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Xerox® WorkCentre® 5890 Family Multifunction Printer Service Manual

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Introduction

About This Manual

This manual is part of a multinational service documentation system that is structured in the standard Xerox service manual format.

Organization

The service manual is the document used as the primary information source for repairing and maintaining this family of products and is available as EDOC on a CDROM, or in PDF format. The information within the manual is divided into an introduction and eight other sections.

Section 1 Service Call Procedures

This section is used to start and complete a service call. The procedures in this section will either direct you to a Repair Analysis Procedure (RAP), or identify a faulty component or sub-assembly.

Section 2 Status Indicator Repair Analysis Procedures

This section contains the Repair Analysis Procedures (RAPs) and checkouts necessary to diagnose, isolate and repair faults other than image quality faults.

Section 3 Image Quality

This section contains the Image Quality Repair Analysis Procedures (IQ RAPs), checkouts and setup procedures necessary to diagnose, isolate and repair image quality faults.

Section 4 Repairs/Adjustments

This section contains the instructions for removal, replacement, and adjustment of parts within the machine.

Section 5 Parts List

This section contains the detailed and illustrated spare parts list. Any part that is spared or that must be removed to access a spared part is illustrated.

Section 6 General Procedures / Information

This section contains all other procedures, product specifications and general information. It also contains Tag / MOD information. The abbreviations used in this Manual are in GP 40 Glossary of Terms, Acronyms and Abbreviations.

Section 7 Wiring Data

This section contains PWB locations, PJ Locations and Wiring Diagrams.

Section 8 Accessories

This section contains details of any accessories that the machine may have.

Publication Comments Sheet

A Publication Comment Sheet is provided at the rear of the PDF version of the manual.

How To Use This Manual

Always start with the Service Call Procedures, Section 1. Perform Initial Actions and verify the problem, then follow the directions given.

How to Differentiate Between Machine Variants

When a procedure, parts list description or other reference is unique across different speeds of machine, the appropriate speed range will be quoted. For example, 45-55 ppm, 65-90 ppm. Any artwork will also be specific.

NOTE: *This manual services all configurations of the machine. Ignore references to options not installed on the machine.*

Warnings, Cautions And Notes

WARNING

A warning is used whenever an operating or maintenance procedure, practice, condition or statement, if not strictly observed, could result in personal injury.

A translated version of all warnings is in Translation of Warnings.

CAUTION

A caution is used whenever an operation or maintenance procedure, practice, condition or statement, if not strictly observed, could result in damage to the equipment.

NOTE: *A note is used where it is essential to highlight a procedure, practice, condition or statement.*

Remote Control Panel

The WorkCentre 5890F is equipped with a remote control panel feature to allow remote user access to the UI.

The remote control panel feature enables users the ability to:

- Remotely view the local UI display graphics.
- Operate both hard and soft buttons on the control panel.

The remote control panel on the remote user PC mimics the device control panel enabling the remote user to operate the device as though they were standing at the machine. Remote access to Service Mode (diagnostics) is also possible. Refer to GP 15 Remote Diagnostics.

Change History

This page gives information on major changes to the service manual. Please go to the relevant update.

Bus Update February 2013

The following procedures are updated:

- 301B 0V Distribution RAP
- 301D +3.3V Distribution RAP
- 301G +24V Distribution RAP
- 301J Power On and LVPS Control Signal RAP
- 302B UI Control Panel Button or Touch Screen RAP
- 303-405-00, 303-406-00 SIM Card Fault RAP
- 305-940-00, 305-966-00 SPDH No Original RAP
- 310-107-00, 310-108-00, 310-109-00, 310-110-00 Trail Edge Late from Fuser Exit Switch RAP
- 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 Fuser Over Temperature RAP
- 311E-110 2K LCSS to Machine Communications Interface RAP
- 311-043-00-150, 311-046-00-150 LVF BM Hole Punch Operation Failure RAP
- 311-053-00-150, 311-370-00-150, 311-371-00-150 LVF BM Staple Head Unit Movement Failure RAP
- 311-061-00-150 LVF BM Crease Blade Move Failure RAP
- 311-062-00-150 LVF BM Crease Roll Failure RAP
- 311-063-00-150, 311-488-00-150, 311-490-00-150, 311-492-00-150 LVF BM Booklet Stapler Movement Failure RAP
- 311-065-00-150, 311-383-00-150, 311-484-00-150, 311-486-00-150 LVF BM Back Stop Failure RAP
- 311-066-00-150, 311-384-00-150 LVF BM Booklet Tamper 1 Move Failure RAP
- 311-100-00-150, 311-101-00-150, 311-158-00-150, 311-163-00-150 LVF BM Paper Entry RAP
- 311-110-00-150 LVF BM Sheet Late to Hole Punch RAP
- 311-160-00-150, 311-162-00-150 LVF Booklet Maker Entry RAP
- 311-180-00-150, 311-182-00-150 LVF BM Exit Jam RAP
- 311-184-00-150, 311-494-00-150, 311-496-00-150 LVF BM Stray Sheet Detected RAP
- 311-198-00-150 LVF Stray Sheet Detected RAP
- 311-378-00-150, 311-379-00-150 LVF BM Booklet Stapler Assembly Failure RAP
- 311-418-00-150 LVF BM Flapper Failure RAP
- 311E-150 LVF BM to Machine Communications Interface RAP
- 311-460-00-171 to 311-462-00-171 HVF Bin 1 Position RAP

- 311B-171 HVF BM to Machine Communications Interface and BM Present RAP
- 316D Wireless Connectivity RAP
- 319-410-00 to 319-410-13 Image Structure Failure RAP
- 341-360-00 IOT to Output Device Error RAP
- 362-490-00, 362-491-00 Data Steerer Error RAP
- 362-783-00, 366-783-00 SPDH Hotline Error RAP
- 362-784-00 Platen Hotline Error RAP
- 362C Side 2 Exposure Lamp Failure RAP
- 366-450-00 to 366-463-00, 366-466-00 to 366-468-00 SPDH Scanner Calibration Faults RAP
- 366-490-00, 366-491-00 Data Steerer Error RAP
- 373-100-00 Tray 3 Elevator Lift Failure RAP
- 373-500-00 Tray 3 Open During Run RAP
- 374-100-00 Tray 4 Elevator Lift Failure RAP
- 390B Waste Toner Full Sensor RAP
- 393-310-00, 393-390-00 Low Toner Sensor Failure RAP
- OF2 POST Error RAP
- OF3 Dead Machine RAP
- OF5 Boot Up Failure RAP
- IQ1 Image Quality Entry RAP
- IQ9 Unacceptable Received Fax Image Quality RAP
- REP 3.2 Hard Disk Drive
- REP 3.3 Single Board Controller PWB
- REP 11.1-150 LVF BM Covers
- REP 11.19-150 Back Stop Assembly
- REP 11.20-150 BM Guide Home Sensor and BM End Stop Mid Home Sensor
- REP 11.30-150 BM Compiler Guide Assembly, Flapper and Flapper Motor
- REP 11.38-150 BM Stapler Assembly and Booklet Tamper Assembly
- REP 11.40-150 Booklet Tamper Home Sensor
- REP 11.41-150 Booklet Tamper Motor
- REP 11.6-171 HVF Ejector Assembly Removal
- REP 60.1 Scanner Rear Cover and Faraday Shield
- REP 60.2 Scanner Module
- REP 60.4 Scanner PWB
- REP 60.9 Actuator Support Assembly
- ADJ 40.1 Machine Lubrication
- GP 3 Service Information
- GP 4 Machine Software
- GP 15 Remote Diagnostics
- GP 24 Customer Administration Tools
- dC132 Serial Number
- Tags
- PJ Locations
- Wiring Diagrams

Bus Update April 2013

The following procedures are updated:

- SCP 1 Initial Actions
- SCP 2 Call Actions
- SCP 3 Fault Analysis
- SCP 5 Final Actions
- 301K Sleep Mode RAP
- 303-321-00 SBC to SPDH PWB Communications RAP
- 303-397-00 System Configuration Recovery Attempt RAP
- 303-398-00 SOK1 Not Detected RAP
- 303-405-00, 303-406-00 SIM Card Fault RAP
- 303D SBC PWB Diagnostics RAP
- 303E Foreign Device PWB Fault RAP
- 305-335-00, 305-336-00 SPDH Takeaway Sensor Paper Jam RAP
- 305-340-00, 305-341-00 SPDH Reg Sensor Failure RAP
- 305-342-00, 305-343-00 SPDH Side 2 Reg Sensor Failure RAP
- 305-940-00, 305-966-00 SPDH No Original RAP
- 305-958-00 SPDH Lift Home Position Sensor Failure RAP
- 305-959-00 SPDH Calibration Home Position Sensor Failure RAP
- 305-962-00 SPDH Feed Sensor Adjustment Error RAP
- 305-963-00 SPDH Takeaway Sensor Adjustment Error RAP
- 305-964-00 SPDH Reg Sensor Adjustment Error RAP
- 305-965-00 SPDH Side 2 Reg Sensor Adjustment Error RAP
- 305A Document Size Sensors Failure RAP
- 311F-110 2K LCSS PWB DIP Switch Settings RAP
- 311-450-00-171, 311-456-00-171 to 311-459-00-171 HVF Ejector Module RAP
- 316A Workflow Scanning Error Entry RAP
- 319-410-00 to 319-410-13 Image Structure Failure RAP
- 322-350-01, 322350-02 Software Detects Non-Valid Xerox SOK RAP
- 322-351-01, 322-351-03 SOK Write Failure RAP
- 341-360-00 IOT to Output Device Error RAP
- 381-103-00, 381-113-00 Tray 3 Misfeed RAP
- OF4a Status Code in Numerical Order
- OF4b Status Codes in Alphabetical Order
- OF5 Boot Up failure RAP
- OF10 Intermittent Failure RAP
- IQ7 SPDH, Document Glass and Scanner RAP
- IQ11 Light Copies RAP
- REP 1.1 Power and Control Assembly
- REP 3.1 IOT PWB
- REP 3.2 Hard Disk Drive
- REP 3.3 Single Board Controller PWB

- REP 3.4 SD Card
- REP 11.6-171 HVF Ejector Assembly Removal
- REP 11.11-171 HVF Front Tamper Motor Assembly
- REP 60.2 Scanner Module
- REP 60.3 Top Cover Assembly
- REP 60.4 Scanner PWB
- REP 60.6 Side 2 Scan Assembly
- REP 60.7 Scan Carriage Power Ribbon Cable
- REP 60.8 Scan Carriage Data Ribbon Cable
- ADJ 40.1 Machine Lubrication
- ADJ60.4 Side 2 Scan Assembly Cleaning Procedure
- ADJ 60.5 IIT Registration, Magnification and Calibration
- GP 1 Service Mode
- GP 4 Machine Software
- GP 11 How to Check a Sensor
- GP 25 First Copy / Print Out Time and Power On / Off Time
- GP 27 Machine Configuration Control and Recovery
- GP 29 Embedded Customer Documentation
- GP 36 How to Check an Adaptive Sensor
- dC131 NVM Read/Write
- dC134 Market Region
- dC 330 Component Control
- dC604 Registration Setup Procedure
- dC608 Document Feeder Registration
- dC609 Document Glass Registration
- dC610 CCD Lamp Profile Adjustment
- dC611 Platen Magnification
- dC945 IIT Calibration
- Tags
- Wiring Diagrams

Bus Update November 2013

The following procedures are updated

- Translation of Warnings
- SCP 3 Fault Analysis
- SCP 6 Machine Features
- 301B 0V Distribution RAP
- 301D +3.3V Distribution RAP
- 301G +24V Distribution RAP
- 301H Short Circuit and Overload RAP
- 301L LVPS Checkout RAP
- 303-401-00, 303-403-00 Fax Not Detected RAP
- 303-405-00, 303-406-00 SIM Card Fault RAP
- 303-417-00 Incompatible Fax Software RAP
- 303D SBC PWB Diagnostics RAP
- 303E Foreign Device PWB Fault RAP
- 305-253-00 to 305-255-00 SPDH Communications Error RAP
- 305-940-00, 305-966-00 SPDH No Original RAP
- 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 Fuser Under Temperature RAP
- 311-005-00-110, 311-006-00-110 Front Tamper Move Failure RAP
- 311-024-00-110, 311-025-00-110 Paddle Roll Failure RAP
- 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP
- 311-043-00-110, 311-350-00-110 Hole Punch Operation Failure RAP
- 311-100-00-110 2K LCSS Paper Entry RAP
- 311-110-00-110 Sheet Late to Hole Punch RAP
- 311-130-00-110, 311-132-00-110 Paper Exiting to Bin 0 RAP
- 311-140-00-110, 311-142-00-110 Sheet Late to Bin 1 RAP
- 311-300-00-110, 311-302-00-110, 311-303-00-110 Interlocks RAP
- 311-319-00-110 Rear Tamper Move Failure RAP
- 311-320-00-110, 311-322-00-110 Ejector Movement Failure RAP
- 311-360-00-110 Staple Head Operation Failure RAP
- 311-364-00-110 Stapling Failure RAP
- 311-371-00-110 Staple Head Unit Movement Failure RAP
- 311B-110 Bin 1 Overload RAP
- 311D-110 2K LCSS Power Distribution RAP
- 311-005-00-120, 311-006-00-120 Front Tamper Move Failure RAP
- 311-024-00-120, 311-025-00-120 Paddle Roll Failure RAP
- 311-030-00-120 Bin 1 Movement Failure RAP
- 311-050-00-120, 311-360-00-120 Staple Head Operation Failure RAP
- 311-100-00-120 1K LCSS Paper Entry RAP
- 311-130-00-120, 311-132-00-120 Paper Exiting to Bin 0 RAP
- 311-140-00-120, 311-142-00-120 Sheet Late to Bin 1 RAP
- 311-300-00-120, 311-302-00-120, 311-303-00-120 Interlocks RAP
- 311-319-00-120 Rear Tamper Move Failure RAP
- 311-320-00-120, 311-322-00-120 Ejector Movement Failure RAP
- 311A-120 Bin 1 Overload RAP
- 311-005-00-150, 311-006-00-150, 311-311-00-150 LVF BM Front Tamper Move Failure RAP
- 311-024-00-150, 311-025-00-150 LVF BM Paddle Roll Failure RAP
- 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP
- 311-043-00-150, 311-046-00-150 LVF BM Hole Punch Operation Failure RAP
- 311-050-00-150, 311-360-00-150 LVF BM Staple Head Operation Failure RAP
- 311-053-00-150, 311-370-00-150, 311-371-00-150 LVF BM Staple Head Unit Movement Failure RAP

- 311-100-00-150, 311-101-00-150, 311-158-00-150, 311-163-00-150 LVF BM Paper Entry RAP
- 311-110-00-150 LVF BM Sheet Late to Hole Punch RAP
- 311-130-00-150, 311-132-00-150 LVF BM Paper Exiting to Bin 0 RAP
- 311-140-00-150, 311-142-00-150 LVF BM Sheet Late to Bin 1 RAP
- 311-198-00-150 LVF Stray Sheet Detected RAP
- 311-300-00-150, 311-302-00-150, 311-303-00-150 Interlocks RAP
- 311-319-00-150 LVF BM Rear Tamper Move Failure RAP
- 311-320-00-150, 311-322-00-150 Ejector Movement Failure RAP
- 311-377-00-150 LVF BM Stapling Failure RAP
- 311-378-00-150, 311-379-00-150 LVF BM Booklet Stapler Assembly Failure RAP
- 311B-150 LVF BM Bin 1 Overload RAP
- 311D-150 LVF BM Power Distribution RAP
- 311-063-00-171, 311-411-00-171 HVF BM Staple Unit 1 Failure RAP
- 311-403-00-171, 311-413-00-171, 311-414-00-171 HVF BM Staple Head 2 and Stapler Module RAP
- 311A-171 HVF Power Distribution RAP
- 316D Wireless Connectivity RAP
- 320-302-00, 320-303-00 Fax Reset Failure RAP
- 320-305-00 Fax System Low Memory Unrecoverable RAP
- 320-320-00 Fax Fault Not Cleared by Reset RAP
- 320-322-00 Non-Volatile Device Not Installed RAP
- 320-323-00, 320-324-00 Fax System Memory Low RAP
- 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 Fax Network Line 1 Fault RAP
- 320-332-00, 320-340-00 Fax Network Line 2 Fault RAP
- 320-342-00 Fax File Integrity Fault RAP
- 320-701-00 Fax Phone Book Download Failed RAP
- 320-710-00, 320-711-00 Image Overwrite Error RAP
- 20A Fax Entry RAP
- 20B Unable To Send A Fax RAP
- 20C Unable To Send A Fax To Some Machines RAP
- 20D Unable To Receive A Fax RAP
- 20E Fax Will Not Print RAP
- 20F Fax Tab Not Available RAP
- 20G Fax Module Checkout RAP
- 20H Fax Problems on Digital Networks RAP
- 362-310-00 Scanner to SBC Communications Failure RAP
- 362-450-00 to 362-472-00, 362-781-00 Scanner Calibration Faults RAP
- 362-473-00 UART RX Wrap Error RAP
- 362-783-00, 366-783-00 SPDH Hotline Error RAP
- 362A Side 1 Scanning Document Size RAP
- 362C Side 2 Exposure Lamp Failure RAP
- 366-450-00 to 366-463-00, 366-466-00 to 366-468-00 SPDH Scanner Calibration Faults RAP
- 371B Tray 1 and 2 Wrong Size Paper RAP
- 373B Tray 3 or Tray 4 Out of Paper RAP
- 381-104-00, 381-114-00 Tray 4 Misfeed RAP
- 390C Photoreceptor Fan RAP
- 391-060-00 HVPS Fault RAP
- 392-399-00 Incompatible Xerographic Module RAP
- 393-310-00, 393-390-00 Low Toner Sensor Failure RAP
- 394-341-00, 394-342-00 Scorotron Cleaning Failure RAP
- 395-030-00 to 395-038-00, 395-151-00 Fax Software Upgrade Errors RAP
- OF4a Status Codes in Numerical Order
- OF4b Status Codes in Alphabetical Order
- OF5 Boot Up Failure RAP
- OF7 IOT PWB Diagnostics RAP
- OF16 USB Keyboard RAP
- IQ1 Image Quality Entry RAP
- IQ9 Unacceptable Received Fax Image Quality RAP
- IQS 1 Solid Area Density
- IQS 2 Background
- IQS 4 Resolution
- IQS 5 Skew
- IQS 6 Copy / Print Defects
- IQ7 SPDH, Document Glass and Scanner RAP
- REP 2.1 User Interface Assembly
- REP 2.2 UI Touch Screen
- REP 2.3 UI Control PWB
- REP 11.3-110 Intermediate Paper Drive Belt
- REP 11.3-150 Intermediate Paper Drive Belt
- REP 11.48-150 BM Staple Head and Sensors
- REP 11.61-171 BM Module
- REP 11.96-171 HVF Fixed and Adjustable Casters
- REP 20.1 Fax PWB
- REP 60.1 Scanner Rear Cover and Faraday Shield
- REP 60.2 Scanner Module
- REP 60.4 Scanner PWB
- REP 60.5 Scan Carriage Assembly
- ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield
- REP 80.37 Tray 3 and Tray 4 Transport Roll
- GP1 Service Mode
- GP 3 Service Information
- GP 4 Machine Software
- GP 9 Machine SIM Card Matrix

- GP 21 Installation Space Requirements
- GP 24 Customer Administration Tools
- GP 27 Machine Configuration Control and Recovery
- GP 40 Glossary of Terms, Acronyms and Abbreviations
- dc131 NVM Read/Write
- dC361 NVM Save and Restore
- dC611 Platen Magnification (Deleted)
- TAG 003
- TAG 010
- TAG S-001
- PJ location, Table 10, P/J458 & P/J452
- Wiring Diagram 11
- Wiring Diagram 44
- Wiring Diagram 50
- Wiring Diagram 12
- Wiring Diagram 13

The following service bulletins have been incorporated:

- Service bulletin T8118-07-18

Bus Update March 2014

The following procedures are updated:

- SCP 6 Machine Features
- 301C AC Power RAP
- 01F RAP
- 301L LVPS Checkout RAP
- 302A Touch Screen Failure RAP
- 302B UI Control Panel Button or Touch Screen RAP
- 301G +24V Distribution RAP
- 305-335-00, 305-336-00 SPDH Takeaway Sensor Paper Jam RAP
- 305-958-00 SPDH Lift Home Sensor Failure RAP
- 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP
- 311-030-00-120 Bin 1 Movement Failure RAP
- 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP
- 311-377-00-150 LVF BM Stapling Failure RAP
- 311-044-00-171 to 311-047-00-171 Punch Unit Head and Position RAP
- 311-157-00-171, 311-161-00-171 HVF Buffer Position Sensor RAP
- 311-371-00-171 to 311-377-00-171 HVF Stapler Position and Priming RAP
- 311-380-00-171 HVF Punch Unit Paper Edge Detect RAP
- 393-360-00 to 393-363-00 Toner Concentration Sensor Failure RAP
- 20B Unable To Send A Fax RAP
- REP 5.16 Document Guide Sensors and Doc Present Sensor Actuator
- REP 60.7 Scan Carriage Power Ribbon Cable
- REP 60.8 Scan Carriage Data Ribbon Cable
- REP 70.16 Tray 3 and Tray 4 Elevator Cables
- ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006)
- GP 3 Service Information
- dC132 Serial Number
- GP 4 Machine Software
- GP 21 Installation Space Requirements
- GP 24 Customer Administration Tools
- dC131
- dC330 Component Control
- The Mod / Tag plate location LVF BM
- Mod Tag D001
- WD3
- PL 3.22
- PL 5.10
- PL 5.30
- PL 11.6
- PL 11.10
- PL 11.18
- PL 11.54
- PL 11.58
- PL 11.66
- PL 11.86
- PL 11.114
- PL 11.106
- PL 11.145
- PL 11.153
- PL 11.169
- PL 12.10
- PL 31.14
- PL 40.10
- PL 40.15
- PL 60.20
- PL 70.18
- PL 70.30
- PL 80.33
- PL 80.36
- PL 80.45
- PL 90.20

The following procedures are new:

- 312J-150 LVF BM Booklet Quality RAP

Bus Update August 2015

The following procedures are updated:

- Health and Safety Incident reporting
- Translation of Warnings
- 301-300-00 Front Door Open RAP
- 301G +24V Distribution RAP
- 301J Power On and LVPS Control Signal RAP
- 302A Touch Screen Failure RAP
- 302B UI Control Panel Button or Touch Screen RAP
- 303-315-00 DC Platform Internal Interface Fault RAP
- 305-335-00, 305-336-00 SPDH Takeaway Sensor Paper Jam RAP
- 305-340-00, 305-341-00 SPDH Reg Sensor Failure RAP
- 305-940-00, 305-966-00 SPDH No Original RAP
- 305-958-00 SPDH Lift Home Sensor Failure RAP
- 305-964-00 SPDH Reg Sensor Adjustment Error RAP
- 305A Document Size Sensors Failure RAP
- 310A Fuser Web Motor RAP
- 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP
- 311-130-00-110, 311-132-00-110 Paper Exiting to Bin 0 RAP
- 311-320-00-110, 311-322-00-110 Ejector Movement Failure RAP
- 311D-110 2K LCSS Power Distribution RAP
- 311F-110 2K LCSS PWB DIP Switch Settings RAP
- 311-130-00-120, 311-132-00-120 Paper Exiting to Bin 0 RAP
- 311-320-00-120, 311-322-00-120 Ejector Movement Failure RAP
- 311C-120 1K LCSS Power Distribution RAP
- 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP
- 311-050-00-150, 311-360-00-150 LVF BM Staple Head Operation Failure RAP
- 311-130-00-150, 311-132-00-150 LVF BM Paper Exiting to Bin 0 RAP
- 311-320-00-150, 311-322-00-150 Ejector Movement Failure RAP
- 311D-150 LVF BM Power Distribution RAP
- 316-016-14 to 316-016-99 Data Store Initialization Failed RAP
- 316-608-28 to 316-608-68 Unable to Free IPC Resources RAP
- 316-626-00 to 316-626-67 Memory Leak RAP
- 316-628-09 to 316-629-93 No Acknowledgment For RPC Message RAP
- 316-651-19 to 316-656-38 Register Failure RAP
- 316-674-09 to 316-709-00 XSA Database Failure RAP
- 316-755-35 to 316-756-14 Request Error RAP
- 316-756-35 to 316-757-28 NVM Corrupt RAP
- 316-757-35 to 316-758-28 Unable to Write NVM Value RAP
- 316-758-35 to 316-759-28 Service Run Loop Failed RAP
- 316-759-46 to 316-760-46 Fail to Enable Process RAP
- 316-760-47 to 316-761-46 File Error RAP
- 316-761-47 to 316-769-95 Other Network Faults 1 RAP
- 316-790-09 to 316-799-47 Other Network Faults 4 RAP
- 316-810-00 to 316-819-47 Other Network Faults 6 RAP
- 316-891-00 to 316-895-47 Edge Server Auto Registration Failed RAP
- 316-900-19 to 316-909-19 Other Network Faults 14 RAP
- 316-970-19 to 316-979-35 Other Network Faults 21 RAP
- 316-980-00 to 316-989-35 Other Network Faults 22 RAP
- 320-320-00 Fax Fault Not Cleared by Reset RAP
- 320-327-00, 320-332-00, 320-340-00 Fax Network Line 2 Fault RAP
- 20A Fax Entry RAP
- 20C Unable To Send A Fax To Some Machines RAP
- 361-020-00 ROS Motor Failure RAP
- 361-340-00 ROS Laser Failure RAP
- 362-476-00 Scan Carriage Home Sensor RAP
- 362-477-00 to 362-481-00, 362-782-00, 362-785-00, 362-786-00 Timing Errors RAP
- 362C Side 2 Exposure Lamp Failure RAP
- 373-100-00 Tray 3 Elevator Lift Failure RAP
- 374-100-00 Tray 4 Elevator Lift Failure RAP
- 376-100-00 Tray 6 Elevator Lift Failure RAP
- 381-103-00, 381-113-00 Tray 3 Misfeed RAP
- 381-104-00, 381-114-00 Tray 4 Misfeed RAP
- 381-108-00 Tray 3 or Tray 4 Paper Feed Jam RAP
- 381-131-00 Lead Edge Late to Tray 3 Exit Sensor RAP
- 381-150-00, 381-151-00, 381-190-00 to 381-193-00 Registration Jam Entry RAP
- 381-150-00A, 381-151-00A, 381-190-00A to 381-193-00A Registration Jam RAP (45-55 ppm)
- 381-150-00B, 381-151-00B, 381-190-00B to 381-193-00B Registration Jam RAP (65-90 ppm)
- 391-060-00 HVPS Fault RAP
- OF4a Status Codes in Numerical Order
- OF4b Status Messages in Alphabetical Order
- OF7 IOT PWB Diagnostics RAP
- OF15 Xerox Secure Access RAP
- IQ2 Defects RAP
- IQ6 Narrow Bands RAP
- IQ7 SPDH, Document Glass and Scanner RAP
- IQ8 Skew RAP
- IQ11 Light Copies/Prints RAP
- IQS 5 Skew
- REP 5.4 Input Tray Assembly
- REP 5.9 Length Sensors
- REP 11.10-150 Ejector Assembly, Support Finger and Sensors
- REP 11.14-150 LVF PWB
- REP 11.19-150 Back Stop Assembly

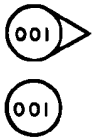
- REP 11.22-150 Crease Blade Assembly and Guides
- REP 11.38-150 BM Stapler Assembly and Booklet Tamper Assembly
- REP 60.6 Side 2 Scan Assembly and Reg Sensor
- REP 60.16 Scanner Module Mounting Frame
- REP 70.15 Tray 3 and Tray 4 Elevator Motor
- REP 80.28 Tray 6 Takeaway Roller
- REP 80.30 Tray 3 Paper Feed Assembly
- REP 80.35 Tray 3 Exit Sensor
- REP 80.44 Tray 3 and Tray 4 Feed Assembly Feed Rolls
- ADJ 5.4 SPDH Cleaning Procedure
- ADJ 11.6-150 Booklet Staple Position
- ADJ 40.1 Machine Lubrication
- ADJ 60.3 Scanner Cleaning Procedure
- ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure
- ADJ 80.2 Simplex and Duplex Buckle Timing Welwyn Team Phone Numbers
- ADJ 90.1 Corotron Cleaning
- GP 4 Machine Software
- GP 27 Machine Configuration Control and Recovery
- dC131 NVM Read/Write Table 3 CCS NVM ID
- dC131 NVM Read/Write Table 38 IIT NVM ID
- dC135 CRU/HFSI Status
- Tags
- Tag 003
- Tag 013
- PJ Locations
- Wiring Diagrams - Introduction
- Wiring Diagram 15
- Wiring Diagram 18
- Wiring Diagram 30
- Wiring Diagram 36
- Wiring Diagram 39

The following procedures are new:

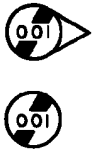
- Introduction - Connector Pin Numbers in Circuit Diagrams
- REP 80.49 Tray 3 or Tray 4 Feed Clutch
- Tag 011
- Tag 012
- Tag 111
- Tag D-002
- Tag D-003
- Tag D-004
- Tag F-018
- Tag V-009
- Tag X-001
- Tag X-002

Mod/Tag Identification

Figure 1 shows the Mod/Tag identification symbols.



These with tag symbols are used to identify the components or configurations that are part of a machine change covered by this tag number.



These without tag symbols are used to identify the components or configurations that are used when this tag is not fitted.

V-1-1088-A

Figure 1 Mod/Tag identification symbols

Voltages Resistances and Tolerances

For AC power specifications, refer to GP 22 Electrical Power Requirements.

DC Voltage Levels and Tolerances

DC Voltages should be measured between an available test point and a machine ground. Table 1 shows the range of the common voltages.

Table 1 DC Voltage Levels

Nominal voltage	Voltage tolerance range	RAP reference
0 volts	0.00 to 0.10V	301B 0V Distribution RAP
+3.3V standby	+3.23V to +3.43V	301J Power On and LVPS Control Signals RAP
+3.3V	+3.23V to +3.43V	301D +3.3V Distribution RAP. See notes below
+5.V	+4.75V to +5.25V	301E +5V Distribution RAP
+12V	+11.4V to +12.6V	301F +12V Distribution RAP
+24V	+23.28V to +25.73V	301G +24V Distribution RAP

Non-standard voltage levels will be quoted on the relevant circuit diagram. All other voltage levels are plus or minus 10%.

Resistance Tolerances

All resistance measurement tolerances are plus or minus 10%, unless otherwise stated in the procedure.

DC Signal Nomenclature

Figure 1 shows the signal nomenclature used in this manual.

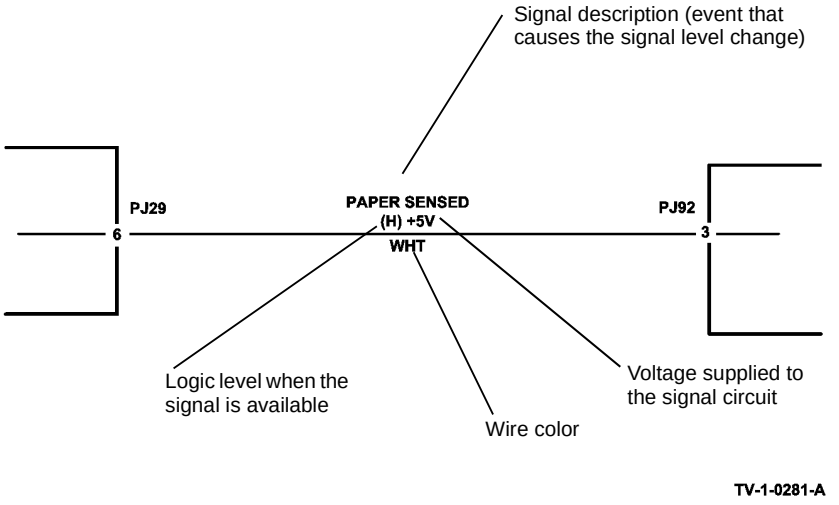


Figure 1 Signal Nomenclature

Table 2 shows the signal tolerances.

Table 2 Signal tolerances

Signal voltage	(H) logic level	(L) logic level
+5V	+3.85V or greater	At or near 0.8V
+3.3V	+2V or greater	At or near 0.8V

Non standard signal tolerances will be quoted on the relevant circuit diagram.

NOTE: *The logic level shown with the signal name will be the actual signal as measured with a service meter. This will not necessarily be the same as the logic state shown on the diagnostic screen.*

Samples of RAP reference text

Throughout the manual there are linked references that extend the diagnostic procedure or add more information.

Go to Flag 1. Check Q08-300. Refer to:

NOTE: *This links to a particular part of the circuit diagram within a RAP.*

- GP 11 How to Check a Sensor.

  NOTE: *This links to General Procedures information.*

- Figure 1, IOT PWB

NOTE: *The P/J links to the connector location on the PWB in a circuit diagram.*

NOTE: *The PWB links the connector to the pin layout on the PWB, referenced in the Wiring Diagram section.*

- 301D +3.3V Distribution RAP.

  NOTE: *This links to a RAP.*

Install new components as necessary:

- Tray 1/2 feed sensor, PL 70.30 Item 24.

  NOTE: *This links to the parts list. If installation of the new component is simple, the parts list artwork is sufficient to show how the component is assembled in the machine. If installation of the new component is not simple, the parts listing will contain cross references to repair procedures and adjustments, as necessary.*

Symbols Used in Circuit Diagrams

Refer to Figure 2.

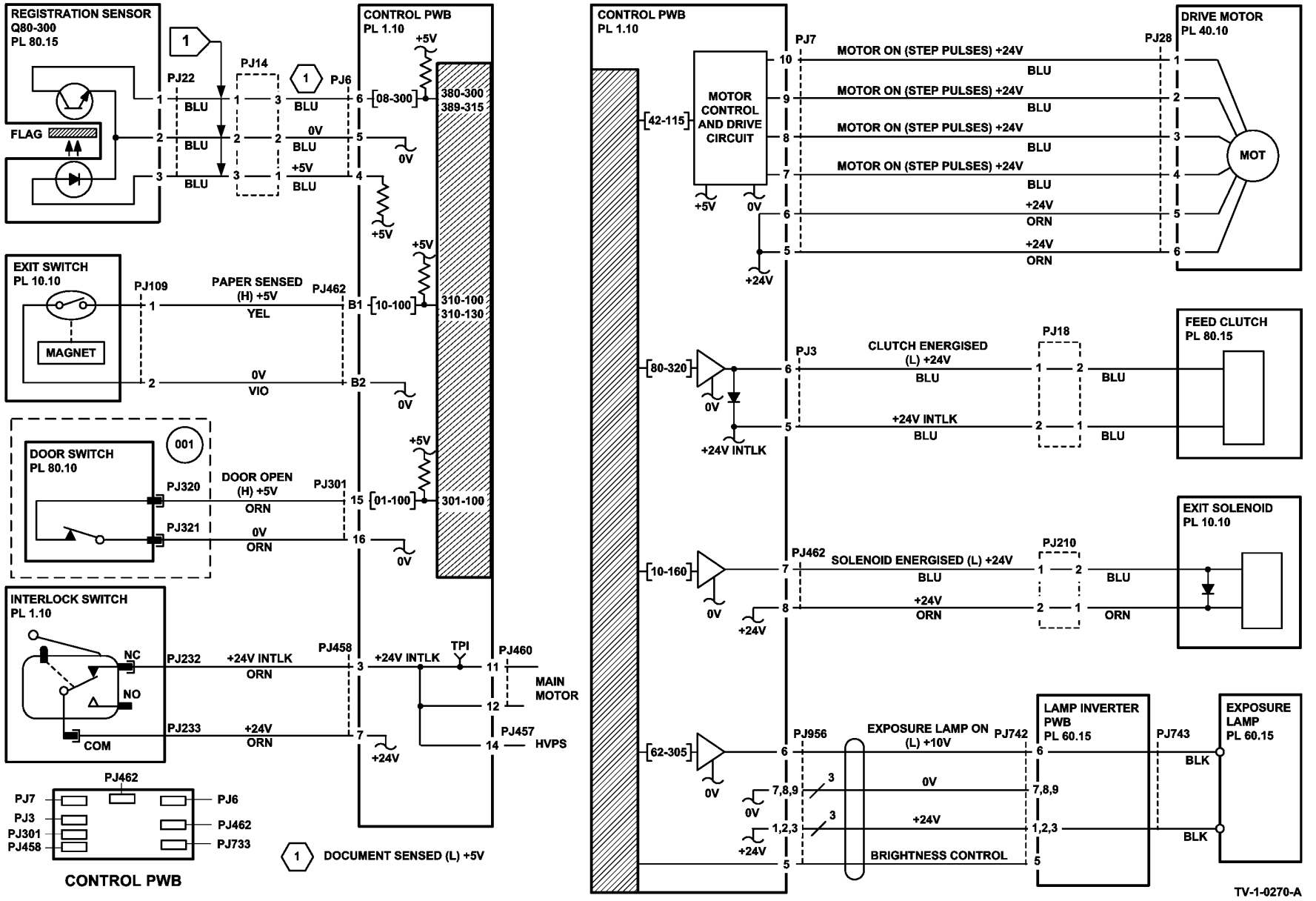


Figure 2 Symbols used in circuit diagrams

Connector Pin Numbers in Circuit Diagrams

The connector pin numbers shown in the circuit diagrams depict the location of the pins as marked on the PWB. If the pin numbers marked on a harness connector differ, the PWB pin numbers take precedence.

Safety Information

The WARNING that follows is for general guidance when live working.

WARNING

Do not work in a confined space. 1m (39 inches) space is needed for safe working.

Safety Icons

The safety icons that follow are displayed on the machine:

ESD Caution Symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Laser Radiation Warning Symbol

WARNING

Follow the service procedure exactly as written. Use of controls or adjustments other than those specified in this manual, may result in an exposure to invisible laser radiation. During servicing, the invisible laser radiation can cause eye damage if looked at directly.

Location Arrow Symbol

The location arrow symbol points to the location to install, to gain access to, or to release an object.

Hot Surface Symbol

This symbol indicates hot surfaces. Take care when servicing the machine.

Lethal Voltage Symbol

This symbol indicates potentially lethal voltages. Take care when servicing the machine when the power cord is connected.

Ozone

During normal operation, this machine produces ozone gas. The amount of ozone produced does not present a hazard to the operator. However, it is advisable that the machine be operated in a well ventilated area.

Toner Cartridge

The product contains a dry imager cartridge that is recyclable. Under various state and local laws, it may be illegal to dispose of the cartridge into the municipal waste. Check with the local waste officials for details on recycling options or the proper disposal procedures.

Fuses

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Part Replacement

Only use genuine Xerox approved spare parts or components to maintain compliance with legislation and safety certification. Also refer to GP 26 Restriction of Hazardous Substances (RoHS).

Disassembly Precautions

Do not leave the machine with any covers removed at a customer location.

Reassembly Precautions

Use extreme care during assembly. Check all harnesses to ensure they do not contact moving parts and do not get trapped between components.

General Procedures

Observe all warnings displayed on the machine and written in the service procedures. Do not attempt to perform any task that is not specified in the service procedures.

Health and Safety Incident reporting

I. Summary

This section defines requirements for notification of health and safety incidents involving Xerox products (equipment and materials) at customer locations.

II. Scope

Xerox Corporation and subsidiaries worldwide.

III. Objective

To enable prompt resolution of health and safety incidents involving Xerox products and to ensure Xerox regulatory compliance.

IV. Definitions

Incident:

An event or condition occurring in a customer account that has resulted in injury, illness or property damage. Examples of incidents include machine fires, smoke generation, physical injury to an operator or service representative. Alleged events and product conditions are included in this definition.

V. Requirements

Initial Report:

1. Xerox organizations shall establish a process for individuals to report product incidents to Xerox Environment Health and Safety within 24 hours of becoming aware of the event.
2. The information to be provided at the time of reporting is contained in Appendix A (Health and Safety Incident Report involving a Xerox product).
3. The initial notification may be made by any of the methods that follow:
   - For incidents in North America and Developing Markets West (Brazil, Mexico, Latin American North and Latin American South):
     - Electronic mail Xerox EH&S at: usa.xerox.ehs@xerox.com.
     - Fax Xerox EH&S at: 1-585-216-8817 [intelnet 8*219-8817].
   - For incidents in Europe and Developing Markets East (Middle East, Africa, India, China and Hong Kong):
     - Electronic mail Xerox EH&S at: ehs-europe@xerox.com.
     - Fax Xerox EH&S at: +44 (0) 1707 353914 [intelnet 8*668 3914].

   NOTE: *If sending a fax, please also send the original via internal mail.*

Responsibilities for resolution:

1. Business Groups/Product Design Teams responsible for the product involved in the incident shall:
   a. Manage field bulletins, customer correspondence, product recalls, safety retrofits.
   b. Fund all field retrofits.
2. Field Service Operations shall:
   a. Preserve the Xerox product involved and the scene of the incident inclusive of any associated equipment located in the vicinity of the incident.
   b. Return any affected equipment/part(s) to the location designated by Xerox EH&S and/or the Business Division.
   c. Implement all safety retrofits.
3. Xerox EH&S shall:
   a. Manage and report all incident investigation activities.
   b. Review and approve proposed product corrective actions and retrofits, if necessary.
   c. Manage all communications and correspondence with government agencies.
   d. Define actions to correct confirmed incidents.

VI. Appendices

The Health and Safety Incident Report involving a Xerox Product (Form # EH&S-700) is available in the locations that follow:

- On electronic documentation (EDOC), located in the Library.
- In the hardcopy, located at the end of the manual.

Translation of Warnings

WARNING

A warning is used whenever an operating or maintenance procedure, practice, condition or statement, if not strictly observed, could result in personal injury.

DANGER: Une note Danger est utilisée chaque fois qu'une procédure d'utilisation ou de maintenance peut être cause de blessure si elle n'est pas strictement respectée.

AVVERTENZA: Un segnale di avvertenza è utilizzato ogni volta che una procedura operativa o di manutenzione, una pratica, una condizione o un'istruzione, se non strettamente osservata, potrebbe causare lesioni personali.

VORSICHT: Weist darauf hin, dass ein Abweichen von den angeführten Arbeits- und Wartungsanweisungen gesundheitliche Schäden, möglicherweise sogar schwere Verletzungen zur Folge haben kann.

AVISO:Un aviso se utiliza siempre que un procedimiento de operación o mantenimiento, práctica o condición puede causar daños personales si no se respetan estrictamente.

WARNING

Do not work in a confined space. 1 m (39 inches) space is needed for safe working.

DANGER: Ne pas travailler dans un espace restreint. 1 mètre d'espace est nécessaire pour un dépannage en toute sécurité.

AVVERTENZA: Non lavorare in uno spazio limitato; è necessario uno spazio di almeno un metro attorno alla macchina per la sicurezza dell'operatore.

VORSICHT: Nur mit ausreichendem Bewegungsspielraum (1 m) arbeiten.

AVISO: No trabaje en un espacio reducido. Se necesita 1 metro de espacio para trabajar con seguridad.

WARNING

Follow the service procedure exactly as written. Use of controls or adjustments other than those specified in this manual, may result in an exposure to invisible laser radiation. During servicing, the invisible laser radiation can cause eye damage if looked at directly.

DANGER : Les procédures de dépannage doivent être suivies à la lettre. Si les réglages ou vérifications ne sont pas effectués suivant les instructions de ce manuel, il peut y avoir un risque d'exposition dangereuse au faisceau laser. Celui-ci peut provoquer des lésions oculaires s'il est observé directement.

AVVERTENZA: Eseguire le procedure di servizio esattamente come descritto. L'utilizzo di dispositivi di controllo o di registrazione diversi da quelli riportati in questo manuale potrebbe comportare un'esposizione a radiazioni laser invisibili. Tali radiazioni possono danneggiare gli occhi se si guarda direttamente il fascio laser durante gli interventi di servizio.

VORSICHT: Die Wartungsarbeiten genau den Anweisungen entsprechend durchführen. Der Umgang mit Steuer- oder Bedienelementen, deren Verwendung nicht ausdrücklich in diesem Handbuch angewiesen wurde, kann dazu führen, dass unsichtbare Laserstrahlung frei gesetzt wird. Direkter Blickkontakt mit dem Laserstrahl kann bleibende Augenschäden verursachen.

AVISO: Siga los procedimientos de mantenimiento tal como están descritos. El uso de controles o ajustes no especificados en este manual puede tener como resultado la exposición a radiación láser invisible. Durante las operaciones de mantenimiento, la radiación de láser invisible puede causar daños en los ojos si se mira directamente a ella.

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

DANGER: Ne pas installer de fusible de type ou de calibre différent. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non installare un fusibile di tipo o carica diversi da quelli esistenti.

VORSICHT: Keine Sicherungen anderer Art oder anderer Leistung auf dem IOT-PWB installieren - Überhitzungs- und Brandgefahr.

AVISO: No instale un fusible de potencia o tipo distinto. Un fusible de potencia o tipo distinto puede producir sobrecalentamiento y el riesgo de incendio.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Mettez la machine hors tension. Reportez-vous à GP 14. Déconnectez le cordon d'alimentation de l'alimentation du client lorsque vous réalisez des tâches qui ne nécessitent pas d'électricité. L'électricité peut être à l'origine de blessures, voire d'un accident mortel. Les pièces amovibles peuvent être à l'origine de blessures.

AVVERTENZA: Spegnere la macchina. Vedere GP 14. Scollegare il cavo di alimentazione dall'alimentatore quando si eseguono attività che non richiedono elettricità. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Schalten Sie die Stromversorgung der Maschine ab. Siehe auch GP 14. Ziehen Sie das Stromkabel ab, wenn Sie Aufgaben ausführen, für die keine Stromversorgung benötigt wird. Stromschläge können Todesfällen oder Verletzungen verursachen. Bewegliche Teile können zu Verletzungen führen.

AVISO: Apague la electricidad de la máquina. Consulte el GP 14. Desconecte el cable de alimentación eléctrica de la toma de pared mientras esté realizando tareas que no necesiten corriente. La electricidad puede causar daños o la muerte. Las partes móviles pueden causar daños.

WARNING

Do not switch on the electricity to the machine while a ground circuit is disconnected. Ground circuits ensure that the machine remains safe during a fault condition.

DANGER : Ne pas mettre la machine sous tension si un circuit de mise à la masse est déconnecté. Les circuits de mise à la masse permettent de garantir la sécurité de la machine lors d'un incident.

AVVERTENZA: Non accendere la macchina se uno dei conduttori di terra non è connesso. In caso di guasti elettrici, tali conduttori garantiscono la sicurezza del sistema.

VORSICHT: Stromzufuhr zum Gerät nicht einschalten, wenn keine Erdung gegeben ist.

AVISO: No encienda la máquina mientras esté deconectado algún circuito de tierra. Los circuitos de tierra mantienen la seguridad de la máquina en las situaciones de averías o errores.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

DANGER: Prendre des précautions lors du relevé de la tension de la prise de courant alternatif. L'électricité peut entraîner des blessures graves voire mortelles.

AVVERTENZA: Procedere con cautela durante la misurazione della tensione CA della rete. L'elettricità può causare infortuni o morte.

VORSICHT: Bei der Netzspannungsprüfung stets vorsichtig vorgehen

AVISO: Tenga cuidado al medir la tensión de la línea de alimentación de corriente alterna. La electricidad puede causar lesiones e incluso la muerte.

WARNING

Do not repair or install a new fuse F1 on the IOT PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

DANGER : Ne pas réparer de fusible F1 ou en installer un nouveau sur la carte d'alimentation de la machine. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non riparare o installare un nuovo fusibile F1 sul PWB IOT.

VORSICHT: Die Sicherung F1 auf dem IOT-PWB nicht reparieren oder neu installieren - Überhitzungs- und Brandgefahr.

AVISO: No repare un fusible F1 ni instale uno nuevo en la PWB de la IOT. Un fusible reparado o nuevo puede producir sobrecalentamiento y el riesgo de incendio.

WARNING

Do not repair or install a new fuse F1 on the power distribution PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

DANGER : Ne pas réparer de fusible F1 ou en installer un nouveau sur la carte de distribution électrique. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non riparare o installare un nuovo fusibile F1 sul PWB distribuzione di alimentazione

VORSICHT: Die Sicherung F1 auf dem Stromverteilungs-PWB nicht reparieren oder neu installieren - Überhitzungs- und Brandgefahr.

AVISO: No repare un fusible F1 ni instale uno nuevo en la PWB de distribución de energía eléctrica. Un fusible reparado o nuevo puede producir sobrecalentamiento y el riesgo de incendio.

WARNING

Do not repair or install a new fuse F1 on the main drive PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

DANGER : Ne pas réparer de fusible F1 ou en installer un nouveau sur la carte d'entraînement principal. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non riparare o installare un nuovo fusibile F1 sul PWB azionamento principale.

VORSICHT: Die Sicherung F1 auf dem Hauptantriebs-PWB nicht reparieren oder neu installieren - Überhitzungs- und Brandgefahr.

AVISO: No repare un fusible F1 ni instale uno nuevo en la PWB de impulso principal. Un fusible reparado o nuevo puede producir sobrecalentamiento y el riesgo de incendio.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

DANGER : Eviter toute exposition au faisceau laser. Radiation laser invisible.

AVVERTENZA: Evitare l'esposizione al fascio laser. Radiazioni laser invisibili.

VORSICHT: Nicht in den Laserstrahl blicken. Verletzungsgefahr durch unsichtbare Laserstrahlung.

AVISO: Evite la exposición al rayo láser. Radiación de láser invisible.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

DANGER : Exécuter cette procédure avec précaution. Les moteurs peuvent devenir très chauds en fonctionnement normal.

AVVERTENZA: procedere con cautela durante questa procedura. I motori si riscaldano molto durante il funzionamento.

VORSICHT: Bei diesem Vorgang vorsichtig vorgehen, da Motoren im Normalbetrieb heiß werden können.

AVISO: Tenga cuidado al efectuar este procedimiento. Los motores alcanzan altas temperaturas durante su funcionamiento normal.

WARNING

Do not touch the fuser while it is hot.

DANGER : Ne pas toucher au four pendant qu'il est encore chaud.

AVVERTENZA: Non toccare il fonditore quando è caldo.

VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.

AVISO: No toque el fusor mientras está caliente.

WARNING

Take care not to topple the LCSS. The LCSS is unstable when undocked from the machine. Do not show the customer how to undock the LCSS.

DANGER: Attention à ne pas faire tomber la trieuse/agrafeuse petite capacité. Elle n'est pas stable lorsqu'elle est détachée de la machine. Ne pas montrer au client comment détacher la trieuse/agrafeuse.

AVVERTENZA: fare attenzione a non destabilizzare il modulo della pinzatrice/impilatore da 2000 fogli. Quando è sganciato dalla macchina, il modulo è instabile: non mostrare al cliente come sganciarlo

VORSICHT: Stapler nicht umstoßen. Nach Trennung des Staplers vom Document Centre ist dieser sehr instabil

AVISO: Tenga cuidado de que no se caiga el apilador/grapadora de baja capacidad. Cuando no está acoplada a la máquina es inestable. No le muestre al cliente como desacoplar el apilador/grapadora de baja capacidad.

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

DANGER: Ne pas s'approcher du méchanisme de la lame de pliage lors d'une activité à proximité de la plieuse/brocheuse pendant que la machine est sous tension. Ce mécanisme s'active rapidement et avec force.

AVVERTENZA: Quando la macchina è accesa, tenersi a debita distanza dalla lama di piegatura mentre si opera in prossimità della stazione libretto. Il meccanismo della lama di piegatura si attiva con velocità e forza notevoli.

VORSICHT: Wenn bei eingeschaltetem Gerät nahe am Booklet Maker gearbeitet wird, von der Schneidevorrichtung fernhalten. Die Schneidevorrichtung wird schnell und mit viel Druck ausgelöst.

AVISO: Manténgase apartado del mecanismo de la cuchilla hendedora cuando trabaje junto al realizador de folletos si la máquina está encendida. Dicho mecanismo se activa de forma rápida y con mucha fuerza.

WARNING

Do not touch the test pads on the embedded fax PWB while the machine is switched on. Dangerous voltages may be present that could cause death or injury.

DANGER : Ne pas toucher les contacts de test de la carte de circuits imprimés du fax intégré tant que la machine est sous tension. Ils représentent un risque de chocs électriques qui sont un danger de mort ou peuvent entraîner des blessures graves.

AVVERTENZA: non toccare le aree di contatto del PWB del fax incorporato mentre la macchina è accesa. La presenza di voltaggi pericolosi comporta il rischio di morte o lesioni personali.

VORSICHT: Die Testpads (Prüfkontakte) der Platine für das integrierte Fax nicht berühren, solange das Gerät eingeschaltet ist. An den Pads liegt eine Spannung an; es besteht Stromschlag- bzw. Lebensgefahr!

AVISO: No toque la zona terminal de prueba que presenta el circuito impreso del fax interno mientras la máquina está encendida, ya que podría haber tensiones peligrosas que podrían provocar lesiones o incluso la muerte.

WARNING

Only use the correct plug to connect a power lead to a power outlet.

DANGER : Toujours utiliser la fiche appropriée pour connecter le cordon d'alimentation à la prise.

AVVERTENZA: Usare la spina corretta per connettere il cavo elettrico alla presa.

VORSICHT: Nur Netzkabel mit dem für die vorhandenen Netzsteckdose geeigneten Netzstecker verwenden.

AVISO: Utilice solamente un enchufe apropiado para conectar el cable de alimentación a la toma de corriente.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

DANGER : Exécuter cette procédure avec précaution. La présence de bords tranchants peut entraîner des blessures.

AVVERTENZA: procedere con cautela durante questa procedura. Possono essere presenti oggetti con bordi taglienti pericolosi.

VORSICHT: Bei diesem Vorgang vorsichtig vorgehen, damit keine Verletzungen durch die scharfen Kanten entstehen.

AVISO: Tenga cuidado al efectuar este procedimiento. Puede haber bordes afilados que podrían producir lesiones.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

DANGER : Prendre des précautions lors du relevé de la tension de la prise de courant alternatif. L'électricité peut entraîner des blessures graves voire mortelles.

AVVERTENZA: Procedere con cautela durante la misurazione della tensione CA della rete. L'elettricità può causare infortuni o morte.

VORSICHT: Bei der Netzspannungsprüfung stets vorsichtig vorgehen

AVISO: Tenga cuidado al medir la tensión de la línea de alimentación de corriente alterna. La electricidad puede causar lesiones e incluso la muerte.

WARNING

Do not attempt any repairs to the power cord or safety ground harness/conductor.

DANGER : Ne pas tenter de réparer le faisceau/conducteur de mise à la masse ou du cordon d'alimentation.

AVVERTENZA: non eseguire riparazioni sul cavo dell'alimentazione o sul conduttore di terra di sicurezza.

VORSICHT: Keine Reparaturen am Netzkabel oder am Schutzleiter vornehmen.

AVISO: No intente reparar el cable de alimentación ni el conductor/mazo de tierra de protección.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

DANGER : Ne pas retirer le CAD monopasse alors qu'il est en position basse. Dans cette position, les ressorts compensateurs sont compressés et peuvent entraîner des blessures s'ils se relâchent.

AVVERTENZA: Non rimuovere l'alimentatore automatico a passaggio singolo quando è abbassato. In questa posizione, le molle del contrappeso sono compresse e possono causare lesioni al rilascio.

VORSICHT: Vorlageneinzug nicht in abgesenkter Position entfernen. Bei abgesenktem Vorlageneinzug sind die Ausgleichsfedern zusammengedrückt und können bei Fre¬igabe Verletzungen verursachen.

AVISO: No quite el alimentador de documentos de pasada única si está bajado. Cuando está bajado, los resortes de contrapeso están comprimidos y pueden causar lesiones al soltarse.

WARNING

Take care not to topple Tray 6. Tray 6 is unstable when undocked from the machine. Do not show the customer how to undock Tray 6.

DANGER : Attention à ne pas faire tomber le magasin 6. Le magasin 6 n'est pas stable lorsqu'il est détaché de la machine. Ne pas montrer au client comment détacher le magasin 6.

AVVERTENZA: Fare attenzione a non destabilizzare il vassoio 6. Quando è sganciato dalla macchina, questo vassoio è instabile: non mostrare al cliente come sganciarlo.

VORSICHT: Behälter 6 nicht umstoßen.Der Behälter ist nach der Trennung vom Gerät sehr instabil.Benutzer nicht im Trennen des Behälters vom Gerät einweisen.

AVISO: Tenga cuidado de que no se caiga la bandeja 6. Cuando no está acoplada a la máquina, la bandeja 6 es inestable.No le muestre al cliente como desacoplar la bandeja 6.

WARNING

Take care when removing the latch. The latch contains a compressed spring, which can cause injury when released.

DANGER: Faites attention en déverrouillant le levier : il comporte un ressort comprimé, ce qui présente un risque de blessure lors du déverrouillage.

AVVERTENZA: Rimuovere il gancio con cura in quanto contiene una molla compressa che può causare lesioni al rilascio.

VORSICHT: Beim Entfernen der Verriegelung mit Vorsicht vorgehen. Es ist eine unter Spannung stehende Feder enthalten, die bei spontaner Freisetzung Verletzungen verursachen kann.

AVISO: Tenga cuidado al soltar el enganche. Tiene un resorte comprimido, que puede causar alguna lesión al soltarlo.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

DANGER: Avertissement obligatoire. Cette procédure doit être effectuée par 2 personnes. Le module est très lourd.

AVVERTENZA: Avviso di sicurezza obbligatorio. A causa della pesantezza del modulo, questa procedura deve essere eseguita da due persone.

VORSICHT: Verbindliche Sicherheitsvorschrift - dieser Vorgang muss von zwei Personen ausgeführt werden, da das Modul sehr schwer ist.

AVISO: Aviso de seguridad obligatorio. Este procedimiento debe ejecutarse entre dos personas. El módulo pesa mucho.

WARNING

Do not break the glass. Broken glass can cause injury.

DANGER: Attention à ne pas briser la glace sous risque de blessure.

AVVERTENZA: Per evitare il rischio di lesioni, non rompere il vetro.

VORSICHT: Glas nicht zerbrechen - Verletzungsgefahr.

AVISO: No rompa el cristal. El cristal roto puede ocasionar daños.

WARNING

Wear protective gloves when using solvents and cleaning agents, PL 26.10 Item 10 .

DANGER : Porter des gants de protection lors de l'utilisation de solvants et de produits de nettoyage, PL 26.10 Item 10.

AVVERTENZA: utilizzare guanti protettivi durante l'impiego di solventi e soluzioni per pulizia PL 26.10 Item 10.

VORSICHT: Beim Einsatz von Lösungs- und Reinigungsmitteln Handschuhe tragen PL 26.10 Item 10.

AVISO: Póngase guantes de protección cuando utilice disolventes y productos de limpieza PL 26.10 Item 10.

WARNING

Do not use the power button as a safety disconnect device. The power button is not a disconnect device. Disconnect the power cord from the supply to isolate the equipment.

DANGER : Ne vous servez pas de l'interrupteur comme d'un dispositif de déconnexion. L'interrupteur n'est pas un dispositif de déconnexion. Débranchez le câble d'alimentation de la prise électrique pour isoler l'appareil.

AVVERTENZA: L'interruttore di alimentazione non è un dispositivo di disconnessione di sicurezza e pertanto non va utilizzato come tale. Per isolare la macchina, scollegare il cavo di alimentazione dalla presa elettrica.

VORSICHT: Zur Unterbrechung der Gerätestromzufuhr nicht den Betriebsschalter verwenden, sondern das Netzkabel aus der Steckdose ziehen, an die das Gerät angeschlossen ist. Nur dann ist der Drucker vollständig vom Stromnetz getrennt.

AVISO: No utilice el botón de encendido/apagado como dispositivo de desconexión de seguridad. El botón de encendido/apagado no es un dispositivo de desconexión. Desconecte el cable de alimentación de la fuente de energía para aislar el equipo.

WARNING

USA and Canada. Do not install this machine in a hallway or exit route that does not have 1.12 m (44 inches) of space additional to the normal space requirements in front of the machine. To conform with fire regulations this additional 1.12 m (44 inches) of space is needed in front of the machine in hallway and exit routes.

DANGER : États-Unis et Canada. Si cette machine est installée dans un couloir ou une voie de sortie, 1,12 m (44 pouces) d'espace supplémentaire à l'espace normal doit être disponible devant la machine conformément aux normes de sécurité d'incendie.

AVVERTENZA: N/A

VORSICHT: N/A

AVISO: Estados Unidos y Canadá. No instale esta máquina en un corredor o ruta de salida que no tenga 1.12 m (44 pulgadas) de ancho delante de la máquina, sin incluir el espacio que ocupe la máquina. Este espacio adicional de 1.12 m (44 pulgadas) delante de la máquina en corredores y rutas de salida es necesario para cumplir los requisitos de las normas sobre incendios.

WARNING

Isolate the machine from the customers network before performing tasks that do not need network access. Isolating the machine will prevent remote diagnostic access, GP 15.

AVERTISSEMENT: Isolez la machine du réseau des clients avant d'effectuer les tâches qui ne nécessitent pas l'accès au réseau. Cette isolation bloquera l'accès diagnostique à distance, GP 15.

AVVERTENZA: Prima di eseguire attività che non richiedono l'accesso alla rete, isolare la macchina dalla rete del cliente. L'isolamento della macchina impedisce l'accesso alla diagnostica remota (GP 15).

ACHTUNG: Für Aufgaben, bei denen kein Netzwerkzugriff erforderlich ist, das Gerät vom Kundennetzwerk trennen. Hinweis: Bei Trennung des Geräts ist keine Ferndiagnose möglich (GP 15).

AVISO: Desconecte la máquina de la red del cliente para realizar operaciones que no necesiten acceso a red. Desconectar la máquina de la red evitará que se genere el diagnóstico de acceso remoto, GP 15.

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Reportez-vous à GP 14. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Vedere GP 14. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Siehe auch GP 14. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Consulte GP 14. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when undocked from the machine. Do not show the customer how to undock the LVF BM

DANGER : Attention à ne pas faire tomber la plieuse/brocheuse du module de finition petite capacité. Elle n'est pas stable lorsqu'elle est détachée de la machine. Ne pas montrer au client comment détacher la plieuse/brocheuse du module de finition petite capacité.

AVVERTENZA: Fare attenzione a non destabilizzare la stazione libretto della stazione di finitura per bassi volumi. Quando è sganciata dalla macchina, la stazione libretto è instabile: non mostrare al cliente come sganciarla.

VORSICHT: Finisher-Booklet Maker für kleine Auflagen (LVF BM) nicht kippen. Nach der Trennung vom Drucker steht das Endverarbeitungsgerät nicht stabil. Kunden nicht in der Abkopplung des Endverarbeitungsgeräts vom Drucker einweisen.

AVISO: Tenga cuidado de que no se caiga el realizador de folletos de la acabadora de bajo volumen. Cuando no está acoplado a la máquina es inestable. No le muestre al cliente como desacoplar el realizador de folletos de la acabadora de bajo volumen.

WARNING

Ensure that the ground plate is located between the Fax PWB and the front cover. The ground plate provides a ground path for lightning strikes. Electricity can cause death or injury.

DANGER: Assurez-vous que la plaque de masse est positionnée entre la carte de câblage imprimé (PWB) du fax et le panneau avant. La plaque de masse fournit un chemin de mise à la terre pour la foudre. L'électricité peut tuer ou blesser.

AVVERTENZA: Assicurarsi che la piastra di messa a terra venga posizionata tra la scheda di collegamenti stampata (PWB) del fax e la copertura anteriore. Tale piastra fornisce un percorso di messa a terra per la protezione contro le scariche atmosferiche. L'elettricità può causare lesioni o morte.

VORSICHT: Sicherstellen, dass sich die Grundplatte zwischen Fax PWB und vorderer Abdeckung befindet. Die Grundplatte dient als Blitzableiter. Elektrischer Strom kann lebensgefährlich sein.

AVISIO: Asegúrese de que la placa de conexión a tierra esté situada entre la tarjeta del fax y la cubierta frontal. La placa de conexión a tierra facilita una ruta de conexión a tierra para los rayos. La electricidad puede provocar lesiones graves e incluso mortales.

1 Service Call Procedures

SCP 1 Initial Actions

Use the Service Call Procedures to find a problem with the machine.

Use the Initial Actions to collect the information on the machine performance.

Also refer to SCP 6 Machine Features.

Initial Actions

- Switch off the machine, then switch on the machine, GP 14.
- If the machine cannot be switched off, go to GP 14 How to Switch Off the Machine or Switch On the Machine.
- Ensure that the machine has the latest available machine software loaded before commencing any diagnostic or repair procedures.

Procedure

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power lead from the customer supply while preforming tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not work in a confined space. 1m (39 inches) space is needed for safe working.

1. Take note of problems, error messages or error codes. If necessary, refer to Machine Status.
2. Ask the operator to describe or demonstrate the problem.

   NOTE: *If the machine is password protected, login into service copy mode, refer to GP 1.*
3. If the problem is the result of an incorrect action by the operator, refer the operator to the user documentation.
4. Check the steps that follow:
   a. The power lead is connected to the wall outlet and to the machine.
   b. Documents are not loaded in the SPDH or on the document glass.
   c. The paper is loaded correctly.
   d. All paper trays are closed.
   e. All covers are closed or installed.
   f. If a telephone line cable is installed, make sure that the cable is connected between the line socket and the wall jack.
   g. If a telephone line cable is installed, make sure that the customer telephone line is functioning.
5. Check the machine service log book for previous actions that are related to this call.
6. Go to SCP 2 Call Actions.

Machine Status

To display a list of the most recent fault codes, perform the steps that follow:

1. Press the Machine Status key on the UI.
2. Touch the Active Messages tab on the UI.
3. Touch the Fault History button on the UI.

If the 'Machine Status' screen is not accessible, go to dC122 to view the fault history.

To display the active messages on the UI, perform the steps that follow:

1. Press the Machine Status key on the UI.
2. Touch the Active Messages tab on the UI
3. Select Faults & Alerts from the pull down menu.

SCP 2 Call Actions

Use the Call Actions during a service call.

Procedure

1. If this is the first service call to this machine, perform the following actions:
   a. If the 'install wizard' has failed to install the SIM card, go to 303-405-00, 303-406-00 SIM Card Fault RAP.
   b. Check the machine configuration with the customer. Check that all the required hardware and software is installed. Check that all the required hardware and software is enabled.
   c. Check that all the machine settings are entered correctly.
   d. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
   e. Enter the machine information and the customer information in the service logbook.
   f. If the machine has a tray 6 installed, check the top edge registration, ADJ 70.4.
2. Review the copy, print and Fax samples.
3. Make sure the user access settings are correct. If necessary refer to the user documentation.
4. To prevent the deletion of the customer information and soft machine settings, perform NVM Save and Restore. Refer to dC361 NVM Save and Restore.
5. If necessary, perform GP 19 Network Clone Procedure.

   NOTE: *The clone file must be taken whenever the customer changes the network controller setting or after the system software is changed.*

6. Before switching off the machine or clearing the memory, check for a customer job in the memory.
7. Check and record the total print counter.
8. Check the machine for waste toner contamination. Refer to the OF11 Waste Toner Contamination RAP.
9. Clean the relevant optical sensors:
   - SPDH reg sensor, PL 5.18 Item 11.
   - SPDH feed sensor, PL 5.20 Item 10.
   - SPDH takeaway sensor, PL 5.20 Item 10.
   - SPDH length sensor 2, PL 5.30 Item 9.
   - SPDH last sheet out sensor, PL 5.30 Item 9.
   - Tray 1 feed sensor, PL 70.30 Item 24.
   - Tray 2 feed sensor, PL 70.30 Item 24.
   - Tray 3 feed sensor, PL 80.32 Item 6.
   - Tray 4 feed sensor, PL 80.33 Item 3.
   - HCF exit sensor, PL 80.33 Item 3.
   - Tray 6 feed sensor, PL 80.45 Item 6.
   - Tray 6 empty sensor, PL 80.45 Item 6.
   - (65-90 ppm) Wait sensor, PL 70.30 Item 25.
   - (65-90 ppm) Duplex sensor, PL 80.20 Item 4.
   - (65-90 ppm) Registration sensor, PL 80.17 Item 3.
   - (1K LCSS) entry sensor, PL 11.122 Item 3.
   - (2K LCSS) entry sensor, PL 11.24 Item 3.
   - (LVF BM) booklet staple paper detect sensor, PL 11.74 Item 5.
   - (LVF BM) finisher entry sensor, PL 11.75 Item 7.
   - (HVF) Bin 1 rear wall sensor, PL 11.140 Item 17.
10. Check the LVF BM staple cartridges. If necessary, install new LVF BM staple cartridges, PL 11.78 Item 8.
11. Go to SCP 3 Fault Analysis.

SCP 3 Fault Analysis

Use the Fault Analysis to identify a fault.

Procedure

WARNING

Isolate the machine from the customers network before performing tasks that do not need network access. Isolating the machine will prevent remote diagnostic access, GP 15.

Use the machine in all modes until the fault is found.

Go to the correct procedure for the machine fault. When the fault is cleared, go to SCP 4 Subsystem Maintenance.

- Power Up Problems
- Sleep Mode Problems
- User Interface Problems
- Messages, Fault Codes and Status Codes
- SPDH Problems
- Paper Supply and Paper Feed Problems
- OCT Problems
- 1K LCSS Problems
- 2K LCSS Problems
- LVF BM Problems
- HVF, HVF BM, Inserter and Tri-Folder Problems
- Fax Problems
- Other Problems

Power Up Problems

- If the UI has stalled and shows the splash-logo screen, or the system appears to have power but the UI is blank, go to the OF2 Post Error RAP.
- Go to the OF3 Dead Machine RAP if the machine has the problems that follow:
  - The machine will not power up.
  - There is no information on the user interface.
  - There is no LED illumination on the user interface.
  - If all the panel lights are on, the UI touch screen is illuminated and the machine then powers off
- If the UI displays 'system unavailable' or the machine does not come to a 'Ready to scan your job' state. Go to the OF5 Boot Up Failure RAP.

Sleep Mode Problems

- If the machine fails to enter or exit sleep mode, go to the 301K Sleep Mode RAP.

User Interface Problems

- If the user interface is not illuminated, go to the 302A Touch Screen Failure RAP.
- If the user interface is illuminated, but there is no information, go to the 302B UI Control Panel Button or Touch Screen RAP.

Messages, Fault Codes and Status Codes

- If a fault code is displayed, go to the Status Indicator RAP for that code.
- If a status code or message is displayed, but not a fault code, go to OF4 Status Code and Messages RAP.
- If the machine has the problems that follow, go to the 319-401-00, 319-402-00 Stress Out of Memory RAP.
  - A message that there is not enough memory to complete the job.
  - The machine does not print a complex job.
  - The customer reports that the print speed is slow.
- If a fault code and the message 'Mark Service Unavailable' is displayed, perform the Status Indicator RAP for that code. If the fault continues after the RAP is performed, go to the 303B Mark Service Unavailable RAP.

SPDH Problems

- If the SPDH has detected a document of the wrong size, go to the 305A Document Size Sensors Failure RAP.
- If the SPDH does not detect the documents in the SPDH input tray, go to the 305C Document Present Failure RAP.
- If the message 'Due to a system error all scanned jobs have been deleted' is displayed, go to the 305B Last Sheet Out Sensor Failure RAP.
- If the SPDH is damaging documents, go to the 305D Damaged Documents RAP.
- If the machine locks up after the SPDH scans documents in duplex mode, perform the 305-960-00 SPDH LED Fan Lock Alarm RAP.

Paper Supply and Paper Feed Problems

- For the paper supply problems that do not have a fault code, perform the procedures that follow, as appropriate:
  - 371A Tray 1 and Tray 2 Empty RAP.
  - 373A Tray 3 and Tray 4 False Low Paper Level RAP.
  - 375A Bypass Tray RAP.
  - 371B Tray 1 and 2 Wrong Size Paper RAP.
  - 373B Tray 3 or Tray 4 Out of Paper RAP.
  - 370A Tray Out of Service RAP.
  - 376A Tray 6 Empty RAP
- If tray 6 is not set to the correct paper size, perform ADJ 70.2 Tray 6 Paper Tray Guide Setting.
- If the machine produces a multifeed, go to the OF8 Multi-feed RAP.

OCT Problems

- Go to the 312-301-00 Offset Catch Tray Failure RAP.
- If the prints adhere to each other in the OCT, go to the OF6 Ozone and Air Systems RAP.

1K LCSS Problems

- If the machine has a 1K LCSS fault, but not a fault code, perform the procedures that follow, as appropriate:
  - 311A-120 Bin 1 Overload RAP.
  - 311B-120 Initialization Failure RAP.
  - 311C-120 1K LCSS Power Distribution RAP.
  - 311D-120 1K LCSS to Machine Communication Interface RAP.

- 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- 311F-120 1K LCSS PWB Damage RAP.
- 311G-120 Copy Damage in the 1K LCSS RAP.
- 311H-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
- 311J-120 1K LCSS Poor Stacking RAP.

- If the machine has the problems that follow, go to the 311E-120 1K LCSS PWB DIP Switch Settings RAP:
  - False jam clearance messages.
  - Communication errors between the LCSS and the machine.
- If the staples of a stapled set are not correct, go to the 311-364-00-120 Stapling Failure RAP.
- If the prints bond together in the LCSS trays, go to OF6 Ozone and Air Systems RAP.

2K LCSS Problems

- If the machine has an 2K LCSS fault, but not a fault code, perform the procedures that follow, as appropriate:
  - 311A-110 2K LCSS Poor Stacking RAP.
  - 311B-110 Bin 1 Overload RAP.
  - 311C-110 2K LCSS Initialization Failure RAP.
  - 311D-110 2K LCSS Power Distribution RAP.
  - 311E-110 2K LCSS to Machine Communications Interface RAP.
  - 311F-110 2K LCSS PWB DIP Switch Settings RAP.
  - 311G-110 2K LCSS PWB Damage RAP.
  - 311H-110 Copy Damage in the 2K LCSS RAP.
  - 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
- If the punched holes are out of position, perform ADJ 11.3-110 Hole Punch Position.
- If the machine has the problems that follow, go to the 311F-110 2K LCSS PWB DIP Switch Settings RAP:
  - False jam clearance messages.
  - Communication errors between the LCSS and the machine.
- If the staples of a stapled set are not correct, go to the 311-364-00-110 Stapling Failure RAP.
- If the prints bond together in the LCSS trays, go to OF6 Ozone and Air Systems RAP.

LVF BM Problems

- If the machine has an LVF BM fault, but not a fault code, perform the procedures that follow, as appropriate:
  - 311A-150 LVF BM Poor Stacking RAP.
  - 311B-150 LVF BM Bin 1 Overload RAP.
  - 311C-150 LVF BM Initialization Failure RAP.
  - 311D-150 LVF BM Power Distribution RAP.
  - 311E-150 LVF BM to Machine Communications Interface RAP.
  - 311F-150 LVF BM PWB DIP Switch Settings RAP.
  - 311G-150 LVF BM Mis-Registration in Stapled Sets and Non-Stapled Sets RAP
  - 311H-150 LVF BM Copy Damage in the LVF BM RAP.
- If the punched holes are out of position, perform ADJ 11.3-150 Hole Punch Position.
- If the staples of a stapled set are not correct, go to the 311-377-00-150 LVF BM Stapling Failure RAP.
- If the prints bond together in the LVF BM trays, go to OF6 Ozone and Air Systems RAP.

HVF, HVF BM, Inserter and Tri-Folder Problems

- If the machine has a fault in the HVF or HVF BM, but with no fault code, perform the procedures that follow, as appropriate:
  - 311-300-00-171, 311-302-00-171, 311-303-00-171 HVF Docking and Interlocks RAP
  - 311A-171 HVF BM Power Distribution RAP.
  - 311B-171 HVF BM to Machine Communication Interface and BM Present RAP.
  - 311C-171 HVF BM Bin 2 Failure RAP.
  - 311D-171 Booklet Quality RAP.
  - 311E-171 Copy Damage in the HVF BM RAP.
  - 311F-171 Mis-Registration in Stapled and Unstapled Sets RAP.
  - 311G-171 HVF BM Poor Stacking RAP.
  - 311H-171 Pause To Unload (PTU) RAP.
  - 311J-171 Inserter Paper Sensing and +5V Supply RAP.
  - 311K-171 HVF Initialization Failure RAP.
  - 311L-171 Tri-Folder Not Detected RAP.
  - 311M-171 Curl Suppressor RAP
  - 311N-171 Chad Bin Present and Bin Full RAP.
  - 311P-171 Buffer Clamp RAP
- If the staples of a booklet are not correct, perform the correct procedure that follows:
  - 311-063-00-171, 311-411-00-171 HVF BM Staple Unit 1 Failure RAP.
  - 311-403-00-171, 311-413-00-171, 311-414-00-171 HVF BM Stapler head 2 and Staple Module RAP.
- If the tri-folder paper fold is not in the correct position, perform ADJ 11.2-171 Tri-Folder Paper Settings.

Fax Problems

- For Fax problems with no fault code, perform the procedures that follow, as appropriate:
  - 20A Fax Entry RAP.
  - 20H Fax Problems on Digital Networks RAP.

Other Problems

- Hot machine. Go to the OF6 Ozone and Air Systems RAP.
- Convenience stapler faults. Go to the OF13 Convenience Stapler RAP.
- Image quality fault. Go to the IQ1 Image Quality Entry RAP.
- Unusual machine noise. Go to the OF1 Unusual Noise RAP.
- Machine odour. Go to the OF6 Ozone and Air Systems RAP.
- If the UI displays ‘system not available’ or the machine continues to boot up, go to OF5 Boot Up Failure RAP.
- The machine will not turn off. Go to the 303F Switch Off Failure RAP.
- Foreign device fault. Go to the ACC 1 Foreign Device Checkout.
- Xerox extensible interface platform faults. Go to the OF14 Extensible Interface Platform RAP.
- Xerox secure access faults. Go to the OF15 Xerox Secure Access RAP.

- Scan to file failure when using the FTP or SMB protocols. Go to the 316A Workflow Scanning Error Entry RAP.
- The date and time appearing on the customers banner sheets or the configuration report is incorrect. Go to the 303G SBC PWB Battery RAP.
- Multiple error messages are displayed on the UI after a IOT PWB, scanner PWB, hard disk or SD card has been installed, refer to GP 27 Machine Configuration Control and Recovery.
- The machines displays incompatible xerographic or fuser unit. Check the four main configuration parameters, GP 27 and that the machine settings are correct.
- Failure of wireless printing. Go to the 316D Wireless Connectivity RAP.
- Failure of an external USB keyboard. Go to the OF16 USB Keyboard RAP.

SCP 4 Subsystem Maintenance

Use Subsystem Maintenance to maintain the machine.

Procedure

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power lead from the customer supply while performing tasks that do not need electricity. Electricity can cause the death or injury. Moving components can cause the injury.

Go to the correct procedure:

- Installation of New Parts
- HFSI
- Lubrication
- How to Clean the Machine
- Xerographic Module (XRU) Handling

Installation of New Parts

The design life of the major components is shown in Table 1.

Table 1 Component design life

Part	Life	Parts list reference
Fuser module 45-55 ppm 65-90 ppm	 400k prints 400k prints	 PL 10.8 Item 1 PL 10.10 Item 1
Ozone filter	400k prints	PL 90.25 Item 3
Xerographic module	400k prints	PL 90.20 Item 2
Toner cartridge 45-55 ppm 65-90 ppm	 36.5k prints at 6% area coverage 50k prints at 6% area coverage	 PL 90.17 Item 4 PL 90.15 Item 4
Waste toner bottle	100k	PL 90.10 Item 1
SPDH feed roll kit	170k feeds	PL 31.11 Item 16
1K LCSS staple cartridge	3k staples	PL 26.10 Item 25
2K LCSS staple cartridge	5k staples	PL 26.10 Item 11
LVF BM staple cartridge	5k staples	PL 26.10 Item 11
LVF BM staple cartridge (booklet maker)	2k staples	PL 11.78 Item 8
HVF staple cartridge	5k staples	PL 26.10 Item 22
HVF BM staple cartridge	2k staples	PL 11.168 Item 8

NOTE: *If a range of machine speeds are specified within Table 1, the life expectancy for the part will be specific for that machine.*

If the speed has not been specified, the life expectancy for the part applies to all machines within the product family.

NOTE: *Save the NVM of the machine to an external USB pen drive prior to any major maintenance, dC361 NVM Save and Restore.*

HFSI

For High Frequency Service Items, refer to dC135 CRU/HFSI Status.

Lubrication

To lubricate the machine, refer to ADJ 40.1 Machine Lubrication.

How to Clean the Machine

- Refer to ADJ 90.4 Xerographics Cleaning.
- Refer to ADJ 5.4 SPDH Cleaning Procedure.
- Clean the upper surfaces of the CVT glass and document glass. Refer to ADJ 60.3 Scanner cleaning procedure.
- Clean the tray 1 and tray 2 feed sensors and the area around the sensors, PL 80.25.
- Clean the tray 4 feed sensor and the area around the sensor, PL 80.33 Item 3.
- Clean the duplex sensor and the area around the sensor, (45-55 ppm) PL 80.22 Item 4 or (65-90 ppm) PL 80.20 Item 4.
- Clean the registration sensor and the surrounding area, (45-55 ppm) PL 80.15 Item 3 or (65-90 ppm) PL 80.17 Item 3.
- For special tools and consumables, refer to GP 8 Special Tools and Consumables.
- Go to SCP 5 Final Actions.

Xerographic Module (XRU) Handling

- The Xerographic Module (XRU) must be protected from light shock and mechanical damage.
- Do not expose the photoreceptor drum to bright lights for extended periods.
- Whenever the XRU is removed from the IOT, place the XRU in the black plastic bag supplied with the IOT. Store the XRU in a safe place on a clean flat surface, to avoid damage to the photoreceptor drum surface.
- Place the XRU in the black bag if the covers are removed or left open for long periods.

SCP 5 Final Actions

Use the Final Actions to verify the total operation of the system. Use the Final Actions to complete the service call.

Procedure

Perform the steps that follow. If a fault is identified, go to SCP 3 Fault Analysis:

1. If necessary re-connect the machine to the customers network.
2. If necessary, restore the NVM to the machine. Go to dC361 NVM Save and Restore.
3. If necessary, perform GP 19 Network Clone Procedure.

   NOTE: *The clone file will need to be taken whenever the system software is changed.*
4. Go to SCP 4 Subsystem Maintenance.
5. To clear all fault counters, go to GP 1 Service Mode
6. Operate the machine in all modes. Make the copies and prints from all trays, use the SPDH and the document glass.
7. Make copies and/or prints from all trays and check the registration and copy quality. To reset the registration, go to dC604 Registration Setup Procedure. For copy quality defects, go to IQ1 Image Quality Entry RAP.
8. Make a proof copy or print of a customer document.
9. If some of the customers selections were changed, return the selections to the customer settings.
10. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
11. If some changes were made to the configuration or options were added, print the configuration report. Store the configuration report with the machine log book. Discard the previous version of the configuration report.
12. Remove and destroy all copies of test patterns.
13. Make sure the machine and service area are clean.
14. If necessary, provide the customer with training.
15. At the completion of the service call, log the billing counters.
16. If a new IOT PWB, scanner PWB, hard disk or SD card has been installed, check that the following settings for the machine's NVM parameters are correct. Refer to GP 27;
    - Machine speed, NVM location 616-003.
    - Service plan, NVM location 606-269.
    - Market region, NVM location 616-001.
    - Serial number, refer to dC132.
17. Save the NVM of the machine to the hard disk, dC361 NVM Save and Restore.

SCP 6 Machine Features

Configuration Options

The WorkCentre 5890F is available as a basic machine with trays 1, 2 and 5 (bypass tray). It is also available in various configurations using the options that follow:

General

For the space requirements, environment range and the print out time. Refer to:

- GP 21 Installation Space Requirements
- GP 23 Environmental Data.
- GP 25 First Copy / Print Out Time and Power On / Off Time.

Paper supply and paper handling options

- Two 500 sheet paper trays (trays 1 and 2).
- Optional 3600 sheet high capacity feeder (tray 3 and 4).
- 100 sheet bypass tray (tray 5).
- Optional 4100 sheet high capacity feeder (tray 6).
- 200 sheet single pass document handler (SPDH).

Output options

- 500 sheet offsetting catch tray (OCT).
- Basic office finisher. A 1250 sheet 2 bin stapler stacker. Abbreviated to 1K LCSS.
- Office finisher. A 2250 sheet 2 bin stapler stacker. Abbreviated to 2K LCSS.
- Office finisher with booklet maker. A 2000 sheet 2 bin stapler stacker tray with booklet maker. Abbreviated to LVF BM.
- High volume finisher. A 3000 sheet 2 bin stapler stacker with 100 sheet finishing. Abbreviated to HVF.
- Post print inserter. A 250 sheet post print inserter used with an HVF. Abbreviated to PPI.
- High volume finisher with booklet maker. A 2000 sheet 2 bin stapler stacker with booklet maker. Abbreviated to HVF BM.
- Tri-folder. A 2000 sheet 2 bin stapler stacker with booklet maker and tri-folder.

Accessories and Kits

- Workshelf.
- 50 sheet convenience stapler.
- Tray 6 Short edge reg kit (A4 / 8.5x11 inch SEF).
- Tray 6 Short edge reg kit (A3 / 17 inch SEF).
- Envelope kit.
- 2 hole punch kit.
- Legal 2 hole punch kit.
- 3 hole punch kit.
- 4 hole punch kit.
- Swedish 4 hole punch kit.
- 1 Line Fax kit.
- 2 Line Fax kit.
- Scan to PC desktop SE - standard.
- Scan to PC desktop SE - professional.
- Nationalization kits.
- Foreign device interface kit.
- Tray 2/4 lock kit.
- Unicode international printing kit.
- Secure access kit.
- Common access card.
- McAfee Integrity Control enablement kit.
- XPS enablement kit.
- Wireless print kit.
- Smartcard kit.

NOTE: *The service manual covers all of the above configurations. Within the manual, ignore any references to options that are not installed.*

Development History

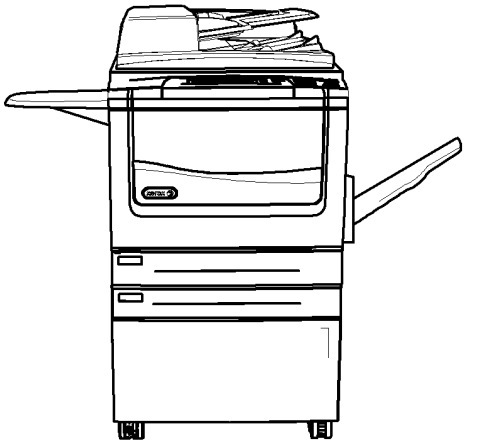
The WC5890F machines have been developed from the WC5790F and offer the following new features:

- Single pass document handler (SPDH)
- Low volume finisher booklet maker (LVF BM).

Machine Identification

The diagrams that follow illustrate some of the various machine configurations:

- Figure 1 WC5845 with workshelf, stand and OCT.
- Figure 2 WC5845 with workshelf, HCF and 1K LCSS.
- Figure 3 WC5865 with HCF and 2K LCSS.
- Figure 4 WC5875 with HCF, tray 6 and LVF BM.
- Figure 5 WC5890 with HCF, tray 6, HVF BM, inserter and tri-fold.



V-1-0001-A

Figure 1 WC5845

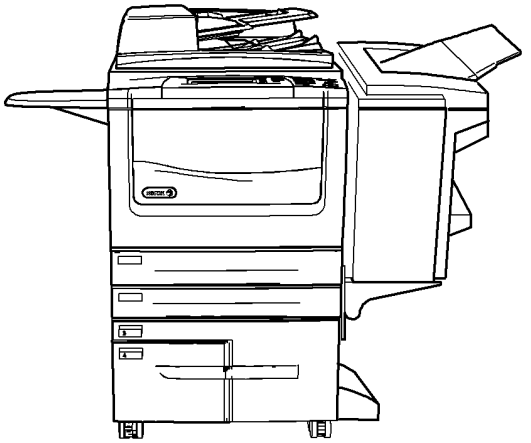


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Figure 2 WC5845

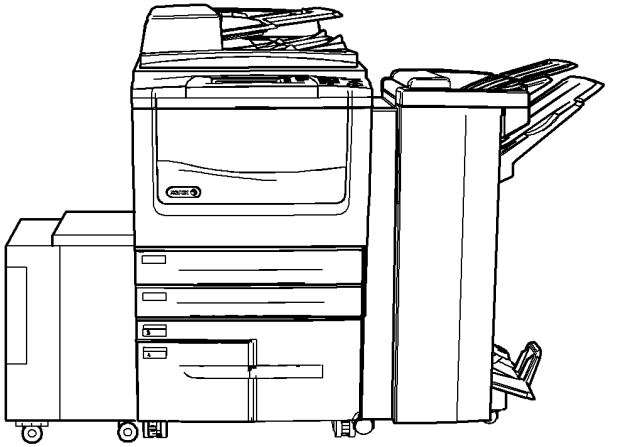

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Figure 4 WC5875

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Figure 3 WC5865

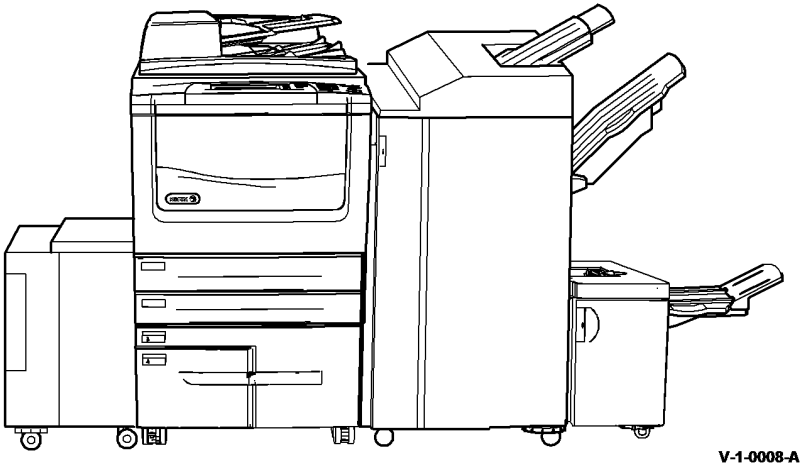

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Figure 5 WC5890

2 Status Indicator RAPs

Chain 11-110 - 2K LCSS

Chain 11-120 - 1K LCSS

Chain 11-150 - LVF

Chain 11-171 - HVF

Chain 12 - Offset Catch Tray

Chain 16 - Network Controller

Chain 19 - Image Processing

Chain 20 - Fax

Chain 22 - System Errors

Chains 40 to 41 - Main Drives

Chains 61 to 66 - Imaging

Chains 70 to 76 - Paper Supply

Chains 80 to 83 - Paper Transport

Chains 90 to 94 - Xerographics

Chain 95 - Software Upgrade Faults

OF - Other Faults

301-300-00 Front Door Open RAP

301-300-00 The front door has opened during machine operation.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330, code 001-300 front door interlock, Figure 1. Press start, open and close the front door. **The display changes.**

Y N

Go to Flag 2. **+12V is available at P/J147 pin 4 on the main drive PWB.**

Y N

Go to Flag 2. **+12V is available at P/J147 pin 3 on the main drive PWB.**

Y N

Go to Flag 2. **+12V is available at P/J16 pin 3 on the LVPS.**

Y N

Go to the 301H Short Circuit and Overload RAP and check for a short circuit in the +12V distribution.

Repair the wiring or the connector pins between P/J16 and P/J147.

Remove the main drive module, (45-55 ppm) REP 40.1 or (65-90 ppm) REP 40.5. Go to Flag 2. Check the continuity to the xerographic module CRUM at P/J147, between pins 3 and 4. If necessary, check and repair the wiring between the main drive module and the xerographic CRUM, REP 1.2.

Go to Flag 1. **+12V is available at P/J17, pin 5.**

Y N

Perform the 301L LVPS Checkout RAP.

Go to Flag 1. **+12V is available at P/J17, pin 6.**

Y N

Check S01-300 and associated wiring. Refer to:

- GP 13 How to Check a Switch.
- P/J17, LVPS.
- REP 1.2 Wiring Harness Repairs.

If necessary, install a new front door interlock switch, PL 1.10 Item 7.

Go to Flag 3. Open the front door, then measure the signal at P/J26 pin 8 on the IOT PWB. **+3.3V is measured.**

Y N

Perform the 301L LVPS Checkout RAP.

Perform OF7 IOT PWB Diagnostics RAP.

A

A

Check that the front door, PL 28.10 Item 10 closes correctly. If not, check the following:

- The jam clearance latch, PL 80.20 Item 5.
- The xerographic module latch, PL 90.20 Item 7.
- (45-55 ppm) the fuser latch, PL 10.8 Item 5.
- (65-90 ppm) the fuser latch, PL 10.10 Item 5.
- The post fuser jam clearance latch, PL 10.15 Item 11.
- The latch cam handle, PL 10.15 Item 14.

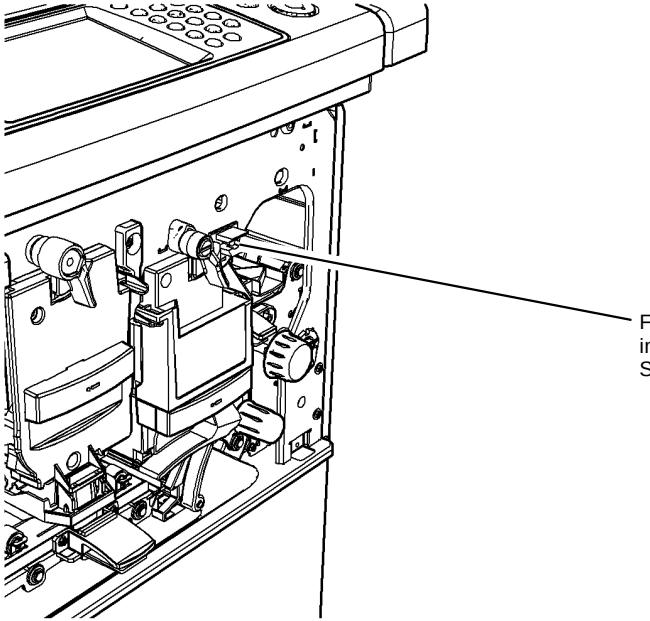


Figure 1 Component Location

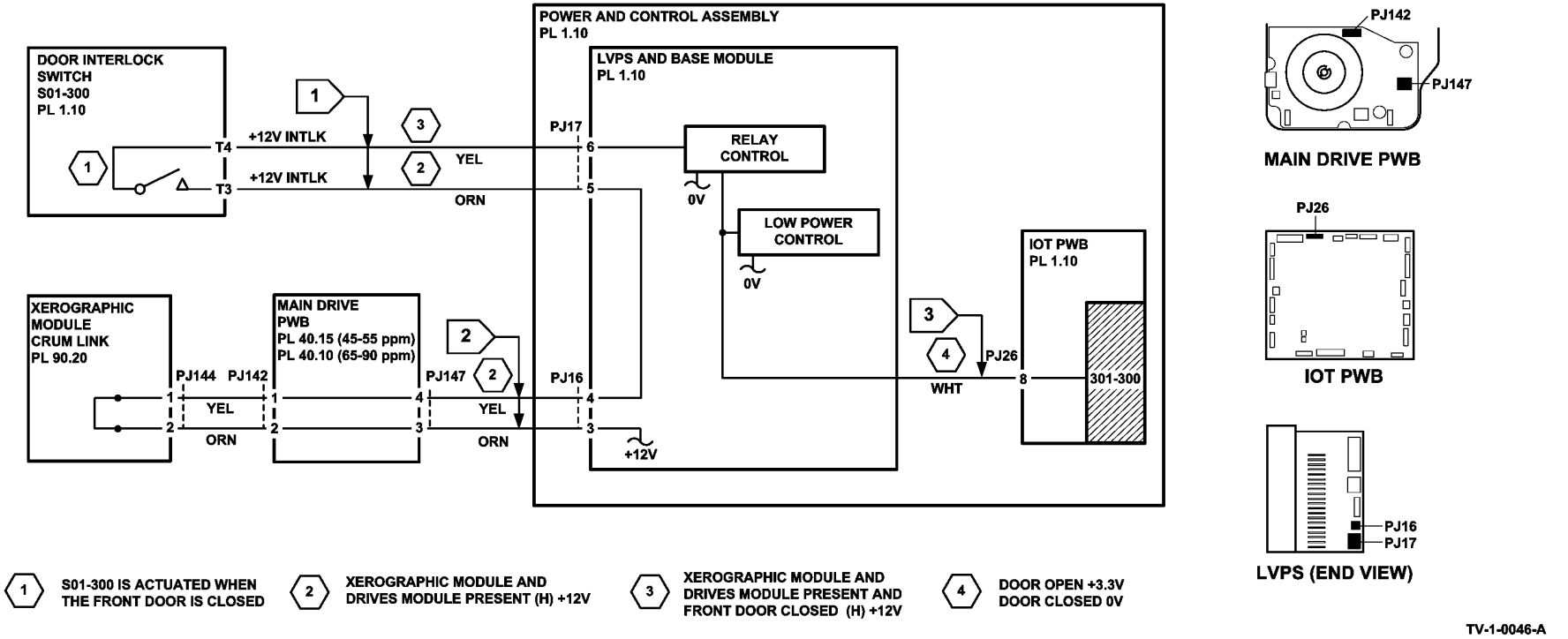


Figure 2 Circuit diagram

301-305-00 Left Door Open RAP

301-305-00 The left door has been opened during machine operation.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *To access the left door interlock, remove the interlock cover, PL 70.30 Item 23.*

Enter dC330, code 001-305 left door interlock. Press Start, open and close the left hand door, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check the left door interlock, S01-305. Refer to:

- GP 13, How to Check a Switch.
- P/J7 on the IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP

If necessary, install a new left door interlock, PL 70.30 Item 3.

Check that the left door closes correctly. If not, check the following:

- Hinge pin, PL 70.30 Item 8, is located correctly.
- Left door latch, part of the left door, PL 70.30 Item 2.
- Check that the interlock cover is not loose, PL 70.30 Item 23. If necessary push the cover towards the front and tighten the screws.

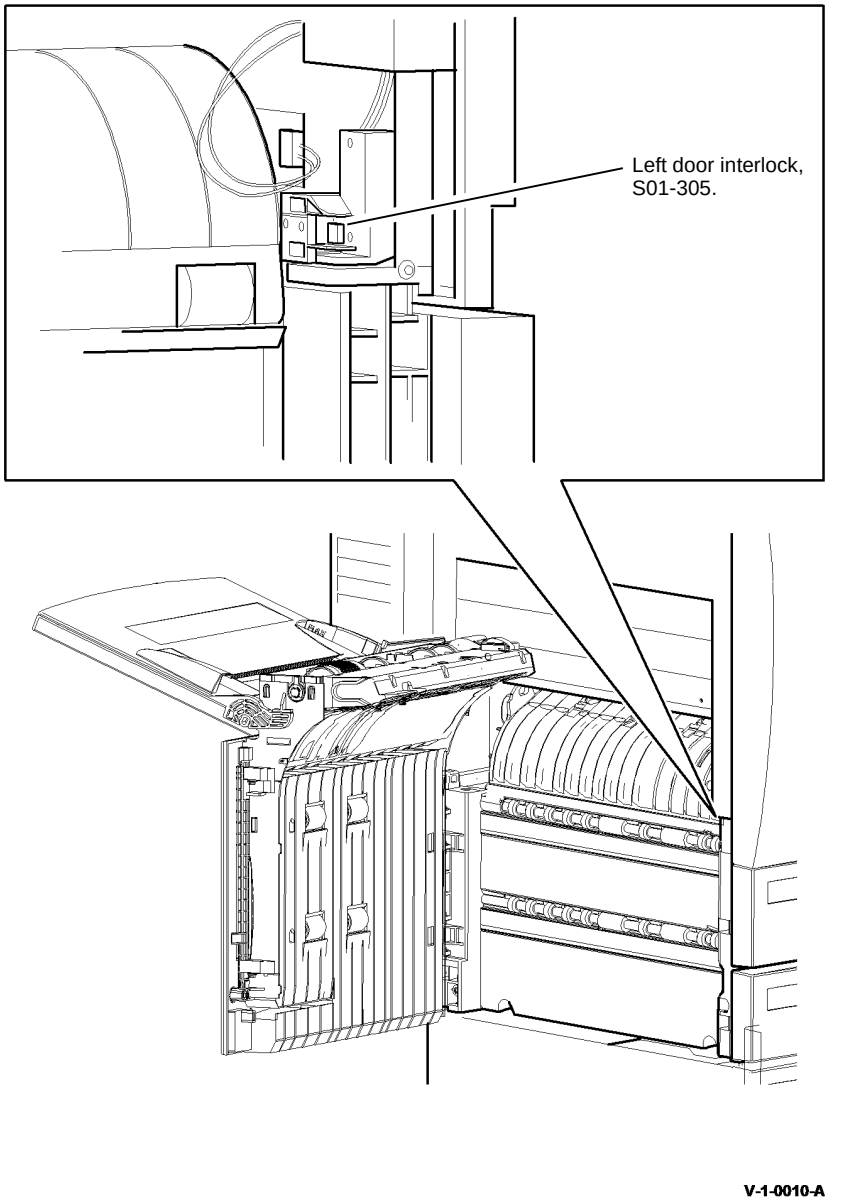


Figure 1 Component Location

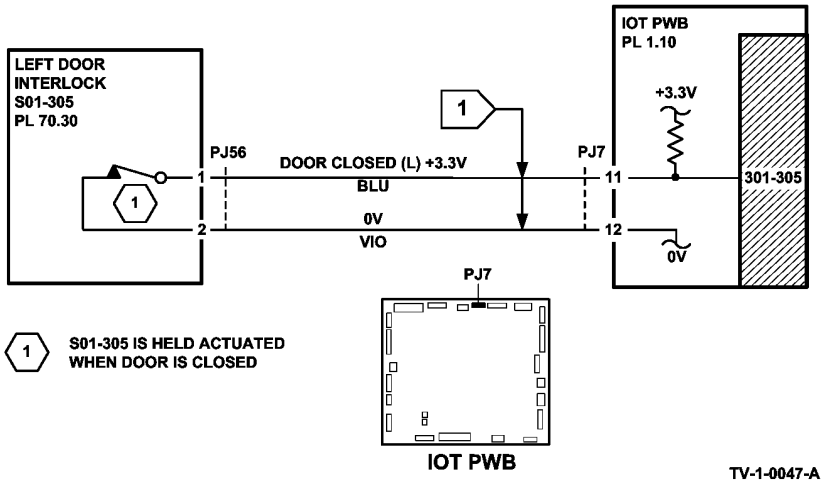


Figure 2 Circuit diagram

301A Ground Distribution RAP

Use this RAP to identify ground distribution faults.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not switch on the electricity to the machine while a ground circuit is disconnected. Ground circuits ensure that the machine remains safe during a fault condition.

NOTE: *Ground distribution faults must be isolated by continuity checks and visual inspection. Check all circuits between each connection and ground.*

Ground distribution faults can cause the following:

- Image quality faults
- Paper feed faults.
- Paper path faults.
- Random logic faults

To diagnose a suspected ground distribution fault, the following must be considered:

- Ensure that all the connectors are not damaged. Check crimping for suspect electrical connections or any mechanical failure that could cause a failed or poor electrical contact. Refer to REP 1.2 for information concerning wiring harness repairs.
- When making a continuity check on a harness, disconnect the harness at both ends, to ensure that other wiring does not cause continuity readings to be incorrect. Ensure that any in-line connectors are installed correctly.
- When making a check between connectors and ground, preferably use the main frame ground connection, Figure 1. Alternatively use any unpainted metal part of the machine frame.
- Check the ground conductor of the main power cord for continuity or damage, if necessary install a new main power cord, PL 1.10 Item 10.
- Check that the ground connections that follow are secure:
  - Main Frame
  - Corotron Shield Ground
  - Corotron Shield Ground Return
  - SPDH Ground Connection
  - Paper Path
  - Duplex Paper Path
  - Registration Transport
  - Bypass Tray
  - Tray 3 and 4
  - Paper Transport Rolls

– Fax Module
– Tray 6
– Scanner Module

Main Frame

Refer to Figure 1, main input and auxiliary output ground connections. Check for continuity of less than 1 ohm between the ground contact of each mains connector and the main frame ground. Check that the hardware is tight and the harness crimping is good. To improve continuity, disconnect the terminals, clean the contact faces and re-assemble.

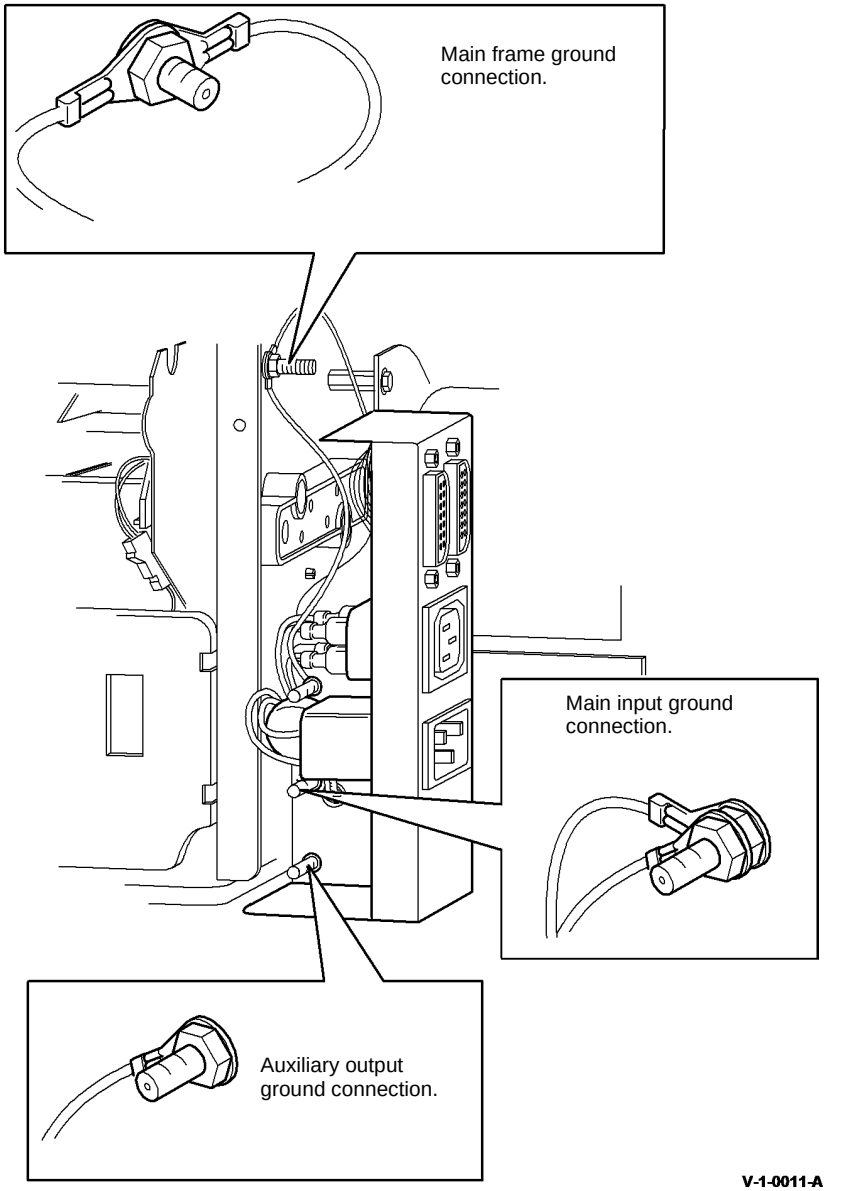


Figure 1 Component location

Corotron Shield Ground

Refer to Figure 2. Check for continuity of less than 10 ohms between the exposed metal end of the corotron shield and ground. To improve continuity, remove the duplex transport, REP 80.5, then check the corotron shield ground return,

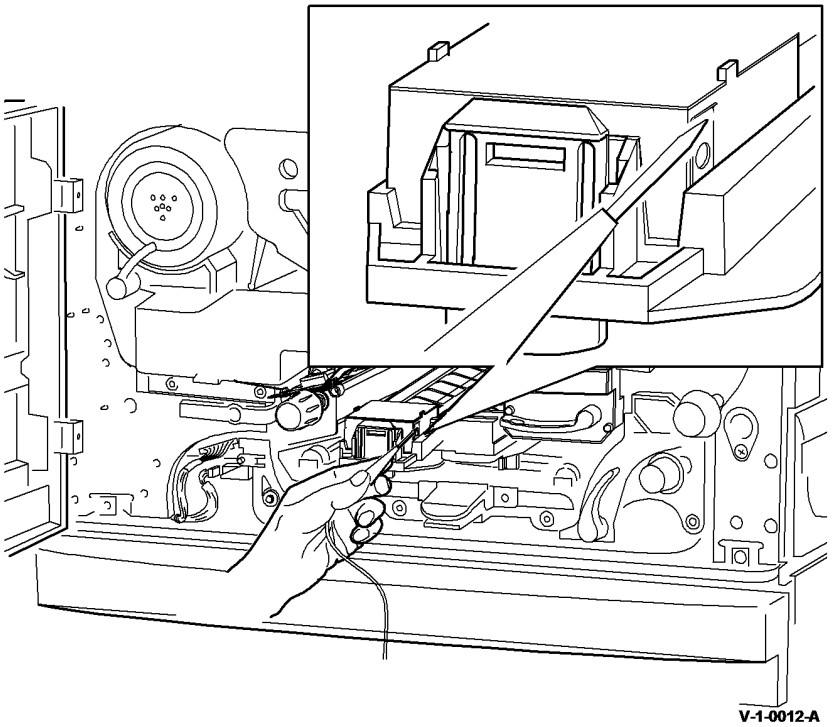


Figure 2 Corotron shield ground

Corotron Shield Ground Return

Refer to Figure 3. Check the connection of the Faston connector and the tightness of the screw at the rear of the machine frame. If necessary disconnect the terminals, clean the contact faces and re-assemble, to improve continuity.

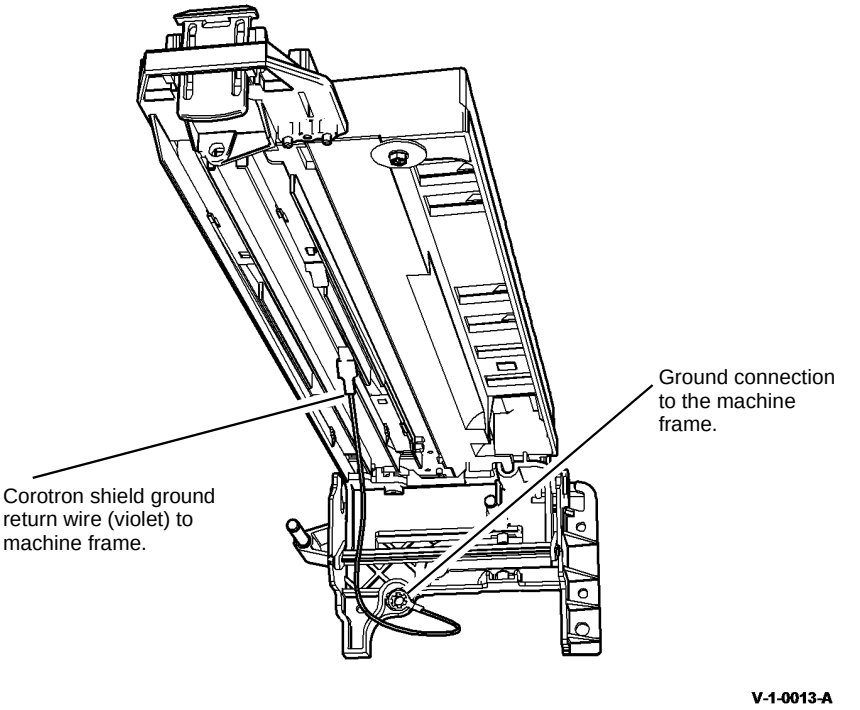


Figure 3 Corotron shield ground return

SPDH Ground Connection

Refer to Figure 5 and Figure 4, perform the following checks:

- Remove the SPDH rear cover, PL 5.10 Item 1. Check for continuity of less than 1 ohm between the SPDH frame and the main frame ground connection. To improve continuity, clean the contact faces between the left counterbalance, PL 5.10 Item 4 and the scanner module frame, then re-assemble, to improve continuity.
- Remove the feed assembly, REP 5.2, but do not disconnect the harness. Check for continuity between the feed assembly ground points at the end of the green wires and the ground terminals shown in Figure 5. To improve continuity disconnect, clean and reassemble the connections.
- Check for continuity between the motor housings and the left counterbalance. To improve continuity disconnect, clean and reassemble the motor ground connections shown in Figure 5.
- Remove the input tray assembly, REP 5.4, but do not disconnect the harness. Check for continuity between the ground points at the end of the green wires and the input tray ground connections indicated in Figure 5. To improve continuity disconnect, clean and reassemble the connections.

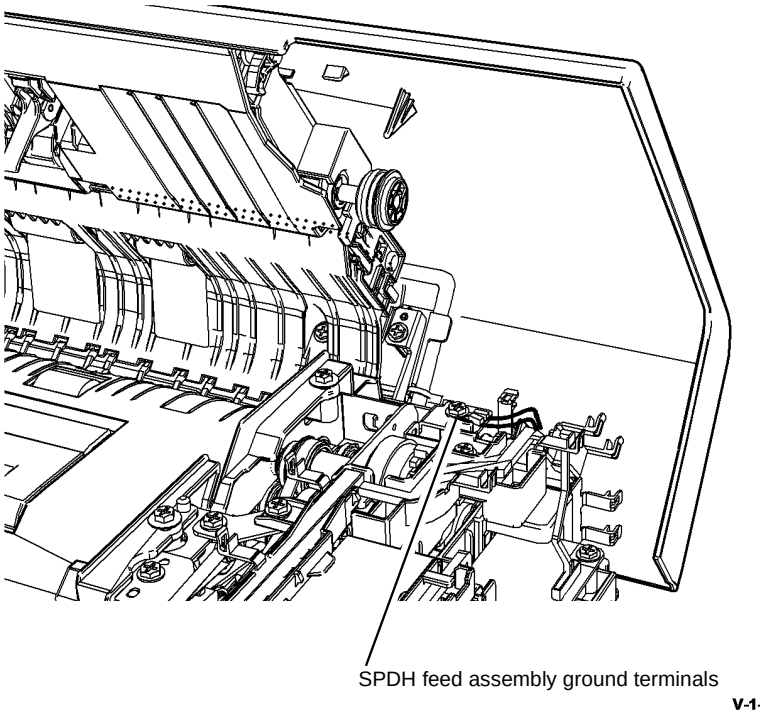


Figure 4 SPDH ground connections 1

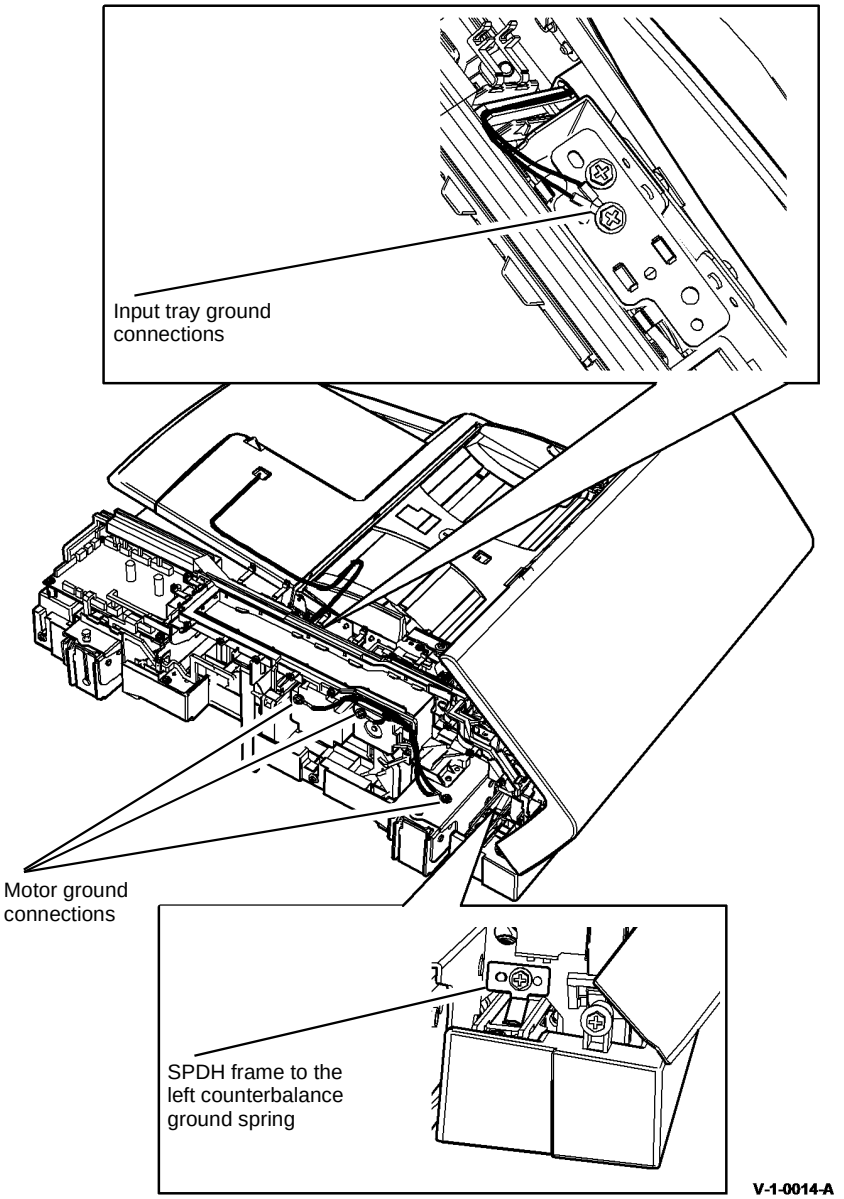


Figure 5 SPDH ground connections 2

Paper Path

Refer to Figure 6. With the duplex transport in the latched position, check for continuity of less than 1M ohms between the ends of the three duplex roll shafts, the steel frame of the duplex path and the main frame ground connection. Also check for continuity of less than 10 ohms between the steel frame of the duplex path and the ends of the three duplex roll shafts. To improve continuity, remove and re-install the duplex transport, REP 80.5.

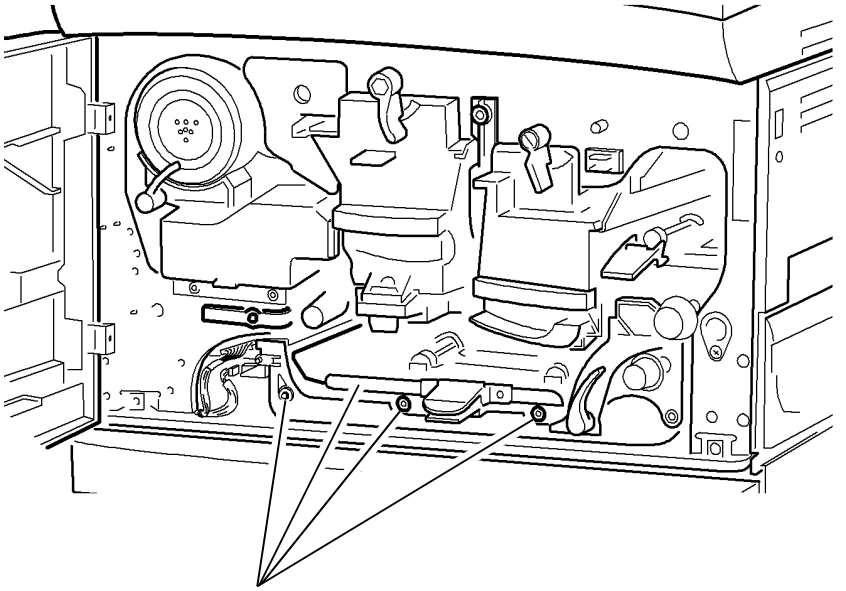


Figure 6 Paper path ground check points

Duplex Paper Path

Refer to Figure 7. Check the duplex paper path ground contact spring and ground wire terminal. If necessary remove and clean the spring, shafts and bearings, then re-assemble to improve continuity.

NOTE: *The (45-55 ppm) duplex transport is shown in Figure 7. The (65-90 ppm) duplex transport has a duplex duct installed, PL 80.20 Item 12.*

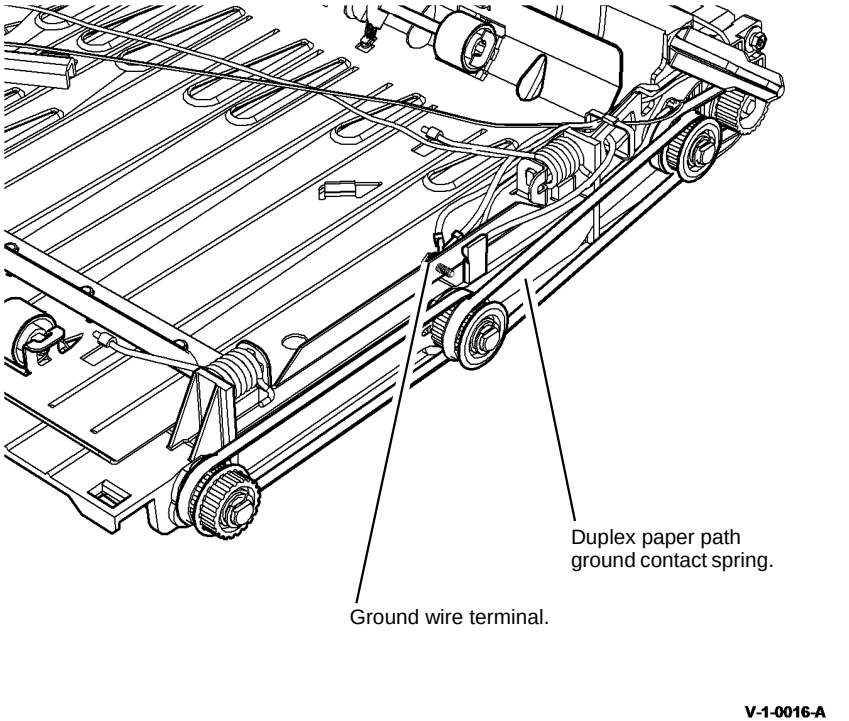


Figure 7 Duplex path ground contact spring

Registration Transport

Refer to Figure 8. Check for continuity of less than 2k ohms between the ends of the pre-registration drive roll shaft, the registration roll shaft and the grounding screw. To improve continuity, remove and re-install the registration transport, REP 80.2.

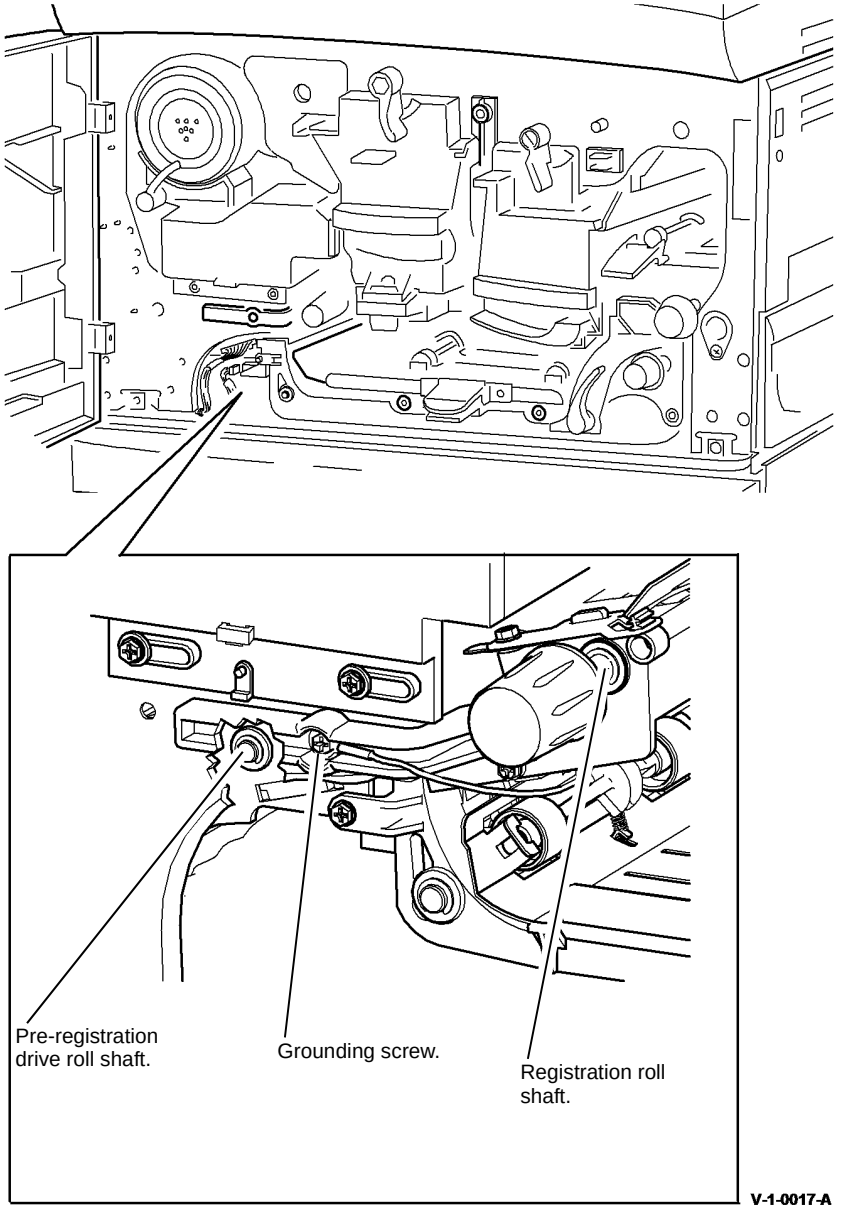


Figure 8 Registration ground check points

Refer to Figure 9. Check the registration ground contact spring and ground wire terminal. If necessary remove and clean the spring, shafts and bearings, then re-assemble to improve continuity.

NOTE: *The two bearings in contact with the registration ground contact spring are manufactured from conductive plastic. It is not possible to measure the resistance of these bearings with the standard service meter.*

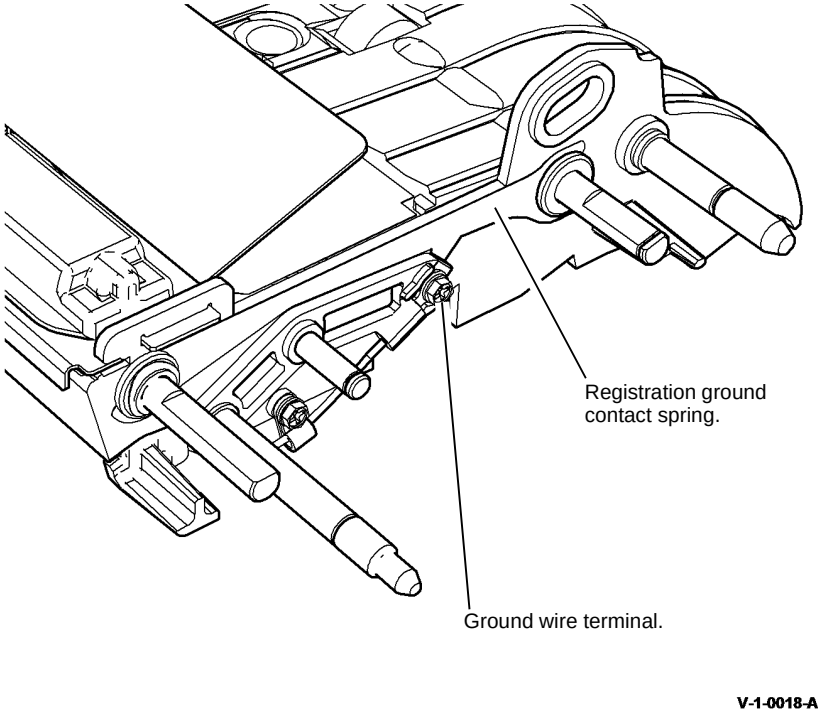


Figure 9 Registration ground contact spring

Bypass Tray

Refer to Figure 10. Check for continuity of less than 2k ohms between the ground contact spring and the lift plate (Figure 11). Check for continuity of less than 1 ohm between the bypass paper guide and the main frame ground connection, when the left hand door is closed. To improve continuity, disconnect the ground terminals clean the spring contact faces and re-assemble. Also check and clean, if necessary the part of the machine frame where the ground contact spring makes contact.

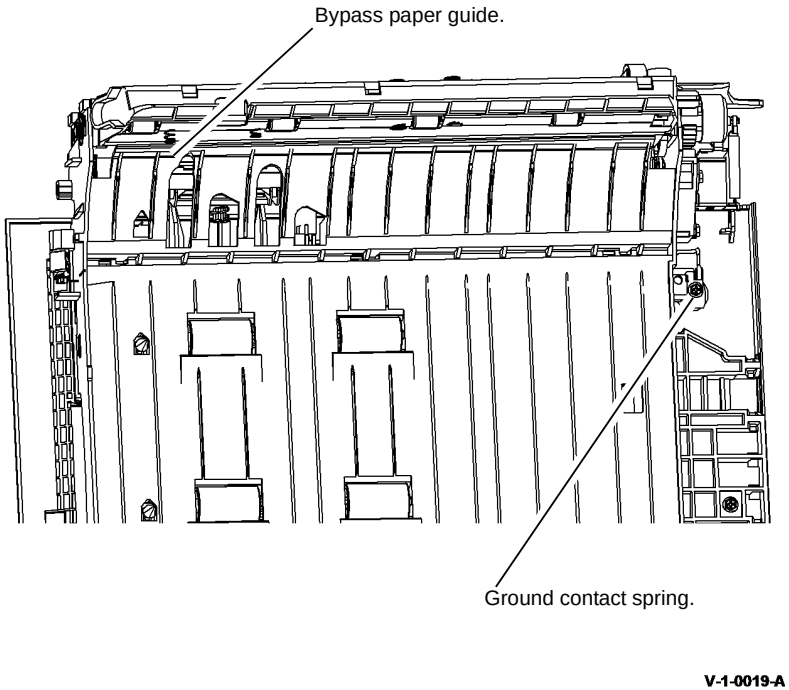


Figure 10 Bypass tray guide

Refer to Figure 11. Remove the feed head top cover, PL 70.30 Item 14. Check for continuity of less than 2k ohms between the ground contact spring (Figure 10) and the feed shaft. Check for continuity of less than 2k ohms between the feed shaft and the main frame ground connection when the left hand door is closed. To improve continuity, dismantle the ground connection spring, clean the spring contact faces and re-assemble, to improve continuity.

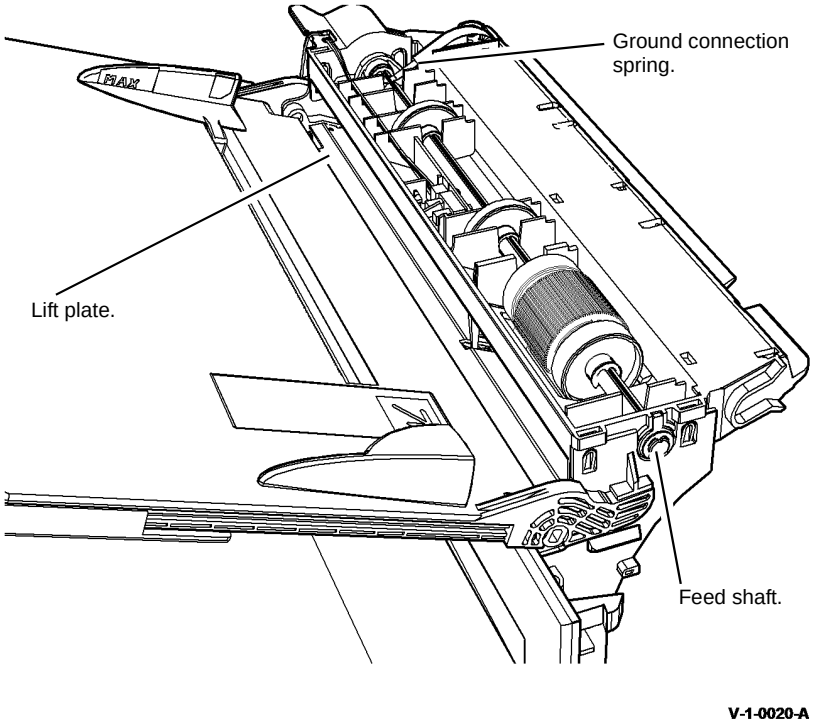


Figure 11 Bypass tray paper feed

Tray 3 and 4

Remove the tray 3 front cover, PL 70.26 Item 5 (4 screws). Refer to Figure 12. With tray 3 closed, check for continuity of less than 10k ohms between the tray 3 takeaway roll shaft and the main frame ground connection, also between the tray 3 and 4 transport roll shaft and the main frame ground connection

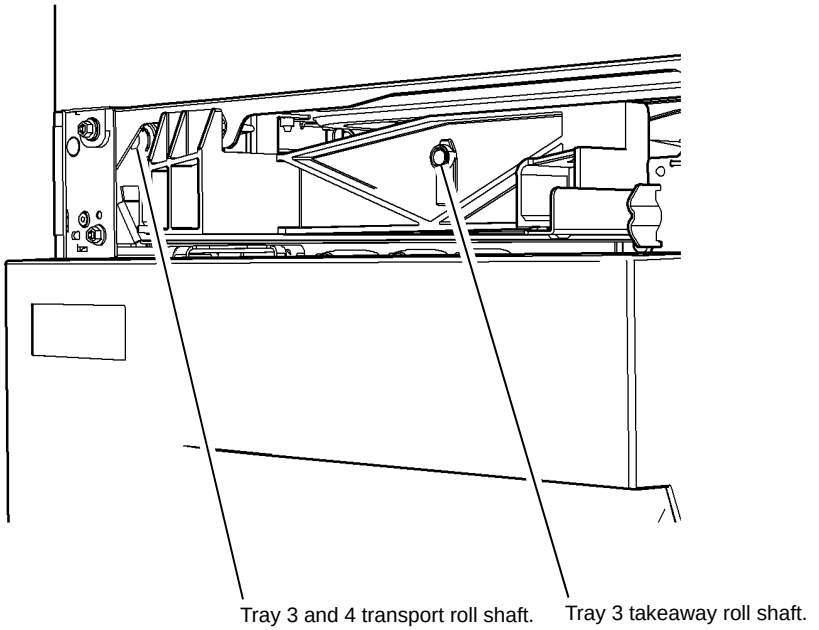


Figure 12 Continuity check points

1. If necessary, open the tray then rotate the shafts. Close the tray and repeat the measurements.
2. To improve continuity, remove the tray 3 takeaway roll, REP 80.36. Refer to Figure 13, clean the conductive plastic bearings and shaft. Then install the removed components.

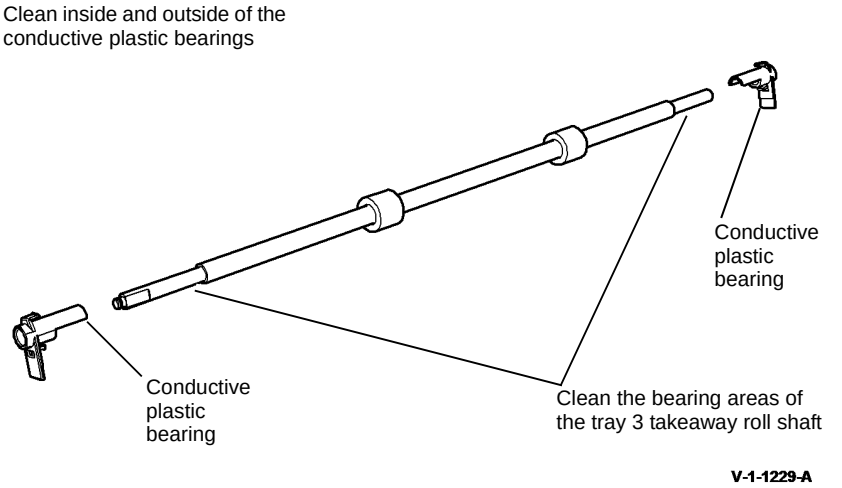


Figure 13 Component cleaning

3. To improve continuity, remove the tray 3 and 4 transport roll and bearings, REP 80.37. Refer to Figure 14, clean the bearings and shaft. Then install the removed components.

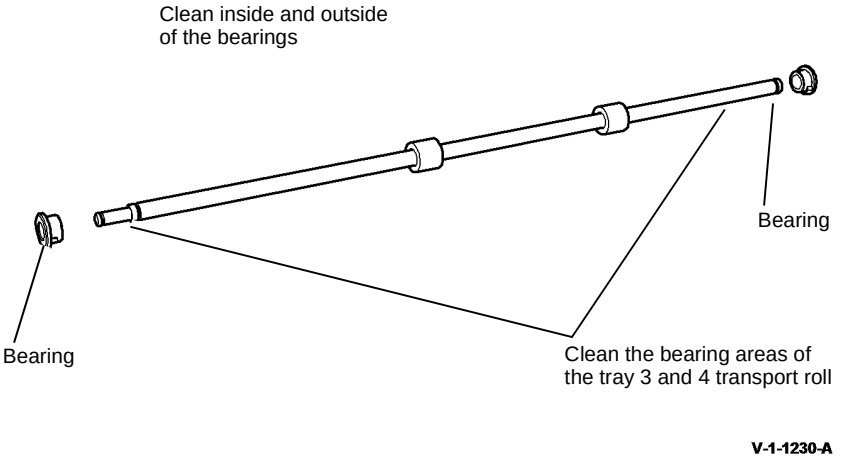


Figure 14 Component cleaning

4. Empty tray 3 of paper. Refer to Figure 15, check for continuity of less than 10k ohms between the tray 3 lift plate and the paper tray guide. To improve continuity, disconnect and clean the tray 3 ground harness connectors. Then install the removed components.

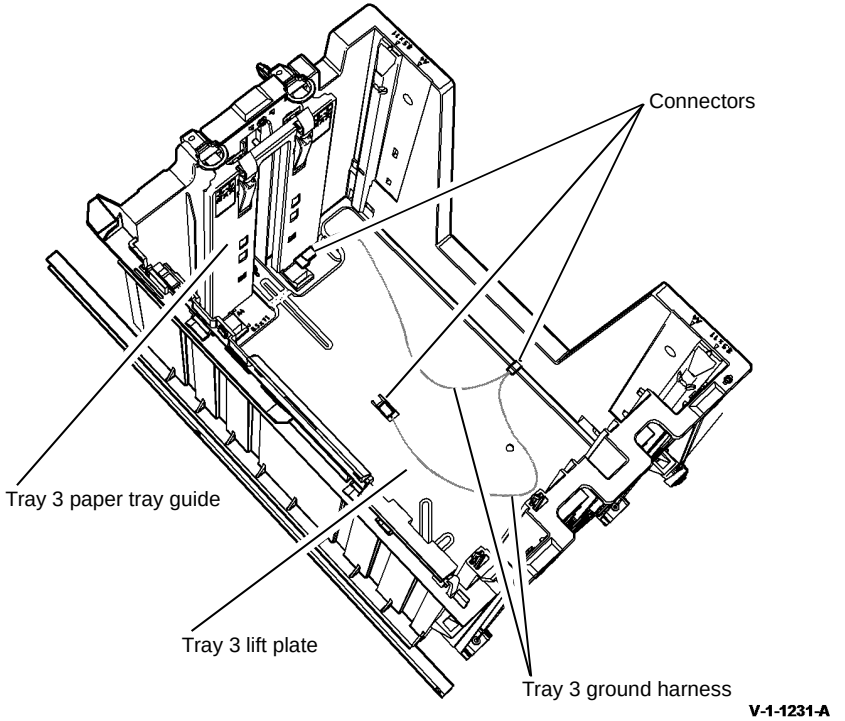


Figure 15 Tray 3 grounding

5. Empty tray 4 of paper. Refer to Figure 16, check for continuity of less than 10k ohms between the tray 4 lift plate and the paper tray guide. To improve continuity, disconnect and clean the tray 4 ground harness connectors. Then install the removed components.

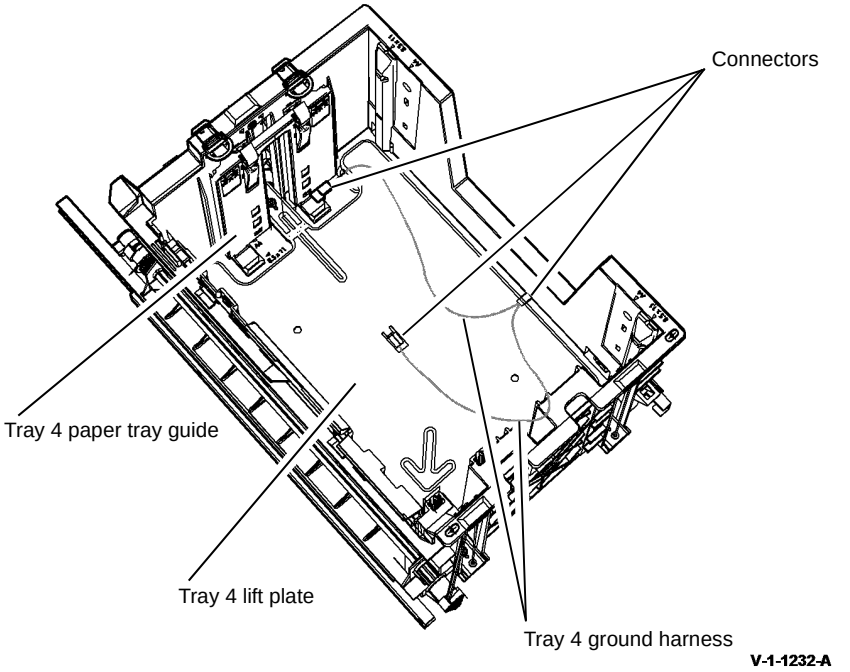


Figure 16 Tray 4 grounding

Paper Transport Rolls

Refer to Figure 17. Open the left hand door. Rotate the rolls by hand and check for continuity of less than 10k ohms between the tray 1 and tray 2 transport roll shaft and the main frame ground connection. To improve continuity for the tray 1 and tray 2 transport roll shaft, remove, clean and re-install the shaft and bearings, REP 80.10.

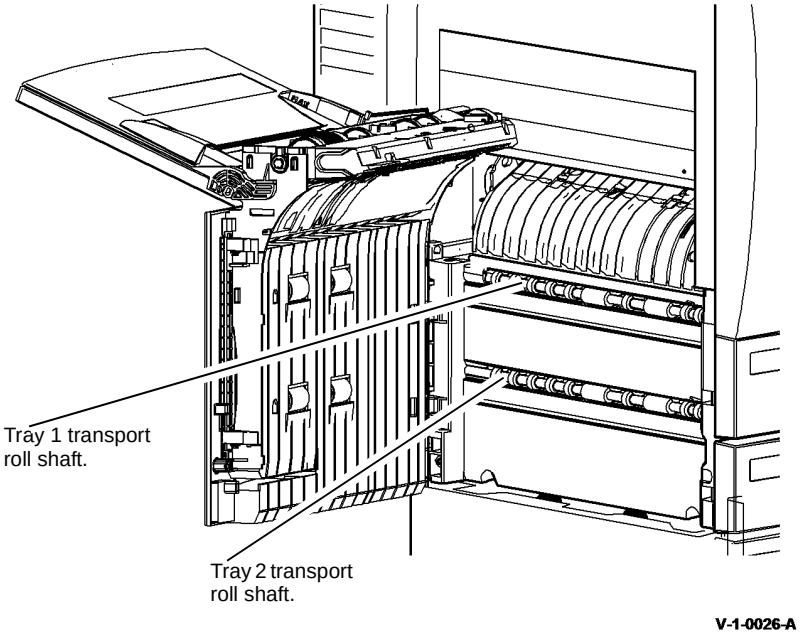


Figure 17 Paper transport rolls

Fax Module

Refer to Figure 18. Ensure the front face of the Fax module mounting flange and the mounting area of the SBC PWB module are clean.

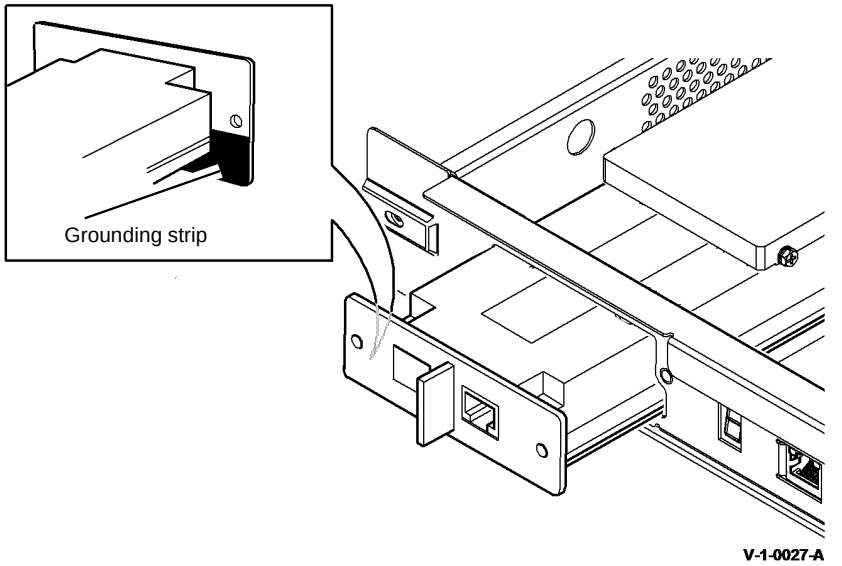


Figure 18 Fax module ground connection

Tray 6

Refer to Figure 19. Check the ground connection on the frame, the elevator motor and on the base of the paper tray. Ensure that the in-line connectors are fully connected.

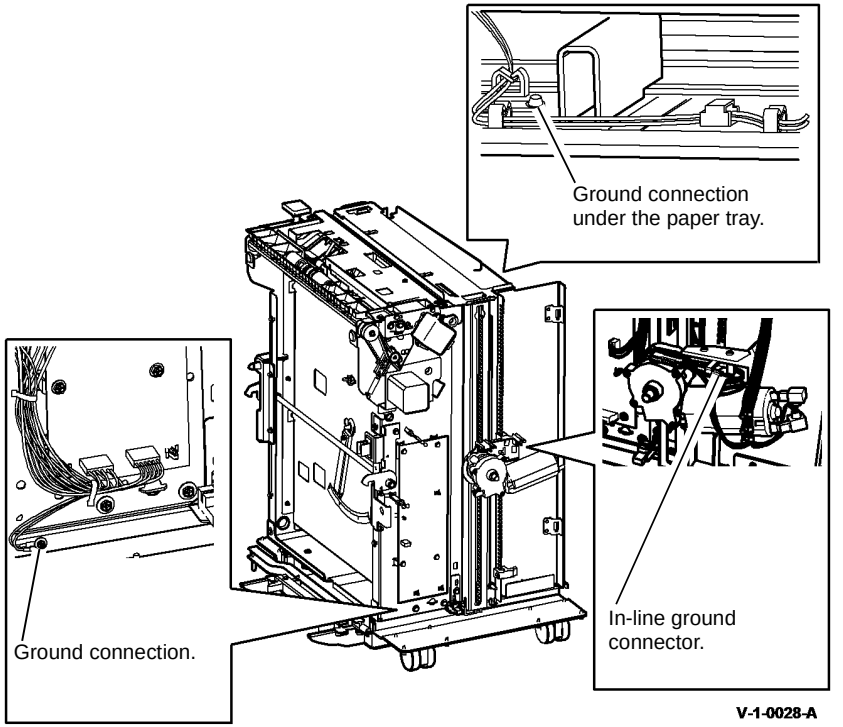


Figure 19 Tray 6 ground connections

Scanner Module

Refer to Figure 20, check the following:

- The ground connection between the machine frame and the scanner frame (2 places)
- The ground connection between the scanner frame, via three ground springs and the three mounting plates
- The ground connection between the mounting plate and the grounding strip
- The ground connection between the grounding strip and the transit shaft
- The ground connection between the grounding strip and the carriage support rail
- The condition of the foam pad between the scan carriage and the carriage support rail

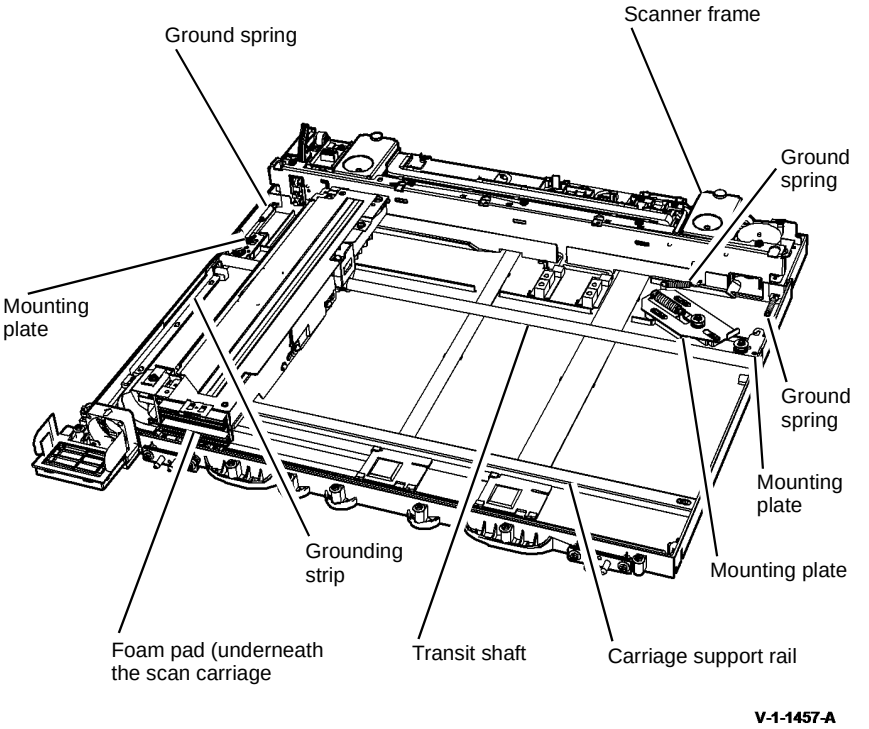


Figure 20 Scanner ground connections

301B 0V Distribution RAP

Use this RAP to identify 0V distribution faults.

Procedural Notes

NOTE: *If a voltage is measured between ground and a return 0V line, then the continuity of that 0V circuit must be checked.*

NOTE: *To isolate a 0V distribution fault, perform the following:*

1. *Check the continuity of a harness while the harness is disconnected at both ends. This is to ensure that other wiring does not cause false continuity readings.*
2. *Check the continuity and perform a visual inspection of each connection sequentially, back to its source.*
3. *Check that any in-line connectors are installed correctly.*
4. *Check that all connectors are mechanically good. Check crimping for suspect electrical connections or any mechanical failure that could cause a failed or poor electrical contact, GP 7. Refer to REP 1.2 for information concerning wiring harness repairs.*

NOTE: *The expression 'return' is used to identify the 0V line that completes the circuit for a particular voltage.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to the 0V circuit that has the suspect problem:

- 01B +3.3V Return.
- 01B +5V Return.
- 01B +12V Return.
- 01B +24V Return.

01B +3.3V Return

Go to the appropriate component in the list that follows that has the suspect 0V supply. Check the wiring GP 7.

- ROS, PL 60.10 Item 8.
  - Flag 1, P/J18, P/J1.
- Bypass tray width sensor, part of the bypass tray and left door assembly, PL 70.30 Item 1 and bypass tray empty sensor, PL 70.30 Item 7.
  - Flag 5, P/J36, P/J550, P/J10.
  - Flag 8, P/J36, P/J550, P/J10.
  - Flag 4, P/J27.
- Paper path module components (45-55 ppm); IOT exit sensor, PL 10.11 Item 13, duplex sensor, PL 80.22 Item 4, wait sensor, PL 80.15 Item 3, registration sensor, PL 80.15 Item 3.
- Paper path module components (65-90 ppm); IOT exit sensor, PL 10.11 Item 13, duplex sensor, PL 80.20 Item 4, wait sensor, PL 70.30 Item 25, registration sensor, PL 80.17 Item 3.
  - Flag 7, P/J5.
  - Flag 4, P/J27.
- IOT PWB PL 1.10 Item 2.
  - Flag 4, P/J27.
  - Flag 6, P/J27.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 2, P/J271, P/J9.
  - Flag 4, P/J27.
- SBC PWB, PL 3.22 Item 3.
  - Flag 49, P/J81, P/J104.
  - Flag 51, P/J133, P/J130.
  - Flag 48, P/J25, P/J131.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 50, P/J459, P/J418.
  - Flag 9, P/J410, P/J140.
  - Flag 48, P/J25, P/J131.
- Side 2 CCD PWB, part of the scan assembly PL 5.10 Item 12.
  - Flag 31, P/J452, P/J458.
  - Flag 50, P/J459, P/J418.
  - Flag 9, P/J410, P/J140.
  - Flag 48, P/J25, P/J131.
- UI control PWB, PL 2.10 Item 6.
  - Flag 51, P/J133, P/J130.
  - Flag 48, P/J25, P/J131.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 9, P/J410, P/J140.
  - Flag 48, P/J25, P/J131.
- Scanner CCD PWB, part of the scan carriage assembly, PL 60.20 Item 1.
  - Flag 14, P/J446, P/J416.
  - Flag 9, P/J410, P/J140.
  - Flag 48, P/J25, P/J131.
- Fax connector PWB, PL 20.05 Item 2.
  - Flag 23, P/J1, P/J212.
  - Flag 49, P/J81, P/J104.
  - Flag 51, P/J133, P/J130.
  - Flag 48, P/J25, P/J131.
- Fax module, PL 20.05 Item 1.
  - Flag 23, P/J1, P/J212.
  - Flag 49, P/J81, P/J104.
  - Flag 51, P/J133, P/J130.

- Flag 48, P/J25, P/J131.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 48, P/J25, P/J131.
- Foreign device interface PWB, PL 3.22 Item 26.
  - Flag 52, P/J16, P/J201.
  - Flag 49, P/J81, P/J104.
  - Flag 51, P/J133, P/J130.
  - Flag 48, P/J25, P/J131.
- Foreign device.
  - Flag 53, P/J100, 124.
  - Flag 52, P/J16, P/J201.
  - Flag 49, P/J81, P/J104.
  - Flag 51, P/J133, P/J130.
  - Flag 48, P/J25, P/J131.

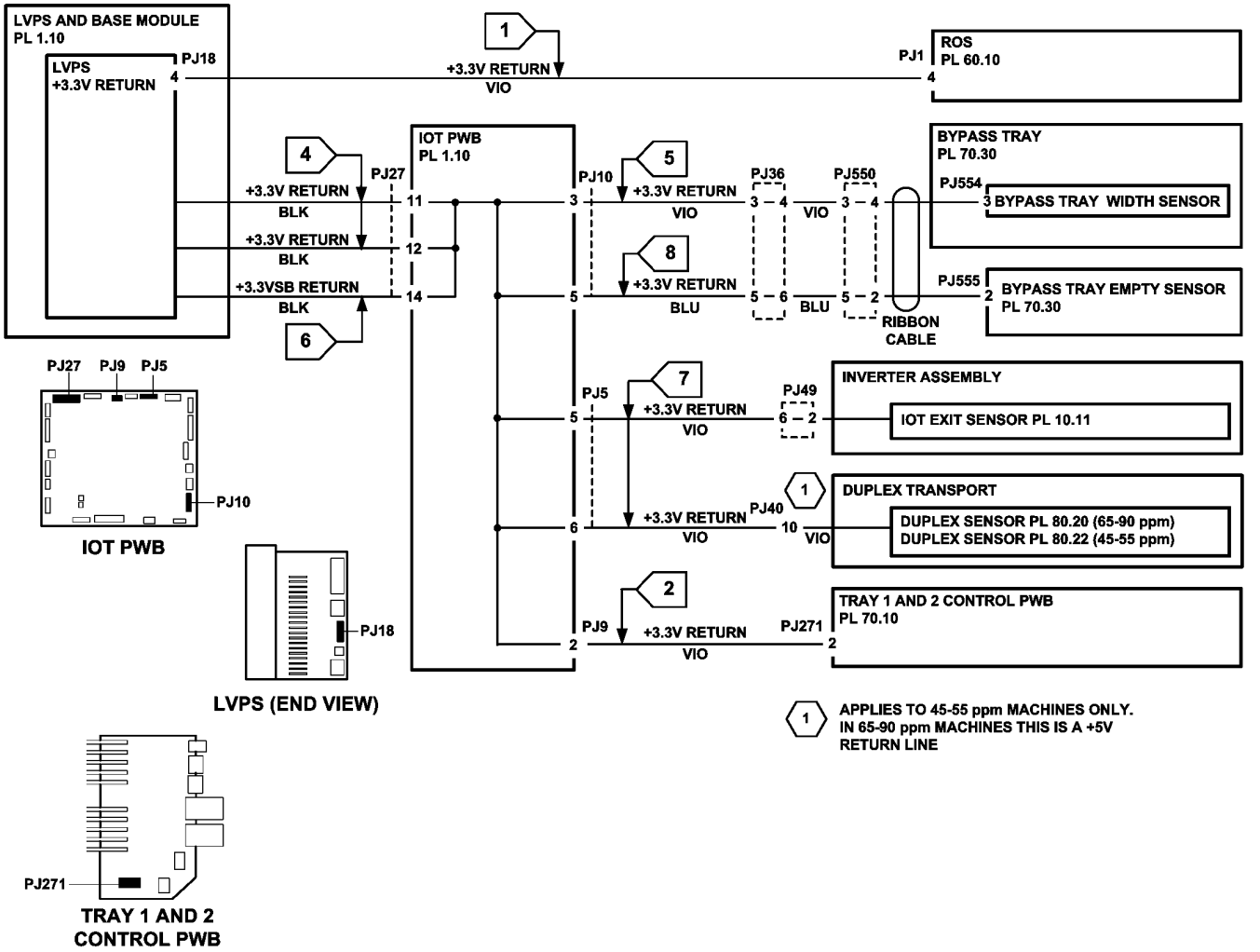


Figure 1 +3.3V Return

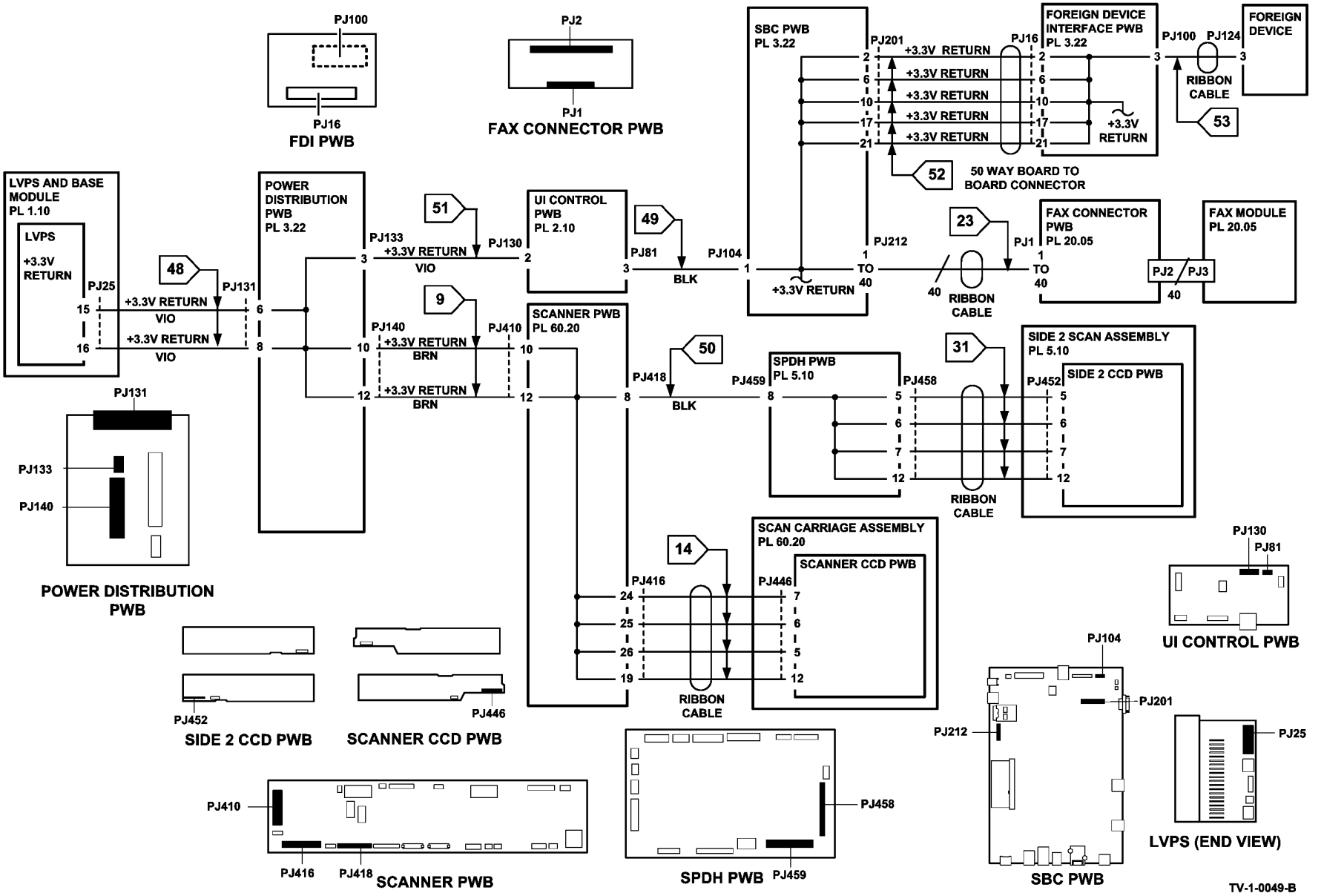


Figure 2 +3.3V Return

01B +5V Return

Go to the appropriate component in the list that follow that has the suspect 0V supply. Check the wiring GP 7.

- Xerographic CRUM, part of the xerographic module, PL 90.20 Item 2.
  - Flag 17, P/J142, P/J144.
  - Flag 16, P/J149, P/J8.
  - Flag 15, P/J27.
- Fuser module CRUM, part of the fuser module (45-55 ppm), PL 10.8 Item 1, (65-90 ppm), PL 10.10 Item 1.
  - Flag 18, P/J146, P/J141.
  - Flag 16, P/J149, P/J8.
  - Flag 15, P/J27.
- Main drive PWB, part of the main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.
  - Flag 16, P/J149, P/J8.
  - Flag 15, P/J27.
- IOT PWB, PL 1.10 Item 2.
  - Flag 15, P/J27.
- Registration sensor (65-90 ppm), PL 80.17 Item 3.
  - Flag 47, P/J16.
  - Flag 15, P/J27.
- HCF control PWB PL 70.21 Item 2.
  - Flag 20, P/J272, P/J63, P/J7.
  - Flag 19, P/J270, P/J19.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 19, P/J270, P/J19.
- Output device, (OCT, PL 12.10 Item 1), (1K LCSS PWB, PL 11.124 Item 10), (2K LCSS PWB, PL 11.26 Item 1), (LVF PWB, PL 11.90 Item 8), (HVF control PWB, PL 11.157 Item 2).
  - Flag 21, P/J11.
  - Flag 15, P/J27.
- Fax connector PWB, PL 20.05 Item 2.
  - Flag 24, P/J212, P/J1.
- Fax module PL 20.05 Item 1.
  - Flag 24, P/J212, P/J1.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 22, P/J25, P/J131.
- Relative humidity sensor, PL 90.20 Item 4.
  - Flag 45, P/J7.
  - Flag 15, P/J27.
- Ambient temperature sensor, PL 90.20 Item 4.
  - Flag 45, P/J7.
  - Flag 15, P/J27.
- Waste toner full sensor, PL 90.10 Item 2.
  - Flag 45, P/J7.
  - Flag 15, P/J27.
- Left door interlock, PL 70.30 Item 3.
  - Flag 45, P/J7.
  - Flag 15, P/J27.
- Waste toner door switch, PL 90.10 Item 6.
  - Flag 45, P/J7.
  - Flag 15, P/J27.
- Tray 6 control PWB, PL 70.68 Item 8
  - Flag 25, P/J502, P/J272, P/J12.
  - Flag 15, P/J27.
- Hard disk drive, PL 3.22 Item 2.
  - Flag 10, P/J116.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 11, P/J140, P/J410.
  - Flag 22, P/J25, P/J131.
- Wait sensor (65-90 ppm only), PL 70.30 Item 25.
  - Flag 45, P/J16, P/J559, P/J636.
  - Flag 15, P/J27.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 44, P/J460, P/J417.
  - Flag 11, P/J410, P/J140.
  - Flag 22, P/J25, P/J131.
- Side 2 CCD PWB, part of the scan assembly, PL 5.10 Item 12.
  - Flag 52 P/J460, P/J417.
  - Flag 44, P/J460, P/J417.
  - Flag 11, P/J410, P/J140.
  - Flag 22, P/J25, P/J131.

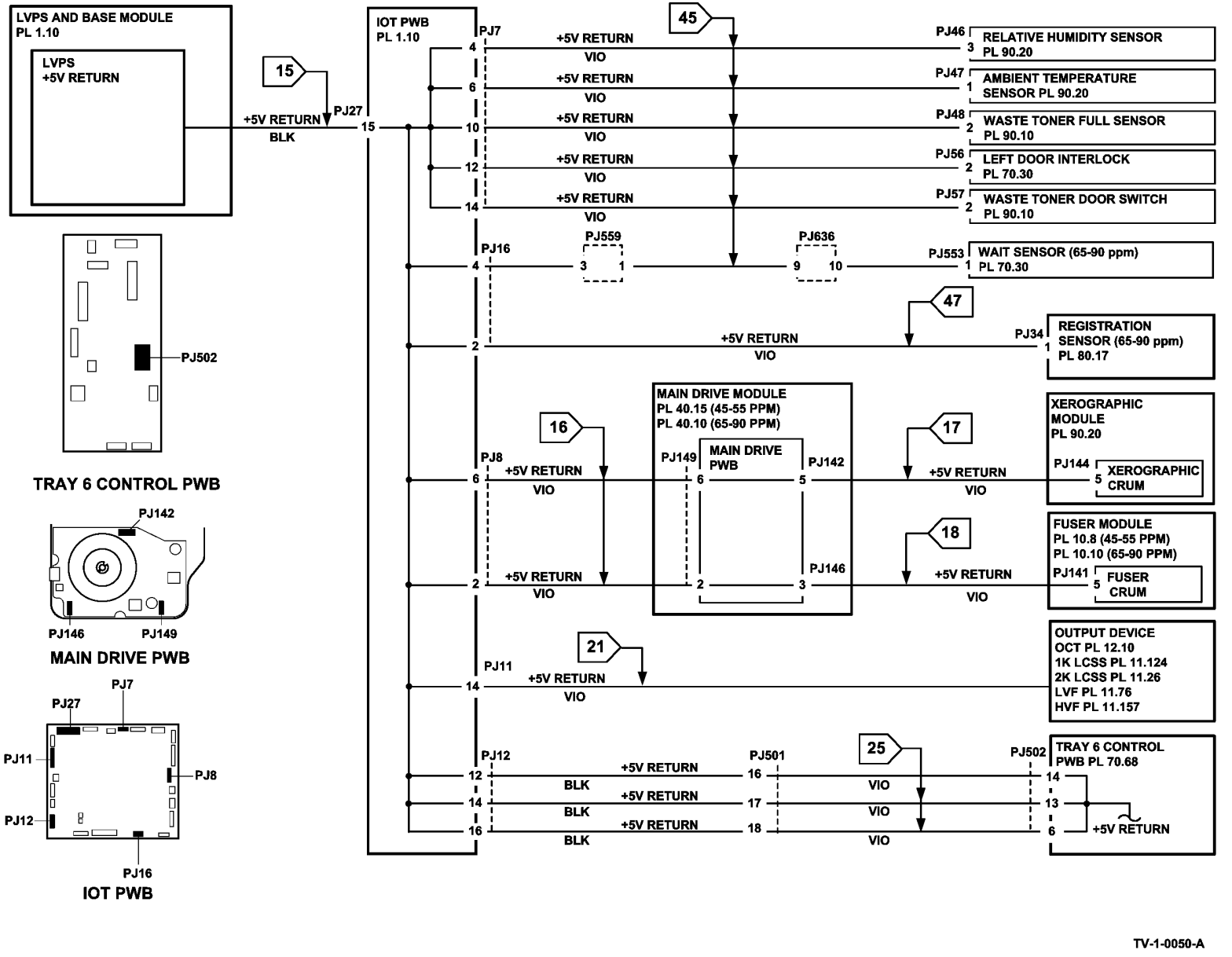


Figure 3 +5V Return

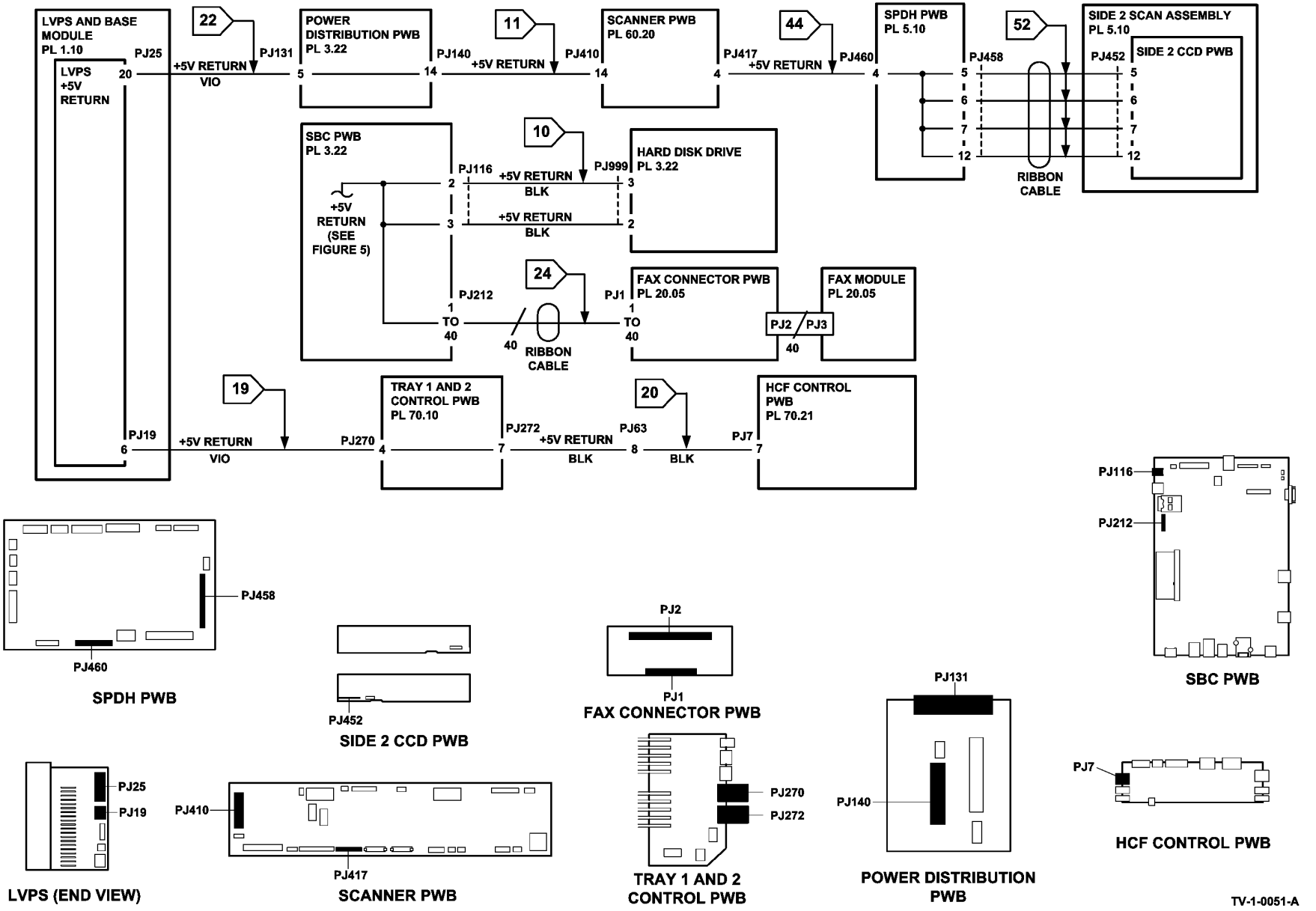


Figure 4 +5V Return

01B +12V Return

Go to the appropriate component in the list that follows that has the suspect 0V supply. Check the wiring GP 7.

- IOT PWB, PL 1.10 Item 2.
  - Flag 26, P/J27.
- UI control PWB, PL 2.10 Item 6.
  - Flag 28, P/J133, P/J130.
  - Flag 27, P/J25, P/J131.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 29, P/J410, P/J140.
  - Flag 27, P/J25, P/J131.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 27, P/J25, P/J131.
- SBC PWB, PL 3.22 Item 3.
  - Flag 30, P/J137, P/J106.
  - Flag 27, P/J25, P/J131.

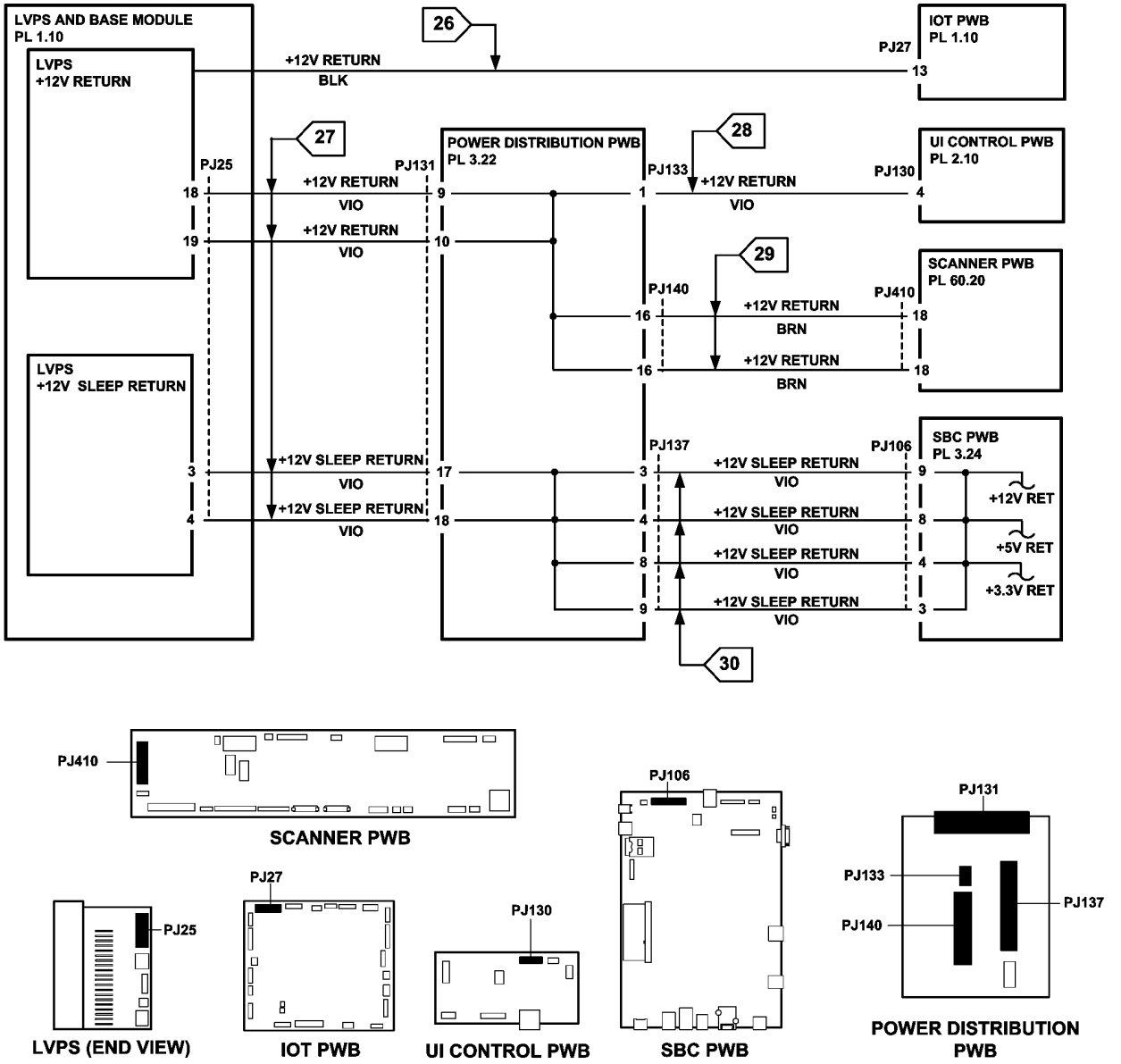


Figure 5 +12V Return

01B +24V Return

Go to the appropriate component in the list that follows that has the suspect 0V supply. Check the wiring GP 7.

- Inverter motor driver PWB, PL 10.11 Item 22.
  - Flag 33, (65-90 ppm) P/J45, (45-55 ppm) P/J91, P/J4.
  - Flag 32, P/J27.
- Duplex motor driver PWB, (45-55 ppm) PL 80.22 Item 9 or (65-90 ppm) PL 80.20 Item 9.
  - Flag 33, P/J4, P/J91, P/J40.
  - Flag 32, P/J27.
- Toner concentration sensor, part of the toner dispense module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.
  - Flag 34, P/J93, P/J6.
  - Flag 32, P/J27.
- OCT, PL 12.10 Item 1.
  - Flag 35, P/J151, P/J11.
  - Flag 32, P/J27.
- HVPS, PL 1.10 Item 5.
  - Flag 36, P/J55, P/J14.
  - Flag 32, P/J27.
- IOT PWB, PL 1.10 Item 2.
  - Flag 32, P/J27.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 38, P/J459, P/J418.
  - Flag 39, P/J410, P/J140.
  - Flag 37, P/J25, P/J131.
- Side 2 CCD PWB, part of the scan assembly, PL 5.10 Item 12.
  - Flag 47, P/J452, P/J458.
  - Flag 38, P/J459, P/J418.
  - Flag 39, P/J410, P/J140.
  - Flag 37, P/J25, P/J131.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 37, P/J25, P/J131.
- Scanner PWB, PL 60.20 Item 4
  - Flag 39, P/J410, P/J140.
  - Flag 37, P/J25, P/J131.
- Main drive PWB, part of the main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.
  - Flag 40, P/J16, P/J147.
- Photoreceptor drive motor, part of the main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.
  - Flag 13, P/J151.
  - Flag 40, P/J16, P/J147.
- ROS, PL 60.10 Item 8.
  - Flag 41, P/J18.
- HCF control PWB, PL 70.21 Item 2.
  - Flag 43, P/J272, P/J63, P/J7.
  - Flag 42, P/J19, P/J270.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 42, P/J19, P/J270.
- Tray 6 control PWB, PL 70.68 Item 8.
  - Flag 46, P/J502, P/J12, P/J501.
  - Flag 32, P/J27.
- Scanner module cooling fan, PL 60.15 Item 6.
  - Flag 12, P/J424.
  - Flag 39, P/J410, P/J140.
  - Flag 37, P/J25, P/J131.

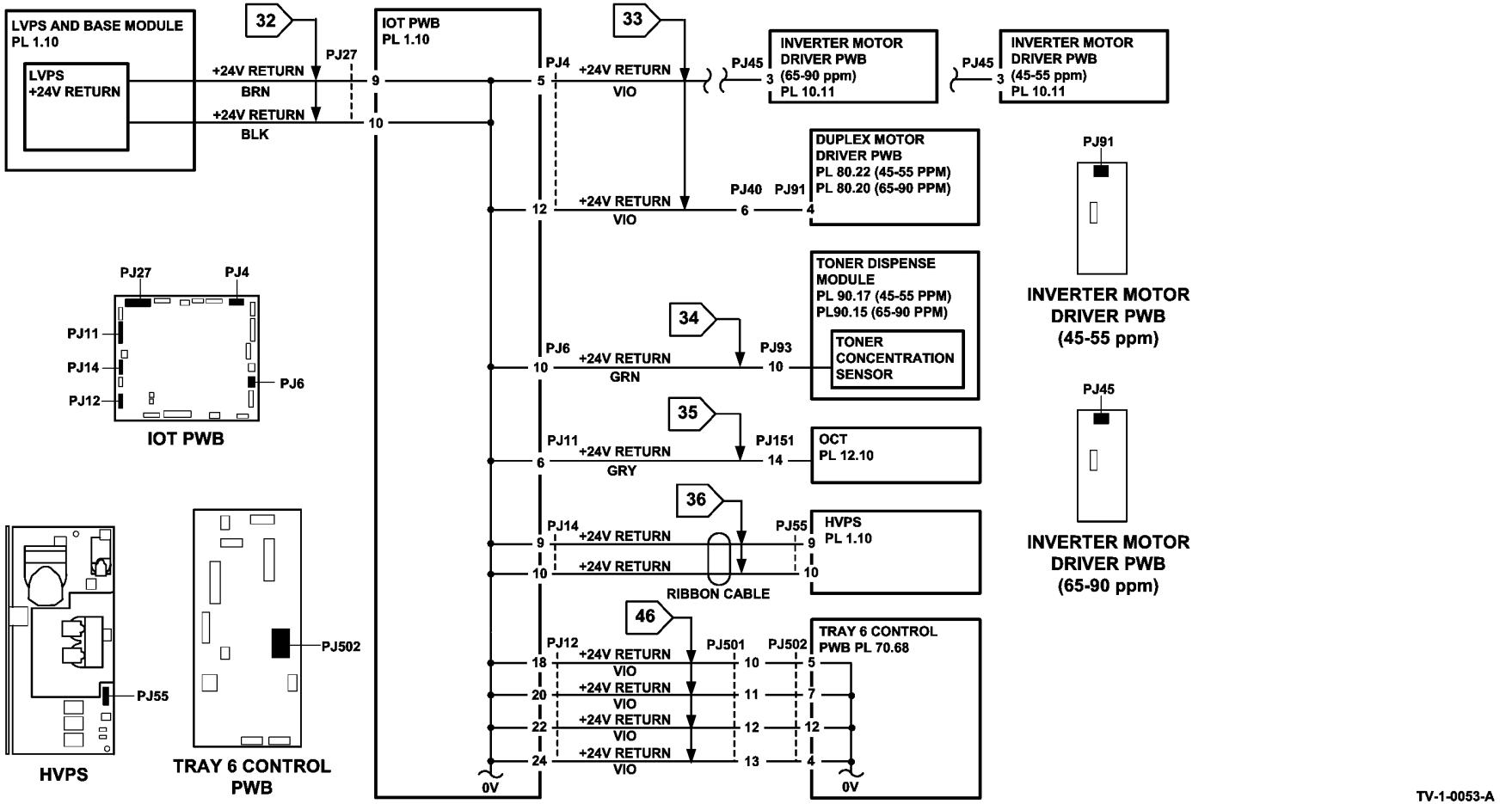


Figure 6 +24V Return

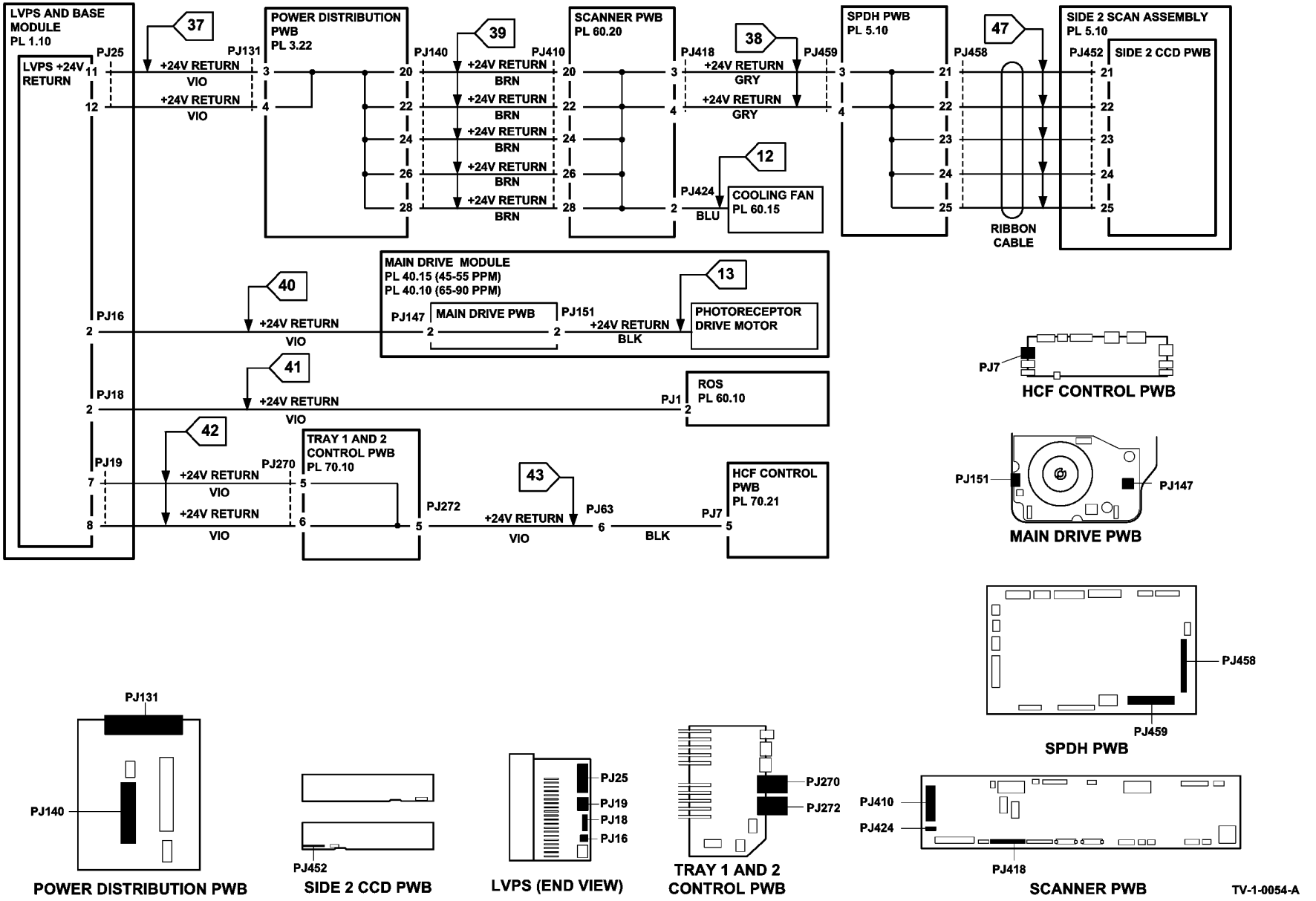


Figure 7 +24V Return

301C AC Power RAP

Use this RAP to identify AC power input and output failures.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Incorrect voltage may damage the machine. The machine must not be connected to the power outlet if the voltage is incorrect.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

Check the AC mains (line) voltage at the customer power outlet. **The voltage measured is within the electrical power requirements, GP 22.**

Y N

If the voltage is incorrect or the wiring of the main supply is found to be defective, inform your technical manager and the customer. Do not attempt to repair or adjust the customer supply.

Check the main power cord for continuity and damage. **The main power cord is good.**

Y N

Install a new main power cord, PL 1.10 Item 10.

Switch on the machine, GP 14. Go to Flag 1. Measure the voltage at the outlet connection, PJ22, Figure 1. **The voltage measured is within the electrical power requirements, GP 22.**

Y N

Go to Flag 2. Check for the AC voltage at PJ24 on the LVPS, Figure 2. **The AC voltage is present.**

Y N

Switch off the machine, GP 14. Remove the power cord from PJ21, Figure 1. Measure the resistance between ACL and ACN at PJ21 on the LVPS, Figure 1. **The resistance reading is greater than 1M Ohms.**

Y N

Remove the fuser module. On the fuser module at PJ100 measure the resistance between pin 10 and pins 1, 2, 3 and 4, Figure 3. **The reading is infinity, an open circuit.**

Y N

Install a new fuser module, (45-55 ppm) PL 10.8 Item 1, (65-90 ppm) PL 10.10 Item 1. If the fault remains, perform the 301L LVPS Checkout RAP.

Check the wire harness between PJ24 and PJ100, Figure 2. **The harness is good.**

A B C

Y N

Install a new fuser connector assembly, (45-55 ppm) PL 40.15 Item 9, (65-90 ppm) PL 40.10 Item 9. If the fault remains, perform the 301L LVPS Checkout RAP.

Perform the 301L LVPS Checkout RAP.

Perform the 301L LVPS Checkout RAP.

Perform the 301L LVPS Checkout RAP.

Check the power cords to the output device:

- 1K LCSS, PL 11.124 Item 8.
- 2K LCSS, PL 11.26 Item 4.
- LVF BM, PL 11.90 Item 4.
- HVF, PL 11.157 Item 4

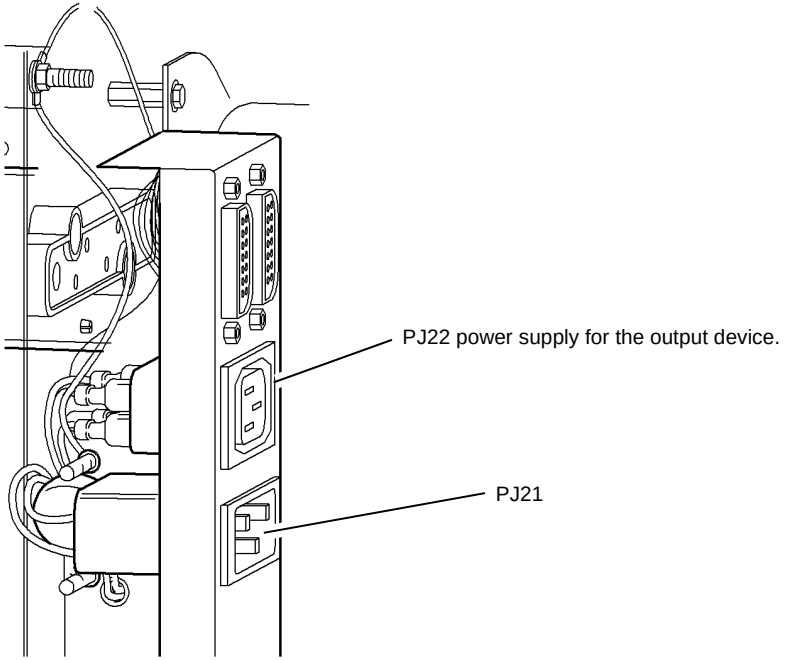


Figure 1 Input and output connections

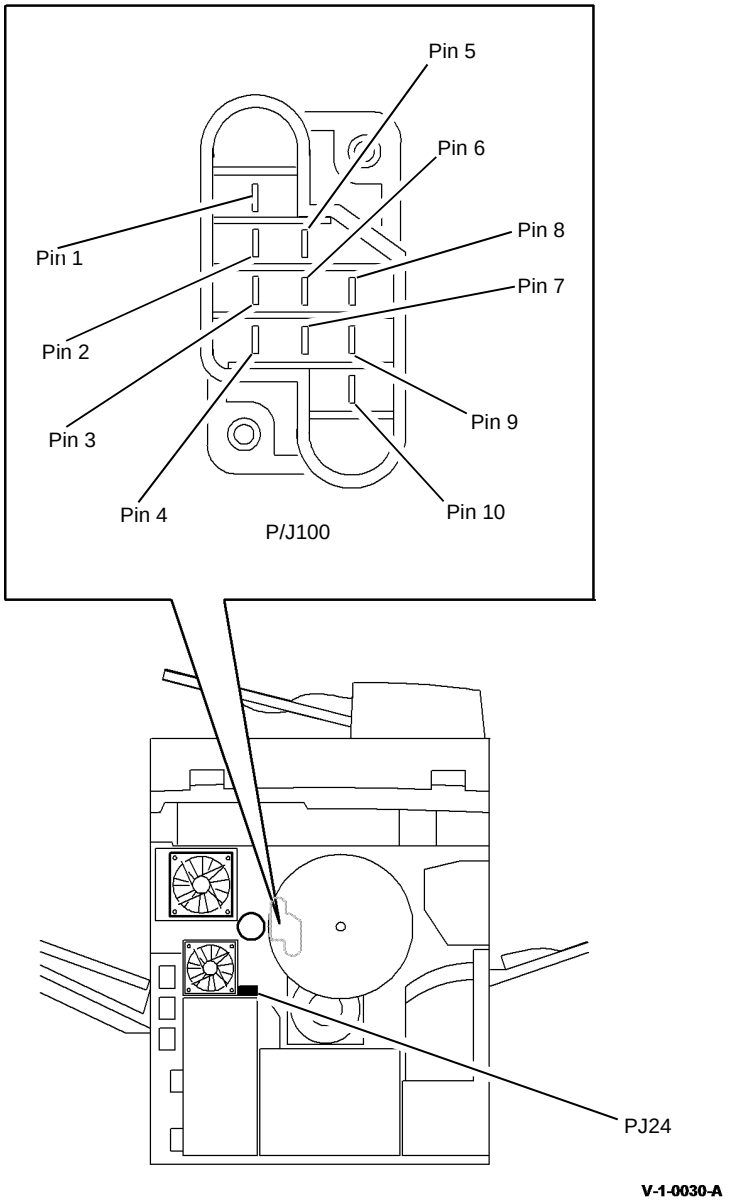


Figure 2 Supply to the fuser module

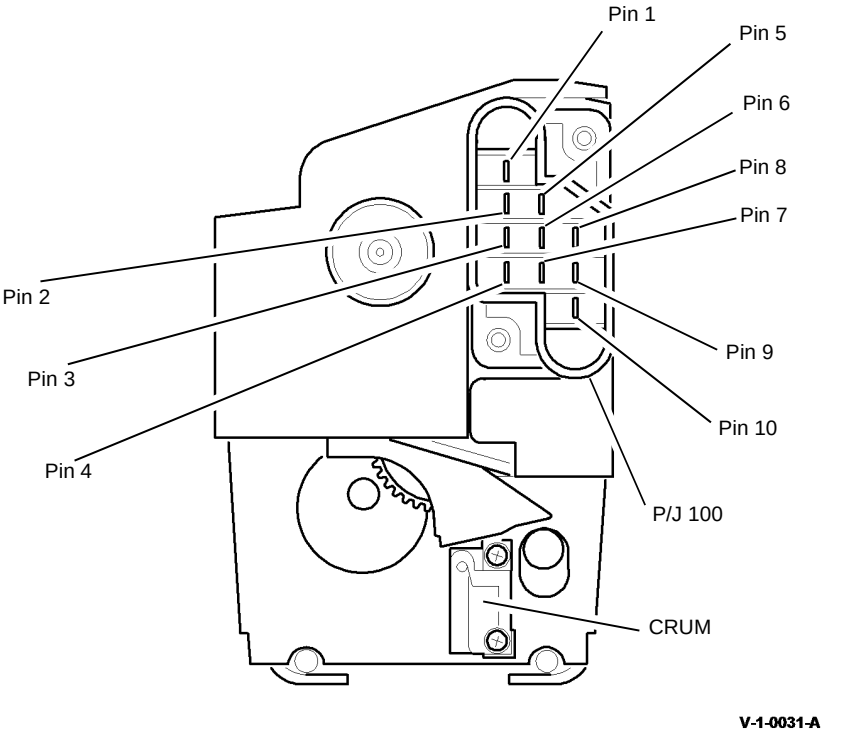
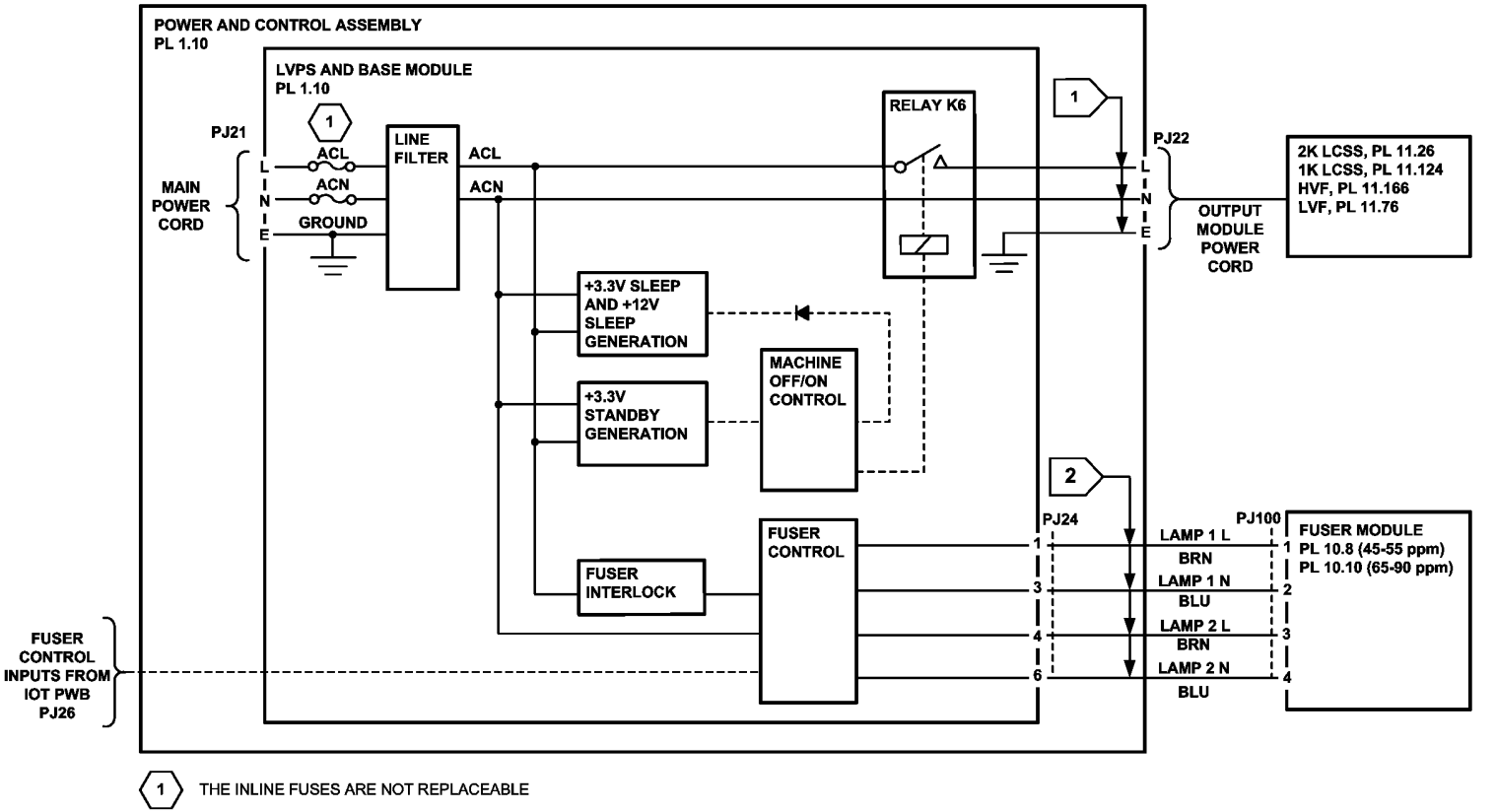


Figure 3 Fuser module



TV-1-0056-A

Figure 4 AC circuit diagram

301D +3.3V Distribution RAP

Use this RAP to identify +3.3V distribution problems.

NOTE: *Short circuit or overload of the +3.3V or +5V supply will result in all outputs off, except +3.3VSB (standby).*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to Figure 1 and Figure 2. Go to the appropriate component in the list that follows that has a suspect +3.3V supply. Check the wiring, GP 7.

- ROS, PL 60.10 Item 8.
  - Flag 1, P/J18.
- Bypass tray width sensor, part of the bypass tray, PL 70.30 Item 12.
  - Flag 6, P/J10, P/J36, P/J550.
  - Flag 5, P/J27.
- Bypass tray empty sensor, PL 70.30 Item 7.
  - Flag 4, P/J10, P/J36, P/J550.
  - Flag 5, P/J27.
- IOT exit sensor, PL 10.11 Item 13.
  - Flag 7, P/J5, P/J49.
  - Flag 5, P/J27.
- Duplex sensor, (45-55 ppm) PL 80.22 Item 4, (65-90 ppm) PL 80.20 Item 4.
  - Flag 7, P/J5, P/J40.
  - Flag 5, P/J27.
- Wait sensor, part of the registration transport, (45-55 PPM) PL 80.15 Item 3, (60-90 PPM) PL 70.30 Item 25.
  - Flag 7, P/J5, P/J44.
  - Flag 5, P/J27.
- Registration sensor, part of the duplex transport, (45-55 ppm) PL 80.15 Item 3, (65-90 ppm) PL 80.17 Item 3.
  - Flag 7, P/J5, P/J44.
  - Flag 5, P/J27.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 3, P/J271, P/J9.
  - Flag 5, P/J27.
- IOT PWB, PL 1.10 Item 2.
  - Flag 5, P/J27.
  - Flag 2, P/J27.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 9, P/J25, P/J131.
- UI control PWB, PL 2.10 Item 6.
  - Flag 12, P/J133, P/J130
  - Flag 9, P/J25, P/J131.
- Scanner PWB, PL 60.20 Item 4
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 11, P/J418, P/J459.
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- Side 2 CCD PWB, part of the scan assembly, PL 5.10 Item 12.
  - Flag 10, P/J452, P/J458.
  - Flag 11, P/J418, P/J459.
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- Fax connection PWB, PL 20.05 Item 2.
  - Flag 8, P/J212, P/J1.
- Fax module, PL 20.05 Item 1.
  - Flag 8, P/J212, P/J1.
- Scanner CCD PWB, part of the scan carriage assembly, PL 60.20 Item 1.
  - Flag 14, P/J446, P/J416.
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- Scan carriage home sensor, PL 60.20 Item 7.
  - Flag 15, P/J420.
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- Input module angle sensor, PL 60.20 Item 7.
  - Flag 16, P/J423.
  - Flag 13, P/J140, P/J410.
  - Flag 9, P/J25, P/J131.
- Platen down sensor, PL 60.20 Item 7.
  - Flag 17, P/J423.
  - Flag 13, P/J140, P/J410.
- Foreign device interface PWB, PL 3.22 Item 26.
  - Flag 19, P/J16, P/J201.
- Foreign device.
  - Flag 18, P/J100, 124.
  - Flag 19, P/J16, P/J201.

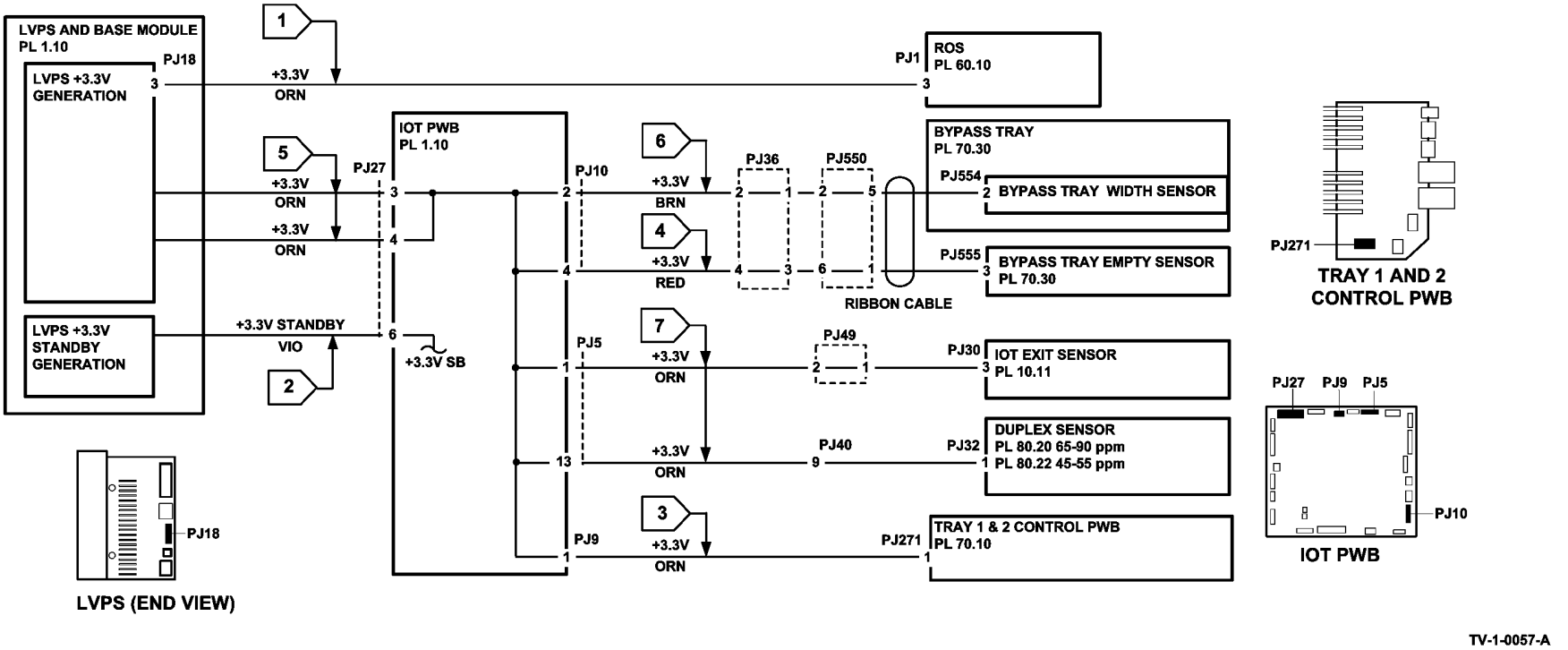


Figure 1 +3.3V distribution circuit diagram

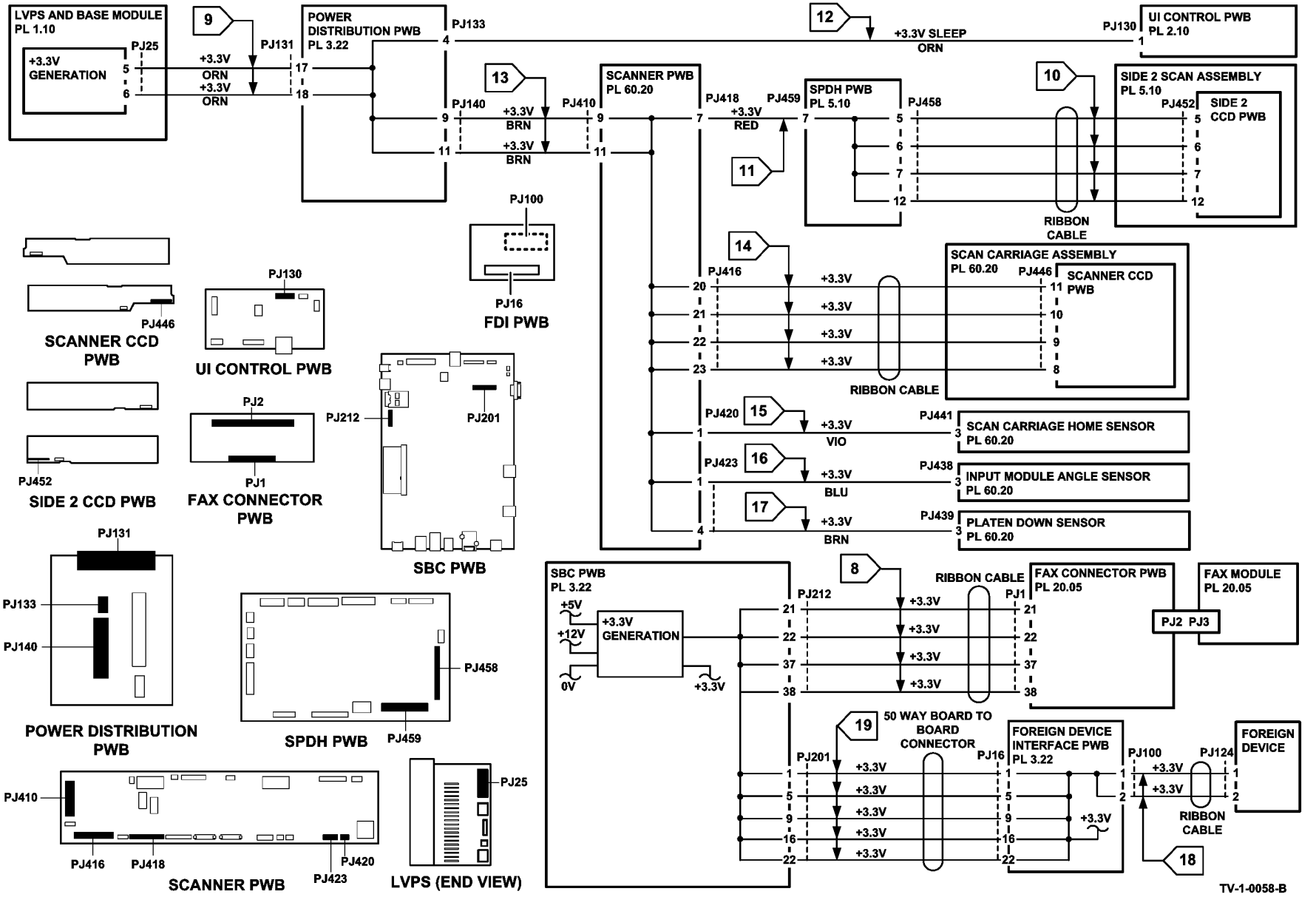


Figure 2 +3.3V distribution circuit diagram

301E +5V Distribution RAP

Use this RAP to identify +5V distribution problems.

NOTE: *Short circuit or overload of +3.3V or +5V supply will result in all outputs off, except +3.3VSB (standby).*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to Figure 1 and Figure 2. Go to the appropriate component in the list that follows that has a suspect +5V supply. Check the wiring, GP 7.

- Developer temperature sensor, PL 90.20 Item 5.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Relative humidity sensor, PL 90.20 Item 4.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Waste toner full sensor, PL 90.10 Item 2.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Left door interlock, PL 70.30 Item 3.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Waste toner door switch, PL 90.10 Item 6.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Registration sensor, (45-55 ppm), PL 80.15 Item 3, (65-90 ppm), PL 80.17 Item 3.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Wait sensor, (45-55 ppm), PL 80.15 Item 3, (65-90 ppm), PL 70.30 Item 25.
  - Flag 2, P/J7.
  - Flag 1, P/J27.
- Main drive module, (45-55ppm) PL 40.15 Item 1 or (65-90ppm) PL 40.12 Item 1.
  - Flag 3, P/J149, P/J8.
  - Flag 1, P/J27.
- Xerographic CRUM, part of the xerographic module, PL 90.20 Item 2.
  - Flag 4, P/J142.
  - Flag 3, P/J149, P/J8.
  - Flag 1, P/J27.
- Fuser CRUM, part of the fuser module, (45-55 ppm), PL 10.8 Item 1, (65-90 ppm), PL 10.10 Item 1.
  - Flag 5, P/J146.
  - Flag 3, P/J149, P/J8.
  - Flag 1, P/J27.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 6, P/J19, P/J270.
- HCF control PWB, PL 70.21 Item 2.
  - Flag 21, P/J7, P/J63.
  - Flag 7, P/J63, P/J272.
  - Flag 6, P/J19, P/J270.
- OCT PWB, part of the OCT, PL 12.10 Item 1.
  - Flag 8, P/J151, P/J11.
  - Flag 1, P/J27.
- Inverter motor driver PWB, PL 10.11 Item 22.
  - Flag 9, (65-90 ppm), P/J45, (45-55 ppm), P/J4, P/J45.
  - Flag 1, P/J27.
- Duplex motor driver PWB, (45-55 ppm) PL 80.22 Item 9 or (65-90 ppm) PL 80.20 Item 9.
  - Flag 11, PJ91, P/J40, P/J4.
  - Flag 1, P/J27.
- Low toner sensor, (45-55 ppm), PL 90.17 Item 5, (65-90 ppm), PL 90.15 Item 5.
  - Flag 10, P/J6.
  - Flag 1, P/J27.
- SBC PWB, PL 3.22 Item 3.
  - Flag 17, P/J137, P/J106.
  - Flag 16, P/J25, P/J131.
- Fax connector PWB, PL 20.05 Item 2.
  - Flag 18, P/J1, P/J212.
  - Flag 17, P/J137, P/J106
  - Flag 16, P/J131, P/J25.
- Fax module, PL 20.05 Item 1.
  - Flag 18, P/J1, P/J212.
  - Flag 17, P/J137, P/J106
  - Flag 16, P/J131, P/J25.
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 16, P/J131, P/J25.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J131, P/J25.
- Document size sensor 2, PL 60.20
  - Flag 12, P/J452.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J131, P/J25.
- Document size sensor 1, PL 60.20.
  - Flag 13, P/J422.

  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J131, P/J25.
- IOT PWB, PL 1.10 Item 2.
  - Flag 1, P/J27.
- Tray 6 control PWB, PL 70.68 Item 8.
  - Flag 15, P/J501, P/J502, P/J12.
  - Flag 1, P/J27.
- Hard disk drive, PL 3.22 Item 2.
  - Flag 19, P/J116.
  - Flag 17, P/J137, P/J106
  - Flag 16, P/J25, P/J131.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 23, P/J460, P/J417.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J25, P/J131.
- SDPH CCD PWB, part of the scan assembly, PL 5.10 Item 12.
  - Flag 24, P/J452, P/J458.
  - Flag 23, P/J460, P/J417.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J25, P/J131.
- Length sensor 2, PL 5.30 Item 9.
  - Flag 25, P/J462.
  - Flag 23, P/J131, P/J25.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J25, P/J131.
- Length sensor 1, PL 5.30 Item 5.
  - Flag 26, P/J463.
  - Flag 23, P/J131, P/J25.
  - Flag 20, P/J410, P/J140.
  - Flag 16, P/J25, P/J131.

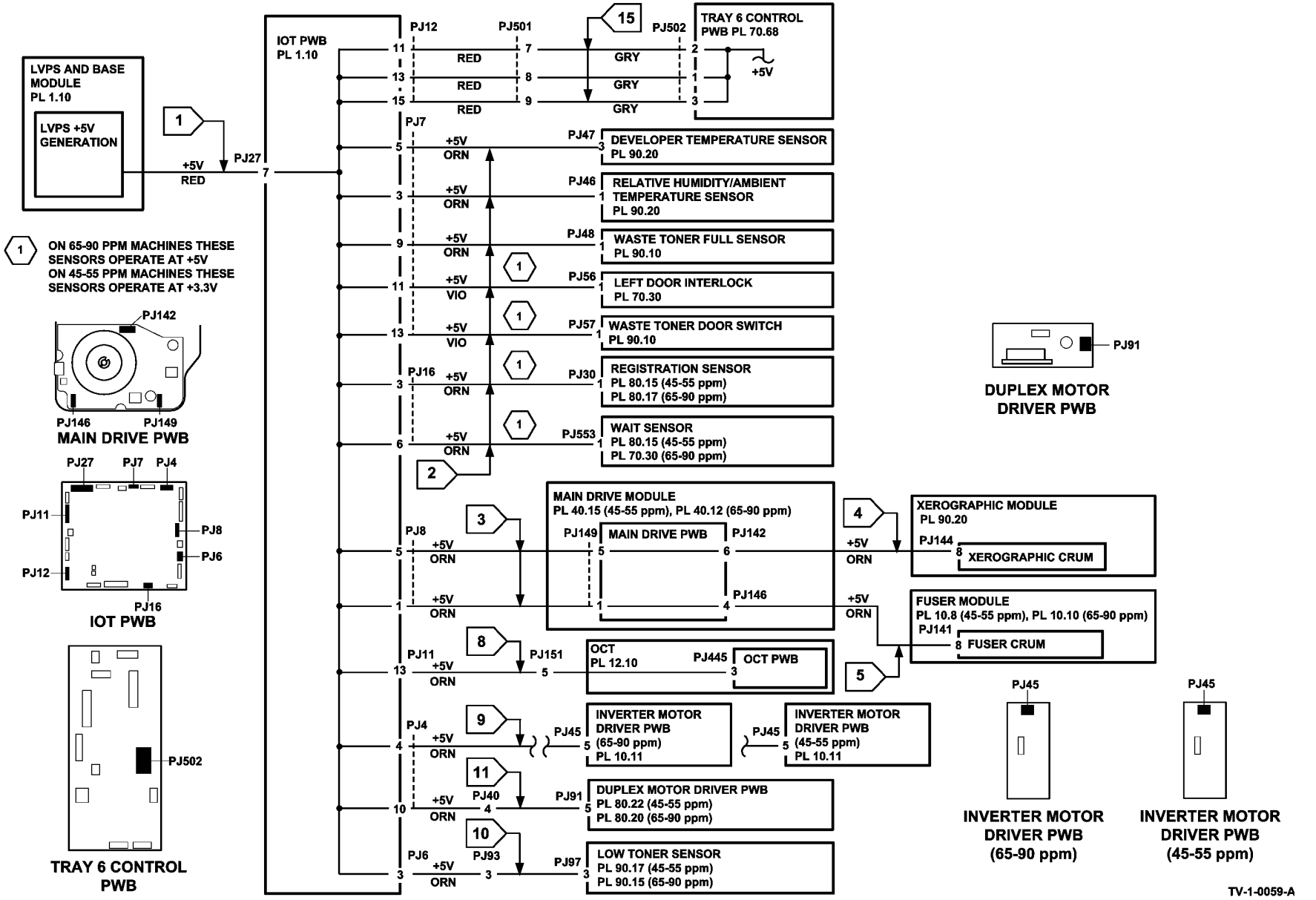


Figure 1 +5V distribution circuit diagram

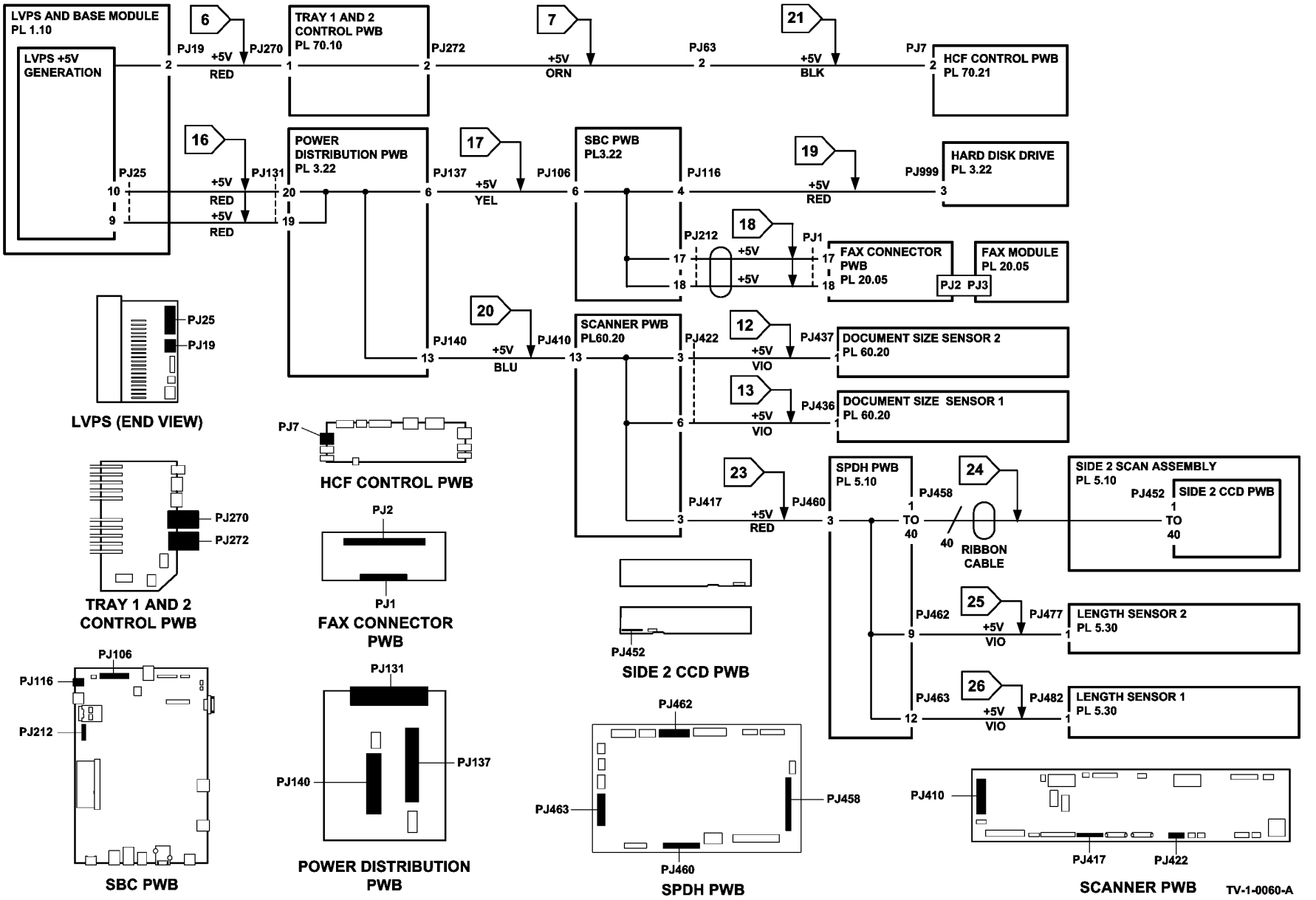


Figure 2 +5V distribution circuit diagram

301F +12V Distribution RAP

Use this RAP to identify +12V distribution problems.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to Figure 1. Go to the appropriate component in the list that follows that has a suspect +12V supply. Check wiring, GP 7.

NOTE: *For +12V interlock problems, go to the 301-300-00 Front Door Open RAP*

- Power distribution PWB, PL 3.22 Item 1.
  - Flag 1, P/J131, P/J25.
- UI control PWB, PL 2.10 Item 6.
  - Flag 2, P/J130, P/J133.
  - Flag 1, P/J25, P/J131.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 3, P/J410, P/J140.
  - Flag 1, P/J131, P/J25.
- IOT PWB, PL 1.10 Item 2.
  - Flag 4, P/J27.
- SBC PWB, PL 3.22 Item 3.
  - Flag 5, P/J137, P/J106.
  - (+12V sleep) Flag 6, P/J137, P/J106.
  - Flag 1, P/J131, P/J25.

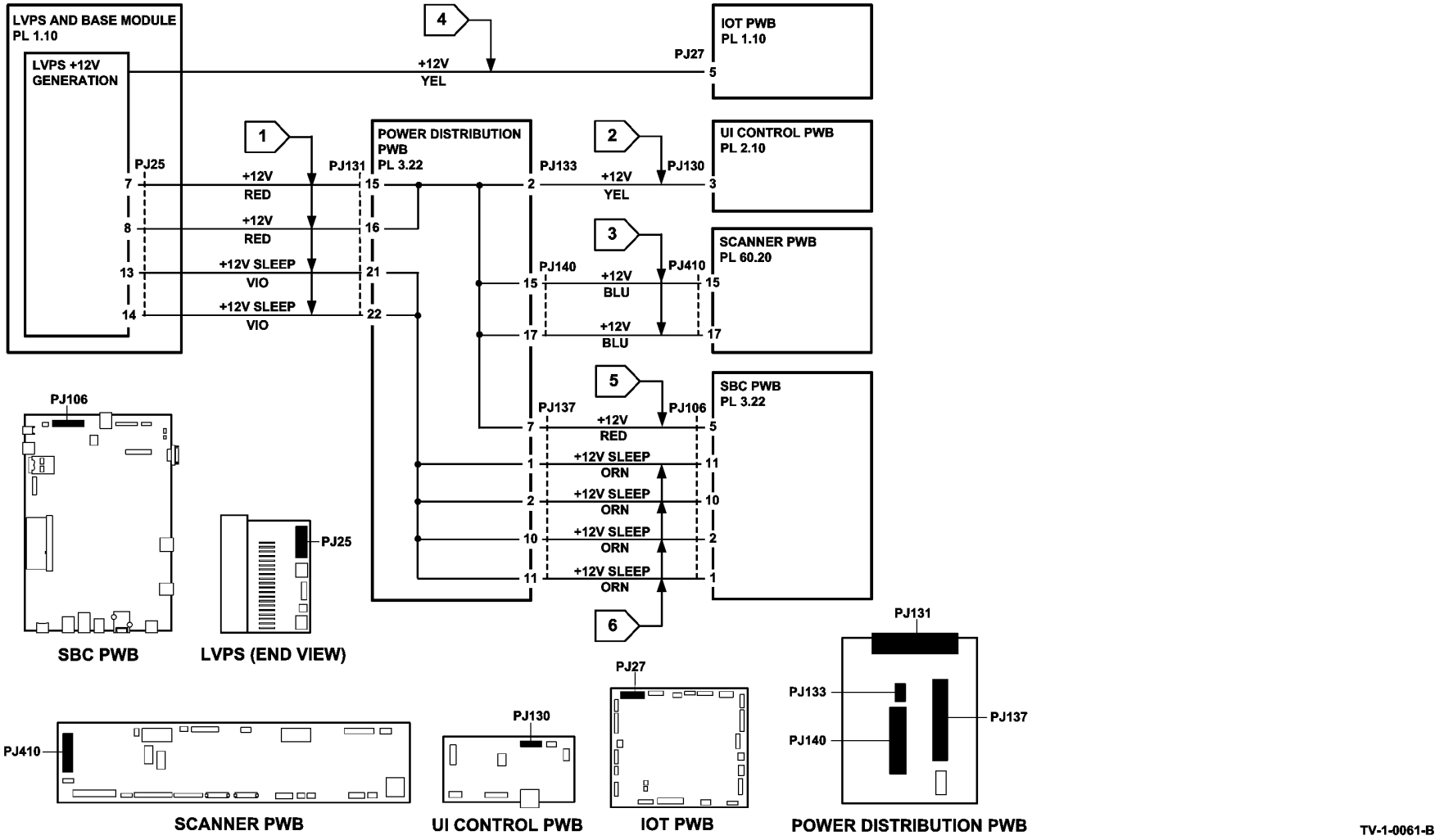


Figure 1 +12V distribution circuit diagram

301G +24V Distribution RAP

Use this RAP to identify +24V distribution problems.

Initial Actions

Check the following:

- The front door interlock switch is closed.
- The xerographic module is correctly installed.
- With the machine switched on check the LVPS cooling fan is running. If the machine has 24V related faults and the fan is not working the replace the LVPS.

Circuit Information

The +24V distribution in the machine can be divided into 3 stages; The first stage, +24V Direct is independent of the other two stages. The second stage, +24V Interlocked is derived from +24V Direct. The third stage, +24V Interlocked From the IOT PWB is derived from both +24V Direct and +24V Interlocked.

+24V failures will result in the following UI messages:

- Copying and scanning are unavailable
- Copying and printing are unavailable

Typical faults caused by +24V copying and scanning are unavailable failures are; 61-340, 91-060 and 62-476.

+24V Direct

This supply feeds the power distribution PWB, scanner PWB, SPDH PWB, Side 2 CCD BWB and Scanner CCD BWB. It also feeds the interlocked +24V circuit internally within the LVPS.This supply is not dependant on any interlocks and is available at power on. The supply is not fused, but the LVPS will shut the voltage down if the supply short circuits. The voltage can be measured on the LVPS at P/J25 pins 1 and 2, but is more easily accessed on the power distribution PWB at P/J131 pins 1 and 2, refer to Figure 2.

+24V Interlocked

This supply feeds the IOT PWB, main drive module, paper path module, ROS, Tray 1 and 2 control PWB and short paper path assembly. When +24V interlocked is available, CR16 on the IOT PWB is lit. The availability of +24V interlocked is dependant on the +12V interlock circuit being complete through the door interlock switch, xerographic module CRUM link and the main drive PWB, refer to the circuit diagram in the 301-300-00 Front Door Open RAP. When the +12V interlock circuit is complete, +24V interlocked will be available at P/J27 pins 1 and 2 on the IOT PWB, Figure 3. If the +24V interlocked supply is shorted, It will shut down the +24V direct supply from the LVPS.

+24V Interlocked From the IOT PWB

The availability of +24V interlocked from the IOT PWB is dependant on +24V interlocked being available at P/J27 pins 1 and 2. The +24V interlocked from the IOT PWB is fused by a surface mounted fuse F1 (non replaceable), so a short on any of the IOT PWB +24V interlocked outputs will result in fuse F1 being blown and all +24V interlocked outputs not available. Be aware that a high resistance short circuit on any of the outputs will damage, but not blow fuse F1, resulting in measurements of +24V at the top cap (input) of fuse F1 and less than +24V (but not 0V) on the bottom cap of fuse F1.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not repair or install a new fuse F1 on the IOT PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not repair or install a new fuse F1 on the power distribution PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not repair or install a new fuse F1 on the main drive PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

CAUTION

If the surface mounted fuse on the power distribution PWB, IOT PWB or main drive PWB has blown, do not install a new PWB until the cause of the fault is repaired.

Remove the rear cover, switch on the machine, GP 14. **CR13, CR15 and CR36 on the IOT PWB are lit and stay lit.**

Y N

Go to the OF3 Dead Machine RAP

CR16 is lit.

Y N

+24V is available at P/J27 pin 1 and pin 2, Flag 5.

Y N

Switch off the machine, GP 14. **Greater than 100 Ohms resistance is measured between P/J27 pin 1 and the machine frame, also between P/J27 pin 2 and the machine frame.**

Y N

There is a short circuit on the +24V interlocked circuit. Disconnect P/J27. **Greater than 100 Ohms resistance is measured on the harness between P27 pin 1 and the machine frame, also between P27 pin 2 and the machine frame.**

A B C

A B C

Y N

The IOT PWB is shorting the +24V interlocked to ground, a new IOT PWB will need to be installed. Before installing a new IOT PWB, check the fuse F1 on the IOT PWB. If the fuse is open circuit the cause of the failure will need to be found, refer to Figure 3 and the Component List. Refer also to the 301H Short Circuit and Overload RAP. When the cause of the high resistance short circuit has been repaired, install a new IOT PWB, PL 1.10 Item 2.

Disconnect P/J18, Flag 2 and P/J19, Flag 17. **Less than 100 Ohms resistance is measured on the harness between P27 pin 1 and the machine frame, also between P27 pin 2 and the machine frame.**

Y N

Refer to Figure 2 and the Component List to isolate and repair the component that is causing the short.

Disconnect P/J17, Flag 15 and P/J16, Flag 11. **Less than 100 Ohms resistance is measured on the harness between P27 pin 1 and the machine frame, also between P27 pin 2 and the machine frame.**

Y N

Refer to Figure 4 and the Component List to isolate and repair the component that is causing the short.

Install a new LVPS and base module, PL 1.10 Item 3.

Switch on the machine, GP 14. **+10.9V or greater is available on P/J17 pin 6 (yellow wire, bottom of connector).**

Y N

The +12V interlock voltage used to maintain the +24V interlocked circuit is not available or is below specification, go to the 301-300-00 Front Door Open RAP to fix the fault.

Switch off the machine, GP 14. Pull out the single board controller PWB module, PL 3.22. Disconnect P/J131, Flag 1. Switch on the machine, GP 14. **+24V is available on the harness between P131 pin 1 to the machine frame and P131 pin 2 to the machine frame.**

Y N

Install a new LVPS and base module, PL 1.10 Item 3.

Components in the SBC PWB module, scanner or SPDH are shorting the +24V to ground, refer to Flag 1, Flag 3, Flag 4 and the Component List to isolate and repair the short circuit.

The fuse F1 on the IOT PWB is blown, therefor a new IOT PWB will need to be installed. Before installing a new IOT PWB, find the cause of the failure, refer to Figure 3 and the Component List to isolate and repair the short circuit. Refer also to the 301H Short Circuit and Overload RAP. When the cause of the high resistance short circuit has been repaired, install a new IOT PWB, PL 1.10 Item 2.

NOTE: *CR16 will light at voltages of less than+24V.*

The voltage at P/J27 pin 1and pin 2 is equal to or greater than +24V

Y N

Install a new LVPS and base module, PL 1.10 Item 3.

The voltage measured at the top cap of fuse F1 on the IOT PWB is the same as the voltage measured on the bottom cap of fuse F1.

Y N

A high resistance short circuit has damaged the fuse F1. Identify and repair the cause of the high resistance short circuit, refer to Figure 3 and the Component List. Refer also to the 301H Short Circuit and Overload RAP. When the cause of the high resistance short circuit has been repaired, install a new IOT PWB, PL 1.10 Item 2.

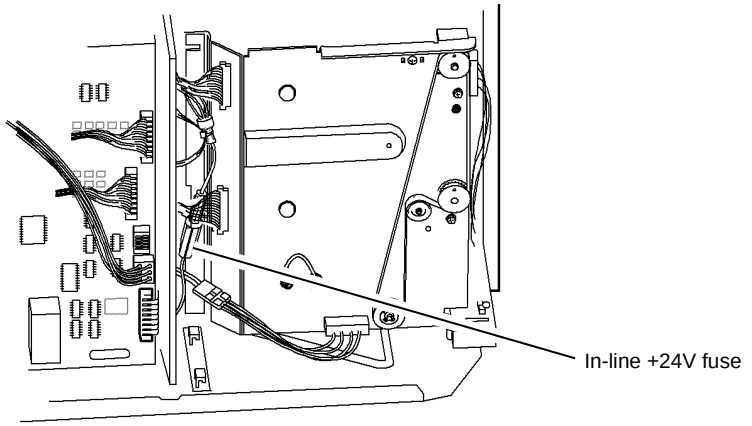
+24V interlocked is available to the IOT PWB, exercise the machine in all possible modes and make a note of what components are energized when the fault occurs. Refer to the Component List and the appropriate circuit diagram to isolate and repair the problem component or circuit.

Component List

Refer to Figure 2, Figure 3 and Figure 4. Go to the appropriate component in the list that follows that has a suspect +24V supply. Inspect then re-seat all PJs and check the wiring, GP 7.

- Paper path module containing an in-line fuse and wiring. Refer to GP 7.
  - Flag 15, in-line fuse, PL 1.10 Item 9 and Figure 1
  - Flag 25, erase lamp, PL 90.20 Item 1
  - Flag 26, inverter path solenoid, PL 10.11 Item 14
  - Flag 27, inverter nip solenoid, PL 10.11 Item 6
  - Flag 28, registration clutch, (45-55 ppm) PL 80.15 Item 7, (65-90 ppm) PL 80.17 Item 7
  - Flag 29, vacuum transport fan (part of the short paper path assembly), PL 10.25 Item 1
- Power distribution PWB, PL 3.22 Item 1.
  - Flag 1, P/J25, P/J131.
- IOT PWB, PL 1.10 Item 2.
  - Flag 5, P/J27.
- Main drive PWB, part of the main drive module, (45-55 ppm) PL 40.15 Item 1, (65-90 ppm) PL 40.10 Item 1.
  - Flag 11, P/J147, P/J16.
- ROS PL 60.10 Item 8
  - Flag 2, P/J18.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.
  - Flag 17, P/J270, P/J19.
- HCF control PWB, PL 70.21 Item 2.
  - Flag 16, P/J7, P/J63.
  - Flag 18, P/J63., P/J272.
  - Flag 17, P/J270, P/J19.
- SPDH PWB, PL 5.10 Item 5.
  - Flag 3, P/J418, P/J459.
  - Flag 4, P/J410, P/J140.
  - Flag 1, P/J131, P/J25.

- Side 2 CCD PWB, part of the scan assembly, PL 5.10 Item 12.
  - Flag 3, P/J418, P/J459.
  - Flag 4, P/J410, P/J140.
  - Flag 1, P/J131, P/J25.
- Tray 6 control PWB, PL 70.68 Item 8.
  - Flag 21, P/J501, P/J502.
  - Flag 20, P/J12.
  - Flag 5, P/J27.
- Scanner PWB, PL 60.20 Item 4.
  - Flag 4, P/J410, P/J140.
  - Flag 1, P/J131, P/J25.
- Scanner CCD PWB, part of the scan carriage assembly, PL 60.30 Item 1.
  - Flag 4, P/J410, P/J140.
  - Flag 1, P/J131, P/J25.
- Inverter motor driver PWB, PL 10.11 Item 22.
  - Flag 30, (65-90 PPM) P/J45, (45-55 PPM) P/J91, P/J4.
  - Flag 5, P/J27.
- Duplex motor driver PWB, (45-55 ppm) PL 80.22 Item 9, (65-90 ppm) PL 80.20 Item 9.
  - Flag 31, P/J91, P/J40.
  - Flag 6, P/J4, P/J40.
  - Flag 5, P/J27.
- Toner dispense motor and toner cartridge drive motor, part of the toner dispense module (45-55 ppm) PL 90.17 Item 1, (65-90 ppm) PL 90.15 Item 1.
  - Flag 32, P/J93.
  - Flag 7, P/J6, P/J93.
  - Flag 5, P/J27.
- Toner concentration sensor, part of the developer module, (45-55 ppm) PL 90.17 Item 2, (65-90 ppm) PL 90.15 Item 2.
  - Flag 33, P/J93.
  - Flag 23, P/J93, P/J6.
  - Flag 5, P/J27.
- Feed solenoid, part of the bypass tray feed head assembly, PL 70.30 Item 5.
  - Flag 8, P/J10, P/J36.
  - Flag 5, P/J27.
- OCT, PL 12.10 Item 1.
  - Flag 9, P/J11, P/J151.
  - Flag 5, P/J27.
- HVPS, PL 1.10 Item 5,
  - Flag 10, P/J14, P/J55.
  - Flag 5, P/J27.
- Inverter nip split solenoid, PL 10.14 Item 1.
  - Flag 19, P/J76, P/J61.
  - Flag 5, P/J27.
- Photoreceptor drive motor, part of the main drive module, (45-55) PL 40.15 Item 1, (65-90 ppm) PL 40.10 Item 1.
  - Flag 12, P/J151.
  - Flag 11, P/J147, P/J16.
- Ozone fan, PL 90.25 Item 1.
  - Flag 13, P/J142.
  - Flag 12, P/J151.
  - Flag 11, P/J147, P/J16.
- Fuser web motor, part of the main drive module, (45-55) PL 40.15 Item 1, (65-90 ppm) PL 40.10 Item 1.
  - Flag 14, P/J154.
  - Flag 11, P/J147, P/J16.
- Photoreceptor CRUM, part of the xerographic module, PL 90.20 Item 2.
  - Flag 22, P/J142.
  - Flag 11, P/J147, P/J16.
- Erase lamp, PL 90.20 Item 1.
  - Flag 25.
  - Flag 15, P/J17, fuse, PL 1.10 Item 9, Figure 1.
- Inverter path solenoid, PL 10.11 Item 14.
  - Flag 26.
  - Flag 15, P/J17, fuse, PL 1.10 Item 9, Figure 1.
- Inverter nip solenoid, PL 10.11 Item 6.
  - Flag 27.
  - Flag 15, P/J17, fuse, PL 1.10 Item 9, Figure 1.
- Registration clutch, (45-55 ppm), PL 80.15 Item 7, (65-90 ppm), PL 80.17 Item 7.
  - Flag 28.
  - Flag 15, P/J17, fuse, PL 1.10 Item 9, Figure 1.
- Vacuum transport fan (part of short paper path assembly W/TAG 001, PL 10.25 Item 15.
  - Flag 29.
  - Flag 15, P/J17, fuse, PL 1.10 Item 9, Figure 1.



V-1-0032-A

Figure 1 +24 volt in-line fuse

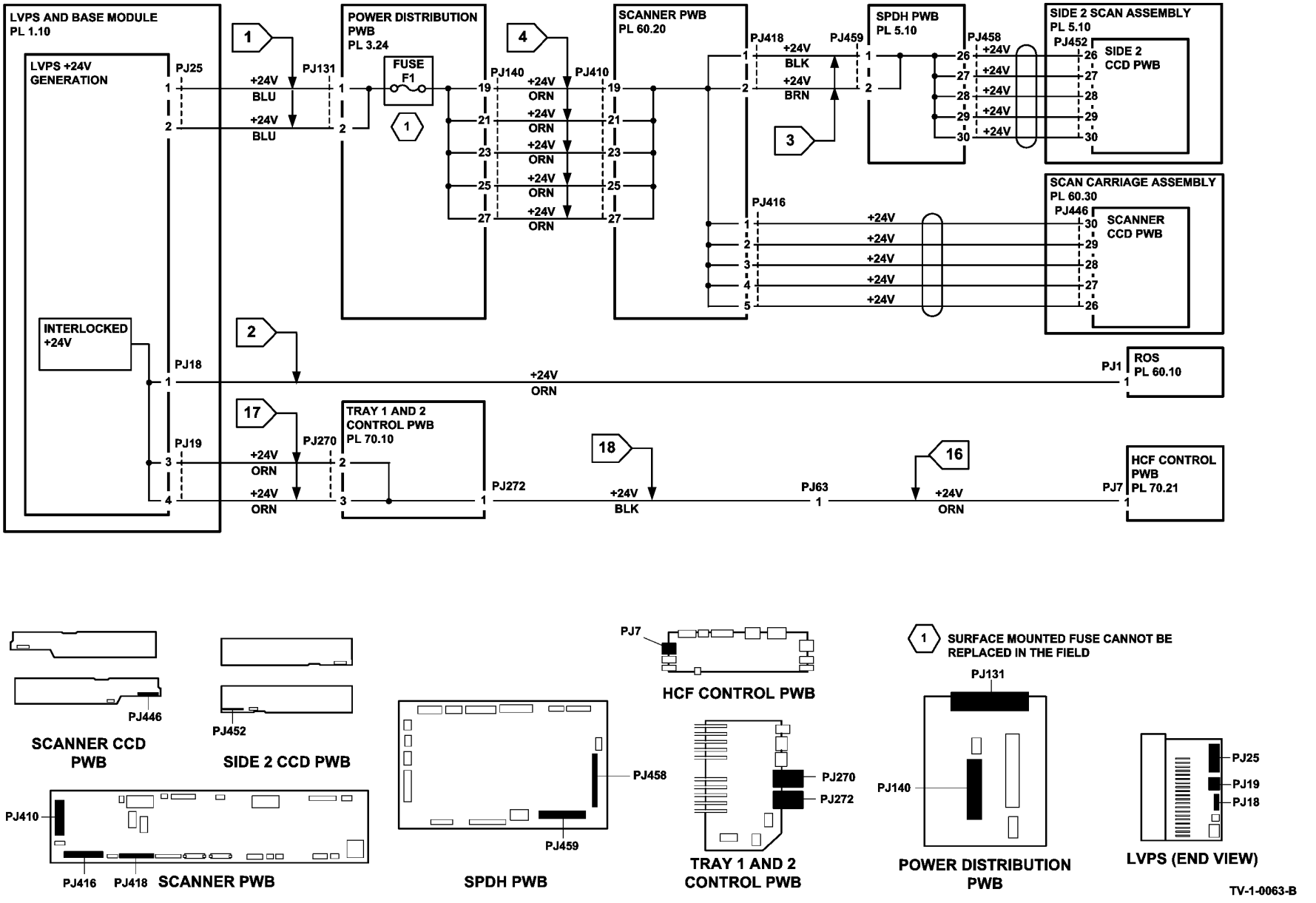


Figure 2 +24V distribution circuit diagram

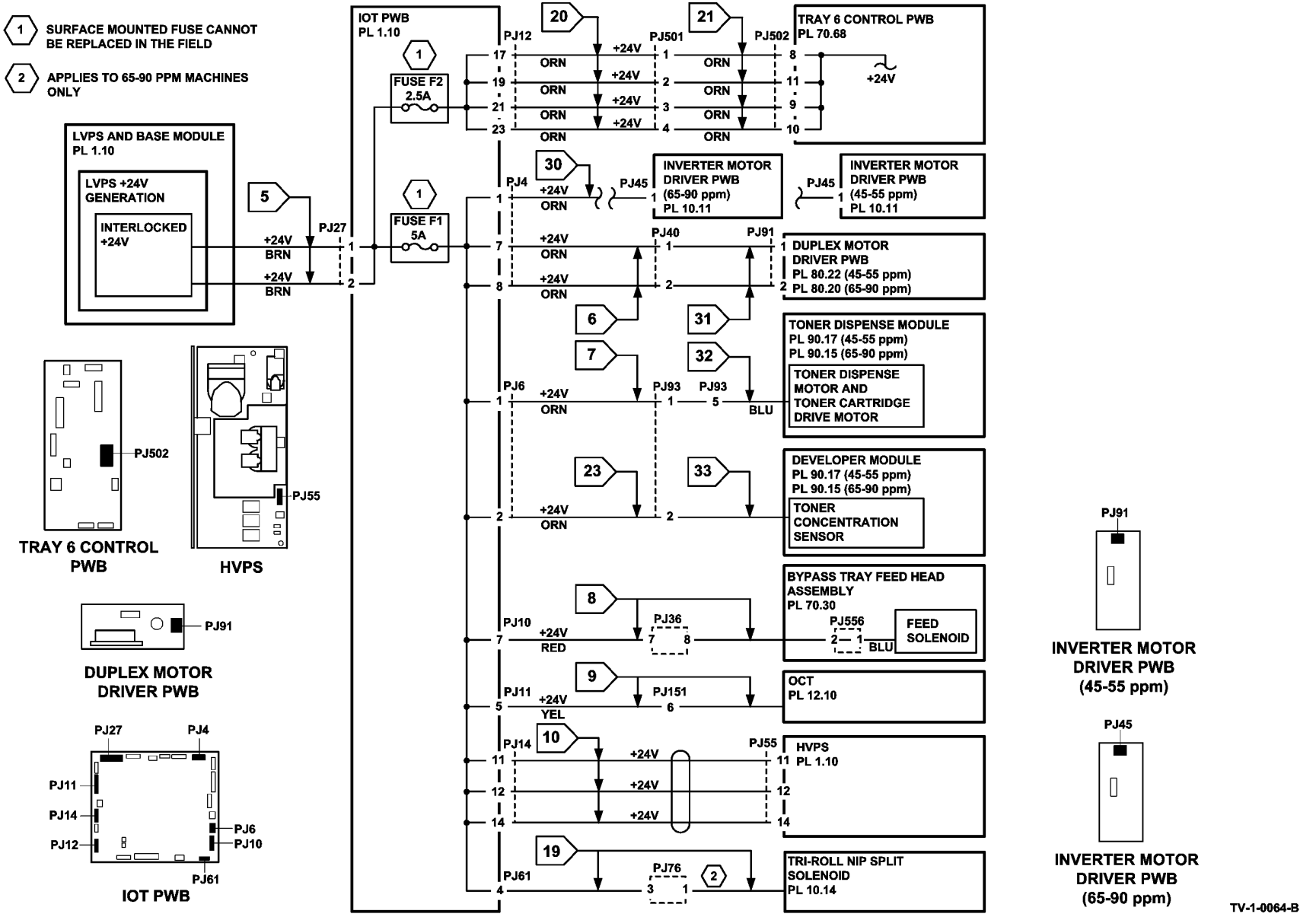
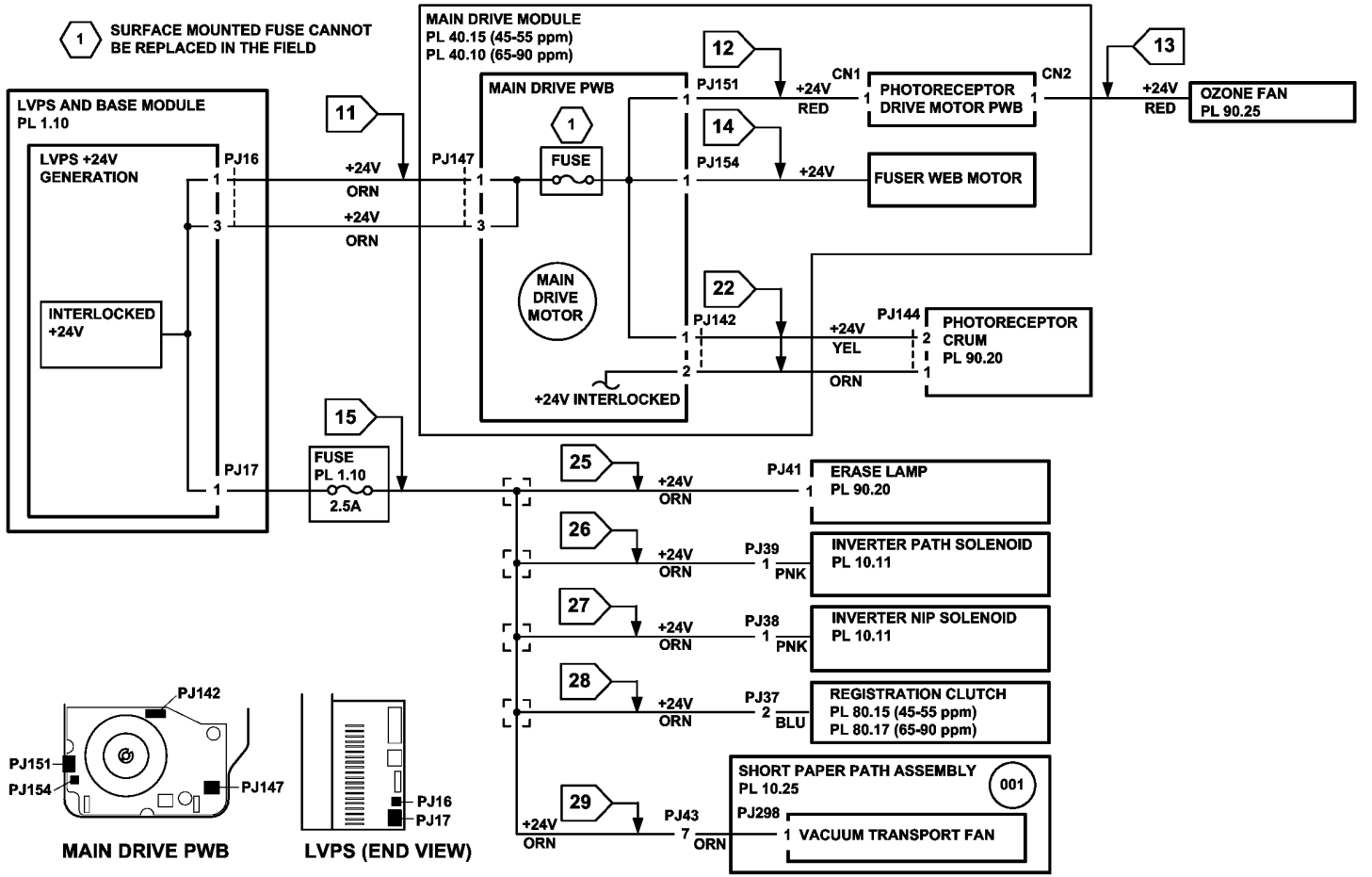


Figure 3 +24V distribution circuit diagram



TV-1-0065-A

Figure 4 +24V distribution circuit diagram

301H Short Circuit and Overload RAP

Procedural Notes

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- The LEDs, Figure 1, CR12, CR13, CR15 and CR36 on the IOT PWB are used to indicate that a supply voltage is available. Refer to OF7 IOT PWB Diagnostics RAP.
- Short circuit or overload of +3.3VSB (standby) will result in all outputs off.
- Short circuit or overload of +3.3V or +5V will result in all outputs off, except +3.3VSB.
- Short circuit or overload of +12V or +24V will result in +12V and +24V outputs being off.
- In all instances, when the short circuit or overload is removed all the outputs will recover to normal operating voltages after 10 seconds.
- If +3.3VSB is over voltage, all outputs will be off. To restore to normal voltages, switch off the machine, GP 14. Wait two minutes. Switch on the machine.
- If +3.3V, +5V or +12V are over voltage, all outputs will be off, except +3.3VSB. To restore to normal voltages, switch off the machine, GP 14. Wait two minutes. Switch on the machine.
- If the +24V is over voltage, only the +24V the output will be off. To restore to normal voltages, switch off the machine, GP 14. Wait two minutes. Switch on the machine.

WARNING

Do not repair or install a new fuse F1 on the IOT PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not repair or install a new fuse F1 on the power distribution PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not repair or install a new fuse F1 on the main drive PWB. Repairing or installing a new fuse can cause overheating and a risk of fire.

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Procedure

Switch off the machine, GP 14. Remove the rear cover, PL 28.10 Item 1. Reconnect the power cord. **CR36 is on, Figure 1.**

Y **N**

Go to 301J Power On and LVPS Control Signals RAP.

A

A

NOTE: *To disconnect the connectors PJ16, PJ17, PJ18, PJ19 and PJ25 on the LVPS, open tray 1 and tray 2. Remove the screw that secures the power and control assembly, PL 1.10 Item 1. Slide the power and control assembly to the left.*

NOTE: *Refer to Figure 3 for the low voltage distribution. This is an overview of all the low voltage harnesses within the machine.*

NOTE: *Refer to GP 7 at every harness check and if necessary perform, REP 1.2.*

To check the output voltages of the LVPS, disconnect the following.

- Figure 2. PJ16, PJ17, PJ18, PJ19 and PJ25.
- Figure 1. All the PJ connectors on the IOT PWB, except PJ1 Flag 13, PJ26 Flag 11 and PJ27 Flag 12.

Press the power button on the UI. **LED CR36 is on.**

Y **N**

Check for a short circuit on the AC line. Go to 301C AC Power RAP.

Press the power button on the UI. **LEDs CR12, CR13 and CR15 are on and stay on.**

Y **N**

Go to Flag 13. Measure the voltage at PJ1, pin 11. Press the power button on the UI. **The voltage changes from +3.5V to 0V.**

Y **N**

Check the wiring between PJ910 on the UI keyboard PWB and PJ1 on the IOT PWB, refer to the 303F Switch Off Failure RAP.

Disconnect PJ26. Measure the voltage at the harness of PJ26, pin 7, Flag 11. **+1.16V is available at pin 7.**

Y **N**

Perform the 301L LVPS Checkout RAP.

Reconnect PJ26. Measure the voltage at the harness of PJ26, pin 7, Flag 11. Press the power button on the UI. **The voltage changes from +1.16V to 0V and stays at 0V.**

Y **N**

Perform the following:

- 301L LVPS Checkout RAP.
- OF7 IOT PWB Diagnostics RAP.

Disconnect the power cord. Use a service multi-meter set to DC amps. Ensure the meter leads are connected to the correct meter sockets to measure amps. Connect the black lead to the machine frame. Reconnect the power cord. Use the probe on the red lead to ground PJ26, pin 7 to ground, through the multi-meter. When the LEDs CR27, CR28 and CR29 are flashing, press and release the power button and remove the probe. **LEDs CR12, CR13 and CR15 are ON and stay ON.**

Y **N**

Set the service multi-meter to measure volts. Ensure the meter leads are connected to the correct meter sockets to measure volts. Measure the voltage at the harness of PJ26, pin 7, Flag 11. **0V is measured.**

Y **N**

Check that the F1 fuse on the IOT PWB has not failed. Go to 01H +24 Volt Circuits before a new IOT PWB is installed, PL 1.10 Item 2.

Perform the 301L LVPS Checkout RAP.

B C

B C

Set the service multi-meter to measure volts. Ensure the meter leads are connected to the correct meter sockets to measure volts. Measure the voltage at PJ25, pins 1 and 2, Flag 5. **+24V is measured.**

Y N

Measure the voltage at the harness of PJ26, pin 9, Flag 11. **0V is measured.**

Y N

Check that the F1 fuse on the IOT PWB has not failed. Go to 01H +24 Volt Circuits before a new IOT PWB is installed, PL 1.10 Item 2.

Perform the 301L LVPS Checkout RAP.

Disconnect the power cord. Disconnect the in-line fuse in the harness from PJ17. Reconnect PJ16 and PJ17. Set the service multi-meter to measure amps. Ensure the meter leads are connected to the correct meter sockets to measure amps. Clip the black lead to the machine frame. Reconnect the power cord. Use the probe on the red lead to ground PJ26, pin 7 to ground. When the LEDs CR27, CR28 and CR29 are flashing, press and release the power button, then remove the probe. **LEDs CR12, CR13, CR15 and CR16 are ON and stay ON**

Y N

Check the interlock circuit, Flag 29, Flag 30 and Flag 31. If the circuit is good, check that F1 fuse on the IOT PWB has not failed. Go to 01H +24 Volt Circuits before a new IOT PWB is installed, PL 1.10 Item 2.

The LVPS is good. Continue at 01H Initial Isolation Check.

Disconnect the power cord. Reconnect PJ16 and PJ17. Connect the power cord. Press the power button on the UI. **LED CR16 is ON.**

Y N

Check the interlock circuit, Flag 29, Flag 30 and Flag 31. If the circuit is good, go to 01H +24 Volt Circuits before a new a new IOT PWB is installed, PL 1.10 Item 2.

The LVPS is good. Go to the 01H Initial Isolation Check.

01H Initial Isolation Check

NOTE: *After every disconnection, the power button on the UI must be pressed. If CR12 and CR13 are not on, reconnect and go to the next step.*

Disconnect the power cord. Reconnect all the disconnected PJ connections on the IOT PWB, LVPS and the power distribution PWB. Reconnect the power cord. Switch on the machine, GP 14. If the LEDs, Figure 1, CR12, CR13, CR15 and CR16 are OFF, go to step 1. If CR15 is OFF, go to 01H +12 Volt Circuits. If CR16 is OFF, go to 01H +24 Volt Circuits.

1. Disconnect PJ25, Flag 5. If the LEDs CR12 and CR13 are on, check the harness from PJ25 to PJ131. If the harness is good, go to 01H +3.3 Volt and +5 Volt Circuits.
2. Disconnect PJ18, Flag 3. If the LEDs CR12 and CR13 are on, check the harness from PJ18 to the ROS, PL 60.10 Item 8.
3. Disconnect PJ19, Flag 4. If the LEDs CR12 and CR13 are on, check the harness, from PJ19 on the LVPS to the Tray 1 and 2 Control PWB, PL 70.10 Item 2.
   a. Check the harness at Flag 7.
   b. Check the harness, Flag 4, from PJ19 on the LVPS to the Tray 1 and 2 Control PWB, PL 70.10 Item 2.
4. Disconnect PJ10, Flag 24. If the LEDs CR12 and CR13 are on, check the harness, from PJ10 on the IOT PWB, to, PL 70.30 Item 1.
5. Disconnect PJ11, Flag 25. If the LEDs CR12 and CR13 are on, check the harness, from PJ11 on the IOT PWB to the output devices.
6. Disconnect PJ7, Flag 23. If the LEDs CR12 and CR13 are on, check the harness, from PJ7 to the components that follow:
   a. Developer temperature sensor, PL 90.20 Item 5.
   b. Relative humidity sensor / ambient temperature sensor, PL 90.20 Item 4.
   c. Waste toner full sensor, PL 90.10 Item 2.

01H +3.3 Volt and +5 Volt Circuits

NOTE: *After every disconnection, the power button on the UI must be pressed. If CR12 and CR13 are not on, reconnect and go to the next step.*

1. Perform the steps that follow:
   a. Disconnect PJ137 on the power distribution PWB, Flag 9 If the LEDs CR12 and CR13 are on, check the following:
      i. The harness, Flag 9, from the power distribution PWB to PJ106 on the SBC PWB.
      ii. The ribbon cable, Flag 14, from the SBC PWB to PJ1 on the Fax connector PWB.
   b. Disconnect PJ140 from the power distribution PWB. If the LEDs, CR12 and CR13 are on, check the following:
      i. The harness, Flag 10, to the scanner PWB.
      ii. The harness, Flag 15, from the scanner PWB to the SPDH PWB.
      iii. The harness, Flag 27, from the SPDH PWB to the SPDH CCD.
      iv. The harness, Flag 16, from the scanner PWB to the scanner CCD.
   c. Disconnect PJ9 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 21, from the IOT PWB to Tray 1 and 2 PWB.
2. If no short circuit is found in the +3.3V and +5V circuits, go to 01H +3.3 Volt Circuits.

01H +3.3 Volt Circuits

NOTE: *After every disconnection, the power button on the UI must be pressed. If CR12 and CR13 are not on, reconnect and go to the next step.*

1. Disconnect PJ133 on the power distribution PWB. If the LEDs, CR12 and CR13 are on, check the harness, Flag 8, to the UI control PWB.
2. Disconnect PJ5 on the IOT PWB If the LEDs, CR12 and CR13 are on, check the harness, Flag 19, to the paper path sensors.
3. If no failure is found in the +3.3V circuits, go to 01H +5 Volt Circuits.

01H +5 Volt Circuits

NOTE: *After every disconnection, the power button on the UI must be pressed. If CR12 and CR13 are not on, reconnect and go to the next step.*

1. Disconnect PJ8 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 18, to the xerographic CRUM, part of the xerographic module, PL 90.20 Item 2 and to the fuser CRUM, part of the fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

2. Disconnect PJ4 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 20, to the inverter motor driver PWB, PL 10.11 Item 22, and to the duplex motor driver PWB, (45-55 ppm) PL 80.22 Item 9, (65-90 ppm) PL 80.20 Item 9.
3. Disconnect PJ6 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 22, to the developer assembly.
4. Disconnect PJ7 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 23, To the developer sensors and interlocks.
5. Disconnect PJ11 on the IOT PWB. If the LEDs CR12 and CR13 are on, check the harness, Flag 25, to the output module.

01H +12 Volt Circuits

NOTE: *Before disconnection, switch off the machine, GP 14. Switch on the machine, GP 14, to check CR15.*

CR15 is OFF. Check the harnesses that follow for a short circuit, until CR15 is on, Figure 1.

1. Disconnect PJ25 on the LVPS. CR15 is ON. Check from PJ25, Flag 5, to the power distribution PWB. If the harness from PJ25 to PJ131 is good. Reconnect PJ25 and perform the steps that follow:
   a. Disconnect PJ133 on the power distribution PWB. Check the harness, Flag 8, to PJ130 on the UI control PWB.
   b. Disconnect PJ140 from the power distribution PWB. If the LEDs, CR12 and CR13 are on, check the following:
      i. The harness, Flag 10, to the scanner PWB.
      ii. The harness, Flag 15, from the scanner PWB to the SPDH PWB.
      iii. The harness, Flag 27, from the SPDH PWB to the SPDH CCD.
      iv. The harness, Flag 16, from the scanner PWB to the scanner CCD.
   c. Disconnect PJ27 on the IOT PWB, Flag 12. CR15 is on. Perform OF7 IOT PWB Diagnostics RAP.

01H +24 Volt Circuits

NOTE: *Before disconnection, switch off the machine, GP 14. Switch on the machine, GP 14, to check CR16.*

CR16 is OFF. Check the harnesses that follow for a short circuit, until CR16 is on, Figure 1.

1. Disconnect PJ18 on the LVPS. CR16 is ON. Check from PJ18, Flag 3 to the ROS, PL 60.10 Item 8.
2. Disconnect PJ19 on the LVPS. CR16 is ON. Check from PJ19, Flag 4, to the tray 1 and 2 control PWB.
3. Switch off the machine, GP 14.

   If the F1 fuse on the IOT PWB has failed. Set the meter to measure ohms. Connect the black lead to PJ27 pin 9 or pin 10 and the red lead to the bottom of the F1 fuse on the IOT PWB. If the output is shorted the measurement will be less than 1 ohm.
   a. Disconnect PJ3 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ3, Flag 17, to the main drive PWB.
   b. Disconnect PJ4 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ4, Flag 20, to the inverter motor, PL 10.11 Item 11, and the duplex motor, (45-55) PL 80.22 Item 8, (65-90 ppm) PL 80.20 Item 8.
   c. Disconnect PJ6 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ6, Flag 22, to the developer module.
   d. Disconnect PJ10 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ10, Flag 24, to the bypass tray sensors and solenoids.
   e. Disconnect PJ11 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ11, Flag 25, to P/J151 and onto the output device.
   f. Disconnect PJ14 on the IOT PWB. If the measurement remains below 1 Ohm, this part of the circuit is good, move to the next step. If the measurement changes to open circuit, check from PJ14, Flag 26, to PJ55 on the HVPS.
   g. Install a new IOT PWB, PL 1.10 Item 2.
   h. If after completing the checks above, the F1 fuse on the IOT PWB fails. Switch off the machine, GP 14. Install a new IOT PWB, PL 1.10 Item 2.

      Disconnect PJ3, PJ4, PJ6, PJ11 and PJ14. Switch off the machine, GP 14 before a PJ is connected. Connect each PJ, one at a time until the PJ is found that causes the fuse to fail. Check and repair the harness or install new components as necessary.
4. Switch on the machine, GP 14.

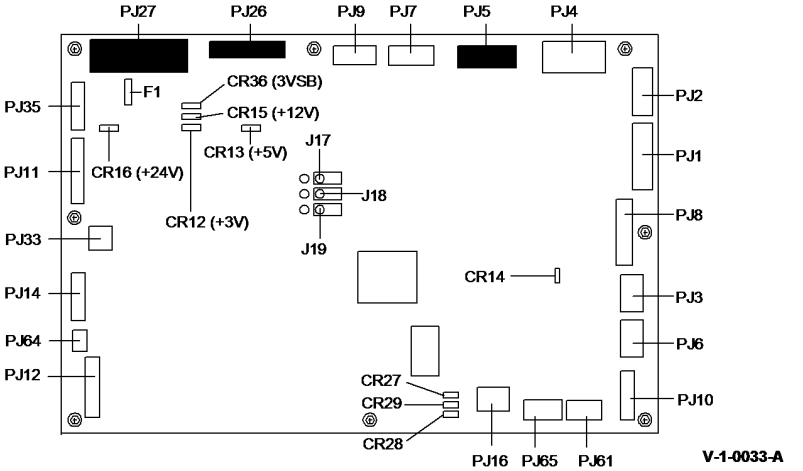


Figure 1 IOT PWB, LED and PJ location

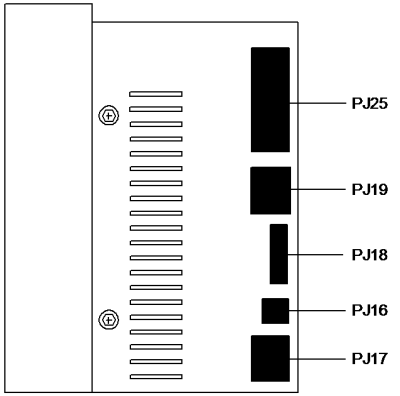


Figure 2 LVPS PJ location

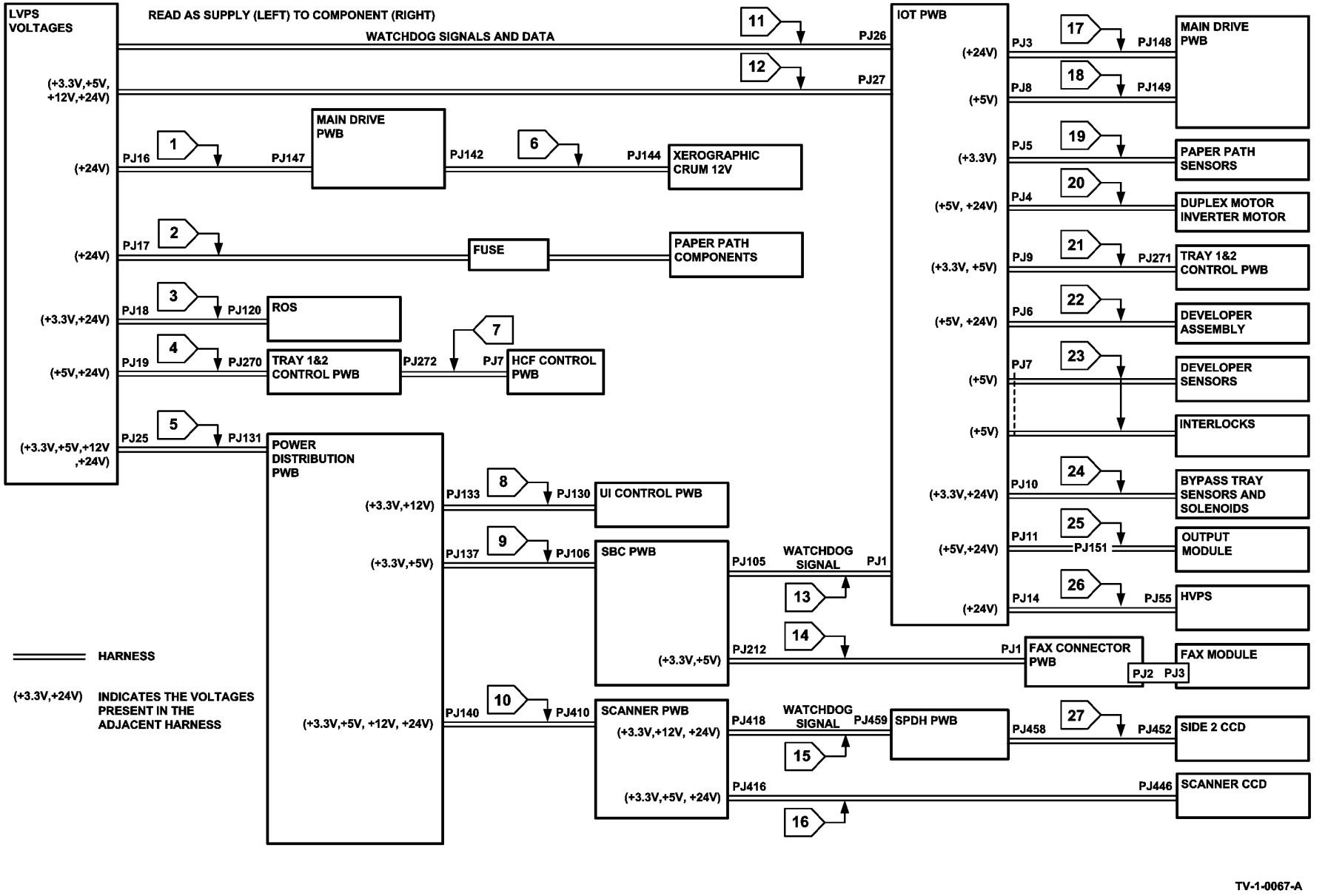


Figure 3 Low voltage distribution

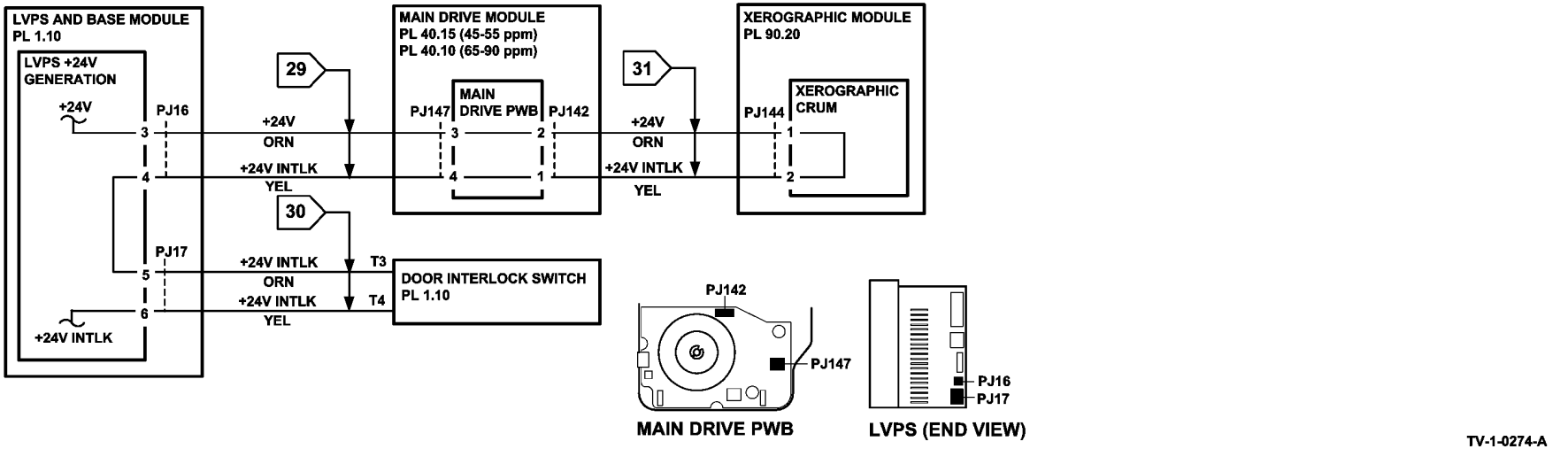


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Figure 4 +24V interlock circuit diagram

301J Power On and LVPS Control Signal RAP

Use this RAP to check and identify power on and standby signals from the LVPS.

Ensure that the 301C AC Power RAP is performed before starting this RAP.

Procedural Notes

NOTE: *Short circuit or overload of +3.3VSB (standby) will result in all the LVPS outputs off. Short circuit or overload of +3.3V or +5V will result in all the LVPS outputs off, except +3.3VSB.*

NOTE: *For an explanation of the LEDs on the IOT PWB and their function, go to OF7 IOT PWB Diagnostics RAP.*

NOTE: *+3.3VSB (standby) is generated from the LVPS when the machine is connected to the AC supply. +3.3VSB is required to initialize the machine from standby to power on.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure that the machine is switched off, GP 14. Remove the rear cover, PL 28.10 Item 1. Reconnect the power cord. Check CR36, Figure 1. **CR36 is on.**

Y N

Go to Flag 1. **+3.3VSB is available at P/J27, between pin 6 and pin 14, on the IOT PWB.**

Y N

Disconnect P/J27, wait aproximately 10 seconds. **+3.3VSB is available at the disconnected end of the harness, P/J27, between pins 6 and 14.**

Y N

Check the harness and connector P/J27, if necessary repair the harness/connector or Perform the 301L LVPS Checkout RAP.

A short circuit or overload on the +3.3VSB circuit may be causing the LVPS to shut down. Check the wiring and connectors from the LVPS to P/J27.
Perform the following as necessary:

- Repair the wiring or connectors.
- 301L LVPS Checkout RAP.
- Install a new IOT PWB, PL 1.10 Item 2.

Check the pin to pin connections of P/J27. If the connections are good, perform OF7 IOT PWB Diagnostics RAP.

Go to Flag 2. Monitor the voltage at P/J26, pin 7. Switch off the machine, then switch on the machine, GP 14. **The voltage changes from +2.3V to 0V.**

Y N

Perform the following:

- Go to Flag 3, check the wiring and connectors between P/J81 on the UI control PWB and P/J18 on the SBC PWB

A

- Go to Flag 4, check the wiring and connectors between P/J105 on the SBC PWB and P/J1 on the IOT PWB
- Go to Flag 5, check the ribbon cable and connectors between P/J910 on the UI keyboard PWB and P/J908 on the UI control PWB

The wiring and connectors are good.

Y N

Repair the wiring and connectors or install new parts, refer to:

- REP 1.2 Wiring Harness Repairs
- Control to keyboard PWB ribbon cable, PL 2.10 Item 10
- UI keyboard PWB, PL 2.10 Item 9
- UI control PWB, PL 2.10 Item 6
- SBC PWB, PL 3.22 Item 3
- IOT PWB, PL 1.10 Item 2

Perform OF7 IOT PWB Diagnostics RAP.

Go to the 301H Short Circuits and Overloads RAP.

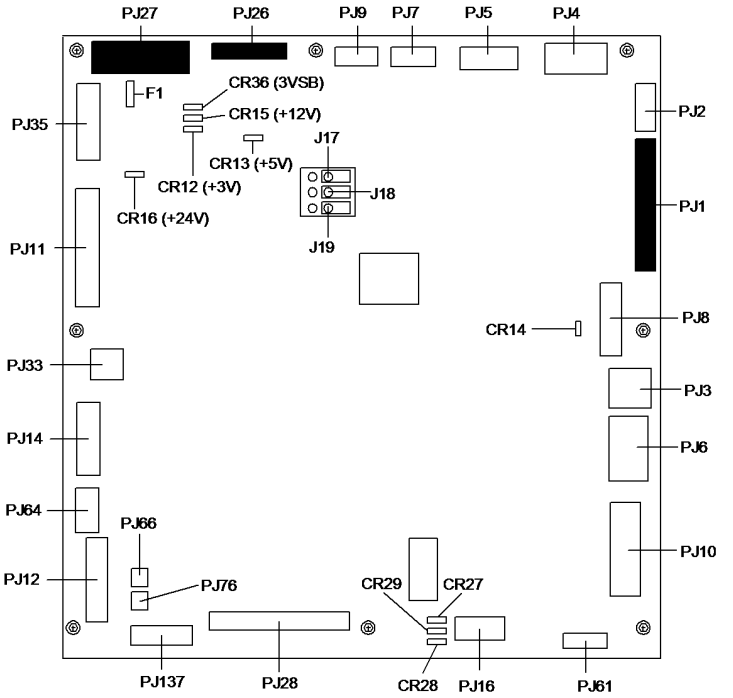


Figure 1 LED locations on the IOT PWB

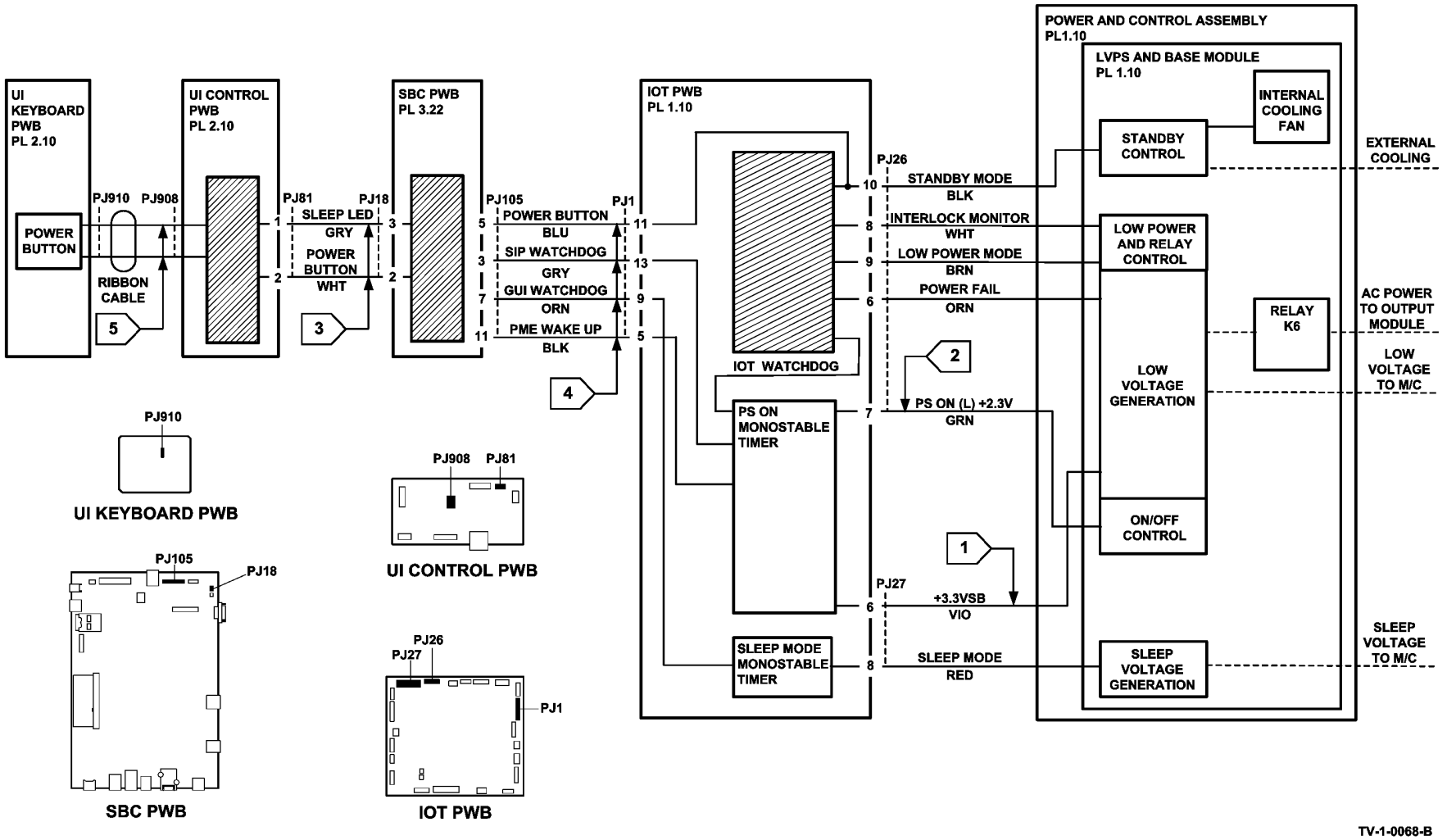


Figure 2 Circuit diagram

301K Sleep Mode RAP

Use this RAP to diagnose problems entering or exiting sleep mode.

Sleep Mode Operation

The machine is designed to be energy efficient by reducing the power consumption after periods of inactivity. The machine has three power modes:

- Standby or run mode - full power consumption. In this mode, the power button, Figure 1, is not illuminated.
- Low power mode - the fuser temperature is reduced to save power, yet allow a quick return to run temperature. In this mode, the power button, Figure 1, is blinking.
- Sleep mode - power consumption for the whole machine is reduced to below 10 watts by powering down all but the essential parts, see the note below. In this mode, the power button, Figure 1, is illuminated.

  NOTE: *When the machine is in sleep mode, +12V sleep is supplied from a special power supply located within the LVPS to the power distribution PWB. The power distribution PWB supplies +3.3V sleep and +12V sleep to power the items that follow:*

  – *Fax connector PWB.*
  – *Fax module.*
  – *SBC PWB.*
  – *UI control PWB.*

Off to Run Mode

When the power button is pressed, the UI control sends the power button pressed signal to the SBC PWB. The SBC PWB generates PME wakeup and sends it to the IOT PWB. The IOT PWB sends the PS ON signal to the LVPS to power-on the low voltage DC outputs of the machine. The PS ON signal is diode coupled within the LVPS to the sleep signal, therefore whenever the main power supply is on, the sleep mode power supply is on. When the machine is in run mode the IOT watchdog signal and the SBC watchdog signal keep the PS ON signal active.

Run Mode to Sleep Mode

After a period of machine inactivity that equates to the sum of the low power mode duration plus the sleep mode duration, as set in the customer tools options, both the SBC and IOT watchdogs are stopped. After approximately 4.5 seconds the PS ON signal goes inactive, causing the low voltage DC outputs of the machine to switch off. Before the SBC and IOT stop their watchdogs, the UI watchdog is started, this causes the sleep signal to be active; this in turn keeps the sleep mode power supply on when the main power supply switches off.

Sleep Mode to Run Mode

Exit from sleep mode requires one of the wake events that follows to occur:

- An operator presses the power button. This causes the UI control to send the power button pressed signal to the SBC PWB. The SBC PWB generates PME wakeup and sends it to the IOT PWB. This in turn causes the IOT to generate the PS ON signal to the LVPS, which in turn switches on the low voltage DC outputs of the machine and also asserts the LOW PWR signal to enable AC power to the finisher.
- An operator touches the UI screen or presses any UI buttons. This causes the UI control to send the power button pressed signal to the SBC PWB. The SBC PWB generates PME wakeup and sends it to the IOT PWB. This causes the IOT to generate the PS ON signal to the LVPS, which in turn switches on the low voltage DC outputs of the machine and also asserts the LOW PWR signal to enable AC power to the finisher.
- An incoming Fax job. To indicate a wake up call has been initiated the Fax PWB will generate a power management event/wake up (PME/wake up) signal. The PME/wake up signal is sent via the Fax connector PWB through the PCI bus to the SBC PWB to the IOT PWB. The IOT on/off control circuit detects the PME/wake up line is active and enables the PS ON signal to the LVPS, which in turn switches on the low voltage DC outputs of the machine, and also asserts the LOW PWR signal to enable AC power to the finisher.
- An incoming print job to the single board controller PWB will generate a power management event/wake up (PME/wake up) signal that is passed through single board controller PWB to the IOT PWB. This causes the IOT to generate the PS ON signal to the LVPS, which in turn switches on the low voltage DC outputs of the machine and also asserts the LOW PWR signal to enable AC power to the finisher.

Reading or Setting the Power Save Duration Times

Access the power save feature by performing the following:

1. Access the customer administration tools screen, GP 24.
2. Touch the More button.
3. Touch the Power Saver Administration button.
4. Set the Standby/Low Power duration times.
5. Touch save.

The default time for standby mode to low power mode is 15 minutes, the minimum value is 1, the maximum value is 120.

The default time for low power mode to sleep mode is 45 minutes, the minimum value is 10, the maximum value is 120.

To change either of the timing values, touch the appropriate input area, enter the new value using the keypad. Touch the Save button to confirm the change.

Initial Actions

Make sure that the cooling fan assembly, PL 3.22 Item 5 is connected to PJ221 on the SBC PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to Sleep Mode to Run Mode. **The machine remains in sleep mode after a wake event.**

Y **N**

Refer to Run Mode to Sleep Mode. **The machine remains in standby mode or low power mode after both power save duration times have elapsed.**

A

A

Y N

The machine switches off when it should enter sleep mode.

Y N

The system is operating correctly, perform SCP 5 Final Actions.

Perform the following:

- Refer to Reading or Setting the Power Save Duration Times. Set the standby mode to low power mode to 1 minute and the low power mode to sleep mode values to 10 minutes.
- Disconnect the Fax telephone lines to prevent a power management event.
- Disconnect the ethernet connection P/J1 to prevent a power management event.

Go to Flag 1. Check the voltage at P/J27 pin 8 on the IOT PWB. **After 11 minutes the voltage changes from +3.3V to 0V.**

Y N

Go to Flag 2. Check the wiring and connectors between PJ1 pin 9 on the IOT PWB and P/J105 pin 7 on the SBC PWB.

Go to Flag 3. Check the wiring and connectors between P/J18 pin 3 on the SBC PWB and P/J81 pin 1 on the UI controller PWB. **The wiring and connectors are good.**

Y N

Repair the wiring, REP 1.2.

Go to Flag 8. Check that the ribbon cable between P/J212 on the SBC PWB and P/J1 on the Fax connector PWB is fully connected and undamaged. **The cable is good.**

Y N

Remove and reconnect the cable, if necessary install a new Fax communication ribbon cable. PL 3.22 Item 10.

Go to Flag 6. **+3.3v is available at P/J130 between pins 1 and 2 on the UI control PWB.**

Y N

Go to Flag 6. **+3.3V is available at P/J133 between pins 3 and 4 on the power distribution PWB.**

Y N

Check the wiring and connectors between P/J130 and P/J133. If necessary install a new UI harness, PL 2.10 Item 3.

Go to Flag 5 and Flag 7. **+12V is available at the LVPS and base module P/J25 between pins 3 and 13, and between pins 4 and 14.**

Y N

Perform the 301L LVPS Checkout RAP.

Go to Flag 5 and Flag 7. Check for +12V at the power distribution PWB P/J131 between pins 17 and 13, also check for +12V between pins 14 and 18. **The voltages are good.**

Y N

Check the wiring and connectors between P/J25 and P/J131. Repair the wiring as necessary, REP 1.2.

A B C D E

A B C D E

Install a new power distribution PWB, PL 3.22 Item 1.

Install new parts as necessary:

- UI control PWB, PL 2.10 Item 6.
- UI touch screen, PL 2.10 Item 4.
- UI keyboard PWB, PL 2.10 Item 9.
- SBC PWB, PL 3.22 Item 3.
- Perform OF7 IOT PWB Diagnostics.

Perform the 301L LVPS Checkout RAP.

Perform the following:

- If the fax option is installed, ensure it has been enabled and set up. If the customer does not use this option, it may be disabled via the tools menu, but the fax option must be set up to allow the operation of the Sleep Mode.
- Refer to Reading or Setting the Power Save Duration Times. Set the standby mode to low power mode to 1 minute and the low power mode to sleep mode values to 10 minutes.
- Disconnect the input Fax line(s) to prevent a power management event.
- Disconnect from the network to prevent a power management event.
- Leave the machine untouched and observe the user interface.

After one minute the power button flashes, then after a further ten minutes the power button illuminates.

Y N

Perform OF7 IOT PWB Diagnostics RAP. Return the power save settings to the previous values and reconnect the Fax and network lines. Perform SCP 5 Final Actions.

The system is operating correctly. Return the power save settings to the previous values and reconnect the Fax and network lines. Perform SCP 5 Final Actions.

Remove the rear cover, PL 28.10 Item 1. Observe the LEDs on the IOT PWB, refer to the OF7 IOT PWB Diagnostics RAP. **Only CR36 is lit.**

Y N

Disconnect the power cord from the machine. Wait two minutes, then re-connect the power cord. **The machine remains in sleep mode.**

Y N

The fault may be intermittent. If the fault re-occurs, perform an Altboot, GP 4. If necessary, install a new single board controller PWB, PL 3.22 Item 3.

Install a new single board controller, PL 3.22 Item 3.

The wake event is from the user interface.

Y N

The wake event is from the network.

Y N

The wake event is from the Fax PWB.

Y N

Go to the 301J Power On and LVPS Control Signals RAP, check the operation of the power button.

F G H

F G H

Perform the following:

1. Refer to 20A Fax Entry RAP and complete all of the initial actions.
2. Remove and re-seat the Fax module and the harnesses to the Fax connection PWB, REP 3.2.
3. Refer to Reading or Setting the Power Save Duration Times. Set the standby mode to low power mode to 1 minute and the low power mode to sleep mode values to 10 minutes.
4. Go to Flag 2, Measure the voltage at P/J105 pin 11.
5. Leave the machine untouched, allow the machine to enter sleep mode.
6. Arrange for a Fax job to be sent from another machine to this machine.

The voltage measured changes from +3.3V to 0V when the Fax arrives at the machine.

Y N

Go to Flag 8. Check that the ribbon cable between P/J212 on the SBC PWB and P/J1 on the Fax connector PWB is fully connected and undamaged. **The cable is good.**

Y N

Remove and reconnect the cable, if necessary install a new Fax communication ribbon cable. PL 3.22 Item 10.

Go to Flag 5 and Flag 7. Check for +12V at the power distribution PWB P/J131 between pins 17 and 13, also check for +12V between pins 18 and 14. **The voltages are good.**

Y N

Go to Flag 5 and Flag 7. Check for +12V at the LVPS and base module P/J25 between pins 3 and 13, also check for +12V between pins 4 and 14. **The voltages are good.**

Y N

Perform the 301L LVPS Checkout RAP.

Check the wiring and connectors between P/J25 and P/J131. Repair the wiring as necessary, REP 1.2.

Install a new power distribution PWB, PL 3.22 Item 1.

Go to Flag 2. Measure the voltage at P/J1 pin 5 on the IOT PWB.
Arrange for a Fax to be sent from another machine to this machine. **The voltage measured changes from +3.3V to 0V when the Fax arrives at the machine.**

Y N

Check the wiring and connectors between P/J1 on the IOT PWB and P/J105 on the SBC PWB. Repair the wiring as necessary, REP 1.2.

Go to Flag 4. Measure the voltage at P/J26 pin 7 on the IOT PWB.
Arrange for a Fax job to be sent from another machine to this machine. **The voltage measured changes from +3.3V to 0V.**

Y N

Perform OF7 IOT PWB Diagnostics RAP.

Perform the 301L LVPS Checkout RAP.

F G

F G

Go to Flag 9. Check the network connection P/J114 on the SBC PWB. **The harness and connectors are good.**

Y N

Install a new ethernet harness.

Perform the following:

1. Refer to Reading or Setting the Power Save Duration Times. Set the standby mode to low power mode to 1 minute and the low power mode to sleep mode values to 10 minutes.
2. Disconnect the telephone network harness from the Fax module to prevent a power management event.
3. Go to Flag 2. Measure the voltage at P/J105 pin 11 on the SBC PWB.
4. Leave the machine untouched, allow the machine to enter sleep mode.
5. Arrange for a print job to be sent from a PC to this machine.

The voltage measured changes from +3.3V to 0V, when the print job arrives at the machine.

Y N

Go to Flag 5 and Flag 7. Check for +12V at the power distribution PWB P/J131 between pins 17 and 13, also check for +12V between pins 14 and 18. **The voltages are good.**

Y N

Go to Flag 5 and Flag 7. Check for +12V at the LVPS and base module P/J25 between pins 3 and 13, also check for +12V between pins 4 and 14. **The voltages are good.**

Y N

Perform the 301L LVPS Checkout RAP.

Check the wiring and connectors between P/J25 and P/J131. Repair the wiring as necessary, REP 1.2.

Install a new power distribution PWB, PL 3.22 Item 1.

Go to Flag 2. Measure the voltage at P/J1 pin 5 on the IOT PWB. Arrange for a print job to be sent from a PC to this machine. **The voltage measured changes from +3.3V to 0V when the print job arrives at the machine.**

Y N

Check the wiring and connectors between P/J1 on the IOT PWB and P/J105 on the SBC PWB. Repair the wiring as necessary, REP 1.2.

Go to Flag 4. Measure the voltage at P/J26 pin 7 on the IOT PWB. Arrange for a print job to be sent from a PC to this machine. **The voltage measured changes from +3.3V to 0V when the print job arrives at the machine.**

Y N

Perform OF7 IOT PWB Diagnostics RAP.

Perform the 301L LVPS Checkout RAP.

Go to Flag 3. Measure the voltage at P/J81 pin 2 on the UI control PWB.

NOTE: *Any voltage change will be small, less than 1V.*

The voltage changes when the UI screen is touched or a UI button is pressed.

Y N

Go to Flag 6. **+3.3V is available at P/J130 on the UI control PWB, between pins 1 and 2.**

Y N

Go to Flag 6. **+3.3V is available at P/J133 on the power distribution PWB, between pins 3 and 4.**

Y N

Go to Flag 5 and Flag 7. **+12V is available at P/J131 on the power distribution PWB, between pins 13 and 17 and also between pins 14 and 18.**

Y N

Go to Flag 5 and Flag 7. **+12V is available at P/J25 on the LVPS and base module, between pins 13 and 3 and also between pins 4 and 14.**

Y N

Perform the 301L LVPS Checkout RAP.

Check the wiring and connectors between P/J25 and P/J131. Repair the wiring, REP 1.2, as necessary.

Install a new power distribution PWB, PL 3.22 Item 1.

Check the wiring and connectors between P/J133 and P/J130. Repair the wiring, REP 1.2, as necessary.

Install new parts as necessary:

- UI harness, PL 2.10 Item 3.
- User interface control PWB, PL 2.10 Item 11.
- User interface touch screen PWB, PL 2.10 Item 6.
- User interface touch screen, PL 2.10 Item 5.

Go to Flag 3. Measure the voltage at P/J18 pin 2 on the SBC PWB. **The voltage changes from +3.3V to 0V when the UI screen is touched or a UI button is pressed.**

Y N

Check the wiring and connectors between P/J81 and P/J18. Repair the wiring, REP 1.2, as necessary.

Go to Flag 2. Measure the voltage at P/J105 pin 11 on the SBC PWB. **The voltage changes from +3.3V to 0V when the UI screen is touched or a UI button is pressed.**

Y N

Install a new SBC PWB, PL 3.22 Item 3.

Go to Flag 2. Measure the voltage at P/J1 pin 5 on the IOT PWB. **The voltage changes from +3.3V to 0V when the UI screen is touched or a UI button is pressed.**

Y N

Check the wiring and connectors between PJ1 on the IOT PWB and P/J105 on the SBC PWB. Repair the wiring, REP 1.2 as necessary.

Go to Flag 4.Measure the voltage at P/J26 pin 7 on the IOT PWB. **The voltage changes from +3.3V to 0V when the UI screen is touched or a UI button is pressed.**

Y N

Perform OF7 IOT PWB Diagnostics RAP.

Perform the 301L LVPS Checkout RAP.

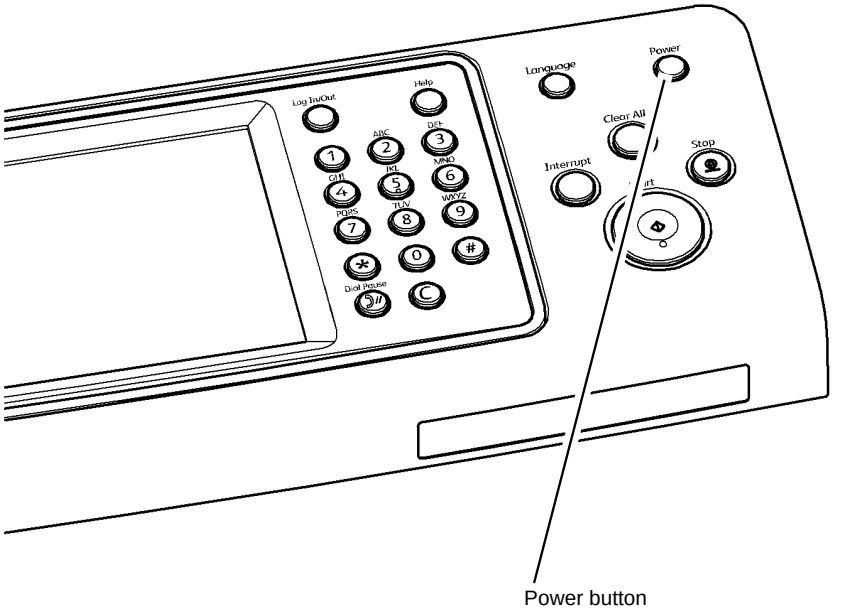


Figure 1 Component location

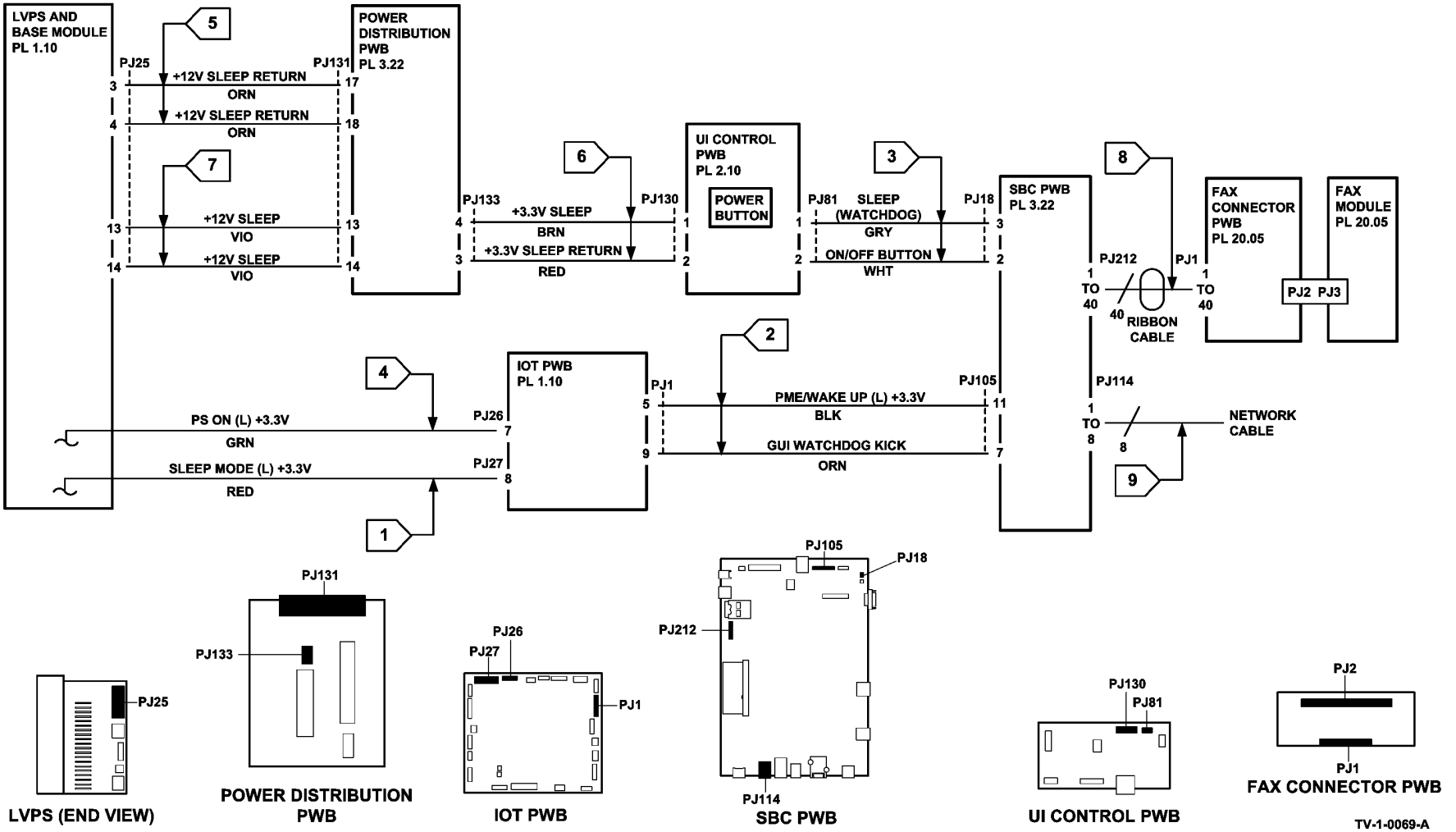


Figure 2 Circuit diagram

301L LVPS Checkout RAP

Use this RAP to diagnose problems with the LVPS that give the following symptoms:

- The machine does not respond after the power button on the UI has been pressed
- The machine responds for an instant to the power button on the UI having been pressed, with a beep, a click or a momentary LED flash, but no power or lights on the UI, no fans running, no motors on and no solenoids on. There may be a slight clicking noise from the relays in the LVPS along with slight flashing of some LEDs on the IOT PWB every five to six seconds

Initial Actions

- If the UI touch screen is black or blank, but the LVPS fan is running, or there is an LED lit on the UI, go to the 302A Touch Screen Failure RAP.
- The LVPS can shut down in response to a power surge, requiring a reset. Disconnect the machine from the AC power supply and leave it disconnected for two minutes, then re-connect.
- Ensure that the correct LVPS and base module has been installed, refer to PL 1.10.
- Check CR16 on the IOT PWB, Figure 2. If CR16 is not lit, check for continuity of less then 1 Ohm through fuse F1. If fuse F1 is open circuit/blown, refer to the 301H Short Circuit and Overload RAP to find and repair the +24V short circuit, then install a new IOT PWB, PL 1.10 Item 2.

Checkout Options

If a LVPS test box, PL 26.11 Item 8 is available, go to LVPS Test Box is Available. If a LVPS Test Box is not available go to LVPS Test Box is Not Available.

LVPS Test Box is Available

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the power and control assembly, REP 1.1.
2. Make the following connections:
   - P27 from the top of the LVPS to J27 on the test box
   - P26 from the top of the LVPS to J26 on the test box
   - The supplied test harness into J67 on the test box
   - P24 from the test harness into J24 on top of the LVPS
   - P25 from the test harness to J25 on the side of the LVPS, Figure 3
   - P16 from the test harness to J16 on the side of the LVPS, Figure 3
   - P17 from the test harness to J17 on the side of the LVPS, Figure 3
   - The supplied connector with a loop wire into J5 on the IOT PWB, Figure 2
3. Connect the power cord and switch on. Allow a few seconds for the LVPS to stabilise.

Observe the LEDs on the test box. **The Amber LED is lit.**

Y N

Check that all the connections have been made correctly. Check that there is a good AC neutral, AC live and ground supply at the customers AC supply point and at the machine end of the main power cord. If the AC power supply and connections are good, install a new LVPS and base module, PL 1.10 Item 3.

The green LED is lit.

Y N

The red LED is lit or flashing. This indicates the following failures:

- Flashing at 1Hz indicates a +24V failure
- Flashing at 0.33Hz an AC fuser output failure
- Permanently lit indicates a failure of 3.3VSB, +5V(1), +5V(2), +12V(1), +12V(2) or +12V sleep

Install a new LVPS and base module, PL 1.10 Item 3.

The LVPS has passed the test, but there may be a problem with the IOT PWB.
Perform the following IOT PWB check:

1. Switch off the power to the LVPS and disconnect the power cord.
2. Disconnect P26 and P27 from the test box.
3. Connect P26 to J26 on the IOT PWB.
4. Connect P27 to J27 on the IOT PWB.
5. Leave all other connections unchanged.
6. Allow a minimum of 2 minutes before the next switch on to allow the LVPS to recover from any shut downs.
7. Reconnect the power cord and switch on the power to the LVPS.

CR12, CR13, CR15 and CR36 are all lit.

Y N

Install a new IOT PWB, PL 1.10 Item 2.

CR16 on the IOT PWB is lit.

Y N

Switch off the power to the LVPS and disconnect the power cord. Disconnect P/J14. Wait 2 minutes for the LVPS to recover from the +24V shutdown. Reconnect the power cord and switch on the power to the LVPS. **CR16 on the IOT PWB is lit.**

Y N

There is a short circuit on the +24V output from the IOT PWB or an open circuit on the +12V interlock circuit.

- Refer to the circuit diagrams in the 301G +24V Distribution RAP. Also refer to the 301H Short Circuit and Overload RAP to locate and repair the short circuit. Install a new IOT PWB, PL 1.10 Item 2. Perform the IOT PWB check again to ensure that the IOT PWB is now good.
- To check for an open circuit on the +12V interlock circuit, refer to the 301-300-00 Front Door Open RAP circuit diagram.

Install a new HVPS PWB, PL 1.10 Item 5. Perform the IOT PWB check again to ensure that the HVPS is now good.

CR12 is lit.

Y N

There is a short circuit on the +12V output from the IOT PWB. Refer to the circuit diagrams in the 301F +12V Distribution RAP to locate and repair the short circuit. Perform the IOT PWB check again to ensure that the IOT PWB is now good.

CR36 is the only led that is lit.

Y N

Install a new IOT PWB, PL 1.10 Item 2. Perform the IOT PWB check again to ensure that the IOT P PWB is good.

There is a short circuit on the +3.3V or the +5V output from the IOT PWB.

- Refer to the circuit diagrams in the 301D +3.3V Distribution RAP. Also refer to the 301H Short Circuit and Overload RAP to locate and repair the short circuit. Perform the IOT PWB check again to ensure that the IOT PWB is now good.
- Refer to the circuit diagrams in the 301E +5V Distribution RAP. Also refer to the 301H Short Circuit and Overload RAP to locate and repair the short circuit. Perform the IOT PWB check again to ensure that the IOT PWB is now good.

LVPS Test Box is Not Available

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that there is a good AC neutral, AC live and ground supply at the customers AC supply point and at the machine end of the main power cord. Also check that the main power cord is securely connected at both ends. Refer to GP 22 Electrical Power Requirements. If necessary install a new main power cord, PL 1.10 Item 10

Remove the rear cover and connect the power cord. As soon as the power cord is connected the 3.3V standby LED CR36 should light, Figure 2. **CR36 on the IOT PWB is lit.**

Y N

Check for a blown fuse in the LVPS. Disconnect the power cord from the machine, measure the resistance between the AC live pin and the AC neutral pin on the receptacle where the power cord connects to the LVPS and base module, Figure 1. **Between 0.250 and 0.750 M Ohms is measured,**

Y N

A resistance reading of 1 M Ohms or greater indicates that the fuse in the LVPS has blown by a short in the fuser module. Install new parts:

- Fuser Module (45-55 ppm), PL 10.8 Item 1
- Fuser module (65-90 ppm), PL 10.10 Item 1
- LVPS and base module, PL 1.10 Item 3

The LVPS is defective, install a new LVPS and base module, PL 1.10 Item 3.

Measure the voltage at P/J26 pin 7. **The voltage changes from +2.3V to 0V when the power button on the UI is pressed.**

Y N

The power on control signal is not available, go to the 301J Power On and LVPS Control Signal RAP.

Disconnect the power cord. Disconnect all P/Js on the IOT PWB, except for P/J1, P/J26 and P/J27, Figure 2. Remove the waste toner bottle, PL 90.10 Item 1 and waste toner door, PL 90.10 Item 3. Disconnect P/J16, P/J17, P/J18, P/J19 and P/J25 on the right end of the LVPS, Figure 3. Connect the power cord, then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

Disconnect the power cord. Disconnect P/J1, P/J26 and P/J27 on the IOT PWB. Measure the resistance between the machine frame ground point, Figure 1 and P/J27 pins 1 to 8 (top row), also P/J26 pins 1 to 10. **Greater than 100 Ohms is measured on all pins.**

Y N

Install a new IOT PWB, PL 1.10 Item 2.

Install a new LVPS and base module, PL 1.10 Item 3. If the problem continues, install a new IOT PWB, PL 1.10 Item 2.

This indicates that the LVPS itself is good, but that there is a short circuit on one of the +3.3V or +5V circuits that were connected to the LVPS. Disconnect the power cord, reconnect P/J5, reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J5. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

Disconnect the power cord. Reconnect P/J16. Reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J16. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

Disconnect the power cord. Reconnect P/J17. Reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J17. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

Disconnect the power cord. Reconnect P/J18. Reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J18. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

Disconnect the power cord. Reconnect P/J19. Reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J19. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

Disconnect the power cord. Reconnect P/J25. Reconnect the power cord and then press the power button on the UI. **The LVPS is on (IOT PWB LEDs CR12, CR13, CR15 and CR16 are lit, also the LVPS fan is running) and all stay on.**

Y N

This indicates that there is a short circuit on one of the +3.3V or +5V circuits connected to P/J25. Go to the 301D +3.3V Distribution RAP and the 301E +5V Distribution RAP to troubleshoot and repair the cause of the +3.3V or +5V short circuit.

The LVPS, +3.3V circuits and +5V circuits are working correctly, the problem is intermittent. Go to the 301H Short Circuit and Overload RAP to diagnose the short circuit.

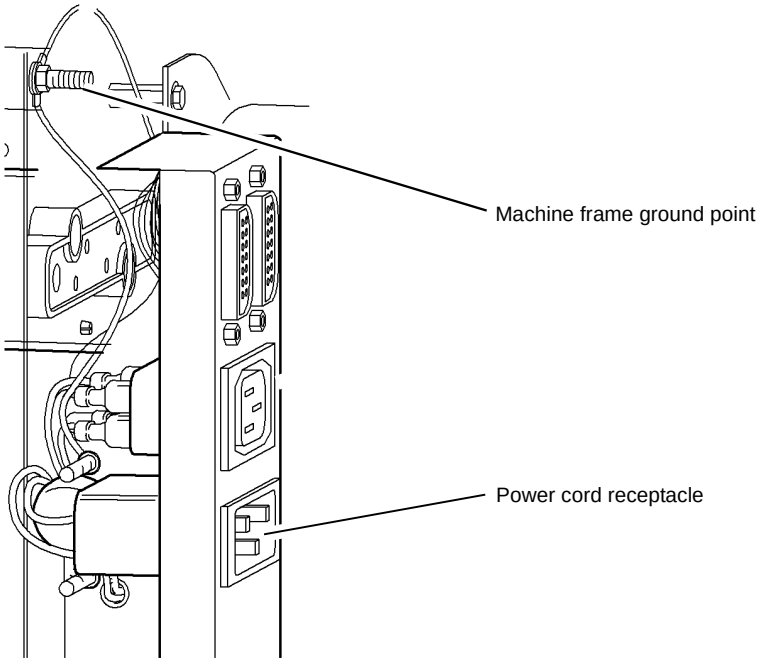


Figure 1 Power connections

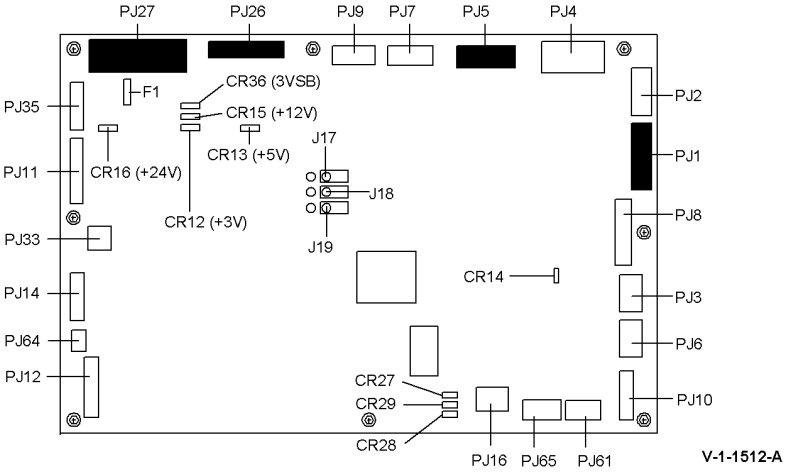


Figure 2 IOT PWB LED and PJ locations

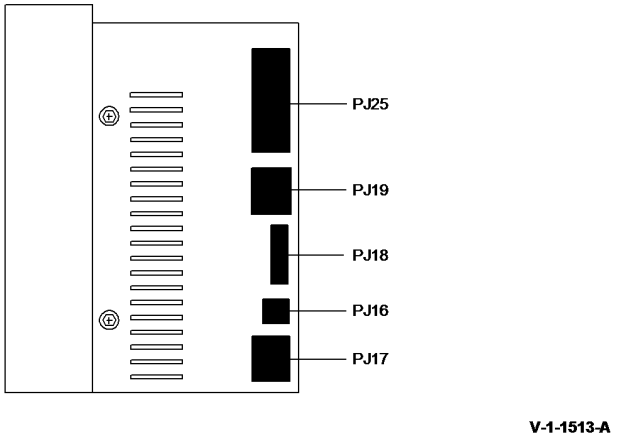


Figure 3 LVPS PJ location

302-302-00, 302-306-00, 302-308-00 Flash Failure RAP

302-302-00 Flash rewrite failure.

302-306-00 Flash erase failure.

302-308-00 Flash download failure.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch the machine off, then switch on the machine, GP 14.

Procedure

1. Perform an Altboot, GP 4.
2. If the fault remains, install a new hard disk drive, PL 3.22 Item 2.

302-315-00 Service Registry Bad Data RAP

302-315-00 Service registry bad or corrupted data

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch the machine off, then switch on the machine, GP 14.

Procedure

1. Perform an Altboot, GP 4.
2. If the fault remains, install a new hard disk drive, PL 3.22 Item 2.

302-316-00, 302-317-00 SRS Error RAP

302-316-00 SRS returns to LUI invalid fields, invalid data or missing data.

302-317-00 LUI gets no response from SRS.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch the machine off, then switch on the machine, GP 14.

Procedure

1. Perform an Altboot, GP 4.
2. If the fault remains, install a new hard disk drive, PL 3.22 Item 2.

302-320-00 Data Time Out Error RAP

302-320-00 UI does not receive requested data from the CCM within the specified time out window.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch the machine off, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Refer to Wiring Diagram 4. Check the wiring between the SBC PWB and the UI Control PWB. Repair the wiring, GP 7 or install new components as necessary:
   - SBC PWB/UI Control PWB harness, PL 3.22 Item 23.
   - UI harness, PL 3.22 Item 24.
2. Perform an Altboot, GP 4.
3. Install new components as necessary:
   - Hard disk drive, PL 3.22 Item 2.
   - UI control PWB, PL 2.10 Item 6.
4. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

302-321-00 XEIP Browser Dead RAP

302-321-00 The user interface has detected that the EIP (Extensible Interface Platform) browser does not respond, or is known to be not working.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following steps:

1. Switch off the machine, then switch on the machine, GP 14.
2. Ensure that Extensible Services are enabled, as detailed in the System Administrator's Guide. If necessary, re-load the software set, GP 4 Machine Software.
3. Check that the machine is communicating with the network, for example by sending a print job. If necessary, check the network cable and check with the customer that their network and web browser are running correctly.
4. Go to Flag 1. Check the wiring between PJ130 on the UI control PWB and PJ104 on the SBC PWB. Repair the wiring or install new components as necessary:
   - UI harness, PL 3.22 Item 24.
   - UI control PWB, PL 2.10 Item 6.
5. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

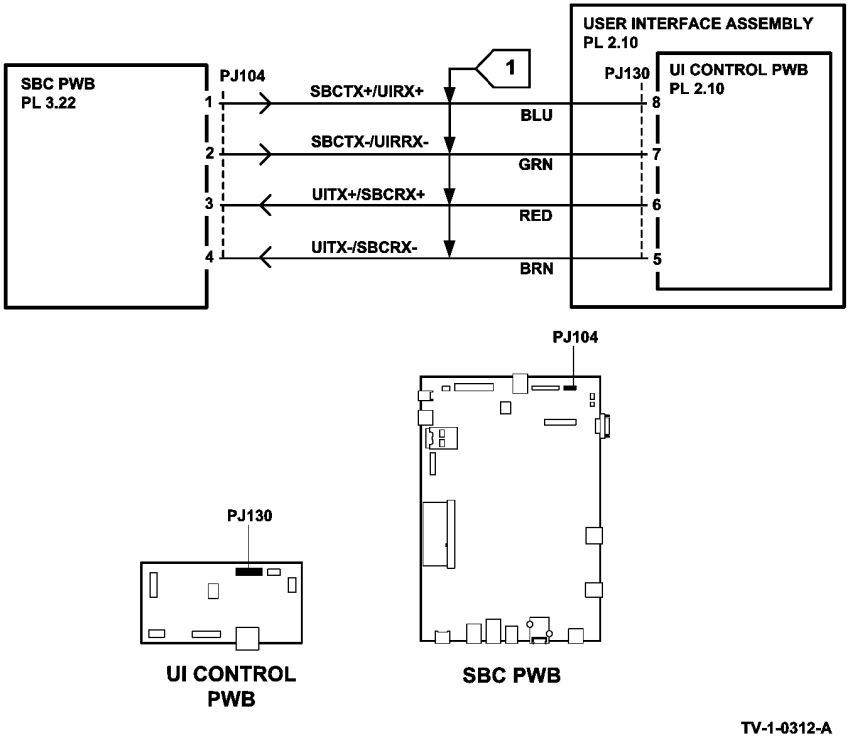


Figure 1 Circuit Diagram

302-380-00, 302-381-00 UI Communication Fault RAP

302-380-00 Communication via H-H USB net path connection between SBC and UI panel is not working

302-381-00 Communication via USB connection between SBC and UI panel is not working.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following steps:

1. Switch off the machine, then switch on the machine, GP 14.
2. Go to Flag 1. Check the wiring between P/J905 on the UI control PWB and P/J101 on the SBC PWB. Install new components as necessary:
   - SBC PWB/UI control PWB harness, PL 3.22 Item 23.
   - UI control PWB, PL 2.10 Item 6.
3. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

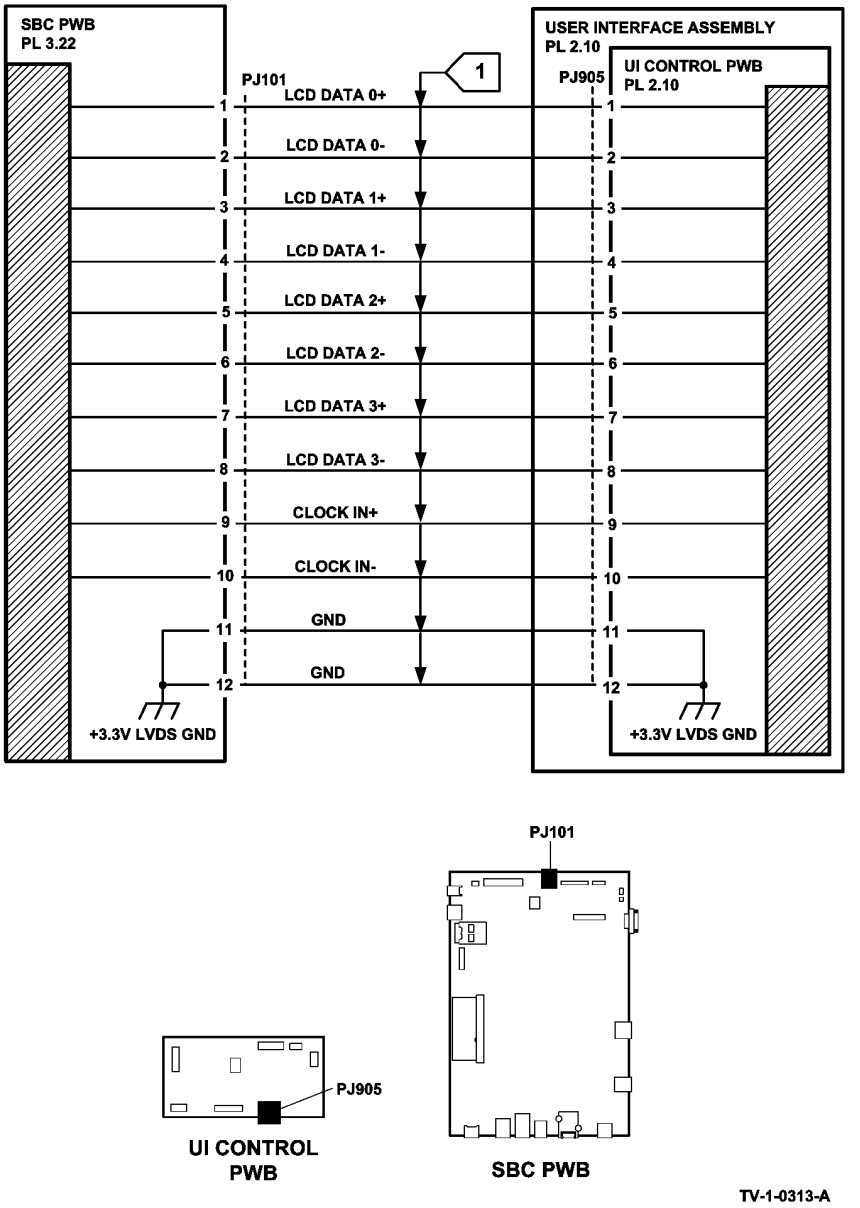


Figure 1 Circuit Diagram

302-390-00 Configurable Services RAP

302-390-00 During power up all configurable services have not achieved a stable state after 5 minutes from power up.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch the machine off, then switch on the machine, GP 14.
2. Reload the software set, GP 4 Machine Software.

302A Touch Screen Failure RAP

Use this RAP to solve UI touch screen problems when the machine has power but either the display is blank, flashing, is too dark or the UI screen responds incorrectly or does not refresh.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check and re-seat all connectors on the UI control PWB, PL 2.10 Item 6, UI status PWB, PL 2.10 Item 7 and the UI keyboard PWB, PL 2.10 Item 9.

  NOTE: *Refer to REP 2.1 to access the user interface assembly.*

- Check the 7 segment LED display for POST errors. Go to OF2 Post Errors RAP.
- Go to Tools / Device Settings / Display Brightness. Adjust the UI brightness level.
- If the problem occurs while entering or exiting sleep mode, go to the 301K Sleep Mode RAP.

Procedure

Go to Flag 1. **+3.3V is available at P/J130 between pin 1 and 2.**

Y **N**

Check the wiring between P/J130 on the UI control PWB and P/J133 on the power distribution PWB. **The wiring is good.**

Y **N**

Repair the wiring, GP 7 or install a new UI harness, PL 3.22 Item 24.

Check the +3.3V power supply. Refer to:

- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 2. **+12V is available at P/J130 between pin 3 and 4.**

Y **N**

Check the wiring between P/J130 on the UI control PWB and P/J133 on the power distribution PWB. **The wiring is good.**

Y **N**

Repair the wiring, GP 7 or install a new UI harness, PL 3.22 Item 24.

Check the +12V power supply. Refer to:

- 301F+12V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 3. Check the harness and wiring, GP 7. **The wiring is good.**

Y **N**

Repair the wiring, GP 7 or install a new UI harness, PL 3.22 Item 24.

Go to Flag 4. Check the harness and wiring, GP 7. **The wiring is good.**

Y N

Repair the wiring, GP 7 or install a new UI harness, PL 3.22 Item 24.

Go to Flag 5. Check the harness. **The harness is good.**

Y N

Install a new SBC PWB/UI control PWB harness, PL 3.22 Item 23.

The power button on the UI is flashing, Figure 1.

Y N

Install new components as necessary:

- Memory module, PL 3.22 Item 11.
- UI control PWB, PL 2.10 Item 6.
- UI touch screen, PL 2.10 Item 5.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Switch off the machine GP 14. Check the memory module, PL 3.22 Item 11. **The memory module is correctly installed.**

Y N

Correctly install the memory module.

Install new components as necessary:

- Memory module, PL 3.22 Item 11.
- UI control PWB, PL 2.10 Item 6.
- UI touch screen, PL 2.10 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

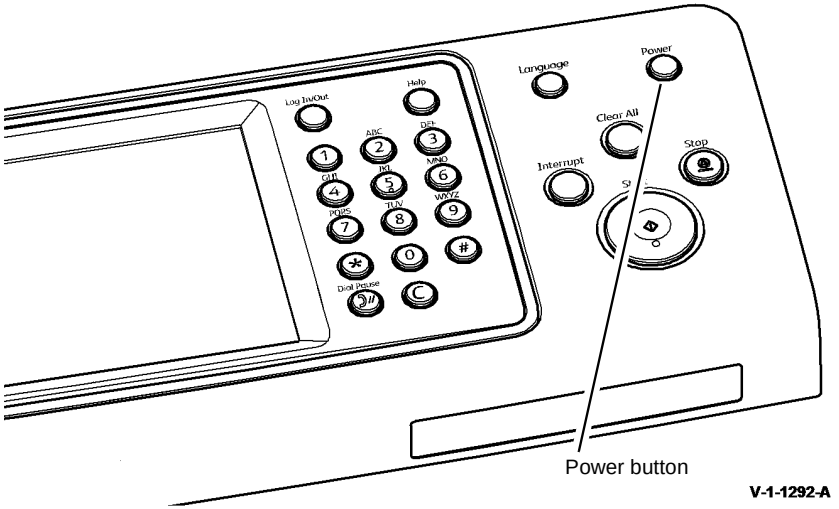


Figure 1 Power button

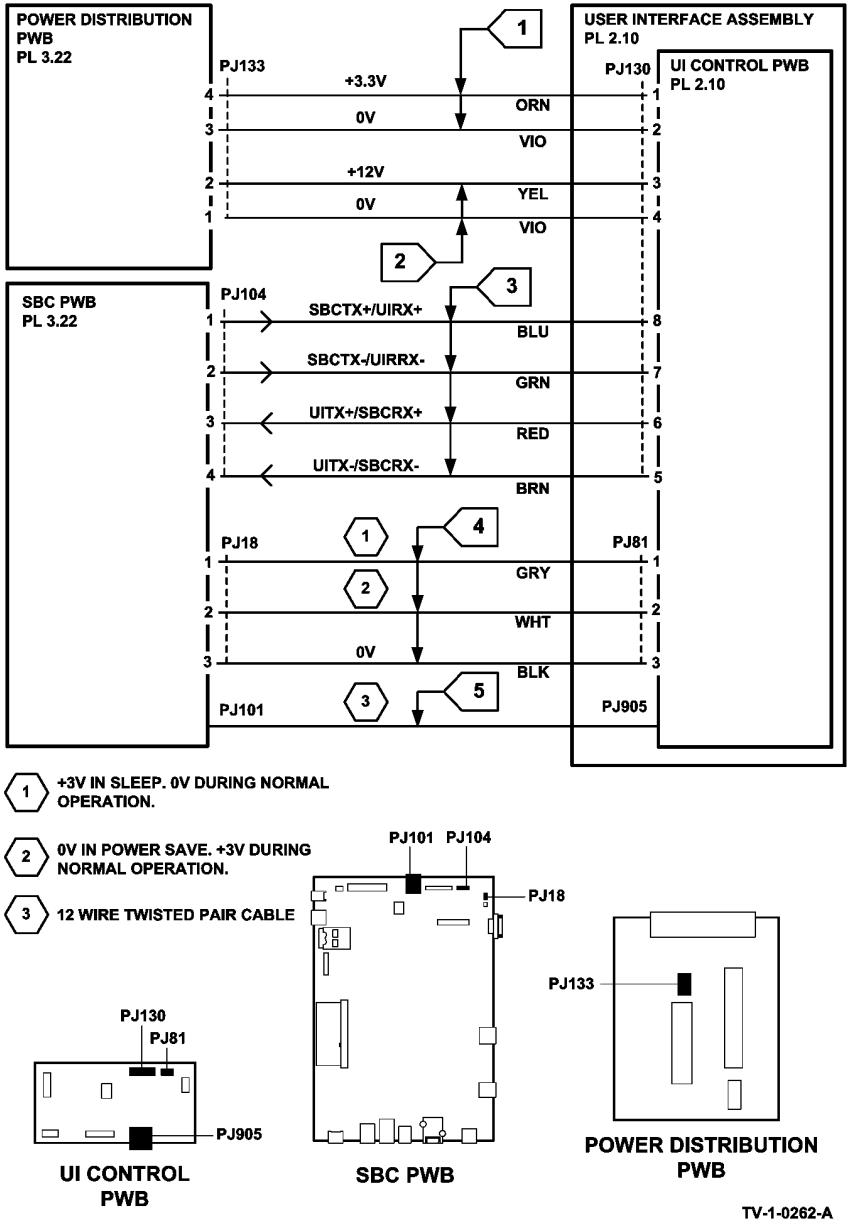


Figure 2 Circuit Diagram3

302B UI Control Panel Button or Touch Screen RAP

Use this RAP if the user interface is illuminated, but there is no information.

Initial Actions

- If the UI has stalled and shows the splash-logo screen or the system appears to have power but the UI is blank, check the 7 segment LED display for POST errors. Go to OF2 Post Errors RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the next steps:

1. Switch off the machine GP 14.
2. Refer to WD4, then check the harness connections between the user interface, PL 2.10 and the single board controller PWB, PL 3.22 Item 3:
   - PJ104 on the SBC PWB to PJ130 on the UI control PWB
   - PJ18 on the SBC PWB to PJ81 on the UI control PWB
   - PJ101 on the SBC PWB to PJ905 on the UI control PWB
3. Switch on the machine, GP 14.
4. Reload the UI software, GP 4.
5. Install new components as necessary:
   - UI control PWB, PL 2.10 Item 6.
   - UI touch screen, PL 2.10 Item 4.
6. If the fault persists, perform the 303D SBC PWB Diagnostics RAP.

303-306-00 Software Downgrade Not Permitted RAP

303-306-00 Downgrade not permitted.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

Go to the 395-303-00 Software DLM Downgrade Error RAP.

303-307-00 Software Upgrade Synchronization Failure RAP

303-307-00 Software upgrade synchronization failure.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Switch off the machine, then switch on the machine, GP 14.
2. Re-load the software set, GP 4

303-315-00 DC Platform Internal Interface Fault RAP

303-315-00 The DC platform software has timed out.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history files for other 303-XXX fault codes. If the 303-XXX codes occur randomly, the cause may be due to electrical noise. Perform the OF10 Intermittent Failure RAP.

Procedure

Switch off, then switch on the machine, GP 14. **The fault is cleared.**

Y **N**

Perform the PWS AltBoot procedure, refer to GP 4 Software Loading Procedures. At step 12 of the PWS AltBoot Procedure, select option 11 from the actions menu, **Forced Install ESS Software**, then follow the remaining steps to complete the procedure.

Perform SCP 5 Final Actions.

303-316-00 CCM Cannot Communicate with IOT RAP

303-316-00 CCM can not communicate with the IOT PWB.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for other 303-XXX fault codes. If the 303-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to OF10 Intermittent Failure RAP.

Procedure

NOTE: *The machine may continue to boot with this fault, but printing may be disabled. The status codes, 503-505 and 503-561 are raised with this fault code.*

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Perform the following as necessary:
   - 303D SBC PWB Diagnostics RAP.
   - OF7 IOT PWB Diagnostics RAP.

303-321-00 SBC PWB to SPDH PWB Communications RAP

303-321-00 The single board controller PWB to SPDH PWB communications are out of sequence.

Procedure

Go to 305-253-00 to 305-255-00 SPDH Communications Error RAP.

303-324-00, 303-327-00, 303-390-00 Software Upgrade Failure RAP

303-324-00 Software upgrade file transfer failure.

303-327-00 Upgrade failure.

303-390-00 Upgrade automation failure.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Switch off the machine, then switch on the machine, GP 14.
2. Re-load the software set, GP 4.
3. If the fault remains, the software.dlm file may be corrupt. Source another .dlm file, then re-load the software, GP 4.

303-325-00 System Detects the Machine Clock Failed to Increment During Power On RAP

303-325-00 The software has detected that the machine clock has failed to increment within 1.5 seconds during the power on self test operation.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

NOTE: *The machine may continue to boot with this fault, but printing may be disabled. The status code, 303-505 is raised with this fault code.*

1. Switch off the machine, then switch on the machine, GP 14.
2. Re-load the software set, GP 4.
3. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303-326-00 Software Upgrade Not Required RAP

303-326-00 Software upgrade not required, the same version is already on the machine.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

Code shown for information only. No service action necessary.

303-329-00, 303-330-00 Software Upgrade Request RAP

303-329-00 Software upgrade request during active diagnostics.

303-330-00 Software upgrade request during active security feature.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Exit diagnostics or the active security feature.
2. Re-load the software, GP 4.

303-331-00, 303-332-00 Main Controller and Network Controller on the SBC PWB Cannot Communicate RAP

303-331-00 Integral network communication error on the single board controller PWB.

303-332-00 The main controller and network controller (integral components of the single board controller PWB) were unable to communicate within a 12 minutes time span.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Switch off the machine, then switch on the machine, GP 14.
2. Check the network connection to the single board controller PWB, PJ114 is correctly inserted.
3. Re-load the software set, GP 4 Machine Software.
4. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303-338-00 SBC Main Controller Reset RAP

303-338-00 System detects that the software in the single board controller PWB has been reset. This was due either to the watch dog timing out or the software writing to an illegal address.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Switch off the machine, then switch on the machine, GP 14.
2. Re-load the software set, GP 4 Machine Software.
3. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303-346-00, 303-347-00 Single Board Controller PWB to UI Error RAP

303-346-00 Unable to re-establish communication with the UI after 30 seconds.

303-347-00 The single board controller PWB to UI control PWB communications have failed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.
- Switch off the machine, then switch on the machine, GP 14.

Procedure

Perform the following steps:

1. Switch off the machine, then switch on the machine, GP 14.
2. Go to Flag 1. Check the wiring between P/J130 on the UI control PWB and P/J104 on the SBC PWB. Repair the wiring or install new components as necessary:
   - UI harness, PL 3.22 Item 24.
   - UI control PWB, PL 2.10 Item 6.
3. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

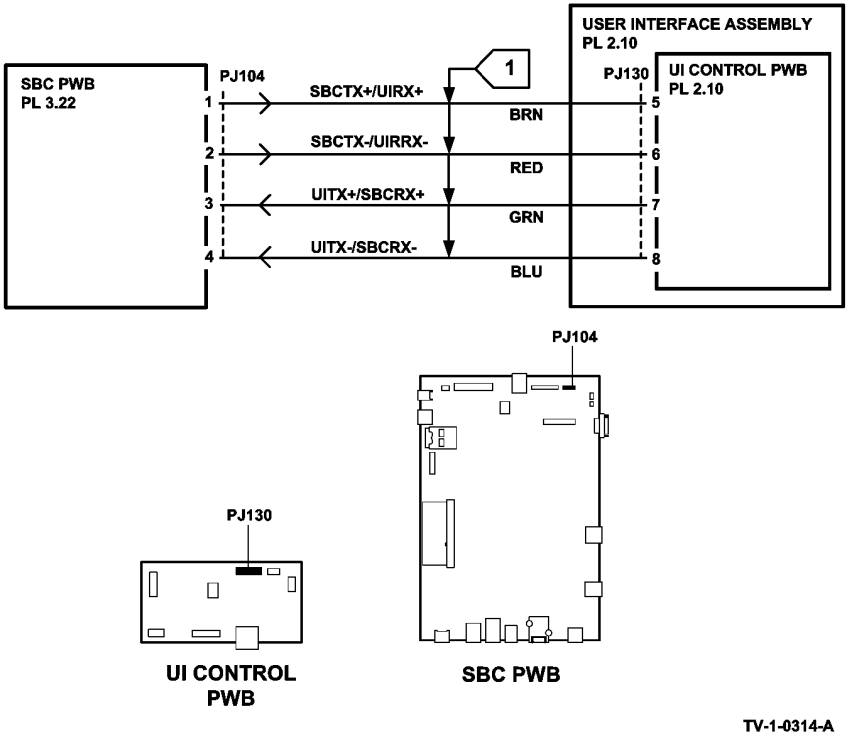


Figure 1 Circuit Diagram

303-355-00 CCM POST Failure Detected RAP

303-355-00 The software has detected a CCM POST failure during the NVM integrity test.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.
- Re-seat the SD Card, PL 3.22 Item 16.

Procedure

NOTE: *The machine may continue to boot with this fault, but printing may be disabled. The status code, 503-505 is raised with this fault code.*

1. Switch off the machine, then switch on the machine, GP 14.
2. Re-load the software set, GP 4.
3. Install a new SD card, PL 3.22 Item 16.
4. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303-362-00 CCS Power Fault RAP

303-362-00 The single board controller software has failed to exit from a timer loop and has detected that this is caused by an abnormal power condition.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

1. Switch off the machine, then switch on the machine, GP 14.
2. Refer to Wiring Diagram 2. Check the wiring and connections between the LVPS and base module, PL 1.10 Item 3 and the power distribution PWB, PL 3.22 Item 1. Repair the wiring as necessary, REP 1.1.
3. Refer to Wiring Diagram 3. Check the wiring and connections between the power distribution PWB, PL 3.22 Item 1 and the single board controller PWB, PL 3.22 Item 3. Repair the wiring as necessary, REP 1.1.
4. Go to the following RAPs and check the low voltage supplies to the single board controller PWB:
   - 301E +5V Distribution RAP.
   - 301F +12V Distribution RAP.
   - 301B 0V Distribution RAP.
5. Install new components as necessary:
   - SBC power harness, PL 3.22 Item 7.
   - Power distribution PWB, PL 3.22 Item 1.
   - LVPS/PDB PWB harness, PL 3.22 Item 14.
6. If the fault remains, perform the following:
   - 303D SBC PWB Diagnostics RAP.
   - 301L LVPS Checkout RAP.

303-397-00 System Configuration Recovery Attempt RAP

303-397-00 Machine speed is lost and an attempted recovery made (from SIM).

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.
- Switch off the machine, then switch on the machine, GP 14.

Procedure

1. Go to 303-405-00, 303-406-00 SIM Card Fault RAP.

303-398-00, 303-399-00 SOK 1 Not Detected RAP

303-398 SIM card serial number does not match the serial number in the system.

303-399 Unable to establish communications with the SIM card.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.

Procedure

1. For 303-398-00 only, perform the steps that follow:
   a. If possible, install the original SIM card that was supplied with the machine.
   b. If the original SIM card is not available, install a SIM card, PL 3.22 Item 17 that is compatible with the speed of machine and the Pagepack requirement. Refer to GP 9 Machine SIM Card Matrix and GP 27 Machine Configuration Control and Recovery.
   c. Enter the correct serial number, refer to dC132 Serial Number.
2. If the fault persists, go to 303-405-00, 303-406-00 SIM Card Fault RAP.

303-401-00, 303-403-00 Fax Not Detected RAP

303-401-00 The basic (1 line) fax module has not been detected or confirmed.

303-403-00 The extended (2 line) fax module has not been detected or confirmed.

Initial Actions

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, GP 14.
2. Check that the fax module, PL 20.05 Item 1, has been installed.
3. Perform the Initial Actions in 20A Fax Entry RAP.
4. Perform the 20G Fax Module Checkout RAP.
5. If necessary, re-load the software set, GP 4 Machine Software.
6. Install new components as necessary:
   - Fax PWB, PL 20.05 Item 7.
   - Fax connector PWB, PL 20.05 Item 2.
   - Fax communication ribbon cable, PL 3.22 Item 10.
7. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303-405-00, 303-406-00 SIM Card Fault RAP

303-405-00 Machine class not set (unknown).

303-406-00 SIM speed does not match machine class.

Initial Actions

- Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.
- Ensure dC131 NVM location 616-328 is set to the correct value for the machine class.
- Check that the machine serial number is correct. Refer to dC132 Serial Number.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. Observe the LEDs on either side of the SIM card slot (CR15 and CR16). At initial power on, both LEDs should illuminate for approximately one minute and then switch off. The SIM card is then read. If a compatible SIM card is detected, the green LED (CR16) is illuminated. **The green LED (CR16) is illuminated.**

Y N

The red LED (CR15) is illuminated.

Y N

Neither LED is illuminated. This indicates that the SIM card has not been detected. Remove the SIM card, clean the contact face, then re-insert the SIM card. **The fault is fixed.**

Y N

Perform the following:

- Check the 7 segment LED display for POST errors. Go to OF2 POST Error RAP.
- Check dC122 Fault History. Go to the appropriate RAP.
- If the fault persists, perform the 303D SBC PWB Diagnostics RAP.

Perform SCP 5 Final Actions.

This indicates that the SIM card is not compatible with the machine (it is either from another machine or another product). Install a SIM card, PL 3.22 Item 17 that is compatible with the speed of machine and the Pagepack requirement. **The fault is fixed.**

Y N

Perform the 303D SBC PWB Diagnostics RAP.

Perform SCP 5 Final Actions.

This indicates that the inserted SIM card is compatible with the machine configuration. Perform SCP 5 Final Actions.

303-417-00 Incompatible Fax Software RAP

303-417-00 The fax software version supplied at power up is not compatible with the image processing software.

Initial Actions

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off, then switch on the machine, GP 14.
2. Reload the software set, GP 4, Machine Software.
3. If necessary, install a new fax PWB, PL 20.05 Item 7.

303-777-00 Power Loss Detected RAP

303-777-00 This fault code in the fault history file indicates that the system has previously detected a power input loss.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Check with the customer that the AC mains (line) input power supply is not experiencing interruptions.
2. Check with the customer that the machine does not share a power supply with any other equipment. Sharing a power supply may cause the safety over current device to switch off the electrical supply to the machine. This would cause a 303-777-00 fault. If possible, ensure the machine is connected to a dedicated power supply.
3. Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.
4. Go to 301C AC Power RAP then check the power input circuit and its connectors.

303-788-00 Failed to Exit Power Save Mode RAP

303-788-00 The single board controller software could not enter power save mode. The single board controller software was unable to update its parameters from the UI, when the machine previously came out of sleep mode. It was then unable to re-enter sleep mode.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to the 303-346-00, 303-347-00 Single Board Controller PWB to UI Error RAP.

303-790-00 Timezone Cannot Be Set RAP

303-790-00 At power up, the time zone is not valid due to NVM corruption, or OS file system problem. Timezone overridden to GMT: DST disabled.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fault history file for other 303-XXX-XX fault codes. If the 303-XXX-XX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 Intermittent Failure RAP.

Procedure

Reset the timezone in Customer Administration Tools, refer to GP 24.

303A SBC PWB Module Cooling Fan Failure RAP

Use this RAP if the SBC PWB module cooling fan is suspected of failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Note the orientation of the cooling fan, PL 3.22 Item 5 before installing a new component.

1. Go to Flag 1. Check the cooling fan in the SBC PWB module. Refer to:
   - GP 10, How to Check a Motor.
   - P/J221 on the SBC PWB.
   - 301F +12V Distribution RAP.
   - 301B 0V Distribution RAP.
2. Install a new cooling fan, PL 3.22 Item 5.
3. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

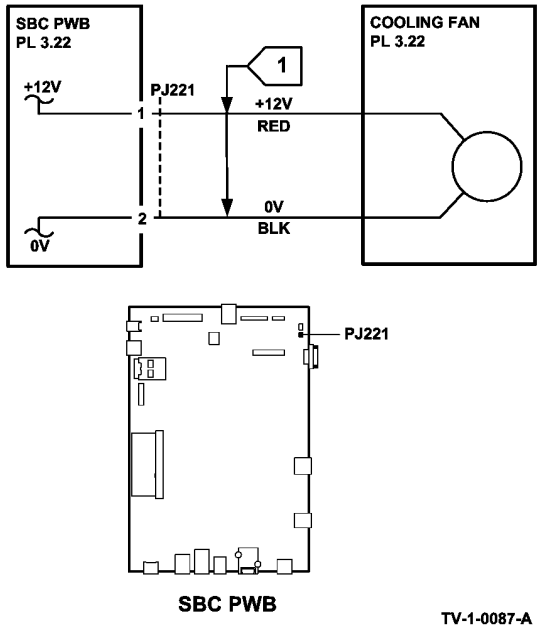


Figure 1 Circuit diagram

303B Mark Service Unavailable RAP

Before performing this RAP, any relevant status code RAP must have been performed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.

Procedure

1. Switch off the power, GP 14. Disconnect the power cord and ensure all the P/Js are properly installed on the IOT PWB, PL 1.10 Item 2 and SBC PWB, PL 3.22 Item 3.
2. Reload the software, GP 4, Machine Software.
3. Ensure that the output device communications cord is connected and secure, at PJ151 on the Power and Control Assembly at the rear of the machine.
4. Perform the following procedures as necessary:
   - OF7 IOT PWB Diagnostics RAP.
   - 303D SBC PWB Diagnostics RAP.

303C Hard Disk Failure RAP

Use this RAP to determine failure of the hard dIsk drive.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the OF5 Boot Up Failure RAP.

Procedure

1. Switch off the machine GP 14.
2. Go to Wiring Diagram 11. Check the wiring between the hard disk drive and the single board controller PWB, GP 7.
3. Repair the wiring or install a new HDD harness, PL 3.22 Item 4.
4. Check for +5V distribution, refer to the 301E +5V Distribution RAP.
5. Perform the forced AltBoot software loading procedure, GP 4.
6. Install a new hard disk drive, PL 3.22 Item 2.
7. If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

303D SBC PWB Diagnostics RAP

Purpose

To assist in identifying any suspected problems with the SBC PWB.

Procedure

NOTE: *If directed here from any other procedure, always return to that procedure.*

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Observe ESD procedures during this procedure.

Perform the following checks:

1. SBC PWB Voltage Check.
2. SBC PWC LED Indicator Check.
3. SBC PWB Connections Check.

SBC PWB Voltage Check

Perform the following:

1. Loosen the two thumb screws and pull out the SBC PWB module.
2. Check the cooling fan assembly is operating, if necessary refer to 303A SBC PWB Module Cooling Fan Failure RAP
3. Check for +12V at P/J106 pin 5 on the SBC PWB. If the +12V is not within the tolerance of +11.4 to +12.6V, install a new LVPS and base module, PL 1.10 Item 3. If the +12V is not present, perform the 301F +12V Distribution RAP and 301B 0V Distribution RAP.
4. Check for +5V at P/J106 pin 6 on the SBC PWB. If the +5V is not within the tolerance of +4.75V to +5.25V, install a new LVPS and base module, PL 1.10 Item 3. If the +5V is not present, perform the 301E +5V Distribution RAP and 301B 0V Distribution RAP.

SBC PWC LED Indicator Check

Perform the following:

1. Check the 7 segment display on the rear of the SBC PWB. If the display is blank with a flashing decimal point or showing a zero with a flashing decimal point, no action is required. For all other display readings, perform the OF2 POST Error RAP.
2. Pull out the SBC PWB module. Check the state of the LEDs on the SBC PWB, refer to Table 1 and Figure 1. Perform the relevant service actions.

Table 1 LED Status

LED identifier	LED colour	Description
CR6	Green	Image path power good - this LED is lit when the machine is in normal power mode and there is no fault preventing full image path functionality. If the LED is not lit, switch off the machine, then switch on the machine, GP 14. If the fault still exists, install a new SBC PWB, PL 3.22 Item 3.
CR7	Green	Power supply good - this LED is lit when power is good. If this LED is not lit, switch off the machine, then switch on the machine, GP 14. If the fault still exists, install a new SBC PWB, PL 3.22 Item 3.
CR11	Green	SBC Mutara FPGA configuration incomplete - this LED is lit in a fault condition. Switch off the machine, then switch on the machine, GP 14. If the fault still exists, install a new SBC PWB, PL 3.22 Item 3.
CR12	Green	Image path sleep - this LED is lit when there is no image path activity when the machine is in low power mode. No service action required.
CR15	Red	SIM card socket - this LED is lit during initialisation at power on, and then stays on if an incompatible SIM card is detected. If the LED illuminates when a SIM card is inserted, check that the card and socket contacts are clean. If necessary, install a SIM card, PL 3.22 Item 17 that is compatible with the speed of machine and the Pagepack requirement. Refer to GP 9 Machine SIM Card Matrix. If the fault remains, install a new SBC PWB, PL 3.22 Item 3.
CR16	Green	SIM card socket - this LED is lit during initialisation at power on, and then stays on if a compatible SIM card is detected. If the LED does not light when a SIM card is inserted, check that the card and socket contacts are clean. If necessary, install a SIM card, PL 3.22 Item 17 that is compatible with the speed of machine and the Pagepack requirement. Refer to GP 9 Machine SIM Card Matrix. If the fault remains, install a new SBC PWB, PL 3.22 Item 3.
CR17	Bi-colour	Ethernet speed. LED not lit = 10 Base-T or No Link. LED lit Yellow = 100 Base-T. LED lit Green = Gigabit Ethernet. If the LED does not indicate the expected speed, check all network connections.
CR18	Green	Ethernet link/activity. LED not lit = no link. LED lit = linked but no activity. LED blinking = linked with RX/TX activity. If the LED does not indicate as expected, check all network connections.

Table 1 LED Status

LED identifier	LED colour	Description
CR19	Green	SBC Horizon FPGA configuration incomplete - this LED is lit in a fault condition. Switch off the machine, then switch on the machine, GP 14. If the fault still exists, install a new SBC PWB, PL 3.22 Item 3.
CR23	Green	SBC microprocessor heart beat - this LED flashes at approximately 0.5Hz to show that the microprocessor is running correctly. Switch off the machine, then switch on the machine, GP 14. If the fault still exists, perform the 303G SBC PWB Battery RAP.
CR24	Red	SBC microprocessor power fail - this LED is lit when there is a power supply problem to the SBC microprocessor. Switch off the machine, then switch on the machine, GP 14. If the fault still exists, install a new SBC PWB, PL 3.22 Item 3.

SBC PWB Connections Check

Perform the following:

1. Switch off the machine, GP 14.
2. Disconnect all connectors from the SBC PWB, refer to REP 3.3 Single Board Controller PWB. Ensure the connectors on the harnesses are clean and undamaged.
3. Remove the SBC PWB, refer to REP 3.3 Single Board Controller PWB. Ensure the connectors on the PWB are clean and undamaged.
4. Remove the SD card, PL 3.22 Item 16, ensure the contacts on the card and PWB are clean. Install the SD card.
5. Remove the memory module, PL 3.22 Item 11, ensure the contacts on the module and PWB are clean. Install the memory module.
6. Install the SBC PWB, refer to REP 3.3 Single Board Controller PWB.
7. Connect all connectors on the SBC PWB.
8. Switch on the machine, GP 14. If the problem with the SBC PWB remains, install a new SBC PWB, PL 3.22 Item 3.

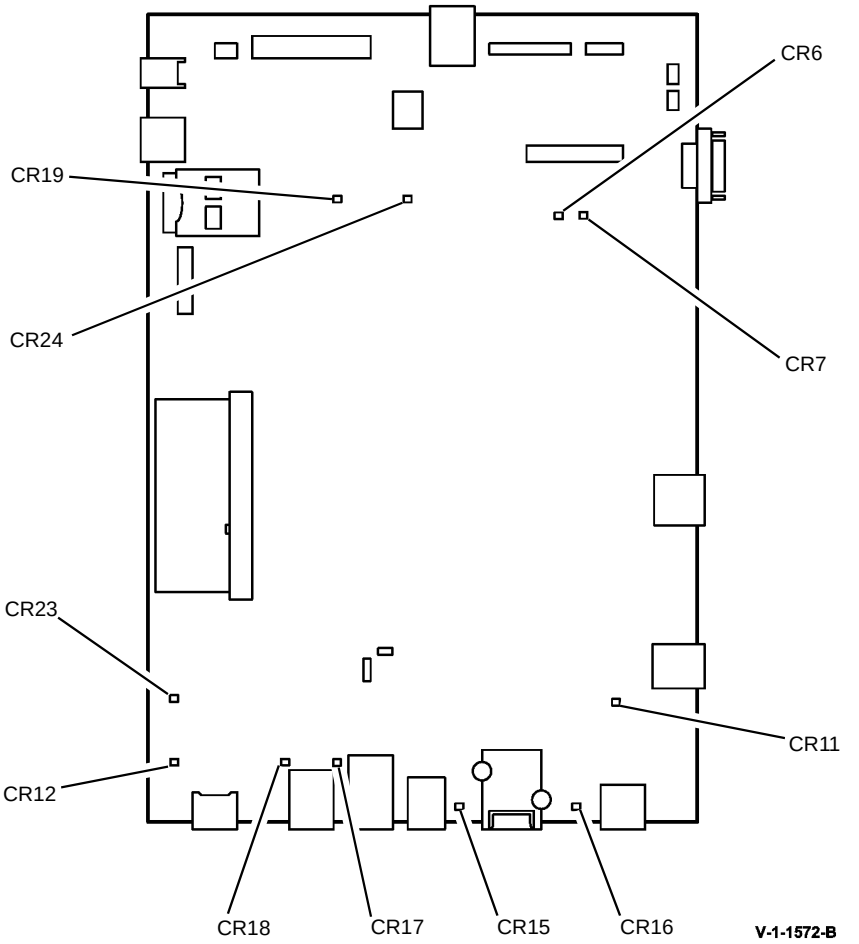


Figure 1 SBC PWB LED locations

303E Foreign Device PWB Fault RAP

Use this RAP when the foreign interface device is not detected at power on.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not show the customer how to install a temporary shorting link. Do not leave a shorting link installed.

- Switch off the machine, then switch on the machine, GP 14.
- Ensure the foreign interface PWB, PL 3.22 Item 26 is securely connected to the single board controller PWB, PL 3.22 Item 3.
- Ensure the foreign device is enabled, refer to GP 24 Customer Administration Tools. Select **Tools** > **Accounting settings** > **Accounting mode** > **Auxiliary access** > **Auxiliary device type**. Select, if listed your type of device (**?**) or **Generic** > **O.K**, then exit Tools.

NOTE: *Do not attach a foreign interface vend adaptor with this configuration of foreign interface PWB.*

Procedure

Go to Flag 1. **+3.3V is available at P/J100 between pins 2and 3, also between pins 1and 3.**

Y **N**

Disconnect the foreign device from P/J124. **+3.3V is available at between pins 2and 3, also between pins 1and 3.**

Y **N**

Disconnect P/J100. **+3.3V is available at J100 on the foreign interface PWB between pins 2and 3, also between pins 1 and 3.**

Y **N**

Disconnect the foreign interface PWB. **+3.3V is available at P/J201 on the single board controller PWB at pins 1, 5, 9, 16 and 22.**

Y **N**

Check the voltages that follow:

- +5V supply to the +3V generator on the SBC PWB. Refer to the 301D +3.3V Distribution RAP.
- +5V return supply to the +3V generator on the SBC PWB. Refer to the 301B 0V Distribution RAP.

If the supplies are good, perform the 303D SBC PWB Diagnostics RAP.

Install a new foreign interface PWB, PL 3.22 Item 26.

Install a new foreign device interface harness, PL 3.22 Item 27.

A **B**

A **B**

The foreign device is faulty.

Disconnect the foreign device. Install a temporary shorting link between pins 2 and 3 on P/J124 . Check the voltage at PJ124 pin 1. **0V is measured.**

Y **N**

Install a new foreign interface PWB, PL 3.22 Item 26. If the fault persists, the foreign device is faulty.

Disconnect the foreign device. Install a temporary shorting link between pins 1 and 3 on P/J124. Check the display. Ensure the machine is now enabled to scan or print. **The machine is enabled.**

Y **N**

Install a new foreign interface PWB, PL 3.22 Item 26. If the fault persists, perform the 303D SBC PWB Diagnostics RAP.

The enable circuits are working correctly.

NOTE: *Currently the signals used for billing, e.g. machine function, or premium tray, cannot be adequately measured with a standard meter.*

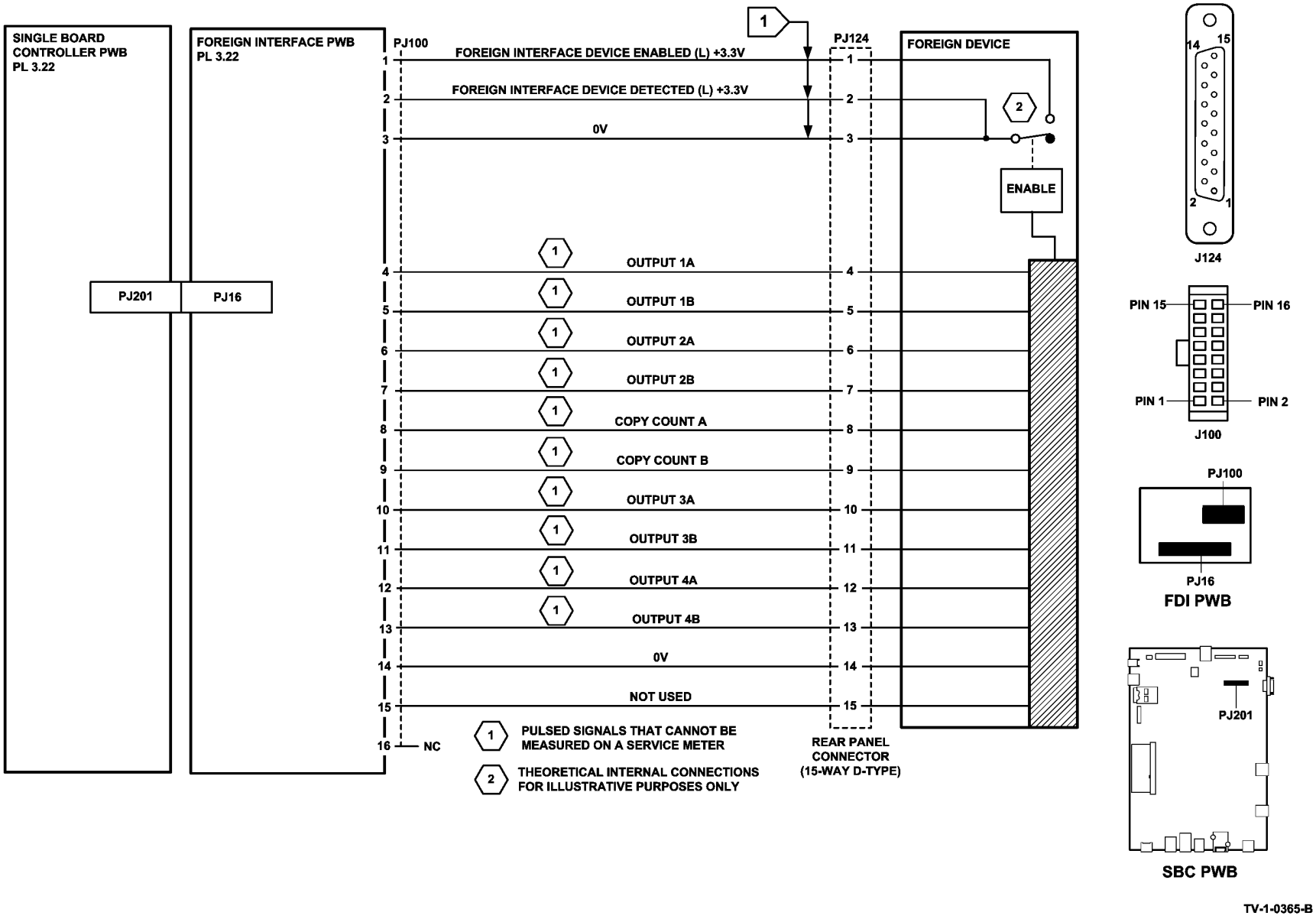


Figure 1 Circuit diagram

303F Switch Off Failure RAP

The machine fails to respond to the user pressing the power button on the UI.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Press and hold the power button on the UI for more than 6 seconds. **The machine switches off.**

Y N

Disconnect the main power cord from the power and control assembly.

Go to Flag 3. Disconnect and check the ribbon cable. Check that the cable locks on P/J910 and P/J907 are working effectively. **The ribbon cable and P/Js are good.**

Y N

Clean the cable ends or repair any damage. Install new parts as necessary:

- Control to keyboard PWB ribbon cable, PL 2.10 Item 10.
- UI keyboard PWB, PL 2.10 Item 9.
- UI control PWB, PL 2.10 Item 6.

Go to Flag 1. Disconnect P/J81 and P/J18. Check the harness and both P/Js, refer to REP 1.2. **The harness and P/Js are good.**

Y N

Repair any damage or install new parts as necessary:

- UI control PWB, PL 2.10 Item 6.
- SBC PWB, PL 3.22 Item 3.

Go to Flag 2. Disconnect P/J105 and P/J1. Check the harness and both P/Js, refer to REP 1.2. **The harness and P/Js are good.**

Y N

Repair any damage or install new parts as necessary:

- IOT PWB, PL 1.10 Item 2.
- SBC PWB, PL 3.22 Item 3.

Install new components one at a time until the fault is fixed:

- UI keyboard PWB, PL 2.10 Item 9.
- UI control PWB, PL 2.10 Item 6.
- SBC PWB, PL 3.22 Item 3.
- IOT PWB, PL 1.10 Item 2.

The switch off circuit is working correctly. Switch on the machine, GP 14. Perform several normal machine switch off then switch on cycles. If the power button proves unreliable, install a new UI keyboard PWB, PL 2.10 Item 9.

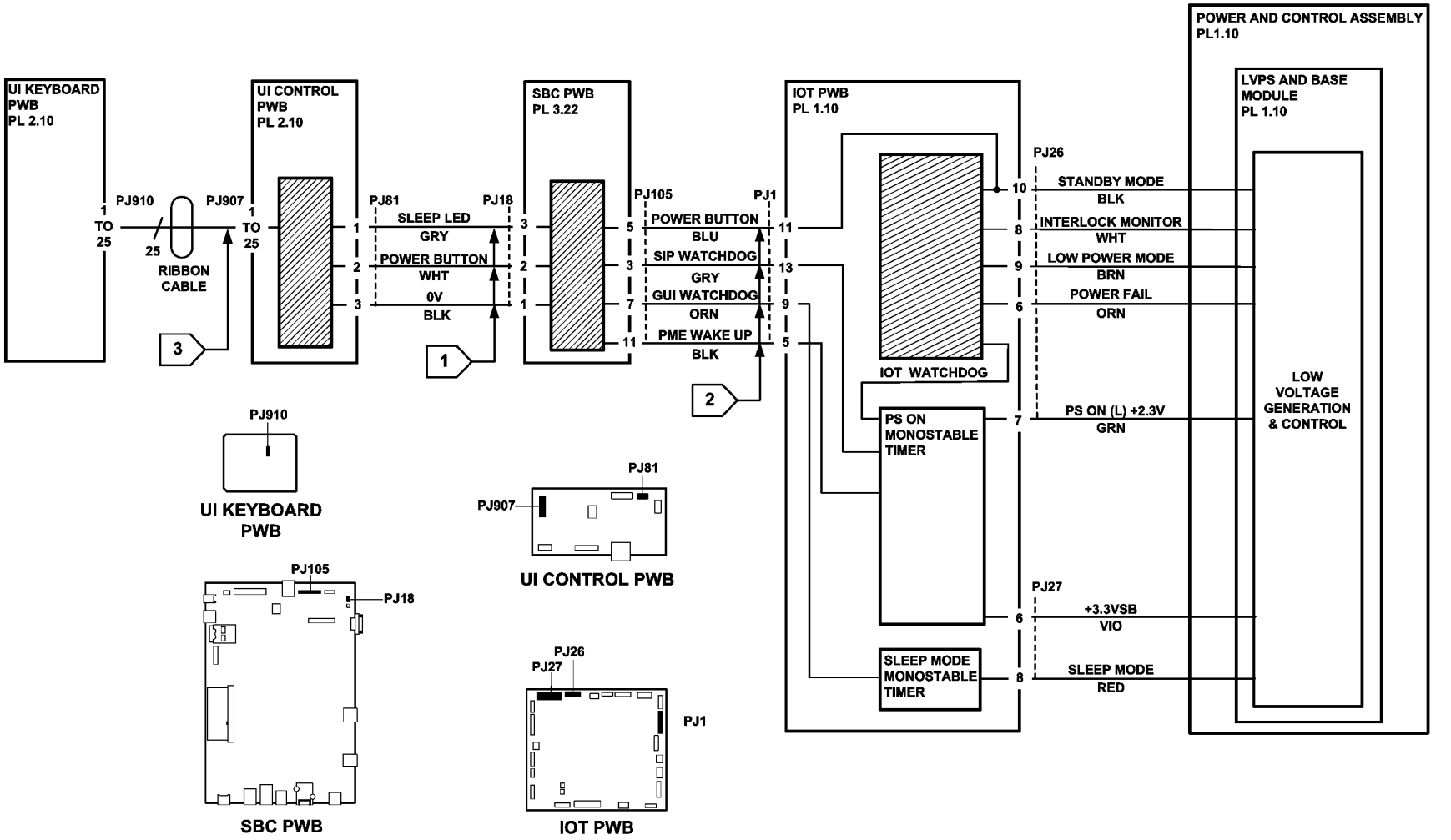


Figure 1 Circuit diagram

303G SBC PWB Battery RAP

Use this RAP when the machine exhibits any of the symptoms that follow:

- The date and time appearing on the customers banner sheets and configuration report ia 1st January 2000
- The machine constantly re-boots
- The machine may not power up
- The software cannot reference the time and date and may behave erratically
- The HDD checking software will run at every re-boot delaying the completion of the boot-up
- If the machine is set to pick up the time from a network server (NTP), it will cause a re-boot and a disk check. This action may cycle continuously

Procedure

NOTE: *If directed here from any other procedure, always return to that procedure.*

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Observe ESD procedures during this procedure.

Switch off the machine, GP 14. Loosen the two thumb screws and pull out the SBC PWB module. Check the voltage of the battery without removing it from the holder, Figure 1. **The battery voltage is below +2.8V**

Y N

Switch on the machine, GP 14. Observe the green LED CR23, Figure 1. This is the SBC microprocessor heart beat - this LED flashes at approximately 0.5Hz to show that the microprocessor is running correctly. **LED CR23 is flashing correctly.**

Y N

Install a new SBC PWB, PL 3.22 Item 3, then Set the Correct Date and Time.

The battery and SBC PWB are good. If necessary Set the Correct Date and Time.

Install a new battery, PL 3.22 Item 18. Switch on the machine, GP 14. Re-set the SBC heartbeat by shorting the two pins of J49, Figure 1. then Set the Correct Date and Time.

Set the Correct Date and Time

1. Login to Customer Administration Tools, GP 24.
2. Select the Tools tab for the tools pathway. The tools pathway menus are displayed.
3. Select Device Settings.
4. Select Date and Time.
5. Make the necessary changes to correct the date and time.

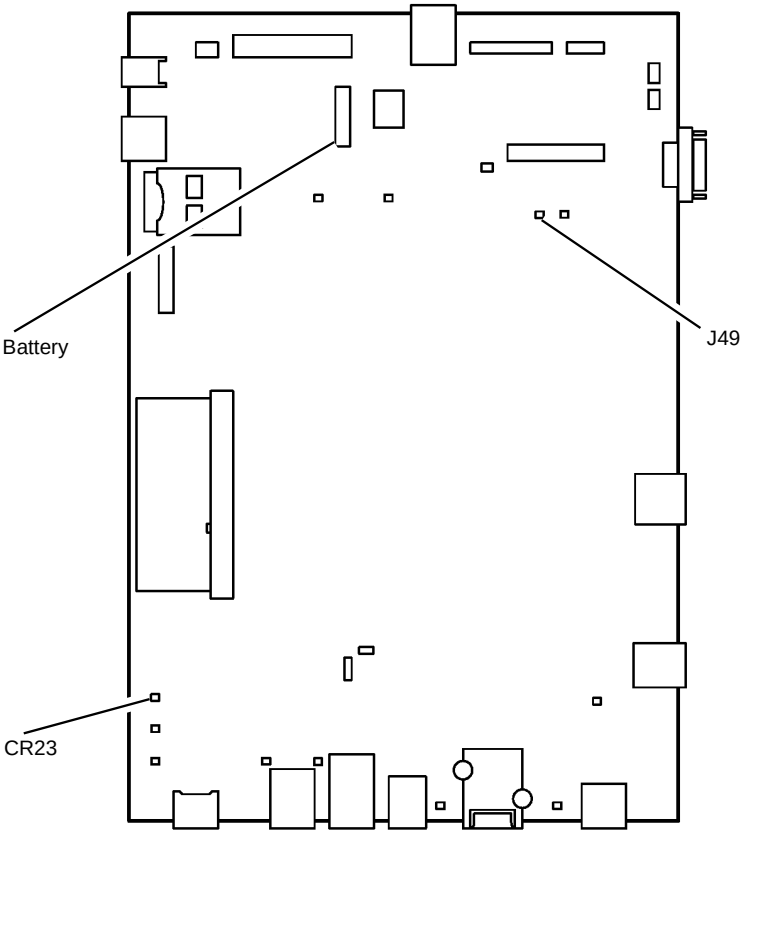


Figure 1 SBC PWB

305-251-00 SPDH Checksum Error RAP

305-251-00 The SPDH flash memory is corrupted. An application checksum error has been detected.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault is fixed.**

Y **N**

Re-load the software set, GP 4 Machine Software. **The fault is fixed.**

Y **N**

Install a new SPDH PWB, PL 5.10 Item 5.

Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

305-253-00 to 305-255-00 SPDH Communications Error RAP

305-253-00 The SPDH PWB to single board controller PWB communications have failed.

305-254-00 The SPDH PWB to single board controller PWB communications are out of sequence.

305-255-00 The SPDH pre scan status message was not received in time.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault is fixed.**

Y **N**

Go to Flag 1. Disconnect and check the ribbon cable between P/J460 on the SPDH PWB and P/J417 on the scanner PWB. **The ribbon cable and connectors are good.**

Y **N**

Clean or repair the ribbon cable or connectors, if necessary install new components:

- Side 2 scan assembly data ribbon cable, PL 5.10 Item 16
- Scanner PWB, PL 60.20 Item 4
- SPDH PWB, PL 5.10 Item 5.

Reconnect the P/J417 to P/J460 ribbon cable. Go to Flag 2. Disconnect and check the data cable and connectors P/J411 on the scanner PWB and P/J250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

Y **N**

Clean or repair the data cable connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Reload the software using the AltBoot Software Loading Procedure, go to GP 4 Machine Software.

If the problem continues install new components:

- Scanner PWB, PL 60.20 Item 4
- SPDH PWB, PL 5.10 Item 5.

Perform SCP 5 Final Actions.

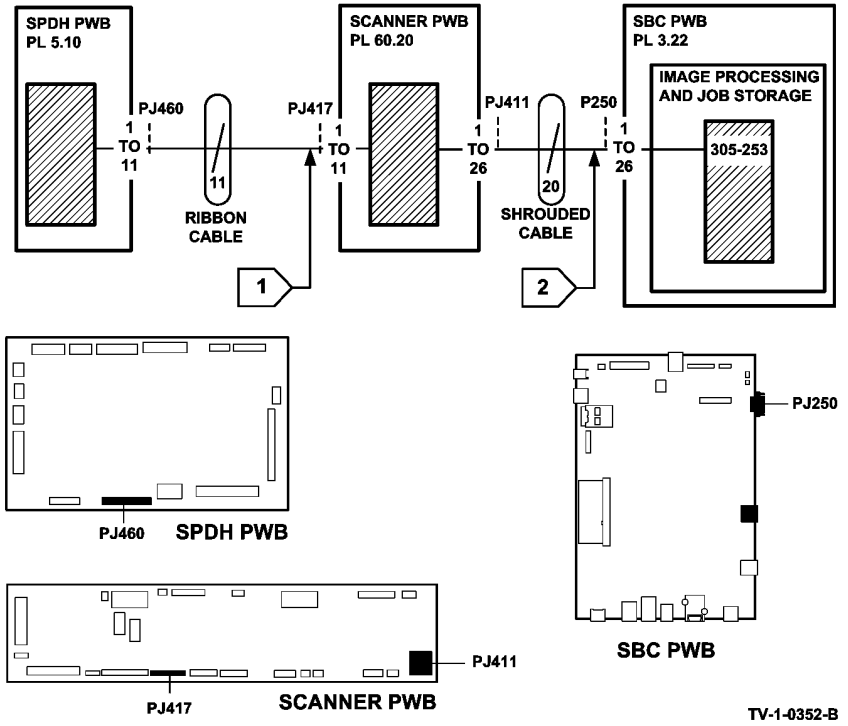


Figure 1 Circuit diagram

305-256-00 Eject Count Error RAP

305-256-00 The number of ejections from the SPDH did not match the number of feeds.

Initial Actions

Perform the following:

- Remove all originals from the SPDH

  NOTE: *Documents placed on the top cover of the SPDH can overhang the input tray and trigger the sensors. This can cause the SPDH to falsely detect a document, causing a feed error.*

- Check the paper path and remove any paper debris
- Check the feed sensor and clean if necessary, Figure 1.
- Check the side 2 registration sensor and clean if necessary, Figure 2.

  NOTE: *Access to view and clean the side 2 registration sensor can be gained by opening the SPDH, then opening the jam clearance baffle assembly, refer to Figure 2.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault is fixed.**

Y **N**

Enter dC330 code 005-343 side 2 registration sensor Q05-343. Open the SPDH. Open and close the jam clearance baffle to actuate the sensor, Figure 2. **The display changes**

Y **N**

Go to Flag 2. Check Q05-343.
Refer to:

- GP 11 How to Check a Sensor
- P/J466, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

If necessary install new components:

- Side 2 registration sensor, PL 60.30 Item 8
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-330 SPDH feed sensor Q05-330, Figure 1. Open and close the SPDH top cover to actuate the sensor. **The display changes**

Y **N**

Go to Flag 1. Check Q05-330.
Refer to:

- GP 11 How to Check a Sensor
- P/J465, SPDH PWB

A B

A B

- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

If necessary install new components:

- SPDH feed sensor, PL 5.20 Item 10
- SPDH PWB, PL 5.10 Item 5

If the fault continues, install a new SPDH PWB, PL 5.10 Item 5.

Perform SCP 5 Final Actions.

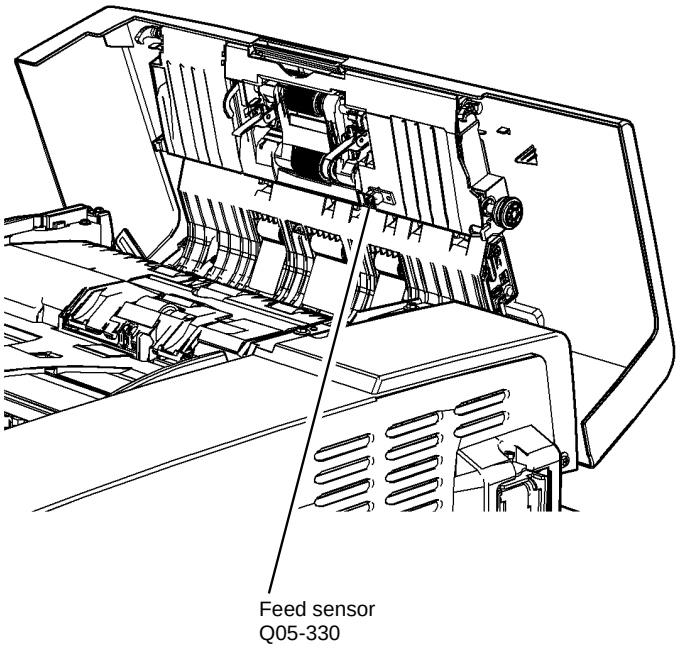


Figure 1 Component location

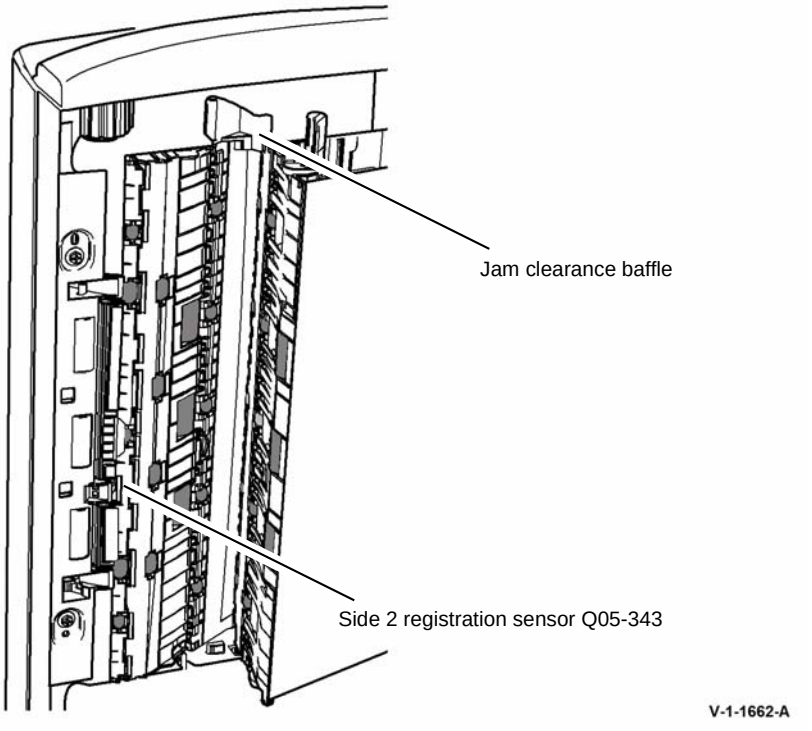
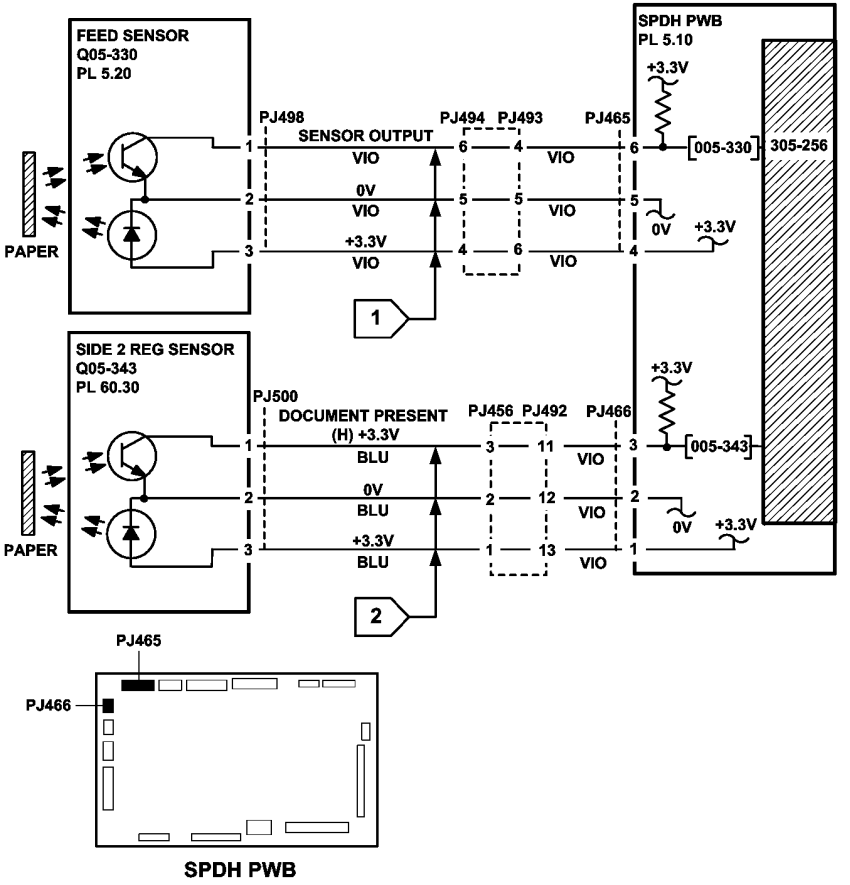


Figure 2 Component location



TV-1-0369-A

Figure 3 Circuit diagram

305-259-00, 305-260-00 SPDH Hotline or Standby Error RAP

305-259-00 The SPDH Hotline is in the wrong state during the scan

305-260-00 The SPDH is not in standby at the start of the job.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault is fixed.**

Y **N**

Re-load the software set, GP 4 Machine Software. **The fault is fixed.**

Y **N**

Install a new SPDH PWB, PL 5.10 Item 5.

Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

305-300-00 SPDH Open RAP

305-300-00 The SPDH platen down sensor detects that the SPDH is open during run.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the operation of the SPDH angle sensor actuator, PL 60.20 Item 12 and the actuator spring, PL 60.20 Item 11. Ensure that they operate the platen down sensor correctly.
Enter dC330 code 062-019 SPDH platen down sensor Q62-019, actuate the sensor. **The display changes.**

Y N

Check the SPDH platen down sensor Q62-019, refer to:

- Flag 1 and Figure 1
- GP 11, How to Check a Sensor
- P/J423, Scanner PWB
- 301C +3.3V Distribution RAP.
- 301L 0V Distribution RAP

Install new components as necessary:

- SPDH platen down sensor, PL 60.20 Item 7
- Scanner PWB, PL 60.20 Item 4

Check that Q62-019 is installed correctly.

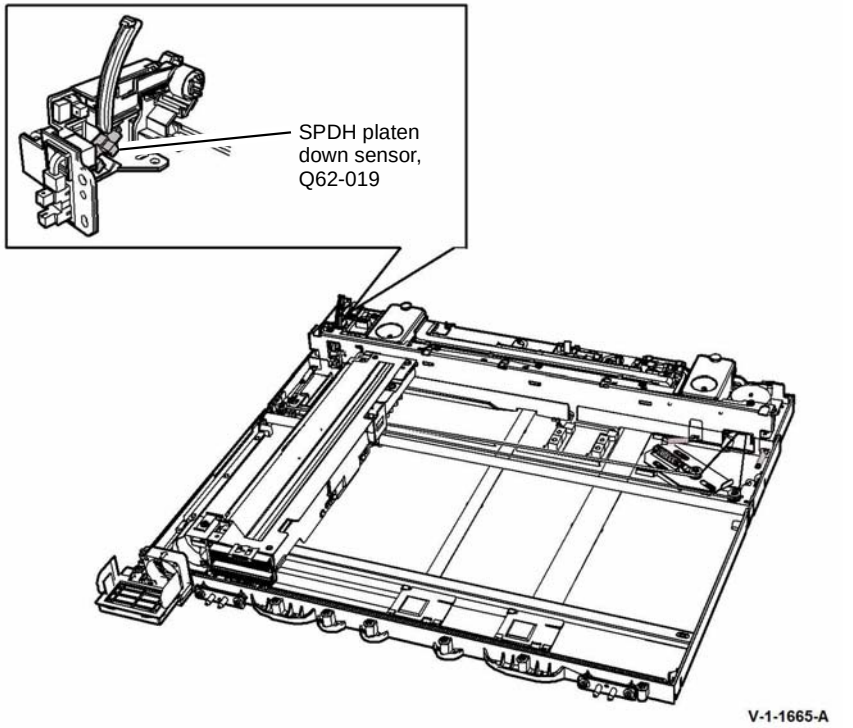


Figure 1 Component location

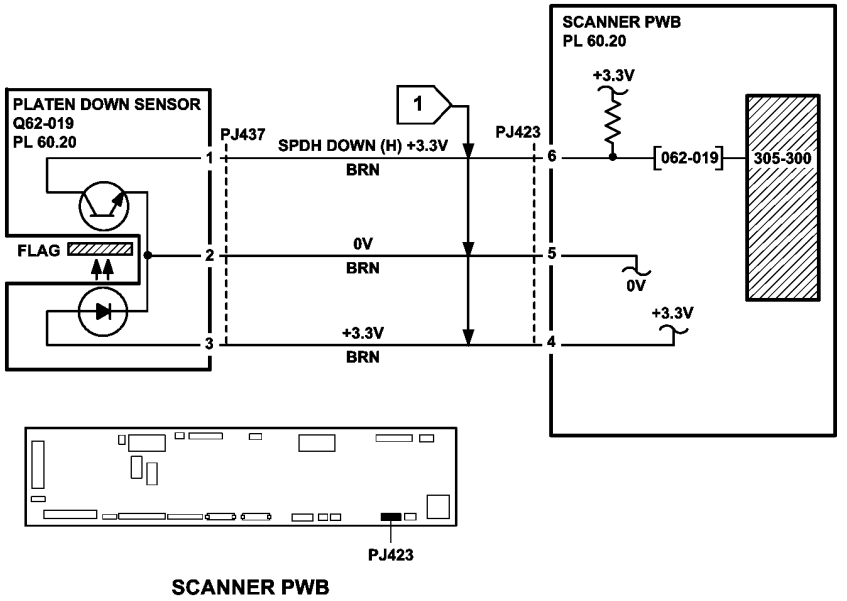


Figure 2 Circuit diagram

305-305-00 SPDH Top Cover Open RAP

305-305-00 The SPDH top cover interlock switch detects that the top cover is open.

Initial Actions

- Remove all documents from the SPDH.
- Check the top cover interlock actuator, Figure 1. If the actuator is damaged, install a new SPDH top cover assembly, PL 5.20 Item 15.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-305, SPDH top cover interlock switch, S05-305. Actuate S05-305. **The display changes.**

Y N

Go to Flag 1. Check S05-305.

Refer to:

- GP 13 How to Check a Switch.
- P/J461, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- SPDH top cover interlock switch, PL 5.10 Item 13
- SPDH PWB, PL 5.10 Item 5.

Check that S05-305 is installed correctly and that the switch arm is not bent or damaged. The switch should be heard to click as it is actuated or de-actuated by closing and opening the top cover.

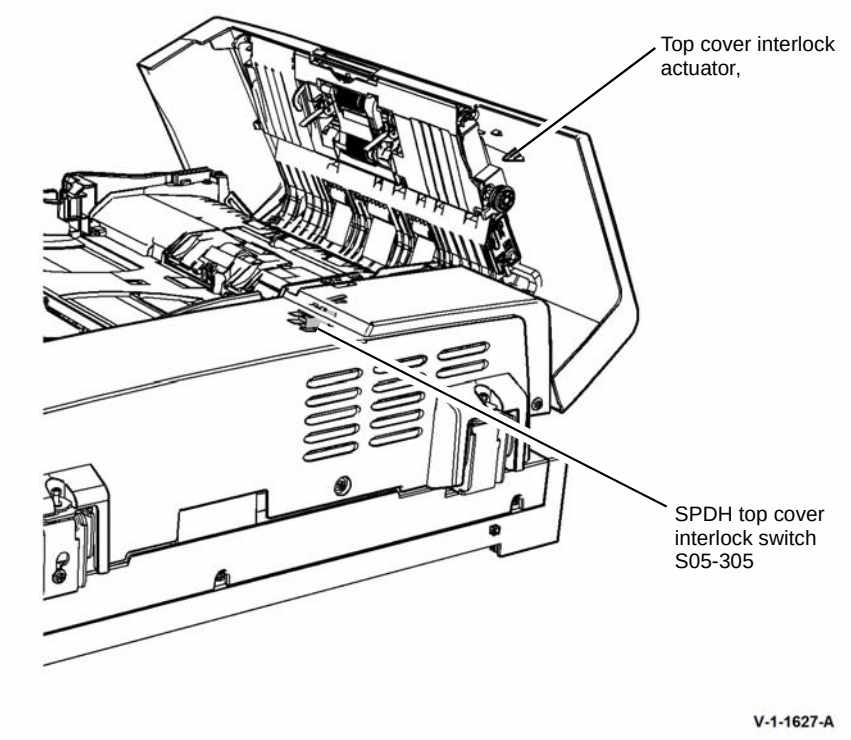


Figure 1 Component location

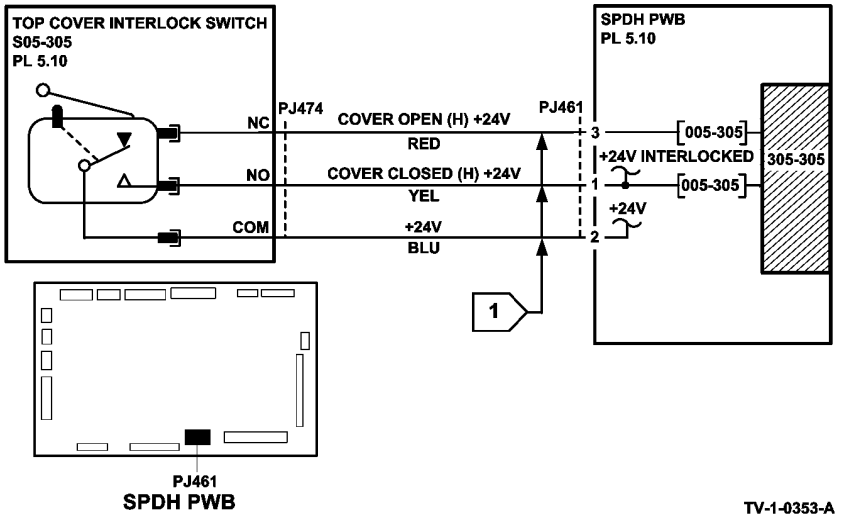


Figure 2 Circuit diagram

305-335-00, 305-336-00 SPDH Takeaway Sensor Paper Jam RAP

305-335-00 The SPDH takeaway sensor does not detect the lead edge of the document within the correct time.

305-336-00 The SPDH takeaway sensor detects a paper jam.

Initial Actions

- Remove all documents from the SPDH.
- Check the paper path of the SPDH and remove any obstructions such as paper debris, staples, paper clips etc.
- Overhead lighting can actuate the last sheet out sensor, Q05-308. This can cause paper jams resulting in 305-355-00 faults. Ensure Mod. TAG D-002 has been installed.
- Ensure the separation assembly Mylar guide length increase, W/TAG D-004, is installed on the SPDH.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-335, SPDH takeaway sensor, Q05-335, Figure 1. Activate Q05-335 by opening and closing the SPDH top cover. **The display changes.**

Y N

Go to Flag 1. Check Q05-335.
Refer to:

- GP 36 How to Check an Adaptive Sensor
- P/J465, SPDH PWB
- 301D +3.3V Distribution RAP

Install new components as necessary:

- SPDH takeaway sensor, PL 5.20 Item 10
- SPDH PWB, PL 5.10 Item 5

Open the SPDH top cover. Hold the top cover interlock switch closed using the shank of a standard interlock cheater. Enter dC330 code 005-020 to run the SPDH feed motor, MOT05-020. **MOT05-020 runs.**

Y N

Go to Flag 2. Check MOT05-020.
Refer to:

- GP 10 How to Check a Motor
- P/J468, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

A

Install new components as necessary:

- Feed motor, PL 5.18 Item 2
- SPDH PWB, PL 5.10 Item 5

Hold the top cover interlock switch closed. Enter dC330 code 005-020 to run the feed motor, MOT05-020. Stack the code 05-025 to energize the feed clutch, CL05-025. **The takeaway roll rotates.**

Y N

Go to Flag 3. Check CL05-025.
Refer to:

- GP 12 How to Check a Solenoid or Clutch
- P/J471, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Refer to GP 7 and check the items that follow:

- Feed motor belt, PL 5.19 Item 19, perform ADJ 5.1. SPDH Drive Belts Adjustment if necessary
- Takeaway roll, PL 5.17 Item 1
- Takeaway roll gear, PL 5.17 Item 8
- Takeaway roll idlers (part of PL 5.20 Item 15)
- Feed clutch drive gear/pulley, PL 5.19 Item 4

Install new components as necessary:

- Feed clutch, CL05-025, PL 5.18 Item 4
- SPDH PWB, PL 5.10 Item 5
- Takeaway roll, PL 5.17 Item 1
- Takeaway roll gear, PL 5.17 Item 8
- Top cover assembly, PL 5.20 Item 15

Enter dC330 code 005-310, stack height sensor, Q05-310. Actuate Q05-310 using the sensor actuating arm, Figure 1. **The display changes.**

Y N

Go to Flag 4. Check Q05-310.
Refer to:

- RAP GP 11 How to Check a Sensor.
- P/J465, SPDH PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Stack height sensor, PL 5.20 Item 4.
- Sensor actuating arm (part of PL 5.20 Item 15).
- SPDH PWB, PL 5.10 Item 5.

Close the top cover. Enter dC330 code 005-020 to run the SPDH feed motor, MOT05-020. Stack the code 05-025 to energize the feed clutch, CL05-025. **The nudger roll drops towards the input tray.**

Y N

Check the nudger roll housing will both latch in the up position and drop to the lowered position without binding. Check around the housing for paper debris or misplaced components that could prevent correct operation.
Check the following components:

- Feed assembly drive belt, PL 5.19 Item 18
- Nudger roll housing, PL 5.20 Item 8
- Shaft, PL 5.20 Item 5
- Shaft, PL 5.20 Item 12

Install new parts as necessary:

- Feed assembly drive belt, part of the SPDH drive kit, PL 5.19 Item 23
- Top cover assembly, PL 5.20 Item 15

- This fault can also be caused by stack height sensor, Q05-310 being out of position. Check the sensor mounting and repair as necessary
- This fault can also be caused by malfunction of the last sheet out sensor, perform the 305B Last Sheet Out Sensor Failure RAP.
- Perform the steps that follow:
  - Check the takeaway roll static eliminator, Figure 1
  - Make sure that the SPDH is connected to ground correctly, refer to the 301A Ground Distribution RAP
  - Check the condition and operation of the items that follow, if necessary clean the items or install new parts:

    Feed roll, PL 5.20 Item 6

    Nudger roll, PL 5.20 Item 7

    Retard roll, PL 5.25 Item 3

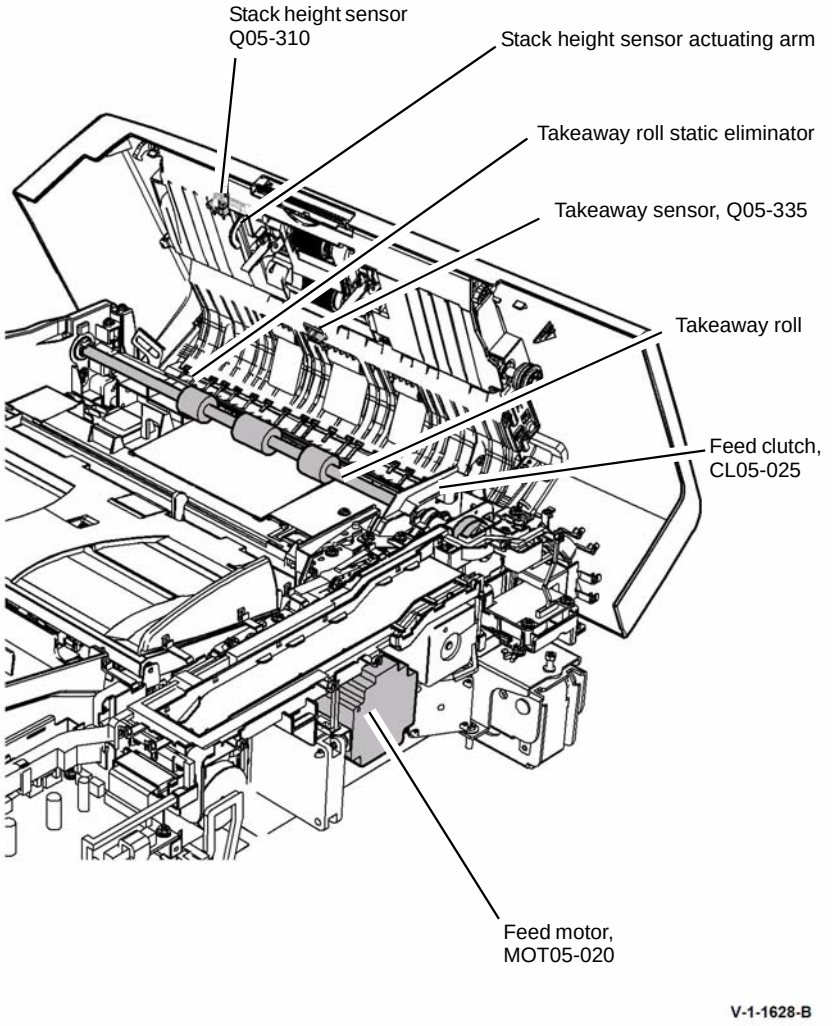


Figure 1 Component location

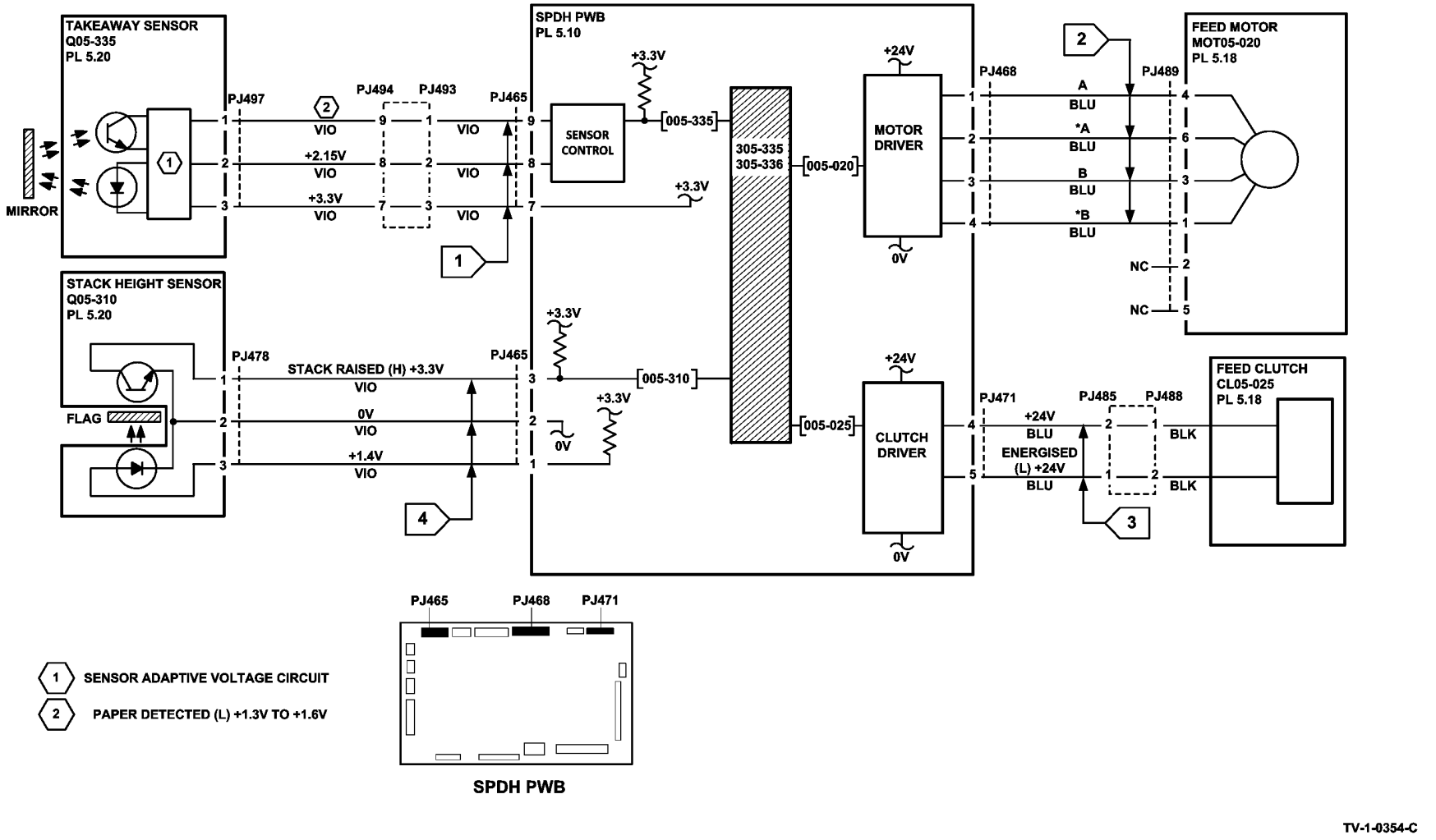


Figure 2 Circuit diagram

305-340-00, 305-341-00 SPDH Reg Sensor Failure RAP

305-340-00 The SPDH reg sensor does not detect the lead edge of the document within the correct time.

305-341-00 The SPDH reg sensor detects a paper jam.

Initial Actions

- Remove all documents from the SPDH.
- Check the paper path of the SPDH and remove any obstructions such as paper debris, staples, paper clips etc.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-340, SPDH reg sensor, Q05-340. Figure 1. Open the SPDH. Actuate Q05-340 using a strip of paper. **The display changes.**

Y N

Go to Flag 1. Check Q05-340.
Refer to:

- GP 36 How to Check an Adaptive Sensor
- P/J467, SPDH PWB
- 301D +3.3V Distribution RAP

Install new components as necessary:

- SPDH reg sensor, PL 5.18 Item 11
- SPDH PWB, PL 5.10 Item 5

Open the SPDH top cover. Hold the top cover interlock switch closed using the shank of a standard interlock cheater. Enter dC330 code 005-030 to run the SPDH read motor, MOT05-030. **MOT05-030 runs.**

Y N

Go to Flag 2. Check MOT05-030.
Refer to:

- GP 10 How to Check a Motor
- P/J468, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- SPDH read motor, PL 5.18 Item 1
- SPDH PWB, PL 5.10 Item 5

Perform the steps that follow:

- Refer to GP 7 and check the following items:
  - Read motor belt, PL 5.19 Item 18, perform ADJ 5.1 SPDH Drive Belts Adjustment if necessary
  - Mid scan drive belt, PL 5.19 Item 21, perform ADJ 5.1 SPDH Drive Belts Adjustment if necessary
  - Pre scan drive belt, PL 5.19 Item 20, perform ADJ 5.1 SPDH Drive Belts Adjustment if necessary
  - Pre scan roll assembly, PL 5.17 Item 4
  - Pre scan roll drive pulley, PL 5.19 Item 12
  - Mid scan roll drive pulley, PL 5.19 Item 13
- Check the pre scan roll static eliminator, Figure 2.
- Make sure that the SPDH is connected to ground correctly, refer to the 301A Ground Distribution RAP

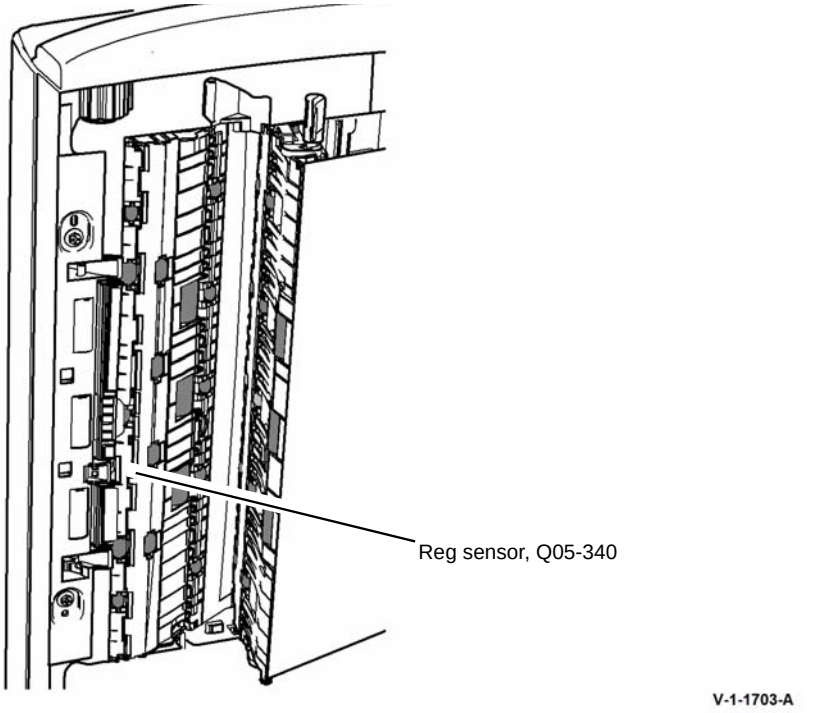


Figure 1 Component location

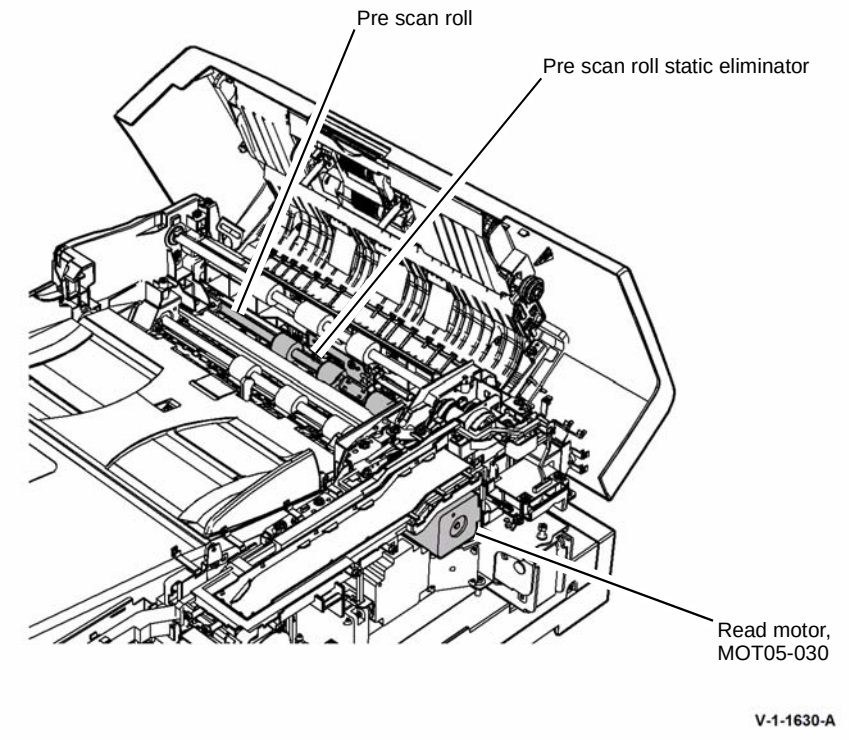


Figure 2 Component location

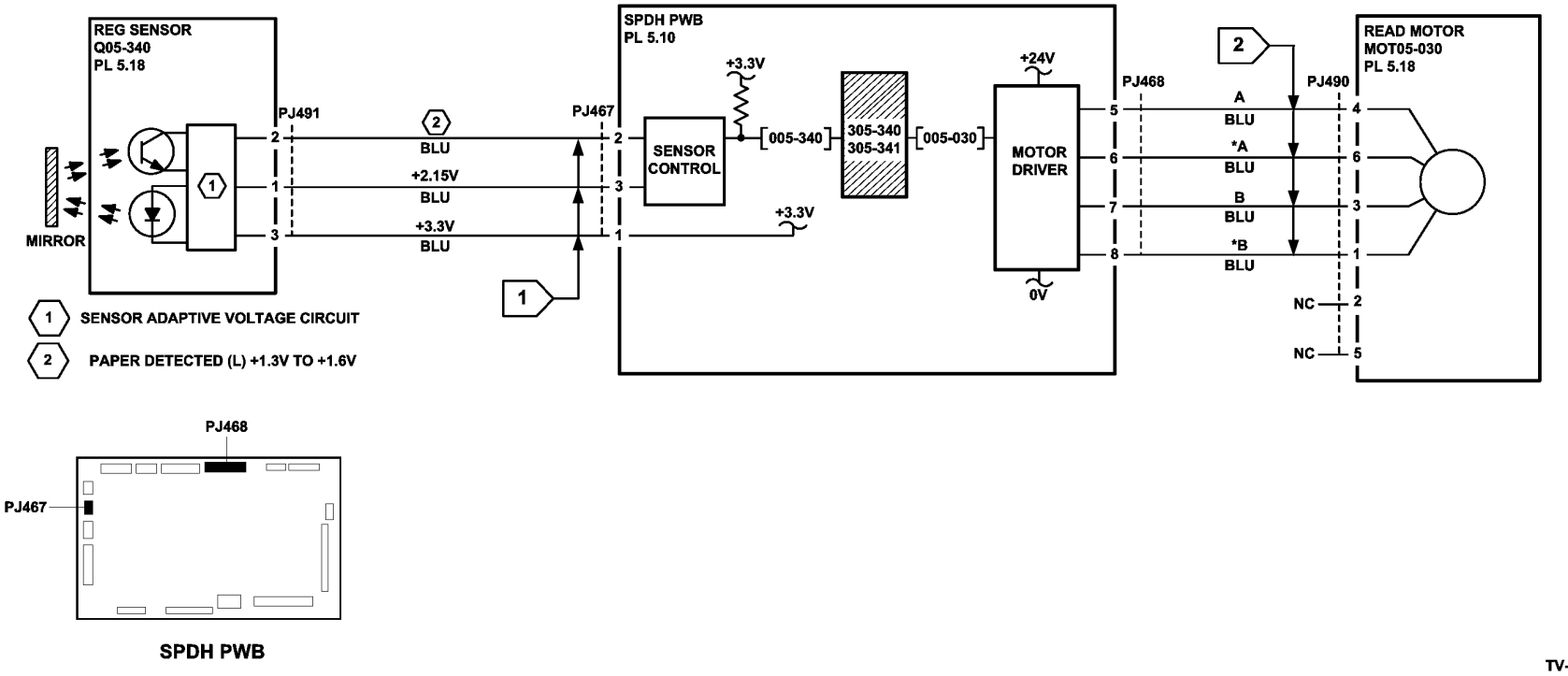


Figure 3 Circuit diagram

305-342-00, 305-343-00 SPDH Side 2 Reg Sensor Failure RAP

305-342-00 The SPDH side 2 reg sensor does not detect the lead edge of the document within the correct time.

305-343-00 The SPDH side 2 reg sensor detects a paper jam.

Initial Actions

- Remove all documents from the SPDH.
- Check the paper path of the SPDH and remove any obstructions such as paper debris, staples, paper clips etc.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-343, SPDH side 2 reg sensor, Q05-343. Open the SPDH. Open and close the jam clearance baffle to actuate the sensor, Figure 2. **The display changes.**

Y N

Go to Flag 1. Check Q05-343.
Refer to:

- GP 36 How to Check an Adaptive Sensor.
- P/J466, SPDH PWB.
- 301D +3.3V Distribution RAP.

Install new components as necessary:

- SPDH side 2 reg sensor, PL 60.30 Item 8.
- SPDH PWB, PL 5.10 Item 5.

Open the SPDH top cover. Hold the top cover interlock switch closed using the shank of a standard interlock cheater. Enter dC330 code 005-030 to run the SPDH read motor, MOT05-030, Figure 1. **MOT05-030 runs.**

Y N

Go to Flag 2. Check MOT05-030.
Refer to:

- GP 10 How to Check a Motor.
- P/J468, SPDH PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- SPDH read motor, PL 5.18 Item 1.
- SPDH PWB, PL 5.10 Item 5.

A

A

Perform the steps that follow:

- Refer to GP 7 and check the following items:
  - Read motor belt, PL 5.19 Item 18, perform ADJ 5.1 SPDH Drive Belts Adjustment if necessary.
  - Mid scan drive belt, PL 5.19 Item 21, perform ADJ 5.1 SPDH Drive Belts Adjustment if necessary.
  - Mid scan roll assembly, PL 5.17 Item 4.
  - Mid scan roll drive pulley, PL 5.19 Item 13.
- Make sure that the SPDH is connected to ground correctly, refer to the 301A Ground Distribution RAP.

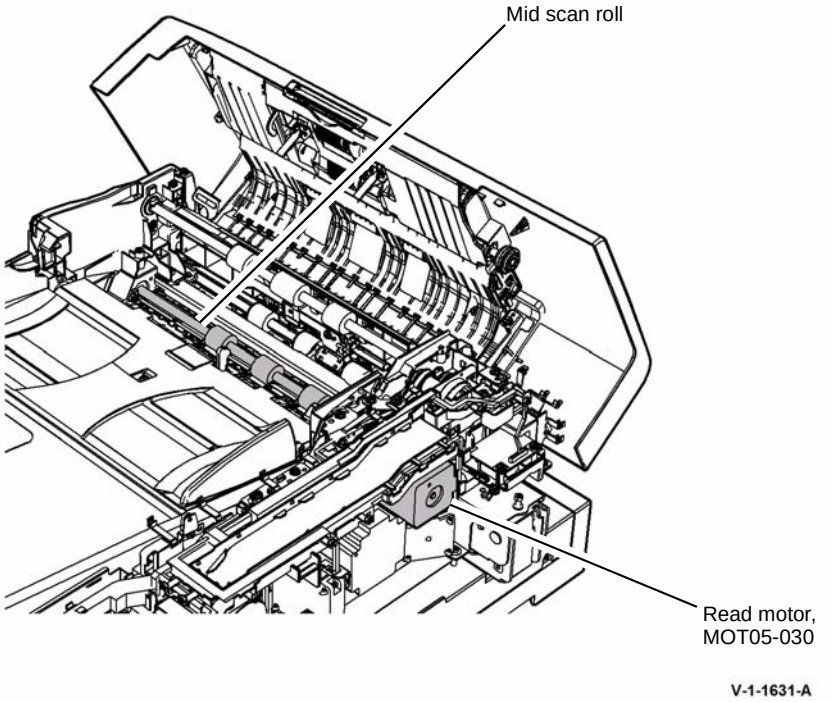


Figure 1 Component location

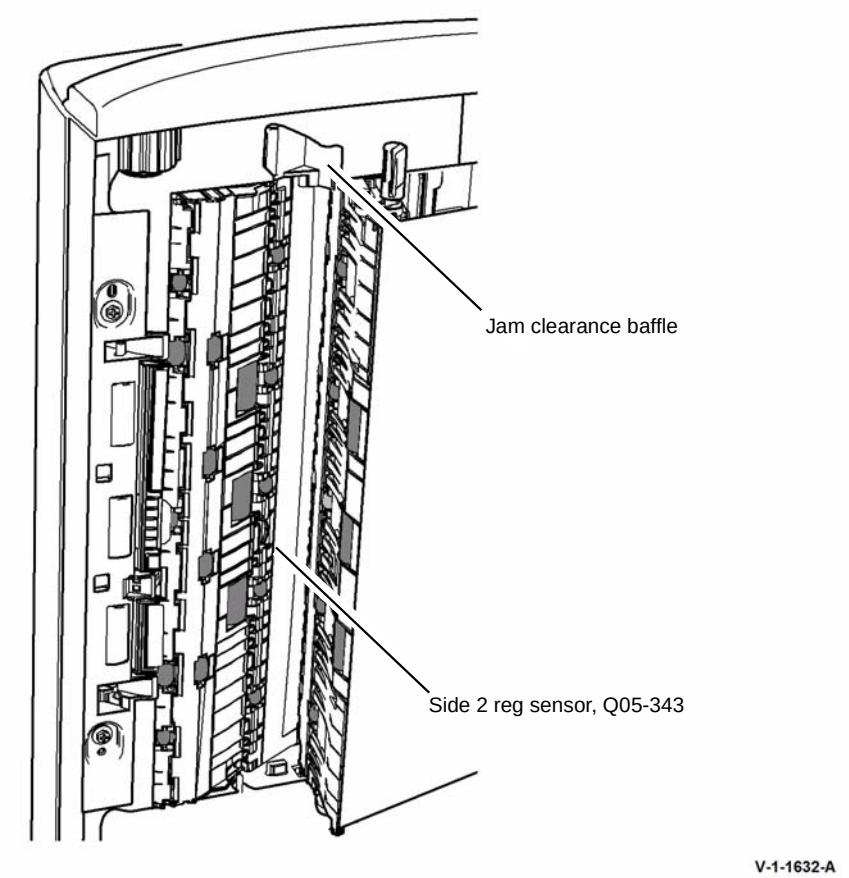


Figure 2 Component location

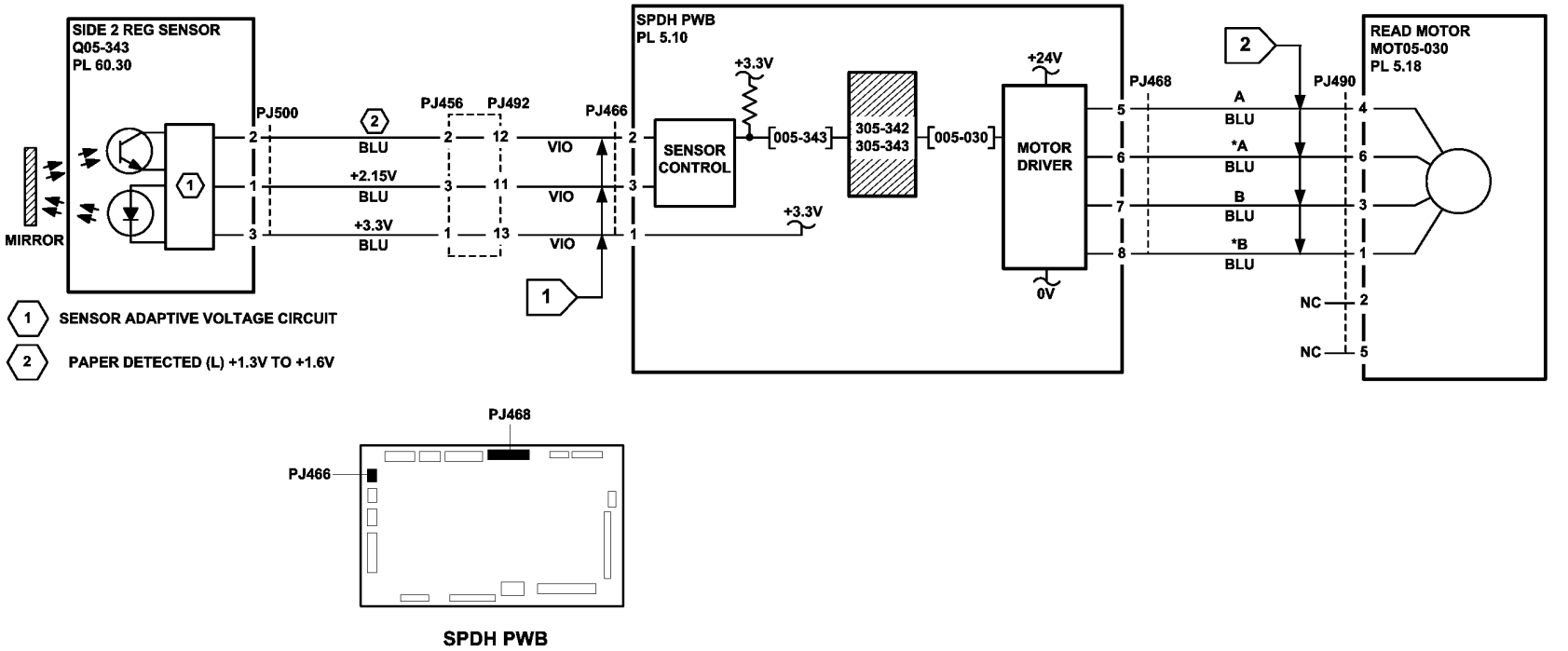


Figure 3 Circuit diagram

305-940-00, 305-966-00 SPDH No Original RAP

305-940-00 The SPDH has detected that the original has been removed.

305-966-00 The SPDH has detected that the original has not been fully inserted in the input tray.

NOTE: *Documents placed on the top cover of the SPDH can overhang the input tray and trigger the sensors. This can cause the SPDH to falsely detect a document, causing a feed error.*

NOTE: *Overhead lighting can actuate the last sheet out sensor, Q05-308, resulting in 305-966-00 faults.*

Initial Actions

- Remove all documents from the SPDH.
- Check around the input tray and remove any obstructions such as paper debris, staples, paper clips etc.
- Ensure that the document width guides are set correctly for the originals in use.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-309, doc present sensor, Q05-309, Figure 1. Actuate the sensor using the doc present sensor actuator, PL 5.30 Item 6. **The display changes.**

Y N

Go to Flag 1. Check Q05-309.

Refer to:

- GP 11 How to Check a Sensor
- P/J462, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Doc present sensor, PL 5.30 Item 5.
- SPDH PWB, PL 5.10 Item 5.

Ensure that:

- The document present sensor actuator, PL 5.30 Item 6 is at Mod. TAG D-001, correctly installed and undamaged, REP 5.16.
- Mod. TAG D-002 has been installed.

Install new components as necessary:

- Doc present sensor actuator W/TAG D-001, PL 5.30 Item 6.
- SPDH last sheet out sensor filter W/TAG D-002, PL 5.30 Item 20.
- SPDH last sheet out sensor W/TAG D-002, PL 5.30 Item 18.
- Input tray upper assembly W/TAG D-002 PL 5.30 Item 2.

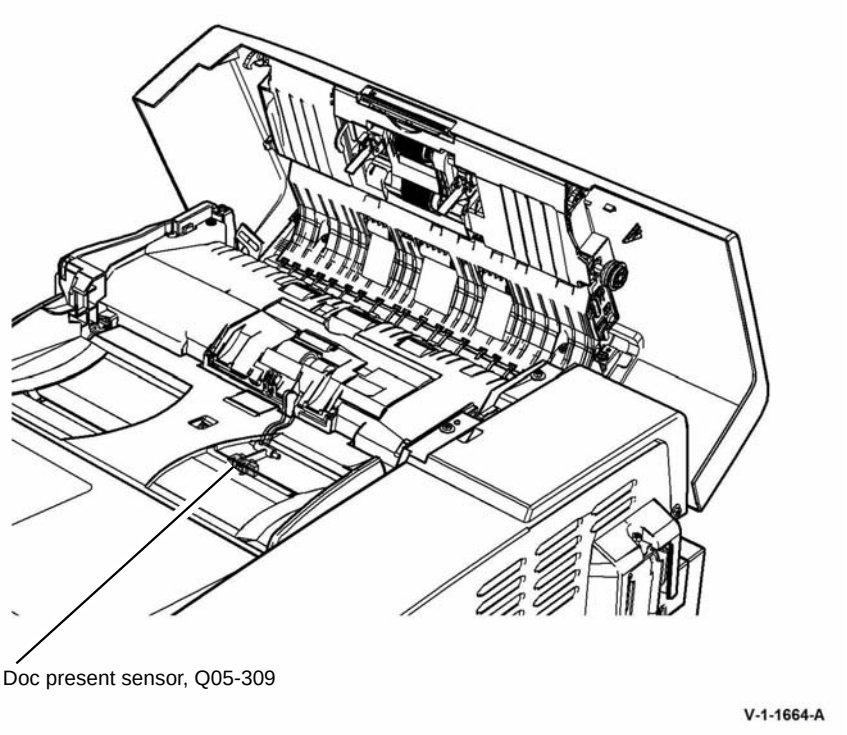


Figure 1 Component location

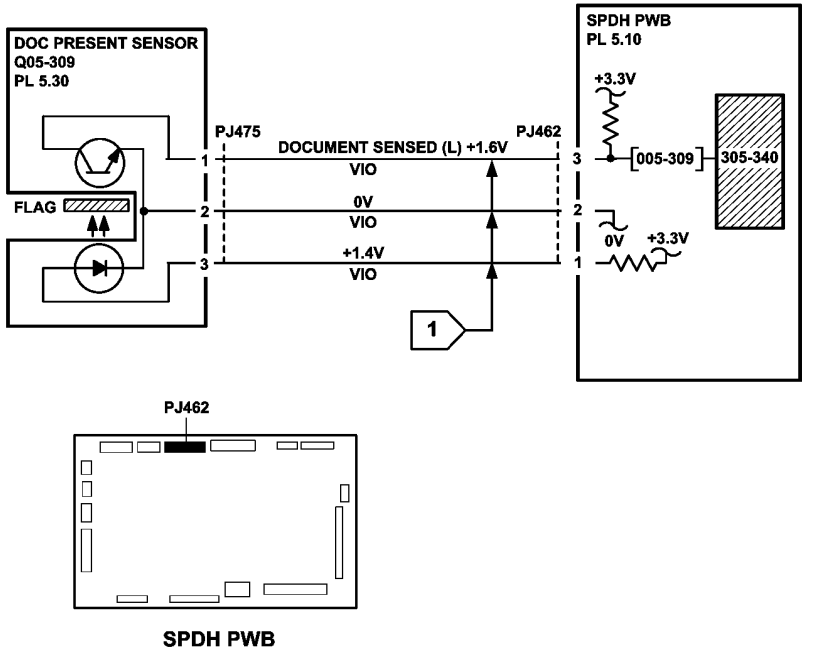


Figure 2 Circuit diagram

305-958-00 SPDH Lift Home Sensor Failure RAP

305-958-00 The lift home sensor does not sense the home position after the tray elevate motor drives the input tray to the home position.

Initial Actions

- Remove all documents from the SPDH.
- Check around the input tray and remove any obstructions such as paper debris, staples, paper clips etc.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-390 to run the tray elevator motor, MOT05-390. **MOT05-390 runs and cycles the tray between the raised and lowered positions.**

Y N

Remove the SPDH rear cover (5 screws). Remove the sensor bracket, PL 5.18 Item 10. Turn over the bracket to access the lift home position sensor, Figure 1. Enter dC330 code 005-307, lift home position sensor, Q05-307. Actuate the sensor using a piece of paper. **The display changes.**

Y N

Go to Flag 1. Check Q05-307.

Refer to:

- GP 11 How to Check a Sensor
- P/J462, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Lift home position sensor, PL 5.18 Item 9
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-309, doc present sensor, Q05-309, Figure 2. Actuate the sensor using the doc present sensor actuator, PL 5.30 Item 6. **The display changes.**

Y N

Go to Flag 3. Check Q05-309.

Refer to:

- GP 11 How to Check a Sensor
- P/J462, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Doc present sensor, PL 5.30 Item 5
- SPDH PWB, PL 5.10 Item 5

A B

A B

Open the top cover to access the stack height sensor, Q05-310, Figure 2. Enter dC330 code 005-310, stack height sensor, Q05-310. Actuate the sensor using the sensor actuating arm. **The display changes.**

Y N

Go to Flag 4. Check Q05-310.
Refer to:

- GP 11 How to Check a Sensor
- P/J465 SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Stack height sensor, PL 5.20 Item 4
- Sensor actuating arm (part of the top cover assembly), PL 5.20 Item 15.
- SPDH PWB, PL 5.10 Item 5

Go to Flag 2, check the tray elevator motor MOT05-390, Figure 1.
Refer to:

- GP 10 How to Check a Motor
- P/J469 SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Tray elevator motor, PL 5.18 Item 3
- SPDH PWB, PL 5.10 Item 5

Check the drive components between the tray elevator motor and the input tray shaft assembly. Install new parts as necessary:

- Tray elevator reduction gears, PL 5.19 Item 9

In run mode the tray lifts normally.

Y N

Open the top cover to access the stack height sensor, Q05-310, Figure 2. Enter dC330 code 005-310, stack height sensor, Q05-310. Actuate the sensor using the sensor actuating arm. **The display changes.**

Y N

Go to Flag 4. Check Q05-310.
Refer to:

- GP 11 How to Check a Sensor
- P/J465 SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Stack height sensor, PL 5.20 Item 4
- Sensor actuating arm (part of the top cover assembly), PL 5.20 Item 15.
- SPDH PWB, PL 5.10 Item 5

C D

C D

The sensor may be working intermittently, check the items that follow:

- That the actuating arm operates correctly.
- That the sensor is located correctly.
- That the sensor wiring is undamaged.

Repair the wiring or install new parts as necessary:

- Stack height sensor, PL 5.20 Item 4
- Sensor actuating arm (part of the top cover assembly), PL 5.20 Item 15.

Go to SCP 5 Final actions.

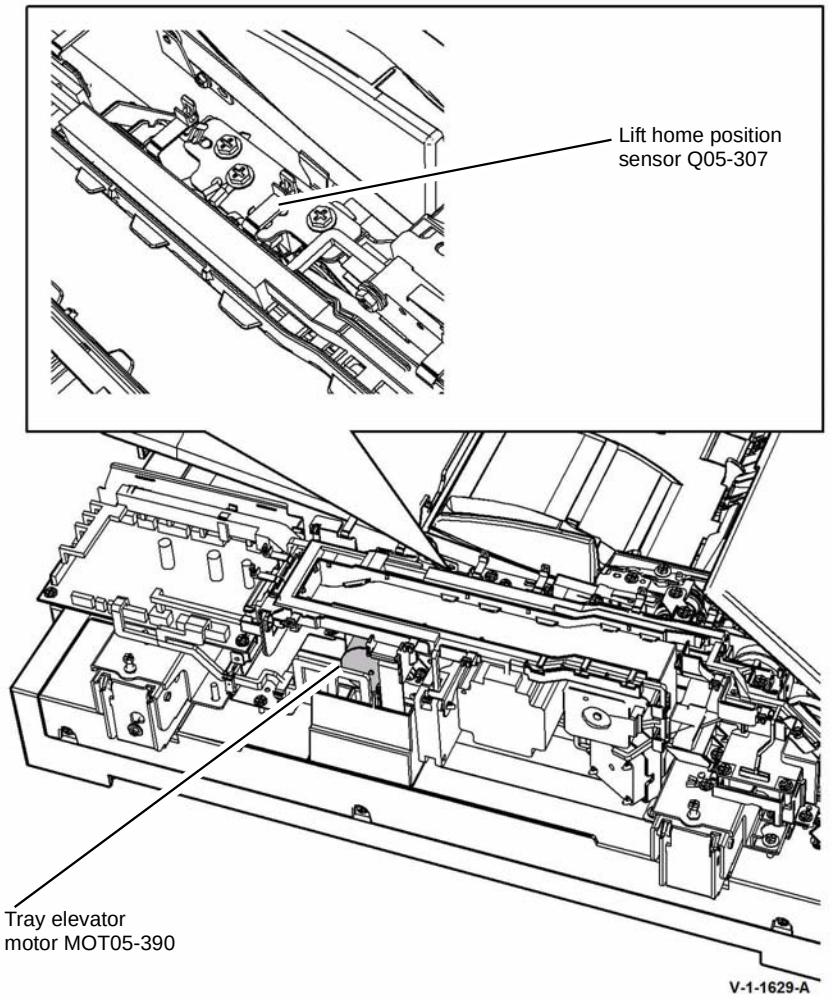


Figure 1 Component location

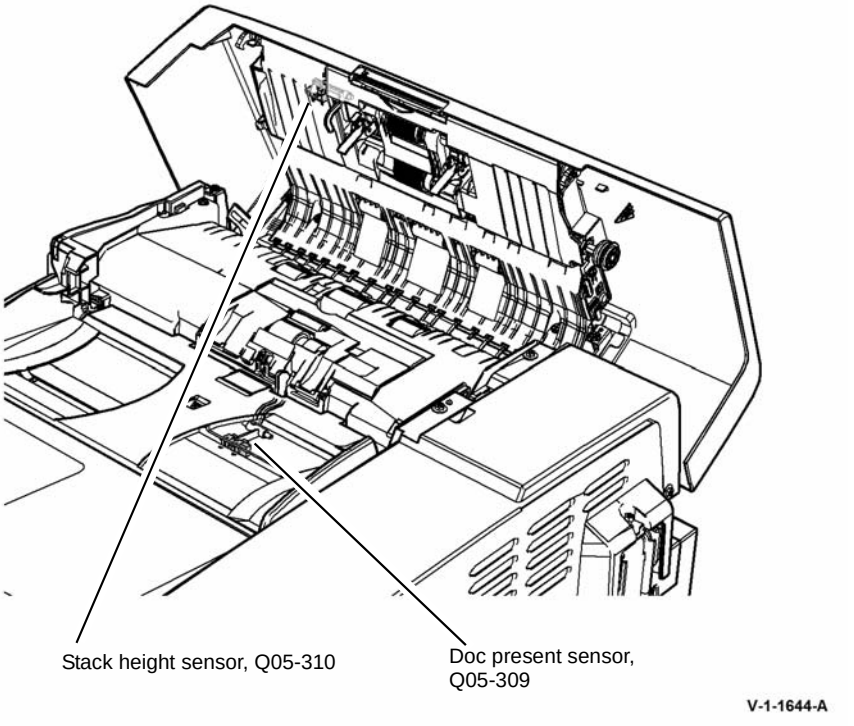


Figure 2 Component location

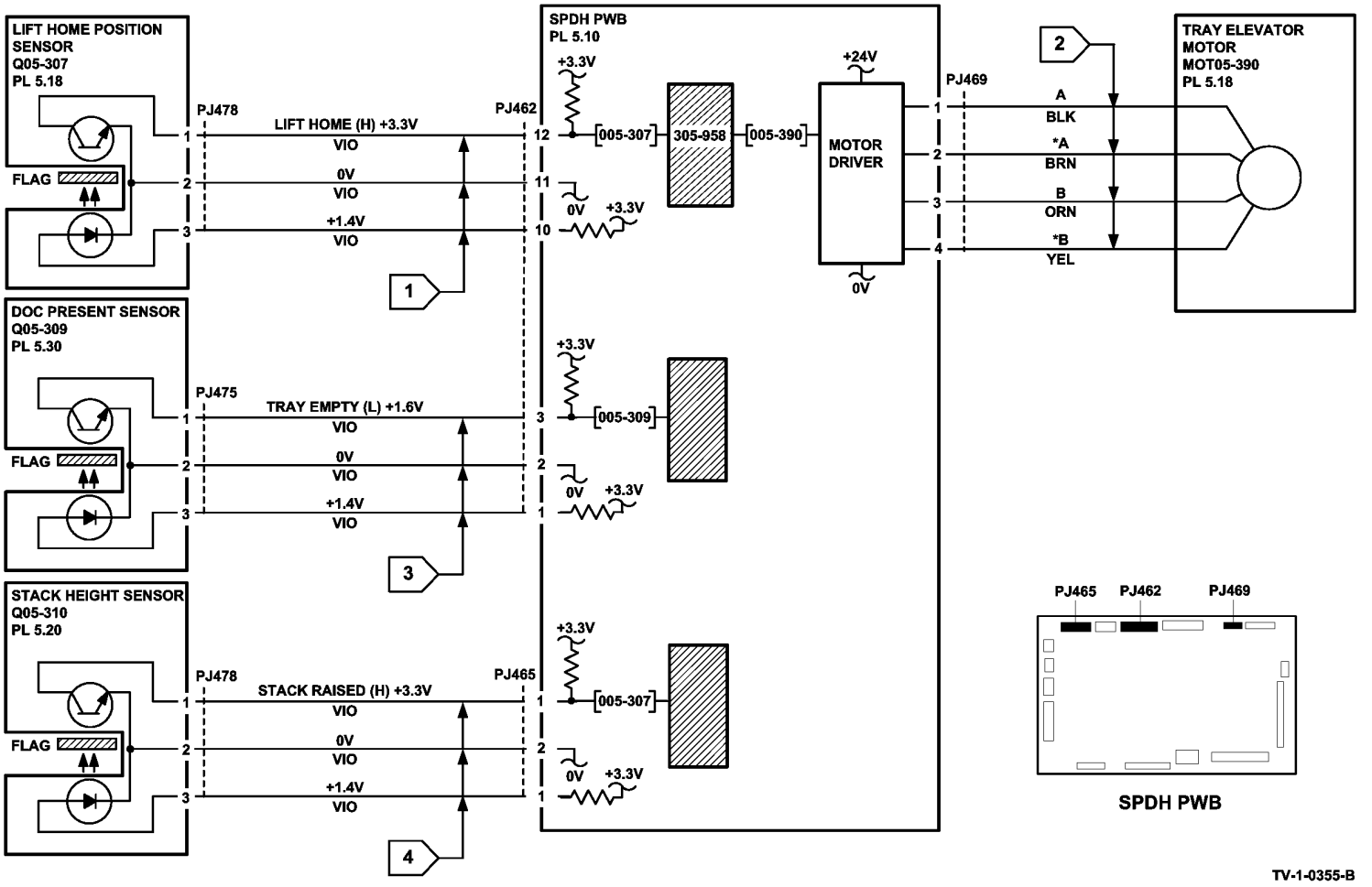


Figure 3 Circuit diagram

305-959-00 SPDH Calibration Home Position Sensor Failure RAP

305-959-00 The calibration home position sensor does not sense the home position after the read motor drives the calibration mechanism to the home position.

Initial Actions

- Remove all documents from the SPDH.
- Check around the calibration mechanism and remove any obstructions such as paper debris, staples, paper clips etc.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Remove the SPDH rear cover (5 screws). Observe the calibration home position sensor and the sensor flag. Enter dC330 code 005-360, calibration home position sensor, Q05-360. Actuate the sensor by rotating the exit jam clearance knob, PL 5.17 Item 5 and observing the position of the flag. **The display changes.**

Y N

Go to Flag 1. Check Q05-360.
Refer to:

- Figure 1
- GP 11 How to Check a Sensor
- P/J464, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Calibration home position sensor, PL 5.18 Item 9
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-430 to run the read motor in reverse to drive the calibration shutter mechanism, MOT05-030. **MOT05-030 runs and the exit jam clearance knob turns in a clockwise direction.**

Y N

MOT05-030 runs but the jam clearance knob remains stationary.

Y N

Go to Flag 2. Check MOT05-030.
Refer to:

- Figure 1
- GP 10 How to Check a Motor
- P/J468, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

A B

Install new components as necessary:

- Read motor, PL 5.18 Item 1
- SPDH PWB, PL 5.10 Item 5

Check the drive components between the read motor and the calibration mechanism. Install new parts as necessary:

- Read motor belt, PL 5.19 Item 18
- Mid scan drive belt, PL 5.19 Item 21
- Exit roll drive pulley, PL 5.19 Item 12
- Calibration shutter drive gear, PL 5.19 Item 10
- Calibration shutter idler gear, PL 5.19 Item 7
- Calibration shutter driven gear, PL 5.19 Item 8

Check the calibration shutter mechanism, Figure 2. repair any damaged parts if possible, if necessary install a new SPDH, PL 5.10 Item 9.

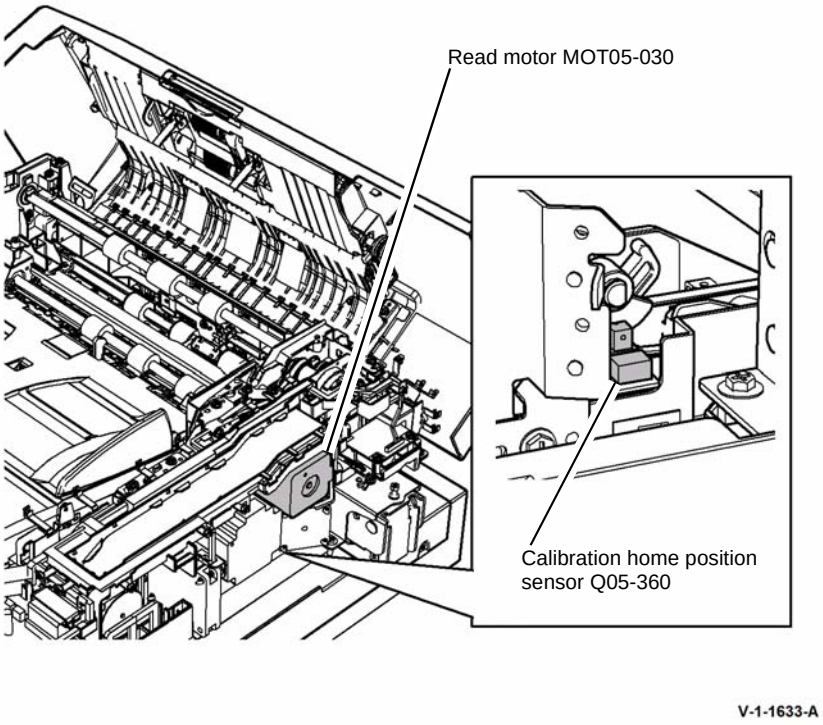


Figure 1 Component location

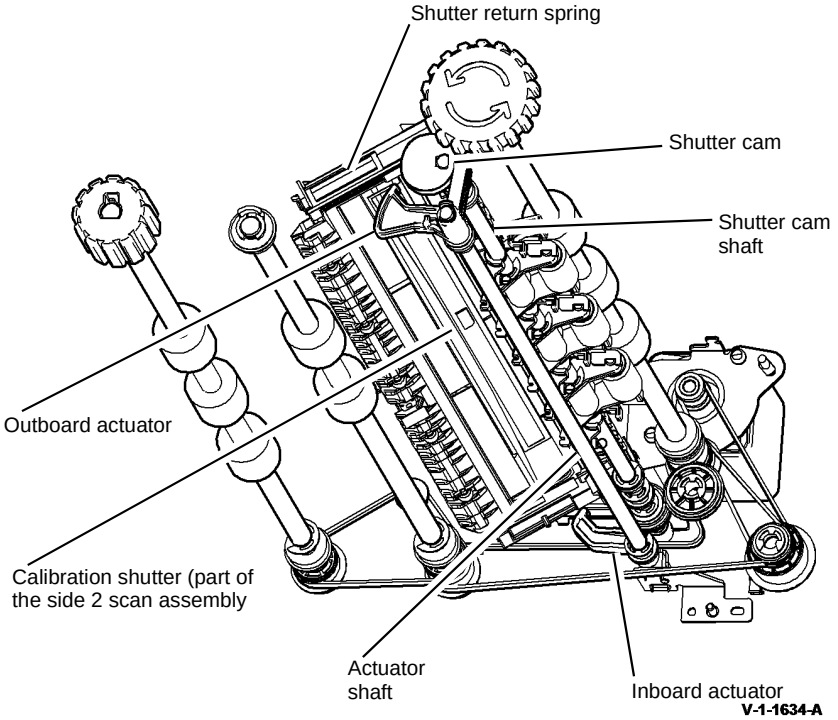
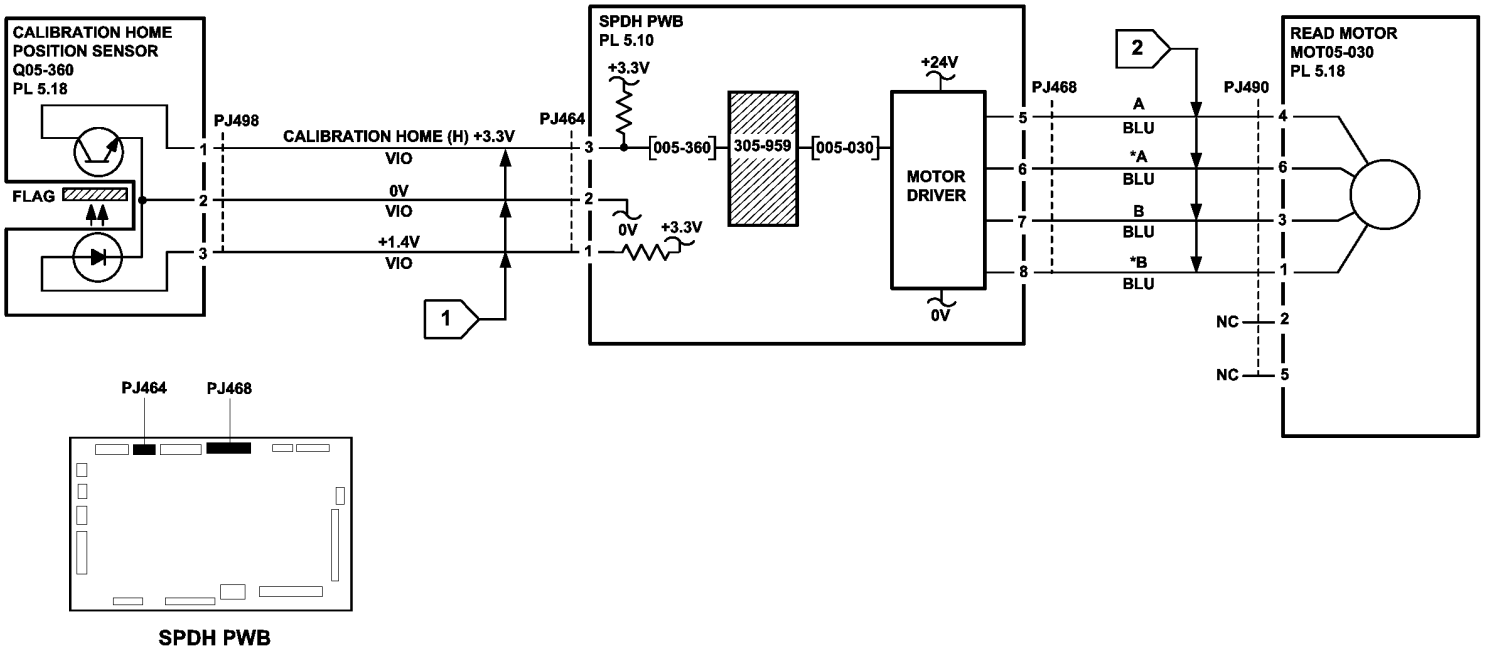


Figure 2 Calibration shutter mechanism



TV-1-0358-B

Figure 3 Circuit diagram

305-960-00 SPDH LED Fan Lock Alarm RAP

305-960-00 The LED cooling fan is not rotating.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Open the SPDH top cover. Hold the top cover interlock switch closed using the shank of a standard interlock cheater. Enter dC330 code 005-370 to run the LED cooling fan, MOT05-370, Figure 1. **MOT05-370 runs.**

Y N

Go to Flag 1. Check MOT05-370.

Refer to:

- GP 10 How to Check a Motor
- P/J471, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- LED cooling fan, PL 5.18 Item 8
- SPDH PWB, PL 5.10 Item 5

Stack the dC330 code 005-375 to check the LED fan lock alarm. **The display reads high.**

Y N

Switch off the machine, then switch on the machine. If the fault remains, install new parts:

- LED cooling fan, PL 5.18 Item 8
- SPDH PWB, PL 5.10 Item 5

Install a new LED cooling fan, PL 5.18 Item 8.

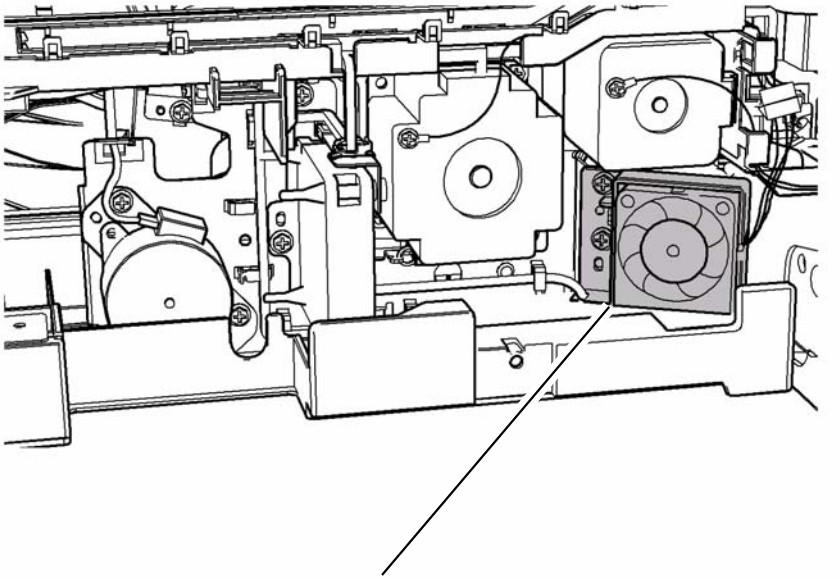


Figure 1 Component location

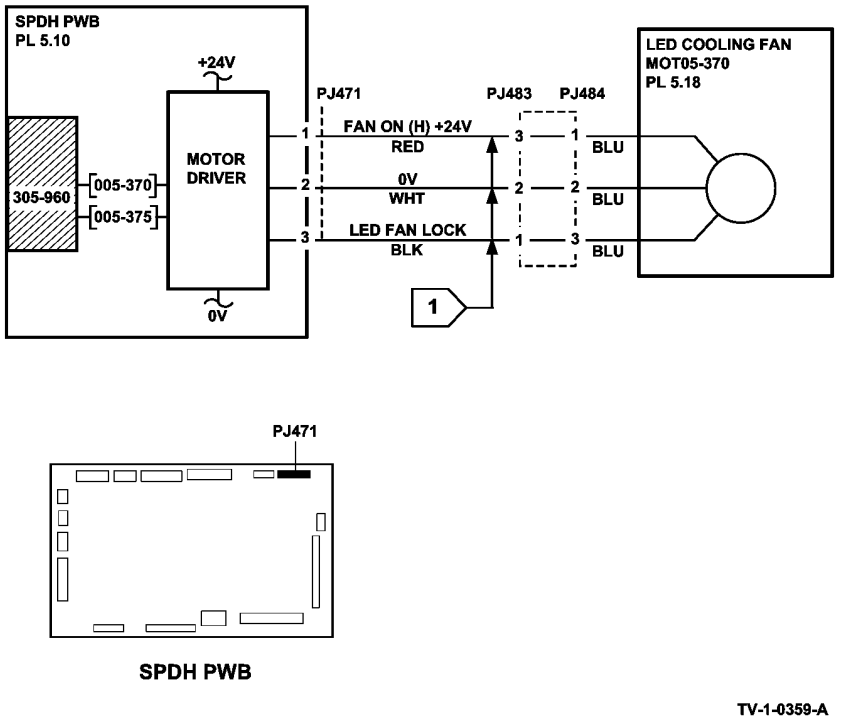


Figure 2 Circuit diagram

305-961-00 SPDH Motor Fan Lock Alarm RAP

305-961-00 The motor cooling fan is not rotating.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Open the SPDH top cover. Hold the top cover interlock switch closed using the shank of a standard interlock cheater. Enter dC330 code 005-380 to run the motor cooling fan, MOT05-380, Figure 1. **MOT05-380 runs.**

Y N

Go to Flag 1. Check MOT05-380.

Refer to:

- GP 10 How to Check a Motor
- P/J470, SPDH PWB
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Motor cooling fan, PL 5.18 Item 7
- SPDH PWB, PL 5.10 Item 5

Stack the dC330 code 005-385 to check the motor fan lock alarm. **The display reads high.**

Y N

Switch off the machine, then switch on the machine, GP 14. If the fault remains, install new parts:

- Motor cooling fan, PL 5.18 Item 7
- SPDH PWB, PL 5.10 Item 5

Install a new motor cooling fan, PL 5.18 Item 7.

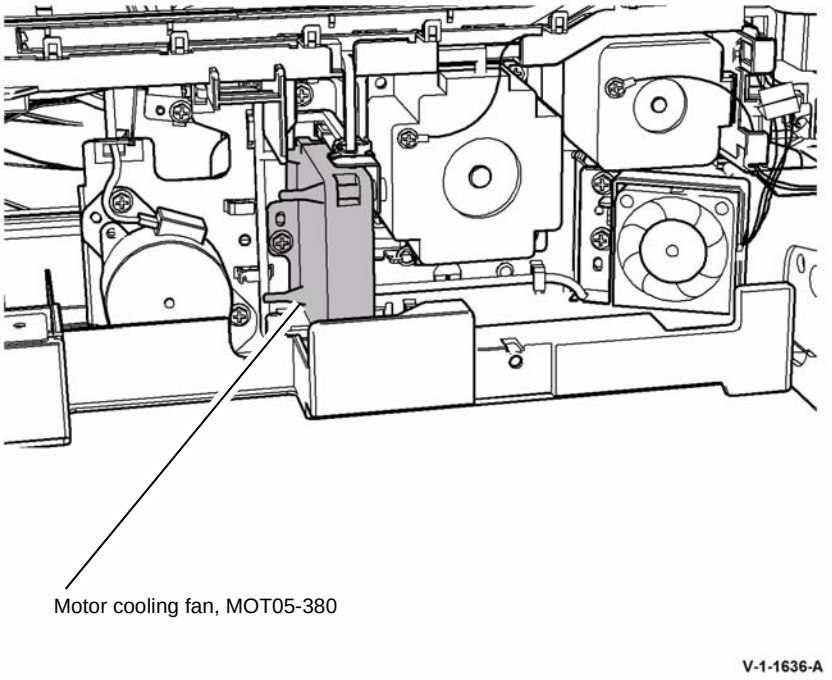


Figure 1 Component location

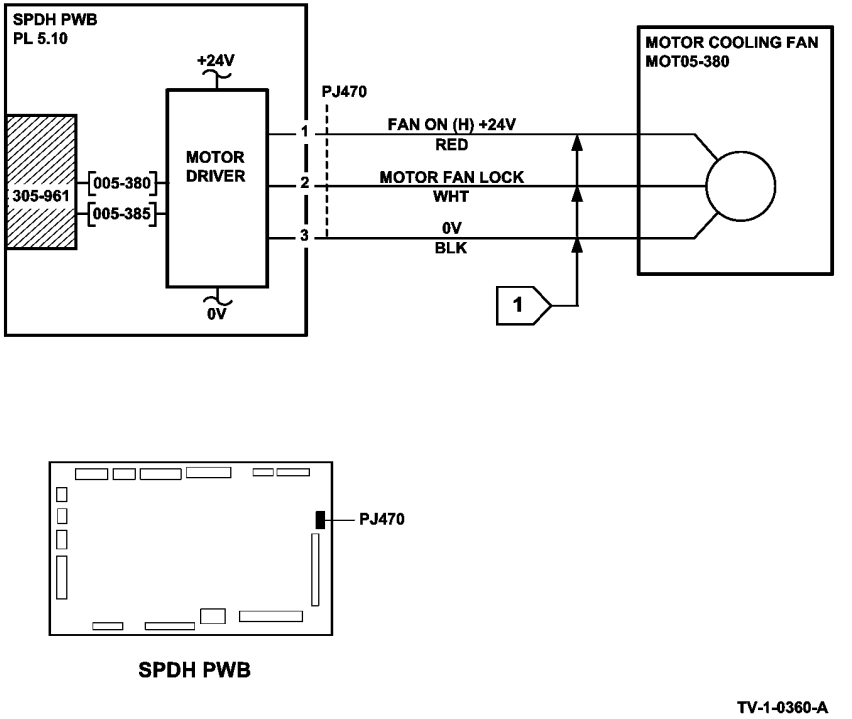


Figure 2 Circuit diagram

305-962-00 SPDH Feed Sensor Adjustment Error RAP

305-962-00 An error has occurred during the automatic adjustment of the feed sensor.

Procedure

Open the SPDH top cover, PL 5.10 Item 8. Enter dC330 code 005-330, SPDH feed sensor, Q05-330, Figure 1. Activate Q05-330 by opening and closing the SPDH top cover. **The display changes.**

Y N

Go to Flag 1. Check Q05-330.

Refer to:

- GP 36 How to Check an Adaptive Sensor.
- P/J465, SPDH PWB.
- 301D +3.3V Distribution RAP.

Install new components as necessary:

- SPDH feed sensor, PL 5.20 Item 10.
- SPDH PWB, PL 5.10 Item 5.

Clean the mirrored surface of the separation assembly that corresponds to the position of the timing sensor. Switch off the machine, then switch on the machine, GP 14. If the fault remains, install new parts:

- SPDH feed sensor, PL 5.20 Item 10.
- SPDH PWB, PL 5.10 Item 5.

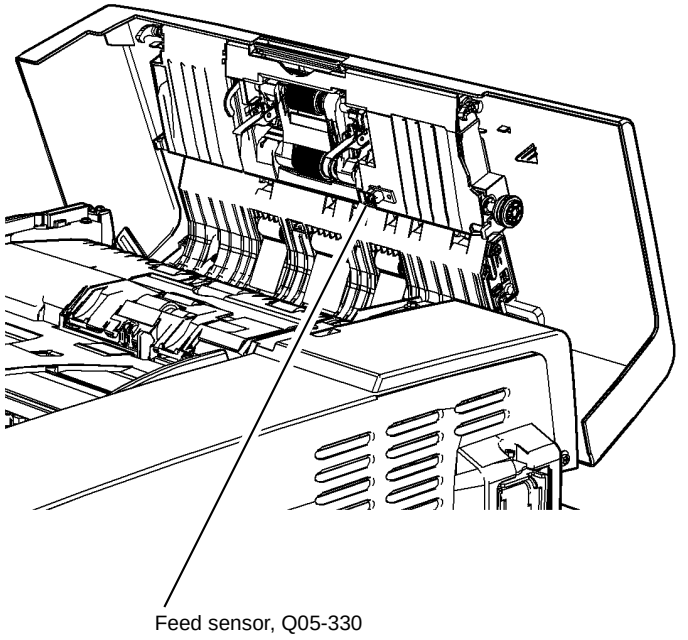


Figure 1 Component location

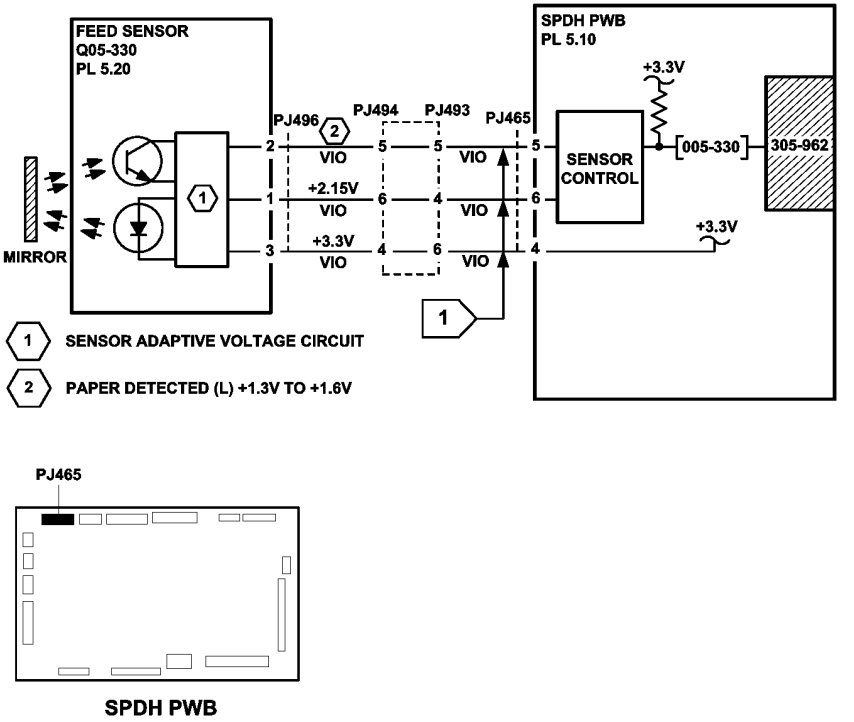


Figure 2 Circuit diagram

305-963-00 SPDH Takeaway Sensor Adjustment Error RAP

305-963-00 An error has occurred during the automatic adjustment of the takeaway sensor.

Procedure

Open the SPDH top cover, PL 5.10 Item 8. Enter dC330 code 005-335, SPDH takeaway sensor, Q05-335, Figure 1. Activate Q05-335 by opening and closing the SPDH top cover. **The display changes.**

Y N

Go to Flag 1. Check Q05-335.

Refer to:

- GP 36 How to Check an Adaptive Sensor.
- P/J465, SPDH PWB.
- 301D +3.3V Distribution RAP.

Install new components as necessary:

- SPDH takeaway sensor, PL 5.20 Item 10.
- SPDH PWB, PL 5.10 Item 5.

Clean the mirrored surface of the separation assembly that corresponds to the position of the SPDH takeaway sensor. Switch off the machine, then switch on the machine, GP 14. If the fault remains, install new parts:

- SPDH takeaway sensor, PL 5.20 Item 10.
- SPDH PWB, PL 5.10 Item 5.

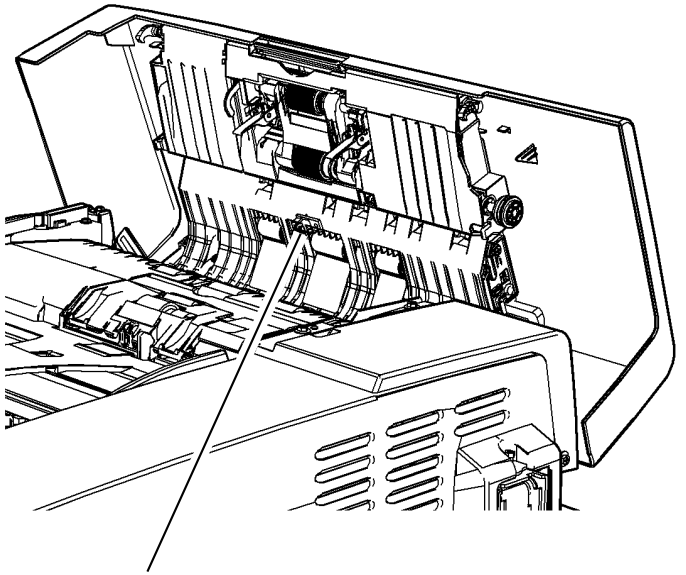


Figure 1 Component location

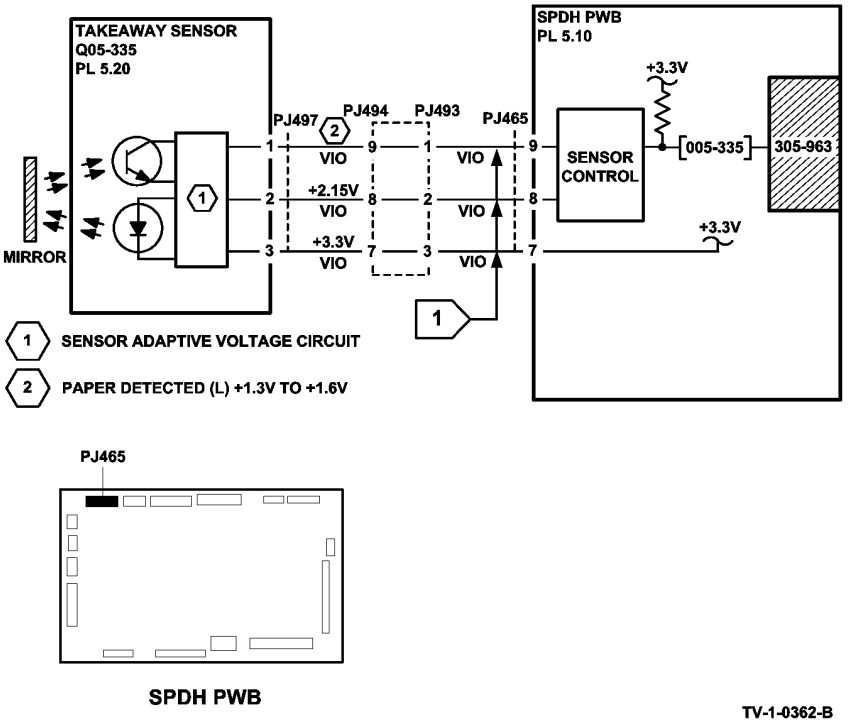


Figure 2 Circuit diagram

305-964-00 SPDH Reg Sensor Adjustment Error RAP

305-964-00 An error has occurred during the automatic adjustment of the registration sensor.

Procedure

Enter dC330 code 005-340, SPDH reg sensor, Q05-340, Figure 1. Activate Q05-340 by using a piece of paper in the document path. **The display changes.**

Y **N**

Go to Flag 1. Check Q05-340.

Refer to:

- Figure 1.
- GP 36 How to Check an Adaptive Sensor.
- P/J467, SPDH PWB.
- 301D +3.3V Distribution RAP.

Install new components as necessary:

- SPDH reg sensor, PL 5.18 Item 11.
- SPDH PWB, PL 5.10 Item 5.

Clean the reg sensor mirror, Figure 1. Switch off the machine, then switch on the machine, GP 14. If the fault remains, install new parts:

- SPDH reg sensor, PL 5.18 Item 11.
- SPDH PWB, PL 5.10 Item 5.

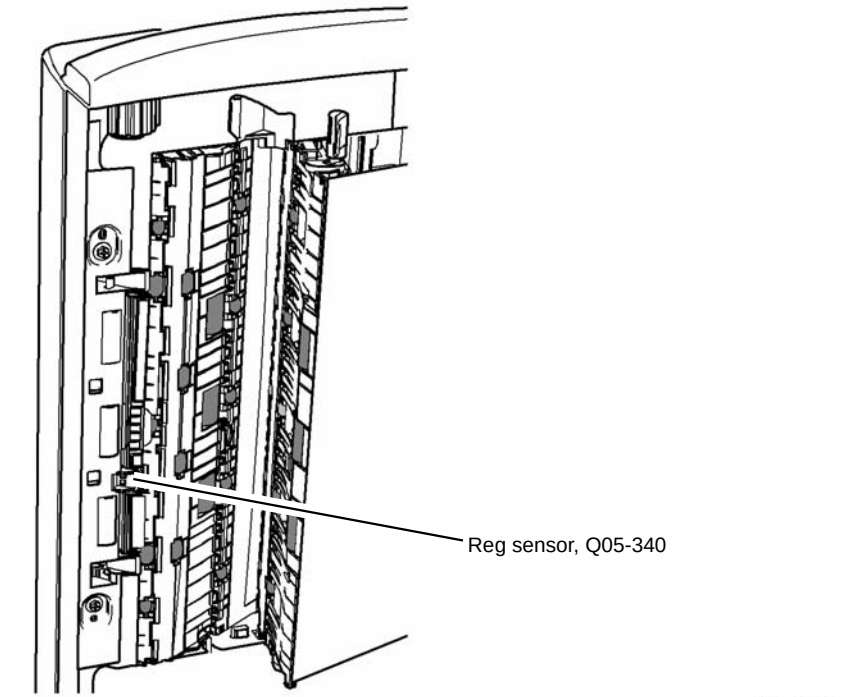


Figure 1 Component location

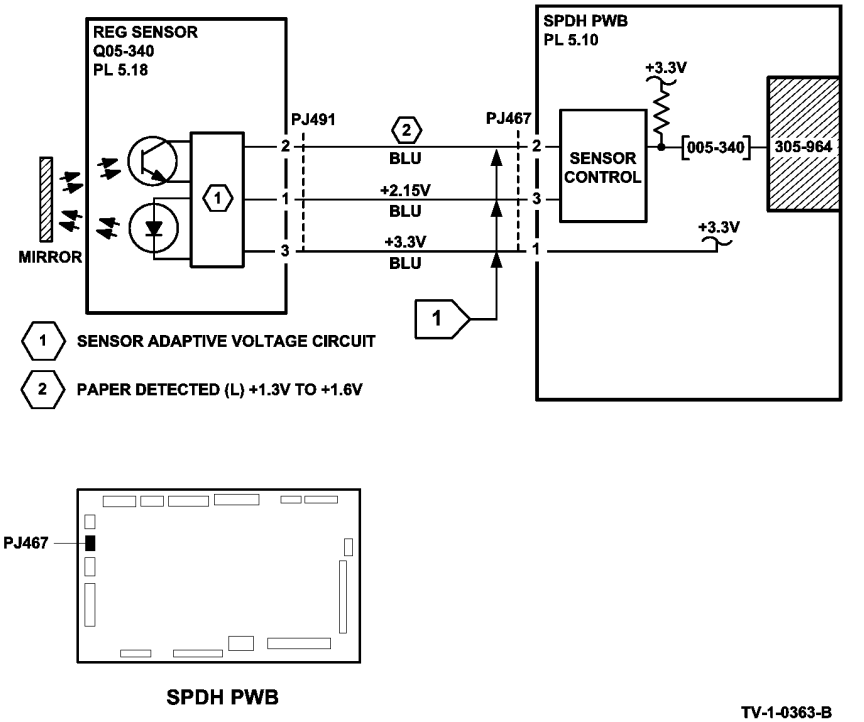


Figure 2 Circuit diagram

305-965-00 SPDH Side 2 Reg Sensor Adjustment Error RAP

305-965-00 An error has occurred during the automatic adjustment of the side 2 registration sensor.

Procedure

Open the SPDH top cover, PL 5.10 Item 8. Enter dC330 code 005-343, SPDH side 2 reg sensor, Q05-343, Figure 1. Activate Q05-343 by opening and closing the jam clearance baffle **The display changes.**

Y N

Go to Flag 1. Check Q05-343.
Refer to:

- Figure 1.
- GP 36 How to Check an Adaptive Sensor.
- P/J466, SPDH PWB.
- 301D +3.3V Distribution RAP.

Install new components as necessary:

- SPDH side 2 reg sensor, PL 60.30 Item 8.
- SPDH PWB, PL 5.10 Item 5.

Clean the side 2 reg sensor mirror, Figure 1. Switch off the machine, then switch on the machine, GP 14. If the fault remains, install new parts:

- SPDH side 2 reg sensor, PL 60.30 Item 8.
- SPDH PWB, PL 5.10 Item 5.

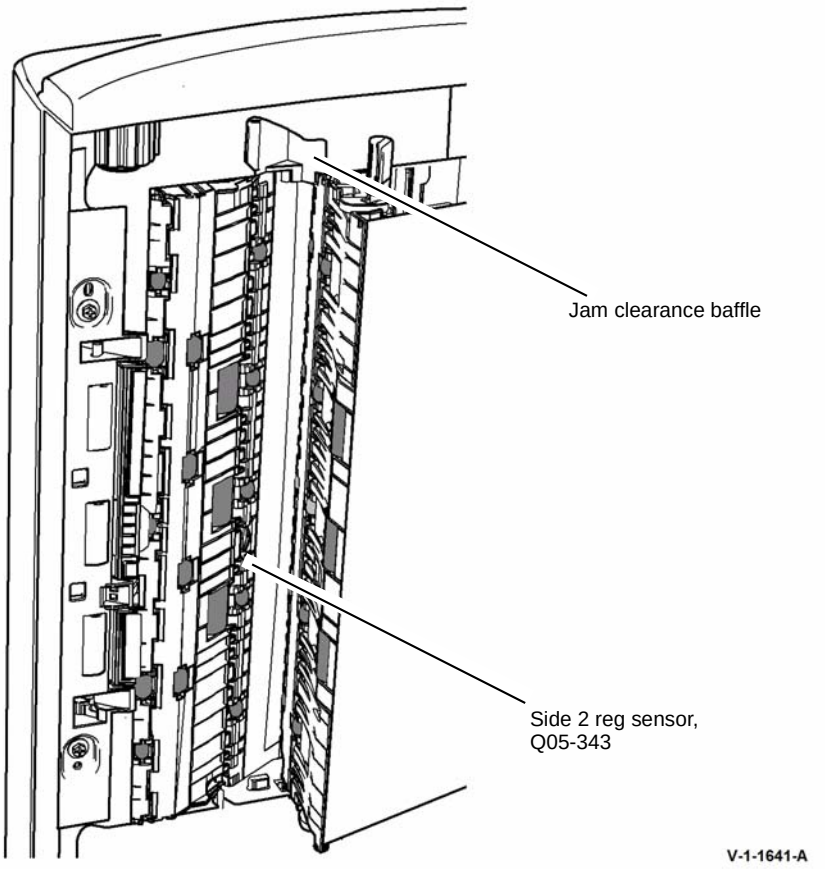


Figure 1 Component location

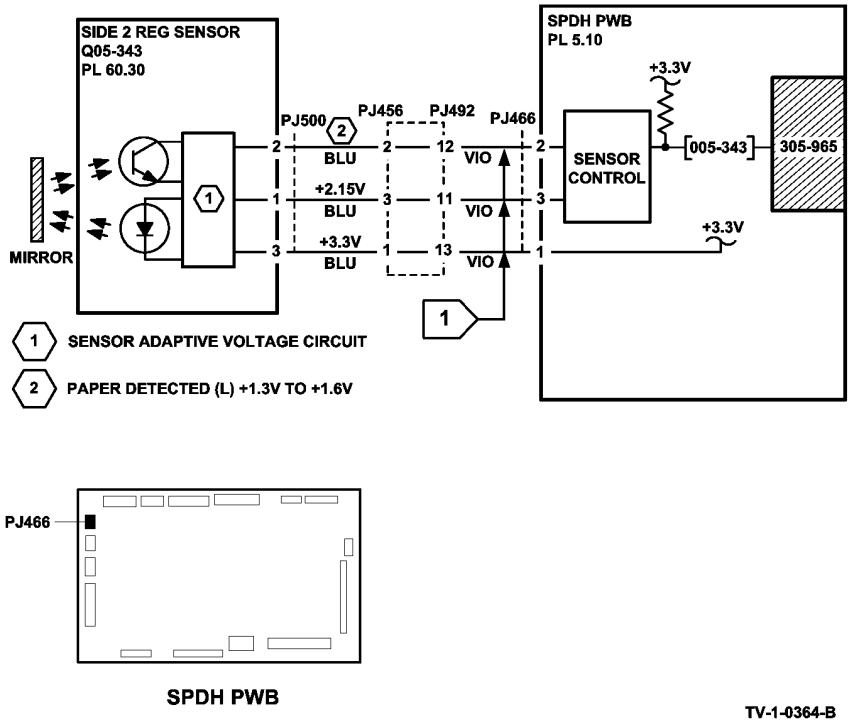


Figure 2 Circuit diagram

305A Document Size Sensors Failure RAP

Use this RAP when the SPDH is in the Auto Paper Select mode and does not detect the correct size of paper.

Initial Actions

- Ensure that the machine is not positioned below a bright light.
- Remove all documents from the SPDH and input tray.
- Ensure that the sensors and the area around the sensors are clean.
- Ensure that the SPDH has Mod. TAG D-003 installed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to Figure 1. Enter dC330 code 005-315 to check the length sensor 1 Q05-315, PL 5.30 Item 5. Actuate Q05-315. **The display changes.**

Y N

Go to Flag 1. Check Q05-315.
Refer to:

- GP 11 How to Check a Sensor
- P/J462, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Length sensor 1, PL 5.30 Item 5
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-320 to check the length sensor 2 Q05-320, PL 5.30 Item 9. Actuate Q05-320. **The display changes.**

Y N

Go to Flag 2. Check Q05-320.
Refer to:

- GP 11 How to Check a Sensor
- P/J462, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Length sensor 2, PL 5.30 Item 9
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-325 to check the width sensor 1 Q05-325, PL 5.30 Item 5. Actuate Q05-325. **The display changes.**

Y N

Go to Flag 3. Check Q05-325.
Refer to:

- GP 11 How to Check a Sensor
- P/J463, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Width sensor 1, PL 5.30 Item 5
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-326 to check the width sensor 2 Q05-326, PL 5.30 Item 5. Actuate Q05-326. **The display changes.**

Y N

Go to Flag 4. Check Q05-326.
Refer to:

- GP 11 How to Check a Sensor
- P/J463, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Width sensor 2, PL 5.30 Item 5
- SPDH PWB, PL 5.10 Item 5

Enter dC330 code 005-327 to check the width sensor 3 Q05-327, PL 5.30 Item 5. Actuate Q05-327. **The display changes.**

Y N

Go to Flag 5. Check Q05-327.
Refer to:

- GP 11 How to Check a Sensor
- P/J463, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Width sensor 3, PL 5.30 Item 5
- SPDH PWB, PL 5.10 Item 5

Install new components as necessary:

- SPDH PWB, PL 5.10 Item 5.
- Tray lower assembly, PL 5.30 Item 3.
- Input tray assembly, PL 5.30 Item 1.

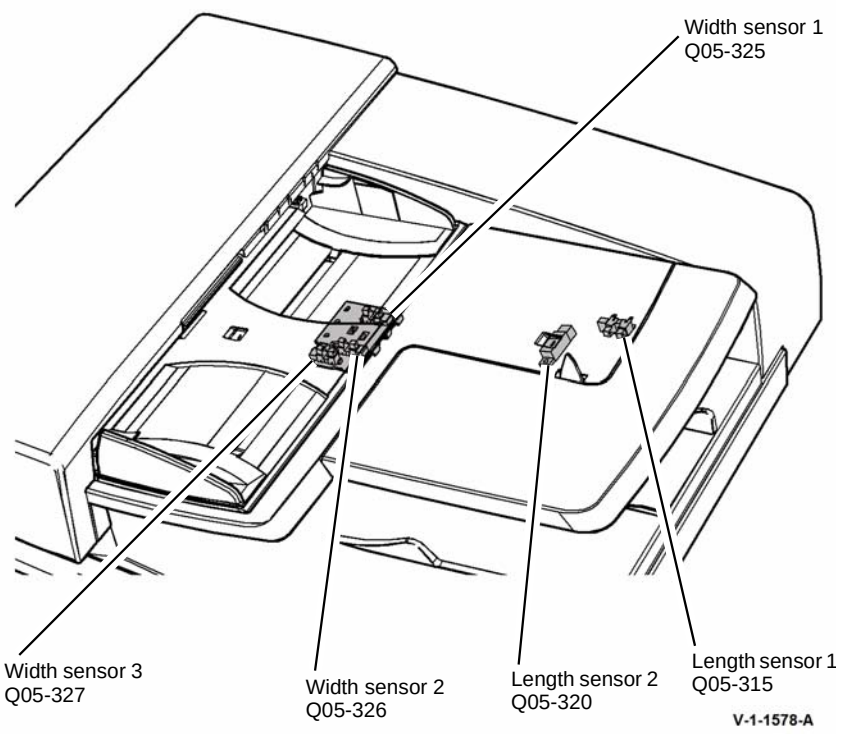


Figure 1 Component location

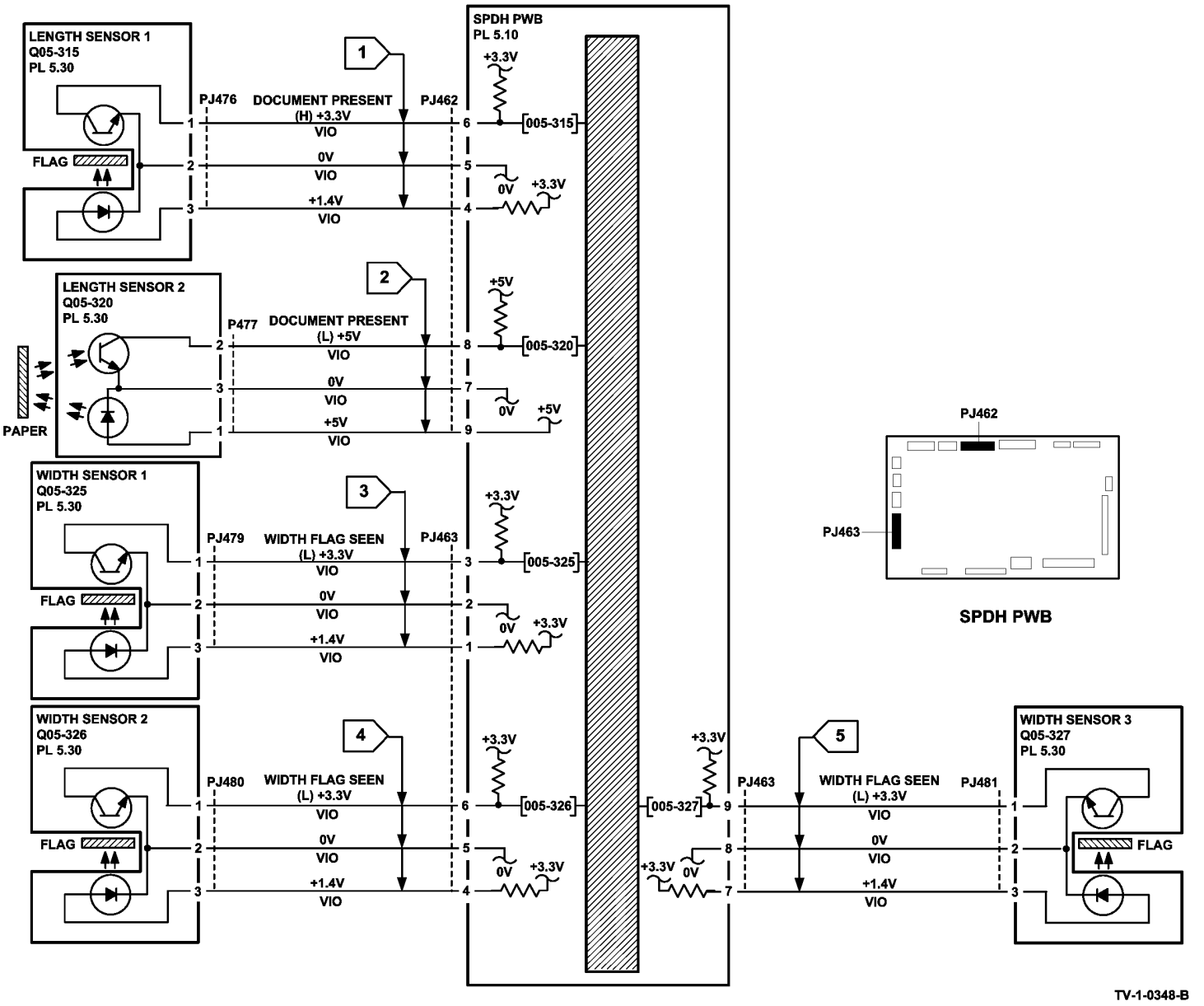


Figure 2 Circuit diagram

305B Last Sheet Out Sensor Failure RAP

Use this RAP if a message “Due to a system error all scanned jobs have been deleted” is displayed during a scanning or copying job.

Initial Actions

- Remove all documents from the SPDH and input tray.
- Ensure that:
  - The machine is not positioned below a bright light.
  - The sensors and the area around the sensors are clean.
  - There is nothing placed on the top cover that could overhang the input tray.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 005-308 to check the last sheet out sensor Q05-308, PL 5.30 Item 9. Actuate Q05-308. **The display changes.**

Y N

Go to Flag 1. Check Q05-308.

Refer to:

- Figure 1
- GP 11 How to Check a Sensor
- P/J463, SPDH PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Last sheet out sensor 1, PL 5.30 Item 9
- SPDH PWB, PL 5.10 Item 5

Perform SCP 5 Final Actions.

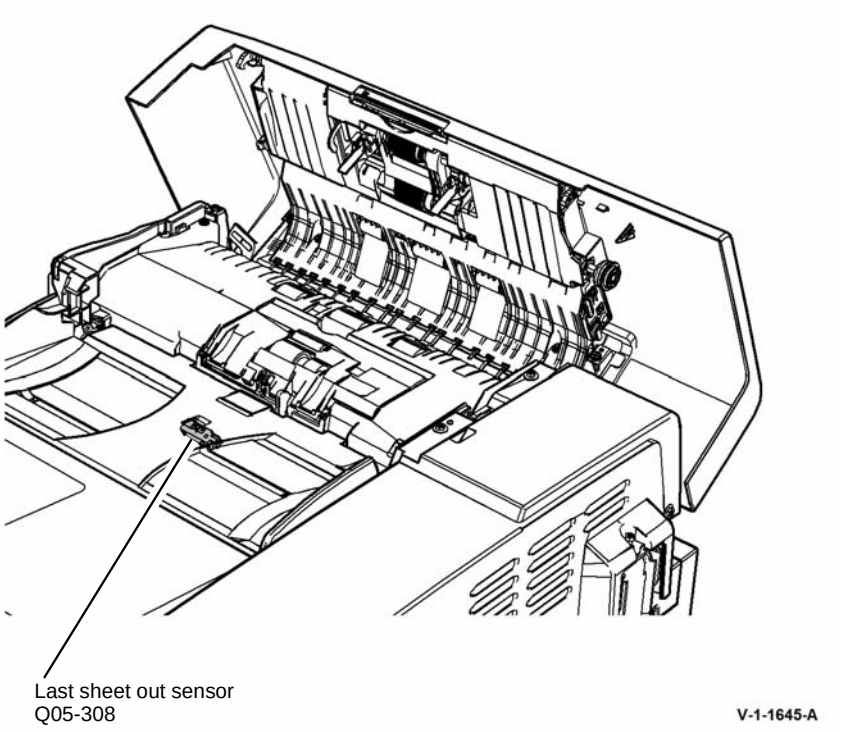


Figure 1 Component location

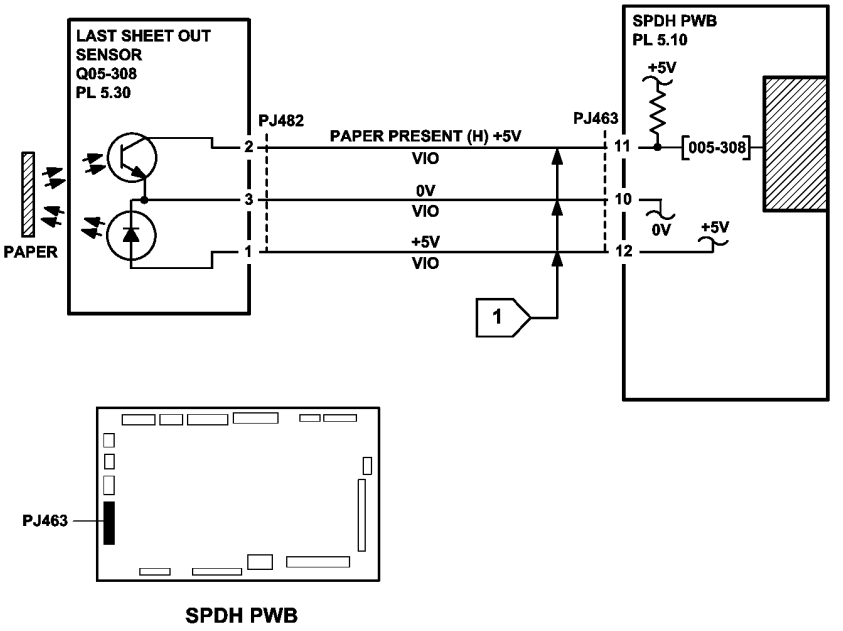


Figure 2 Circuit diagram

305C Document Present Failure RAP

Use this RAP when the SPDH behaves as follows:

- The SPDH detects a document when a document is not present in the input tray during the startup procedure.
- The SPDH detects a document when a document is not present in the input tray after a jam.

  NOTE: *Documents placed on the top cover of the SPDH can overhang the input tray and trigger the sensors. This can cause the SPDH to falsely detect a document, causing a feed error.*

- The SPDH does not detect a document when a document is present in the input tray.

Procedure

Go to the 305-958-00 SPDH Lift Home Sensor Failure RAP and check the doc present sensor, Q05-309.

305D Damaged Documents RAP

Use this RAP if the documents get damaged by the SPDH.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. ADJ 5.2 SPDH height adjustment.
2. Check the input tray assembly for damage, PL 5.30 Item 1.
   - Make sure that the document width guides move freely, PL 5.30 Item 2.
   - Check the restack arm for damage, PL 5.30 Item 7.
3. Open the SPDH top cover, PL 5.10 Item 8.
   - Check the document path for damage.
   - Check that the takeaway roll assembly, PL 5.17 Item 1 and idlers for damage and contamination, refer to ADJ 5.4.
   - Check the feed roll, PL 5.20 Item 6, nudger roll, PL 5.20 Item 7 and retard roll, PL 5.25 Item 3 for contamination or damage, refer to ADJ 5.4.
4. Raise the SPDH. Lower the jam clearance baffle assembly, Figure 1.
   - Check for and remove any pieces of paper.
   - Check the document path in the baffle area for damage.
   - Check the jam clearance baffle assembly for damage.
   - Check the mid scan roll, PL 5.17 Item 3 and the surrounding idlers, Figure 1 for contamination or damage. Ensure that the roll and idlers are clean and rotate freely, ADJ 5.4.
5. Check the CVT ramp assembly for contamination or damage.
6. Check the exit roll assembly and idlers, PL 5.17 Item 2. Remove the input tray assembly, REP 5.4 to access the exit roll.
7. Remove the lower pre scan roller assembly, REP 5.17. Check the pre scan roll assembly, PL 5.17 Item 4 and the lower pre scan rollers for contamination or damage. Ensure that the roll and idlers are clean and rotate freely, ADJ 5.4.
8. Make sure that the customer's documents are within the specification, refer to GP 20.

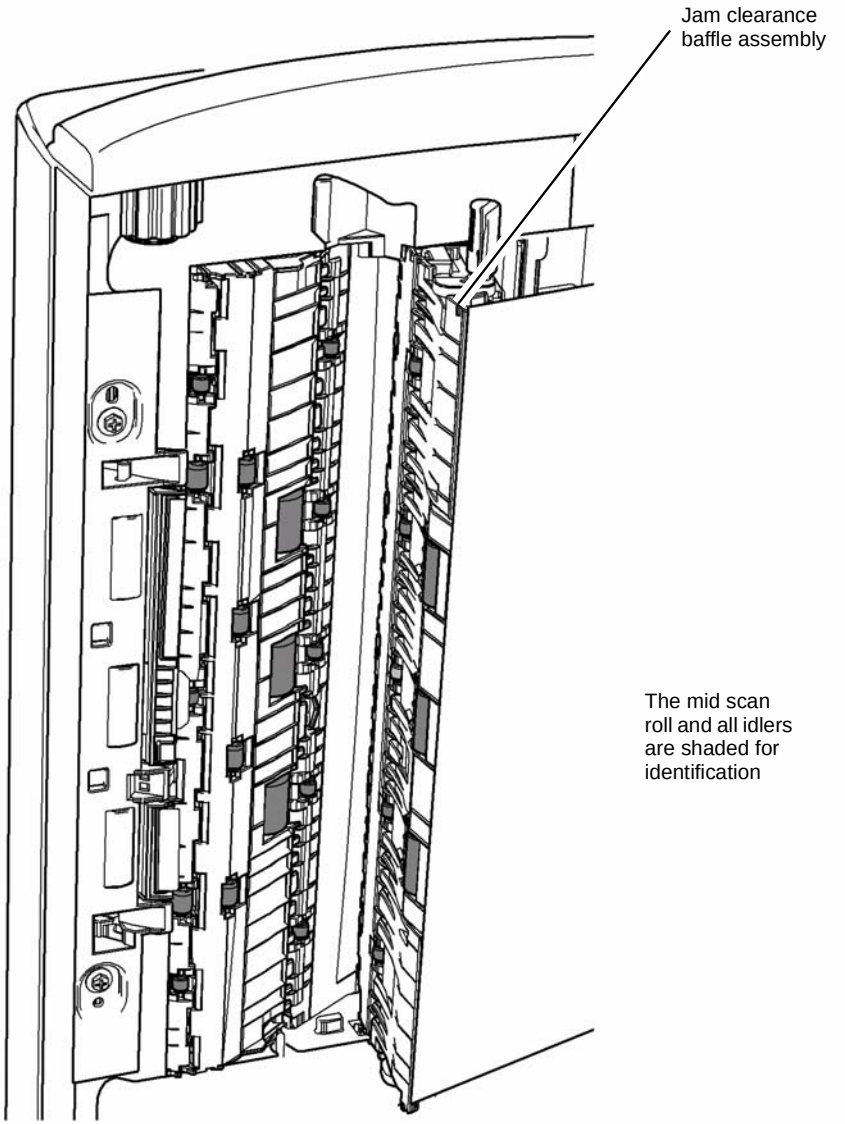


Figure 1 Component location

310-101-00, 310-102-00, 310-103-00 Lead Edge Late to Fuser Exit Switch Entry RAP

310-101-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a simplex sheet.

310-102-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 1.

310-103-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 2.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Before performing this procedure, check that the paper is not being skewed at any point between the paper tray and the fuser module. If skew is found, go to IQ8 Skew RAP.

Procedure

- If the speed of the machine is 45-55 ppm, go to 310-101-00A, 310-102-00A, 310-103-00A Lead Edge Late to Fuser Exit Switch RAP.
- If the speed of the machine is 65-90 ppm, go to 310-101-00B, 310-102-00B, 310-103-00B Lead Edge Late to Fuser Exit Switch RAP.

310-101-00A, 310-102-00A, 310-103-00A Lead Edge Late to Fuser Exit Switch RAP (45-55 ppm)

310-101-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a simplex sheet.

310-102-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 1.

310-103-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 2.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to 310-101-00, 310-102-00, 310-103-00 Lead Edge Late to Fuser Exit Switch Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the registration transport, Figure 2.
- Check for obstructions in the short paper path assembly, PL 10.25 Item 1.
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Refer to REP 10.1.
- Check the stripper fingers on the xerographic module.
- Check for paper in the fuser module.
- Check the fuser stripper fingers for contamination, PL 10.8 Item 4.
- If a 310-101-00 is caused by paper fed from the bypass tray, check for paper skew.
- If a 310-103-00 is caused by a skewed sheet on side 2, check the inverter decurler assembly, PL 10.11 Item 23. Also check the duplex paper path, PL 80.22 Item 1. Install new components as necessary.
- If 310-101-00 jams, check that all of the HT connectors are pushed fully home on the HVPS.
- If the fault is 310-101-00 and the paper is fed from tray 1 or tray 2. Check if the paper has excessive curl, causing the paper to be skewed when fed from the tray. To constrain the effect of the curl install the paper tray lip kit W/TAG 002 onto the paper tray, PL 70.10 Item 24.
- Install the XRU skids kit to eliminate paper jams caused by curled copies between the XRU and the fuser module, PL 90.20 Item 19.
- If the fault occurs only when paper is fed from tray 6, perform an all machine NVM initialisation from dC301.

- If 310-101-00 jams are concurrent with feeding small size media e.g. A5, 8.5 x 5.5 inch paper, ensure the machine does not have a W/TAG 001 short paper path installed, PL 10.25 Item 1.
- If 310-101 jams are caused when paper is fed from tray 5, perform dC301 NVM Initialization.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Enter dC330 code 010-100 fuser exit switch, S10-100. Press Start. Manually actuate the switch with a piece of paper, Figure 1. **The display changes.**

Y **N**

Go to Flag 1. Check S10-100. Refer to:

- GP 13 How to Check a Switch.
- Figure 1.
- P/J35, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new fuser exit switch, PL 10.8 Item 11. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

W/TAG 001 machines only. Enter dC330 code 010-065 vacuum transport fan, MOT10-065. Figure 3. Press Start, **The fan runs.**

Y **N**

Go to Flag 2. Check MOT10-065. Refer to:

- GP 10 How to Check a Motor.
- Figure 3.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new short paper path assembly, PL 10.25 Item 1. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main drive motor. Press Start. Add code 82-070 registration clutch, CL08-070. Press Start.

NOTE: *The clutch will switch off after 5 seconds.*

The jam clearance knob 4c, PL 80.15 Item 10, rotates.

Y **N**

Go to Flag 3. Check CL08-070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.

A

- 301B 0V Distribution RAP.

If necessary, install a new registration clutch, PL 80.15 Item 7. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Manually actuate the sensor Figure 2. **The display changes.**

Y **N**

Go to Flag 4. Check Q82-150. Refer to:

- GP 11 How to Check a Sensor.
- Figure 2.
- P/J16, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new registration sensor, PL 80.15 Item 3. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Check the following components, refer to GP 7:

- Registration roll, PL 80.15 Item 9.
- Roll assembly on the short paper path assembly W/TAG 001, PL 10.25 Item 1.
- Check the detack corotron and the connection to the HVPS. Refer to 391-060-00 HVPS Fault RAP
- The drive gear on the fuser module, PL 10.8 Item 1.
- The fuser drive gear on the main drives module, PL 40.17 Item 10.
- Fuser web motor and the fuser web, refer to the 310A Fuser Web Motor RAP.
- Check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.
- If the fault remains, perform the 301L LVPS Checkout RAP.

A

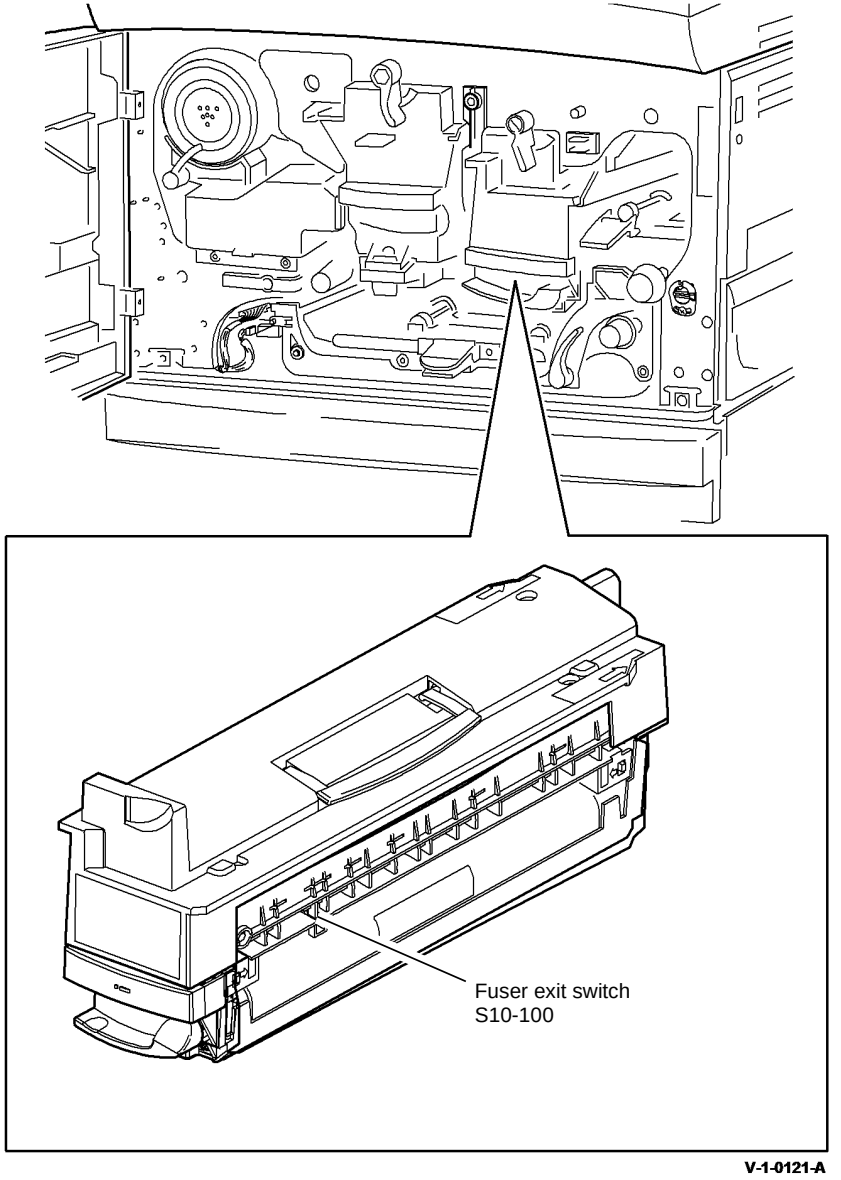


Figure 1 Component location

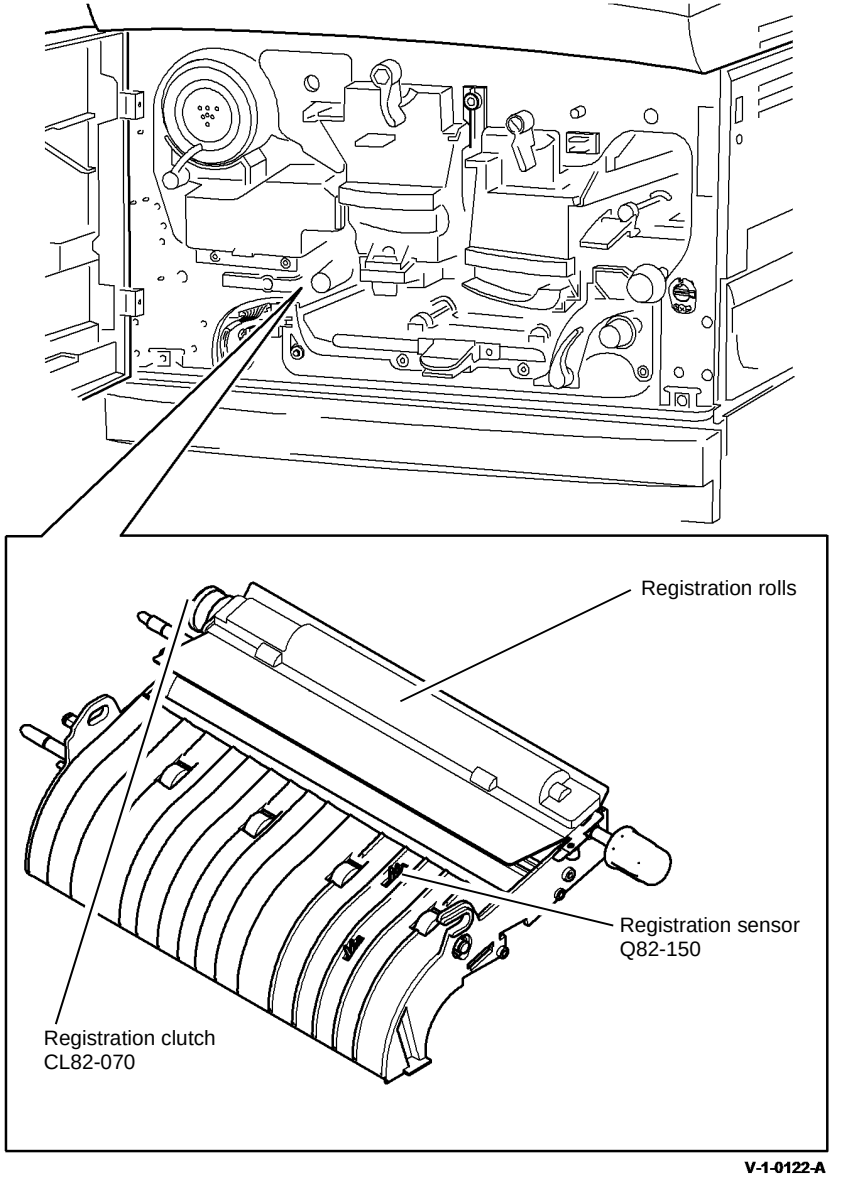


Figure 2 Component location

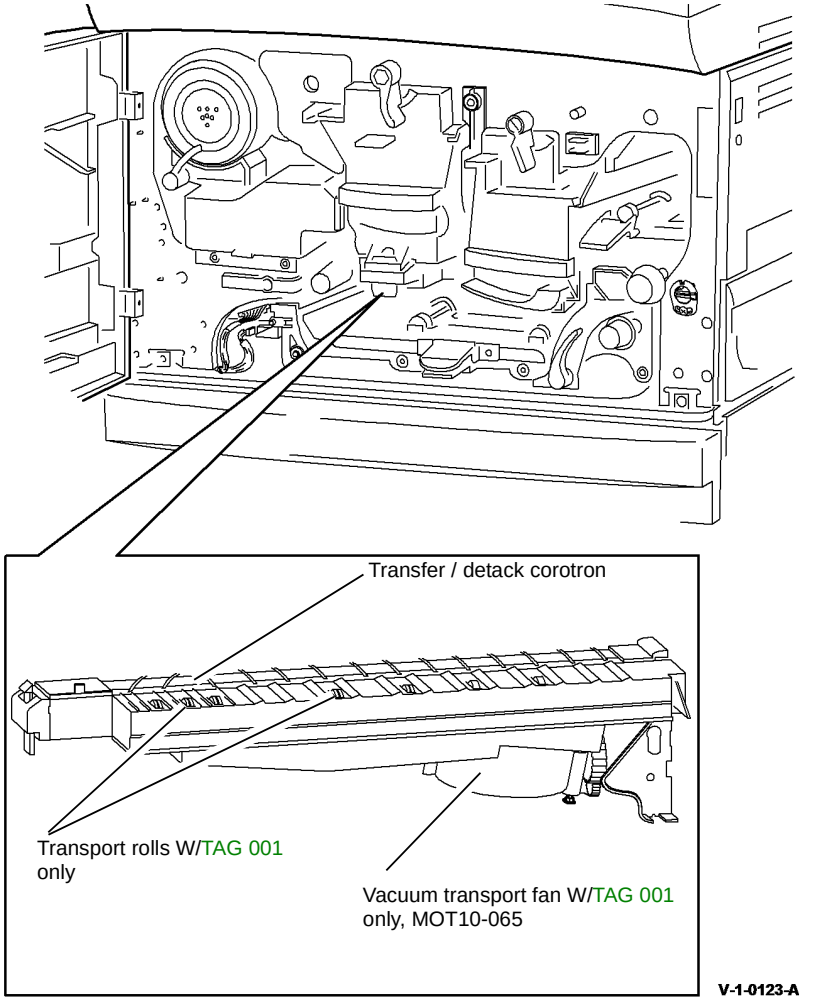


Figure 3 Component location

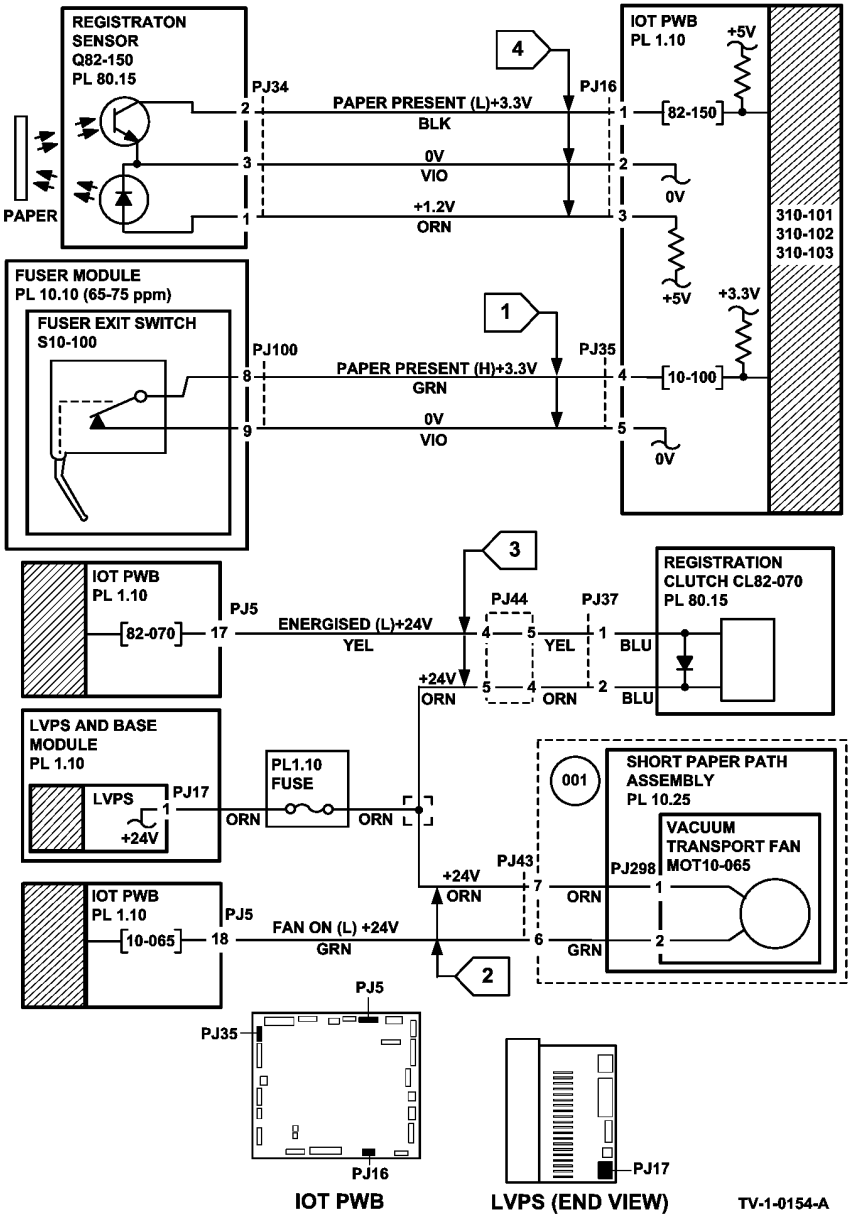


Figure 4 Circuit diagram

310-101-00B, 310-102-00B, 310-103-00B Lead Edge Late to Fuser Exit Switch RAP (65-90 ppm)

310-101-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a simplex sheet.

310-102-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 1.

310-103-00 The lead edge of the paper failed to actuate the fuser exit switch within the correct time after the registration clutch was energized for a duplex sheet side 2.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to 310-101-00, 310-102-00, 310-103-00 Lead Edge Late to Fuser Exit Switch Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the registration transport, Figure 2.
- Check for obstructions in the short paper path assembly, PL 10.25 Item 1.
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Refer to REP 10.1.
- Check the stripper fingers on the xerographic module.
- Check for paper in the fuser module.
- Check the fuser stripper fingers for contamination, PL 10.10 Item 4.
- If a 310-101-00 is caused by paper fed from the bypass tray, check for paper skew.
- If a 310-103-00 is caused by a skewed sheet on side 2, check the inverter decurler assembly, PL 10.11 Item 23. Also check the duplex paper path, PL 80.20 Item 1. Install new components as necessary.
- If 310-101-00 jams, check that all of the HT connectors are pushed fully home on the HVPS.
- If the fault is 310-101-00 and the paper is fed from tray 1 or tray 2. Check if the paper has excessive curl, causing the paper to be skewed when fed from the tray. To constrain the effect of the curl install the paper tray lip kit W/TAG 002, PL 70.10 Item 24.
- Install the XRU skids kit to eliminate paper jams caused by curled copies between the XRU and the fuser module, PL 90.20 Item 19.
- If the fault occurs only when paper is fed from tray 6, perform an all machine NVM initialisation from dC301.
- If 310-101-00 jams are concurrent with feeding small size media e.g. A5, 8.5 x 5.5 inch paper, ensure the machine does not have a W/TAG 001 short paper path installed, PL 10.25 Item 1.
- If 310-101 jams are caused when paper is fed from tray 5, perform dC301 NVM Initialization.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Enter dC330 code 010-100 fuser exit switch, S10-100. Press Start. Manually actuate the switch with a piece of paper, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check S10-100. Refer to:

- GP 13 How to Check a Switch.
- Figure 1.
- P/J35, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new fuser exit switch, PL 10.10 Item 11. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

W/TAG 001 machines only. Enter dC330 code 010-065 vacuum transport fan, MOT10-065. Figure 3. Press Start, **The fan runs.**

Y N

Go to Flag 2. Check MOT10-065. Refer to:

- GP 10 How to Check a Motor.
- Figure 3.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new short paper path assembly, PL 10.25 Item 1. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main drive motor. Press Start. Add code 82-070 registration clutch, CL82-070. Press Start.

NOTE: *The clutch will switch off after 5 seconds.*

The jam clearance knob 4c, PL 80.17 Item 10, rotates.

Y N

Go to Flag 3. Check CL82-070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.

A

A

- 301B 0V Distribution RAP.

If necessary, install a new registration clutch, PL 80.17 Item 7. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Manually actuate the sensor with a piece of paper, Figure 2. **The display changes.**

Y N

Go to Flag 4. Check Q82-150. Refer to:

- GP 11 How to Check a Sensor.
- Figure 2.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new registration sensor, PL 80.17 Item 3. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Check the following components, refer to GP 7:

- Registration roll, PL 80.17 Item 9.
- **W/TAG 001 machines only.** Roll assembly on the short paper path assembly, PL 10.25 Item 16.
- Check the detack corotron and the connection to the HVPS. Refer to 391-060-00 HVPS Fault RAP
- The drive gear on the fuser module, PL 10.10 Item 1.
- The fuser drive gear on the main drives module, PL 40.12 Item 10.
- Fuser web motor and the fuser web, refer to the 310A Fuser Web Motor RAP.
- Check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.
- If the fault remains, the +24V supply from the LVPS may be faulty. Perform the 301L LVPS Checkout RAP.

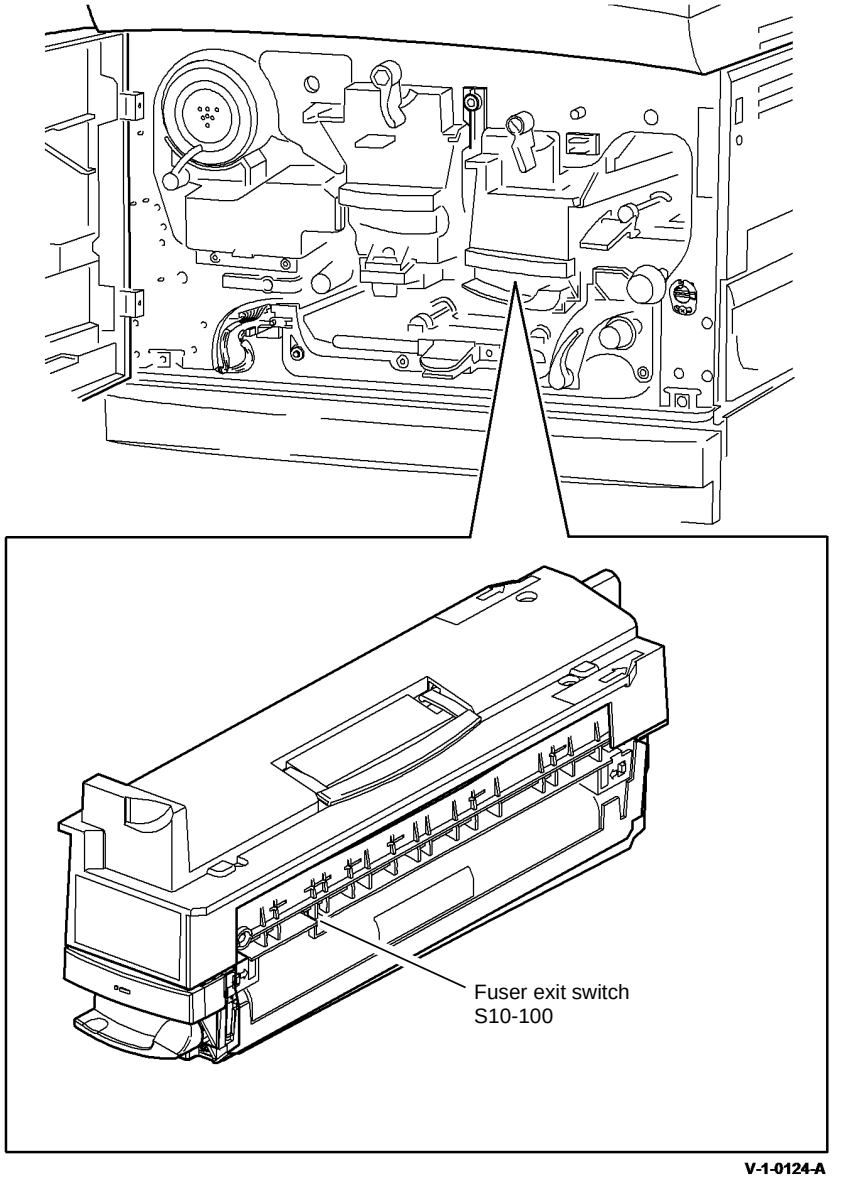


Figure 1 Component location

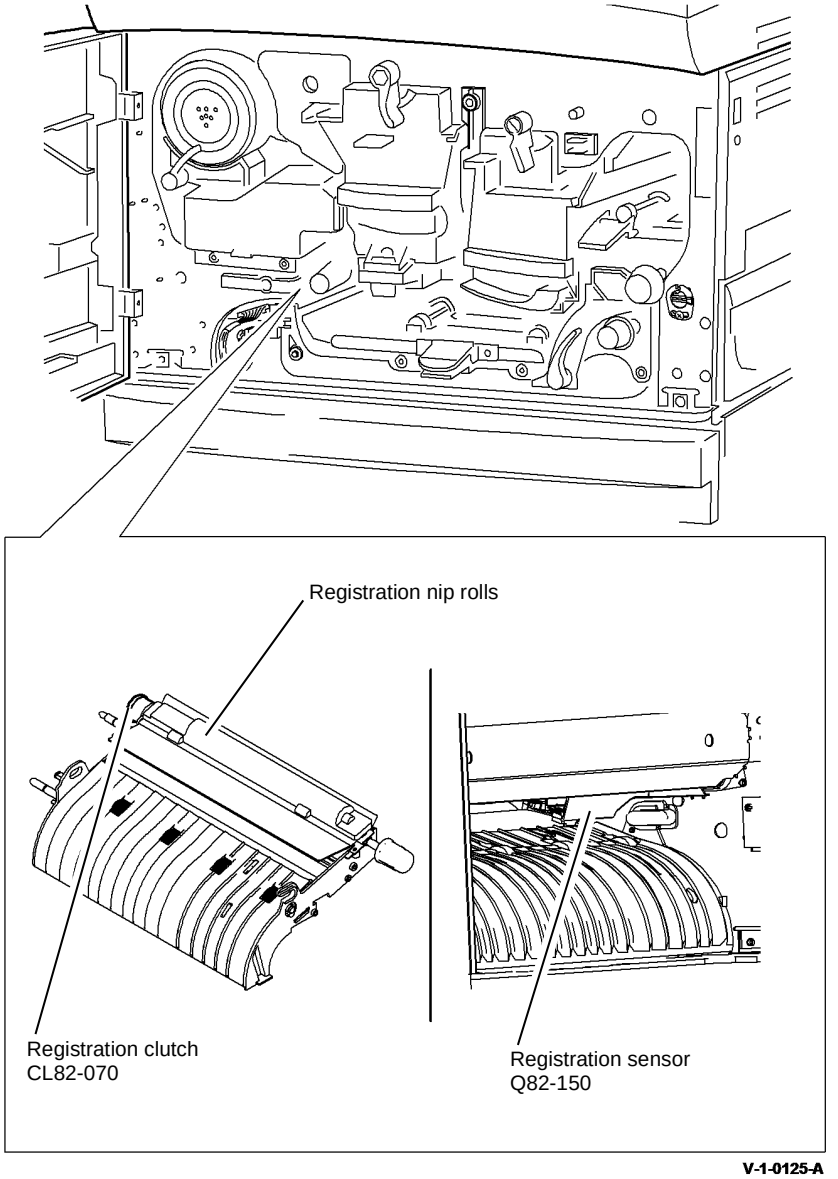


Figure 2 Component location

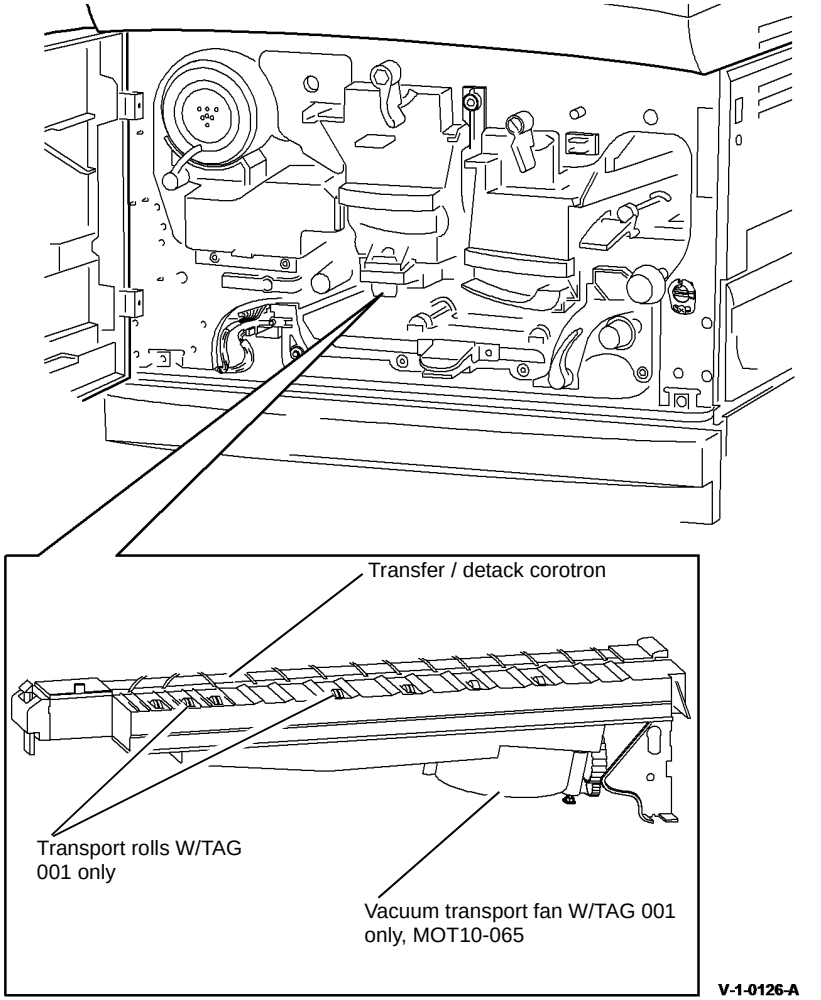


Figure 3 Component location

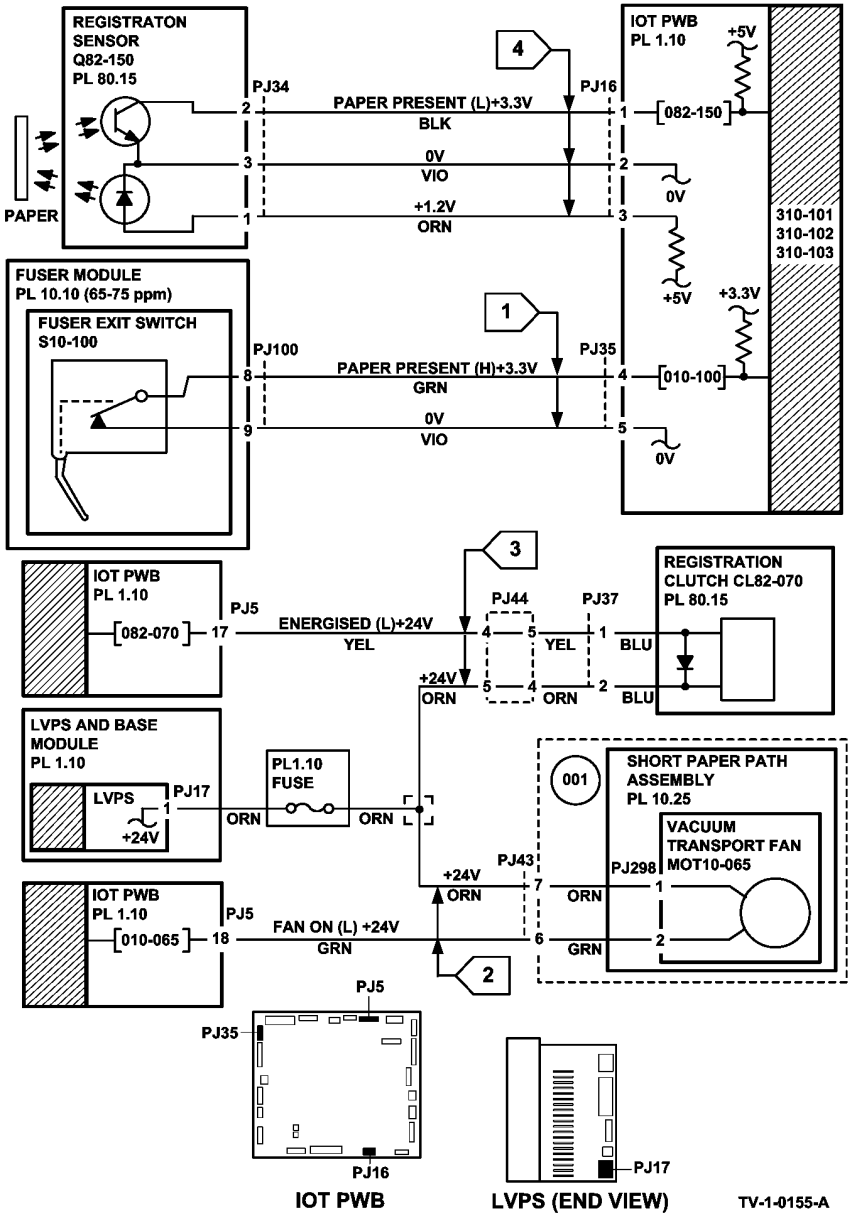


Figure 4 Circuit diagram

310-107-00, 310-108-00, 310-109-00, 310-110-00 Trail Edge Late from Fuser Exit Switch RAP

310-107-00 The trail edge of the paper failed to de-actuate the fuser exit switch within the correct time after the trail edge at the registration sensor, for a simplex non inverted sheet.

310-108-00 The trail edge of the paper failed to de-actuate the fuser exit switch within the correct time after the trail edge at the registration sensor, for a simplex inverted sheet.

310-109-00 The trail edge of the paper failed to de-actuate the fuser exit switch within the correct time after the trail edge at the registration sensor, for a duplex sheet side 1.

310-110-00 The trail edge of the paper failed to de-actuate the fuser exit switch within the correct time after the trail edge at the registration sensor, for a duplex sheet side 2.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

- Check that the paper size information on the UI matches the paper used in the paper trays and the bypass tray.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Refer to REP 10.1.
- Check for paper in the fuser module.
- Check the fuser stripper fingers for contamination, (45-55 ppm) PL 10.8 Item 4 or (65-90 ppm) PL 10.10 Item 4.
- Check the upper baffle assembly, Figure 1.
- Check the entrance to the output device and the alignment of the device.
- **45-55 ppm only.** If the fault occurs when feeding a transparency, install the inverter transparency feed kit W/TAG 004, PL 10.12 Item 24.
- Install the XRU skids kit to eliminate paper jams caused by curled copies between the XRU and the fuser module, PL 90.20 Item 19.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Enter dC330 code 010-100 fuser exit switch, S10-100, Figure 1. Press Start. Manually actuate the switch with a piece of paper. **The display changes.**

Y N

Go to Flag 1. Check S10-100. Refer to:

- GP 13 How to Check a Switch
- P/J35, IOT PWB
- 301D +3.3V Distribution RAP
- 301B 0V Distribution RAP

If necessary, install a new fuser exit switch, (45-55 ppm) PL 10.8 Item 11 or (65-90 ppm) PL 10.10 Item 11. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 10-045 inverter path solenoid, SOL10-045, Figure 1. Press Start. **The solenoid energized.**

Y N

Go to Flag 2 (45 to 55ppm) or Flag 4 (65 to 90ppm). Check SOL10-045. Refer to:

- GP 12 How to Check a Solenoid or Clutch
- P/J5, IOT PWB
- P/J17, LVPS
- Fuse, PL 1.10 Item 9, GP 7
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

If necessary, install a new inverter path solenoid, PL 10.11 Item 14. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-050 inverter nip solenoid, SOL10-050, Figure 1. Press Start. **The solenoid energizes.**

Y N

Go to Flag 5 (45 to 55ppm) or Flag 6 (65 to 90ppm). Check SOL10-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch
- P/J5, IOT PWB
- P/J17, LVPS
- Fuse, PL 1.10 Item 9, GP 7
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

If necessary, install a new inverter nip solenoid, PL 10.11 Item 6. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-030 inverter motor, MOT10-030, Figure 1. Press start. **The jam clearance knob, 2B, PL 10.15 Item 13, is stationary and the motor can be heard.**

Y N

The jam clearance knob, 2B, PL 10.15 Item 13, rotates counterclockwise.

Y N

Go to Flag 3. Check MOT10-030. Refer to:

- GP 10 How to Check a Motor

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- P/J4, IOT PWB
- P/J45, P/J55 inverter motor driver PWB
- 301G +24V Distribution RAP
- 301E +5V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Inverter motor, PL 10.14 Item 13
- Inverter motor driver PWB, PL 10.11 Item 22

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Install a new inverter motor driver PWB, PL 10.11 Item 22.

Check the following components, refer to GP 7:

- The drive gear on the fuser module, PL 10.10 Item 1
- The fuser drive gear on the main drives module, (45-55 ppm) PL 40.17 Item 10 or (65-90 ppm) PL 40.12 Item 10
- Fuser web motor and the fuser web, refer to the 310A Fuser Web Motor RAP
- Drives between inverter decurler assembly and the main drives module, PL 10.15
- Post fuser exit roller, PL 10.12 Item 9

  NOTE: *Excessive post fuser exit roll wear causes buckle between the fuser and the inverter decurler assembly. This can cause severe ripple on the trail edge of A3 (11x17 inch) sheet and paper jams.*

- Upper baffle, PL 10.12 Item 22
- Baffle guide, PL 10.13 Item 3

If the fault remains, the +24V supply from the LVPS may be faulty. Perform the 301L LVPS Checkout RAP.

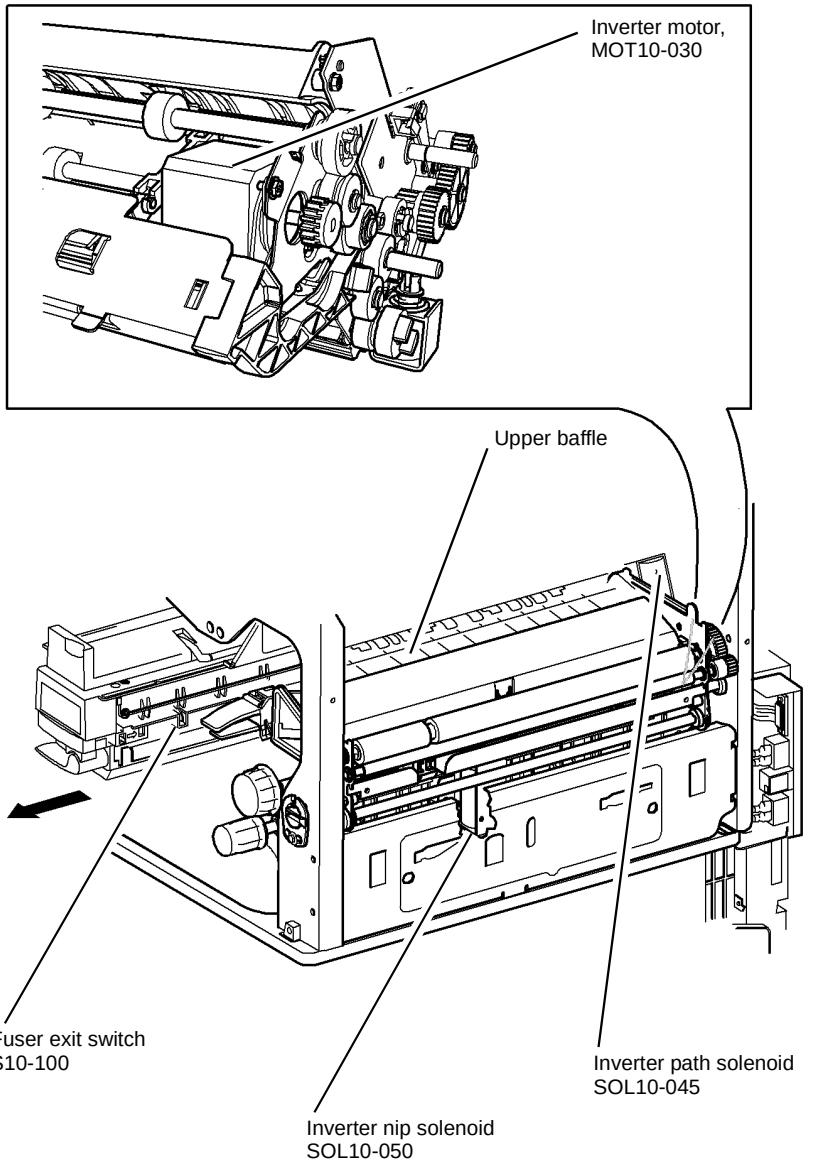

Figure 1 Component location

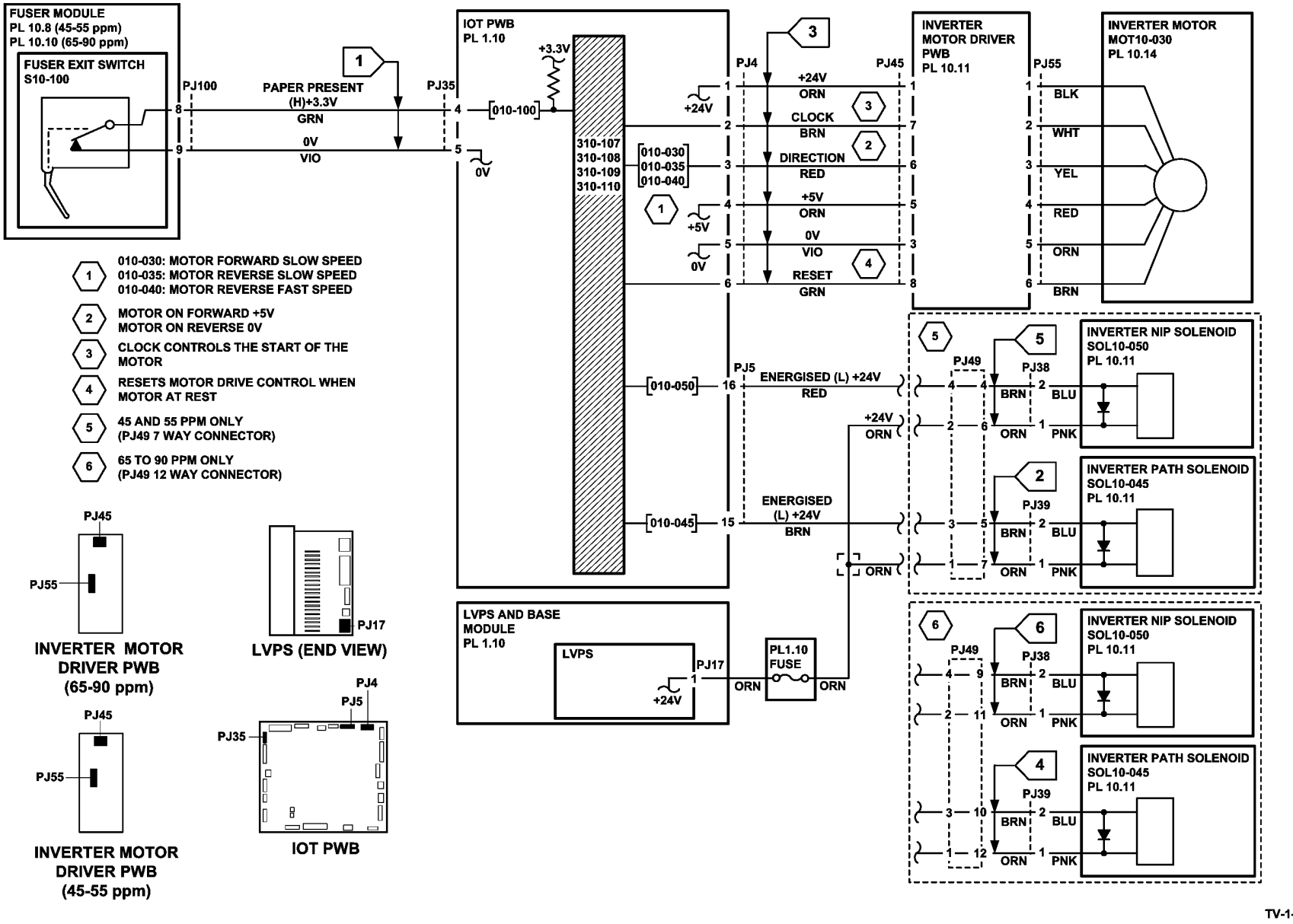

Figure 2 Circuit diagram

310-120-00, 310-121-00, 310-126-00 IOT Exit Sensor RAP

310-120-00 The lead edge of the paper failed to reach the IOT exit sensor within the correct time after the trail edge at the fuser exit switch for an inverted sheet.

310-121-00 The lead edge of the paper failed to reach the IOT exit sensor within the correct time after the trail edge at the fuser exit switch for an non inverted sheet.

310-126-00 The trail edge of the paper failed to clear the IOT exit sensor within the correct time.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.

  NOTE: *If the fault occurs only with heavy weight paper of 120gsm (32 lb.) or greater that is being inverted, enter the Tools Mode and Stock Settings. Change the stock type to heavyweight for the respective tray. If the problem persists, perform the RAP.*

- **45-55 ppm only.** If the faults occur when feeding transparency, install a inverter transparency feed kit W/TAG 004, PL 10.12 Item 24.
- If the fault is 310-120-00 and the paper is fed from tray 1 or tray 2. Check if the paper has excessive curl and is causing the paper to be skewed when fed from the tray. To constrain the effects of curl install the paper tray lip kit W/TAG 002, PL 70.10 Item 24.
- If the fault is 310-120-00 and the paper is skewed with up-curl ensure a W/O TAG 001 short paper path assembly is installed.
- Check for obstructions in the inverter area, Figure 1.
- Check the upper and lower gravity fingers in the inverter decurler assembly are unimpeded and move freely, Figure 2, GP 7.
- Check for obstructions in the exit area.
- Check that the output device is parallel to the machine. Refer to the appropriate adjustment:
  - ADJ 11.2-110 Machine to 2K LCSS Alignment.
  - ADJ 11.2-150 Machine to LVF BM Alignment.
  - ADJ 11.1-171 Machine to HVF/HVF BM, HVF BM to Tri-folder Alignment.
- For 310-126 faults. If the paper jam is at the entrance to the output device. Go to the relevant output device copy damage RAP:
  - 311G-120 Copy Damage in the 1K LCSS RAP.
  - 311H-110 Copy Damage in the 2K LCSS RAP.
  - 311H-150 Copy Damage in the LVF BM RAP.
  - 311E-171 Copy Damage in the HVF BM RAP.
- For 310-126-00 faults. If the paper jam is at the entrance to the output device and the output device fails to initialize after the front door is closed. Go to the relevant output device initialization RAP.
  - 311B-120 1K LCSS Initialization Failure RAP.
  - 311C-110 2K LCSS Initialization Failure RAP.
  - 311C-150 LVF BM Initialization Failure RAP.
  - 311K-171 HVF Initialization Failure RAP.
- If the fault is caused by a multifeed of sheets, go to the OF8 Multifeed RAP.

Procedure

NOTE: *Ensure that the door interlock switch is cheated when checking +24V components.*

Enter dC330 code 010-120 IOT exit sensor, Q10-120. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1 (45 to 55ppm) or Flag 5 (65 to 90ppm). Check Q10-120. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new IOT exit sensor, PL 10.11 Item 13. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-050 inverter nip solenoid, SOL10-050. Press Start. **The solenoid energises.**

Y N

Go to Flag 2 (45 to 55ppm) or Flag 6 (65 to 90ppm). Check SOL10-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter nip solenoid, PL 10.11 Item 6. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-045 inverter path solenoid, SOL 10-045. Press Start. **The solenoid energizes.**

Y N

Go to Flag 3 (45 to 55ppm) or Flag 7 (65 to 90ppm). Check SOL 10-045. Refer to:

- GP 12 How to Check a Solenoid or Clutch.

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- P/J5, IOT PWB
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter path solenoid, PL 10.11 Item 14. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-030 inverter motor, MOT10-030. Press Start. **The jam clearance knob, 2B, PL 10.15 Item 13, is stationary and the motor can be heard.**

Y N

The jam clearance knob, 2B, PL 10.15 Item 13, rotates counterclockwise.

Y N

Go to Flag 4. Check MOT10-030. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB
- P/J45, P/J55 inverter motor driver PWB
- 301G +24V Distribution RAP
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Inverter motor, PL 10.14 Item 13.
- Inverter motor driver PWB, PL 10.11 Item 22.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Install a new inverter motor driver PWB, PL 10.11 Item 22.

Check the following components, refer to GP 7:

- Idler rolls, PL 10.12 Item 15.
- Upper baffle, PL 10.12 Item 22.
- Decurler roll, PL 10.13 Item 8.
- Nip split shaft assembly, PL 10.11 Item 4.
- The drive gear on the fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.
- The fuser drive gear on the main drives module, (45-55 ppm) PL 40.17 Item 10 or (65-90 ppm) PL 40.12 Item 10.
- Check the IOT exit sensor mounting bracket, PL 10.11 Item 10. The bracket holds the IOT exit sensor in the correct position, PL 10.11 Item 13.

If the fault remains, the +24V supply from the LVPS may be faulty. Perform the 301L LVPS Checkout RAP.

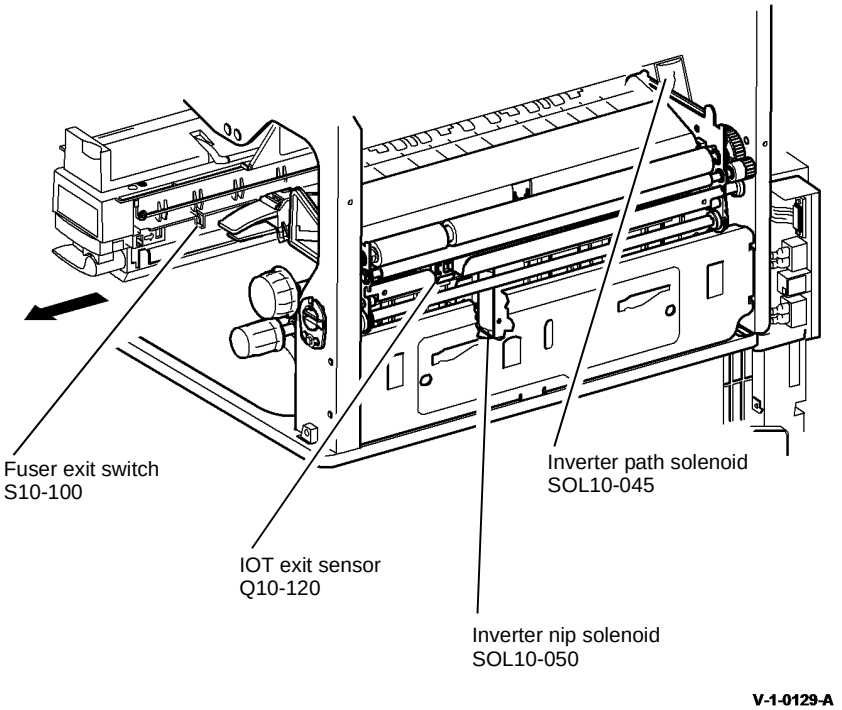

Figure 1 Component location

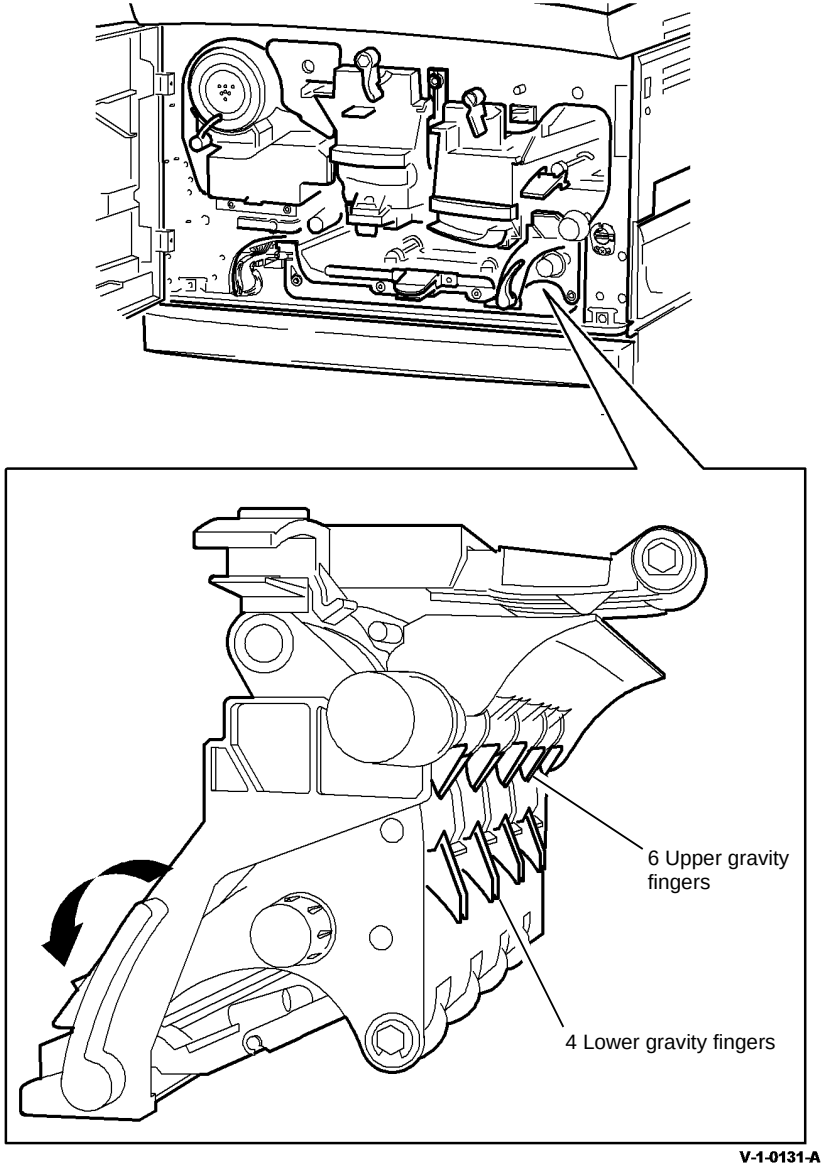

Figure 2 Component location

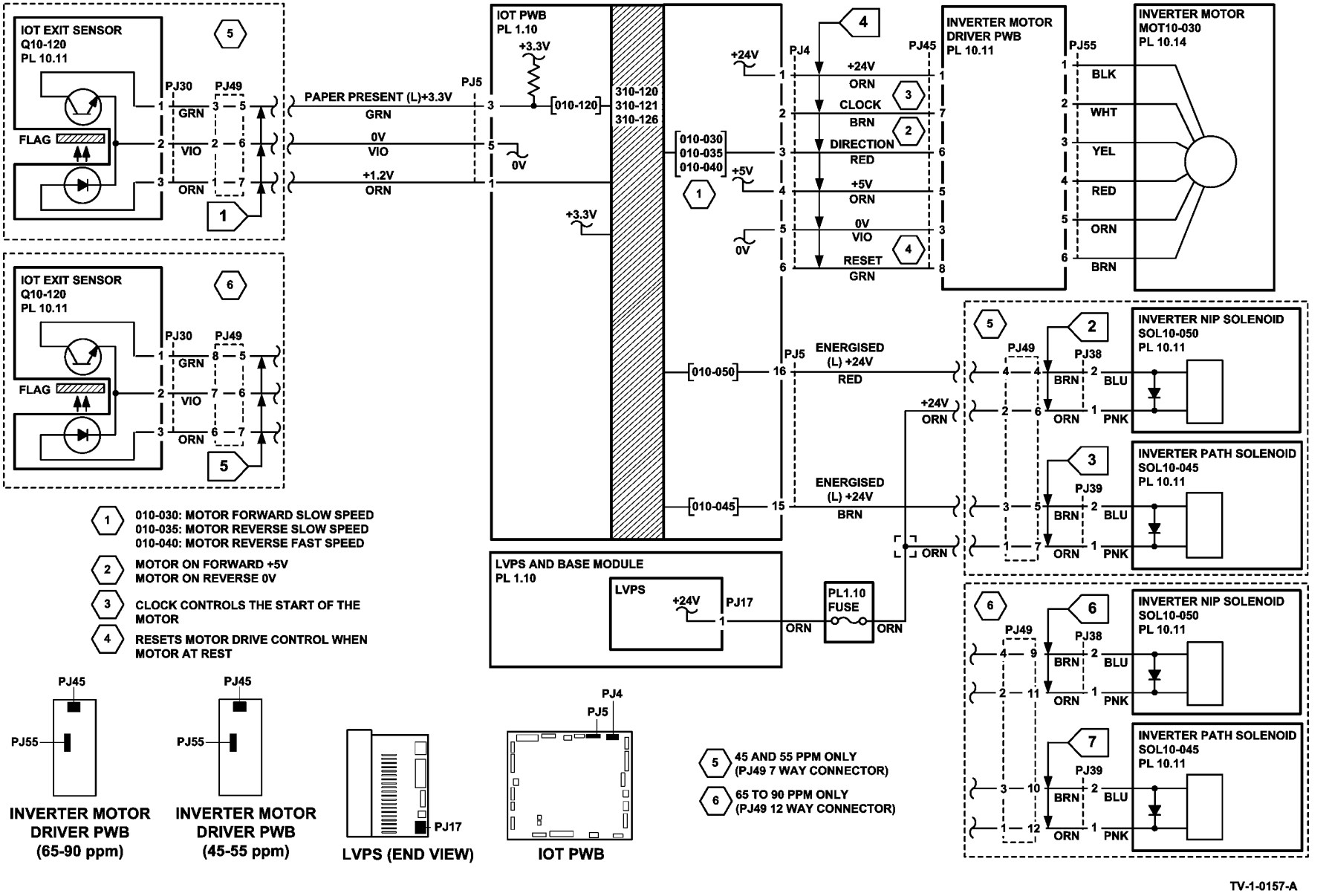

Figure 3 Circuit diagram

310-132-00, 310-133-00, 310-134-00 Lead Edge Late to Inverter Sensor RAP

310-132-00 The lead edge of the paper failed to actuate the inverter sensor within the correct time after the fuser exit switch is made, for a simplex sheet.

310-133-00 The lead edge of the paper failed to actuate the inverter sensor within the correct time after the fuser exit switch is made, for a duplex 1 sheet.

310-134-00 The lead edge of the paper failed to actuate the inverter sensor within the correct time after the fuser exit switch is made, for a duplex 2 sheet.

NOTE: *The inverter sensor is only used on 65-90 ppm machines.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

- Check that the paper size information on the UI matches the paper used in the paper trays and the bypass tray.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Refer to REP 10.1.
- Check for paper in the fuser module.
- Check the fuser stripper fingers for contamination, PL 10.10 Item 4.
- Check the inverter upper baffle assembly, Figure 1.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Enter dC330 code 010-100 fuser exit switch, S10-100. Press Start. Manually actuate the switch with a piece of paper. **The display changes.**

Y **N**

Go to Flag 1. Check S10-100. Refer to:

- GP 13 How to Check a Switch.
- P/J35, IOT PWB.
- 301D +3.3V Distribution RAP.

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- 301B 0V Distribution RAP.

If necessary, install a new fuser exit switch, PL 10.10 Item 11. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 sensor code 010-105 inverter sensor, Q10-105. Press Start. Use a piece of paper to actuate the sensor, Figure 2. **The display changes.**

Y **N**

Go to Flag 2. Check Q10-105. Refer to:

- GP 11. How to Check a Sensor.
- P/J61, IOT PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter sensor, PL 10.12 Item 19. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Check the following components, refer to GP 7:

- The drive gear on the fuser module, PL 10.10 Item 1.
- The fuser drive gear on the main drives module, PL 40.12 Item 10.
- Fuser web motor and the fuser web, refer to the 310A Fuser Web Motor RAP.
- Drives between inverter decurler assembly and the main drives module, PL 10.15.
- Post fuser exit roller, PL 10.12 Item 9.

  NOTE: *Excessive post fuser exit roll wear causes buckle between the fuser and the inverter decurler assembly. This can cause severe ripple on the trail edge of A3 (11x17 inch) sheet and paper jams.*

- Upper baffle, PL 10.12 Item 22.
- Baffle guide, PL 10.13 Item 3.

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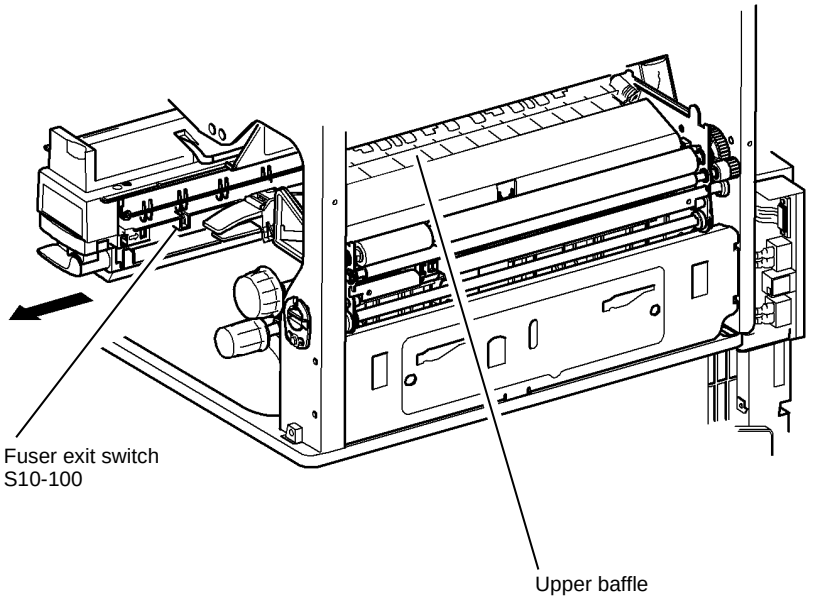

Figure 1 Component location

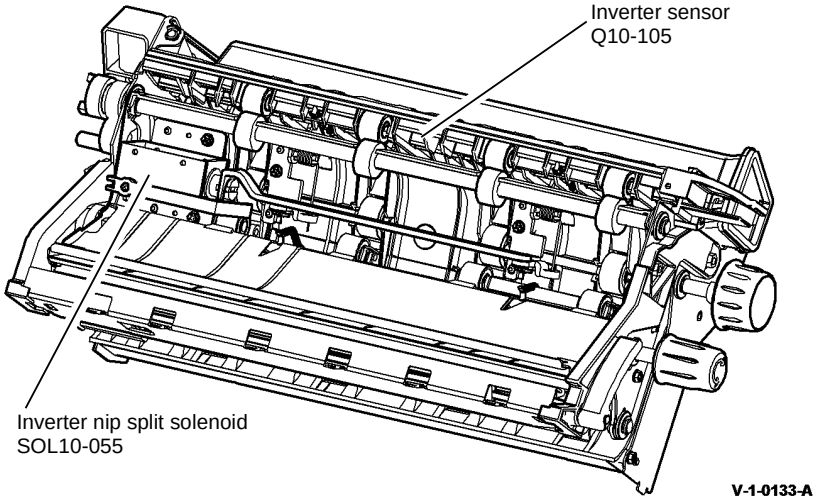

Figure 2 Component location

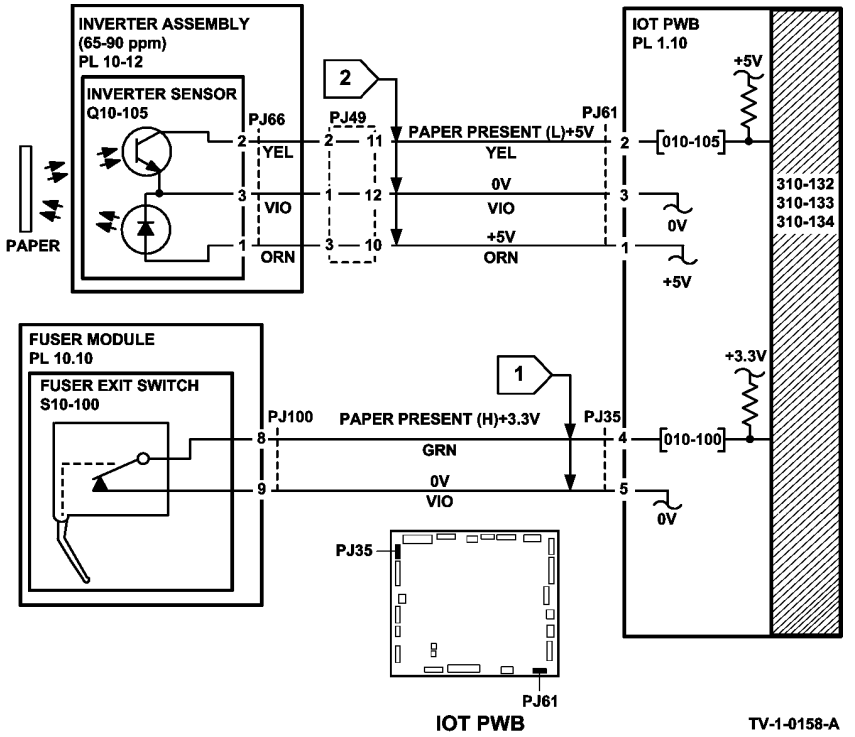

Figure 3 Circuit diagram

310-135-00, 310-136-00, 310-137-00, 310-138-00 Trail edge Late from Inverter Sensor RAP

310-135-00 The trail edge of the paper failed to de-actuate the inverter sensor within the correct time, for a simplex non invert sheet.

310-136-00 The trail edge of the paper failed to de-actuate the inverter sensor within the correct time, for a simplex inverted sheet.

310-137-00 The trail edge of the paper failed to de-actuate the inverter sensor within the correct time, for a duplex sheet side 1.

310-138-00 The trail edge of the paper failed to de-actuate the inverter sensor within the correct time, for a duplex sheet side 2.

NOTE: *The inverter sensor is only used on 65-90 ppm machines.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.

  NOTE: *If the fault occurs only with heavy weight paper of 120gsm (32 lb.) or greater that is being inverted, enter the Tools Mode and Stock Settings. Change the stock type to heavyweight for the appropriate tray. If the problem persists, perform the procedure in this RAP.*

- Check for obstructions in the inverter area, Figure 1.
- Check the upper and lower gravity fingers in the inverter decurler assembly are unimpeded and move freely, Figure 2.
- Check for obstructions in the exit area.
- If the fault is caused by a multifeed of sheets, go to the OF8 Multifeed RAP.

Procedure

NOTE: *Ensure that the door interlock switch is cheated when checking +24V components.*

Enter dC330 code 010-105 inverter sensor, Q10-105. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1. Check Q10-120. Refer to:

- GP 11 How to Check a Sensor.
- P/J61, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter sensor, PL 10.12 Item 19. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-050 inverter nip solenoid, SOL10-050. Press Start. **The solenoid energises.**

Y N

Go to Flag 2 (45 to 55ppm) or Flag 6 (65 to 90ppm). Check SOL10-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter nip solenoid, PL 10.11 Item 6. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-045 inverter path solenoid, SOL 10-045. Press Start. **The solenoid energizes.**

Y N

Go to Flag 3 (45 to 55ppm) or Flag 7 (65 to 90ppm). Check SOL 10-045. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new inverter path solenoid, PL 10.11 Item 14. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

65-90 ppm only. Enter dC330 code 010-055 tri-roll nip split solenoid, SOL 10-055. Press Start. **The solenoid energizes.**

Y N

Go to Flag 5. Check SOL 10-055. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J61, IOT PWB
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new tri-roll nip split solenoid, PL 10.14 Item 1. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

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Enter dC330 code 010-030 inverter motor, MOT10-030. Press Start. **The jam clearance knob, 2B, PL 10.15 Item 13, is stationary and the motor can be heard.**

Y N

The jam clearance knob, 2B, PL 10.15 Item 13, rotates counterclockwise.

Y N

Go to Flag 4. Check MOT10-030. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB
- P/J45, P/J55 inverter motor driver PWB
- 301G +24V Distribution RAP
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Inverter motor, PL 10.14 Item 13.
- Inverter motor driver PWB, PL 10.11 Item 22.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Install a new inverter motor driver PWB, PL 10.11 Item 22.

Check the following components, refer to GP 7:

- Idler roll, PL 10.12 Item 15.
- Upper baffle, PL 10.12 Item 22.
- Decurler roll, PL 10.13 Item 8.
- Nip split shaft assembly, PL 10.11 Item 4.
- The drive gear on the fuser module, PL 10.10 Item 1.
- The fuser drive gear on the main drives module, PL 40.12 Item 10.

If the fault remains, the +24V supply from the LVPS may be faulty. Perform the 301L LVPS Checkout RAP.

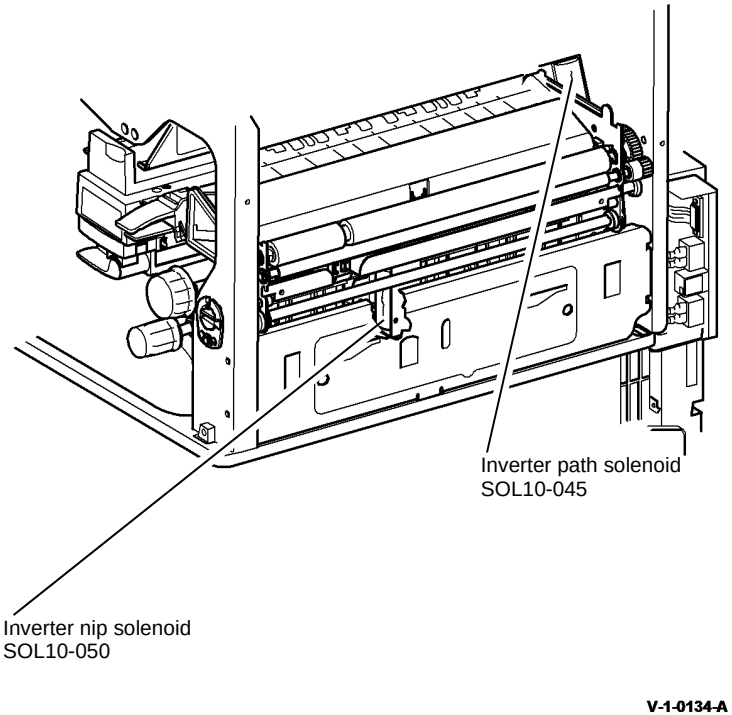

Figure 1 Component location

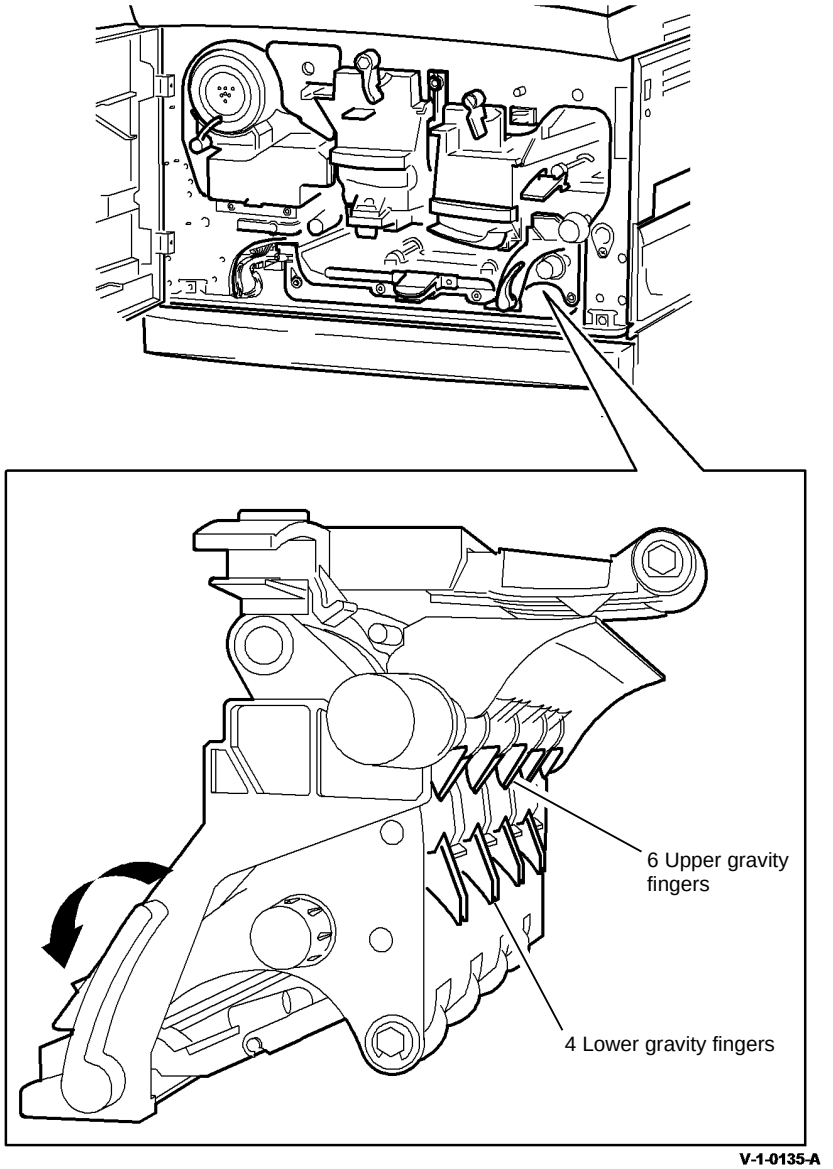

Figure 2 Component location

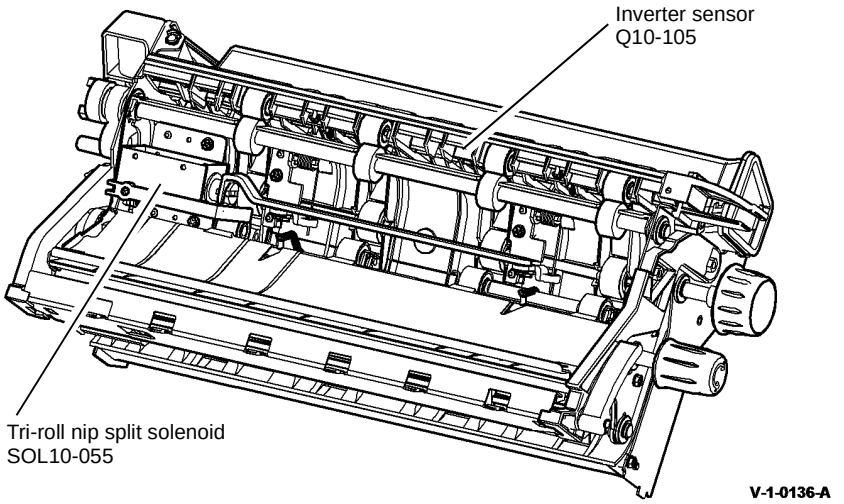

Figure 3 Inverter decurler assembly

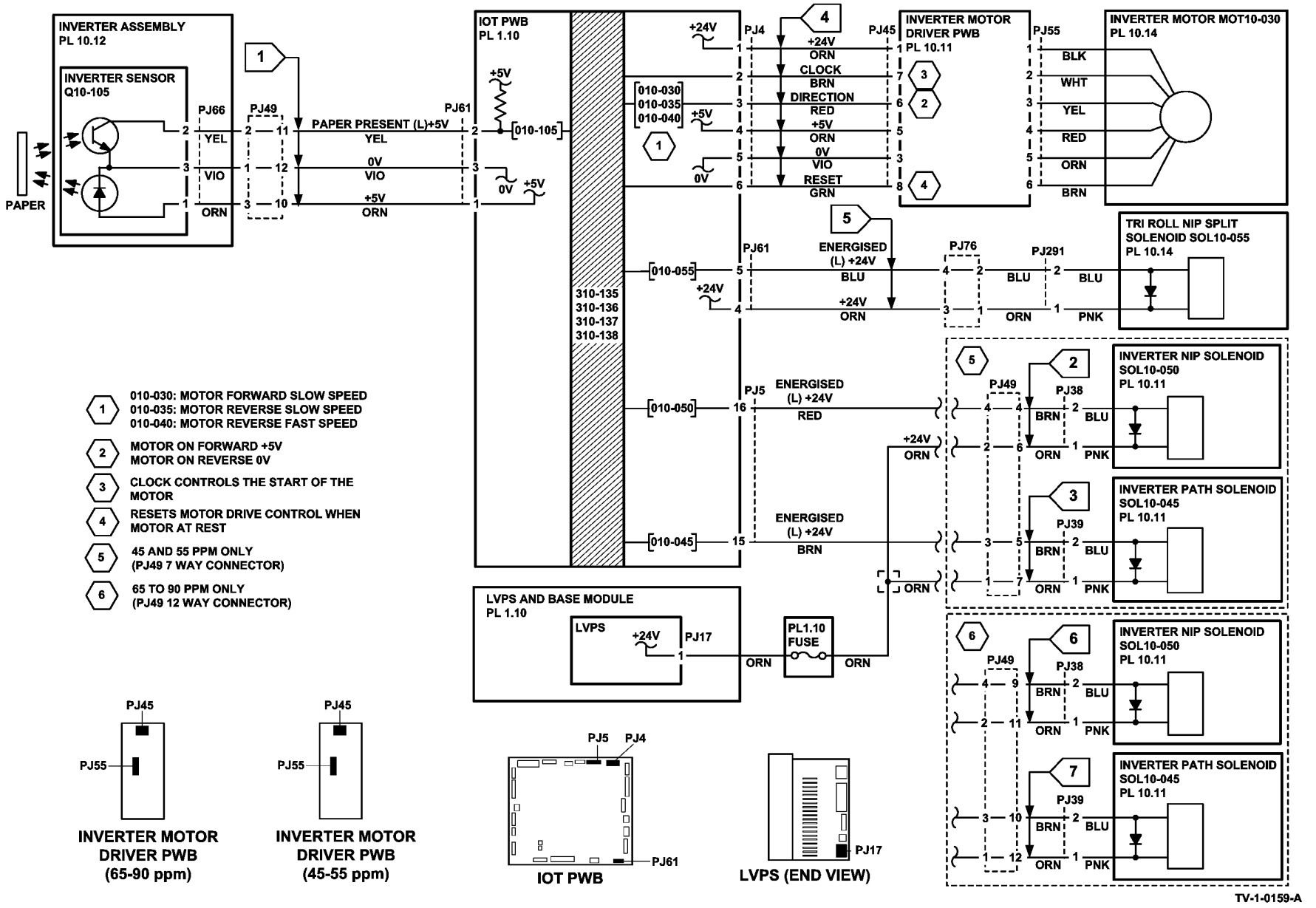

Figure 4 Circuit diagram

310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 Fuser Over Temperature RAP

310-315-00 The difference between 2 consecutive thermistor readings exceeds a given value.

310-320-00 During standby or run mode, the thermistor reading is not within the target temperature range.

310-321-00 Over temperature during standby mode, the thermistor reading is not within the target temperature range

310-323-00 Over temperature during run mode, the thermistor reading is not within the target temperature range.

310-340-00 Fuser temperature sensor A reading monitors above its normal operating temperature.

310-350-00 The hardware comparator detects a fuser reading greater than 240 degrees centigrade or a short circuit thermistor.

310-360-00 Fuser temperature sensor B reading is greater than the normal operating temperature.

310-365-00 The fuser module is above the recommended operating temperature.

310-380-00 The fuser delta value between the temperature sensors A and B is to high.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

- If there are number of 310-321-00 fault codes in the fault history of the machine, check if the customer has been running transparency jobs or nominal papers at card stock settings. This fault can be generated when the temperature changes between the standby and run. This is a normal function of the machine and should not effect the customer operation.
- Check that the fuser temperature NVM settings in dC131, are set to default. Refer to NVM location 710-001 though to 710-093. Ensure that the values are set to the default level. If the values are not at default then, 10-320-00, 10-321, 10-340-00 and 10-360-00 may appear in the fault log.
- Check the fuser module connector, Figure 1 and fuser connector assembly, Figure 2 for damage.
- Check that the photoreceptor fan, PL 90.25 Item 7 is working correctly and that the direction of air flow is into the machine, refer to the 390C Photoreceptor Fan RAP. Check that the intake grille at the rear of the machine is not blocked and there is not a heat source such as a radiator immediately behind the machine. Check that the photoreceptor duct, PL 90.25 Item 5 and the lower duct, PL 90.25 Item 8 are correctly installed.

Procedure

Switch off the machine, then switch on the machine, GP 14. **The display shows Ready to Copy.**

Y N

Refer to Figure 3. Go to Flag 1. The voltage at the temperature sensors A and B should be 2.9 volts when the sensors are cold. In standby mode the voltage should be 0.78 to 0.98 volts. Refer to:

- P/J35, IOT PWB.
- 301D +3.3 V Distribution RAP.
- 301B 0V Distribution RAP

Before new components are installed, restore the NVM values to default.
Perform the following as necessary:

- Install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.
- 301L LVPS Checkout RAP.
- OF7 IOT PWB Diagnostics RAP.

Perform SCP 5 Final Actions.

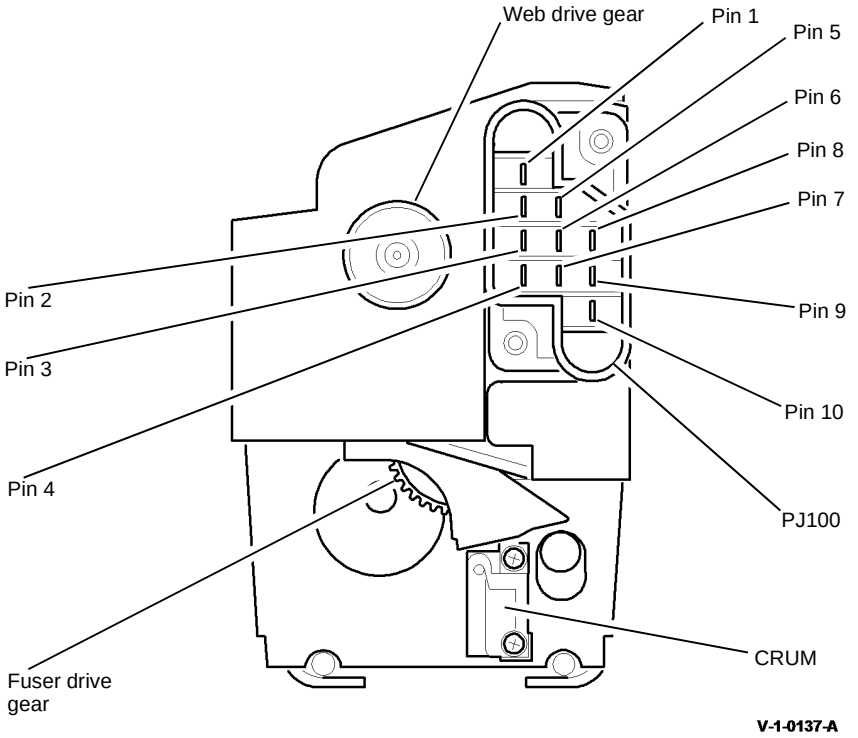

Figure 1 Component location

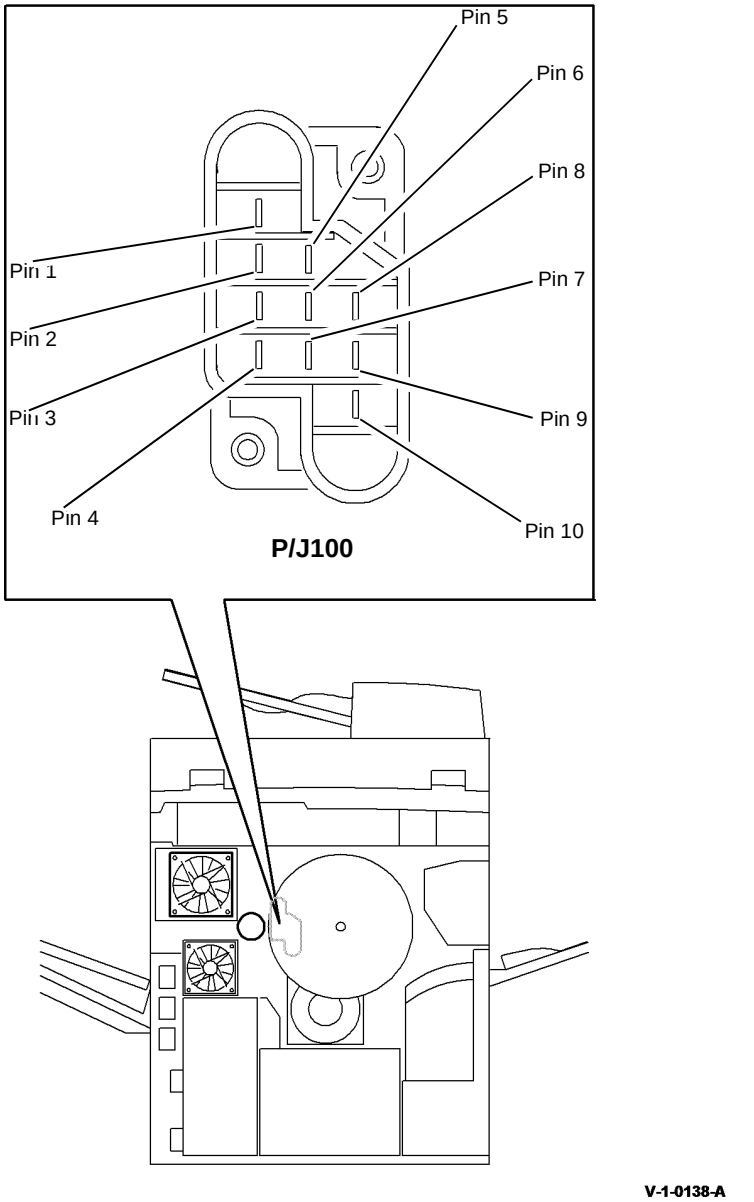

Figure 2 Component location

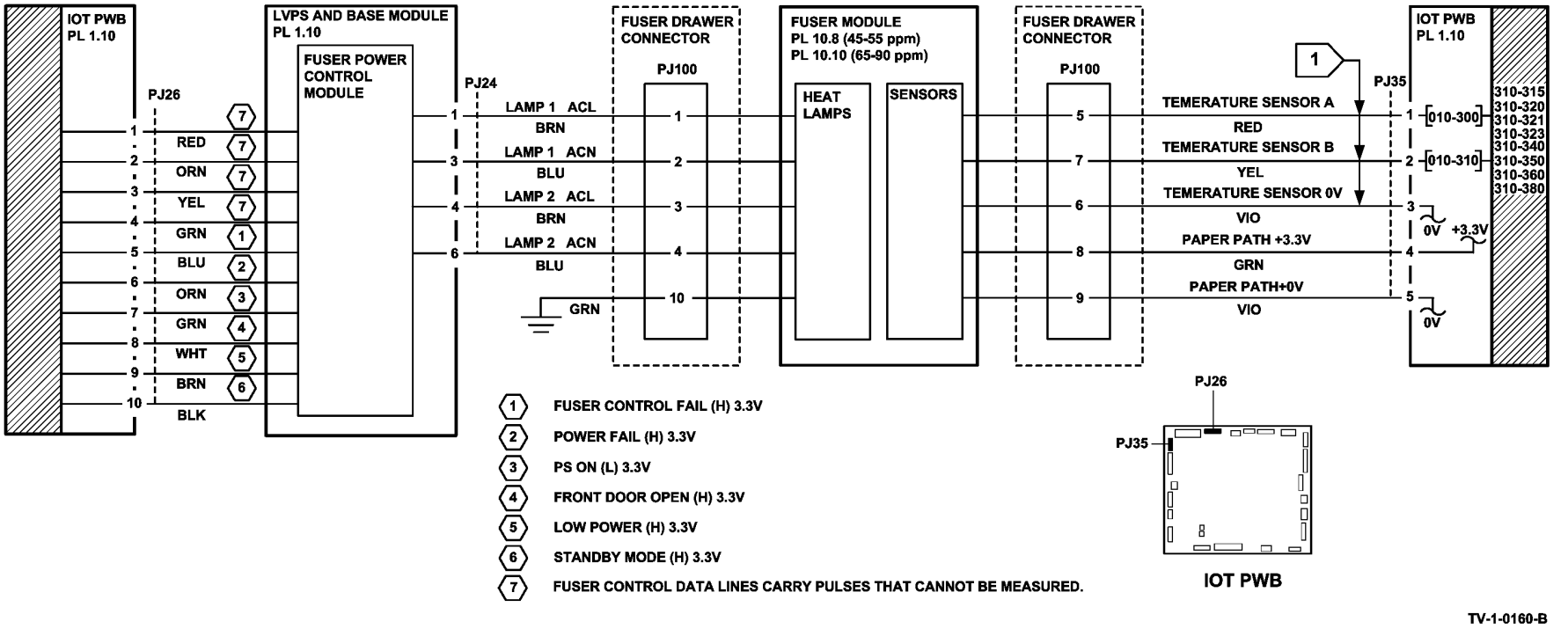

Figure 3 Circuit diagram

310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 Fuser Under Temperature RAP

310-322-00 Under temperature during standby mode, the thermistor reading is not within the target temperature range

310-324-00 under temperature during run mode, the thermistor reading is not within the target temperature range

310-325-00 The fuser control task watchdog timer has not been reset within a specified period.

310-330-00 The initial fuser temperature rise was not achieved within 30 seconds from the start of warm up mode or the standby temperature was not reached within 150 seconds.

310-370-00 During power save mode, the thermistor reading is not within the target value, after the fuser has cooled to the power save temperature.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

- Switch off the machine, then switch on the machine, GP 14.
- If a number of 310-322-00 fault codes are in the fault history of the machine, check if the customer has been running transparency jobs or nominal papers at card stock settings. This fault can be generated when the temperature changes between the standby and run. This is a normal function of the machine and should not effect the customer operation.
- Check that the fuser temperature NVM settings in dC131, are set to default. Refer to NVM location 710-001 though to 710-093. Ensure that the values are set to the default level. If the fuser temperatures are not set to default, 310-322-00 may appear in the fault log.

Procedure

Switch off the machine GP 14. Remove the fuser module and check the continuity between pin 1 and pin 2 and between pin 3 and pin 4 on the fuser module connector, Figure 1. **There is continuity.**

Y N

Install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

Install the fuser module. Disconnect PJ24, Figure 3. Go to Flag 2 and check for continuity between pin 1 and 3 and between pins 4 and 6 at the harness end. **There is continuity.**

Y N

Check the fuser connector assembly, Figure 2. If necessary, install a new fuser connector assembly, (45-55 ppm) PL 40.15 Item 9 or (65-90 ppm) PL 40.10 Item 9.

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WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

NOTE: *The voltage will be 100% of the ACL voltage when the machine is switched on from cold and pulse between 60% and 100% during standby.*

Connect PJ24. Go to Flag 2. Check for ACL at PJ24. Switch on the machine, GP 14. **ACL is available at PJ24 between pin 1 and 3, and between pin 4 and 6.**

Y N

Perform the OF7 IOT PWB Diagnostics RAP. If the fault remains, perform the 301L LVPS Checkout RAP.

Go to Flag 1. With the fuser cold, check for +2.9V at pin 1 and at pin 2. **+2.9V is available at both pins.**

Y N

Go to Flag 1. Check the wiring and connectors. Refer to:

- P/J35, IOT PWB.
- 301D +3.3 V Distribution RAP.
- 301B 0V Distribution RAP

Perform the OF7 IOT PWB Diagnostics RAP. If the fault persists, install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

If the fault persists, install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

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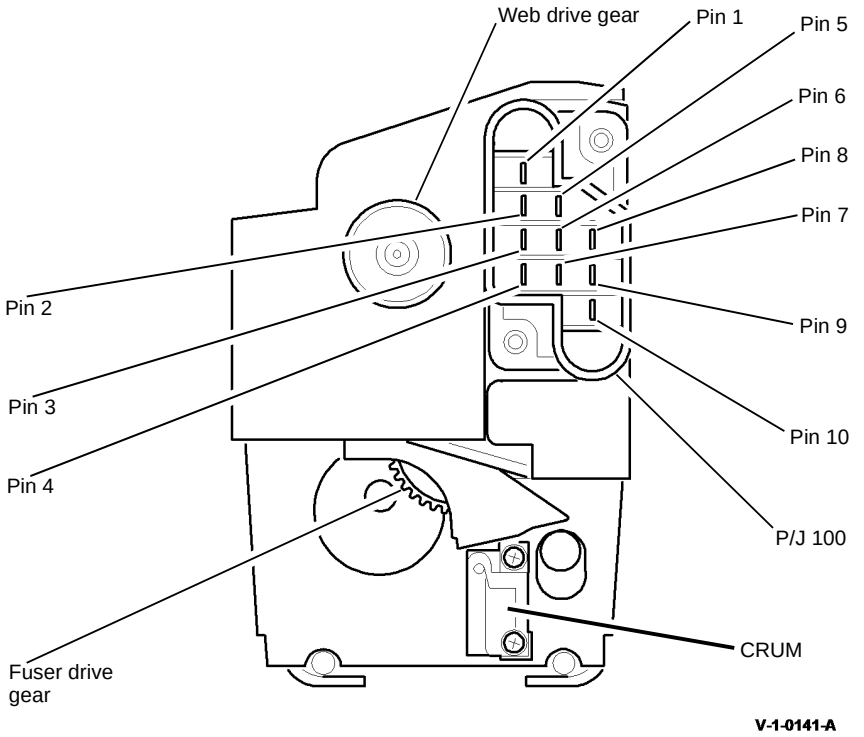

Figure 1 Component location

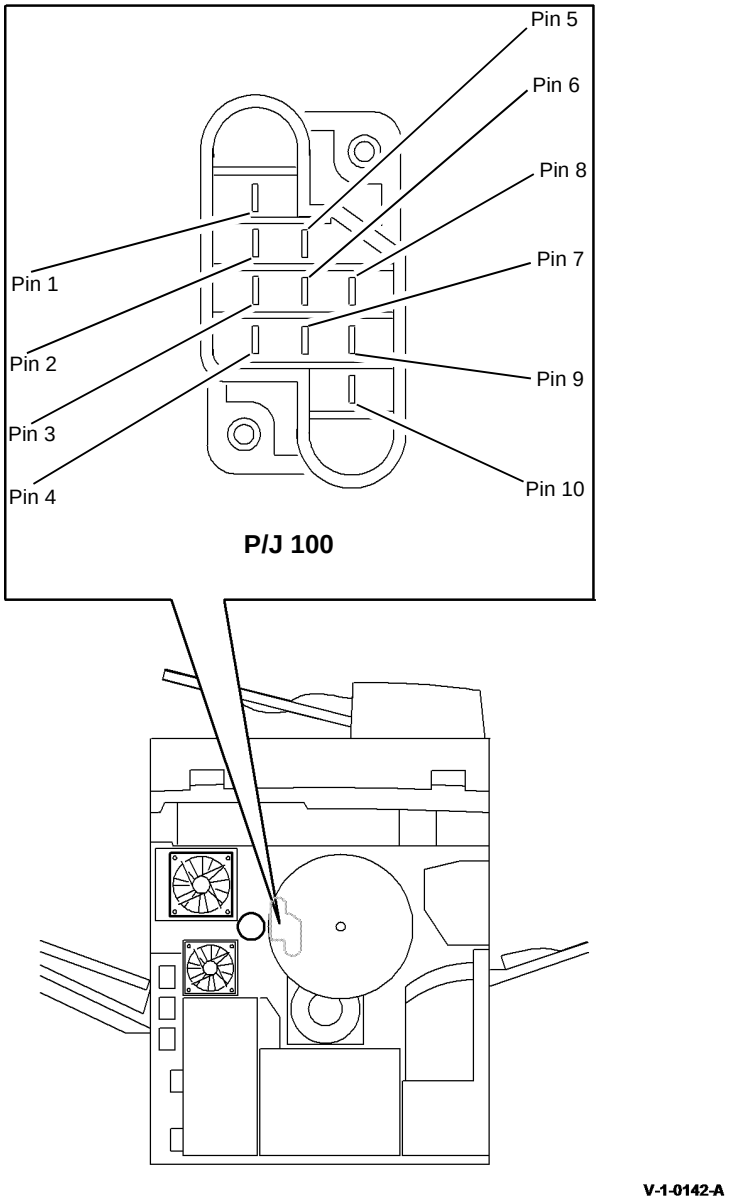

Figure 2 Component location

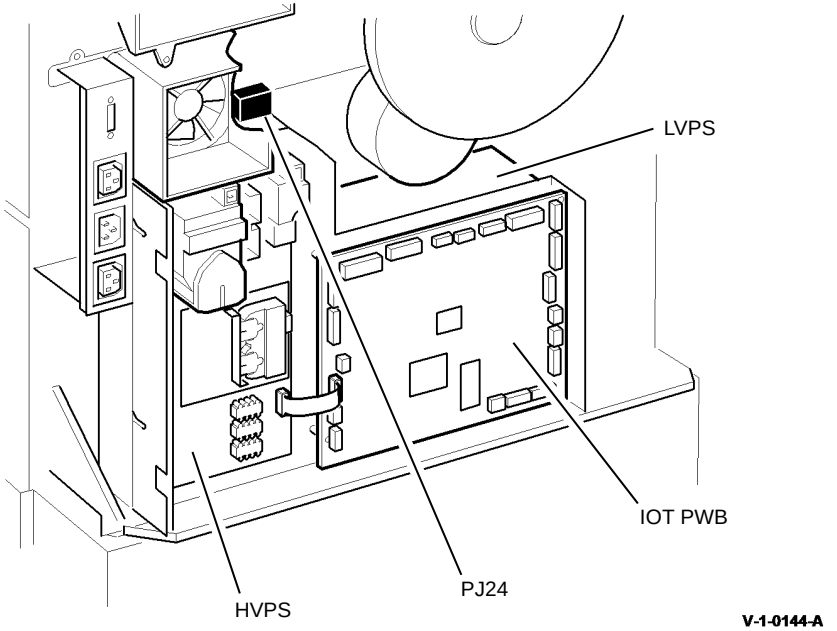

Figure 3 Component location

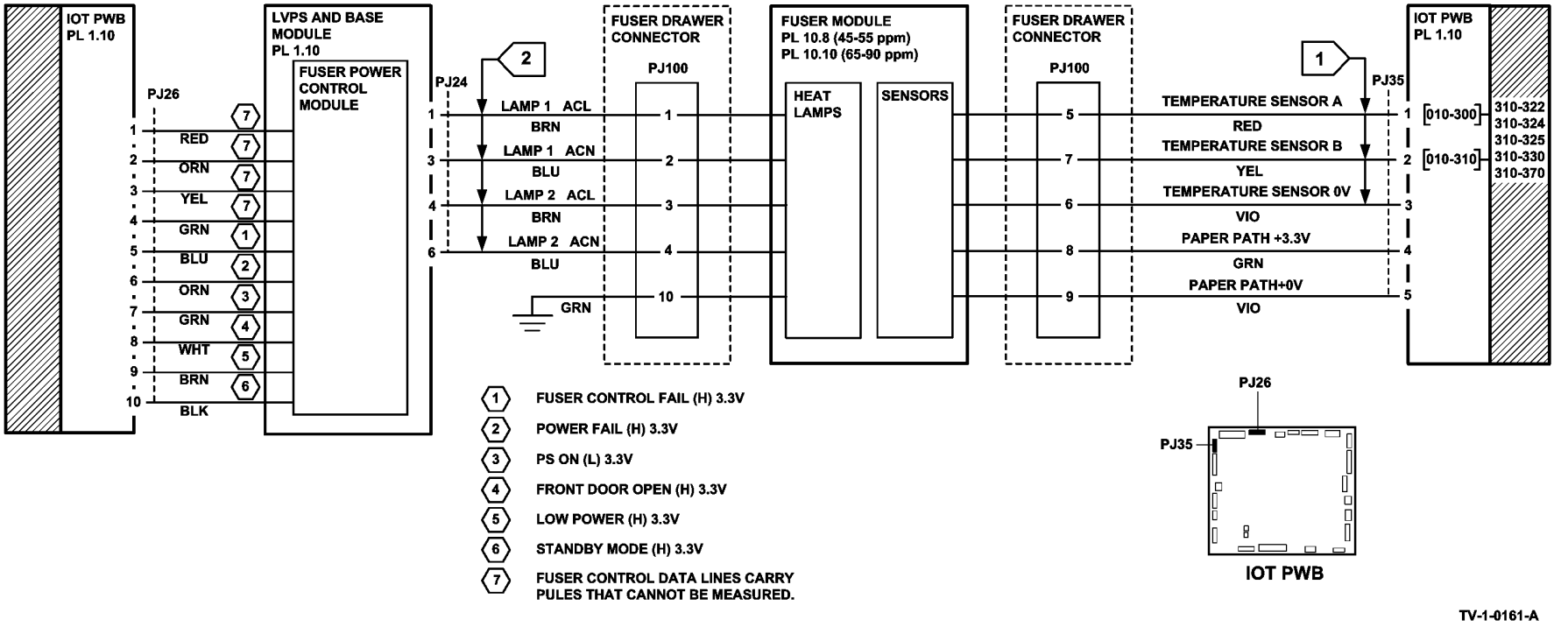

Figure 4 Circuit diagram

310-399-00 Fuser Authorization Failure RAP

310-399-00 The fuser CRUM failed the authorization check.

The authorization check is performed to ensure that the fuser installed in the system is compatible with the machine configuration: 50Hz or 60Hz.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

Install a new fuser module that matches the machine configuration:

- Fuser module (45-55 ppm), PL 10.8 Item 1.
- Fuser module (65-90 ppm), PL 10.10 Item 1.

310A Fuser Web Motor RAP

Use this RAP when the fuser web motor is suspected of having failed. Indications of motor failure are contaminated stripper fingers and fuser roll. This fault may also cause paper jams in the inverter decurler assembly.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

- Check the fuser web motor drive coupling, Figure 2 and fuser connector assembly, Figure 1 for damage.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

The web motor does not run continuously. It is pulsed on for multiples of 0.9 seconds duration. The pulsing of the motor is felt or heard during the print mode.
Remove the fuser, cheat the front door interlock and observe the position of the drive coupling for the web assembly, refer to Figure 2. Enter dC330 code 010-010 fuser web motor, MOT10-010. The rotation is very slow (approximately 0.1 rev per minute). The code may need to be entered several times to see the rotation of the coupling. **The motor runs.**

Y N

Go to Flag 1. Check MOT10-010. Refer to:

- Figure 1.
- GP 10 How to Check a Motor.
- P/J154, Main Drives PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Fuser web motor assembly, (45-55 ppm) PL 40.17 Item 1.
- Fuser web motor assembly, (65-90 ppm) PL 40.12 Item 1.
- Main drives module, (45-55 ppm) PL 40.15 Item 1.
- Main drives module, (65-90 ppm) PL 40.10 Item 1.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The coupling turns in a clockwise direction (observed from the front of the machine).

Y N

Install a new motor:

- Fuser web motor assembly, (45-55 ppm) PL 40.17 Item 1.
- Fuser web motor assembly, (65-90 ppm) PL 40.12 Item 1.

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Check the following:

- Drive coupling on the fuser web motor shaft, (45-55 ppm) PL 40.17 Item 1.
- Drive coupling on the fuser web motor shaft, (65-90 ppm) PL 40.12 Item 1.
- Drive coupling on the web assembly, Figure 2.

The life expectancy of the fuser web is the same as the fuser module. Install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

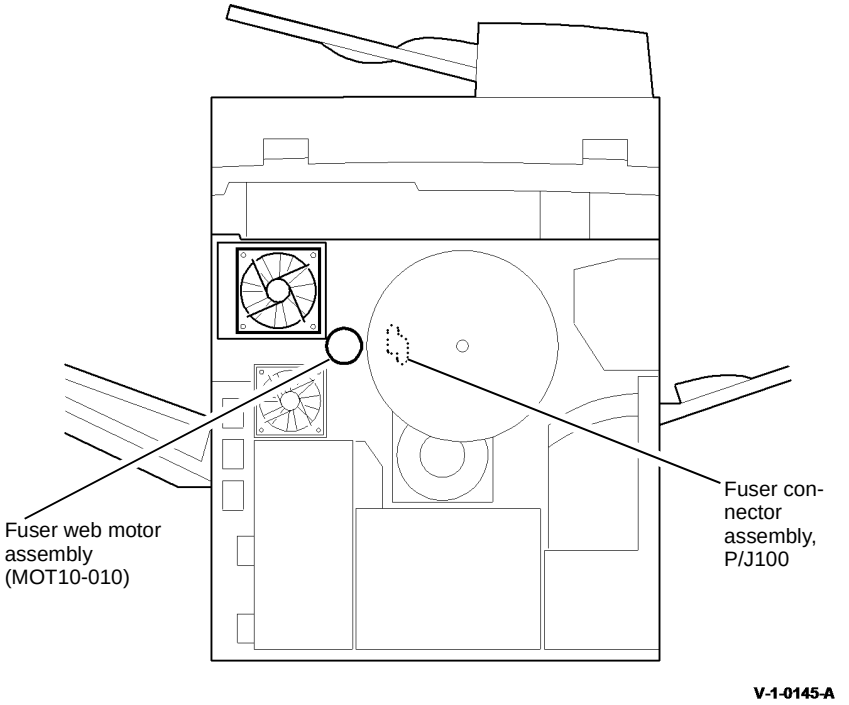

Figure 1 Component location

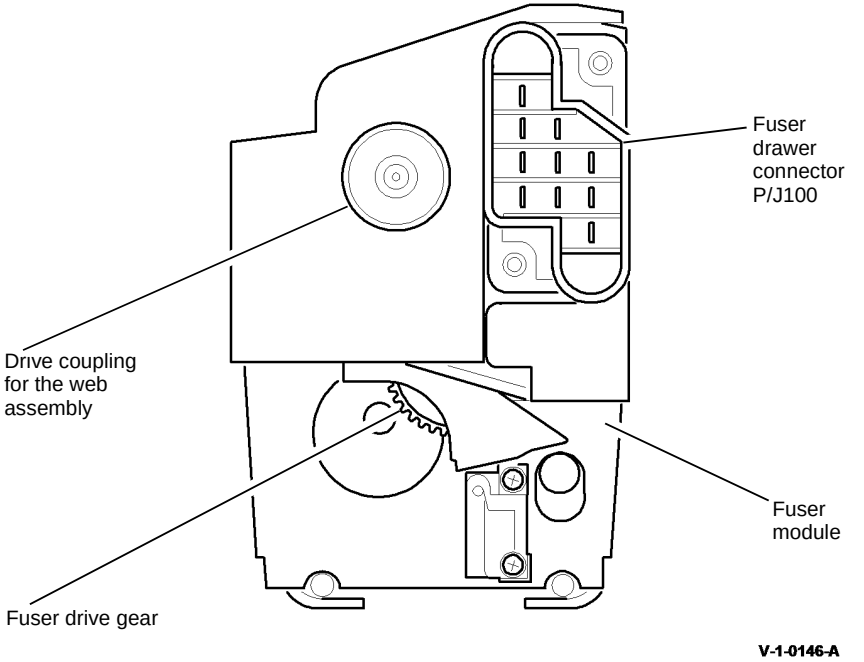

Figure 2 Component location

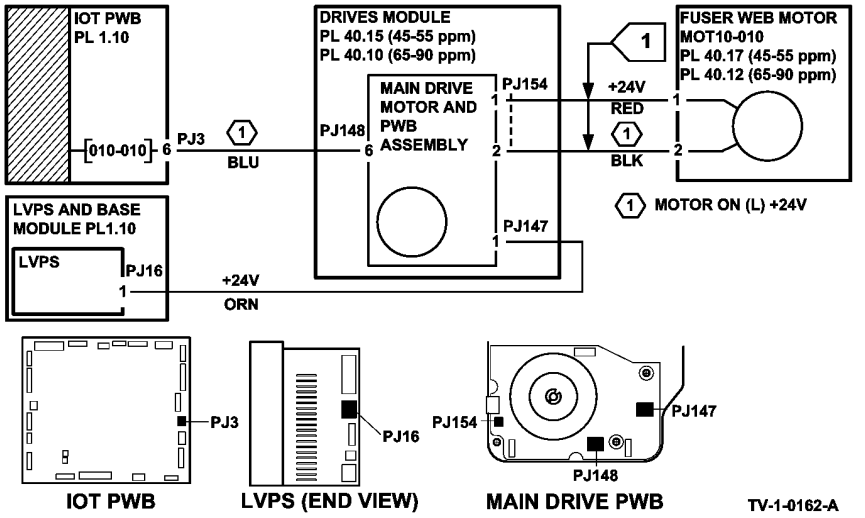

Figure 3 Circuit diagram

311-005-00-110, 311-006-00-110 Front Tamper Move Failure RAP

311-005-00-110 The front tamper fails to move to the front position.

311-006-00-110 The front tamper fails to move to the rear position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.16 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, they may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition and the tension of the front tamper drive belt. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-110, 311-025-00-110 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP.
  - Refer to the 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 codes 011-003 and 011-005 alternately **The front tamper moves between the home and inboard positions, Figure 1.**

Y N

Go to Flag 2. Check the front tamper motor, MOT11-003.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10 How to Check a Motor.
- P/J312, 2K LCSS PWB.

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- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Tamper assembly, PL 11.16 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-310. Actuate the front tamper home sensor, Q11-310. **The display changes.**

Y N

Go to Flag 1. Check Q11-310.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J312, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Front tamper home sensor, PL 11.16 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

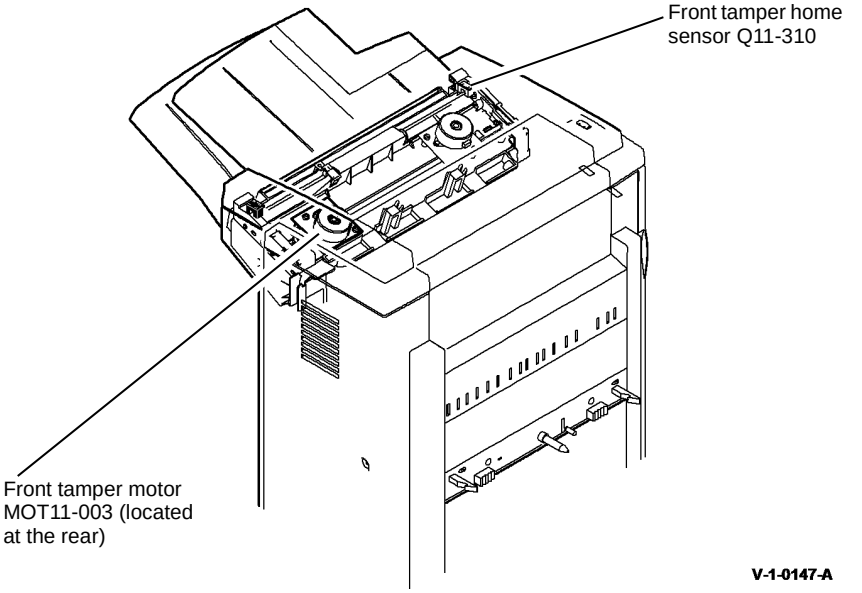

Figure 1 Component location

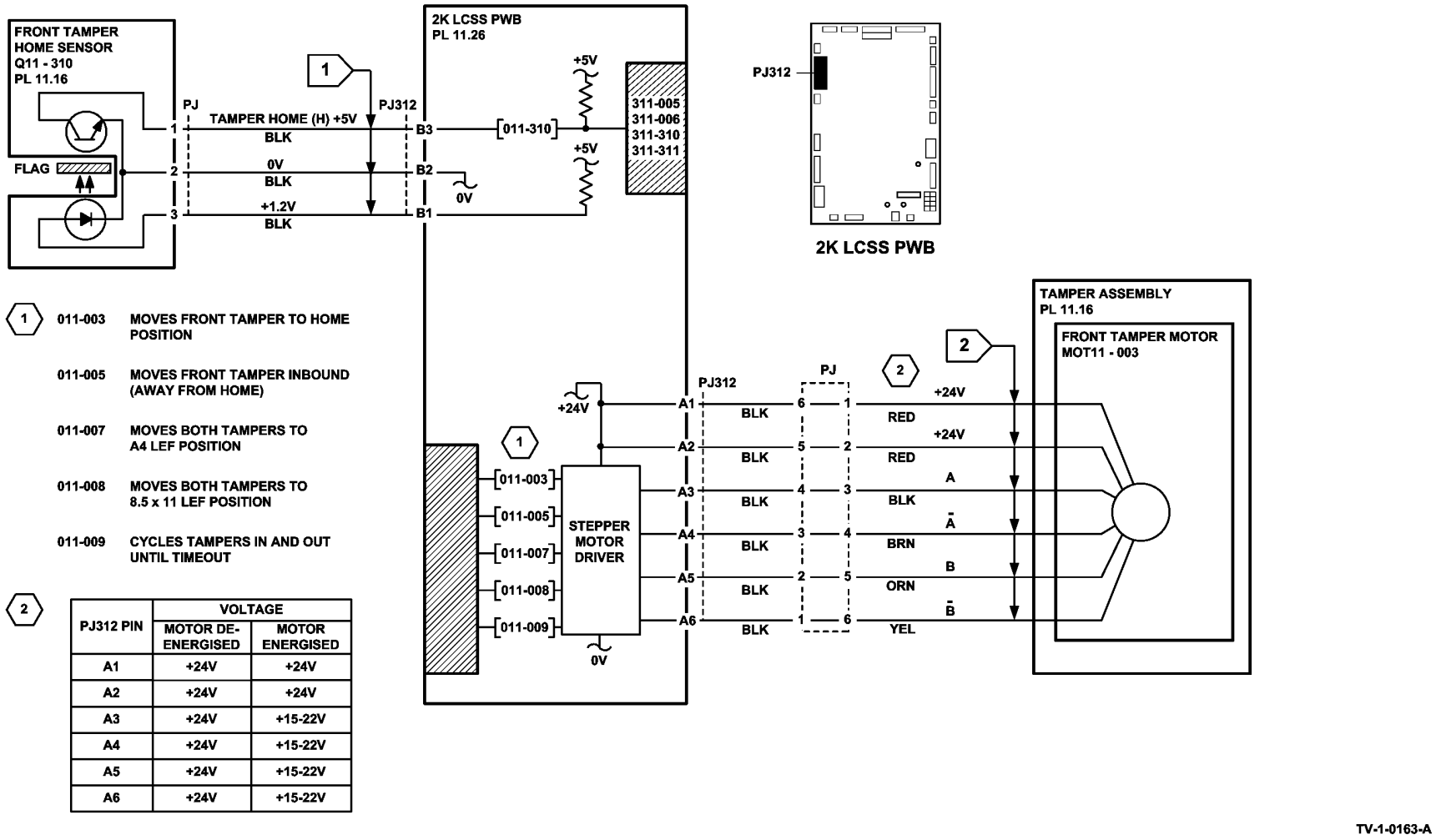

Figure 2 Circuit diagram

311-024-00-110, 311-025-00-110 Paddle Roll Failure RAP

311-024-00-110 The paddle is not at the home position.

311-025-00-110 The paddle fails to rotate.

NOTE: *The paddle is in the home position when the sensor flag is located between the sensor jaws. If a jam occurs in the compiler, bin 1 will not be available.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- That there is no paper or other obstructions in the vicinity of the paddle.
- The paddle roll position sensor bracket is holding the sensor in the correct position, i.e. the flag is in the middle of the sensor gap and the sensor does not touch any moving components.
- That the paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded. Refer to 311J-110 Mis-Registration in Stapled Sets and Non-stapled Sets RAP.
- The position of the paddles. With the paddle roll in the home position both sets of paddles must be within the output cover, if they are not, refer to REP 11.12-110 Paddle Wheel Shaft Assembly. If any of the paddles are out of alignment to other paddles, install a new set of 4 paddles, PL 11.8 Item 13.
- 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 codes 011-024, paddle home position and 011-025, paddle run. **The paddle rotates correctly.**

Y **N**

Go to Flag 2. Check the paddle motor, MOT11-024.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- Figure 1.
- P/J310, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP

Install new components as necessary:

- Paddle motor, PL 11.8 Item 10.
- 2K LCSS PWB, PL 11.26 Item 1.

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Enter dC330 code 011-025. Stack the code 011-326 to actuate the paddle roll home sensor, Q11-326. **The display cycles high/low.**

Y **N**

Go to Flag 1. Check Q11-326.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- Figure 1.
- P/J314, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP

Install new components as necessary:

- Paddle roll position sensor, PL 11.8 Item 11.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

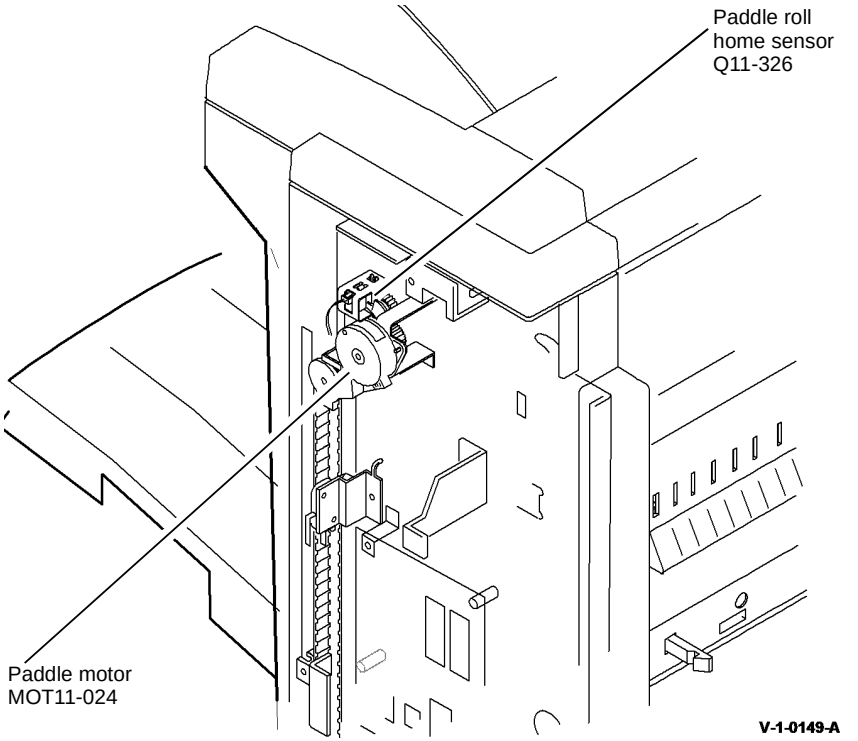
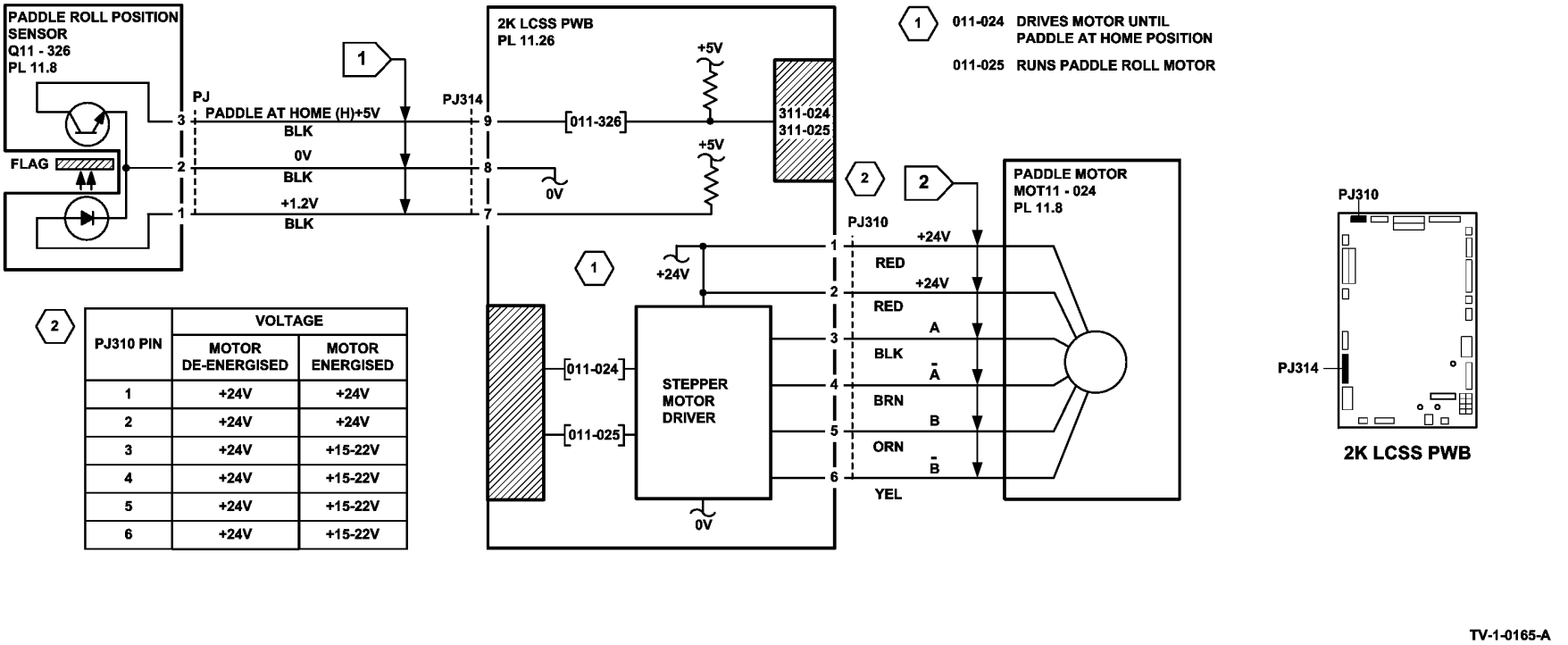


Figure 1 Component location



PJ310 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+15-22V
4	+24V	+15-22V
5	+24V	+15-22V
6	+24V	+15-22V

TV-1-0165-A

Figure 2 Circuit diagram

311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP

311-030-00-110 Bin 1 fails to move.

311-334-00-110 Bin 1 has reached the upper limit of travel.

311-335-00-110 Bin 1 has reached the lower limit of travel.

311-336-00-110 Bin 1 is not at the home position.

NOTE: *The home position of bin 1 is when bin 1 is actuating the bin 1 lower level sensor. See the final actions at the end of the procedure.*

Three sensors and two switches monitor the level of paper in bin 1 and the position of the tray:

- *The bin 1 upper level sensor, the highest of two sensors that detect the top of the paper stack in bin 1, or the empty bin 1, Figure 1.*
- *The bin 1 90% full sensor detects when the tray has descended to a position where the tray is 90% full, Figure 2.*
- *The bin 1 lower level sensor, the lowest of two sensors that detects when paper is removed from bin 1, Figure 1.*
- *Bin 1 upper limit switch, S11-334, Figure 2.*
- *Bin 1 lower limit switch, S11-335, Figure 2.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

- Check for a physical obstruction that would prevent bin 1 from moving, such as an item of furniture.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-110 2K LCSS Bin 1 Level.
- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Refer to the 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
- If there is a large jam of paper above bin 1, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor.

Perform the relevant check:

- If paper is overflowing the tray when it is at the lower limit, check the tray 90% full sensor.
- If paper cannot be fed to bin 1 when it is at the highest position, check the bin 1 lower level sensor Q11-332 and bin 1 upper level sensor Q11-333.

Check the front and rear bin 1 drive belts. If necessary install new components, PL 11.10 Item 1.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

NOTE: *Refer to service bulletin T8164-10-11 High rate of 11-030 faults.*

Remove the 2K LCSS rear cover. Enter dC330 code 011-336, bin 1 motor encoder sensor Q11-336. Slowly rotate the encoder disk by hand. **The display changes.**

Y N

Go to Flag 2. Check Q11-336.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J304, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 motor encoder sensor, PL 11.10 Item 11.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-033, bin 1 elevator motor, MOT11-030. **Bin 1 cycles down and up.**

Y N

Go to Flag 1. Check MOT11-030.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10 How to Check a Motor.
- P/J318, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 elevator motor, PL 11.10 Item 8
- 2K LCSS PWB, PL 11.26 Item 1.

Figure 1, enter dC330 code 011-332. Actuate the bin 1 upper level sensor, Q11-332. **The display changes.**

Y N

Go to Flag 4. Check Q11-332.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J314, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.
- REP 11.13-110 2K LCSS Un-docking.

Install new components as necessary:

- Bin 1 upper level sensor, PL 11.12 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Go to Flag 3. Check the bin 1 lower level sensor, Q11-333.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.

NOTE: *There is no dC330 component control code for this sensor. A service meter connected at Flag 3 PJ314 between pin 3 and pin 2 should change between approximately +5V and 0V when the sensor flag is moved.*

- P/J314, 2K LCSS PWB.
- 311D-110, 2K LCSS Power Distribution RAP.
- REP 11.13-110 2K LCSS Un-docking.

The sensor is operative.

Y N

Install new components as necessary:

- Bin 1 lower level sensor, PL 11.12 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Figure 2. Enter dC330 code 011-334. Actuate the bin 1 upper limit switch, S11-334. **The display changes.**

Y N

Go to Flag 5. Check S11-334.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 13 How to Check a Switch.
- P/J315, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 upper limit switch, PL 11.10 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-335. Actuate the bin 1 lower limit switch, S11-335. **The display changes.**

Y N

Go to Flag 6. Check S11-335.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 13 How to Check a Switch.
- P/J317, 2K LCSS PWB.
- 311D-110 2K LCSS Power Generation RAP.
- REP 11.13-110 2K LCSS Un-docking.

Install new components as necessary:

- Bin 1 lower limit switch, PL 11.12 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-331. Actuate the bin 1 90% full sensor, Q11-331. **The display changes.**

Y N

Go to Flag 7. Check Q11-331.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.

A

- P/J316, 2K LCSS PWB.
- 311D-110, 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 90% full sensor, PL 11.10 Item 5.
- 2K LCSS PWB, PL 11.26 Item 1.

As final actions, check the following sequence of operation:

- When bin 1 is empty and at the top of it's travel, the bin 1 lower level sensor, Q11-333 is actuated by the edge of the tray and the bin 1 upper level sensor, Q11-332 is de-actuated.
- Paper is delivered to the tray until the bin 1 upper level sensor, Q11-332 is actuated.
- The motor lowers the tray until the bin 1 upper level sensor, Q11-332 is de-actuated.
- As the tray is lowered to accommodate the increase in stack height, the bin 1 lower level sensor, Q11-333 is held actuated by the stack rear edge.
- When the tray is emptied, the tray returns to the home position; the bin 1 lower level sensor, Q11-333 is de-actuated and the tray is elevated until both the bin 1 lower level sensor, Q11-333 and bin 1 upper level sensor, Q11-332 are made. The tray is then lowered until the bin 1 upper level sensor, Q11-332 is just cleared. In the home position the bin one upper limit switch, S11-334 is also actuated.

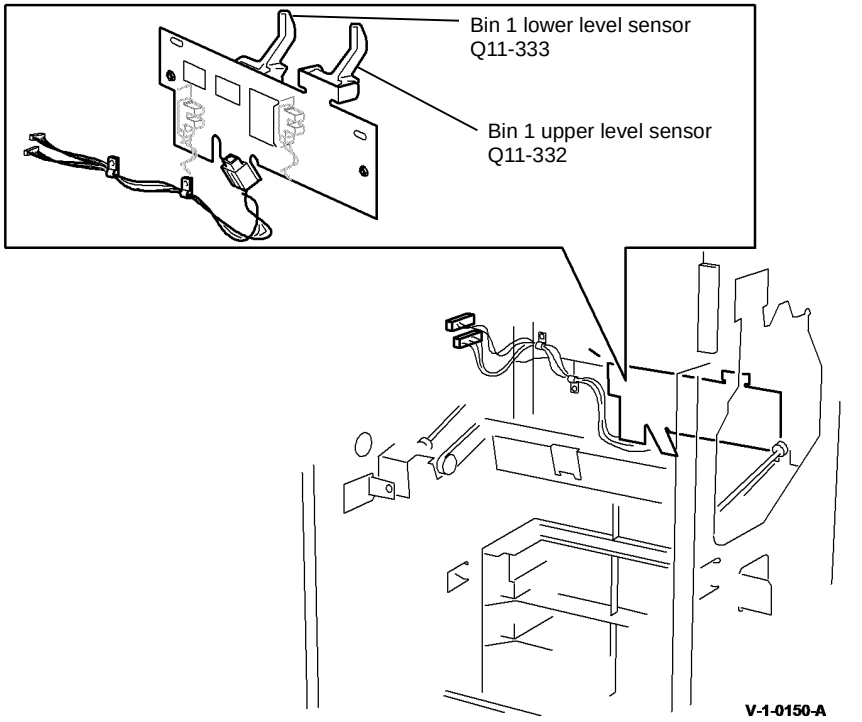


Figure 1 Component location

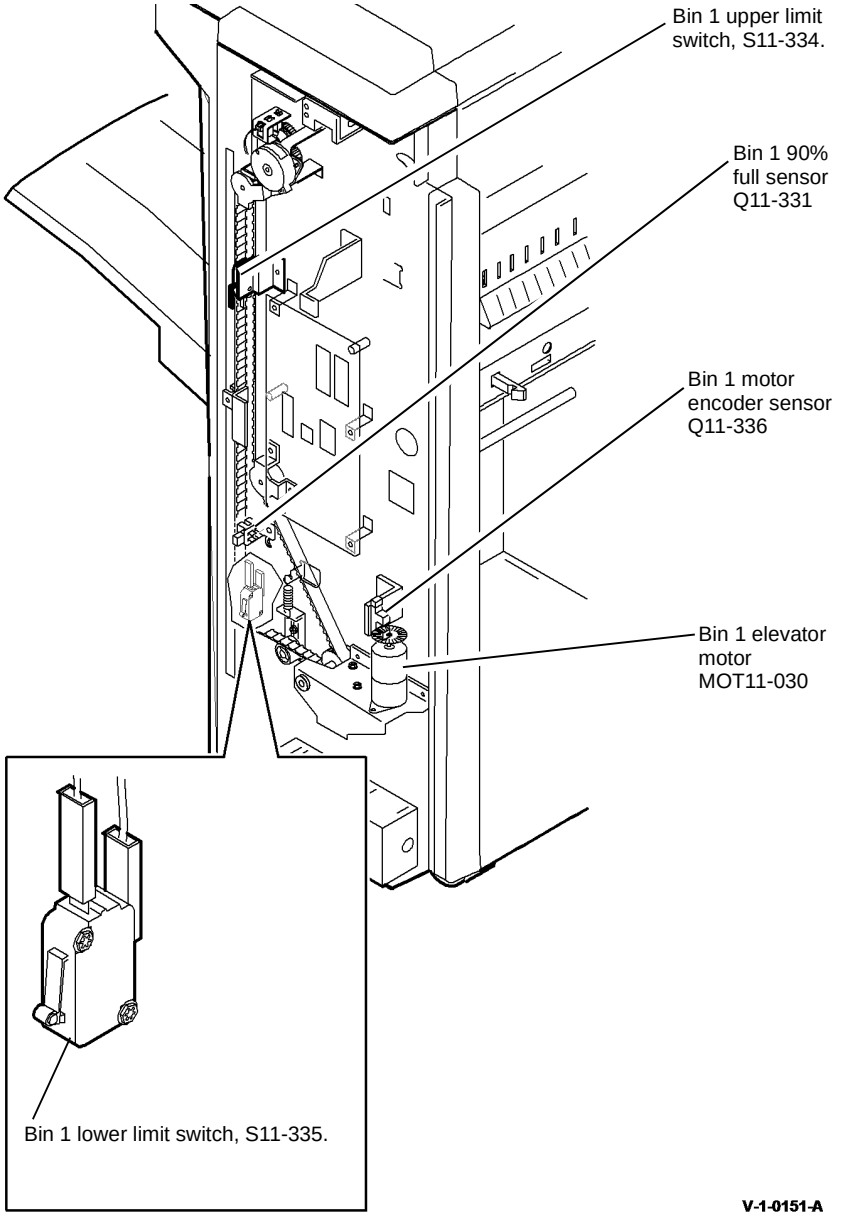


Figure 2 Component location

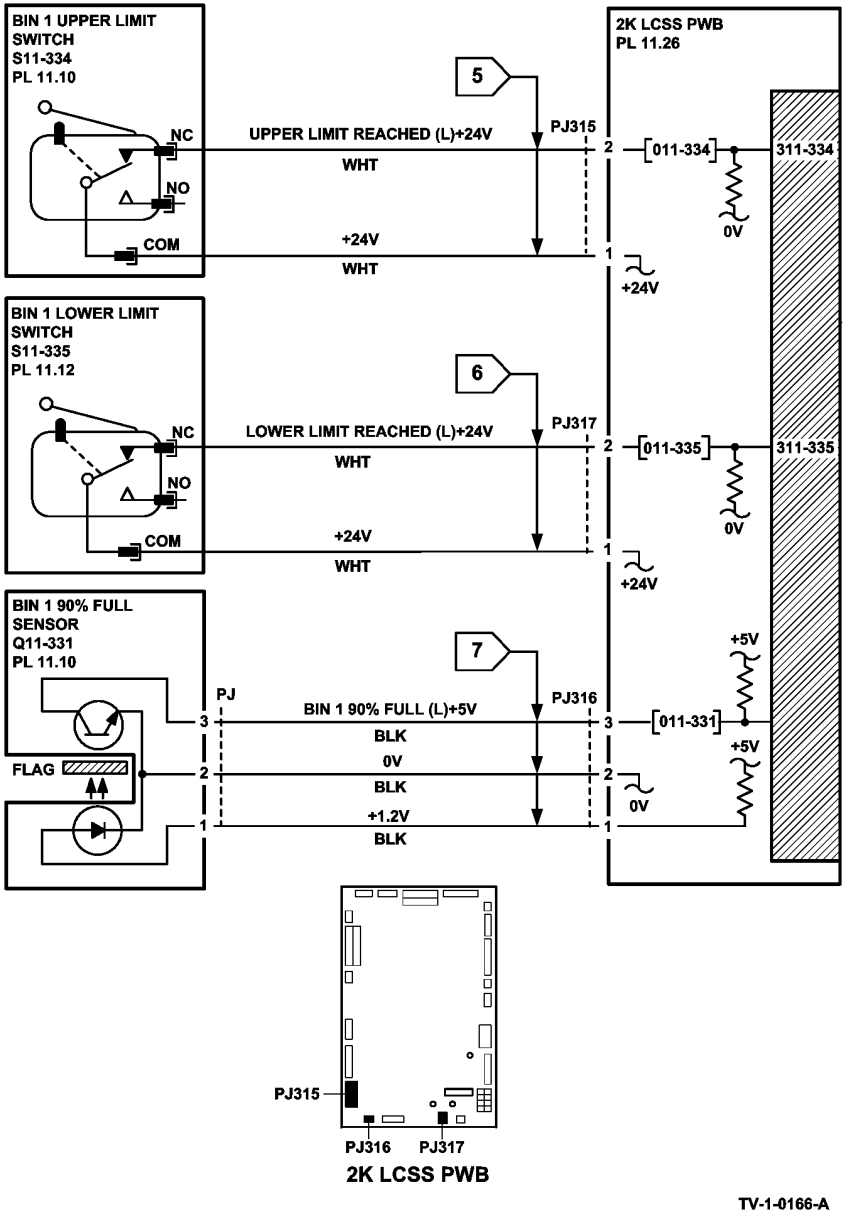


Figure 3 Circuit diagram

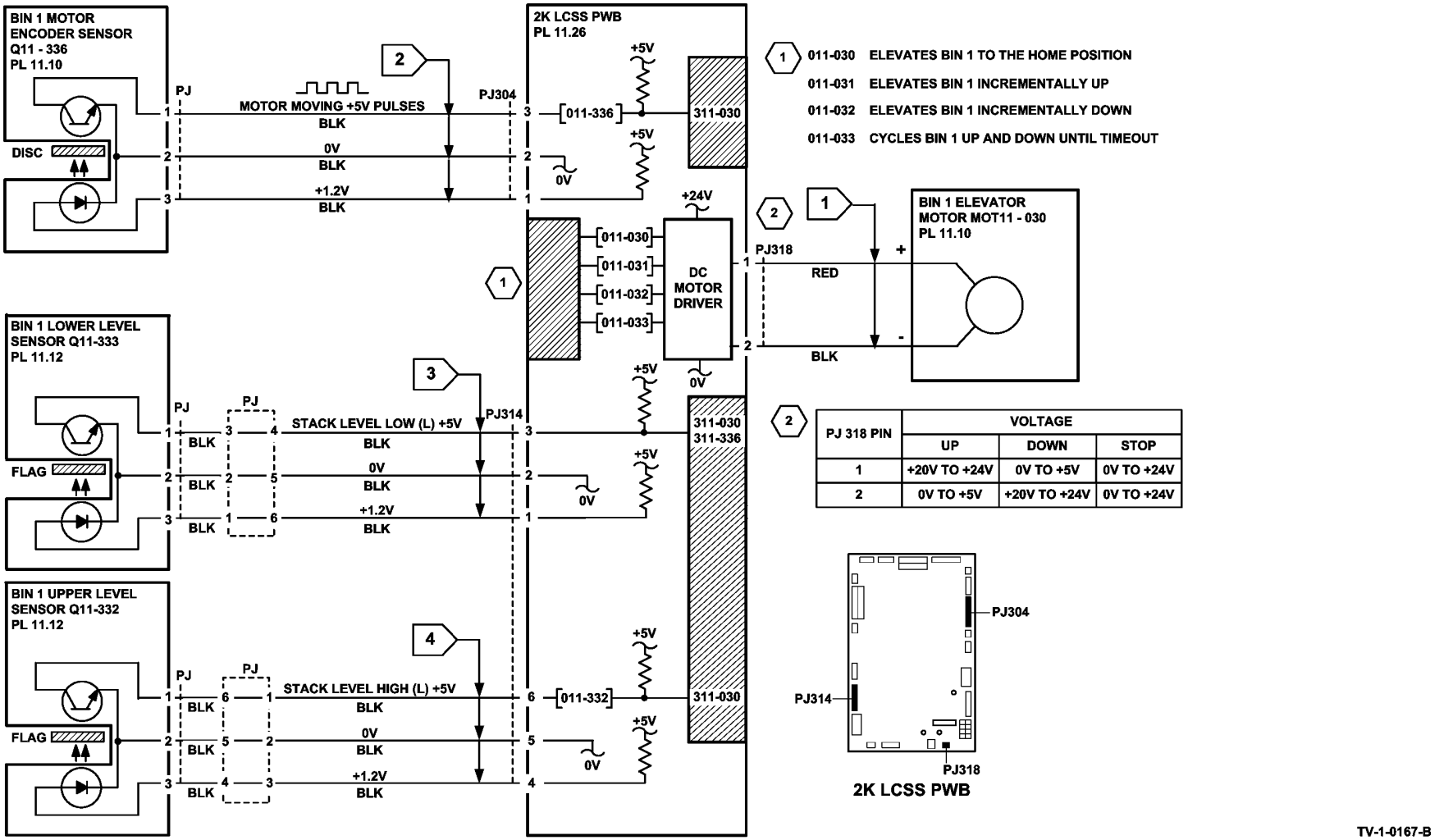


Figure 4 Circuit diagram

311-043-00-110, 311-350-00-110 Hole Punch Operation Failure RAP

311-043-00-110 The hole punch fails to perform a punch cycle.

311-350-00-110 The hole punch is not at the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Check that the hole punch is present and correctly installed.
- Check that the punch has not jammed in the down position. This can occur with transparencies and labels.

NOTE: *The home position of the punch unit is when the cut-out in the actuator is between the punch head home sensor jaws.*

Procedure

Go to Flag 5. Check the link between P/J307 pins 10 and 11 on the 2K LCSS PWB. **The link is good.**

Y **N**

Repair the wiring or connector.

Enter dC330 code 011-351. Actuate the punch head present sensor, Q11-351, Figure 1. **The display changes.**

Y **N**

Go to Flag 2. Check Q11-351.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J307, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Punch head home sensor, PL 11.6 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-350. Actuate the punch head home sensor, Q11-350, Figure 1. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-350.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.

A

- P/J307, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Punch head home sensor, PL 11.6 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-043, hole punch motor, MOT11-042. **The punch cycles.**

Y **N**

Go to Flag 3. Check MOT11-042.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J311, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Hole punch motor assembly, PL 11.6 Item 2.
- 2K LCSS PWB, PL 11.26 Item 1.

NOTE: *The chad bin collects the pieces of paper cut out by the hole punch. The chad bin level sensor will not operate if the bin is incorrectly installed. Ensure the chad bin is fully inserted and the lever engages in the slot.*

Enter dC330 code 011-348 chad bin level sensor, Q11-348, Figure 2. Use a strip of paper actuate Q11-348. **The display changes.**

Y **N**

Go to Flag 4. Check Q11-348.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J307, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as follows.

- Chad bin level sensor, PL 11.6 Item 7.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

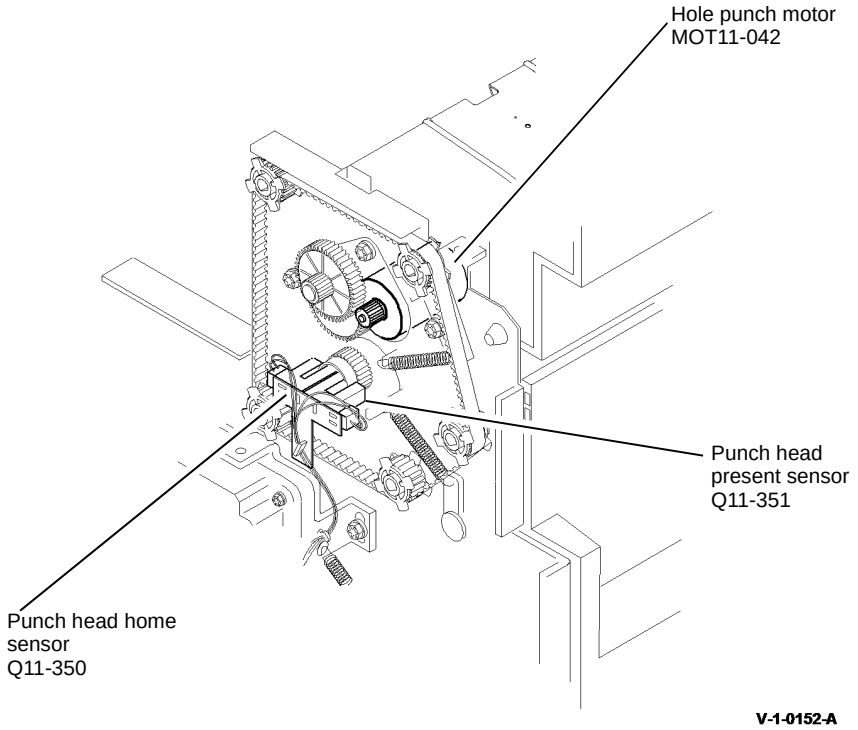


Figure 1 Component location

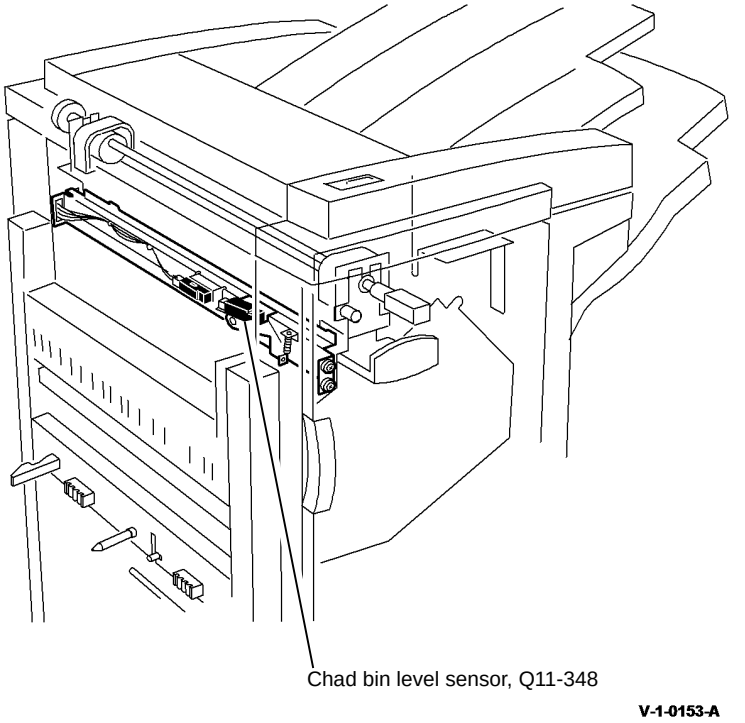


Figure 2 Component location

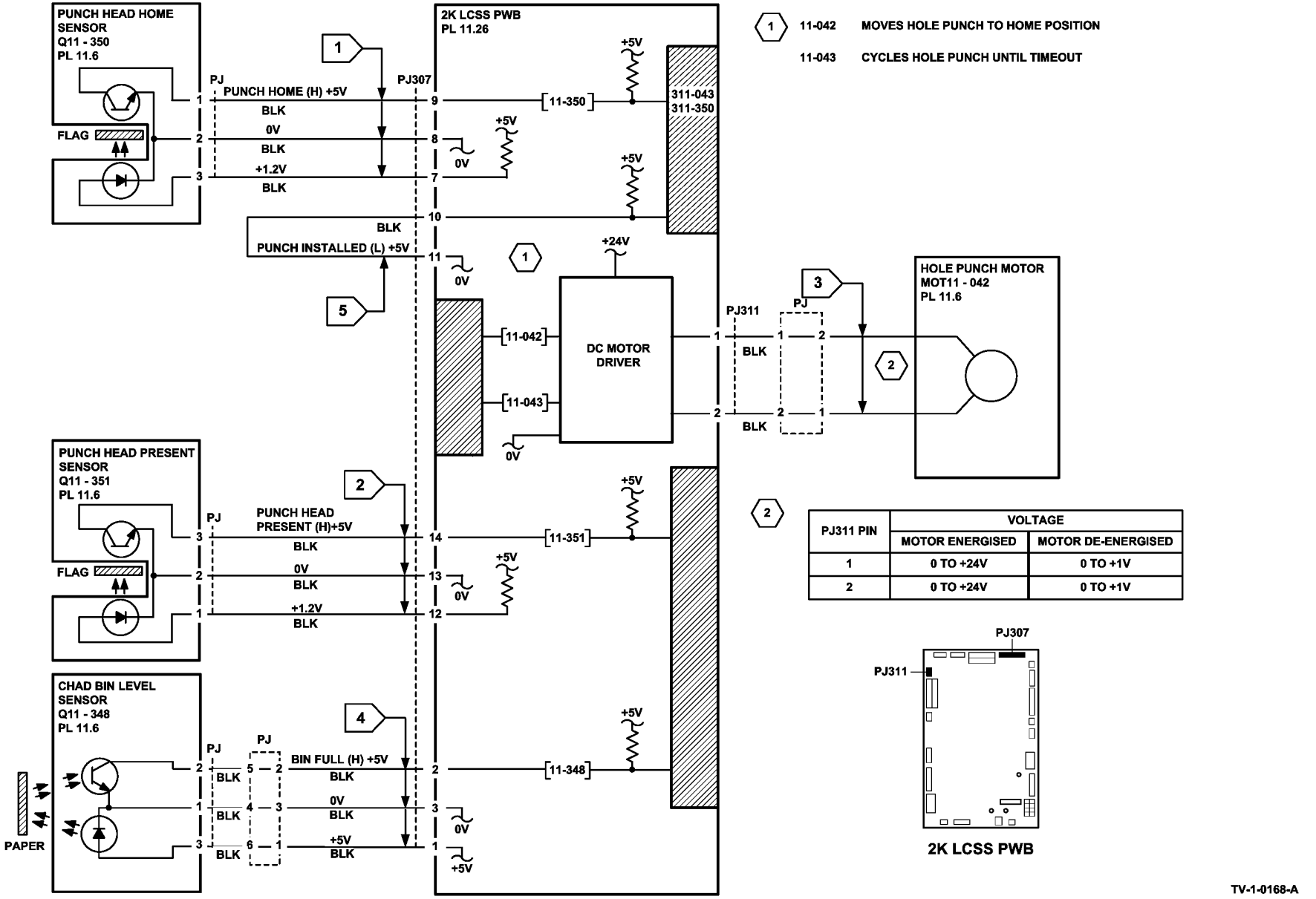


Figure 3 Circuit diagram

311-100-00-110 2K LCSS Paper Entry RAP

311-100-00-110 The leading edge of the sheet is late to the entry sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the 311H-110 Copy Damage in the 2K LCSS RAP.

Check the following:

- 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- Check the paper entry guide for damage or wear that could cause paper to jam.
- Paper jam in the machine to 2K LCSS paper path, ADJ 11.2-110 Machine to 2K LCSS Alignment.
- IOT exit path and feed rolls.
- Feeding performance from a paper tray loaded with a new ream of paper.

Procedure

Lower the paper entry guide assembly, PL 11.14 Item 8, to access the entry sensor. Enter dC330 code 011-100. Actuate the entry sensor, Q11-100, Figure 1. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-100.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J304, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Entry sensor, PL 11.24 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

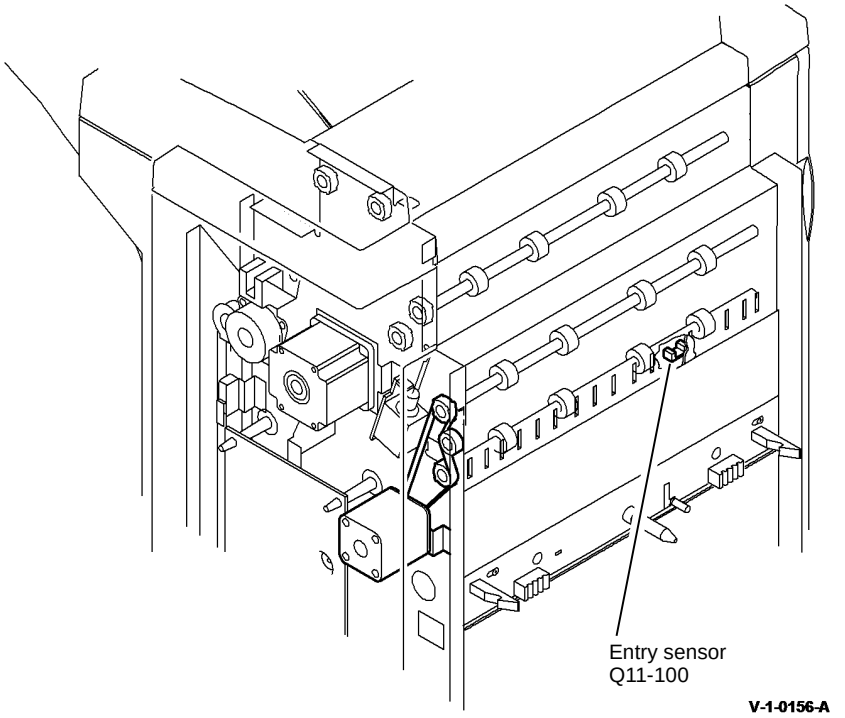


Figure 1 Component location

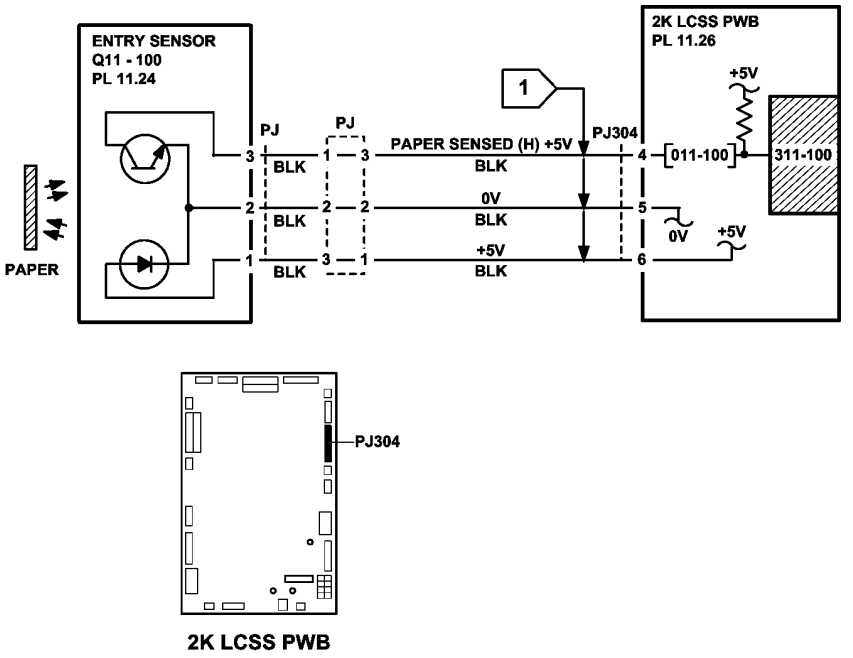


Figure 2 Circuit diagram

311-110-00-110 Sheet Late to Hole Punch RAP

311-110-00-110 Sheet late at the punch sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- The 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- For a paper jam at the entrance to the 2K LCSS. Check that there is no obstruction that would prevent a sheet from arriving in position for punching, refer to the 311H-110 Copy Damage in the 2K LCSS RAP.
- The punch sensor, Q11-110 for chad debris, Figure 1.

Procedure

Figure 1. Enter dC330 code 011-110-00. Actuate the punch sensor, Q11-110. **The display changes.**

Y N

Go to Flag 1. Check Q11-110.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J307, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP

Install new components as necessary:

- Punch sensor, PL 11.6 Item 7.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

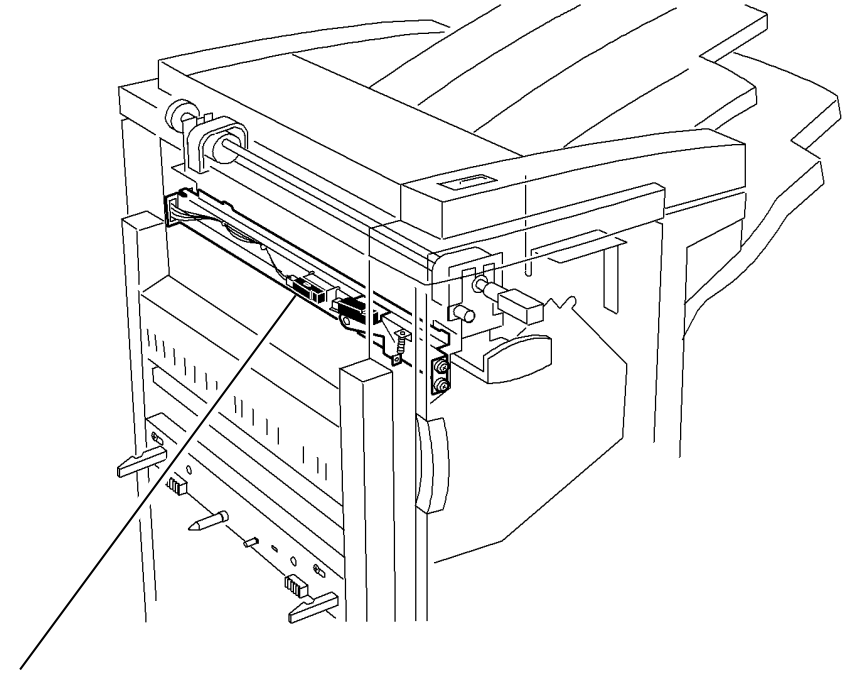


Figure 1 Component location

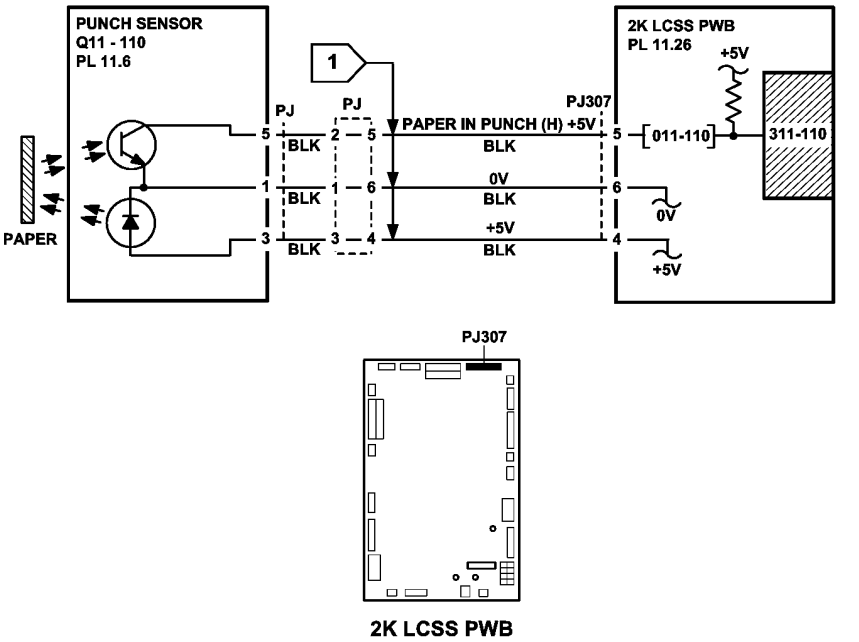


Figure 2 Circuit diagram

311-130-00-110, 311-132-00-110 Paper Exiting to Bin 0 RAP

311-130-00-110 The leading edge of the sheet is late to the top exit sensor.

311-132-100-10 The trailing edge of the sheet is late from the top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary lubricate the tensioner and tensioner pulley, REP 11.3-110. Refer to GP 18 Machine Lubrication.
- The drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted, are in a good condition and correctly tensioned, refer to ADJ 11.4-110 Motor Drive Belt Tensioning.
- All he transport rolls and idler pulleys are free to rotate.
- The diverter gate and linkage for free movement.
- Torn paper fragments from a previous jam clearance action.
- A paper jam in the paper path to bin 0. If the jams occur shortly after install. Check the gap between the entry guide cover, PL 11.24 Item 5 and the paper guide PL 11.22 Item 10. If the gap is less than 1mm, adjust or install a new entry guide cover. Refer to the replacement procedure in REP 11.15-110.

Refer to the 311H-110 Copy Damage in the 2K LCSS RAP and the 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

NOTE: *Paper is diverted to bin 0 when the diverter gate solenoid is energized. Paper is fed to bin 1 when the diverter gate solenoid is de-energized.*

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-001 to run transport motor 2, MOT11-001, Figure 1. **MOT11-001 runs.**

Y N

Go to Flag 3. Check MOT11-001.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J309, 2K LCSS PWB.

A

- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 2, PL 11.22 Item 5.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-002 to energize the diverter gate solenoid, SOL11-002, Figure 1. **SOL11-002 energizes.**

Y N

Go to Flag 2. Check SOL11-002.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 12, How to Check a Solenoid.
- P/J306, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Diverter gate solenoid, PL 11.22 Item 12.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-130, actuate the top exit sensor, Q11-130, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check Q11-130.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J313, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Top exit sensor, PL 11.22 Item 11.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-000 to energize the transport motor 1, MOT11-000, Figure 1. **MOT11-000 runs.**

Y N

Go to Flag 4. Check MOT11-000.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J305, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 1, PL 11.14 Item 2.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

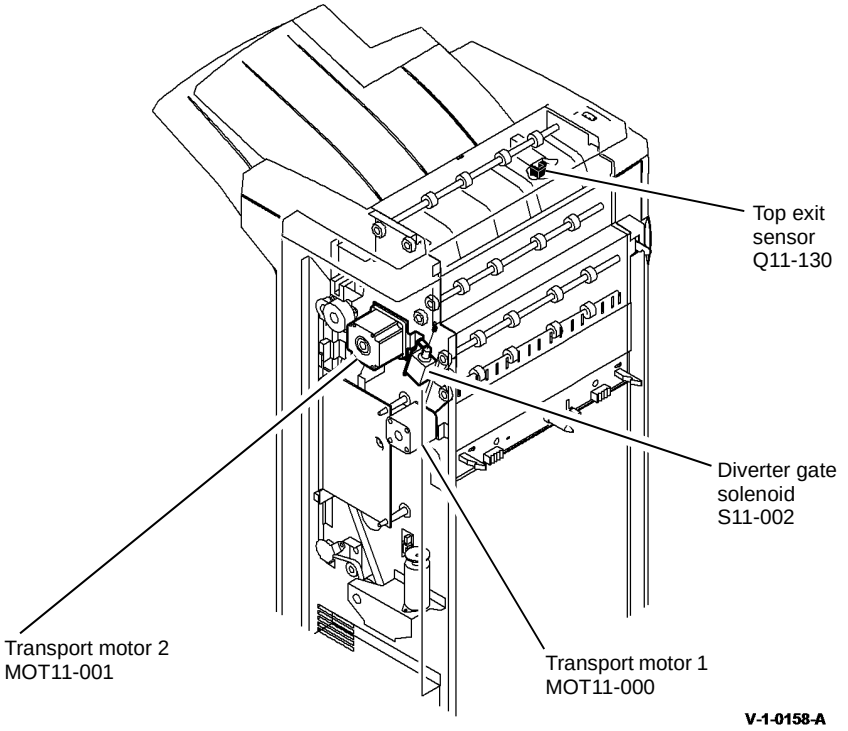
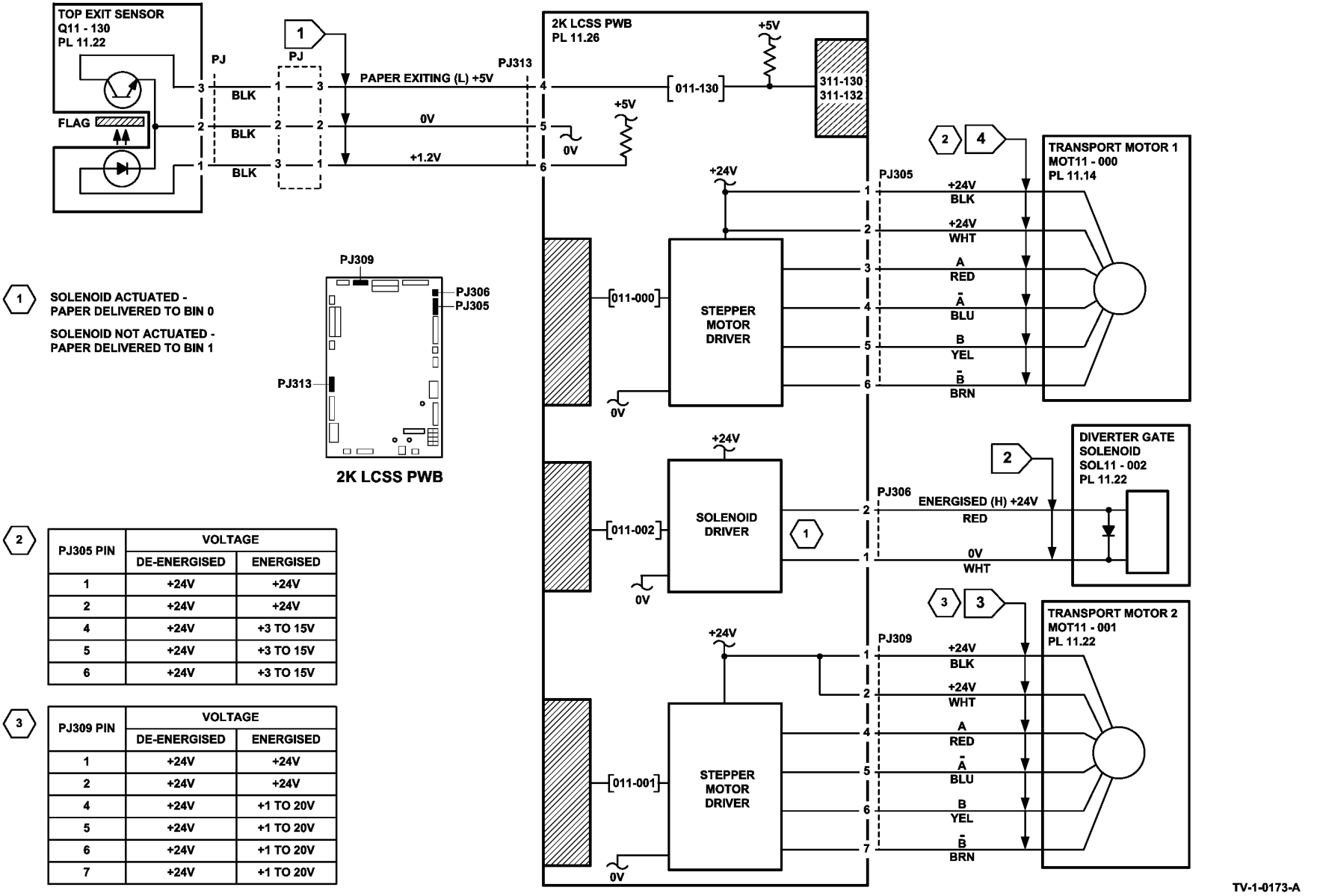


Figure 1 Component location



PJ305 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+3 TO 15V
5	+24V	+3 TO 15V
6	+24V	+3 TO 15V

PJ309 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+1 TO 20V
5	+24V	+1 TO 20V
6	+24V	+1 TO 20V
7	+24V	+1 TO 20V

Figure 2 Circuit diagram

311-140-00-110, 311-142-00-110 Sheet Late to Bin 1 RAP

311-140-00-110 The leading edge of the sheet is late to the 2nd to top exit sensor, Q11-140.

311-142-00-110 The trailing edge of the sheet is late to the 2nd to top exit sensor, Q11-140.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Paper is diverted to bin 0 when the diverter gate solenoid is energized. Paper is fed to bin 1 when the diverter gate solenoid is de-energized.*

Check the following:

- 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in all trays.

  For trays 3 and 4, perform the following:
  - Select the systems settings button from the tools screen.
  - Select the tray management button and stock settings.
  - From the list, select tray 3. Select the change stock size button.
  - Select the paper size loaded in the tray. Select the save button.
  - Repeat for tray 4.
  - Save the stock setting and exit the tools mode.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary re-lubricate the tensioner and tensioner pulley, REP 11.3-110. Refer to GP 18 Machine Lubrication.

  NOTE: *The tensioner arm and the tensioner pulley require different lubricants, refer to REP 11.3-110 for details*
- That the drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted and are in a good condition
- All the transport rolls and idler pulleys are free to rotate.
- The diverter gate and linkage for free movement.
- A paper jam in the path to bin 1, to the compiler, and for poor stacking on bin 1.
- Ensure that the 2K LCSS is fully latched to the machine, refer to REP 11.13-110.
- Torn paper fragments from a previous jam clearance action.

Refer to the 311H-110 Copy Damage in the 2K LCSS RAP and the 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Figure 1. Enter dC330 code 011-001 to energize the transport motor 2, MOT11-001. **MOT11-110 runs.**

Y N

Go to Flag 3. Check MOT11-001.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to check a motor.
- P/J309, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 2, PL 11.22 Item 5.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-002 to energize the diverter solenoid, SOL11-002. **The diverter solenoid energizes.**

Y N

Go to Flag 4. Check SOL11-002.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 12, How to Check a Solenoid or Clutch.
- P/J306, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Diverter gate solenoid, PL 11.22 Item 12.
- 2K LCSS PWB, PL 11.26 Item 1.

Figure 1. Enter dC330 code 011-140, actuate the 2nd to top exit sensor, Q11-140. **The display changes.**

Y N

Go to Flag 1. Check Q11-140.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a sensor.
- P/J313, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- 2nd to top exit sensor, PL 11.23 Item 4.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-000 to energize the transport motor 1, MOT11-000. **MOT11-000 runs.**

Y N

Go to Flag 2. Check MOT11-000.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.

A

A

- GP 10, How to Check a Motor.
- P/J305, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 1, PL 11.14 Item 2.
- 2K LCSS PWB, PL 11.26 Item 1.

If the fault is still present, perform the 311-319-00-110 Rear Tamper Move Failure RAP.

NOTE: *A software problem can cause the machine to incorrectly display the fault code 11-142-110.*

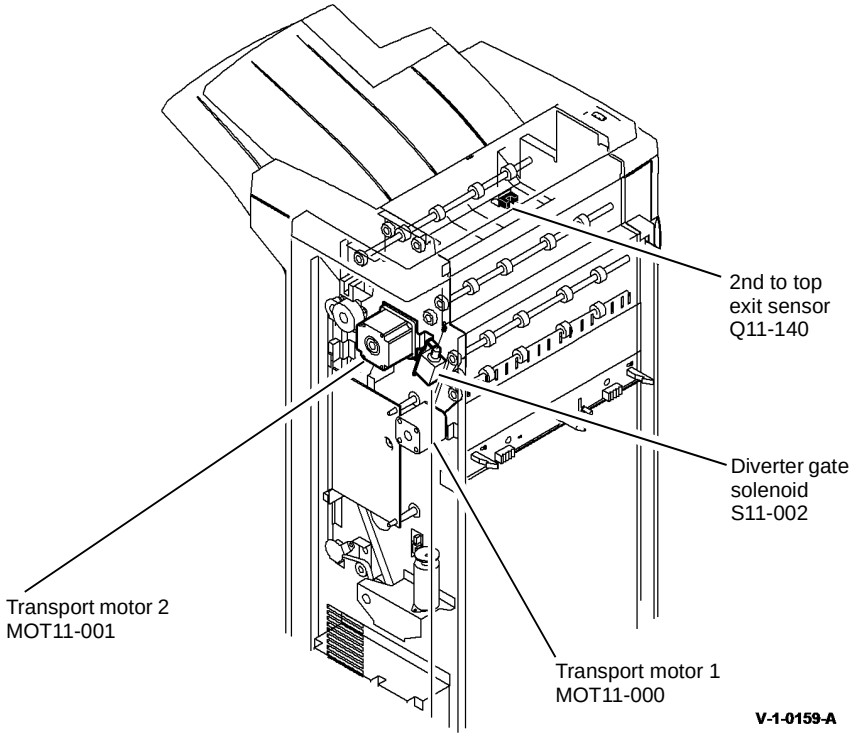
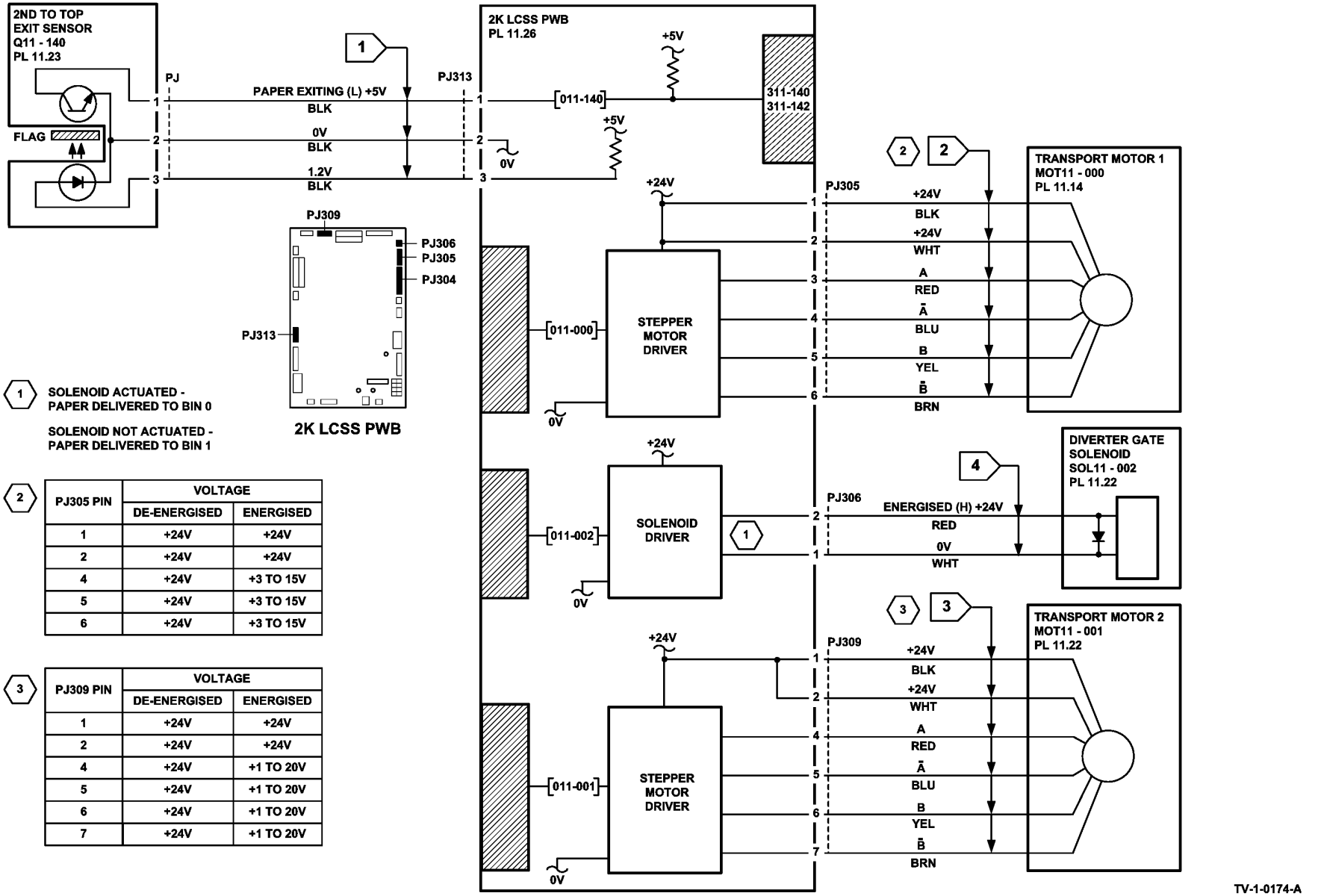


Figure 1 Component location



PJ305 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+3 TO 15V
5	+24V	+3 TO 15V
6	+24V	+3 TO 15V

PJ309 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+1 TO 20V
5	+24V	+1 TO 20V
6	+24V	+1 TO 20V
7	+24V	+1 TO 20V

Figure 2 Circuit diagram

311-300-00-110, 311-302-00-110, 311-303-00-110 Interlocks RAP

311-300-00-110 The docking interlock is open during run mode.

311-302-00-110 The top cover interlock is open during run mode.

311-303-00-110 The front door interlock is open during run mode.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LCSS. The LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the LCSS.

- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Check the following:
  - The 2K LCSS is docked to the machine.
  - The 2K LCSS front door is closed.
  - The 2K LCSS top cover is closed.

Procedure

Go to Flag 1. Check for +24V on P/J302 pin 1. If the voltage is not present, refer to the 311D-110 2K LCSS Power Distribution RAP.

Go to the relevant procedure:

- 311-300-00-110 Docking Interlock Checkout
- 311-302-00-110 Top Cover Interlock Checkout
- 311-303-00-110 Front Door Interlock Checkout

311-300-00-110 Docking Interlock Checkout

Un-dock the 2K LCSS, REP 11.13-110. Check the docking interlock switch, S11-300 as follows:

- Check the interlock actuator on the machine is not damaged or missing.

  NOTE: *The wiring harness passes underneath the docking interlock switch housing. If this harness is not correctly positioned, the switch can be mis-located, giving intermittent docking interlock problems.*

- Enter dC330 code 011-300. Actuate S11-300. If the display does not change, refer to:
  - GP 13, How to Check a Switch
  - Figure 1.
  - P/J302, 2K LCSS PWB.
- Go to Flag 1. Check the wiring between P/J302 and S11-300.
- If necessary, install a new docking interlock switch, PL 11.4 Item 2.

311-302-00-110 Top Cover Interlock Checkout

Check the top cover interlock switch, S11-302 as follows:

- Check the switch actuator.
- Enter dC330 code 011-302. Actuate S11-302. If the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 1.
  - P/J315, 2K LCSS PWB.
- Go to Flag 3. Check the wiring between P/J315 and S11-302.
- If necessary, install a new top cover interlock s witch, PL 11.26 Item 6.

311-303-00-110 Front Door Interlock Checkout

Check the front door interlock switch, S11-303 as follows:

- Check the switch actuator.
- Enter dC330 code 011-303-00. Actuate S11-303. If the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 1.
  - P/J302, 2K LCSS PWB.
- Go to Flag 2. Check the wiring between P/J302 and S11-303.
- If necessary, install a new front door interlock switch, PL 11.26 Item 5.

Perform SCP 5 Final Actions.

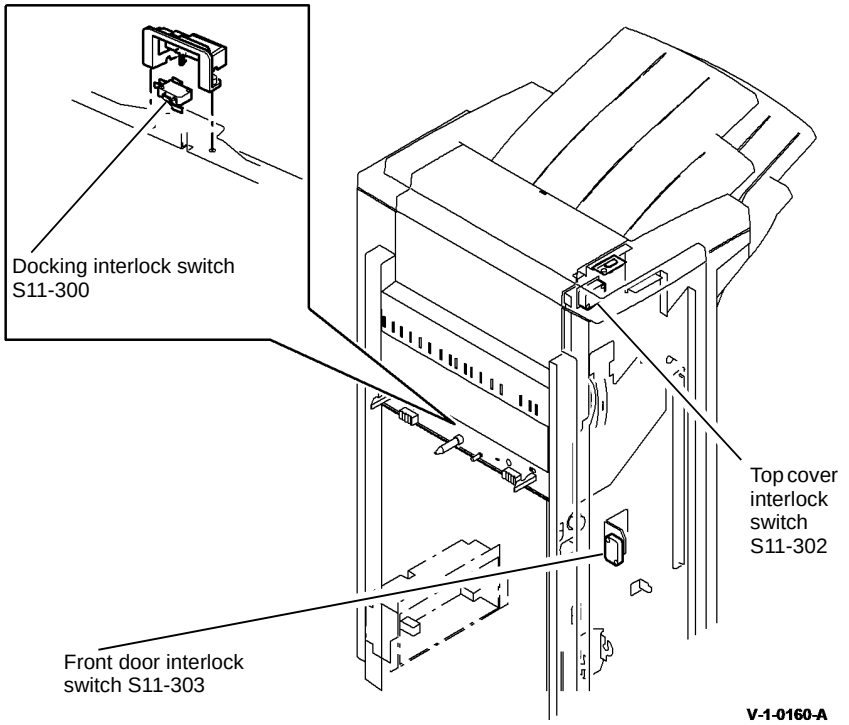


Figure 1 Component location

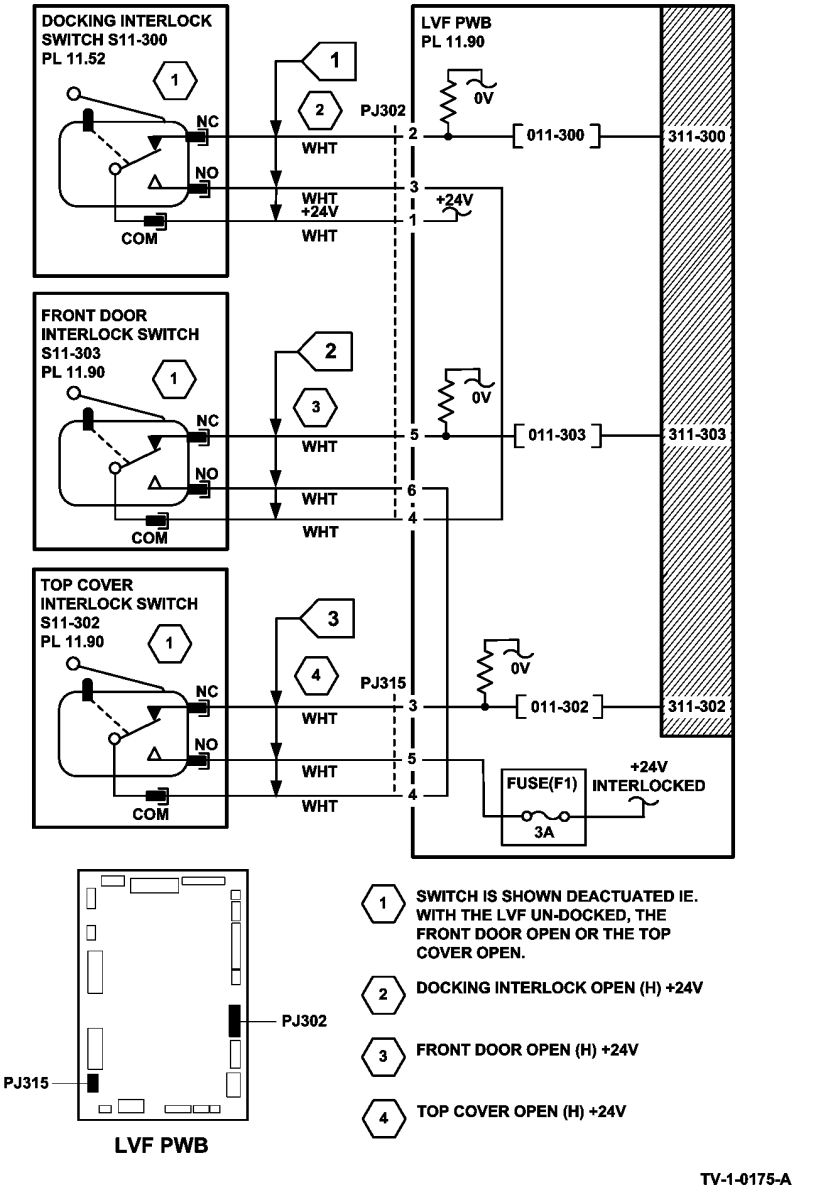


Figure 2 Circuit diagram

311-319-00-110 Rear Tamper Move Failure RAP

311-319-00-110 The rear tamper away home sensor has failed.

NOTE: *The away home position is with the rear tamper approximately halfway along it's travel.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.16 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, they may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition of the front tamper drive belt and that it is correctly tensioned. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-110, 311-025-00-110 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP.
  - Refer to the 311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330, codes 11-004 and 11-006 alternately. **The rear tamper moves between the home and inboard positions, Figure 1.**

Y **N**

Go to Flag 3. Check the rear tamper motor, MOT11-004.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J312, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

A

A

Install new components as necessary:
- Tamper assembly, PL 11.16 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-311, actuate the rear tamper home sensor, Q11-311. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-311.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J312, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:
- Rear tamper home sensor, PL 11.16 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

NOTE: *The away home position is used for short edge feed small paper. This saves unnecessary rear tamper travel.*

Enter dC330 code 011-319. Actuate the rear tamper away home sensor, Q11-319. **The display changes.**

Y **N**

Go to Flag 2. Check Q11-319.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J312, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:
- Rear tamper away home sensor, PL 11.16 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

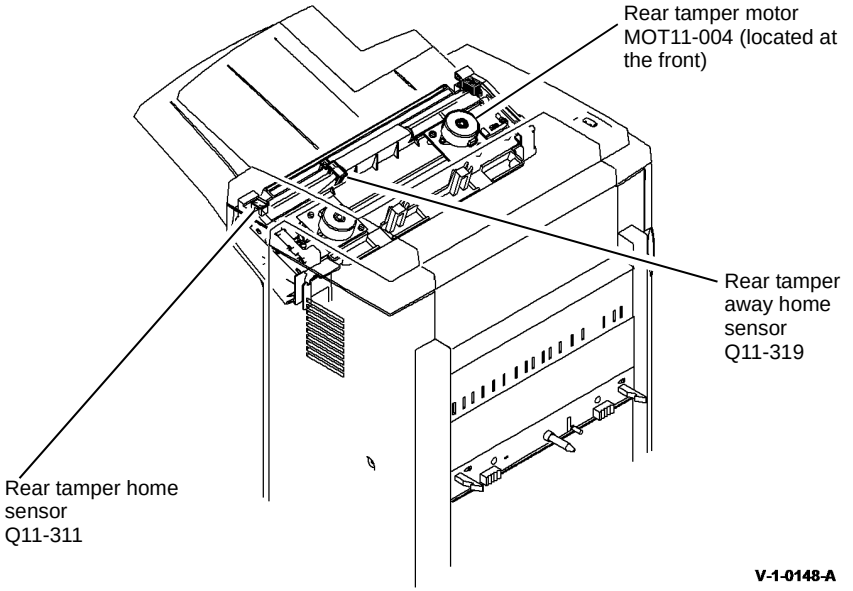
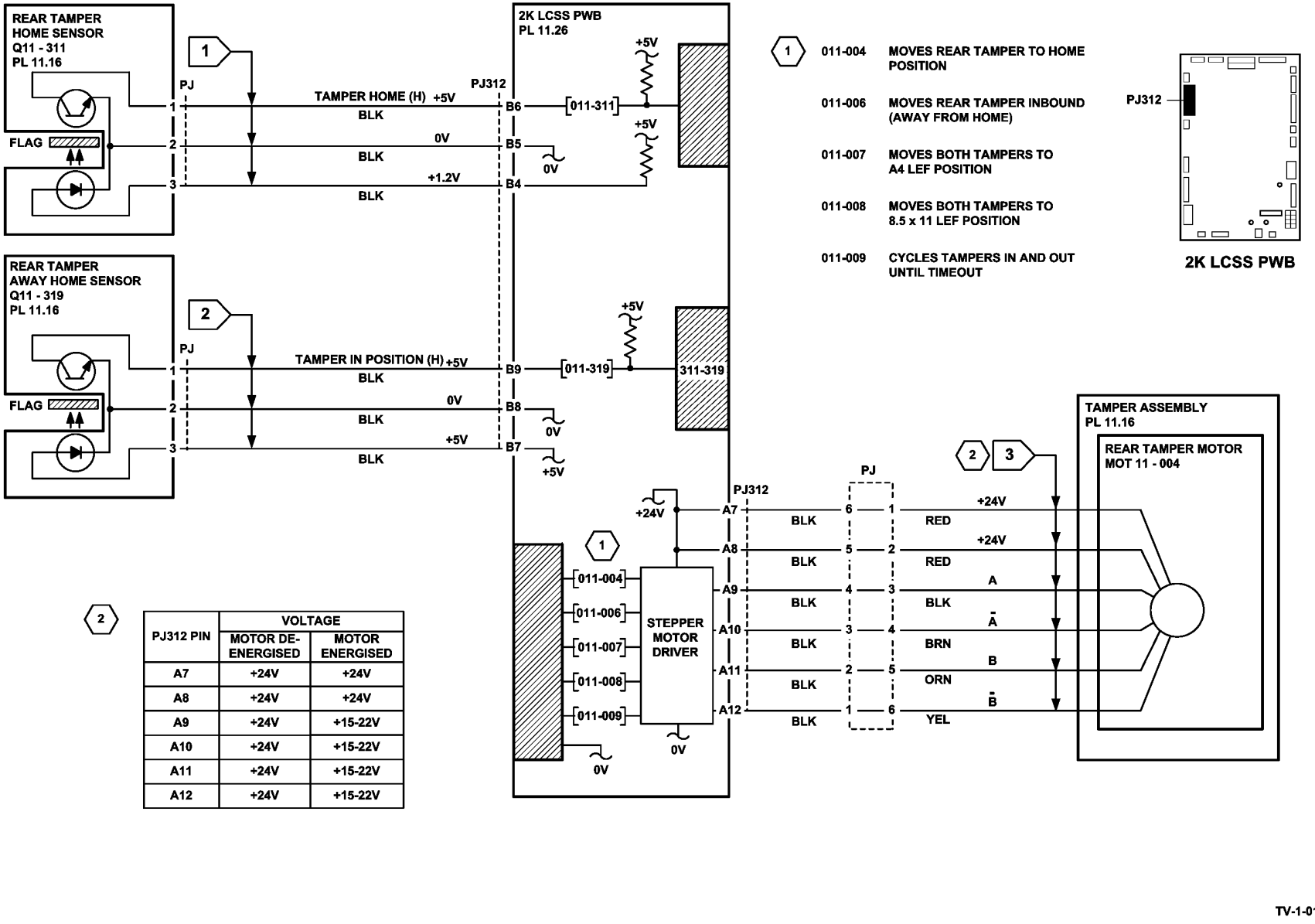


Figure 1 Component Location



PJ312 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
A7	+24V	+24V
A8	+24V	+24V
A9	+24V	+15-22V
A10	+24V	+15-22V
A11	+24V	+15-22V
A12	+24V	+15-22V

Figure 2 Circuit diagram

311-320-00-110, 311-322-00-110 Ejector Movement Failure RAP

311-320-00-110 The ejector is not at the home position.

311-322-00-110 The ejector fails to perform a cycle of operation.

NOTE: *A cycle of operation for the ejector is to cycle from the home position to the out position and back to the home position.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LCSS. The LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the LCSS.

- Check the operation of the ejector mechanism. If the operation is noisy or sluggish, perform the 1K LCSS, 2K LCSS and LVF BM Ejector Shafts and Slide Bearings procedure in ADJ 40.1 Machine Lubrication.
- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Un-dock the 2K LCSS, REP 11.13-110, Check for any obstructions that would prevent the ejector from moving. Cheat the docking interlock switch.

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-322, actuate the ejector out sensor, Q11-322. **The display changes.**

Y **N**

Go to Flag 2. Check Q11-322.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector out sensor, PL 11.18 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-320, actuate the ejector home sensor, Q11-320. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-320.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector home sensor, PL 11.18 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-023 ejector cycle, check the operation of the ejector motor, MOT11-020. **MOT11-020 runs.**

Y **N**

Go to Flag 3. Check MOT11-020.
Refer to:
- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- Figure 1.
- P/J303, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector assembly, PL 11.18 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-023 ejector cycle, check the ejector cycles. Stack the code 011-320 ejector sensor home, then cycle the ejector. Stack the code 011-322 ejector sensor out, then cycle the ejector. **The ejector actuates the ejector home sensor and the ejector out sensor.**

Y **N**

Refer to GP 7, check the following components;
- Figure 1. Pulley/drive gear, PL 11.18.
- Ejector belt, PL 11.18 Item 5.

Install new components as necessary:
- Pulley/drive gear, PL 11.18.
- Ejector belt, PL 11.18 Item 5.

The ejector cycles noisily, colliding with the end stops.

Y **N**

Check the stapler to ensure the staples are correctly formed. Mis-formed staples can cause the set to hang in the stapler causing ejector movement failures. **The staples are correctly formed.**

Y **N**

Clear the staple head of any mis-formed staples, then check the operation of the stapler. If necessary, install a new staple head unit, PL 11.20 Item 5.

If the ejector is still not moving, install a new ejector assembly, PL 11.18 Item 1.

A

A

Perform SCP 5 Final Actions.

Enter dC330 code 011-177, ejector motor encoder sensor, Q11-177. Actuate the sensor by slowly rotating the ejector motor **The display changes.**

Y N

Go to Flag 4. Check Q11-177.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Ejector motor encoder sensor, PL 11.18 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform the 311G-110 2K LCSS PWB Damage RAP.

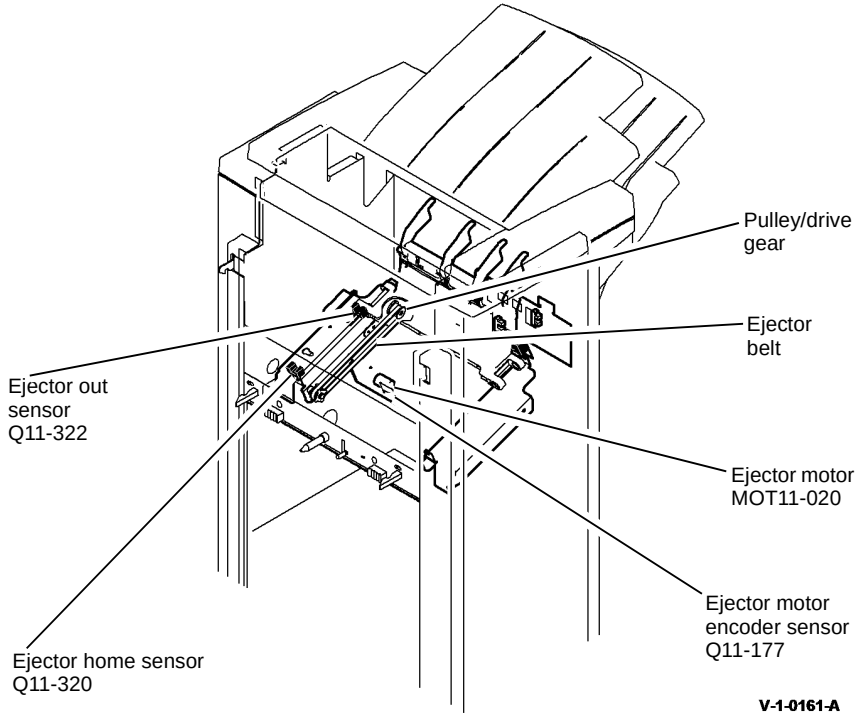


Figure 1 Component location

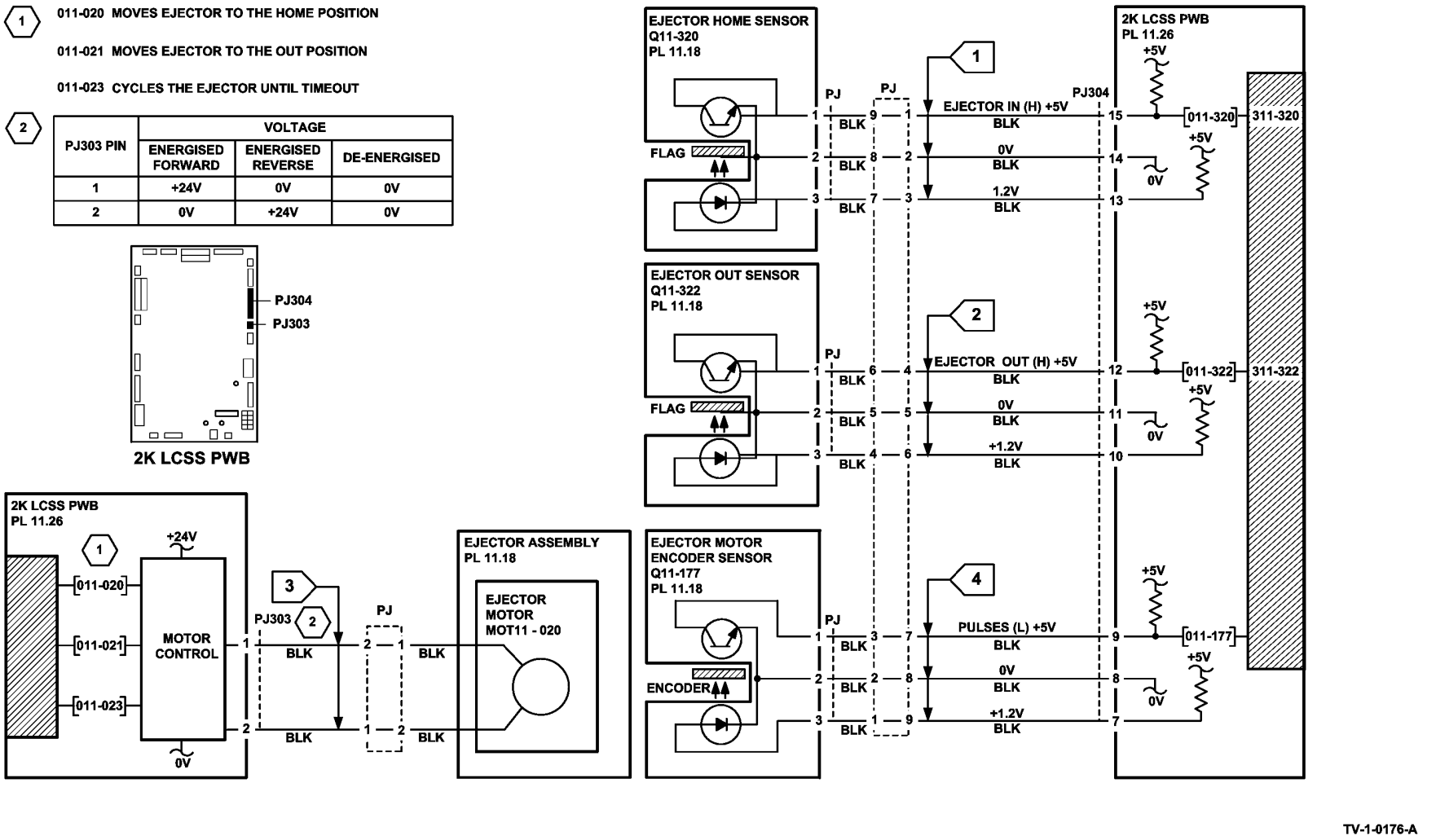


Figure 2 Circuit diagram

311-360-00-110 Staple Head Operation Failure RAP

311-360-00-110 The staple head is not at the home position.

NOTE: *The home position is with the jaws of the staple head fully open.*

NOTE: *Staple head operation faults can be caused by offline stapling failures. The user may be attempting to staple a set that exceeds the number of sheets/weight capacity. There may also be an offline stapling problem, refer to 311A-110 Offline Stapling Fault RAP.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not run code 011-050 without two sheets of paper in the stapler jaws. Running this code without the paper in position can cause damage to the machine.

Switch off the machine, then switch on the machine, GP 14.

Refer to Figure 1. Check the following:

- The spring and cam are correctly located.
- The switch support bracket is correctly located.
- The safety gate switch connector is fully seated on both sides of the frame.
- The 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- The staple head unit is correctly installed.

NOTE: *Figure 1 shows the switch cam in the auto stapling position. To enable offline stapling, the paddle motor is run in the reverse direction to lower the safety gate, this rotates the switch cam in a counterclockwise direction, actuating the safety gate switch.*

Procedure

NOTE: *After repairing the fault using this RAP, switch off the machine, then switch on the machine, GP 14, to enable operation of the staple head.*

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Place two sheets of paper in the stapler jaws. Enter dC330, code 011-050 to cycle the staple head once, and 11-051 to reverse the staple head to the home position. **The staple head operates as expected.**

Y **N**

Go to Flag 1 and Flag 2. Check the wiring and connectors between the 2K LCSS PWB and the staple head. **The wiring is good.**

Y **N**

Repair the wiring.

A **B**

A **B**

Install new components as necessary:

- Staple head unit, PL 11.20 Item 5.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

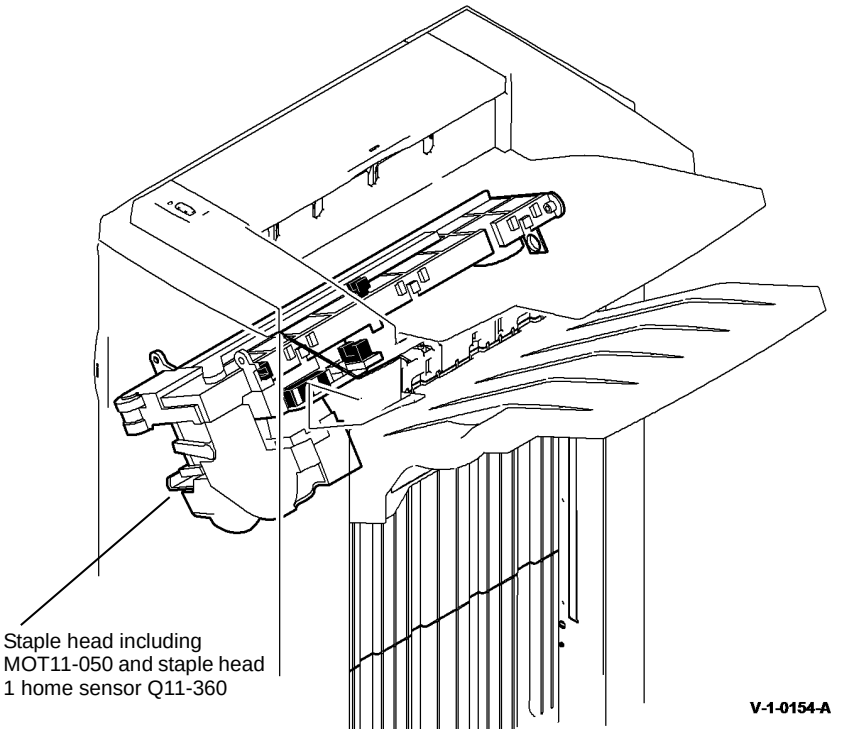


Figure 1 Component location

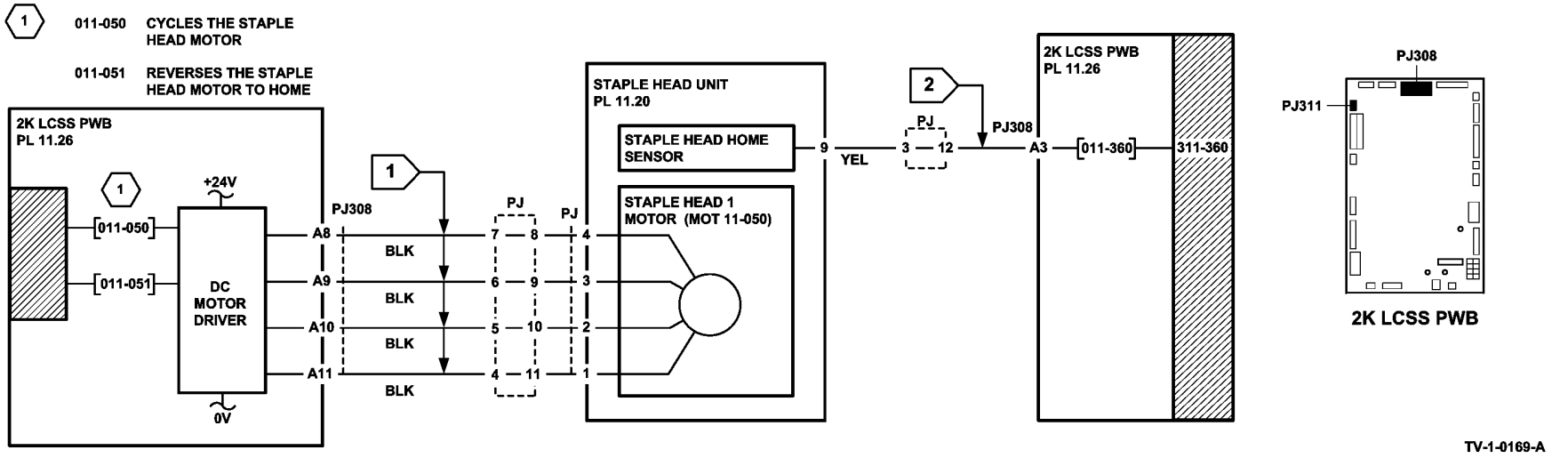


Figure 2 Circuit diagram

311-364-00-110 Stapling Failure RAP

311-364-00-110 Staples in the stapling head are not primed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Check the following:
  - The staple cartridge has staples in it and is correctly installed,
  - The leading staples in the staple head have been primed, Figure 2.
  - Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 26.10 Item 11.

NOTE: *The term "priming" refers to 2 staples at the front of the cartridge, that have been preformed automatically by the action of the stapler, refer to Figure 2.*

NOTE: *The SH 1 low staples sensor, SH 1 cartridge sensor, SH 1 home sensor and the SH 1 priming sensor are all integral to the staple head unit. These sensors can be checked using component control codes but they cannot be exchanged as components.*

Procedure

Figure 1. Enter dC330 code 011-361, actuate the SH 1 paper sensor, Q11-361. **The display changes.**

Y N

Go to Flag 1. Check Q11-361.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J308, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- SH 1 paper sensor, PL 11.20 Item 4.
- 2K LCSS PWB, PL 11.26 Item 1.

A

A

NOTE: *If the SH1 priming sensor does not see staples in the primed position, the staple head cycles a number of times to prime the staple head. This occurs when the 2K LCSS interlocks are made.*

Follow the customer instruction label inside the 2K LCSS front door to remove the staple cartridge, slide out the top sheet of staples from the cartridge, to expose a fresh sheet of staples on the top of the stack. Ensure the forming plate is fully closed, Figure 2. Install the staple cartridge and close the door. The stapler will now cycle a few times to feed and prime the new sheet of staples. Open the door and remove the staple cartridge. Examine the sheet of staples that have been fed to the staple forming part of the stapler, by opening the forming plate, Figure 3. **The first two staples have been partially formed.**

Y N

Install a new staple cartridge, PL 26.10 Item 11and repeat the check. If the first two staples are not partially formed, install a new staple head unit, PL 11.20 Item 5. Perform SCP 5 Final Actions

Install a new staple head unit, PL 11.20 Item 5. Perform SCP 5 Final Actions.

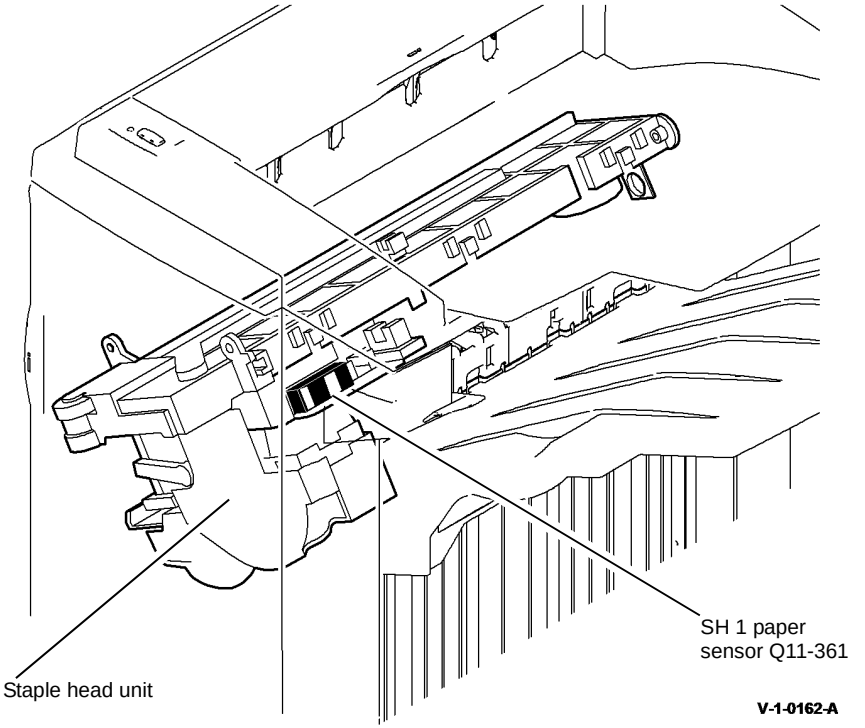


Figure 1 Component location

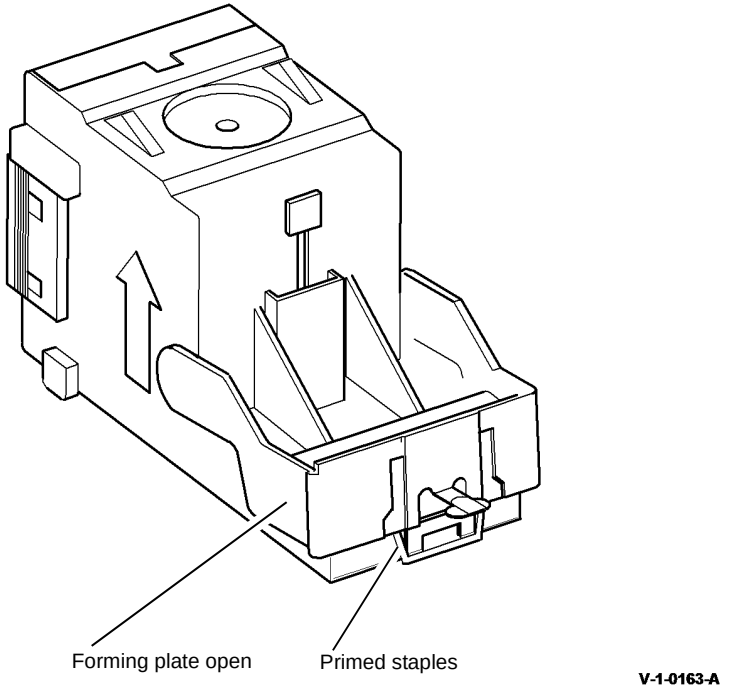


Figure 2 Staple cartridge open

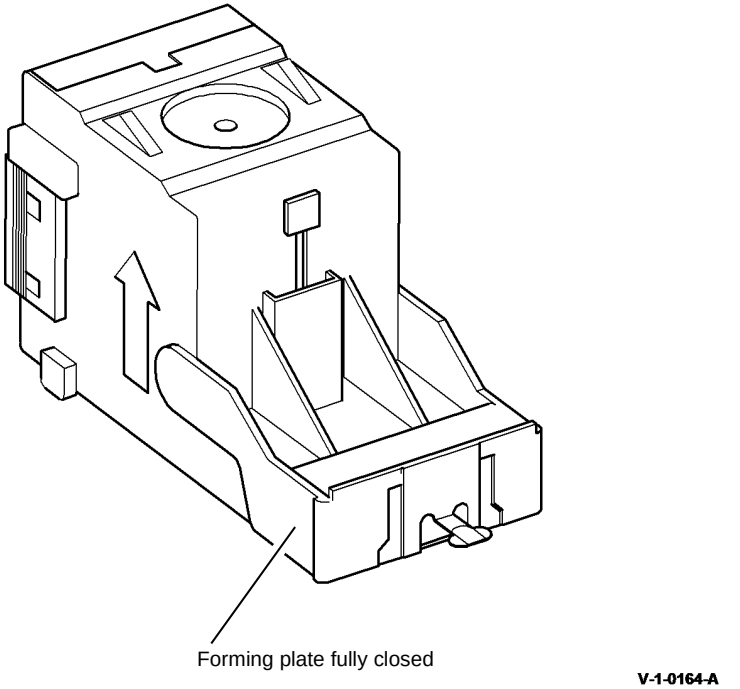
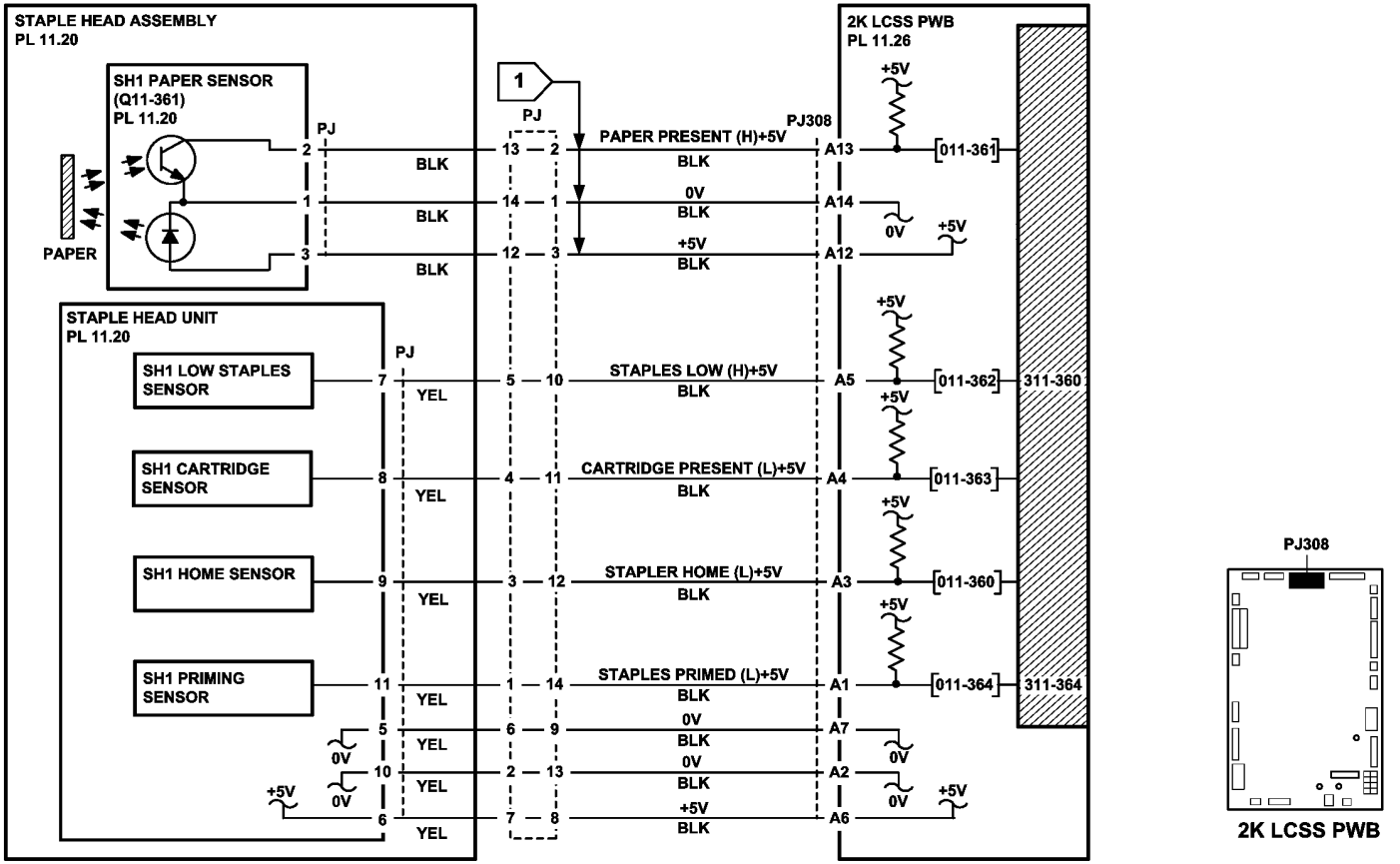


Figure 3 Staple cartridge closed



TV-1-0177-A

Figure 4 Circuit diagram

311-371-00-110 Staple Head Unit Movement Failure RAP

311-371-00-110 The staple head unit fails to move.

NOTE: *The home position is when the staple head unit is at the corner stapling position (fully to the front of the 2K LCSS and rotated through 45 degrees).*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LCSS. The LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the LCSS.

- Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.
- Un-dock the 2K LCSS from the machine, REP 11.13-110. Move the ejector assembly fully to the right, manually move the stapler unit along the full length of the track using the green thumb-wheel. Check the home sensor flag and the two dual position flags for damage, see NOTE. Check for damage or obstructions that would prevent the stapling unit from moving. If necessary, install a new staple head unit, PL 11.20 Item 5 or a new stapler traverse assembly, PL 11.20 Item 1. Dock the 2K LCSS to the machine.

  NOTE: *For dual position stapling, the SU1 front index sensor uses two flags.*

Procedure

NOTE: *All 2K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-021 to move the ejector assembly fully to the right. Enter code 011-055 to cycle the SU1 motor, MOT11-053. **The stapling unit cycles back and forth along the track.**

Y N

Go to Flag 3. Check MOT11-053.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- Figure 1.
- P/J308, 2K LCSS PWB.
- 311D-110. 2K LCSS Power Distribution RAP.

Install new components as necessary:

- Stapler traverse assembly, PL 11.20 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-370-00. Actuate the SU1 home sensor, Q11-370, by moving the stapler unit to and from the home position using the green thumb-wheel. **The display changes.**

Y N

Go to Flag 1. Check Q11-370.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11. How to check a sensor.
- Figure 1.
- P/J308, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- SU1 home sensor, PL 11.20 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-021 to move the ejector assembly fully to the right. Enter code 011-371. Actuate the SU1 front index sensor, Q11-371, by moving the stapler unit to and from the flag position (approximately 115mm (4.5 inches) from the front of the track) using the green thumb-wheel. **The display changes.**

Y N

Go to Flag 2. Check Q11-371.
Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J308, 2K LCSS PWB.
- 311D-110 2K LCSS Power Distribution RAP.

Install new components as necessary:

- SU1 front index sensor, PL 11.20 Item 3.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

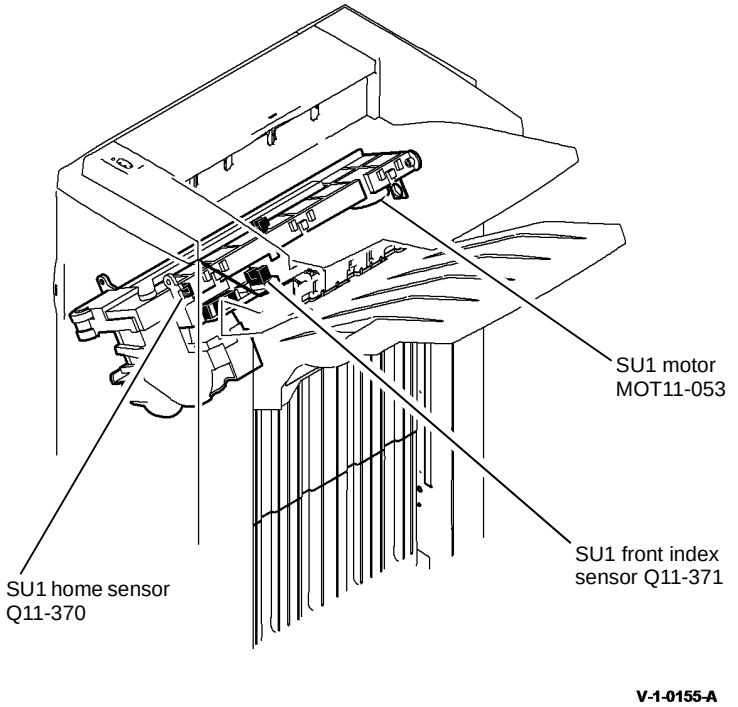
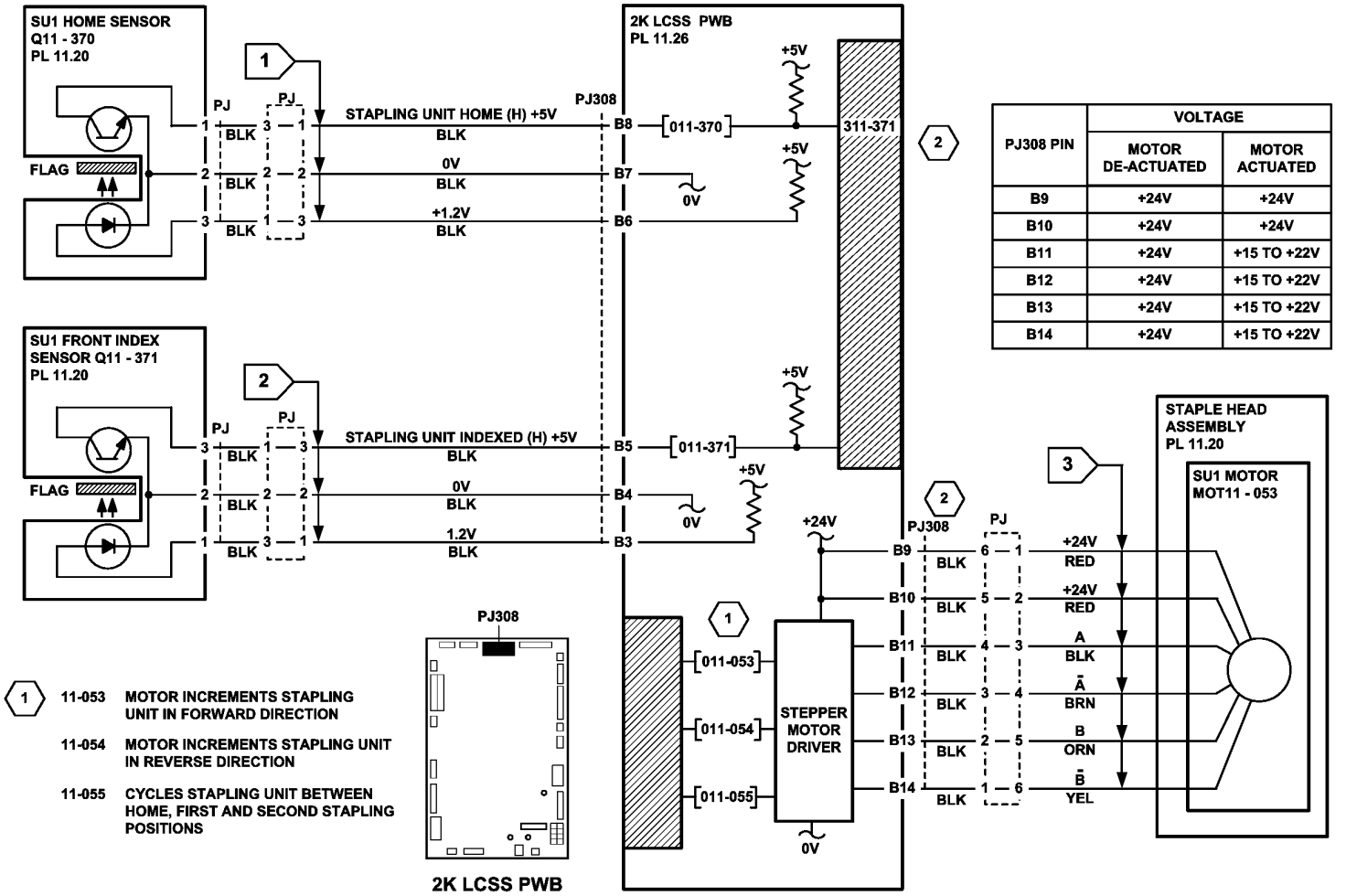


Figure 1 Component location



PJ308 PIN	VOLTAGE	
	MOTOR DE-ACTUATED	MOTOR ACTUATED
B9	+24V	+24V
B10	+24V	+24V
B11	+24V	+15 TO +22V
B12	+24V	+15 TO +22V
B13	+24V	+15 TO +22V
B14	+24V	+15 TO +22V

Figure 2 Circuit diagram

311A-110 2K LCSS Poor Stacking RAP

Use this RAP to find the cause of poor stacking in the 2K LCSS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following;

- Look for sets that are not dropping back fully in bin 1 and therefore not operating the bin 1 level sensors:
  - Large paper sizes should not be stacked on top of small paper sizes.
  - Ensure that the paper stack in each paper tray has been fanned.
  - Turn over the paper stack in each paper tray.
  - Ensure that all paper or other copy stock being used is within the size and weight specifications. Refer to GP 20 Paper and Media Size Specifications.
  - Try using a fresh ream of paper.
  - Ensure that the edge guides of all paper trays are adjusted correctly for the paper size and that the trays are fully closed.
  - Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.2 Item 13.
- Labels must not be fed to bin 1, but to bin 0 only.
- It is recommended that transparencies are fed to bin 0 whenever possible.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-110 2K LCSS Bin 1 Level.
- Check that the bin 1 upper level sensor, Q11-332 and the bin 1 lower level sensor, Q11-333 are working correctly. Refer to the 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failure RAP.
- Check the operation of the front and rear tampers. Refer to 311-005-00-110, 311-006-00-110 Front Tamper Move Failure RAP and 311-319-00-110 Rear Tamper Move Failure RAP.
- Check that the output device is not near an air conditioning or ventilation output duct. Air flow across the output bins can cause poor stacking.
- Check if TAG F-013 LCSS bin 1 kit is installed:
  - Machine that regularly process large stacks of A4/8.5x11 inch LEF paper should have the LCSS bin 1 W/TAG F-013 kit installed, PL 11.2 Item 16.
  - Machines that regular process small stacks of A4/8.5x11 inch LEF, A3/11x17 inch and A4/8.5x11 inch SEF paper should have the standard W/O TAG F-013 bin 1 installed, PL 11.2 Item 10.
- Check the output copies for curl, refer to IQ5.

311B-110 Bin 1 Overload RAP

Use this RAP to resolve a fault on the bin 1 90% full sensor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 011-331, actuate the bin 1 90% full sensor, Q11-331. **The display changes.**

Y N

Go to Flag 1. Check Q11-331.

Refer to:

- 311G-110 2K LCSS PWB Damage RAP.
- GP 11, How to Check a sensor.
- Figure 1.
- P/J316 2K LCSS PWB.
- 311D-110 2K LCSS Power Generation RAP.

Install new components as necessary:

- Bin 1 90% full sensor, PL 11.10 Item 5.
- 2K LCSS PWB, PL 11.26 Item 1.

Perform SCP 5 Final Actions.

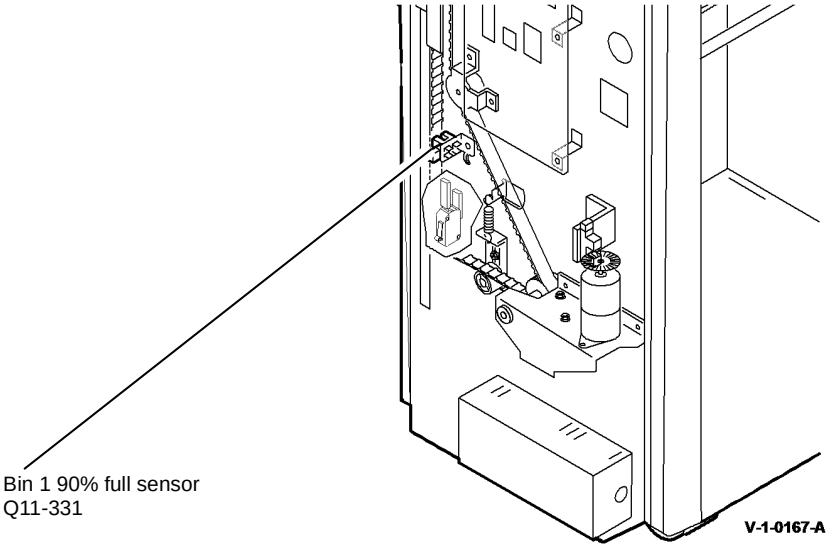


Figure 1 Component location

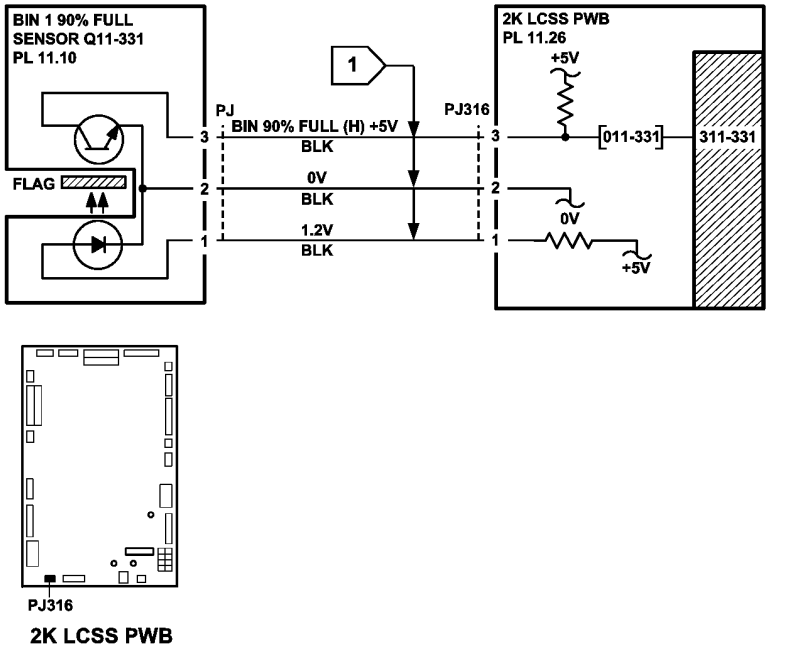


Figure 2 Circuit diagram

311C-110 2K LCSS Initialization Failure RAP

When an initialization command is received from the machine, the units are initialized in two stages:

- The following units are initialized sequentially:
  1. If the staple head is not at the home position, it is driven to the home position
  2. If the stapling unit is not at the home position, it is driven to the home position
  3. If the ejector is not at the home position, it is driven to the home position
- The following units are then initialized simultaneously:
  1. If the front tamper is not at the home position, it is driven to the home position
  2. If the rear tamper is not at the home position, it is driven to the home position
  3. If the hole punch is not at the home position, it is driven to the home position
  4. If the paddle is not at the home position, it is driven to the home position
  5. If the stacker is not at the home position, it is driven to the home position

NOTE: *The staple cartridge must be fully pushed home.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fuse on the 2K LCSS PWB, If the fuse is good, continue at the procedure. If the fuse not good, install a new 2K LCSS PWB, PL 11.26 Item 1.

Check the 2K LCSS PWB DIP switch settings, refer to 311F-110 2K LCSS PWB DIP Switch Settings RAP.

Remove the 2K LCSS covers, REP 11.1-110, so that the units can be viewed. Cheat the front door interlock switch and the top cover interlock switch. Check that LED 2 is illuminated, this shows that all interlocks are made. If the LED fails to illuminate, go to the 311-300-00-110, 311-302-00-110, 311-303-00-110 Interlocks RAP.

Procedure

Refer to Figure 1. Check that the software heartbeat is present on LED 1. The LED should flash twice per second if the 2K LCSS software is running. If necessary, re-load the 2K LCSS software, refer to GP 4 Machine Software.

If the initialization sequence fails to place any unit at the home position, refer to the appropriate RAPs:

- Front tamper not at home, refer to the 311-005-00-110, 311-006-00-110 Front Tamper Move Failure RAP
- Rear tamper not at home, refer to the 311-319-00-110 Rear Tamper Move Failure RAP.
- Paddle not at home, refer to the 311-024-00-110, 311-025-00-110 Paddle Roll Failure RAP.
- Bin 1 not at home, refer to the 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 Bin 1 Movement Failures RAP.
- Punch not at home, refer to the 311-043-00-110, 311-350-00-110 Hole Punch Operation Failure RAP
- Staple head not at home, refer to the 311-360-00-110 Staple Head Operation Failure RAP.
- Stapling unit not at home, refer to the 311-371-00-110 Staple Head Unit Movement Failure RAP.
- Ejector not at home, refer to the 311-320-00-110, 311-322-00-110 Compiler Ejector Movement Failure RAP.

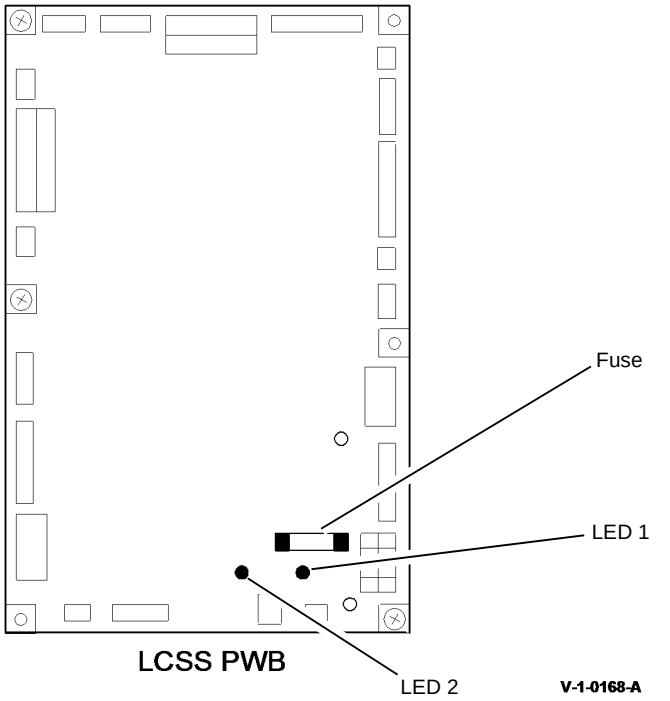


Figure 1 LED location

311D-110 2K LCSS Power Distribution RAP

The 2K LCSS has an integral power supply providing +24V and +5V supplies to the 2K LCSS PWB. The AC power for the 2K LCSS power supply comes from the LVPS and base module of the machine.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

CAUTION

Do not connect the finisher power cord directly to the AC wall outlet. The finisher cannot operate without the machine. The machine controls the distribution of electricity to the finisher for correct power on and power off sequencing.

Close or cheat all the 2K LCSS interlocks. **LED 2 on the 2K LCSS PWB is illuminated.**

Y N

+24V is available at Fuse (F1) on the 2K LCSS PWB.

Y N

Go to Flag 2. Check for +24V between the following pins on P/J300:

- Pin 1 and pin 3
- Pin 1 and pin 4
- Pin 1 and pin 5
- Pin 1 and pin 6
- Pin 2 and pin 3
- Pin 2 and pin 4
- Pin 2 and pin 5
- Pin 2 and pin 6

+24V is available between all the checked pins.

Y N

Disconnect P/J300, check for +24V between the following pins on the end of the harness:

- Pin 1 and pin 3
- Pin 1 and pin 4
- Pin 1 and pin 5
- Pin 1 and pin 6
- Pin 2 and pin 3
- Pin 2 and pin 4
- Pin 2 and pin 5
- Pin 2 and pin 6

A B C

A B C

+24V is available between all the checked pins on the end of the harness.

Y N

Figure 1. Loosen the 4 screws and lift the power supply module away from the 2K LCSS frame. Go to Flag 1. **ACL is available at CN1 between pins 1 and 3.**

Y N

Go to the 301C AC Power RAP and check the AC output voltages.

Check the wiring between CN2 and P/J300. **The wiring is good.**

Y N

Repair the wiring.

Install a new power supply module, PL 11.26 Item 2.

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Perform the following:

1. Switch off the machine, GP 14.
2. Go to Flag 3. Disconnect all the +24V harnesses to components.
3. Check each harness for short circuits and overheating, GP 7.
4. Install new components as necessary.
5. Install a new fuse F1 on the 2K LCSS PWB, switch on the machine, GP 14.
6. Monitor the voltage at the left end of the fuse and re-connect the circuits one at a time. Energize the re-connected components using dC330 control codes shown on Figure 2.
7. If the voltage drops below +22V, switch off the machine, GP 14. Re-check the component and harness for overheating or short circuits. Install new components as necessary.

Go to the 311-300-00-110, 311-302-00-110, 311-303-00-110 Interlocks RAP.

Perform the 311G-110 2K LCSS PWB Damage RAP, if necessary install a new 2K LCSS PWB, PL 11.26 Item 1.

Go to Flag 2. **+5V is available at P/J300 between pins 5 and 7, also between pins 6 and 8.**

Y N

Disconnect P/J300. **+5V is available at P/J300 between pins 5 and 7, also between pins 6 and 8 on the end of the harness.**

Y N

Loosen the 4 screws and lift the power supply module away from the 2K LCSS frame. Go to Flag 1. **ACL is available at CN1 between pins 1 and 3.**

Y N

Go to the 301C AC Power RAP and check the AC output voltages.

Check the wiring between CN2 and P/J300. **The wiring is good.**

D E

D E

Y N

Repair the wiring.

Install a new power supply module, PL 11.26 Item 2.

Perform the steps that follow:

1. Switch off the machine, GP 14.
2. Go to Flag 4. Disconnect all the +5V harnesses to components.
3. Check each harness for short circuits and overheating, GP 7.
4. Install new components as necessary.
5. Reconnect P/J300 and switch on the machine, GP 14.
6. Monitor the voltage at P/J300 pin 8. Re-connect the circuits one at a time. Energize the re-connected components using the dC330 control codes shown on Figure 2.
7. If the voltage drops below +4.7V, switch off the machine, GP 14. Re-check the last re-connected component and harness for overheating or short circuits. Install new components as necessary.

Perform the 311G-110 2K LCSS PWB Damage RAP, if necessary install a new 2K LCSS PWB, PL 11.26 Item 1.

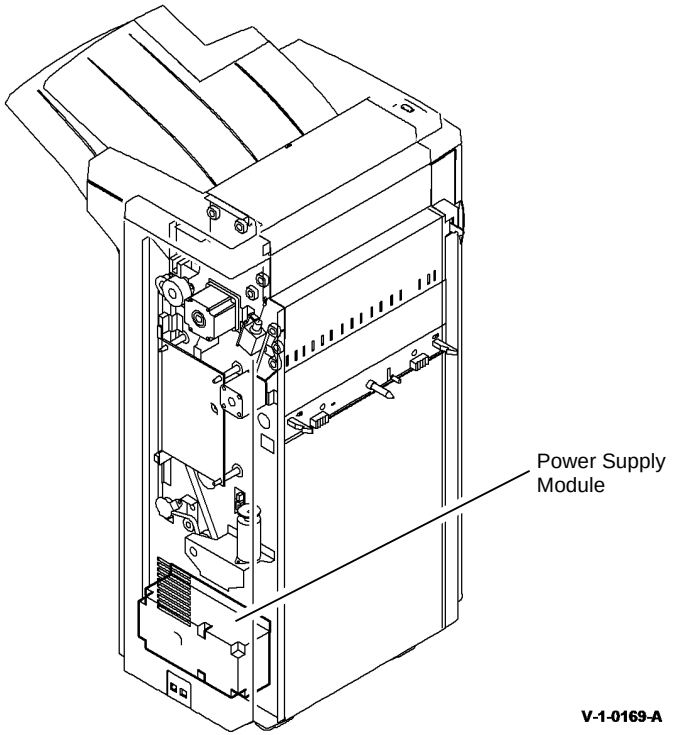


Figure 1 Component location

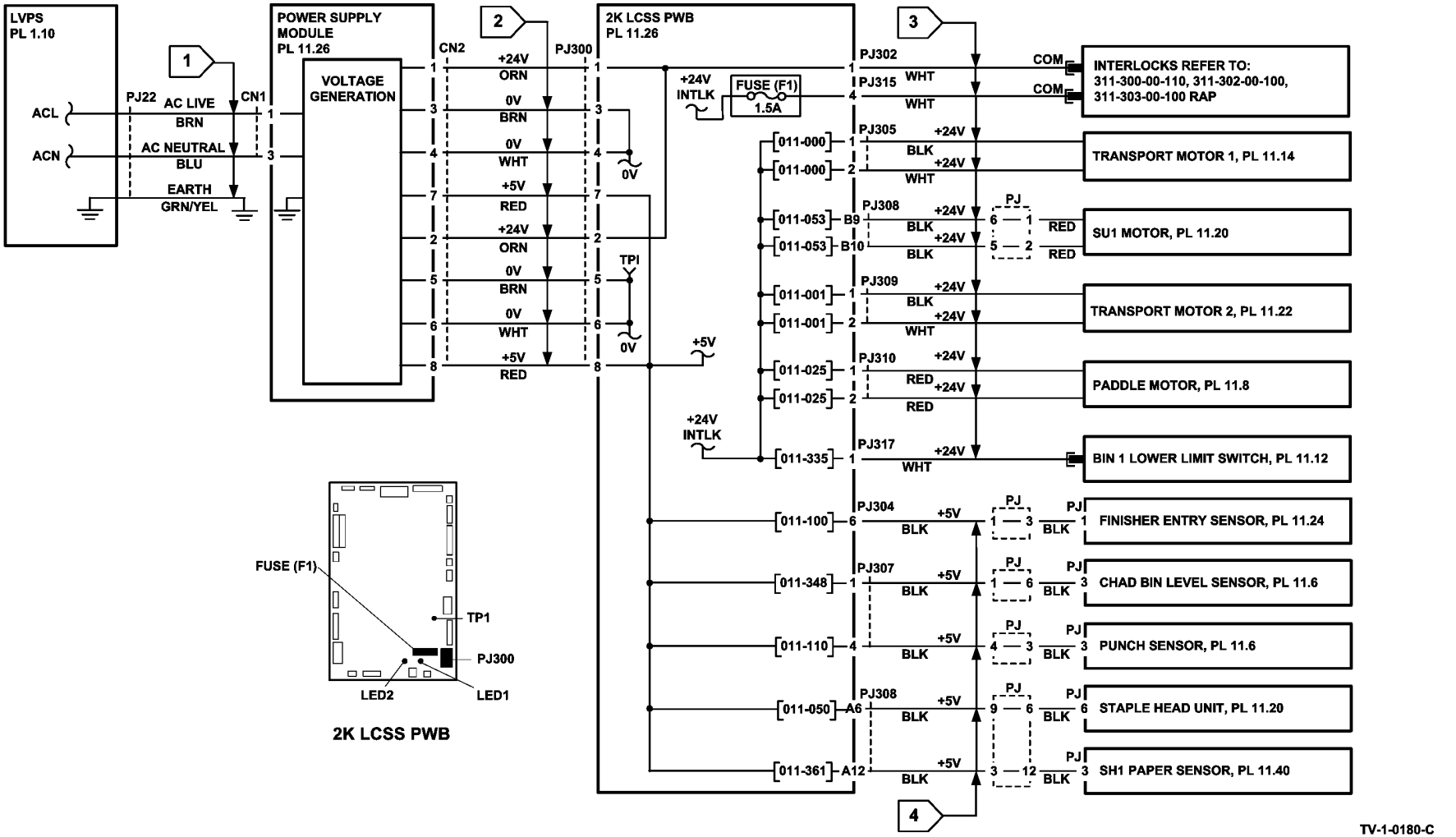


Figure 2 Circuit diagram

311E-110 2K LCSS to Machine Communications Interface RAP

All communications between the machine and 2K LCSS are conducted through a single interface cable. A UI message **System Error** or **Finisher Comms Failure** may be seen.

Initial Actions

Check the 2K LCSS PWB DIP switch settings, refer to the 311F-110 2K LCSS PWB DIP Switch Settings RAP. If the settings are correct, continue with this RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Observe the software heartbeat LED (LED 1) on the 2K LCSS PWB, Figure 1. **LED 1 is flashing at 1Hz (0.5 seconds on, 0.5 seconds off).**

Y N

LED 1 is flashing at 0.25Hz (2 seconds on, 2 seconds off) this indicates that the finisher software is corrupt. Re-load the finisher software, GP 4. If necessary install a new 2K LCSS PWB, PL 11.26 Item 1.

Go to Flag 1, check the wiring and connectors between P/J301and P/J11. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

The finisher checks are good. Switch off the machine, then switch on the machine, GP 14. If the fault remains, perform the Forced Altboot Software Loading Procedure, GP 4.

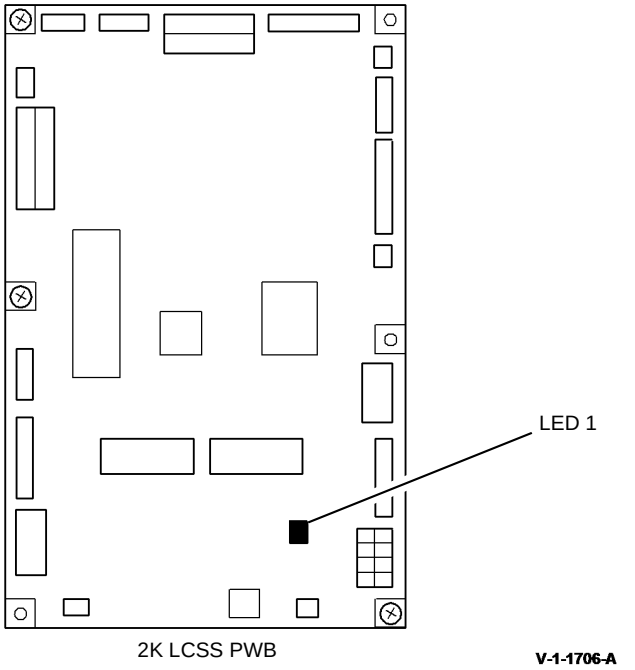


Figure 1 Component location

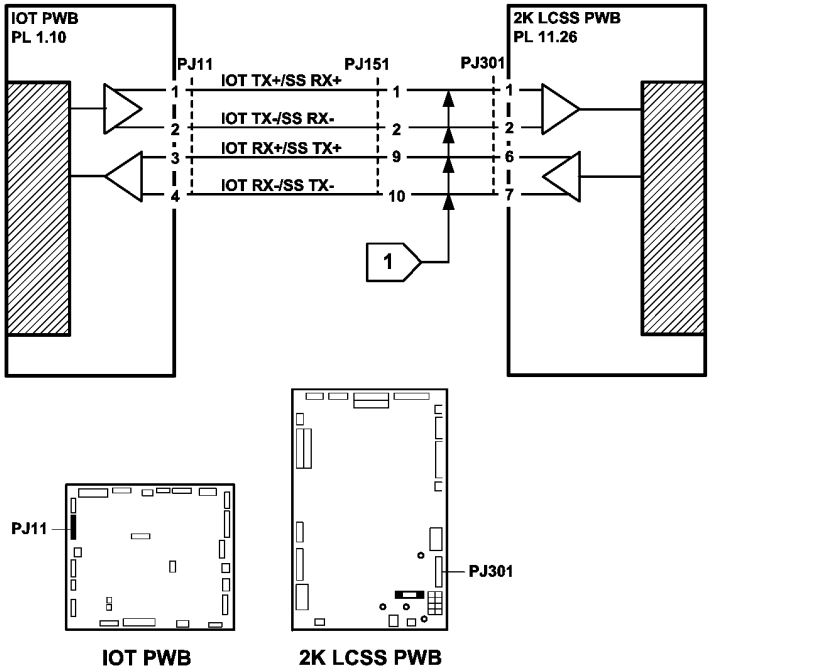


Figure 2 Circuit diagram

311F-110 2K LCSS PWB DIP Switch Settings RAP

To show the correct settings for the DIP switches on the 2K LCSS PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Problems that can result from incorrect DIP switch settings are:

- False jam clearance instructions for the 2K LCSS and/or the machine exit area.
- Communication errors between the 2K LCSS and machine.
- Erratic behavior of the 2K LCSS.

Check the DIP switch settings, Figure 1. If necessary, switch off the machine, GP 14. Correct the DIP switch setting, then switch on the machine, GP 14.

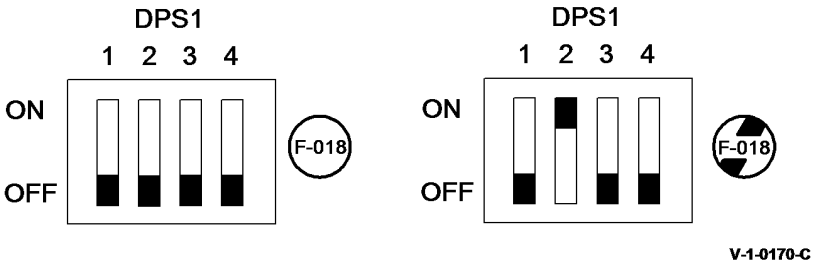


Figure 1 DIP switch settings

311G-110 2K LCSS PWB Damage RAP

Use this RAP to determine the cause of damage to the 2K LCSS PWB, so that the cause can be repaired before a new 2K LCSS PWB is installed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fuse on the 2K LCSS PWB, If the fuse is good, continue at the procedure. If the fuse not good, install a new 2K LCSS PWB, PL 11.26 Item 1.

Procedure

The 2K LCSS PWB can be damaged by a component connected to it going short-circuit. If a new 2K LCSS PWB is installed and power applied to the machine, the new 2K LCSS PWB will be damaged in the same way. The cause of the damage must be found by following this procedure.

Remove the 2K LCSS PWB and inspect the components shown in Figure 1 for damage. The damage to the component may be in the form of a crack, a small crater or a burnt patch. Refer to Table 1 to locate the component causing the damage to the 2K LCSS PWB.

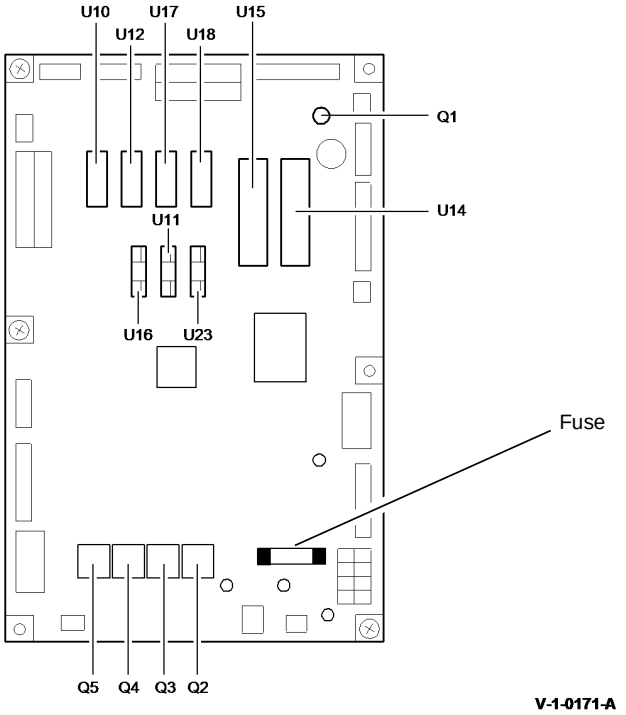


Figure 1 2K LCSS PWB components

Table 1 2K LCSS PWB Drive Components

2K LCSS PWB component	Driven component	Normal resistance measurement +/- 10%	Spared part and references
U10	Rear tamper motor	pin A1 to A3 = 20 ohms pin A1 to A4 = 20 ohms pin A2 to A5 = 20 ohms pin A2 to A6 = 20 ohms	Tamper assembly, PL 11.16 Item 1. 311-319-00-110 RAP
U11	Staple head motor	PJ308 pin A8 to A10 = 20 ohms pin A9 to A11 = 20 ohms	Staple head unit, PL 11.20 Item 5. 311-360-00-110 RAP
U12	Front tamper motor	pin A7 to A9 = 20 ohms pin A7 to A10 = 20 ohms pin A8 to A11 = 20 ohms pin A8 to A12 = 20 ohms	Tamper assembly, PL 11.16 Item 1. 311-005-00-110, 311-006-00-110 RAP

Table 1 2K LCSS PWB Drive Components

2K LCSS PWB component	Driven component	Normal resistance measurement +/- 10%	Spared part and references
U14	Transport motor 1	PJ305 pin 1 to 4 = 4 ohms pin 1 to 5 = infinity pin 2 to 6 = 4 ohms pin 2 to 3 = infinity	Transport motor 1, PL 11.14 Item 2. 311-130-00-110, 311-132-00-110 RAP
U15	Transport motor 2	PJ309 pin 1 to 4 = 1.3 ohms pin 1 to 5 = 1.3 ohms pin 2 to 6 = 1.3 ohms pin 2 to 7 = 1.3 ohms.	Transport motor 2, PL 11.22 Item 5. 311-130-00-110, 311-132-00-110 RAP
U16	Hole punch motor	PJ311 pin 1 to 2 = 6 ohms	Not spared. 311-043-00-110, 311-350-00-110 RAP
U17	Paddle motor	PJ310 pin 1 to 3 = 29 ohms pin 1 to 4 = 29 ohms pin 2 to 5 = 29 ohms pin 2 to 6 = 29 ohms.	Paddle motor assembly, PL 11.8 Item 10. 311-024-00-110, 311-025-00-110 RAP
U18	SU1 motor (stapler index-ing)	PJ308 pin B9 to B11 = 20 ohms pin B9 to B12 = 20 ohms pin B10 to B13 = 20 ohms pin B10 to B14 = 20 ohms.	Stapler traverse assembly, PL 11.20 Item 1. 311-371-00-110 RAP
U23	Ejector motor	PJ303 pin 1 to 2 = 8 ohms	Ejector assembly, PL 11.18 Item 1. 311-320-00-110, 311-322-00-110 RAP
Q1	Diverter gate solenoid	PJ306 pin 1 to pin 2 = 74 ohms	Diverter gate solenoid, PL 11.22 Item 12. 311-130-00-110, 311-132-00-110 RAP
Q2, Q3, Q4, Q5	Bin 1 elevator motor	PJ318 pin 1 to 2 = 7.7 ohms	Bin 1 elevator motor, PL 11.10 Item 8. 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 RAP

NOTE: *If difficulty is found in connecting the service meter probes to the connector headers on the 2K LCSS PWB, refer to the RAP quoted in Table 1 and make the measurement at another point in the harness to the driven component.*

If the defective driven component is found using the table checks, disconnect the connector closest to the driven component, then check the driven component again to identify any short circuit in the wiring to the driven component. Repair the wiring or install new parts as necessary.

If the defective driven component can not be found using the table checks, refer to GP 7, check each driven component to ensure that it is not seized. Motors should rotate reasonably easily. Solenoid armatures should slide easily in the coil. Also check the drive components to ensure that they rotate easily, if necessary install new parts.

When the a new driven component has been installed or the defective drive components have been repaired, install a new 2K LCSS PWB, PL 11.26 Item 1.

311H-110 Copy Damage in the 2K LCSS RAP

Use this RAP to identify and correct the causes of copy damage in the 2K LCSS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- Look for torn paper in the 2K LCSS paper path. Torn fragments can pass through the IOT and 2K LCSS paper path without causing a problem until they finally wedge themselves at some point. A likely place for a piece of paper to be wedged is at the hole punch assembly, where the top and bottom guides form the narrowest part of the paper path.
- Ensure that the shaft diverter assembly, PL 11.22 Item 13, operates correctly and has full movement.
- Ensure that the hole punches park at the fully open position. If they protrude even slightly, a jam will occur in the narrow paper path of the hole punch.
- Ensure that the jam clearance guide, PL 11.24 Item 6, closes and latches correctly. Check that the magnet at the rear is located and functions correctly. Check the clip at the front is positioned correctly, Figure 1.
- Ensure that all idler rolls in the 2K LCSS paper path are free to rotate, particularly those on the jam clearance guide, where the paper turns through 90 degrees.
- Ensure that the paper path ribs of the paper entry guide, PL 11.24 Item 6, and the entry guide cover, PL 11.24 Item 5, are free of ‘scores’ and ‘nicks’. Check also for contamination and glue from label stock.

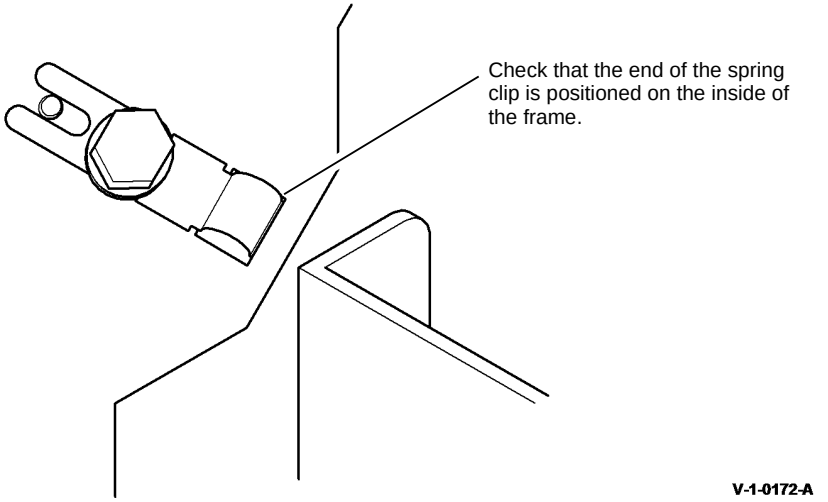


Figure 1 Position of the spring clip

311J-110 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP

Use this RAP to identify and correct the causes of mis-registration in stapled sets, resulting in staples missing some sheets in the set, or poorly registered non-stapled sets.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The most likely cause of mis-registration is paper condition and/or damage such as curl, wrinkle, creases, dog ears, etc.

Curl, wrinkle and creases are probably caused in the IOT, go to IQ1 Image Quality Entry RAP.

For other copy/print damage and dog ears, go to the 311H-110 Copy Damage in the 2K LCSS RAP.

Check the following:

- Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.2 Item 13.
- Turn over the paper stack in the tray in use.
- Use a new ream of paper in the tray in use.
- Paper type especially recycled paper can lead to registration problems. Try changing to a different brand or type of paper.
- Ensure that the guides in the paper trays are correctly set and reported on the UI for the paper size loaded.
- Check that paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded.
- Check for obstructions in the compiler.
- Ensure that the paddle roll operates correctly and that the paddles are not damaged. The paddles should park completely inside the top section of the compiler, with the shorter paddle in a vertical position. If all of the paddles are out of position, check the paddle roll position sensor, PL 11.8 Item 11, the flag, PL 11.8 Item 7 and the paddle motor assembly, PL 11.8 Item 10. If only one paddle is mis-aligned with the others, it can be re-positioned by hand (they are not bonded to the shaft).
- Make sure the paddles are clean. If necessary, use formula A cleaning fluid, PL 26.10 Item 2 to clean the paddles.
- Ensure that the tampers operate correctly, i.e. are not stalling or losing position during the job. Inspect the tampers for damage, if necessary install new parts. PL 11.16.
- Inspect the bin 1 entry nips for roll damage. The idlers should be held against the rubber driving rolls and they should be free to rotate within their support springs. If necessary, install new parts, PL 11.23.
- Inspect the four spring loaded guides on the output cover, PL 11.2 Item 7. Ensure that they are correctly located and are free to move up and down.

311-005-00-120, 311-006-00-120 Front Tamper Move Failure RAP

311-005-00-120 Front tamper fails to move to the front position.

311-006-00-120 Front tamper fails to move to the rear position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.112 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, they may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition and tension of the front tamper drive belt. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to the IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-120, 311-025-00-120 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-120 Bin 1 Movement Failure RAP.
  - Refer to the 311J-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 codes 11-003 and 11-005 alternately. **The front tamper moves between the home and inboard positions, Figure 1.**

Y N

Go to Flag 2. Check the front tamper motor, MOT11-003.
Refer to:

- 311G-120 1K LCSS PWB Damage RAP.
- GP 10 How to Check a Motor.
- P/J9, 1K LCSS PWB.

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A

- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Tamper assembly, PL 11.112 Item 1.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-310. Actuate the front tamper home sensor, Q11-310. **The display changes.**

Y N

Go to Flag 1. Check Q11-310.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J16, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Front tamper home sensor, PL 11.112 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

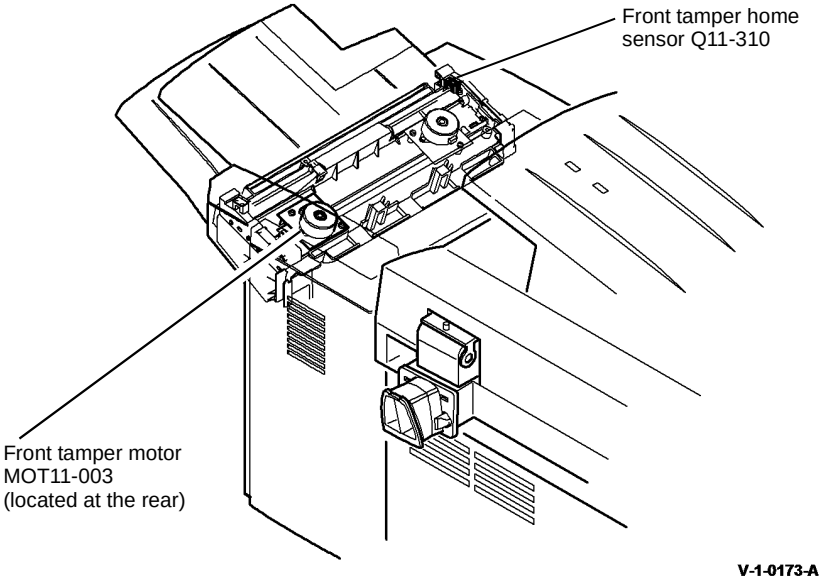
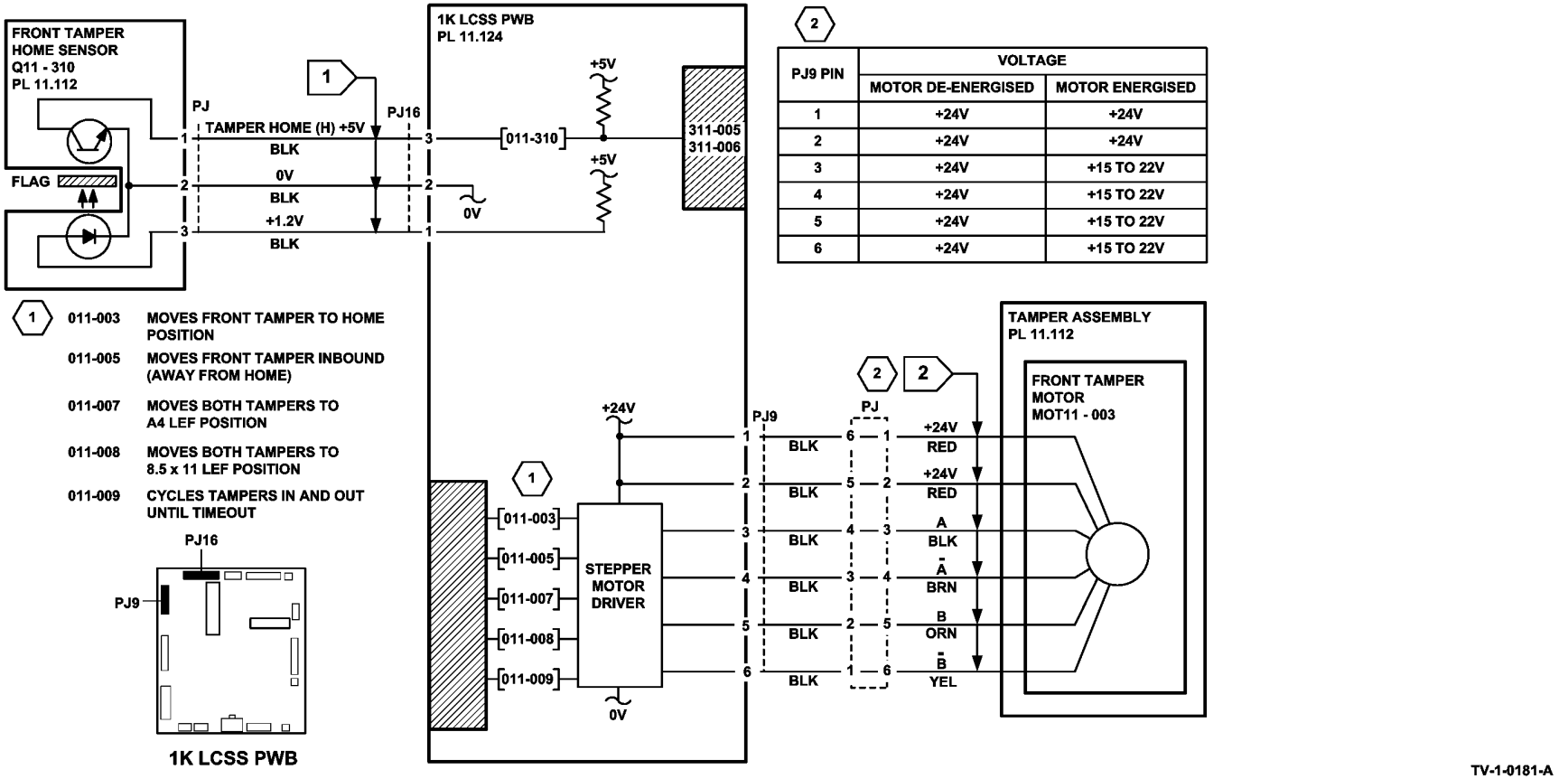


Figure 1 Component location



PJ9 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+15 TO 22V
4	+24V	+15 TO 22V
5	+24V	+15 TO 22V
6	+24V	+15 TO 22V

Figure 2 Circuit diagram

311-024-00-120, 311-025-00-120 Paddle Roll Failure RAP

311-024-00-120 The paddle is not at the home position.

311-025-00-120 The paddle fails to rotate.

NOTE: *The home position of the paddle is when the sensor flag is located between the sensor jaws. Jams will occur in the compiler and bin 1 cannot be used.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- That there is no paper or other obstructions in the vicinity of the paddle.
- The paddle roll position sensor bracket is holding the sensor in the correct position, i.e. the flag is in the middle of the sensor gap and the sensor does not touch any moving components.
- Check that paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded. Refer to the 311H-120 Mis-Registration in Stapled Sets and Non-stapled Sets RAP.
- Check the position of the paddles. With the paddle roll in the home position both sets of paddles must be within the output cover, if they are not, refer to REP 11.10-120 Paddle Wheel Shaft Assembly. If any of the paddles are out of alignment to other paddles, install a new paddle wheel shaft assembly, PL 11.104 Item 4.
- 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 codes 11-024, paddle home position and 11-025, paddle run. **The paddle rotates correctly.**

Y **N**

Go to Flag 2. Check the paddle motor, MOT11-024.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- Figure 1.
- P/J14, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP

Install new components as necessary:

- Paddle motor, PL 11.104 Item 10.
- 1K LCSS PWB, PL 11.124 Item 1.

A

A

Enter dC330 code 011-025 and stack the code 011-326, to actuate the paddle roll position sensor Q11-326. **The display cycles high/low.**

Y **N**

Go to Flag 1. Check Q11-326.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- Figure 1.
- P/J2, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP

Install new components as necessary:

- Paddle roll home sensor, PL 11.104 Item 11.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

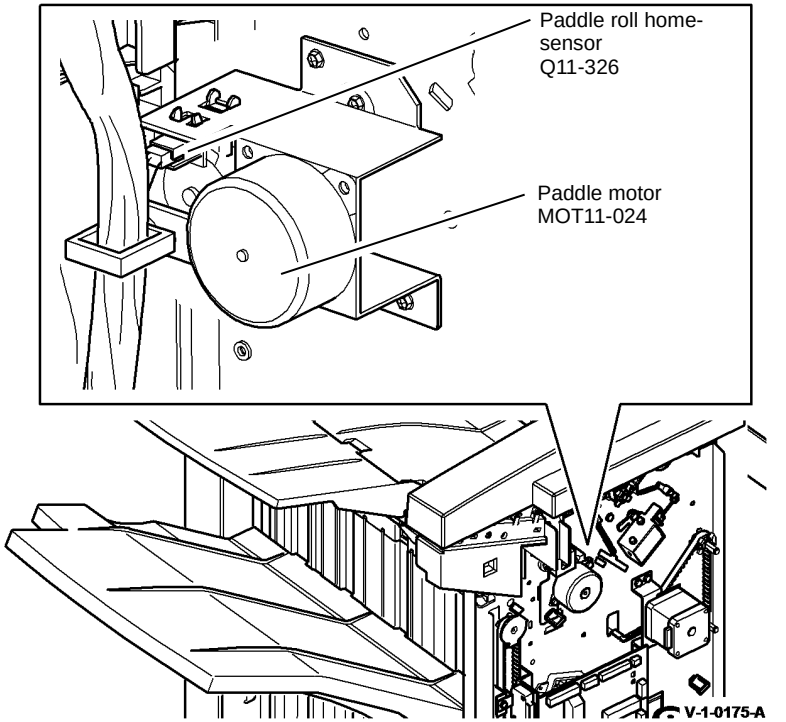
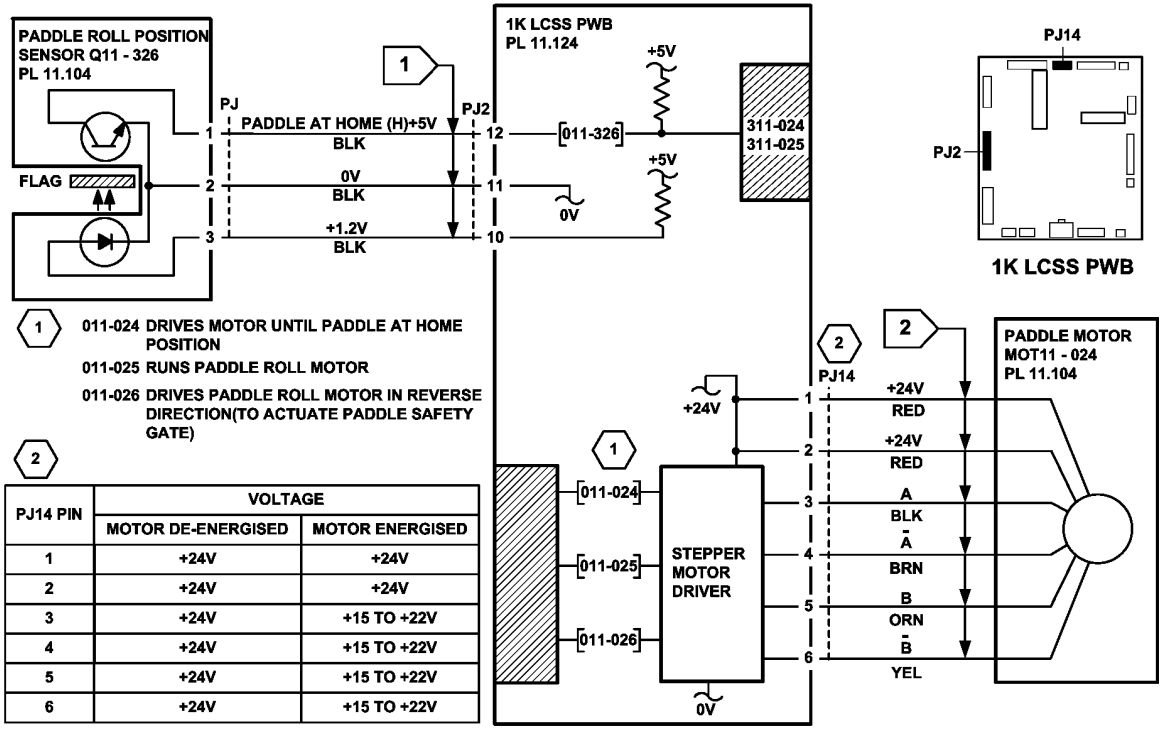


Figure 1 Component location



PJ14 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+15 TO +22V
4	+24V	+15 TO +22V
5	+24V	+15 TO +22V
6	+24V	+15 TO +22V

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Figure 2 Circuit diagram

311-030-00-120 Bin 1 Movement Failure RAP

311-030-00-120 Bin 1 fails to move.

NOTE: *The home position of bin 1 is when bin 1 is actuating the bin 1 upper limit switch. See the final actions at the end of the procedure.*

Two sensors and two switches monitor the level of paper in bin 1 and the position of the tray

- *The bin 1 upper level sensor detects the top of the paper stack in bin 1, Figure 1.*
- *The bin 1 90% full sensor detects when the tray has descended to a position where the tray is 90% full, Figure 2.*
- *Bin 1 upper limit switch, S11-334, Figure 2.*
- *Bin 1 lower limit switch, S11-335, Figure 2.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

- Check for a physical obstruction that would prevent bin 1 from moving, such as an item of furniture.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-120 1K LCSS Bin 1 Level.
- Check the 1K LCSS PWB DIP switch settings, refer to 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- If the fault code is 311-030. Check that the screws to secure the motor damper and the motor bracket are not loose. This will cause the encoder disc to move away from the encoder sensor. Push the motor bracket towards the encoder sensor and tighten the screws. Refer to Figure 2.
- Refer to the 311H-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
- If there is a large jam of paper above bin 1, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor.

Perform the relevant check:

- If paper is overflowing the tray when it is at the lower limit, check the tray 90% full sensor.
- If paper cannot be fed to bin 1 when it is at the highest position, check the bin 1 paper sensor - low and bin 1 paper sensor - high.

Check the front and rear bin 1 drive belts. If necessary install new components, PL 11.106 Item 1.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

NOTE: *Refer to service bulletin T8164-10-11 High rate of 11-030 faults.*

Remove the 1K LCSS rear cover. Enter dC330 code 011-336, bin 1 motor encoder sensor Q11-336. Slowly rotate the encoder disk by hand. **The display changes.**

Y N

Go to Flag 2. Check Q11-336.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J8, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 motor encoder sensor, PL 11.106 Item 11.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-033, bin 1 elevator motor, MOT11-030. **Bin 1 cycles down and up.**

Y N

Go to Flag 1. Check MOT11-030.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10 How to Check a Motor.
- P/J12, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 elevator motor, PL 11.106 Item 8.
- 1K LCSS PWB, PL 11.124 Item 1.

Figure 1. Enter dC330 code 011-332, bin 1 upper level sensor, Q11-332. Actuate Q11-332. **The display changes.**

Y N

Go to Flag 3. Check Q11-332.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J2, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 upper level sensor, PL 11.106 Item 5.
- 1K LCSS PWB, PL 11.124 Item 1.

Figure 2. Enter dC330 code 011-334, bin 1 upper limit switch, S11-334. Actuate S11-334. **The display changes.**

Y N

Go to Flag 4. Check S11-334.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 13 How to Check a Switch.
- P/J5, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

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Install new components as necessary:

- Bin 1 upper limit switch, PL 11.106 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-335, bin 1 lower limit switch, S11-335. Actuate S11-335. **The display changes.**

Y N

Go to Flag 5. Check S11-335.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 13 How to Check a Switch.
- P/J4, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.
- REP 11.13-110 1K LCSS Un-docking.

Install new components as necessary:

- Bin 1 lower limit switch, PL 11.106 Item 11.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-331, bin 1 90% full sensor, Q11-331. Actuate Q11-331. **The display changes.**

Y N

Go to Flag 6. Check Q11-331.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J2, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Bin 1 90% full sensor, PL 11.106 Item 5.
- 1K LCSS PWB, PL 11.124 Item 1.

As final actions, check the following sequence of operation:

- When bin 1 is empty and at the top, bin 1 upper limit switch, S11-334 is actuated and the bin 1 upper level sensor, Q11-332 is de-actuated.
- Paper is delivered to the tray until the bin 1 upper level sensor, Q11-332 is actuated.
- The motor lowers the tray until the bin 1 upper level sensor, Q11-332 is de-actuated.
- When the tray is emptied, the tray returns to the home position. In the home position the bin one upper limit switch, S11-334 is actuated.

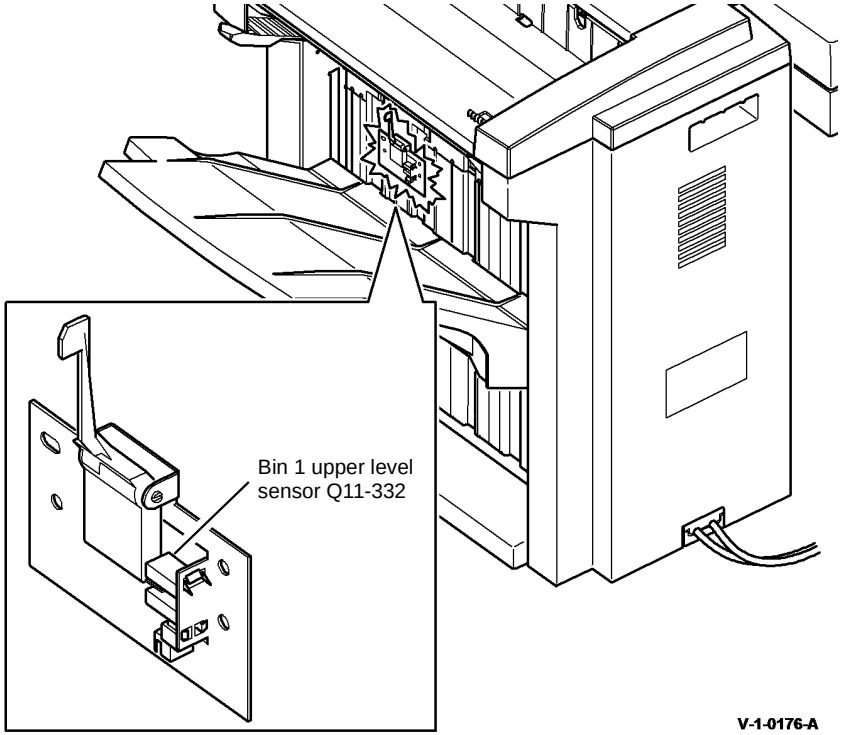


Figure 1 Component location

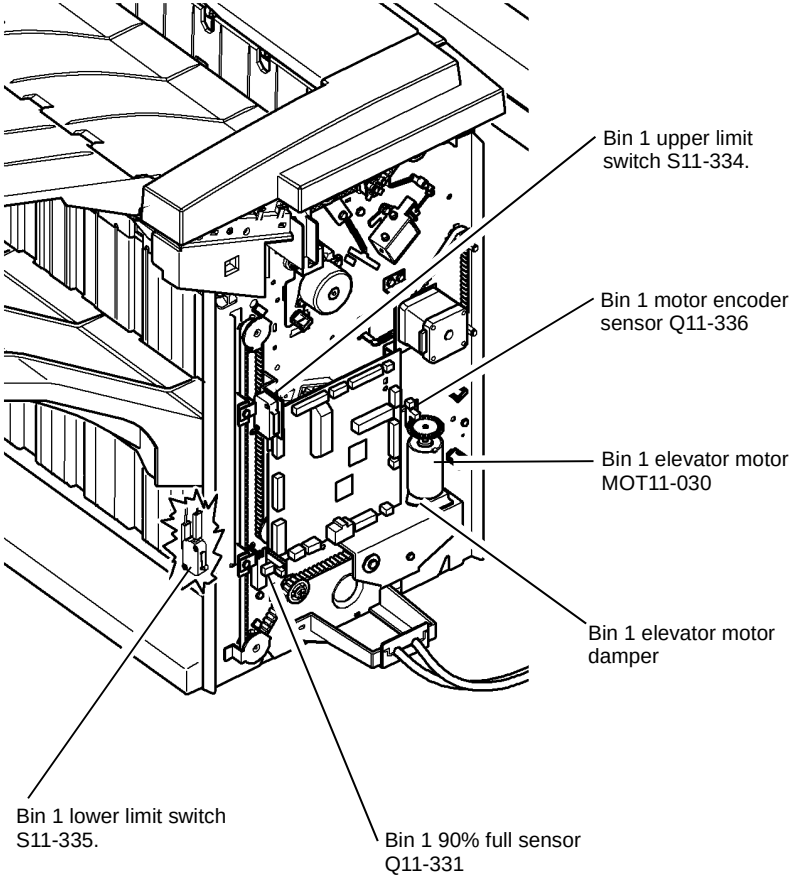


Figure 2 Component location

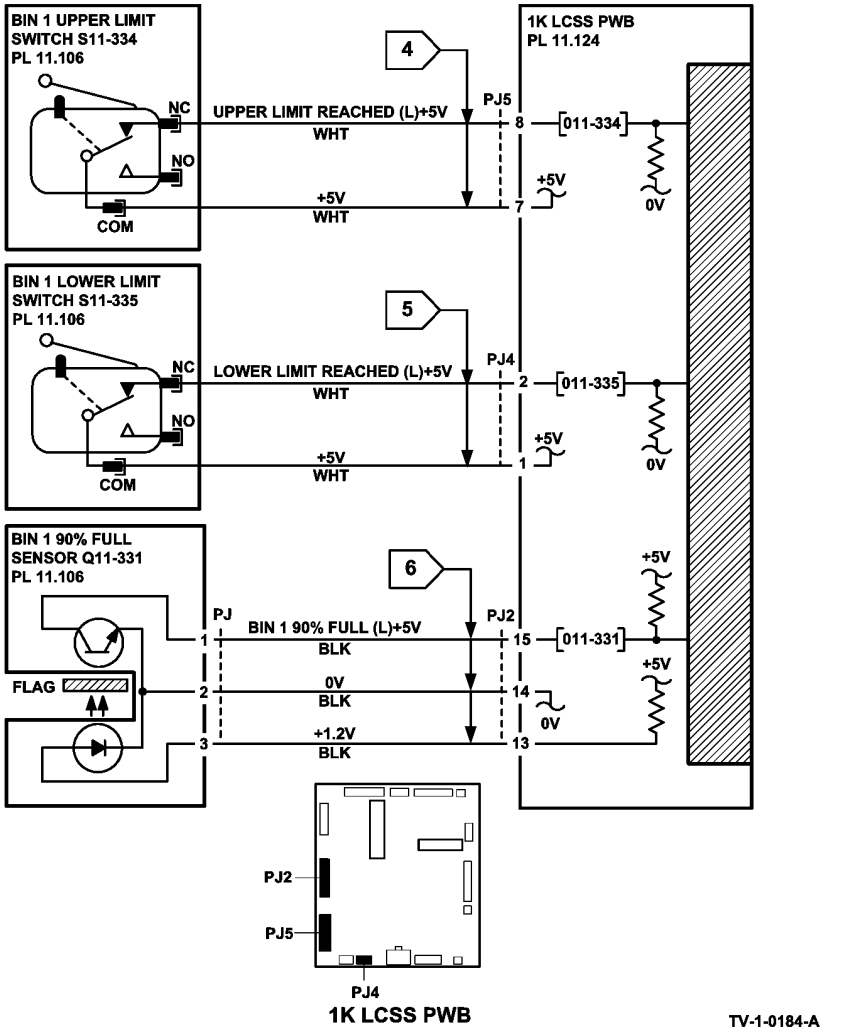
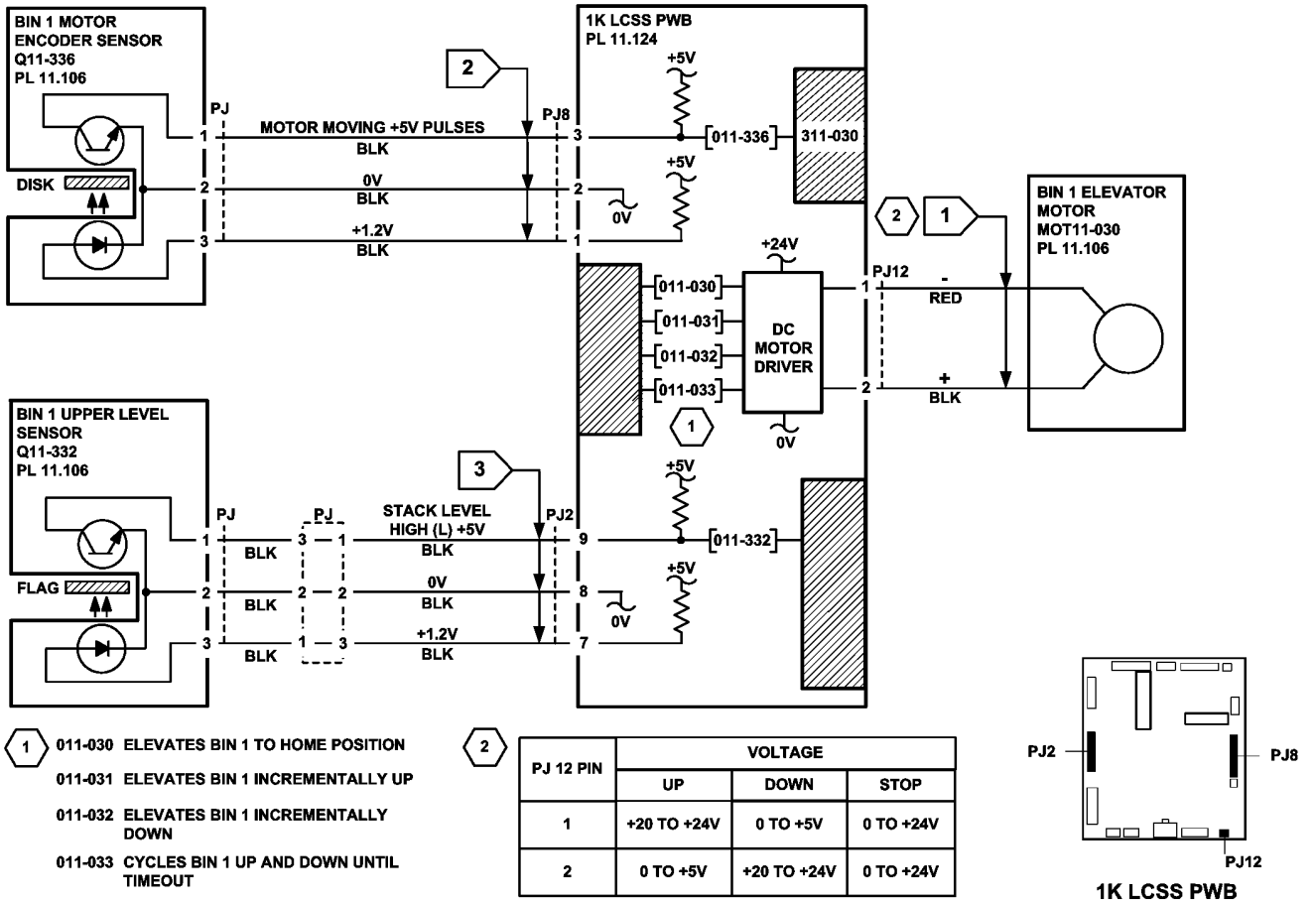


Figure 3 Circuit diagram



PJ 12 PIN	VOLTAGE		
	UP	DOWN	STOP
1	+20 TO +24V	0 TO +5V	0 TO +24V
2	0 TO +5V	+20 TO +24V	0 TO +24V

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Figure 4 Circuit diagram

311-050-00-120, 311-360-00-120 Staple Head Operation Failure RAP

311-050-00-120 The staple head fails to cycle.

311-360-00-120 The staple head is not at the home position.

NOTE: *The home position is with the jaws of the staple head fully open.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not run code 011-050 without two sheets of paper in the stapler jaws. Running this code without the paper in position can cause damage to the machine.

- Switch off the machine, then switch on the machine, GP 14.
- Figure 1. Check the following:
  - The 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.
  - The staple head unit is correctly installed.

Procedure

NOTE: *After repairing the fault using this RAP, switch off the machine, then switch on the machine, GP 14, to enable operation of the staple head.*

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Place two sheets of paper in the stapler jaws. Enter dC330 code 011-050, staple head motor 1, to cycle the staple head once. **The staple head operates as expected.**

Y **N**

Go to Flag 1 and Flag 2. Check the wiring and connectors between the 1K LCSS PWB and the staple head. **The wiring is good.**

Y **N**

Repair the wiring.

Perform the following procedures:

- 311C-120 1K LCSS Power Distribution RAP.
- 311F-120 1K LCSS PWB Damage RAP.

Install new components as necessary:

- Staple head unit, PL 11.116 Item 5.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

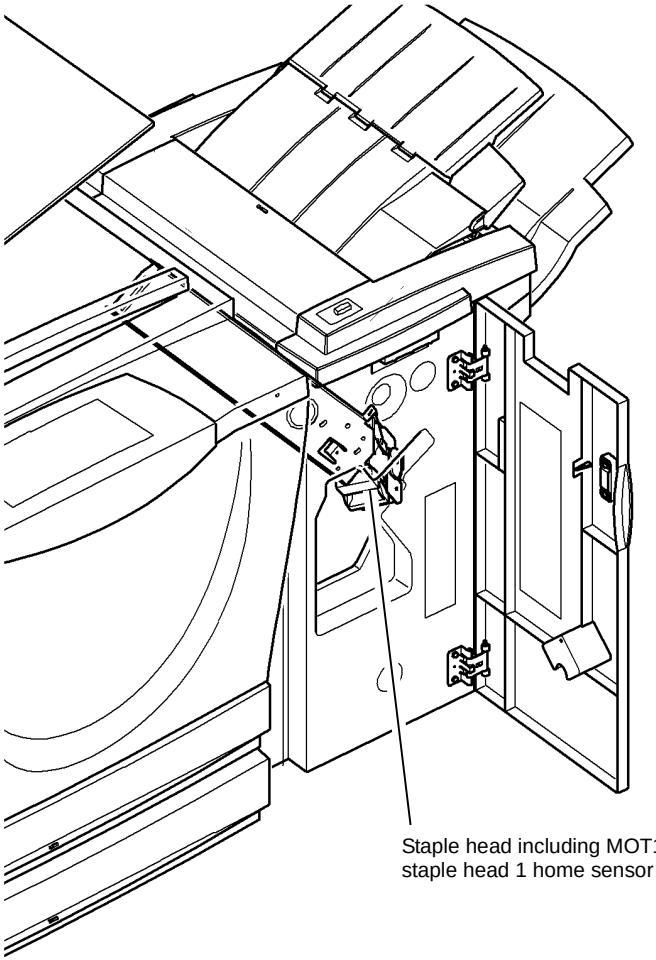

Figure 1 Component location

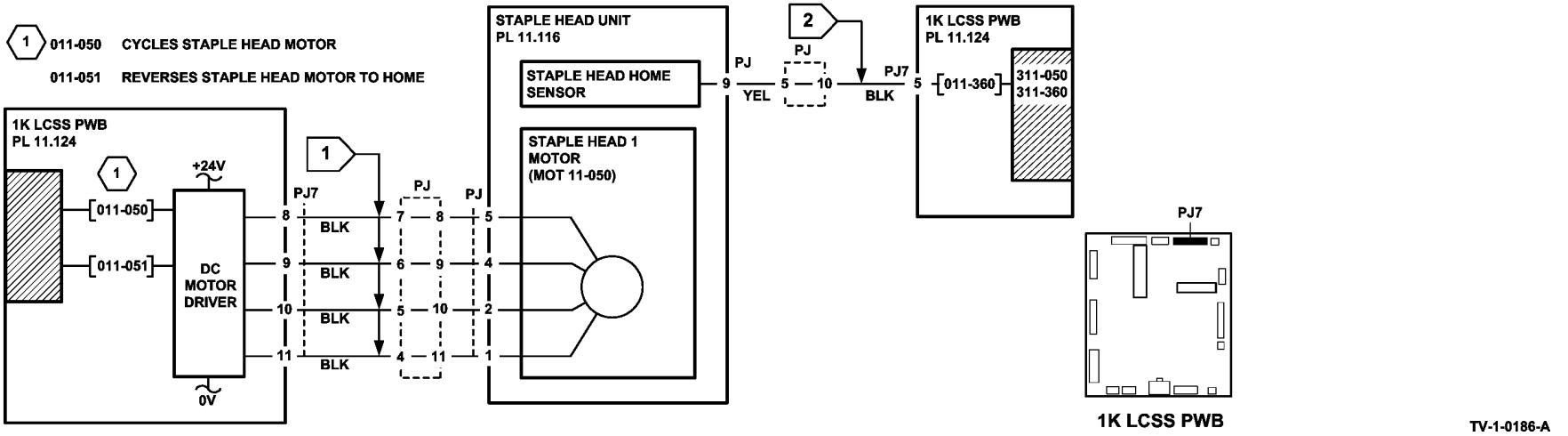

Figure 2 Circuit diagram

311-100-00-120 1K LCSS Paper Entry RAP

311-100-00-110 The leading edge of the sheet is late to the entry sensor Q11-100.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the 311G-120 Copy Damage in the 1K LCSS RAP.

Check the following:

- 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- Check the input guide for damage or wear that could cause paper to jam.
- Paper jam in the machine to 1K LCSS paper path.
- IOT exit path and feed rolls.
- Feeding performance from a paper tray loaded with a new ream of paper.

Procedure

Figure 1. Lower the paper entry guide assembly, PL 11.110 Item 8, to access the entry sensor. Enter dC330, code 011-100 entry sensor, Q11-100. Actuate Q11-100. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-100.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- P/J8, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Entry sensor, PL 11.122 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

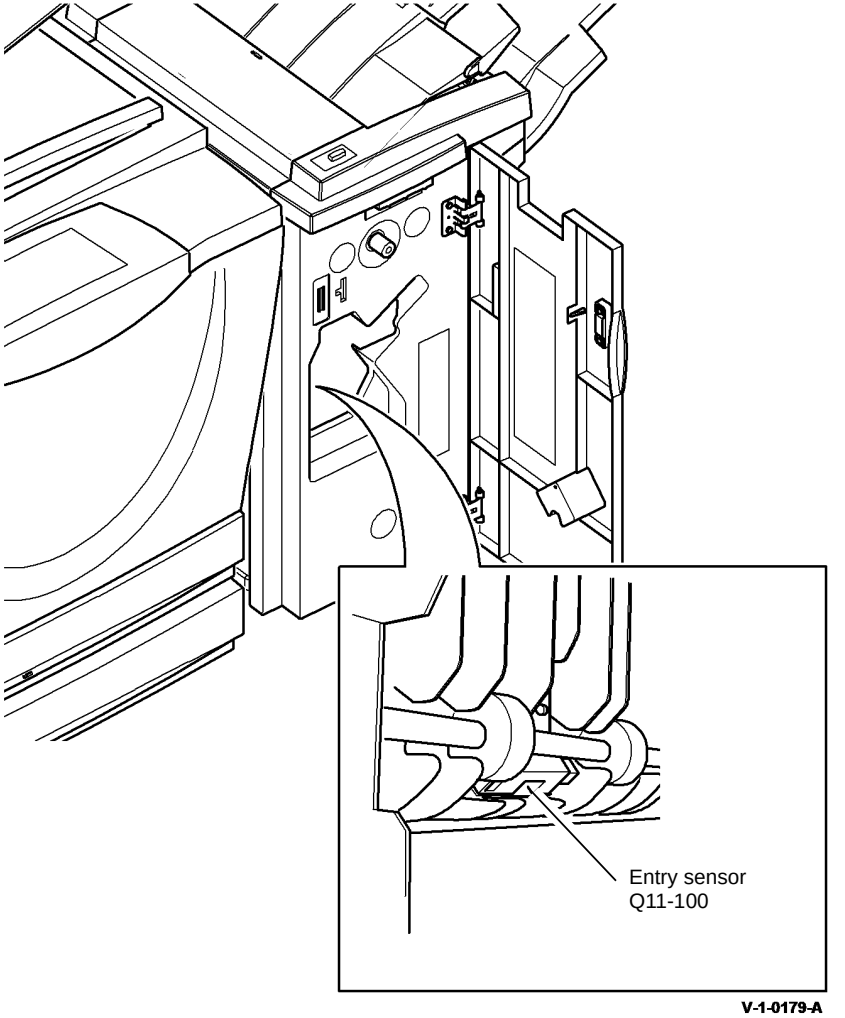

Figure 1 Component location

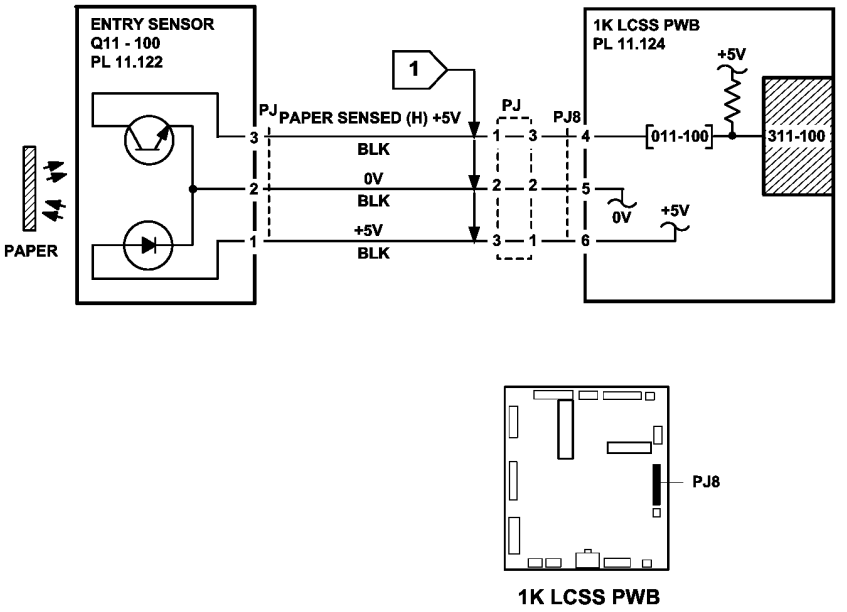

Figure 2 Circuit diagram

311-130-00-120, 311-132-00-120 Paper Exiting to Bin 0 RAP

311-130-00-120 The leading edge of the sheet is late to the top exit sensor.

311-132-00-120 The trailing edge of the sheet is late from the top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary lubricate the tensioner and tensioner pulley. Refer to ADJ 40.1 Machine Lubrication and GP 18 Machine Lubrication.
- That the drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted, are in a good condition and correctly tensioned, refer to ADJ 11.2-120 Motor Drive Belt Tensioning.
- All the transport rolls and idler pulleys are free to rotate.
- The diverter gate and linkage for free movement.
- A paper jam in the path to bin 0.
- Paper fragments from a previous jam clearance action.
- A paper jam in the path to the top tray. If the jams occur shortly after install. Check the gap between the entry guide cover, PL 11.122 Item 5 and the paper guide PL 11.118 Item 10. If the gap is less than 1mm, adjust or install a new entry guide cover. Refer to the replacement procedure in REP 11.13-120.

Refer to the 311G-120 Copy Damage in the 1K LCSS RAP and the 311H-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

NOTE: *Paper is diverted to bin 0 when the diverter gate solenoid is energized. Paper is fed to bin 1 when the diverter gate solenoid is de-energized.*

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-001 transport motor 2, MOT11-001, Figure 1. **MOT11-001 runs.**

Y **N**

Go to Flag 3. Check MOT11-001.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.

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- P/J16, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 2, PL 11.120 Item 13.
- 1K LCSS PWB, PL 11.124 Item 1.

NOTE: *The diverter gate solenoid remains energized for 5 seconds.*

Enter dC330 code 011-002 diverter gate solenoid, SOL11-002. **SOL11-002 energizes.**

Y N

Go to Flag 2. Check SOL11-002.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 12, How to Check a Solenoid.
- P/J13, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Diverter gate solenoid, PL 11.118 Item 12.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-130, top exit sensor, Q11-130. Actuate Q11-130. **The display changes.**

Y N

Go to Flag 1. Check Q11-130.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J2, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Top exit sensor, PL 11.118 Item 11.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-000, transport motor 1, MOT11-000. **MOT11-000 runs.**

Y N

Go to Flag 4. Check MOT11-000.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J17, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Transport motor 1, PL 11.110 Item 2.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

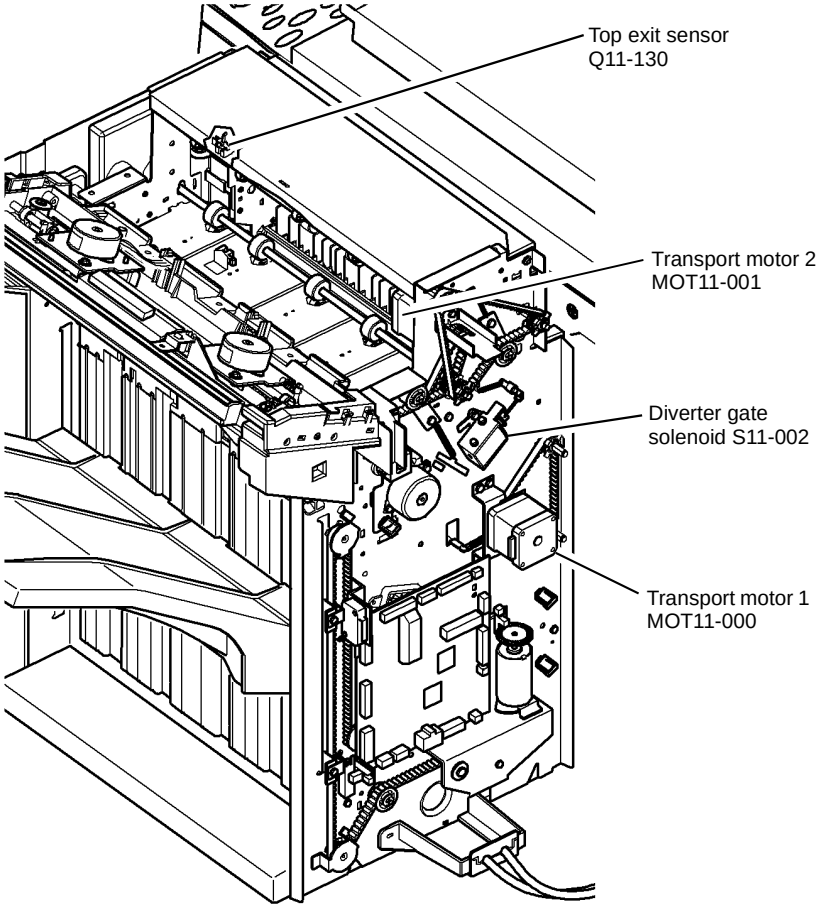

Figure 1 Component location

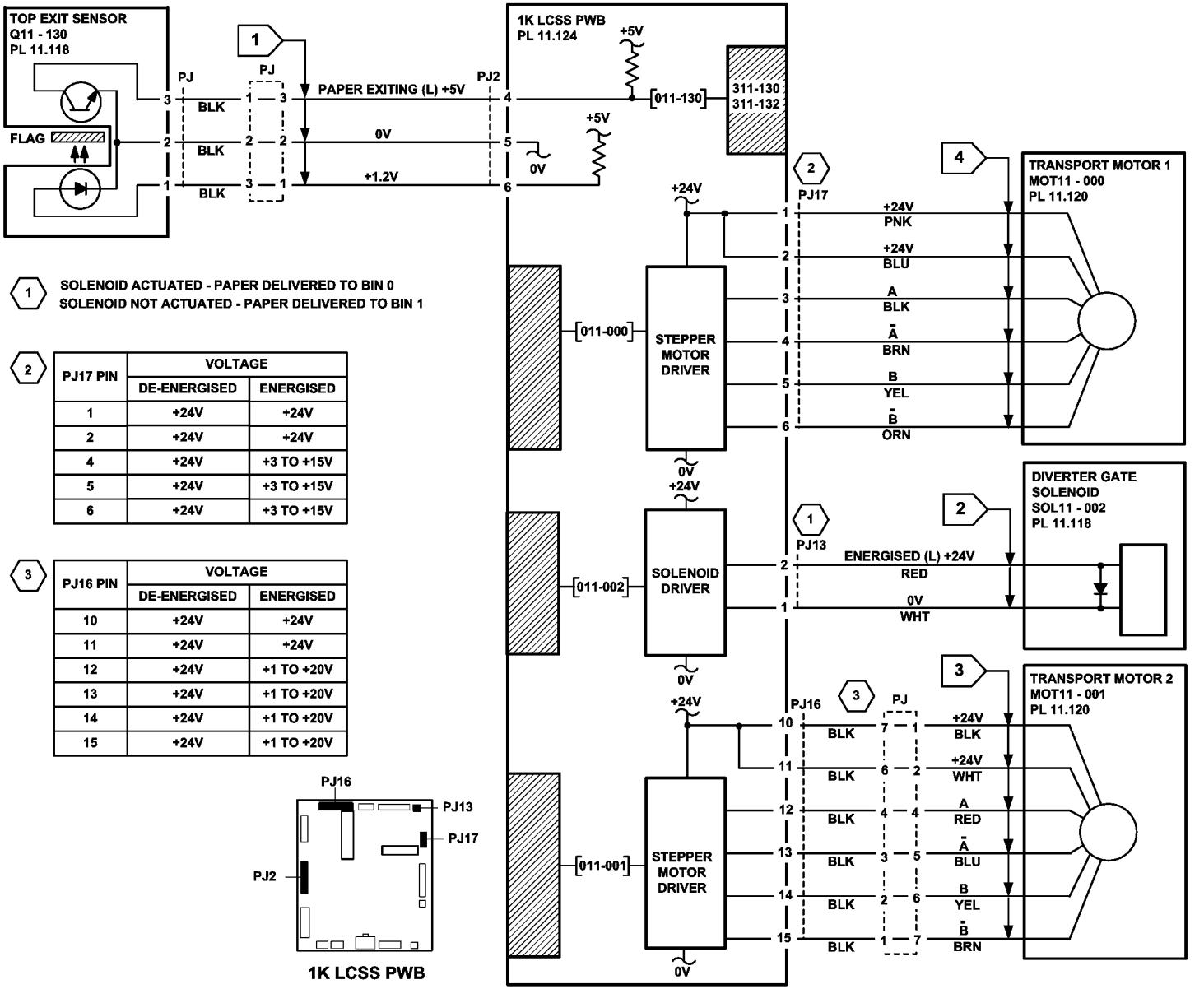

Figure 2 Circuit diagram

311-140-00-120, 311-142-00-120 Sheet Late to Bin 1 RAP

311-140-00-120 The leading edge of the sheet is late to the 2nd to top exit sensor.

311-142-00-120 The trailing edge of the sheet is late to the 2nd to top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Paper is diverted to bin 0 when the diverter gate solenoid is energized. Paper is fed to bin 1 when the diverter gate solenoid is de-energized.*

Check the following:

- 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in all trays.

  For trays 3 and 4, perform the following:
  - Select the systems settings button from the tools screen.
  - Select the tray management button and stock settings.
  - From the list, select tray 3. Select the change stock size button.
  - Select the paper size loaded in the tray. Select the save button.
  - Repeat for tray 4.
  - Save the stock setting and exit the tools mode.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary re-lubricate the tensioner and tensioner pulley. Refer to ADJ 40.1.
- That the drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted and are in a good condition
- All the transport rolls and idler pulleys are free to rotate.
- The diverter gate and linkage for free movement.
- A paper jam in the path to bin 1, to the compiler, and for poor stacking on bin 1.
- Ensure that the 1K LCSS is fully latched to the machine, refer to REP 11.11-120.
- Torn paper fragments from a previous jam clearance action.

Refer to the 311G-120 Copy Damage in the 1K LCSS RAP and the 311H-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Figure 1. Enter dC330 code 011-001 transport motor 2, MOT11-001 **MOT11-001 runs.**

Y N

Go to Flag 3. Check MOT11-001.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to check a motor.
- P/J16, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Transport motor 2, PL 11.118 Item 5.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-002 diverter solenoid, SOL11-002 **SOL11-002 energizes.**

Y N

Go to Flag 4. Check SOL11-002.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 12, How to Check a Solenoid.
- P/J13, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Diverter gate solenoid, PL 11.22 Item 12.
- 1K LCSS PWB, PL 11.26 Item 1.

Enter dC330 code 011-140 2nd to top exit sensor, Q11-140. Actuate Q11-140 **The display changes.**

Y N

Go to Flag 1. Check Q11-140.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a sensor.
- P/J2, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- 2nd to top exit sensor, PL 11.120 Item 4.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-000 transport motor 1, MOT11-000 **MOT11-000 runs.**

Y N

Go to Flag 2. Check MOT11-000.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J17, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Transport motor 1, PL 11.110 Item 2.

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- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

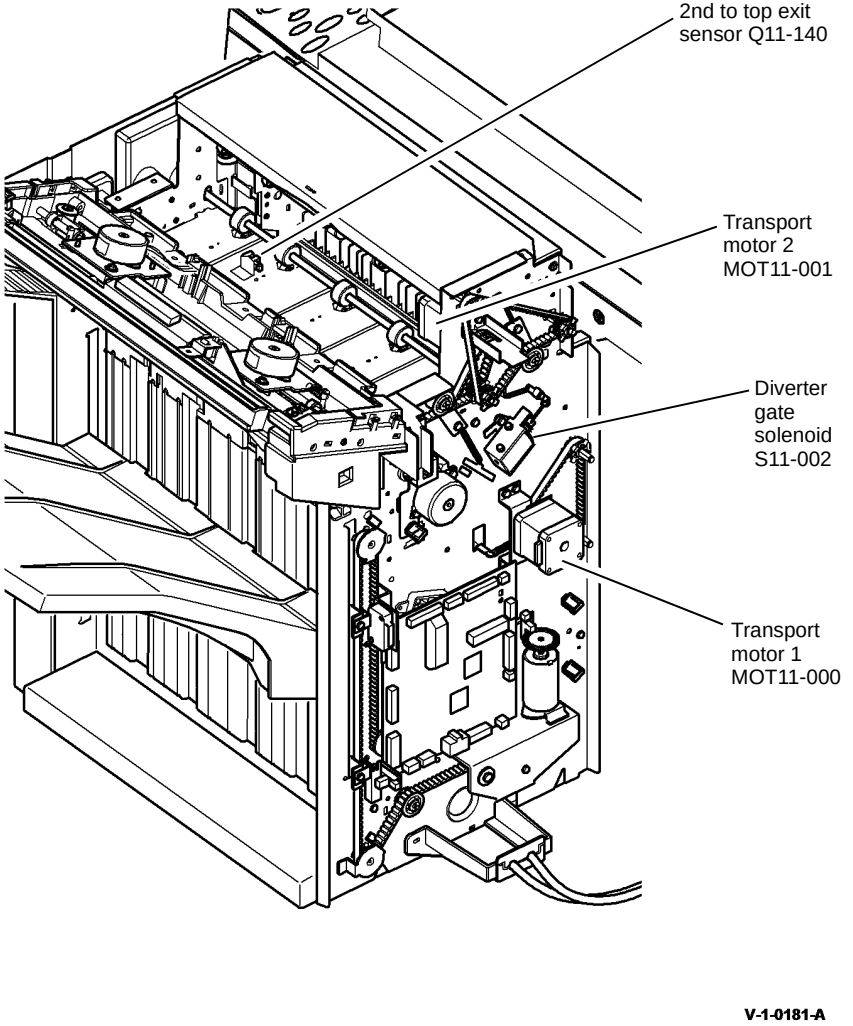


Figure 1 Component location

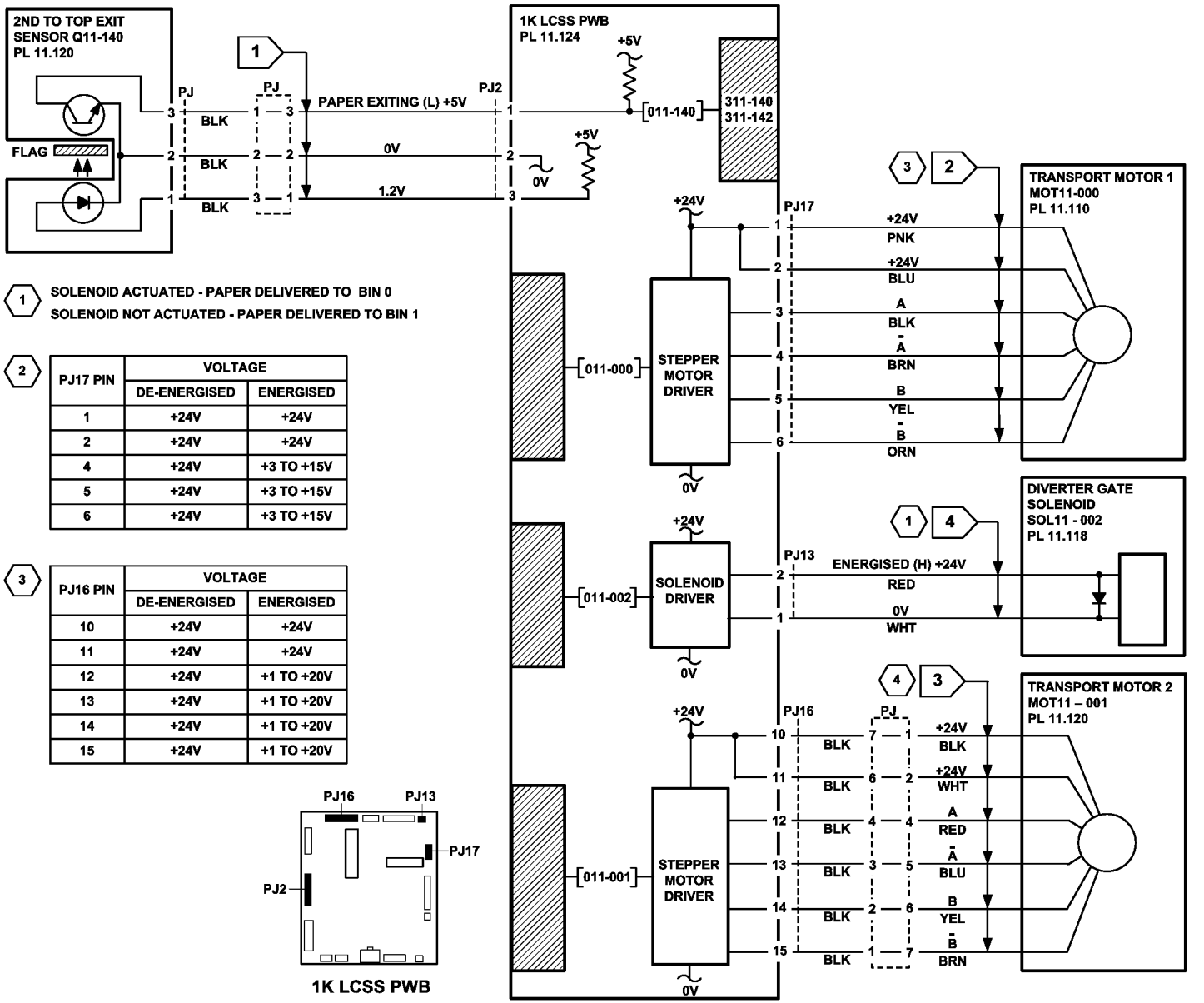


Figure 2 Circuit diagram

311-300-00-120, 311-302-00-120, 311-303-00-120 Interlocks RAP

311-300-00-120 The docking interlock is open during run mode.

311-302-00-120 The top cover interlock is open during run mode.

311-303-00-120 The front door interlock is open during run mode.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Check the following:

- The 1K LCSS is installed correctly, refer to REP 11.13-120.
- The 1K LCSS front door is closed.
- The 1K LCSS top cover is closed.

Procedure

Go to Flag 1. Check for +24V on pin 1. If the voltage is not present, refer to 311C-120 1K LCSS Power Distribution RAP.

Go to the appropriate procedure:

- 311-300-00-120 Docking Interlock Checkout
- 311-302-00-120 Top Cover Interlock Checkout
- 311-303-00-120 Front Door Interlock Checkout

311-300-00-120 Docking Interlock Checkout

Undock the 1K LCSS, refer to REP 11.11-120. Figure 1, check the docking interlock switch, S11-300 as follows:

- While supporting the 1K LCSS, slide the 1K LCSS 5cm (2 inches) away from the machine. Check the interlock actuator on the machine is not damaged or missing.

  NOTE: *The wiring harness passes underneath the docking interlock switch housing. If this harness is not correctly positioned, the switch can be mis-located, giving intermittent docking interlock problems.*

- Enter dC330 code 011-300, docking interlock switch, S11-300. While supporting the 1K LCSS, slide the 1K LCSS 5cm (2 inches) away from the machine to de-actuate S11-300. If the display does not change, refer to:
  - GP 13, How to Check a Switch
  - P/J6, 1K LCSS PWB
- Go to Flag 1. Check the wiring between P/J5 and S11-300.
- If necessary, install a new docking interlock switch, PL 11.102 Item 2.

311-302-00-120 Top Cover Interlock Checkout

Check the top cover interlock switch, S11-302 as follows:

- Check the switch actuator.
- Enter dC330 code 011-302, top cover interlock switch, S11-302. Actuate S11-302. If the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 2.
  - P/J5, 1K LCSS PWB
- Go to Flag 3. Check the wiring between P/J6 and S11-302.
- If necessary, install a new top cover interlock switch, PL 11.124 Item 6.

311-303-00-120 Front Door Interlock Checkout

Check the front door interlock switch, S11-303 as follows:

- Check the switch actuator.
- Enter dC330 code 011-303, front door interlock switch, S11-303. Actuate S11-303. If the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 2.
  - P/J5, 1K LCSS PWB
- Go to Flag 2. Check the wiring between P/J5 and S11-303.
- If necessary, install a new front door interlock switch, PL 11.124 Item 5.

Perform SCP 5 Final Actions.

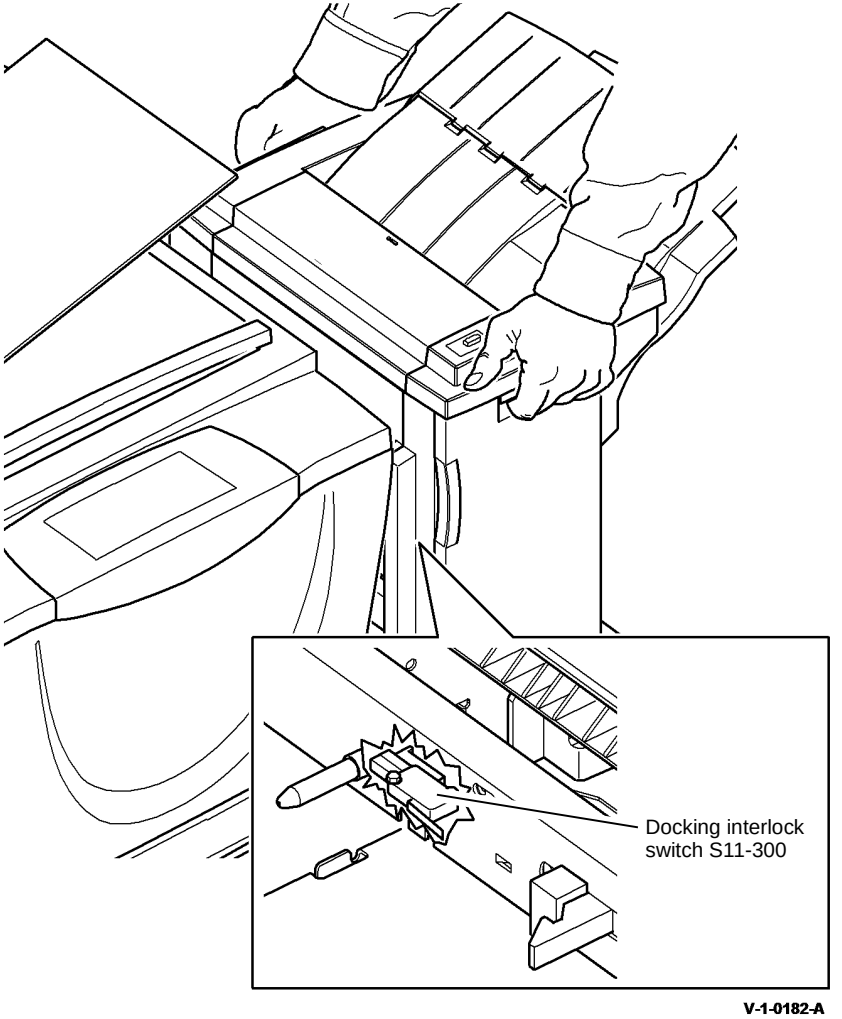


Figure 1 Component location

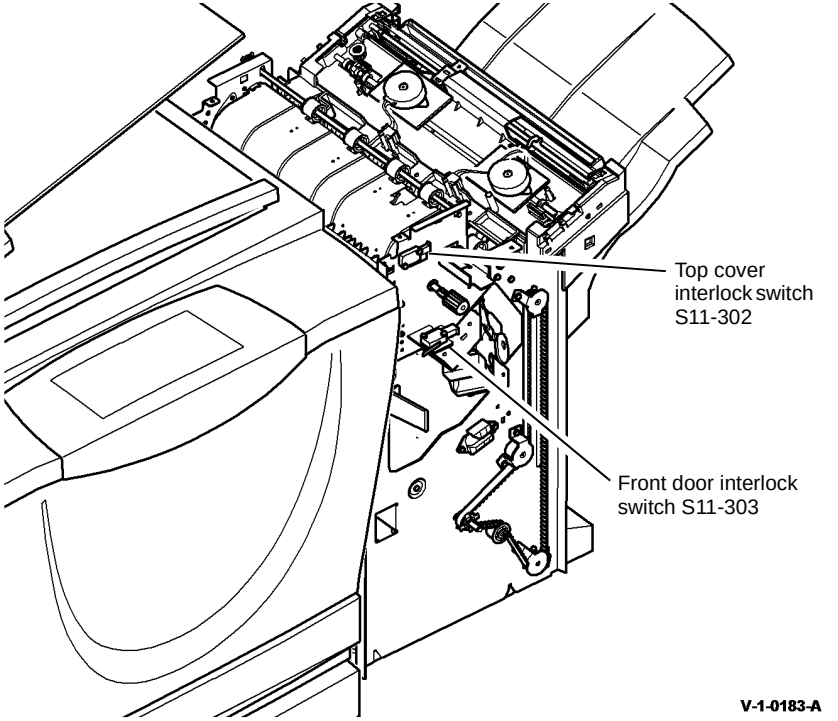


Figure 2 Component location

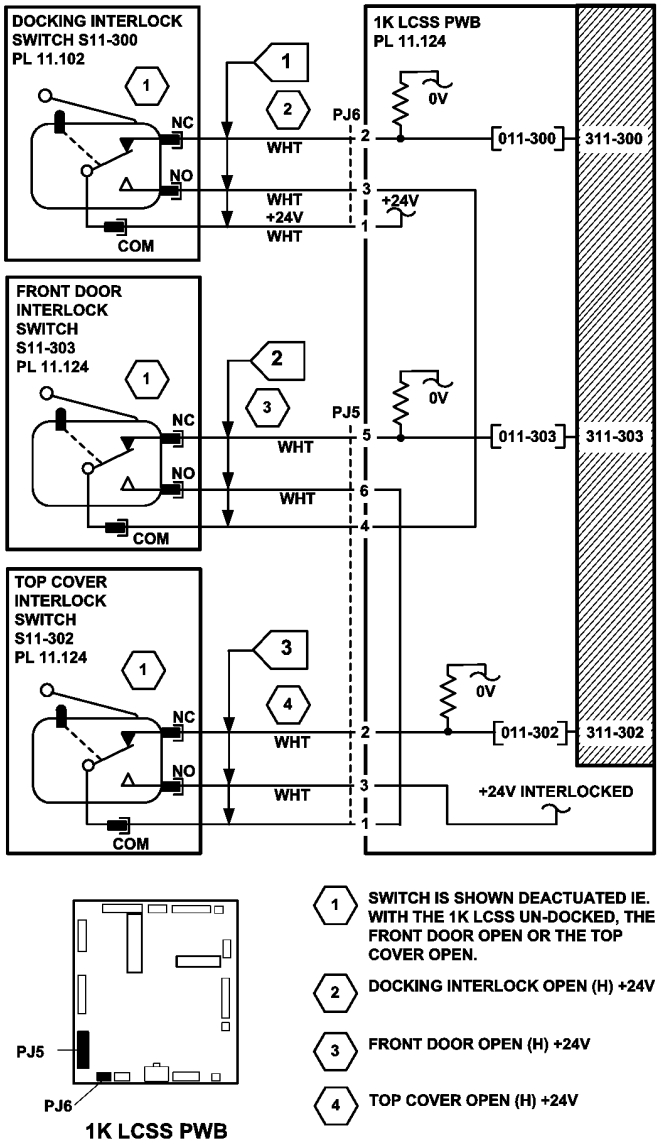


Figure 3 Circuit diagram

311-319-00-120 Rear Tamper Move Failure RAP

311-319-00-120 The rear tamper away home sensor has failed.

NOTE: *The away home position is with the rear tamper approximately halfway along it's travel.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.112 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition and tension of the front tamper drive belt. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to the IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-120, 311-025-00-120 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-120 Bin 1 Movement Failure RAP.
  - Refer to the 311J-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

Enter dC330 codes 11-004 and 11-006 alternately. **The rear tamper moves between the home and inboard positions, Figure 1.**

Y

Go to Flag 3. Check the rear tamper motor, MOT11-004.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- P/J9, 1K LCSS PWB.
- 311C-120 1K LCSS Power Distribution RAP.

N

A

A

Install new components as necessary:

- Tamper assembly, PL 11.112 Item 1.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-311. Actuate the rear tamper home sensor, Q11-311. **The display changes.**

Y N

Go to Flag 1. Check Q11-311.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J16, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Rear tamper home sensor, PL 11.112 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

NOTE: *The away home position is used for short edge feed small paper. This saves unnecessary rear tamper travel.*

Enter dC330 code 011-319. Actuate the rear tamper away home sensor, Q11-319. **The display changes.**

Y N

Go to Flag 2. Check Q11-319.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a Sensor.
- P/J16, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Rear tamper away home sensor, PL 11.112 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

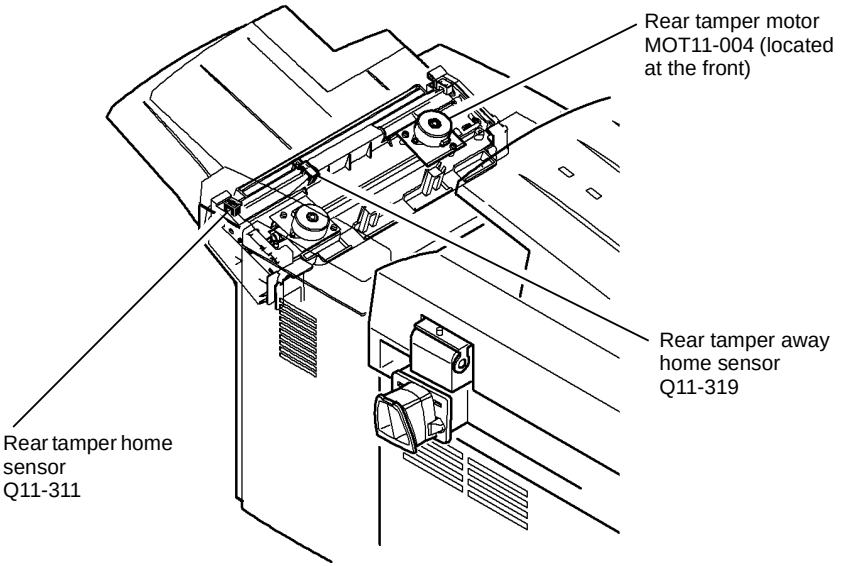
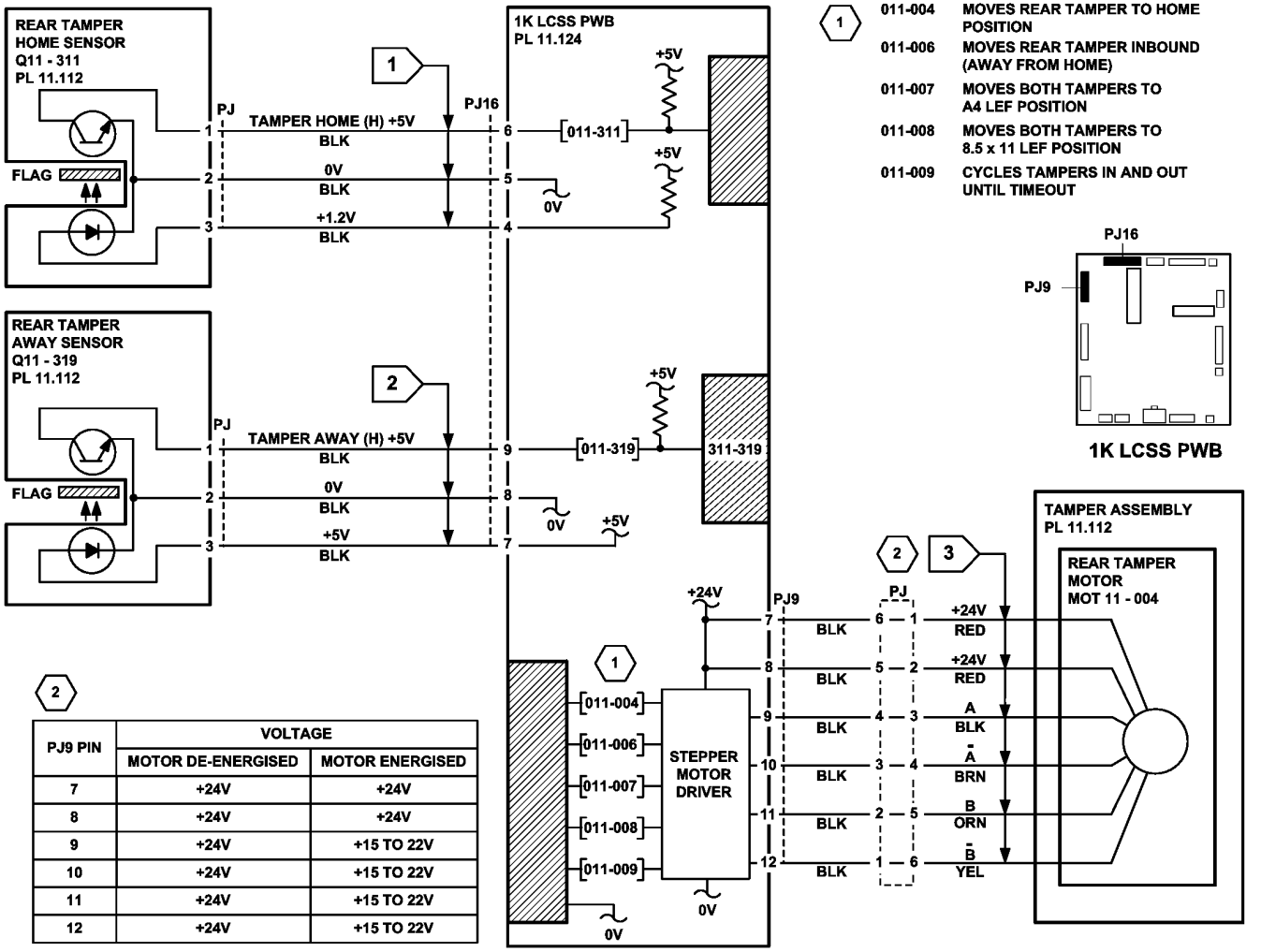


Figure 1 Component Location



2

PJ9 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
7	+24V	+24V
8	+24V	+24V
9	+24V	+15 TO 22V
10	+24V	+15 TO 22V
11	+24V	+15 TO 22V
12	+24V	+15 TO 22V

Figure 2 Circuit diagram

311-320-00-120, 311-322-00-120 Ejector Movement Failure RAP

311-320-00-120 The ejector is not at the home position.

311-322-00-120 The ejector fails to perform a cycle of operation.

NOTE: *A cycle of operation for the ejector is to move from the home position to the out position and back to the home position.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the operation of the ejector mechanism. If the operation is noisy or sluggish, perform the 1K LCSS, 2K LCSS and LVF BM Ejector Shafts and Slide Bearings procedure in ADJ 40.1 Machine Lubrication.
- Check the 1K LCSS PWB DIP switch settings, refer to the 311E-120 1K LCSS PWB DIP Switch Settings RAP.
- Check for any obstructions that would prevent the ejector from moving.
- If the fault code is 311-322. Check that the screws to secure the ejector motor damper and the ejector motor bracket are not loose. This will cause the encoder disc to move away from the encoder sensor. Push the motor bracket towards the encoder sensor and tighten the screws. Refer to Figure 1 and REP 11.8-120.

Procedure

NOTE: *All 1K LCSS interlocks must be made to supply +24V to the motors.*

NOTE: *For clarity, the 1K LCSS is shown removed from the machine in Figure 1.*

Enter dC330 code 011-322, ejector out sensor, Q11-322. Actuate Q11-322. **The display changes.**

Y N

Go to Flag 2. Check Q11-322.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J8, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector out sensor, PL 11.114 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-320, ejector home sensor, Q11-320. Actuate Q11-320. **The display changes.**

Y N

Go to Flag 1. Check Q11-320.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J8, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector home sensor, PL 11.114 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-023 to check the operation of the ejector motor, MOT11-020. **MOT11-020 runs.**

Y N

Go to Flag 3. Check MOT11-020.
Refer to:
- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Motor.
- Figure 1.
- P/J15, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:
- Ejector assembly, PL 11.114 Item 1.
- 1K LCSS PWB, PL 11.124 Item 1.

Enter dC330 code 011-023 ejector cycle, check the ejector cycles. Stack the code 011-320 ejector sensor home, then cycle the ejector. Stack the code 011-322 ejector sensor out, then cycle the ejector. **The ejector actuates the ejector home sensor and the ejector out sensor.**

Y N

Refer to GP 7, check the following components;
- Figure 1. Pulley/drive gear, PL 11.114 Item 7.
- Ejector belt, PL 11.114 Item 5.

Install new components as necessary:
- Pulley/drive gear, PL 11.114 Item 7.
- Ejector belt, PL 11.114 Item 5.

The ejector cycles noisily, colliding with the end stops.

Y N

Check the stapler to ensure the staples are correctly formed, refer to the 311-364-00-120 Stapling Failure RAP. Mis-formed staples can cause the set to hang in the stapler causing ejector movement failures. **The staples are correctly formed.**

Y N

Clear the staple head of any mis-formed staples, then check the operation of the stapler. If necessary, install a new staple head unit, PL 11.116 Item 5.

If the ejector is still not moving, install a new ejector assembly, PL 11.114 Item 1.

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Perform SCP 5 Final Actions.

Enter dC330 code 011-177, ejector motor encoder sensor, Q11-177. Actuate the sensor by slowly rotating the ejector motor. **The display changes.**

Y N

Go to Flag 4. Check Q11-177.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11 How to Check a Sensor.
- Figure 1.
- P/J8, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- Ejector motor encoder sensor, PL 11.114 Item 3.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform the 311F-120 1K LCSS PWB Damage RAP, if necessary install a new 1K LCSS PWB, PL 11.124 Item 1.

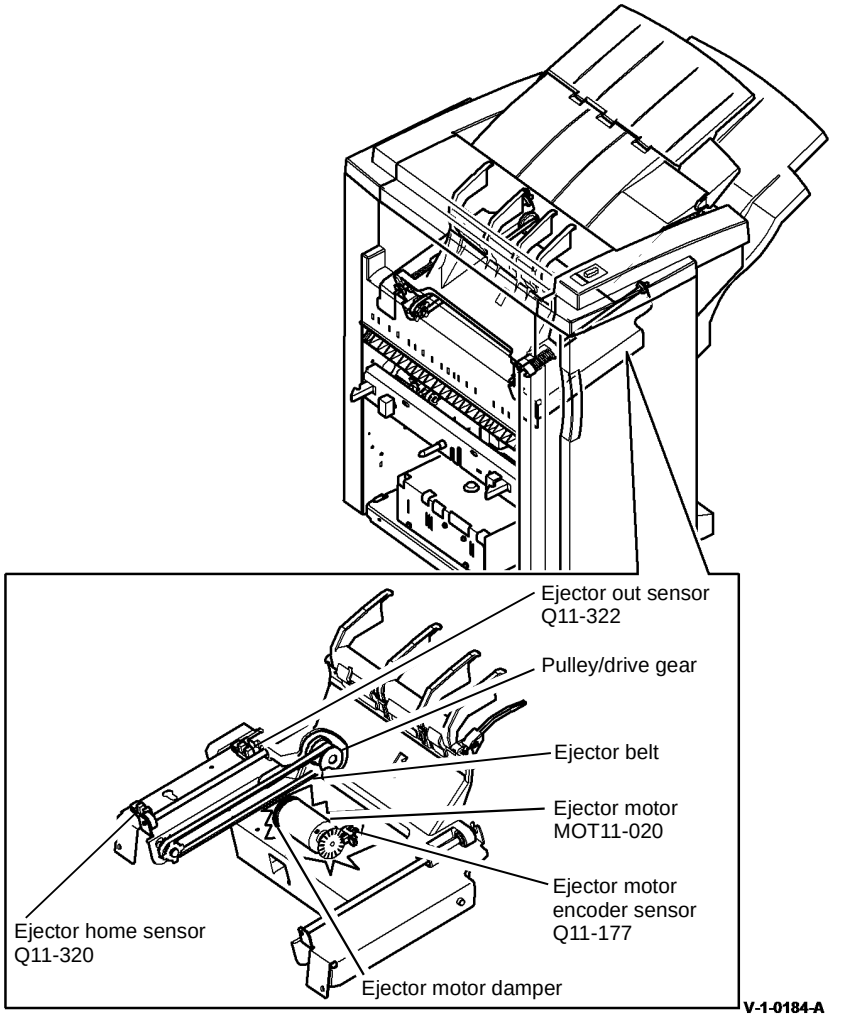
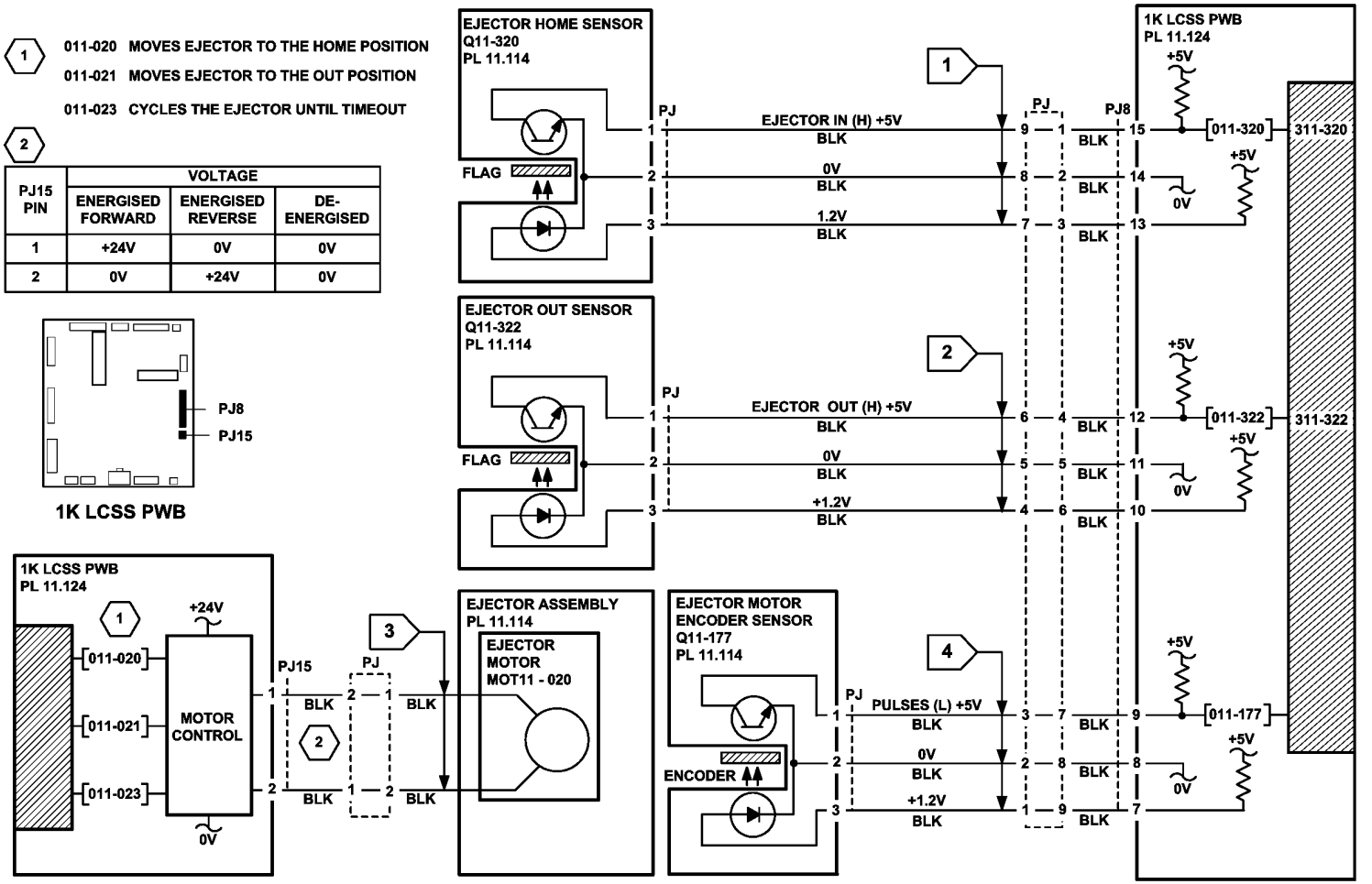


Figure 1 Component location



TV-1-0191-A

Figure 2 Circuit diagram

311-364-00-120 Stapling Failure RAP

311-364-00-120 Staples in the stapling head are not primed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

Check the 1K LCSS PWB DIP switch settings, refer to 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Check the following:

- The staple cartridge has staples in it and is correctly installed,
- The leading staples in the staple head have been primed, Figure 3.
- Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 26.10 Item 11.

NOTE: *The term "priming" refers to 2 staples at the front of the cartridge, that have been preformed automatically by the action of the stapler, refer to Figure 2.*

NOTE: *The SH 1 low staples sensor, SH 1 cartridge sensor, SH 1 home sensor and the SH 1 priming sensor are all integral to the staple head unit and although they can be checked using component control they cannot be exchanged as components.*

Procedure

Figure 1. Enter dC330 code 011-361 SH 1 paper sensor, Q11-361. Actuate Q11-361. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-361.
Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 10, How to Check a Sensor.
- P/J7, 1K LCSS PWB
- 311C-120 1K LCSS Power Distribution RAP.

Install new components as necessary:

- SH 1 paper sensor, PL 11.116 Item 4.
- 1K LCSS PWB, PL 11.124 Item 1.

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NOTE: *If the SH1 priming sensor does not see staples in the primed position, the staple head cycles a number of times to prime the staple head. This occurs when the 1K LCSS interlocks are made.*

Follow the customer instruction label inside the 1K LCSS front door to remove the staple cartridge, slide out the top sheet of staples from the cartridge, to expose a fresh sheet of staples on the top of the stack. Ensure the forming plate is fully closed, Figure 2. Install the staple cartridge and close the door. The stapler will now cycle a few times to feed and prime the new sheet of staples. Open the door and remove the staple cartridge. Examine the sheet of staples that have been fed to the staple forming part of the stapler, by opening the forming plate, Figure 3. **The first two staples have been partially formed.**

Y **N**

Install a new staple cartridge, PL 26.10 Item 11 and repeat the check. If the first two staples are not partially formed, install a new stapler assembly, PL 11.116 Item 1. Perform SCP 5 Final Actions

Install a new staple head unit, PL 11.116 Item 5. Perform SCP 5 Final Actions.

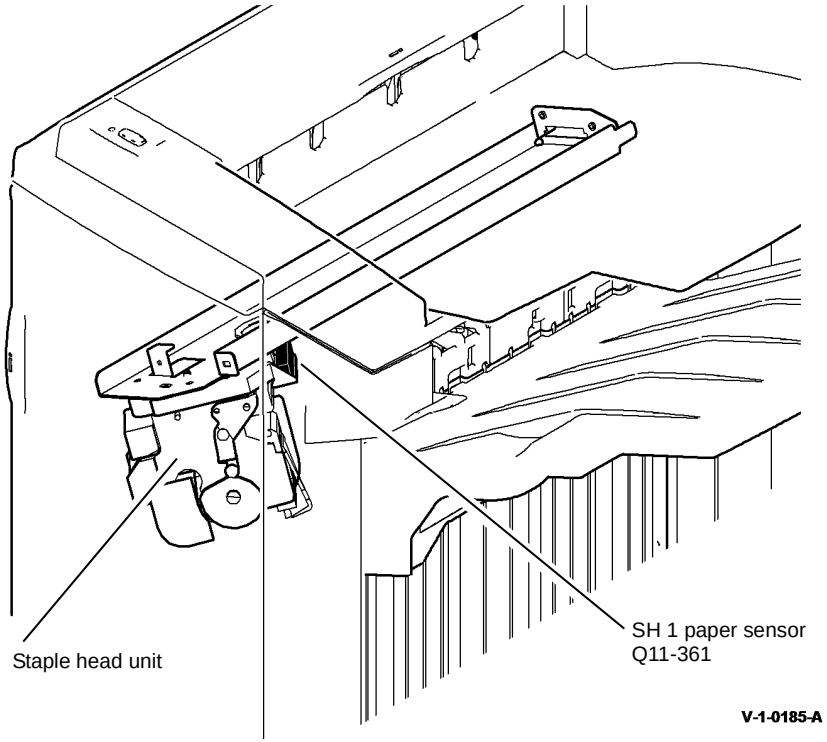


Figure 1 Component location

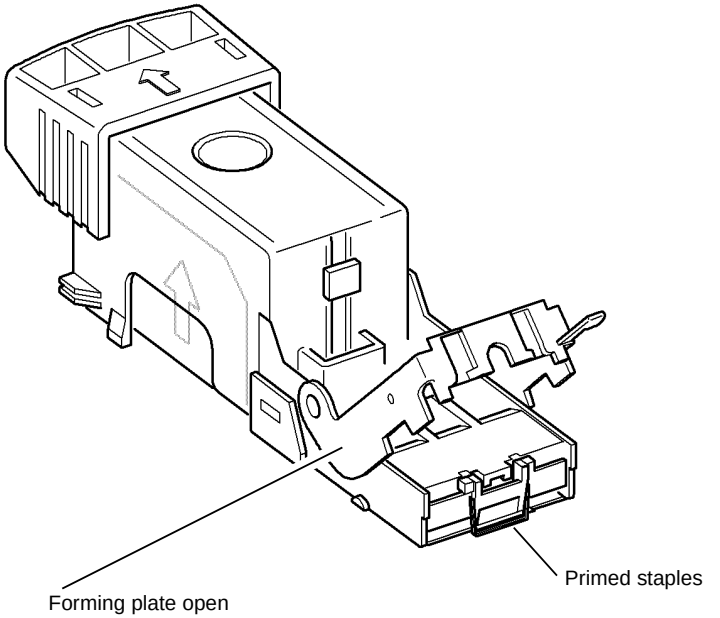


Figure 2 Staple cartridge open

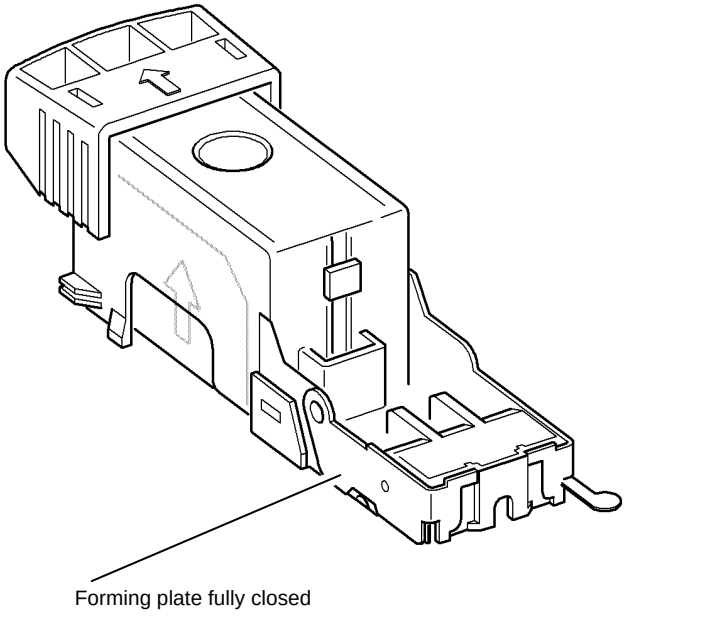
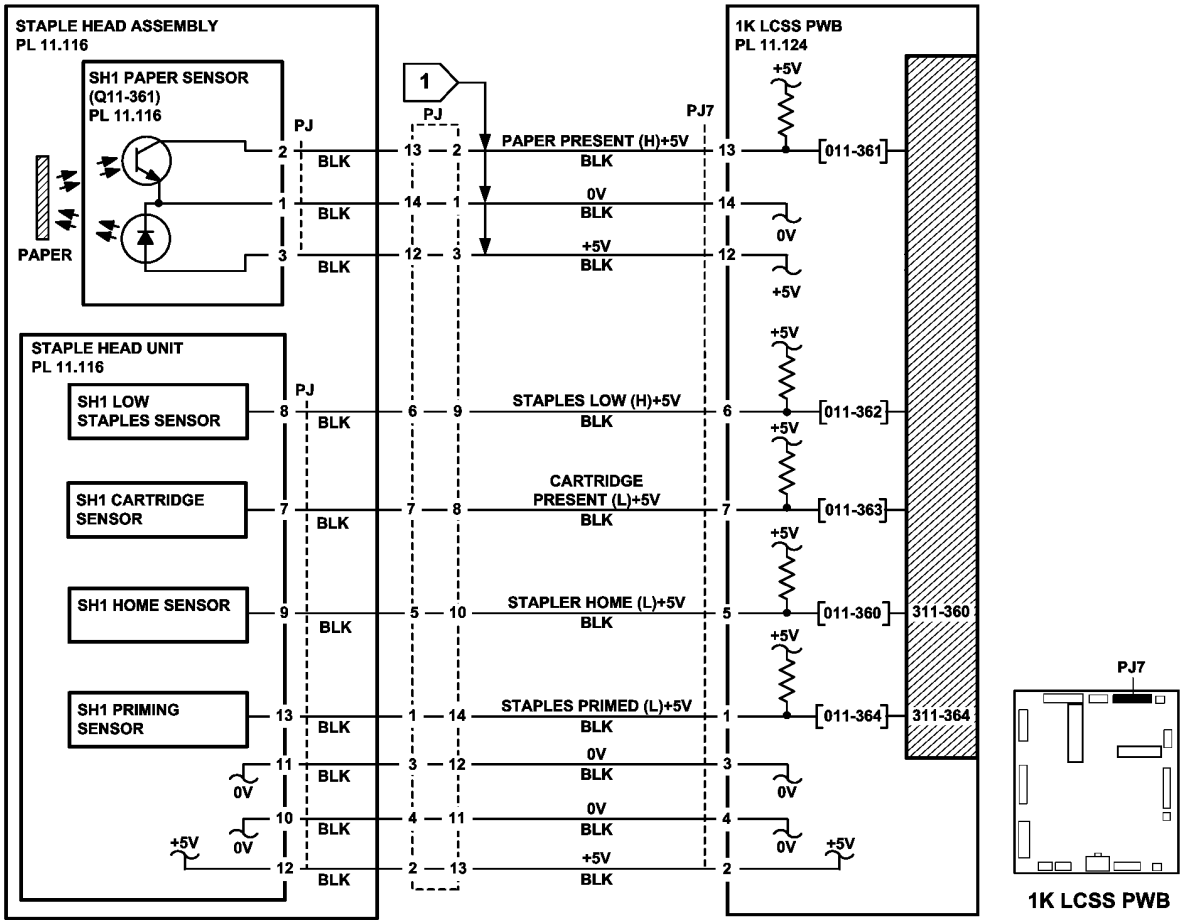


Figure 3 Staple cartridge closed



TV-1-0192-A

Figure 4 Circuit diagram

311A-120 Bin 1 Overload RAP

Use this RAP to resolve a fault on the bin 1 90% full sensor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 011-331, bin 1 90% full sensor, Q11-331. Actuate Q11-331. **The display changes.**

Y N

Go to Flag 1. Check Q11-331.

Refer to:

- 311F-120 1K LCSS PWB Damage RAP.
- GP 11, How to Check a sensor.
- Figure 1.
- P/J2, 1K LCSS PWB
- 311C-120 1K LCSS Power Generation RAP.

Install new components as necessary:

- Bin 1 90% full sensor, PL 11.106 Item 5.
- 1K LCSS PWB, PL 11.124 Item 1.

Perform SCP 5 Final Actions.

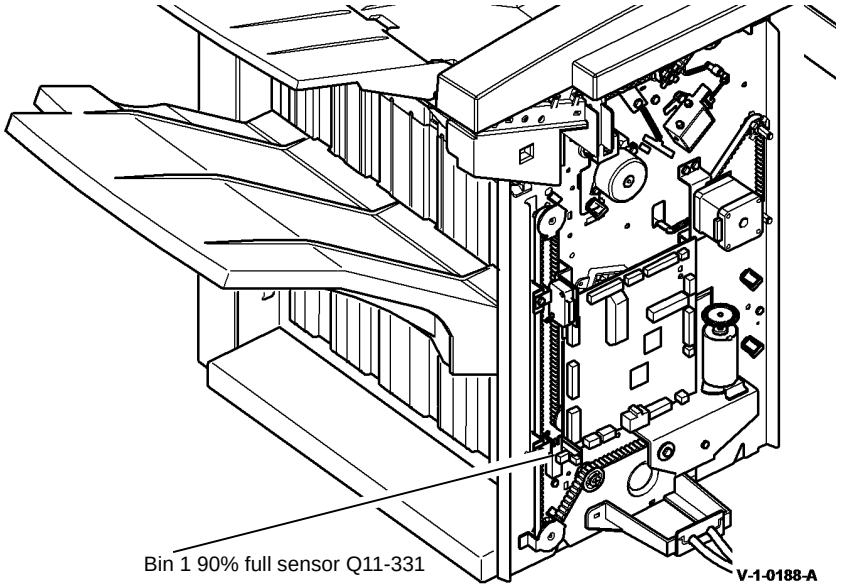


Figure 1 Component location

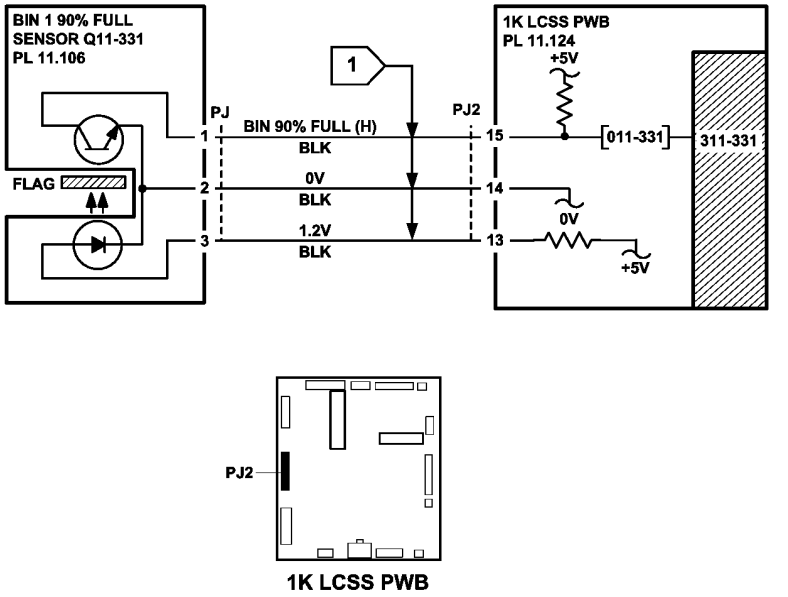


Figure 2 Circuit diagram

311B-120 Initialization Failure RAP

When an initialization command is received from the machine, the units are initialized in two stages:

- The following units are initialized sequentially:
  1. If the staple head is not at the home position, it is driven to the home position
  2. If the ejector is not at the home position, it is driven to the home position
- The following units are then initialized simultaneously:
  1. If the front tamper is not at the home position, it is driven to the home position
  2. If the rear tamper is not at the home position, it is driven to the home position
  3. If the paddle is not at the home position, it is driven to the home position
  4. If the stacker is not at the home position, it is driven to the home position

NOTE: *The staple cartridge must be pushed fully home.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the 1K LCSS PWB DIP switch settings, refer to 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Remove the 1K LCSS covers, REP 11.1-120, so that the units can be viewed. Cheat the front door interlock switch and the top cover interlock switch. Check that LED 2 is illuminated, this shows that all interlocks are made. If the LED fails to illuminate, go to the 311-300-00-120, 311-302-00-120, 311-303-00-120 Interlocks RAP.

Procedure

Figure 1. Check that the software heartbeat is present on LED 1. The LED should flash twice per second if the 1K LCSS software is running. If necessary, re-load the 1K LCSS software, refer to GP 4 Machine Software.

If the initialization sequence fails to place any unit at the home position, refer to the appropriate RAPs:

- Front tamper not at home, refer to 311-005-00-120, 311-006-00-120 Front Tamper Move Failure RAP
- Rear tamper not at home, refer to 311-319-00-120 Rear Tamper Move Failure RAP.
- Paddle not at home, refer to 311-024-00-120, 311-025-00-120 Paddle Roll Failure RAP.
- Bin 1 not at home, refer to 311-030-00-120 Bin 1 Movement Failures RAP.
- Staple head not at home, refer to 311-050-00-120, 311-360-00-120 Staple Head Operation Failure RAP.
- Ejector not at home, refer to 311-320-00-120, 311-322-00-120 Compiler Ejector Movement Failure RAP.

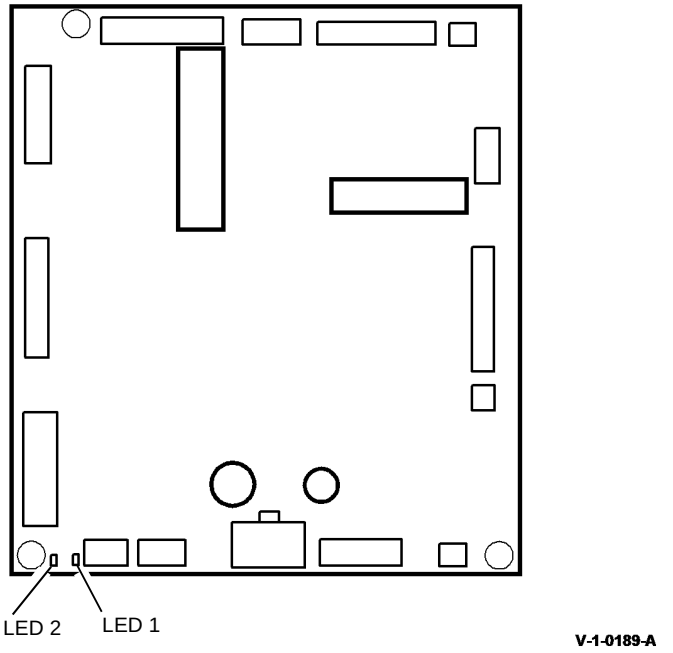


Figure 1 LED location

311C-120 1K LCSS Power Distribution RAP

The 1K LCSS has an integral power supply providing +24V and +5V supplies to the 1K LCSS PWB. The AC power for the 1K LCSS power supply comes from the LVPS and base module of the machine.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

CAUTION

Do not connect the finisher power cord directly to the AC wall outlet. The finisher cannot operate without the machine. The machine controls the distribution of electricity to the finisher for correct power on and power off sequencing.

Close or cheat all the 1K LCSS interlocks. **LED 2 on the 1K LCSS PWB is illuminated.**

Y N

Go to Flag 2. **+24V is available at P/J1 between pins 1 and 3, also between pins 2 and 4.**

Y N

Disconnect P/J1. **+24V is available at P/J1 between pins 1 and 3, also between pins 2 and 4 on the end of the harness.**

Y N

Go to Flag 1. Disconnect the 1K LCSS power cord from P/J22. **ACL is available at PJ22 between pins 1 and 3 on the LVPS and base module.**

Y N

Go to the 301C AC Power RAP.

Remove the 1K LCSS, REP 11.12-120. Loosen the 2 screws and lift the power supply module away from the 1K LCSS frame. Go to Flag 1. Check the wiring between P/J22 and CN1. **The wiring is good.**

Y N

Repair the wiring.

Install a new power supply module, PL 11.124 Item 2.

Perform the following:

- Check for a short circuit or an overload in the wiring or components connected to the +24V on the 1K LCSS PWB. Refer to GP 7.
- Perform the 311F-120 1K LCSS PWB Damage RAP. If necessary install a new 1K LCSS PWB, PL 11.124 Item 1.

+24 V is available at P/J5 pin 3 on the 1K LCSS PWB.

A

Y N

Go to the 311-300-00-120, 311-302-00-120, 311-303-00-120 Interlocks RAP.

Perform the following:

- Switch off the machine, GP 14.
- Go to Flag 3. Disconnect all the +24V harnesses to components.
- Check each harness for short circuits and overheating, GP 7.
- Install new components as necessary.
- Monitor the voltage at P/J6 pin 1. Re-connect the circuits one at a time. Energize the re-connected components using dC330 control codes.
- If the voltage drops below +22V, switch off the machine, GP 14. Re-check the component and harness for overheating or short circuits. Install new components as necessary.

+5V is available between TP3 and TP4 on the 1K LCSS PWB.

Y N

Go to Flag 2. **+5V is available at P/J1 between pins 4 and 7, also between pins 6 and 8.**

Y N

Disconnect P/J1. **+5V is available at P/J1 between pins 4 and 7 also between pins 6 and 8 on the end of the harness.**

Y N

Go to Flag 1. Disconnect the 1K LCSS power cord from PJ22. **ACL is available at PJ22 between pins 1 and 3 on the LVPS and base module.**

Y N

Go to the 301C AC Power RAP.

Remove the 1K LCSS, REP 11.12-120. Loosen the 2 screws and lift the power supply module away from the 1K LCSS frame. Go to Flag 2. Check the wiring between CN2 and P/J1. **The wiring is good.**

Y N

Repair the wiring.

Install a new power supply module, PL 11.124 Item 2.

Perform the following:

- Check for a short circuit or an overload in the wiring or components connected to the +24V on the 1K LCSS PWB. Refer to GP 7.
- Perform the 311F-120 1K LCSS PWB Damage RAP. If necessary install a new 1K LCSS PWB, PL 11.124 Item 1.

Perform the 311F-120 1K LCSS PWB Damage RAP. If necessary install a new 1K LCSS PWB, PL 11.124 Item 1.

The +24V and +5V supplies on the 1K LCSS PWB are good.

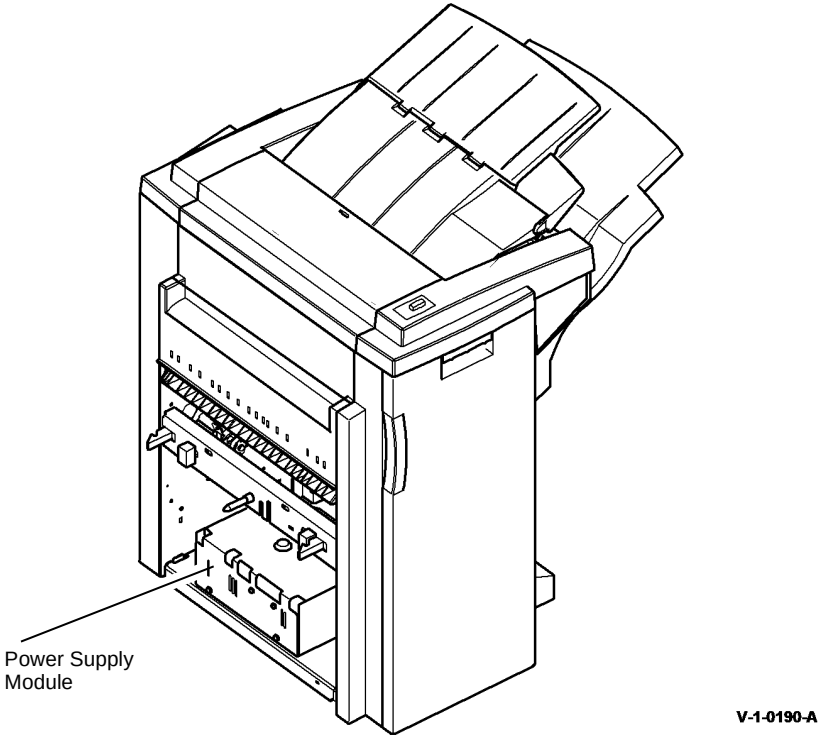


Figure 1 Component location

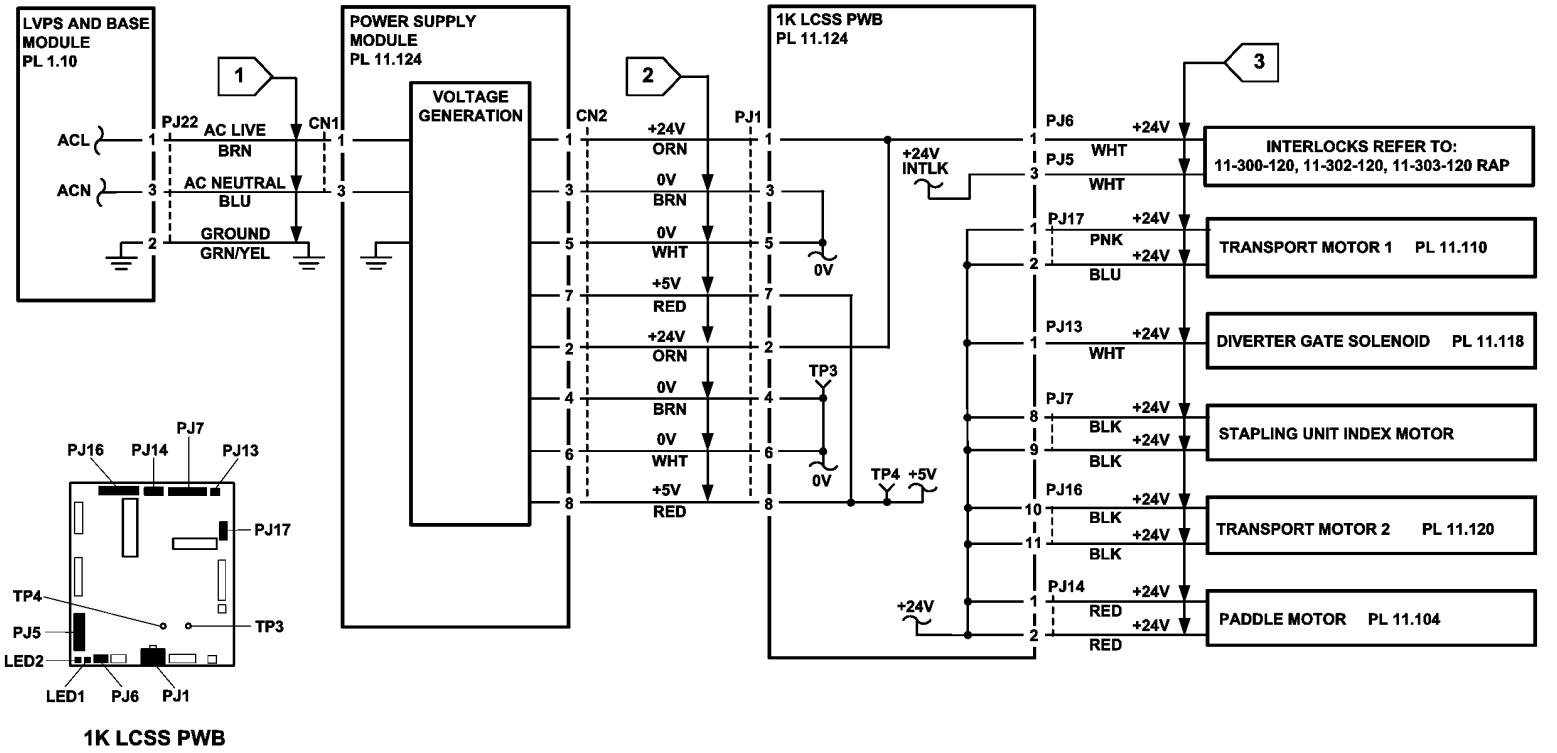


Figure 2 Circuit diagram

311D-120 1K LCSS to Machine Communications Interface RAP

All communications between the machine and 1K LCSS are conducted through a single interface cable.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the 1K LCSS PWB DIP switch settings, refer to 311E-120 1K LCSS PWB DIP Switch Settings RAP.

Go to 341-360-00 IOT to Output Device Error Rap.

311E-120 1K LCSS PWB DIP Switch Settings RAP

To show the correct settings for the DIP switches on the 1K LCSS PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Problems that can result from incorrect DIP switch settings are:

- False jam clearance instructions for the 1K LCSS and/or the machine exit area.
- Communication errors between the 1K LCSS and machine.
- Erratic behavior of the 1K LCSS.

Check the DIP switch settings, Figure 1. If necessary, switch off the machine, GP 14. Correct the DIP switch setting, then switch on the machine, GP 14.

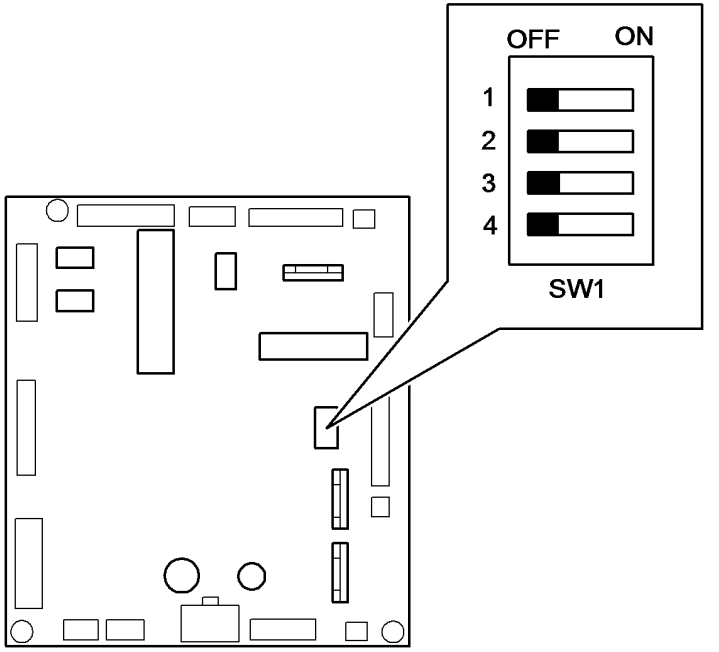


Figure 1 DIP switch settings

311F-120 1K LCSS PWB Damage RAP

Use this RAP to determine the cause of damage to the 1K LCSS PWB, so that the cause can be repaired before a new 1K LCSS PWB is installed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The 1K LCSS PWB can be damaged by a component connected to it going short-circuit. If a new 1K LCSS PWB is installed and power applied to the machine, the new 1K LCSS PWB will be damaged in the same way. The cause of the damage must be found by following this procedure.

Remove the 1K LCSS PWB and inspect the components shown in Figure 1 for damage. The damage to the component may be in the form of a crack, a small crater or a burnt patch. Refer to Table 1 to locate the component causing the damage to the 1K LCSS PWB.

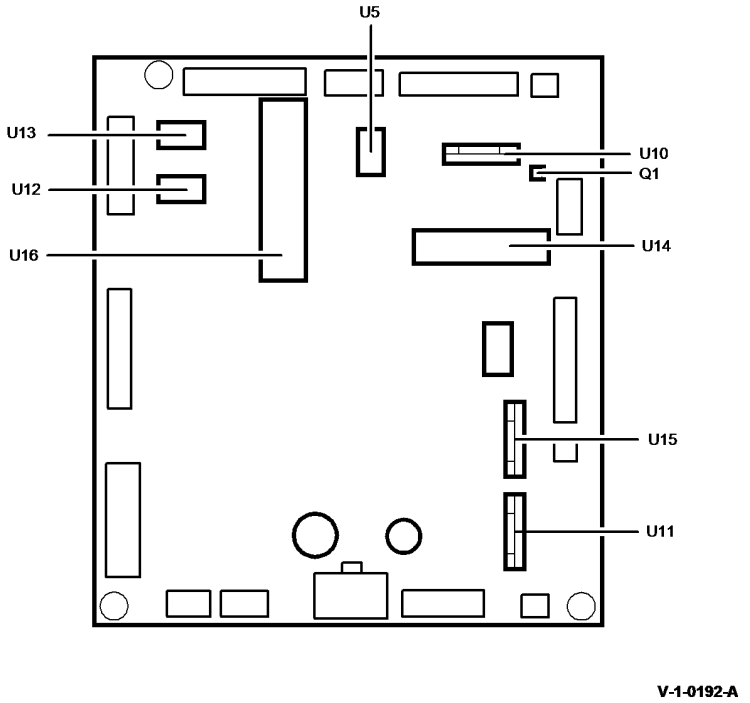


Figure 1 1K LCSS PWB components

Table 1 1K LCSS PWB Drive Components

1K LCSS PWB component	Driven component	Normal resistance measurement +/- 10%	Spared part and references
U5	Paddle motor (MOT11024)	At PJ14: Pin 1 to 3 = 28 ohms. Pin 1 to 4 = 28 ohms. Pin 2 to 5 = 28 ohms. Pin 2 to 6 = 28 ohms.	Paddle motor assembly, PL 11.104 Item 10. 311-024-00-120, 311-025-00-120 RAP
U10	Staple head motor (MOT11-050)	At PJ7: Pin 8 to 10 = 12.6 ohms. Pin 9 to 11 = 12.6 ohms	Staple head unit, PL 11.116 Item 5. 311-050-00-120, 311-360-00-120 RAP
U11	Bin 1 elevator motor (MOT11-030)	At PJ12: Pin 1 to 2 = 6.4 ohms	Bin 1 elevator motor, PL 11.10 Item 8. 311-030-00-120 RAP
U12	Front tamper motor (MOT11-003)	At PJ9: Pin 1 to 3 = 20 ohms. Pin 1 to 4 = 20 ohms. Pin 2 to 5 = 20 ohms. Pin 2 to 6 = 20 ohms.	Tamper assembly, PL 11.16 Item 1. 311-005-00-120, 311-006-00-120 RAP
U13	Rear tamper motor (MOT11-004)	At PJ9: Pin 7 to 9 = 20 ohms. Pin 7 to 10 = 20 ohms. Pin 8 to 11 = 20 ohms. Pin 8 to 12 = 20 ohms.	Tamper assembly, PL 11.112 Item 1. 311-319-00-120 RAP
U14	Transport motor 1 (MOT11-000)	At PJ17: Pin 1 to 3 = 2.2 ohms. Pin 1 to 4 = 2.2 ohms. Pin 2 to 5 = 2.2 ohms. Pin 2 to 6 = 2.2 ohms.	Transport motor 1, PL 11.110 Item 2. 311-130-00-120, 311-132-00-120 RAP
U15	Ejector motor (MOT11-020)	At PJ15: Pin 1 to 2 = 6.6 ohms	Ejector assembly, PL 11.114 Item 1. 311-320-00-120, 311-322-00-120 RAP
U16	Transport motor 2 (MOT11-001)	At PJ16: Pin 10 to 12 = 0.8 ohms. Pin 10 to 13 = 0.8 ohms. Pin 11 to 14 = 0.8 ohms. Pin 11 to 15 = 0.8 ohms.	transport motor 2, PL 11.118 Item 5. 311-130-00-120, 311-132-00-120 RAP
Q1	Diverter gate solenoid (S11-002)	At PJ13: Pin 1 to pin 2 = 74 ohms	Diverter gate solenoid, PL 11.118 Item 12. 311-130-00-120, 311-132-00-120 RAP

NOTE: *If difficulty is found in connecting the service meter probes to the connector headers on the 1K LCSS PWB, refer to the RAP quoted in Table 1 and make the measurement at another point in the harness to the driven component.*

If the defective driven component is found using the table checks, disconnect the connector closest to the driven component, then check the driven component again to identify any short circuit in the wiring to the driven component. Repair the wiring or install new parts as necessary.

If the defective driven component can not be found using the table checks, refer to GP 7, check each driven component to ensure that it is not seized. Motors should rotate easily. Solenoid armatures should slide easily in the coil. Also check the drive components to ensure that they rotate easily, if necessary install new parts.

When the a new driven component has been installed or the defective drive components have been repaired, install a new 1K LCSS PWB, PL 11.124 Item 1.

311G-120 Copy Damage in the 1K LCSS RAP

Use this RAP to identify and correct the causes of copy damage in the 1K LCSS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- Look for torn paper in the 1K LCSS paper path. Torn fragments can pass through the IOT and 1K LCSS paper path without causing a problem until they finally wedge themselves at some point.
- Ensure that the shaft diverter assembly, PL 11.118 Item 13, operates correctly and has it's full movement.
- Ensure that the jam clearance guide, PL 11.122 Item 6, closes and latches correctly. Check that the magnet at the rear is located and functions correctly. Check the clip at the front is positioned correctly, Figure 1.
- Ensure that all idler rolls in the 1K LCSS paper path are free to rotate, particularly those on the jam clearance guide, where the paper turns through 90 degrees.
- Ensure that the paper path ribs of the jam clearance guide, PL 11.122 Item 6, and the entry guide cover, PL 11.122 Item 5, are free of "scores" and "nicks". Check also for contamination and glue from label stock.

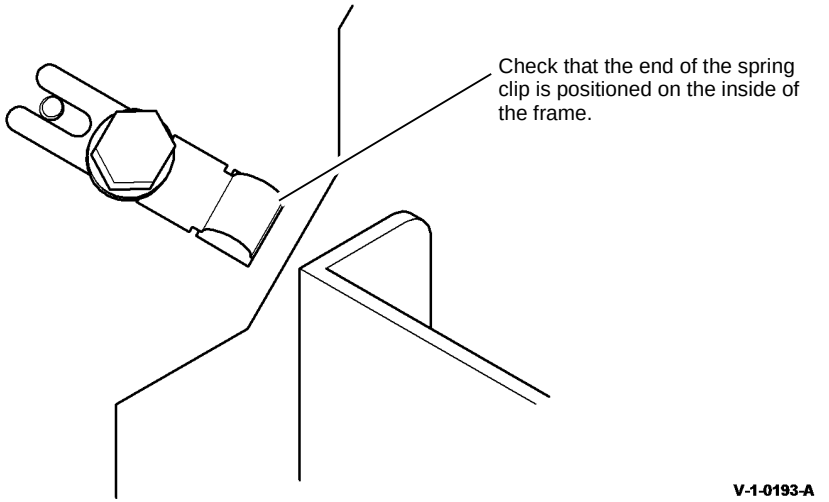


Figure 1 Position of the spring clip

311H-120 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP

Use this RAP to identify and correct the causes of mis-registration in stapled sets, resulting in staples missing some sheets in the set, or poorly registered non-stapled sets.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The most likely cause of mis-registration is paper condition and/or damage such as curl, wrinkle, creases, dog ears, etc.

Curl, wrinkle and creases are probably caused in the IOT, go to the IQ1 Image Quality Entry RAP.

For other copy / print damage and dog ears, go to the 311G-120 Copy Damage in the 1K LCSS RAP.

Check the following:

- Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.100 Item 13.
- Turn over the paper stack in the tray in use.
- Use a new ream of paper in the tray in use.
- Paper type, especially recycled paper, can lead to registration problems. Try changing to a different brand or type of paper.
- Ensure that the guides in the paper trays are correctly set and reported on the UI for the paper size loaded.
- Check that paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded.
- Check for obstructions in the compiler.
- Ensure that the paddle roll operates correctly and that the paddles are not damaged. The paddles should park completely inside the top section of the compiler, with the shorter paddle in a vertical position. If all of the paddles are out of position, check the paddle roll position sensor, PL 11.104 Item 11, the flag, PL 11.104 Item 7 and the paddle motor assembly, PL 11.104 Item 10. If only one paddle is mis-aligned with the others, it can be re-positioned by hand (they are not bonded to the shaft).
- Make sure the paddles are clean. If necessary, use formula A cleaning fluid, PL 26.10 Item 2 to clean the paddles.
- Ensure that the tampers operate correctly, i.e. are not stalling or losing position during the job. Inspect the tampers for damage, if necessary install new parts. PL 11.112.
- Inspect the bin 1 entry nips for roll damage. The idlers should be held against the rubber driving rolls and they should be free to rotate within their support springs. If necessary, install new parts, PL 11.120.
- Inspect the four spring loaded guides on the output cover, PL 11.100 Item 7. Ensure that they are correctly located and are free to move up and down.

311J-120 1K LCSS Poor Stacking RAP

Use this RAP to find the cause of poor stacking in the 1K LCSS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following;

- Look for sets that are not dropping back fully in bin 1 and therefore not operating the bin 1 level sensors:
  - Large paper sizes should not be stacked on top of small paper sizes.
  - Ensure that the paper stack in each paper tray has been fanned.
  - Turn over the paper stack in each paper tray.
  - Ensure that all paper or other copy stock being used is within the size and weight specifications. Refer to GP 20 Paper and Media Size Specifications.
  - Try using a fresh ream of paper.
  - Ensure that the edge guides of all paper trays are adjusted correctly for the paper size and that the trays are fully closed.
  - Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.100 Item 13.
- Labels must not be fed to bin 1, but to bin 0 only.
- It is recommended that transparencies are fed to bin 0 whenever possible.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-120 1K LCSS Bin 1 Level.
- Check that the bin 1 upper level sensor, Q11-332 is working correctly. Refer to the 311-030-00-120 Bin 1 Movement Failure RAP.
- Check the operation of the front and rear tampers. Refer to 311-005-00-120, 311-006-00-120 Front Tamper Move Failure RAP and 311-319-00-120 Rear Tamper Move Failure RAP.
- Check that the output device is not near an air conditioning or ventilation output duct. Air flow across the output bins can cause poor stacking.
- Check that TAG L-013 LCSS bin 1 kit is installed on the finisher.
  - Machine that regularly process large stacks of A4/8.5x11 inch LEF paper should have the LCSS bin 1 W/TAG L-013 kit installed, PL 11.100 Item 10.
  - Machines that regular process small stacks of A4/8.5x11 inch LEF, A3/11x17 inch and A4/8.5x11 inch SEF paper should have the standard W/O TAG L-013 bin 1 installed, PL 11.100 Item 10.
- Check the output copies for curl, refer to IQ5.

311-005-00-150, 311-006-00-150, 311-311-00-150 LVF BM Front Tamper Move Failure RAP

311-005-00-150 The front tamper fails to move to the front position.

311-006-00-150 The front tamper fails to move to the rear position.

311-311-00-150 The front tamper is not at the rear home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.64 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, they may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition and the tension of the front tamper drive belt. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-150, 311-025-00-150 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 Bin 1 Movement Failure RAP.
  - Refer to the 311G-150 LVF BM Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, codes 011-003 and 011-005 alternately. **The front tamper moves between the home and inboard positions, Figure 1.**

Y **N**

Go to Flag 2. Check the front tamper motor, MOT11-003.

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Refer to:

- GP 10 How to Check a Motor.
- P/J312, LVF PWB
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Tamper assembly, PL 11.64 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-310, actuate the front tamper home sensor. **The display changes.**

Y **N**

Go to Flag 1. Check the sensor.

Refer to:

- GP 11 How to Check a Sensor.
- P/J312, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Front tamper home sensor, PL 11.64 Item 3.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

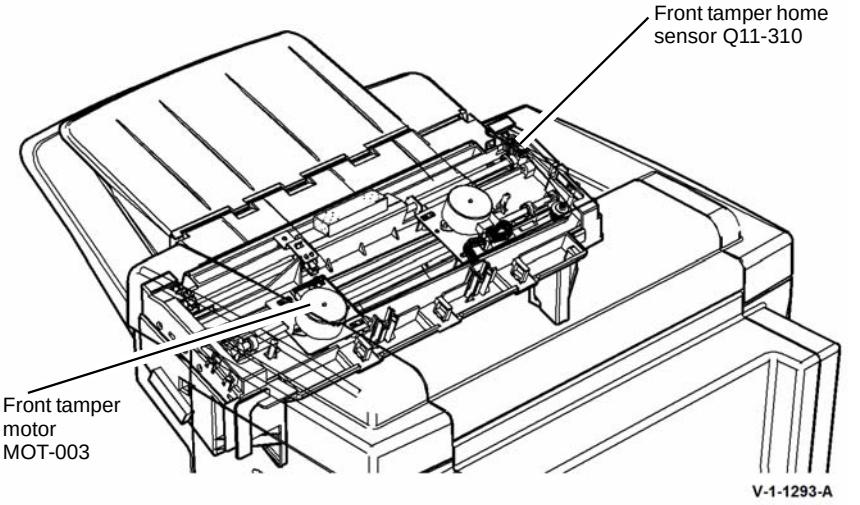
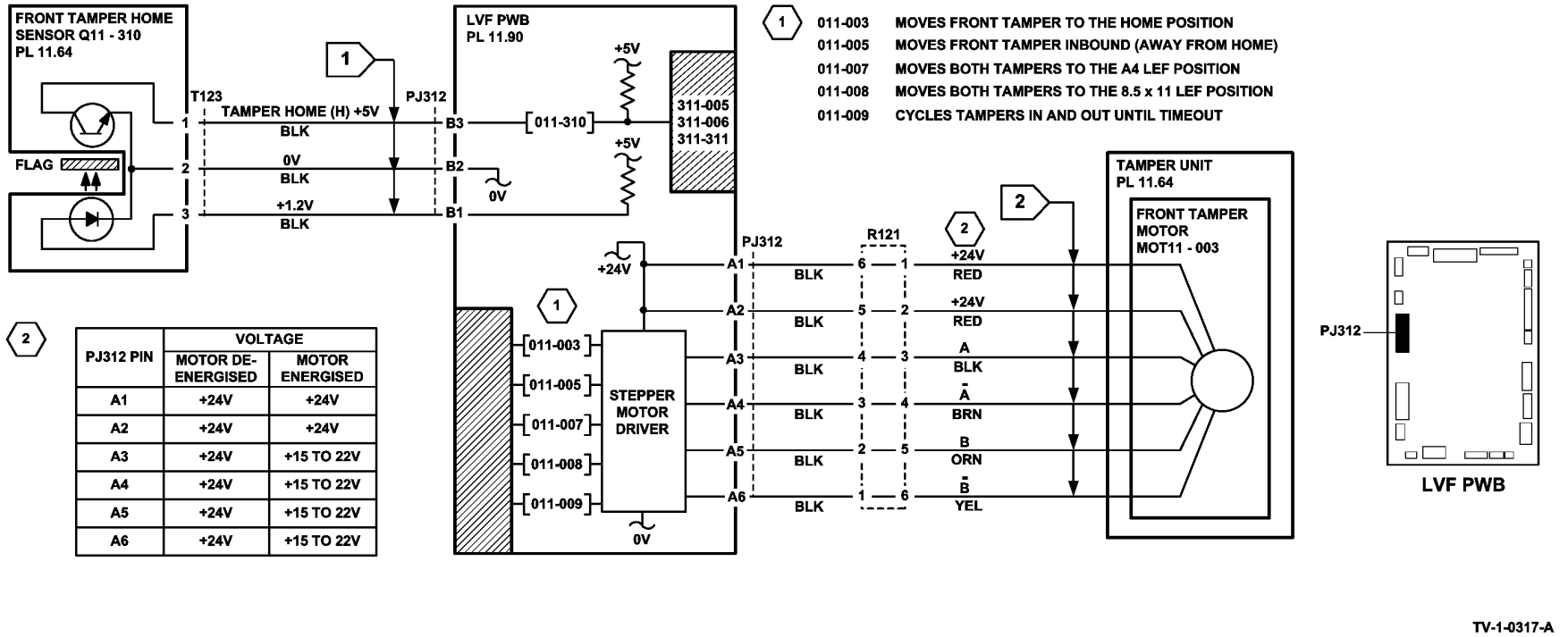


Figure 1 Component location



PJ312 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
A1	+24V	+24V
A2	+24V	+24V
A3	+24V	+15 TO 22V
A4	+24V	+15 TO 22V
A5	+24V	+15 TO 22V
A6	+24V	+15 TO 22V

TV-1-0317-A

Figure 2 Circuit diagram

311-024-00-150, 311-025-00-150 LVF BM Paddle Roll Failure RAP

311-024-00-150 The paddle is not at the home position.

311-025-00-150 The paddle fails to rotate.

NOTE: *The paddle is in the home position when the sensor flag is located between the sensor jaws. If a jam occurs in the compiler, bin 1 will not be available.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- That there is no paper or other obstructions in the vicinity of the paddle.
- The paddle roll position sensor bracket is holding the sensor in the correct position, i.e. the flag is in the middle of the sensor gap and the sensor does not touch any moving components.
- That the paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded. Refer to 311G-150 Mis-Registration in Stapled Sets and Non-stapled Sets RAP.
- The position of the paddles. With the paddle roll in the home position both sets of paddles must be within the output cover, if they are not, refer to REP 11.12-150 Paddle Shaft Assembly and Paddle Motor Assembly. If any of the paddles are out of alignment to other paddles, install a new set of 4 paddles, PL 11.8/13.
- LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, codes 011-024, paddle home position and 011-025, paddle run. **The paddle rotates correctly.**

Y **N**

Go to Flag 2. Check the paddle motor, MOT11-024.

Refer to:

- GP 10, How to Check a Motor.
- Figure 1
- P/J310, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP

Repair or install new components as necessary:

- Paddle motor, PL 11.56 Item 10.
- LVF PWB, PL 11.90 Item 8.

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Enter dC330, code 011-025 and stack the code 011-326, to actuate the paddle roll home sensor Q11-326. **The display cycles high/low.**

Y **N**

Go to Flag 1. Check Q11-326.

Refer to:

- GP 11, How to Check a Sensor.
- Figure 1.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP

Repair or install new components as necessary:

- Paddle roll home sensor, PL 11.56 Item 4.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

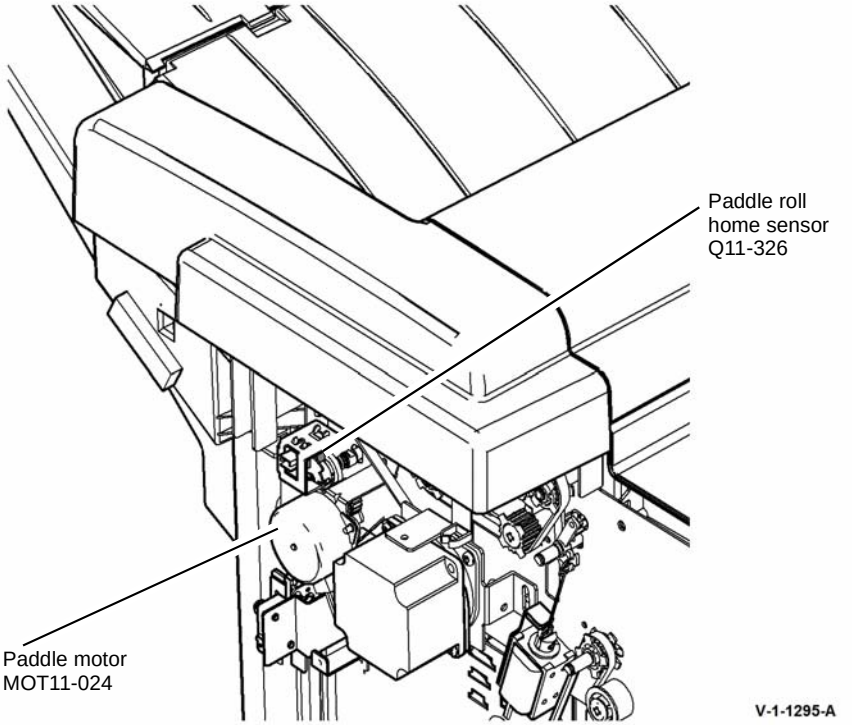
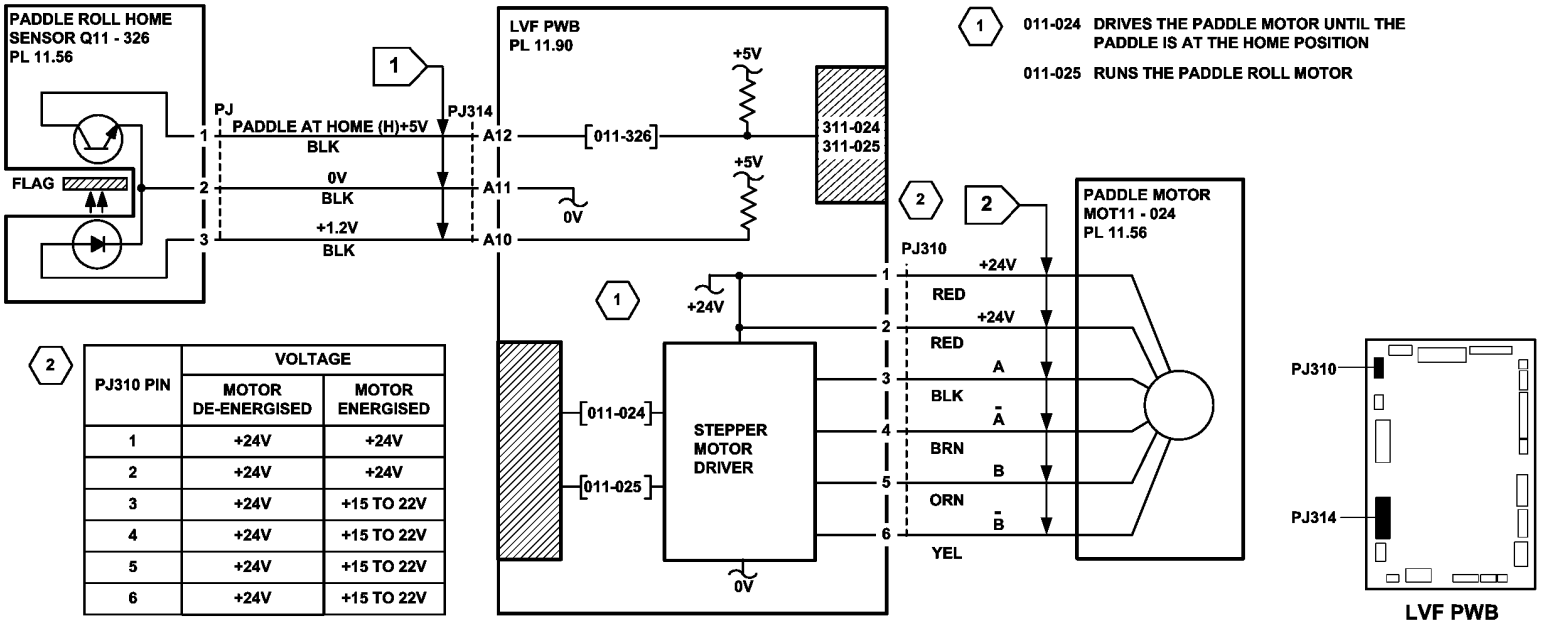


Figure 1 Component location



PJ310 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+15 TO 22V
4	+24V	+15 TO 22V
5	+24V	+15 TO 22V
6	+24V	+15 TO 22V

TV-1-0319-A

Figure 2 Circuit diagram

311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP

311-030-00-150 Bin 1 fails to move.

311-334-00-150 Bin 1 has reached the upper limit of travel.

311-335-00-150 Bin 1 has reached the lower limit of travel.

311-336-00-150 Bin 1 is not at the home position.

NOTE: *The home position of bin 1 is when bin 1 is actuating the bin 1 lower level sensor. See the final actions at the end of the procedure.*

Three sensors and two switches monitor the level of paper in bin 1 and the position of the tray:

- *The bin 1 upper level sensor, the highest of two sensors that detect the top of the paper stack in bin 1, or the empty bin 1, Figure 1.*
- *The bin 1 90% full sensor detects when the tray has descended to a position where the tray is 90% full, Figure 2.*
- *The bin 1 lower level sensor, the lowest of two sensors that detects when paper is removed from bin 1, Figure 1.*
- *Bin 1 upper limit switch, S11-334, Figure 2.*
- *Bin 1 lower limit switch, S11-335, Figure 2.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

- Check for a physical obstruction that would prevent bin 1 from moving, such as an item of furniture.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-150 LVF BM Bin 1 Level.
- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Refer to the 311G-150 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
- If there is a large jam of paper above bin 1, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor.

Perform the relevant check:

- If paper is overflowing the tray when it is at the lower limit, check the tray 90% full sensor.
- If paper cannot be fed to bin 1 when it is at the highest position, check the bin 1 lower level sensor Q11-332 and bin 1 upper level sensor Q11-333.

Check the front and rear bin 1 drive belts. If necessary install new components, PL 11.58 Item 1.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Remove the LVF BM rear cover assembly. Enter dC330 code 011-336, bin 1 motor encoder sensor Q11-336, slowly rotate the encoder disk by hand. **The display changes.**

Y N

Go to Flag 2. Check Q11-336.
Refer to:

- GP 11 How to Check a Sensor.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Bin 1 motor encoder sensor, PL 11.58 Item 9.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-033, bin 1 elevator motor, MOT11-030. **Bin 1 cycles down and up.**

Y N

Go to Flag 1. Check MOT11-030.
Refer to:

- GP 10 How to Check a Motor.
- P/J318, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Bin 1 elevator motor, PL 11.58 Item 7
- LVF PWB, PL 11.90 Item 8.

Figure 1, enter dC330, code 011-332. Actuate the bin 1 upper level sensor Q11-332. **The display changes.**

Y N

Go to Flag 4. Check Q11-332.
Refer to:

- GP 11 How to Check a Sensor.
- P/J314, LVF PWB
- 311D-150 LVF BM Power Distribution RAP.
- REP 11.3-150 LVF BM Un-docking.

Repair or install new components as necessary:

- Bin 1 upper level sensor, PL 11.60 Item 3.
- LVF PWB, PL 11.90 Item 8.

Go to Flag 3. Check the bin 1 lower level sensor Q11-333.
Refer to:

- GP 11 How to Check a Sensor.

  NOTE: *There is no dC330 component control code for this sensor. A service meter connected at Flag 3 PJ314 between pin 3 and pin 2 should change between approximately +5V and 0V when the sensor flag is moved.*

- P/J314, LVF PWB.

- 311D-150, LVF BM Power Distribution RAP.
- REP 11.13-150 LVF BM Un-docking.

The sensor is operative.

Y N

Repair or install new components as necessary:

- Bin 1 lower level sensor Q11-333, PL 11.60 Item 3.
- LVF PWB, PL 11.90 Item 8.

Figure 2. Enter dC330 code 011-334. Actuate the bin 1 upper limit switch, S11-334. **The display changes.**

Y N

Go to Flag 5. Check S11-334.

Refer to:

- GP 13 How to Check a Switch.
- P/J315, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Bin 1 upper limit switch, PL 11.58 Item 3.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-335, actuate the bin 1 lower limit switch, S11-335. **The display changes.**

Y N

Go to Flag 6. Check S11-335.

Refer to:

- GP 13 How to Check a Switch.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.
- REP 11.13-110 LVF BM Un-docking.

Repair or install new components as necessary:

- Bin 1 lower limit switch, PL 11.60 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-331, actuate the bin 1 90% full sensor, Q11-331. **The display changes.**

Y N

Go to Flag 7. Check Q11-331.

Refer to:

- GP 11 How to Check a Sensor.
- P/J316, LVF PWB.
- 311D-150, LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Bin 1 90% full sensor Q11-331, PL 11.58 Item 5.
- LVF PWB, PL 11.90 Item 8.

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As final actions, check the following sequence of operation:

- When bin 1 is empty and at the top of it's travel, the bin 1 lower level sensor, Q11-333 is actuated by the edge of the tray and the bin 1 upper level sensor, Q11-332 is de-actuated.
- Paper is delivered to the tray until the bin 1 upper level sensor, Q11-332 is actuated.
- The bin 1 elevator motor lowers the tray until the bin 1 upper level sensor, Q11-332 is de-actuated.
- As the tray is lowered to accommodate the increase in stack height, the bin 1 lower level sensor, Q11-333 is held actuated by the stack rear edge.
- When the tray is emptied, the tray returns to the home position; the bin 1 lower level sensor, Q11-333 is de-actuated and the tray is elevated until both the bin 1 lower level sensor, Q11-333 and bin 1 upper level sensor, Q11-332 are made. The tray is then lowered until the bin 1 upper level sensor, Q11-332 is just cleared. In the home position the bin one upper limit switch, S11-334 is also actuated.

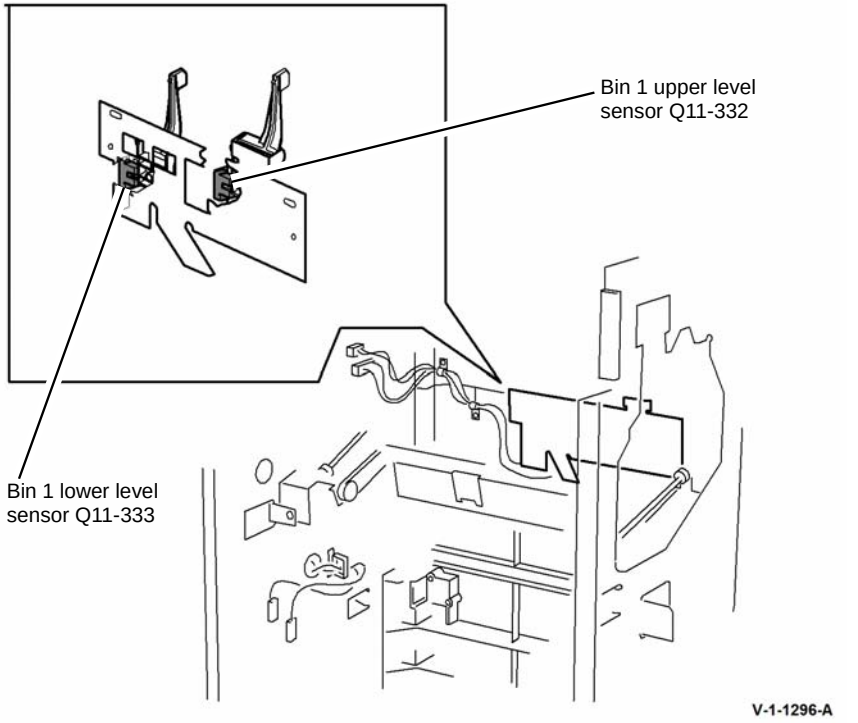

Figure 1 Component location

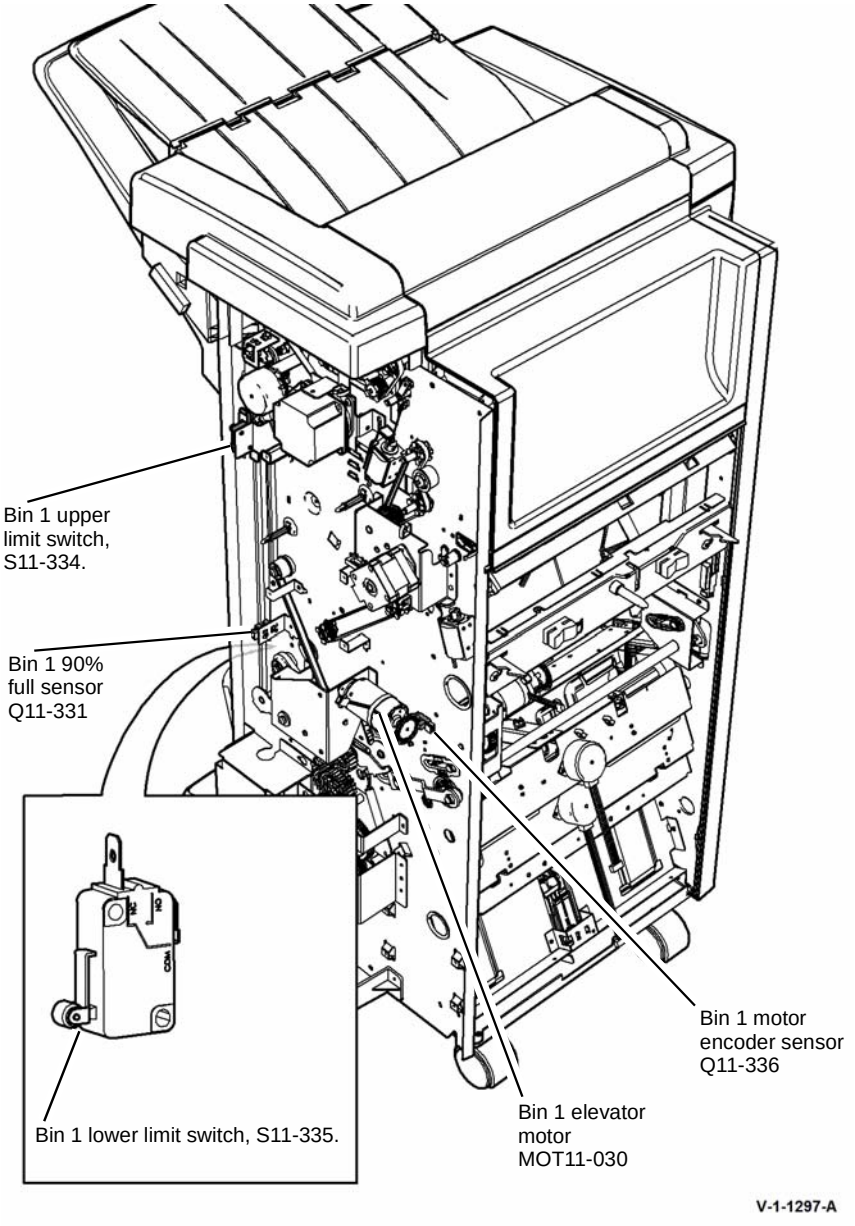

Figure 2 Component location

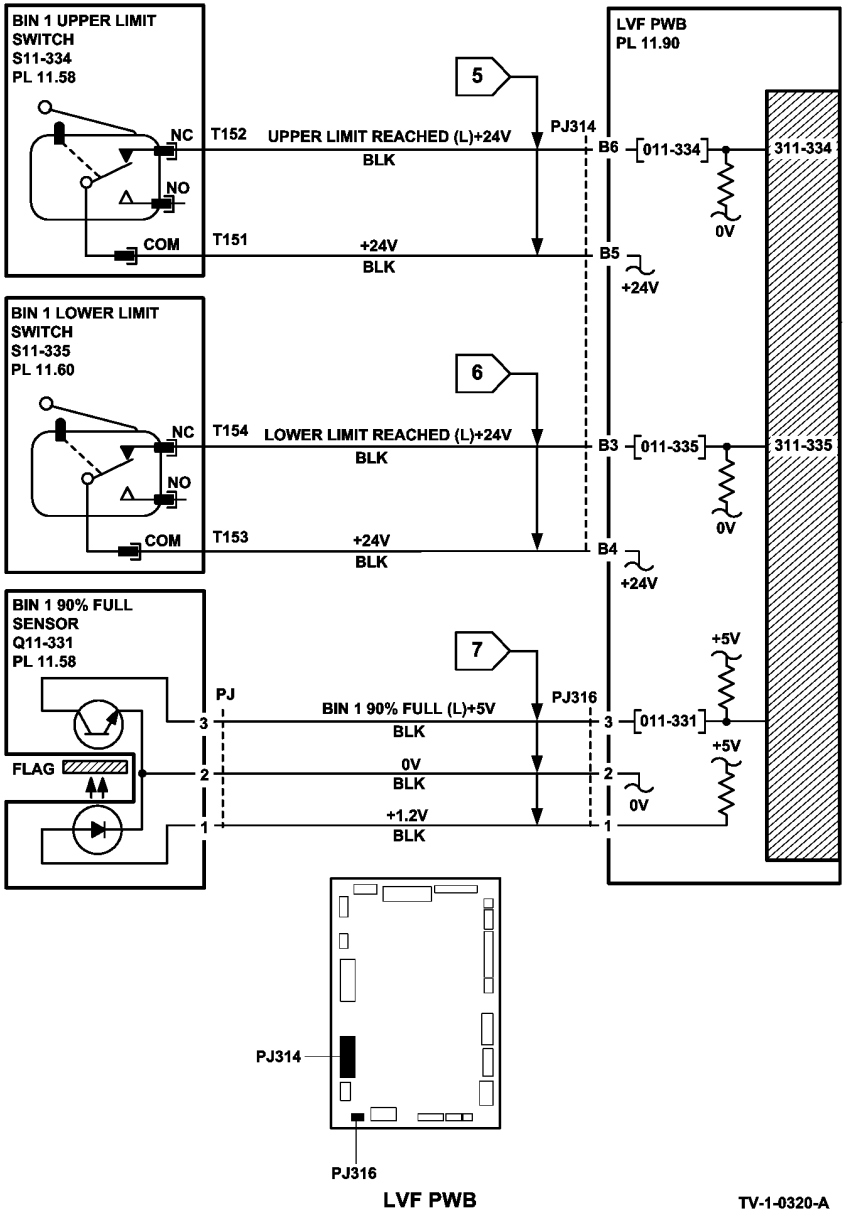

Figure 3 Circuit diagram

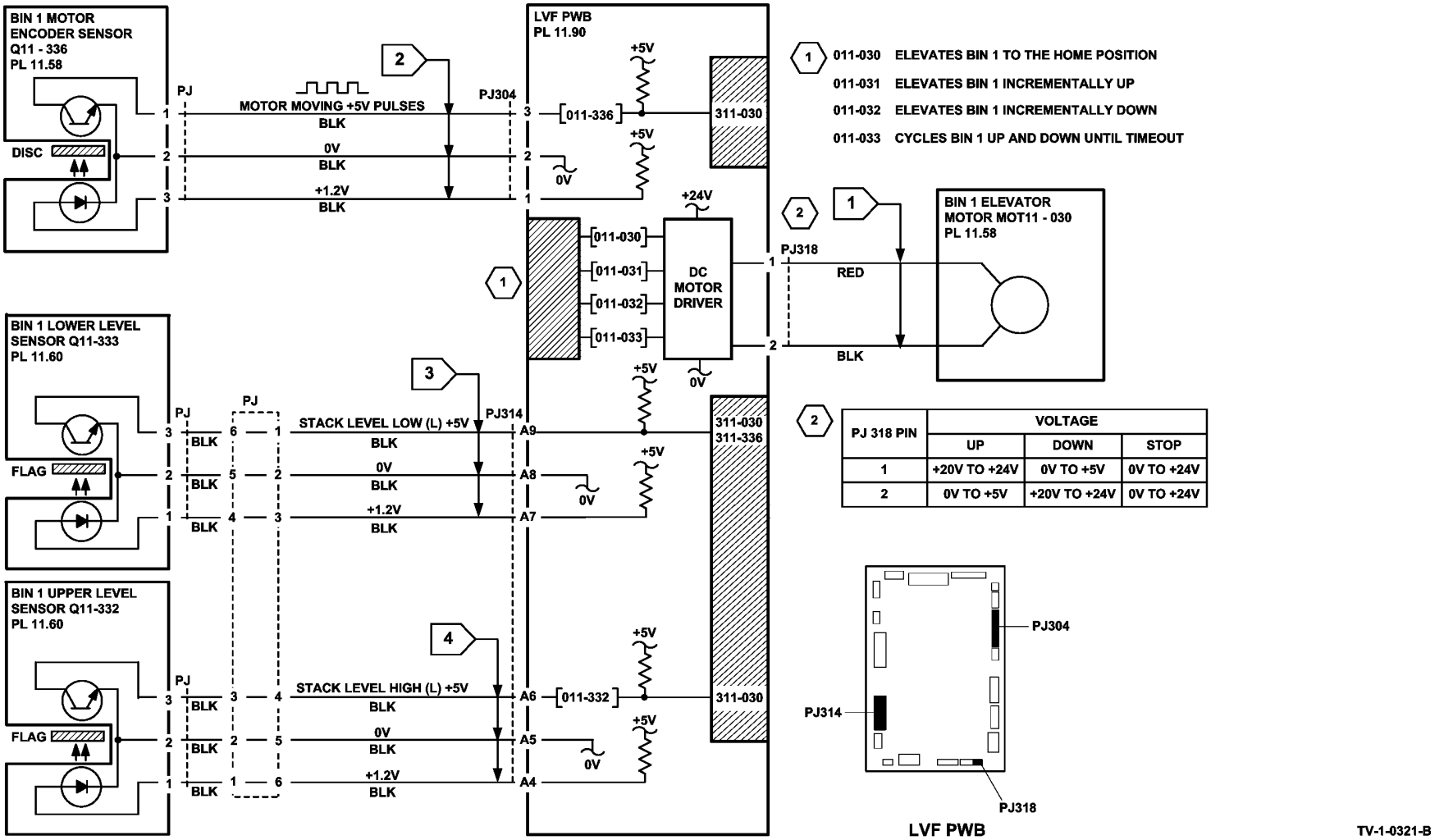

Figure 4 Circuit diagram

311-043-00-150, 311-046-00-150 LVF BM Hole Punch Operation Failure RAP

311-043-00-150 The hole punch fails to perform a punch cycle.

311-046-00-150 The hole punch is not at the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Check that the hole punch is present and correctly installed.
- Check that the punch has not jammed in the down position. This can occur with transparencies and labels.

NOTE: *The home position of the punch unit is when the cut-out in the actuator is between the punch head home sensor jaws.*

Procedure

Go to Flag 5. Check the link between P/J307 pins 10 and 11, LVF PWB. **The link is good.**

Y N

Repair the wiring or connector.

Enter dC330, code 011-351, actuate the punch head present sensor, Q11-351, Figure 1. **The display changes.**

Y N

Go to Flag 2. Check Q11-351.
Refer to:

- GP 11 How to Check a Sensor.
- P/J307, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Punch head home sensor, PL 11.54 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-350, actuate the punch head home sensor, Q11-350, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check Q11-350.
Refer to:

- GP 11 How to Check a Sensor.
- P/J307, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

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Repair or install new components as necessary:

- Punch head home sensor, PL 11.54 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-043, hole punch motor MOT11-042. **The punch cycles.**

Y N

Go to Flag 3. Check MOT11-042.
Refer to:

- GP 10, How to Check a Motor.
- P/J311, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Hole punch motor assembly, PL 11.54 Item 2.
- LVF PWB, PL 11.90 Item 8.

NOTE: *The chad bin collects the pieces of paper cut out by the hole punch. The chad bin level sensor will not operate if the bin is incorrectly installed. Ensure the chad bin is fully inserted and the lever engages in the slot.*

Enter dC330, code 011-348 chad bin level sensor, Q11-348, Figure 2. Use a strip of paper actuate Q11-348. **The display changes.**

Y N

Go to Flag 4. Check Q11-340.
Refer to:

- GP 11 How to Check a Sensor.
- P/J307, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as follows.

- Chad bin full sensor, PL 11.54 Item 7.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

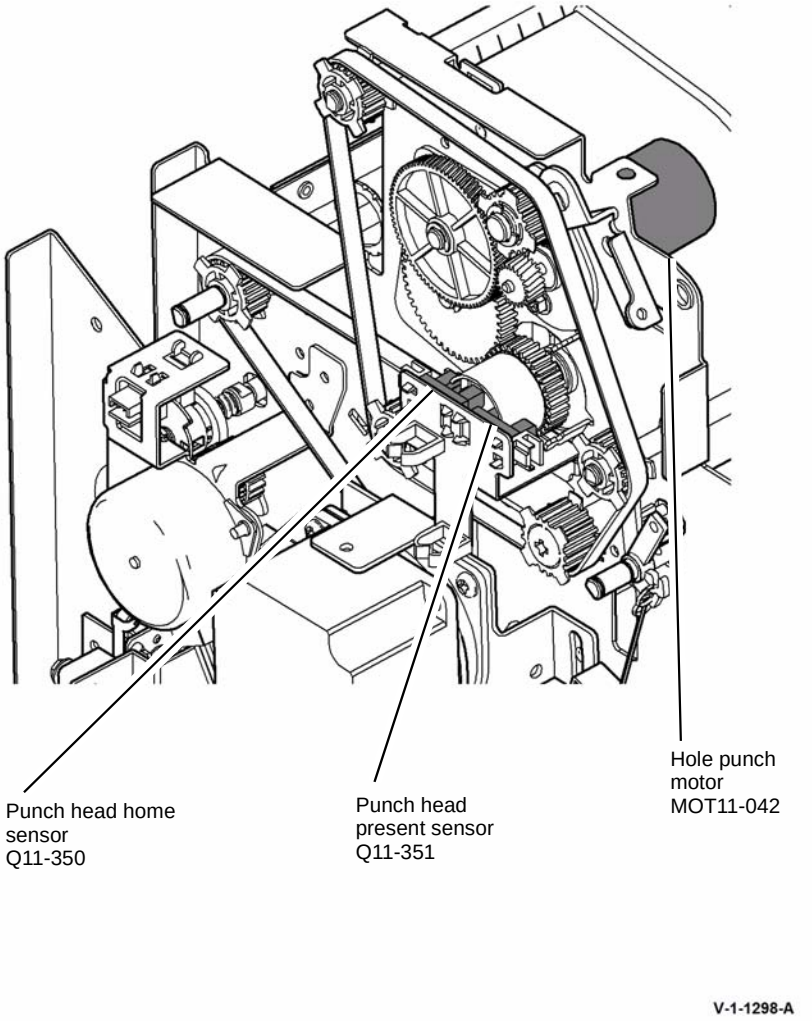

Figure 1 Component location

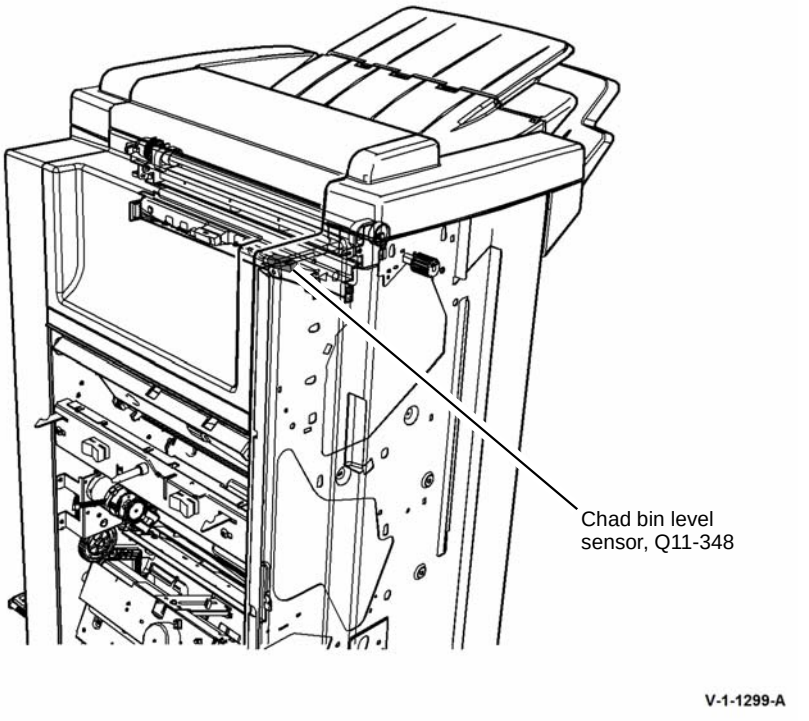

Figure 2 Component location

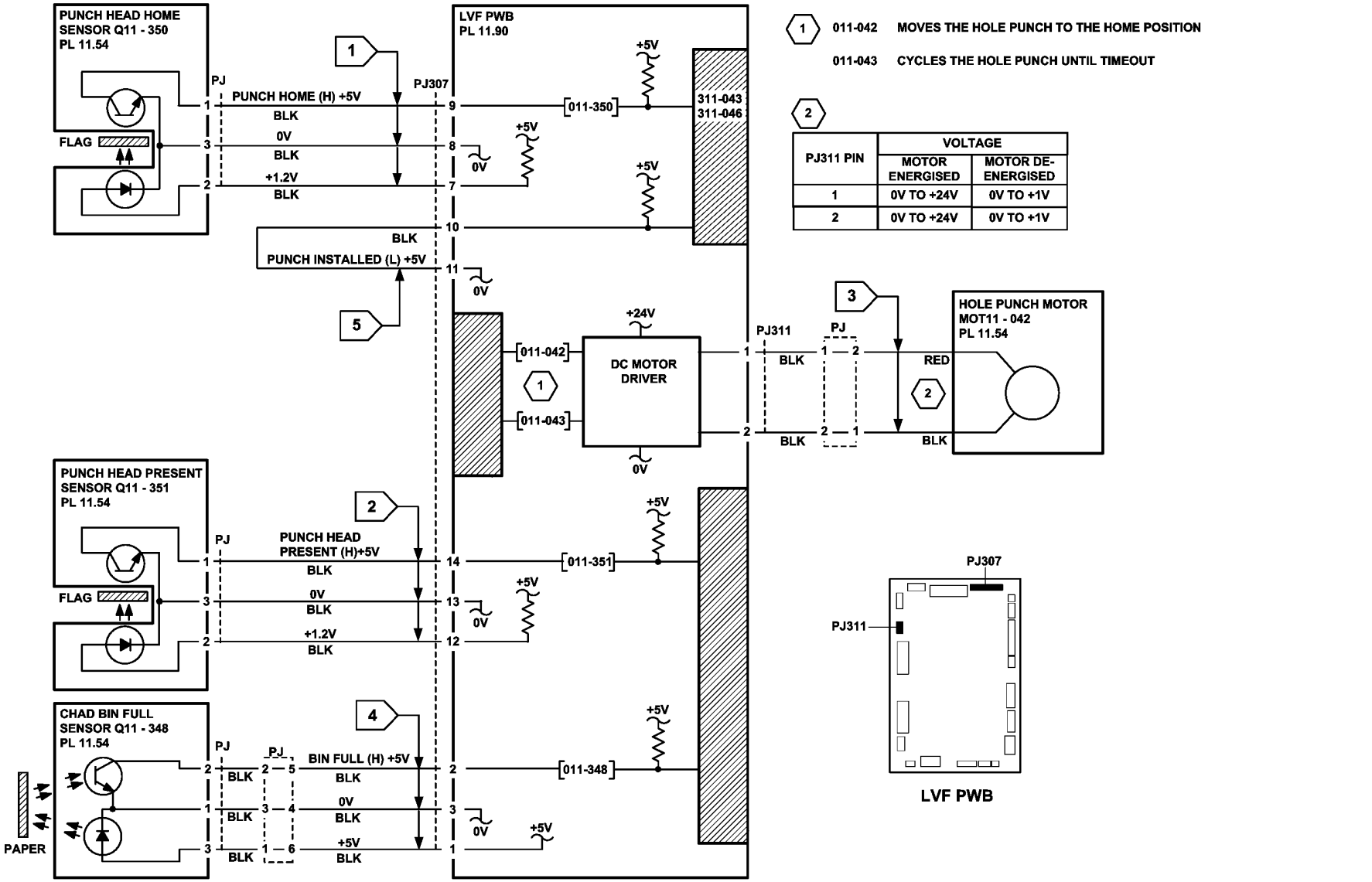

Figure 3 Circuit diagram

311-050-00-150, 311-360-00-150 LVF BM Staple Head Operation Failure RAP

311-050-00-150 The staple head fails to cycle.

311-360-00-150 The staple head is not at the home position.

NOTE: *The home position is with the jaws of the staple head fully open.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not run code 011-050 without two sheets of paper in the stapler jaws. Running this code without the paper in position can cause damage to the machine.

Switch off the machine, then switch on the machine, GP 14.

Refer to Figure 1. Check the following:

- The LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- The staple head unit is correctly installed.

Procedure

NOTE: *After repairing the fault using this RAP, switch off the machine, then switch on the machine, GP 14, to enable operation of the staple head.*

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Place two sheets of paper in the stapler jaws. Enter dC330, code 011-050 to cycle the staple head once, and 011-051 to reverse the staple head to the home position. **The staple head operates as expected.**

Y **N**

Go to Flag 1 and Flag 2. Check the wiring and connectors between the LVF PWB and the staple head. **The wiring is good.**

Y **N**

Repair the wiring.

Install new components as necessary:

- Staple head unit, PL 11.68 Item 5.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

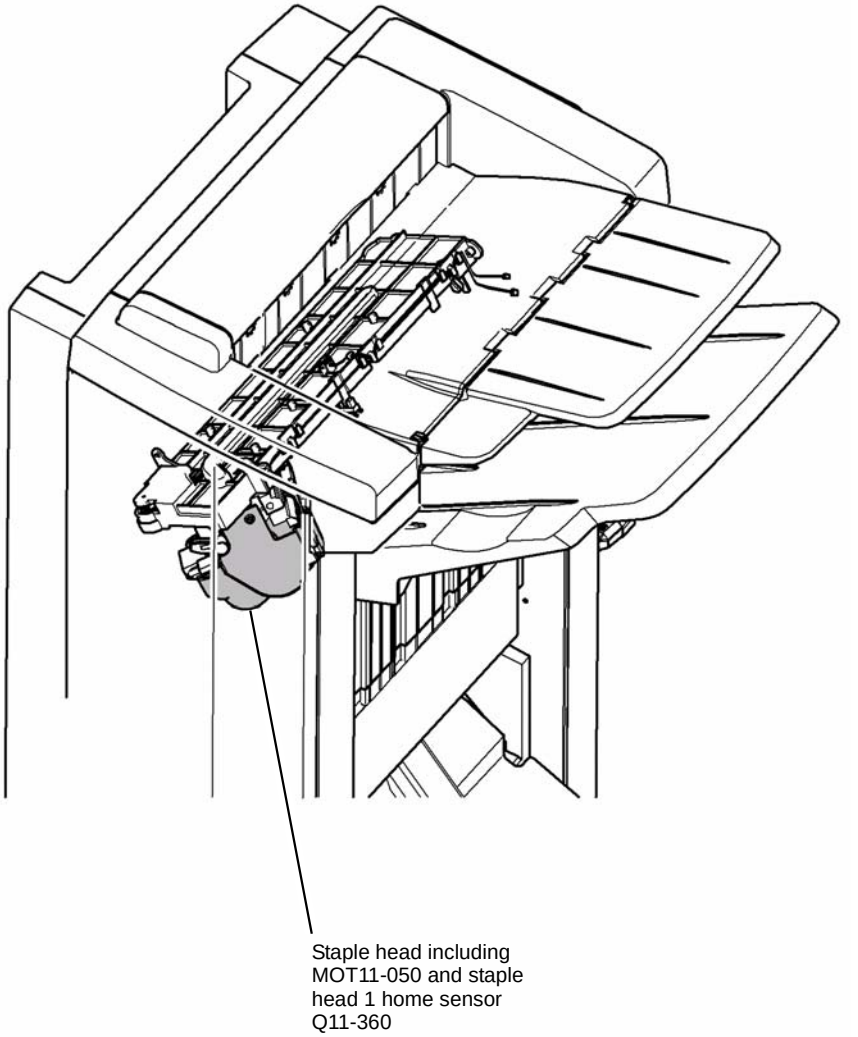

Figure 1 Component location

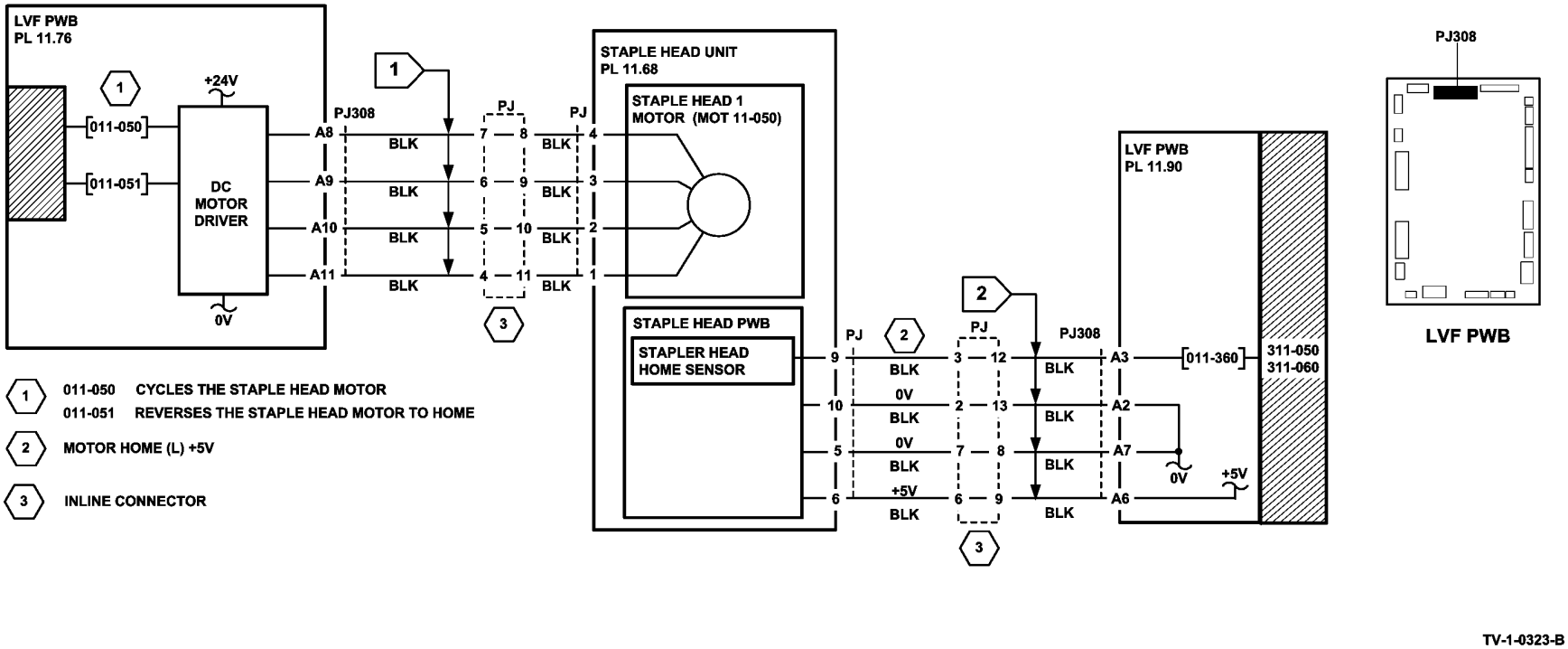

Figure 2 Circuit diagram

311-053-00-150, 311-370-00-150, 311-371-00-150 LVF BM Staple Head Unit Movement Failure RAP

311-053-00-150 The staple head unit fails to move.

311-370-00-150 The staple head unit is not at the home position.

311-371-00-150 The staple head does not move away from the home position.

NOTE: *The home position is when the staple head unit is at the corner stapling position (fully to the front of the LVF BM and rotated through 45 degrees).*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Un-dock the LVF BM from the machine, REP 11.13-150, move the ejector assembly fully to the right, manually move the stapler unit along the full length of the track using the green thumb-wheel. Check the home sensor flag and the two dual position flags for damage, see NOTE. Check for damage or obstructions that would prevent the stapling unit from moving. If necessary, install a new staple head unit, PL 11.68 Item 5 or a new stapler traverse assembly, PL 11.68 Item 1.

  NOTE: *For dual position stapling, the SU1 front index sensor uses two flags.*

- Dock the LVF BM to the machine.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, code 011-021 to move the ejector assembly fully to the right. Enter code 011-055. **The stapling unit cycles back and forth along the track.**

Y N

Go to Flag 3. Check MOT11-053.
Refer to:
- GP 10, How to Check a Motor.
- Figure 1.
- P/J308, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

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Repair or install new components as necessary:
- Stapler traverse assembly, PL 11.68 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-370. Actuate the SU1 home sensor, Q11-370, by moving the stapler unit to and from the home position using the green thumb-wheel. **The display changes.**

Y N

Go to Flag 1. Check Q11-370.
Refer to:
- GP 11. How to check a sensor.
- Figure 1.
- P/J308, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:
- SU1 home sensor, PL 11.68 Item 3.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-021 to move the ejector assembly fully to the right. Enter code 011-371. Actuate the SU1 front index sensor, Q11-371, by moving the stapler unit to and from the flag position (approximately 115mm (4.5 inches) from the front of the track using the green thumb-wheel. **The display changes.**

Y N

Go to Flag 2. Check Q11-371.
Refer to:
- GP 11 How to Check a Sensor.
- P/J308, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:
- SU1 front index sensor, PL 11.68 Item 3.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

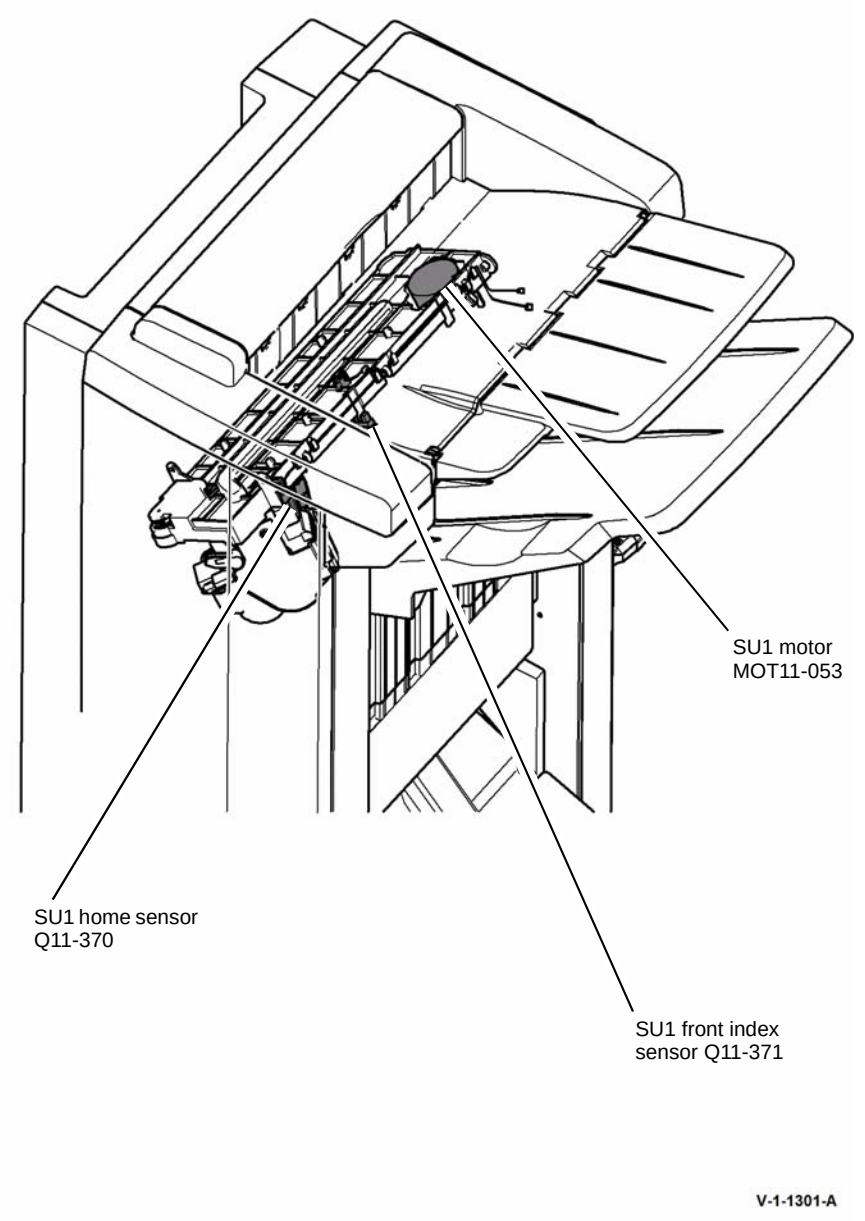
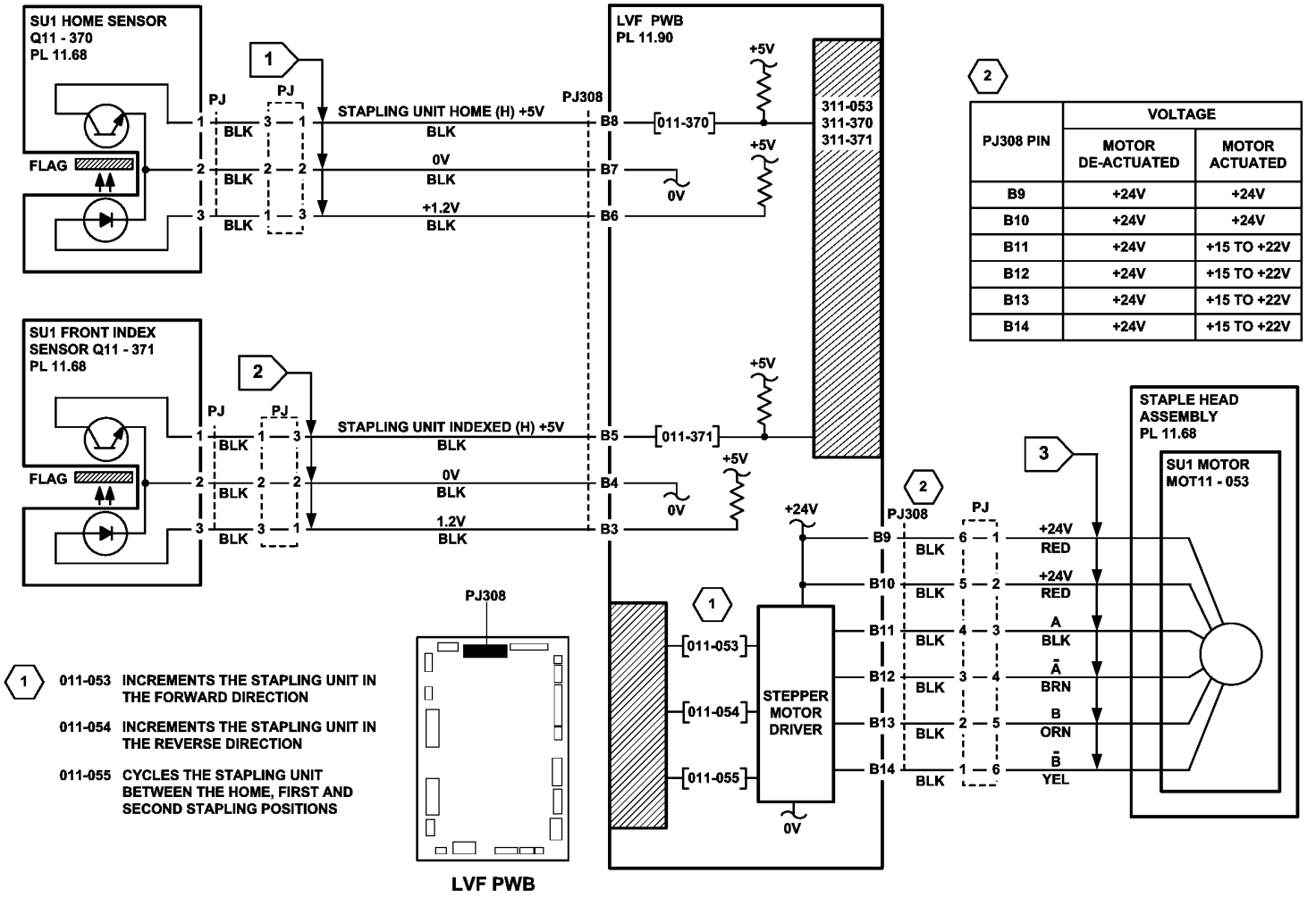


Figure 1 Component location



PJ308 PIN	VOLTAGE	
	MOTOR DE-ACTUATED	MOTOR ACTUATED
B9	+24V	+24V
B10	+24V	+24V
B11	+24V	+15 TO +22V
B12	+24V	+15 TO +22V
B13	+24V	+15 TO +22V
B14	+24V	+15 TO +22V

Figure 2 Circuit diagram

311-061-00-150 LVF BM Crease Blade Move Failure RAP

311-061-00-150 The crease blade has failed to clear the crease blade home sensor.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Rotate the crease blade handle, PL 11.82 Item 1, to ensure that the crease blade mechanism is free to move. If necessary clear any paper jam in the area of the crease blade.

Procedure

Check the following parts for damage:

- Crease blade assembly, PL 11.82 Item 5.
- Crease blade drive gear, PL 11.82 Item 7.
- Crease blade gearbox, PL 11.82 Item 11.
- Crease blade cranks, PL 11.82 Item 12.
- Crease blade front link arm, PL 11.82 Item 8.
- Crease blade rear link arm, PL 11.82 Item 9.
- Crease blade guides, PL 11.82 Item 3.

The parts are good,

Y N

Install new parts as necessary.

Enter dC330 code 011-416. Actuate the crease blade home sensor, Figure 1, by rotating the crease blade knob so that the flag on the crease blade moves into and out of the crease blade home sensor. **The display changes.**

Y N

Go to Flag 1, check the crease blade home sensor, Q11-416.
Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Crease blade home sensor, PL 11.82 Item 4.

Enter dC330 code 011-418. Actuate the crease blade motor encoder sensor, Figure 1, by slowly rotating the crease blade knob. **The display changes.**

Y N

Go to Flag 3, check the crease blade motor encoder sensor, Q11-415.
Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Crease blade motor encoder sensor, PL 11.82 Item 4.

Enter dC330 code 011-061 to cycle the crease blade motor, MOT11-061, Figure 1. **The motor runs.**

Y N

Go to Flag 2, check the crease blade motor, MOT11-061.
Refer to:

- GP 10, How to Check a Motor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Crease blade motor, PL 11.82 Item 2.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

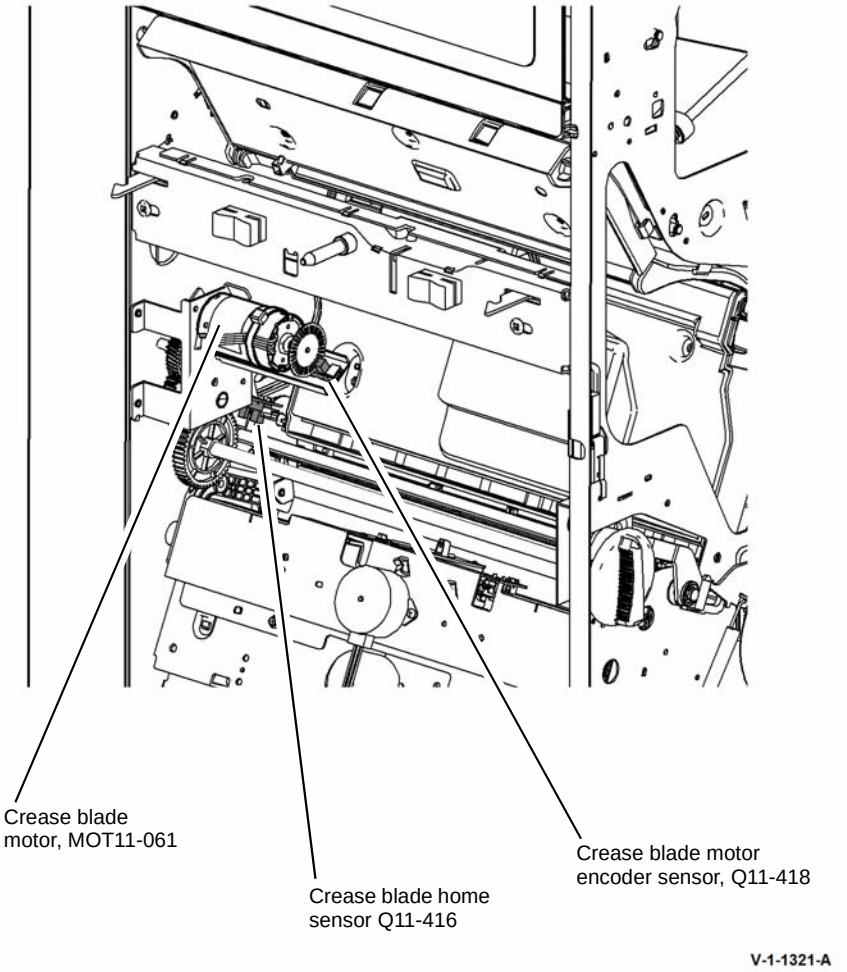


Figure 1 Component location

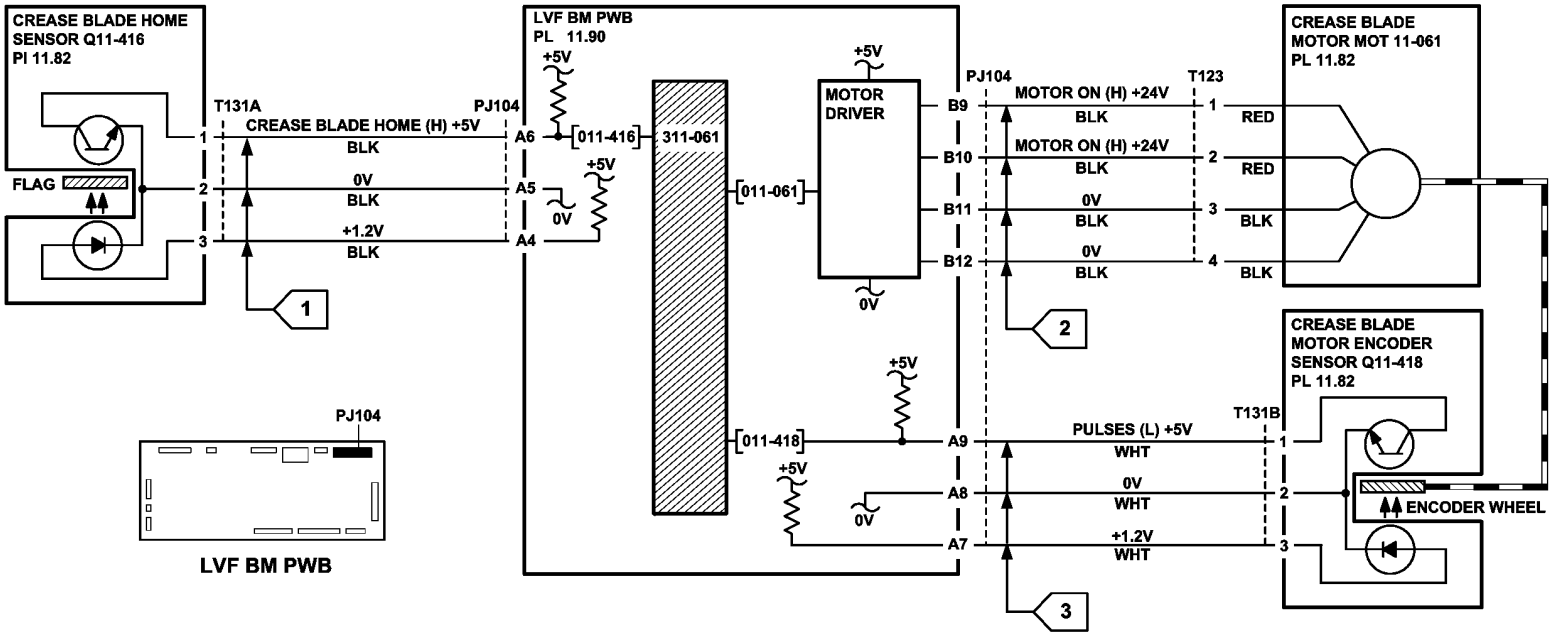


Figure 2 Circuit diagram

311-062-00-150 LVF BM Crease Roll Failure RAP

311-062-00-150 The crease roll motor failed to run.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Rotate the crease roll handle, PL 11.84 Item 1, to ensure that the crease roll mechanism is free to move. If necessary clear any paper jam in the area of the crease rolls.

Procedure

Check the following parts for damage:

- Upper crease roll, PL 11.84 Item 2.
- Lower crease roll, PL 11.84 Item 3.
- Crease roll gearbox assembly, PL 11.86 Item 8.
- Crease roll gear 1, PL 11.84 Item 1.
- Crease roll gear 2, PL 11.84 Item 3.
- Crease roll gear 3, PL 11.84 Item 3.
- Crease roll gear 4, PL 11.84 Item 4.

The parts are good,

Y N

Install new parts as necessary.

Enter dC330 code 011-419. Actuate the crease roll motor encoder sensor, Figure 1, by slowly rotating the crease roll handle. **The display changes.**

Y N

Go to Flag 1, check the crease roll motor encoder sensor, Q11-419.
Refer to:

- GP 11, How to Check a Sensor.
- P/J112, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Crease roll motor encoder sensor, PL 11.86 Item 7.

Enter dC330 code 011-062 to run the crease roll motor, MOT11-062, Figure 1. **The motor runs.**

Y N

Go to Flag 2, check the crease roll motor, MOT11-062.
Refer to:

- GP 10, How to Check a Motor.
- P/J103, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Crease roll motor, PL 11.86 Item 5.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

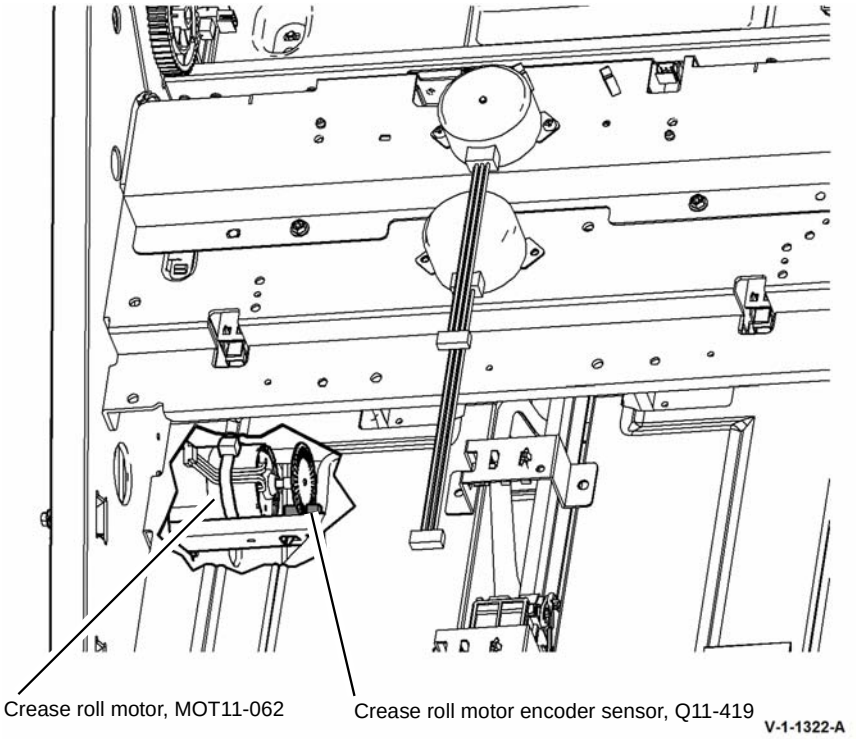


Figure 1 Component location

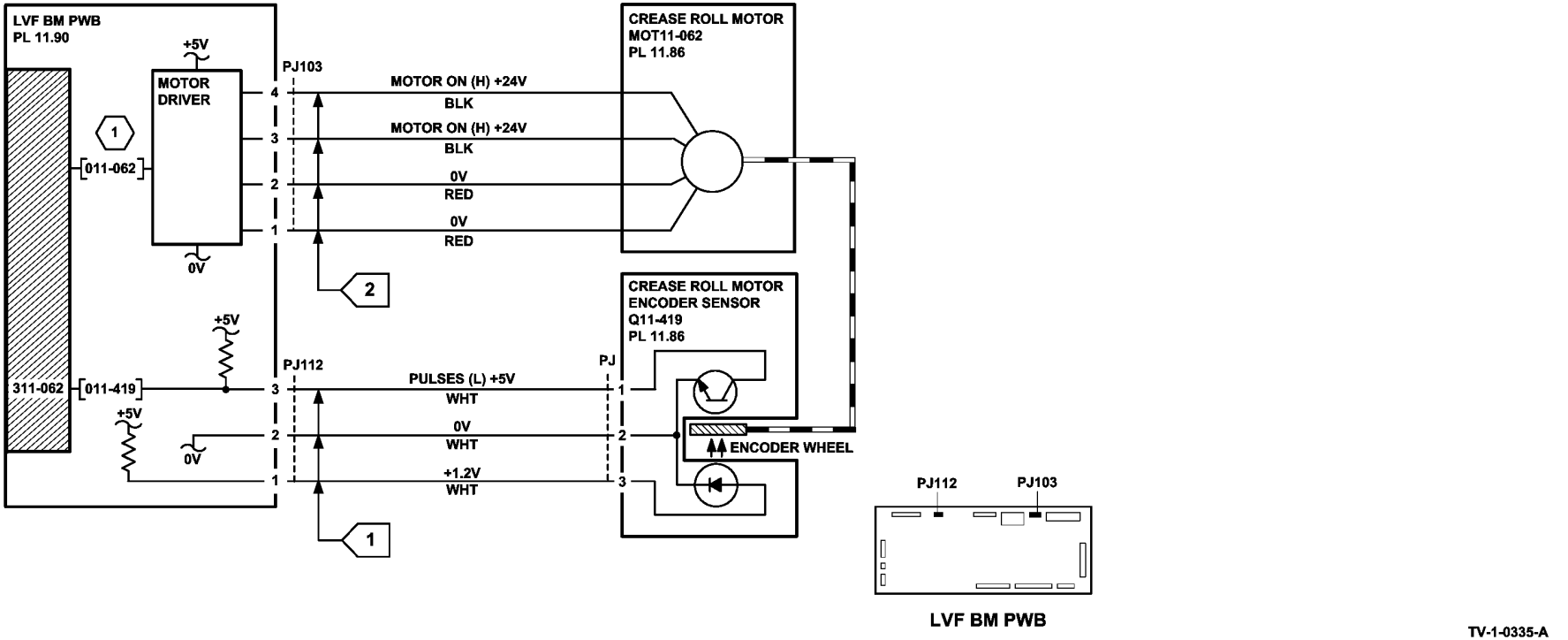


Figure 2 Circuit diagram

311-063-00-150, 311-488-00-150, 311-490-00-150, 311-492-00-150 LVF BM Booklet Stapler Movement Failure RAP

311-063-00-150 The booklet stapler does not move away from the home position.

311-488-00-150 The booklet stapler failed to move to the home position in the allowed time.

311-490-00-150 The booklet stapler failed to move to the away position in the allowed time.

311-492-00-150 The booklet stapler head is not at the home (fully open) position.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Check for a paper jam, paper debris or damage in the stapler area that would hinder the movement of the stapler head assembly,

Procedure

Enter dC330 code 011-438. Actuate the BM staple unit home sensor Q11-438, Figure 1. **The display changes.**

Y N

Go to Flag 1, check the BM staple unit home sensor, Q11-438.
Refer to:

- GP 11, How to Check a Sensor.
- P/J107, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple unit home sensor, PL 11.78 Item 2.

Enter dC330 code 011-439. Actuate the BM staple unit away sensor Q11-439, Figure 1. **The display changes.**

Y N

Go to Flag 2, check the BM staple unit away sensor, Q11-439.
Refer to:

- GP 11, How to Check a Sensor.
- P/J107, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

A

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple unit away sensor, PL 11.78 Item 2.

Enter dC330 code 011-437 to run the BM staple clinch motor, MOT11-437, Figure 2. **The motor runs.**

Y N

Go to Flag 5, check the BM staple clinch motor, MOT11-437.
Refer to:

- GP 10, How to Check a Motor.
- P/J107, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple head assembly PL 11.78 Item 5.
- BM stapler assembly, PL 11.78 Item 1.

Enter dC330 code 011-441, to monitor the BM staple jaw home sensor Q11-441, Figure 2. Stack the dC330 code 011-437 to run the BM staple clinch motor, MOT11-437. **The display changes.**

Y N

Go to Flag 3, check the BM staple jaw home sensor, Q11-441.
Refer to:

- GP 11, How to Check a Sensor.
- P/J107, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple head assembly, PL 11.78 Item 5.

Enter dC330 code 011-435 to run the BM staple unit move motor and move the staple unit to the home position, or enter code 011-436 to run the BM staple unit move motor and move the staple unit to the away position, Figure 1. **The motor runs.**

Y N

Go to Flag 4, check the BM staple unit move motor, MOT11-435.
Refer to:

- GP 10, How to Check a Motor.
- P/J106, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple unit move motor, PL 11.78 Item 3.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

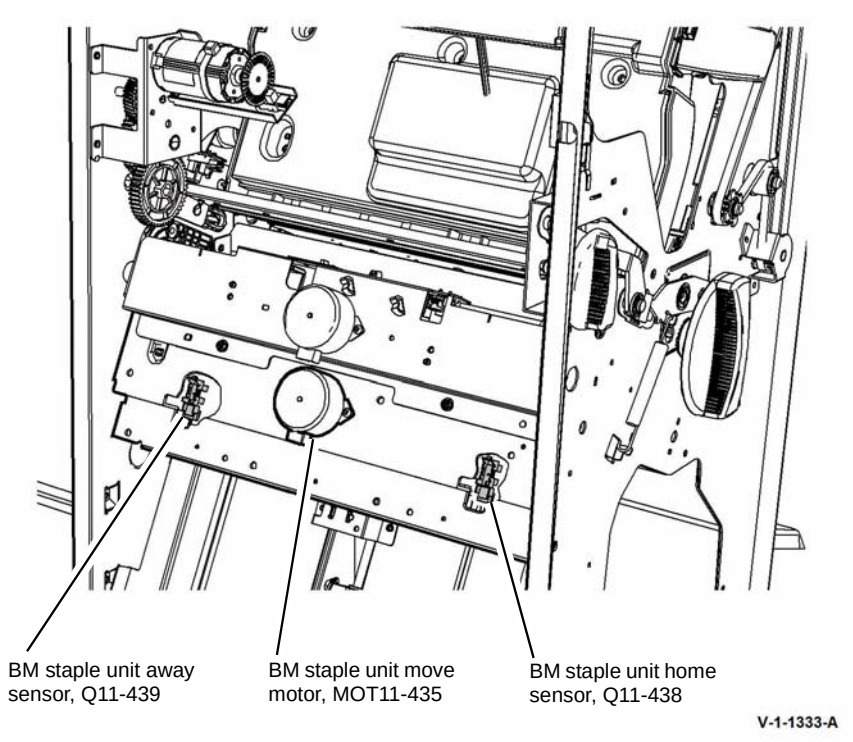


Figure 1 Component location

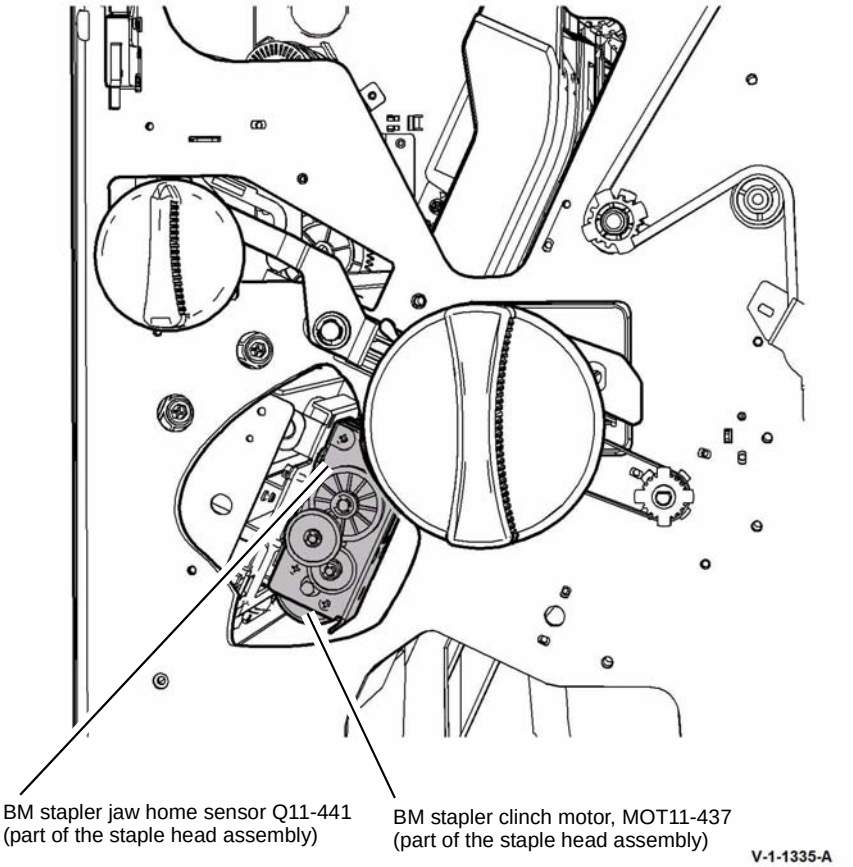
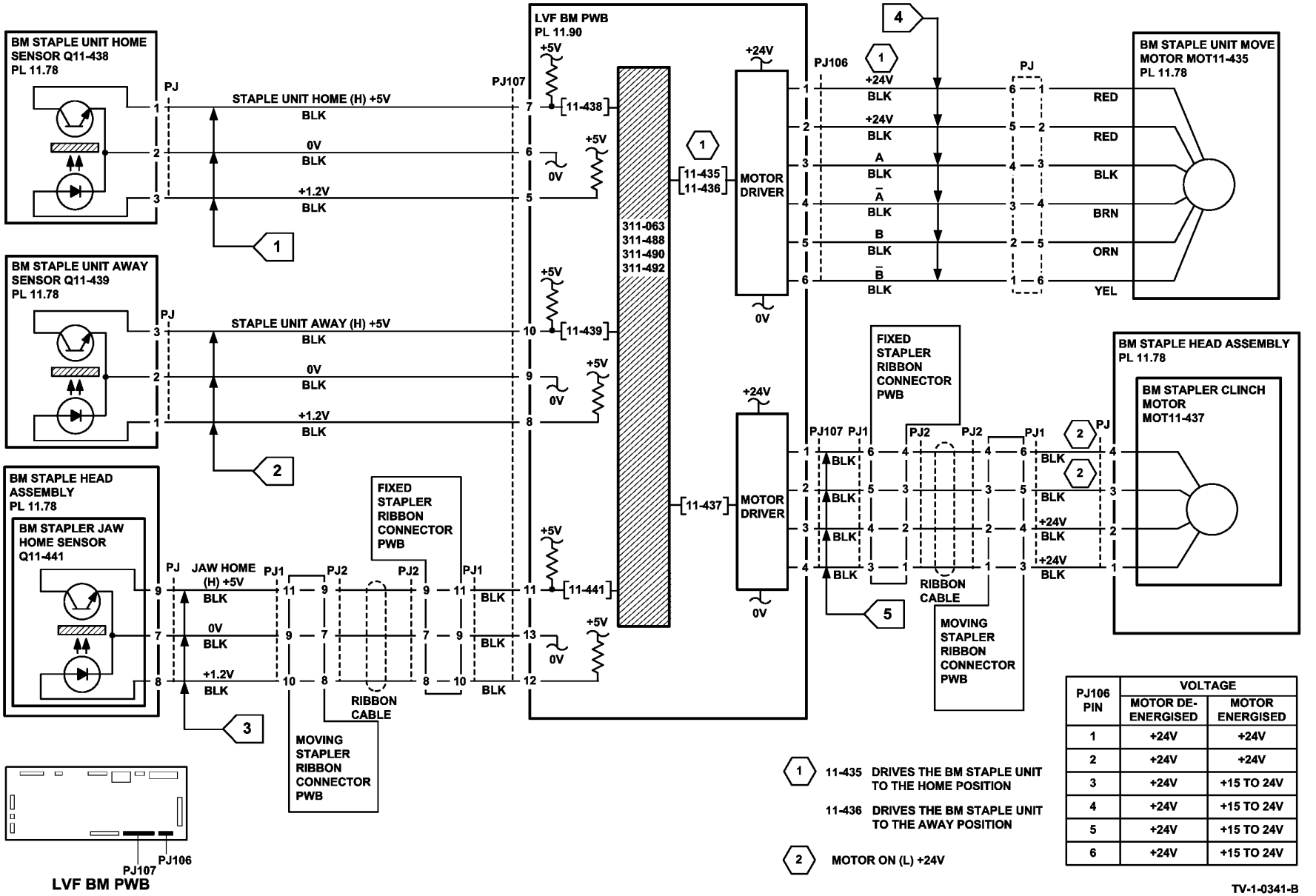


Figure 2 Component location



PJ106 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+15 TO 24V
4	+24V	+15 TO 24V
5	+24V	+15 TO 24V
6	+24V	+15 TO 24V

Figure 3 Circuit diagram

311-065-00-150, 311-383-00-150, 311-484-00-150, 311-486-00-150 LVF BM Back Stop Failure RAP

311-065-00-150 The back stop motor fails to run.

311-383-00-150 The back stop is not at the home position.

311-484-00-150 The back stop failed to move to the mid home position in the allowed time.

311-486-00-150 The back stop failed to move away from the mid home position in the allowed time.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Visually check for any paper jams in the booklet compiler. If necessary clear any stray sheets or paper debris.

Procedure

Check the following parts for damage:

- BM back stop drive belt. PL 11.80 Item 8.
- BM back stop drive pulley. PL 11.80 Item 7.
- BM back stop pulleys, PL 11.80 Item 5.
- BM back stop belt, PL 11.80 Item 4.
- BM back stop assembly, PL 11.82 Item 8.

The parts are good,

Y N

Install new parts as necessary.

Enter dC330 code 011-383. Actuate the back stop home sensor, Figure 1, by rotating the drive belt and pulley by hand so that the flag on the back stop moves into and out of the back stop home sensor. **The display changes.**

Y N

Go to Flag 1, check the back stop home sensor, Q11-383.
Refer to:

- GP 11, How to Check a Sensor.
- P/J105, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

A

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Back stop home sensor, PL 11.80 Item 10.

Enter dC330 code 011-440. Actuate the back stop mid home sensor, Figure 1, by rotating the drive belt and pulley by hand so that the flag on the back stop moves into and out of the back stop mid home sensor. **The display changes.**

Y N

Go to Flag 2, check the back stop mid home sensor, Q11-440.
Refer to:

- GP 11, How to Check a Sensor.
- P/J105, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Back stop mid home sensor, PL 11.82 Item 4.

Enter dC330 code 011-065 to run the back stop motor, MOT11-065, Figure 1. **The motor runs.**

Y N

Go to Flag 3, check the back stop motor, MOT11-065.
Refer to:

- GP 10, How to Check a Motor.
- P/J105, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Back stop motor, PL 11.80 Item 9.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

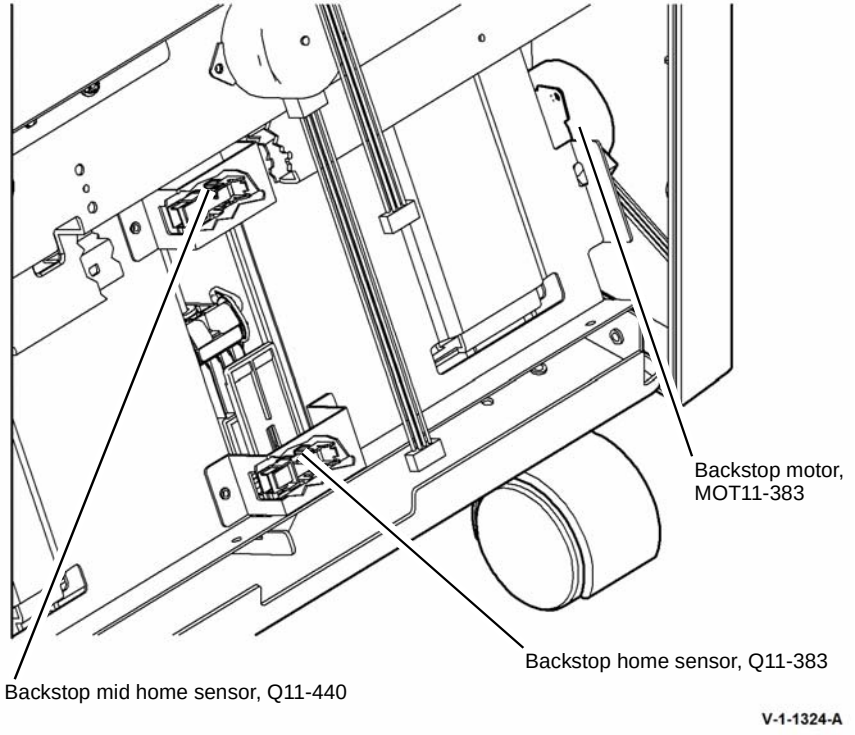


Figure 1 Component location

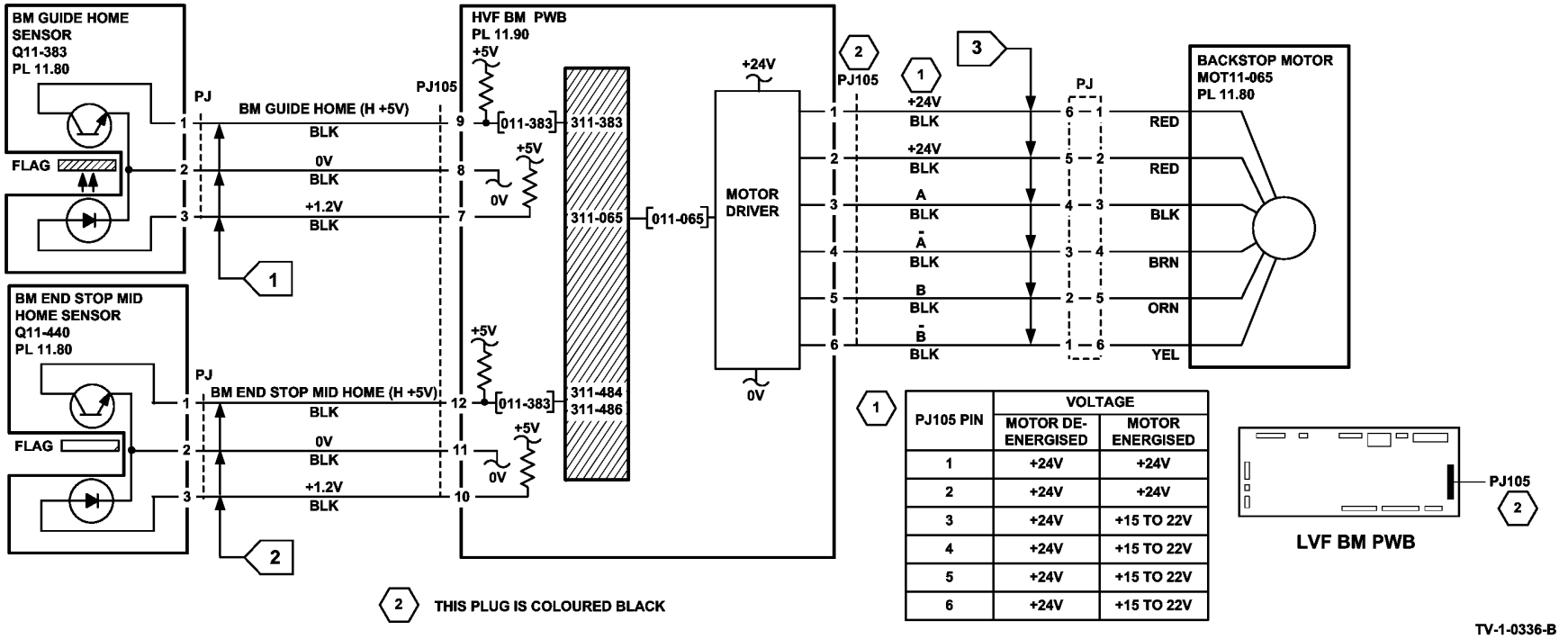


Figure 2 Circuit diagram

311-066-00-150, 311-384-00-150 LVF BM Booklet Tamper 1 Move Failure RAP

311-066-00-150 The booklet tamper failed to clear the tamper home sensor.

11-384-00-150 The booklet tamper failed to move to the home position.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Check that the booklet tamper mechanism is free to move. If necessary clear any paper jam in the area of the booklet tamper.

Procedure

Check the following parts for damage:

- Booklet tamper arms, PL 11.74 Item 2.
- Booklet tamper assembly, PL 11.84 Item 3.

The parts are good,

Y N

Install new parts as necessary.

Enter dC330 code 011-384. Actuate the booklet tamper home sensor, Figure 1, by moving the tamper arms fully out then fully in. **The display changes.**

Y N

Go to Flag 1, check the booklet tamper home sensor, Q11-384.

Refer to:

- GP 11, How to Check a Sensor.
- P/J108, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet tamper home sensor, PL 11.74 Item 6.

Enter dC330 code 011-066 to run the booklet tamper motor, MOT11-066, Figure 1. **The motor runs.**

Y N

Go to Flag 2, check the booklet tamper motor, MOT11-066.

A

A

Refer to:

- GP 10, How to Check a Motor.
- P/J108, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet tamper motor, PL 11.74 Item 3.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

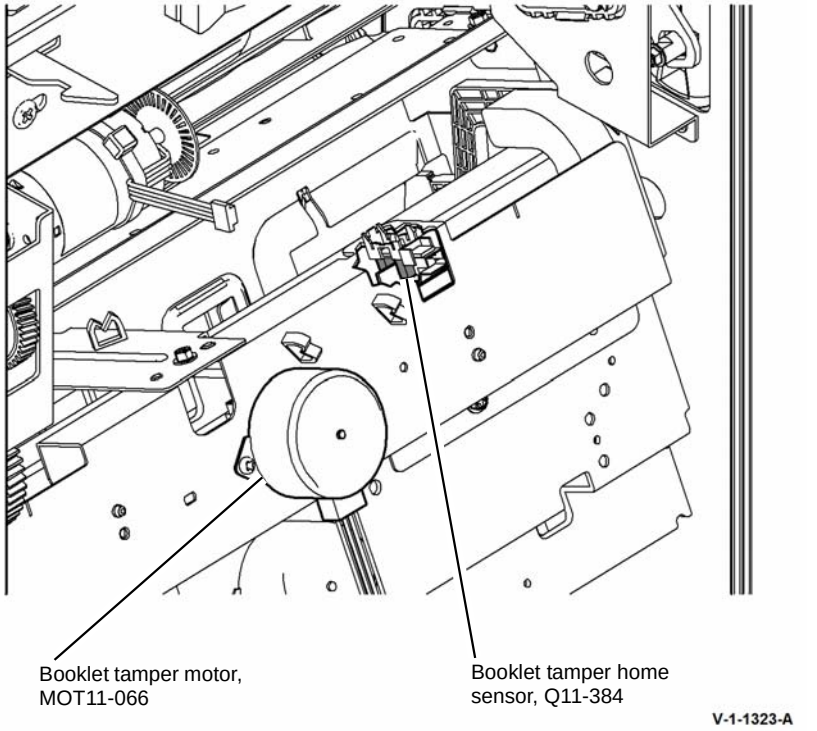
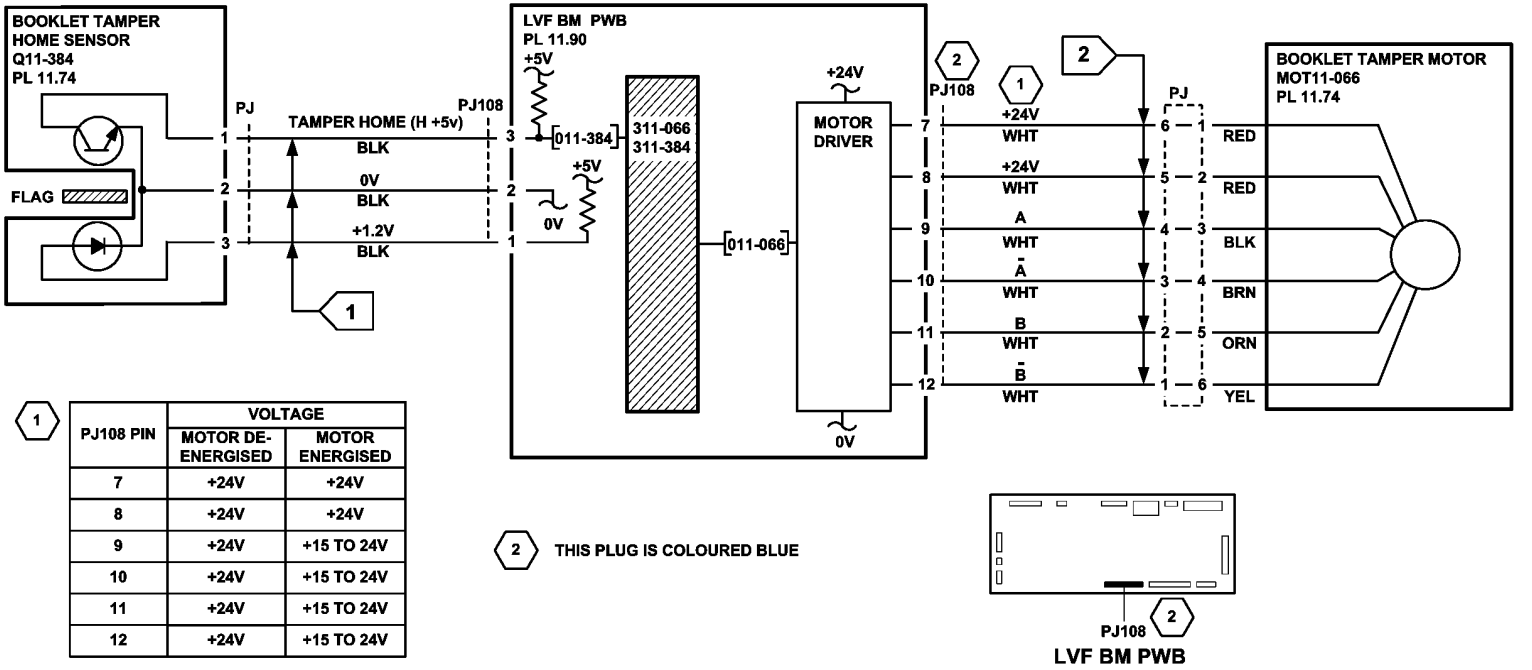


Figure 1 Component location



PJ108 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
7	+24V	+24V
8	+24V	+24V
9	+24V	+15 TO 24V
10	+24V	+15 TO 24V
11	+24V	+15 TO 24V
12	+24V	+15 TO 24V

TV-1-0337-B

Figure 2 Circuit diagram

311-100-00-150, 311-101-00-150, 311-158-00-150, 311-163-00-150 LVF BM Paper Entry RAP

311-100-00-150 The lead edge of the sheet is late to the finisher entry sensor Q11-100.

311-101-00-150 The trail edge of the sheet is late from the finisher entry sensor Q11-100.

311-158-00-150 The lead edge of the sheet is late to the finisher entry sensor Q11-100, when feeding to the booklet maker compiler.

311-163-00-150 The trail edge of the sheet is late from the finisher entry sensor Q11-100, when feeding to the booklet maker compiler.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the 311H-150 Copy Damage in the LVF BM RAP.

Check the following:

- LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- Check the paper entry guide for damage or wear that could cause paper to jam.
- Paper jam in the machine to LVF BM paper path, ADJ 11.2-150 Machine to LVF BM Alignment.
- IOT exit path and feed rolls.
- Feeding performance from a paper tray loaded with a new ream of paper.

Procedure

Lower the paper entry guide assembly, PL 11.62 Item 7, to access the finisher entry sensor, Figure 1. Enter dC330, code 011-100. Actuate the finisher entry sensor, Q11-100. **The display changes.**

Y N

Go to Flag 1. Check Q11-100.
Refer to:

- GP 11, How to Check a Sensor.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Finisher entry sensor, PL 11.74 Item 3.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

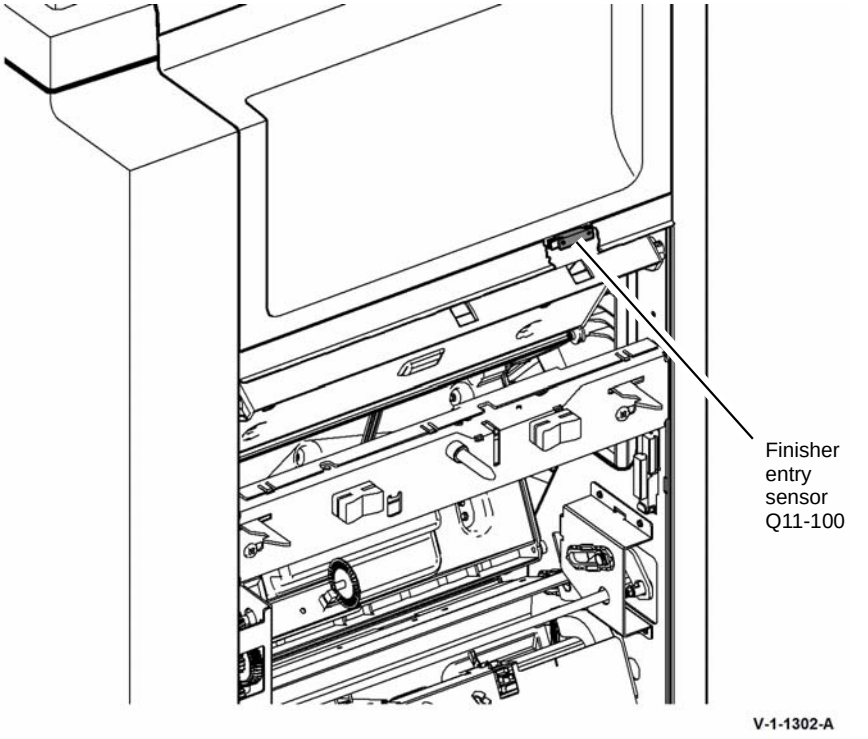


Figure 1 Component location

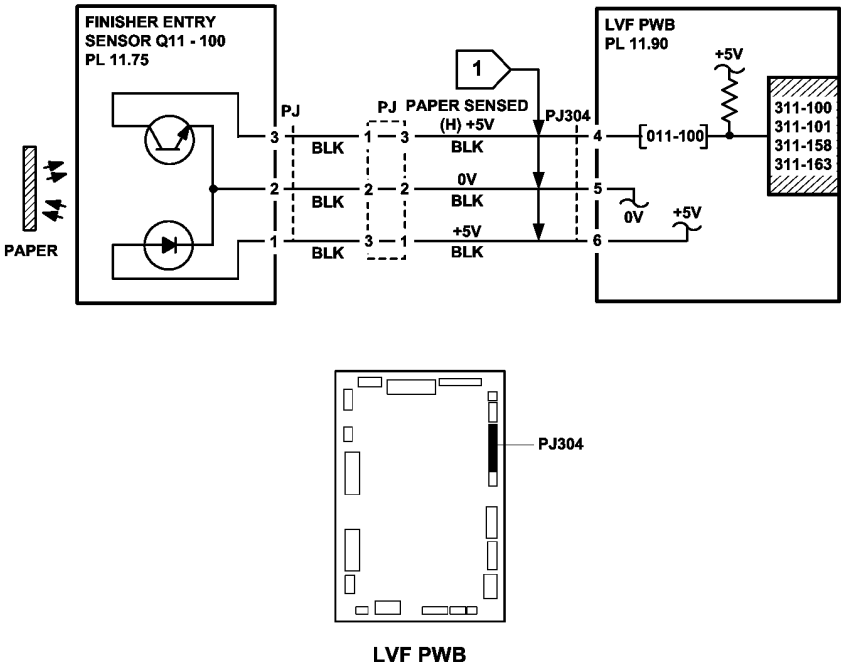


Figure 2 Circuit diagram

311-110-00-150 LVF BM Sheet Late to Hole Punch RAP

311-110-00-150 Sheet late at the punch sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- The LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- For a paper jam at the entrance to the LVF BM. Check that there is no obstruction that would prevent a sheet from arriving in position for punching, refer to the 311H-150 Copy Damage in the LVF BM RAP.
- The punch sensor, Q11-110 for chad debris, Figure 1.

Procedure

Figure 1. Enter dC330, code 011-110. Actuate the punch sensor, Q11-110. **The display changes.**

Y N

Go to Flag 1. Check Q11-110.

Refer to:

- GP 11, How to Check a Sensor.
- P/J307, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP

Repair or install new components as necessary:

- Punch sensor, PL 11.54 Item 7.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

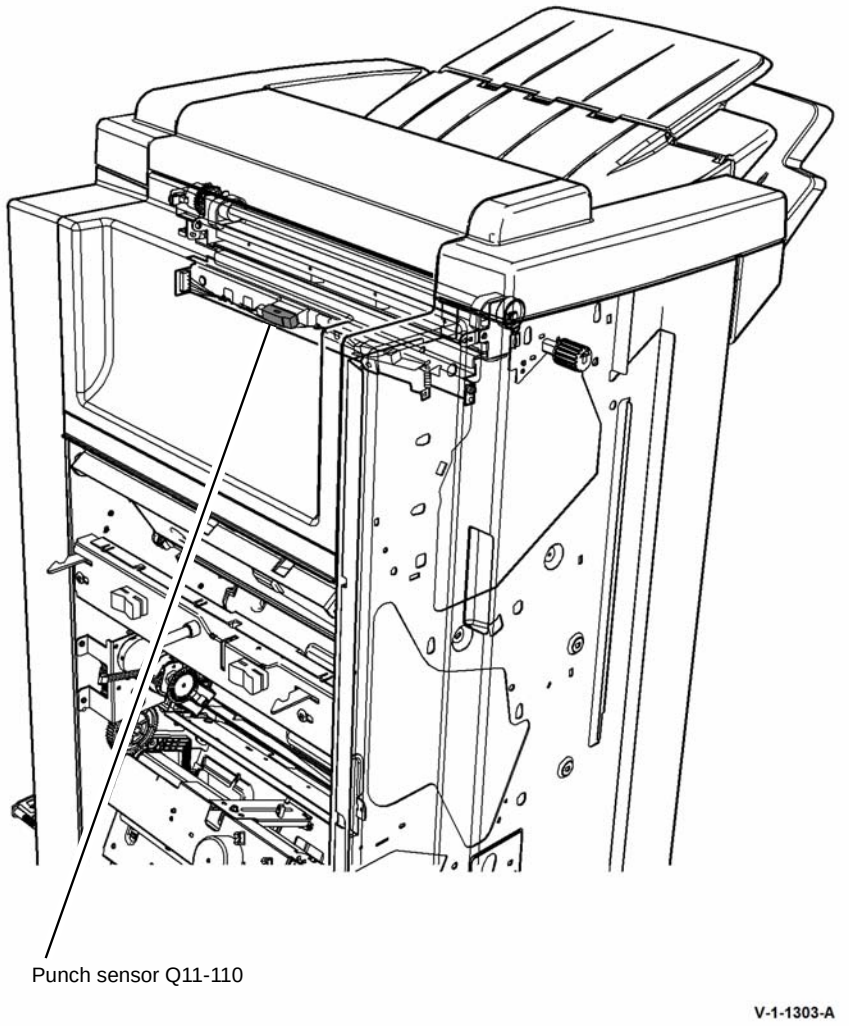


Figure 1 Component location

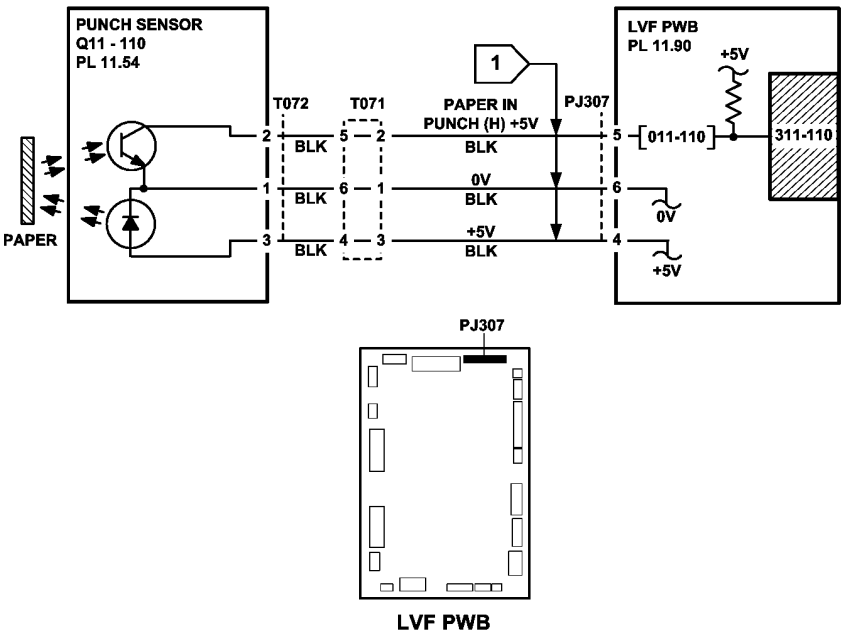


Figure 2 Circuit diagram

311-130-00-150, 311-132-00-150 LVF BM Paper Exiting to Bin 0 RAP

311-130-00-150 The leading edge of the sheet is late to the top exit sensor.

311-132-100-150 The trailing edge of the sheet is late from the top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in the tray.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary lubricate the tensioner and tensioner pulley, REP 11.3-150. Refer to GP 18 Machine Lubrication.
- The drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted, are in a good condition and correctly tensioned, refer to ADJ 11.4-150 Motor Drive Belt Tensioning.
- All the transport rolls and idler pulleys are free to rotate.
- The bin 0 / bin 1 diverter gate and linkage for free movement.
- Torn paper fragments from a previous jam clearance action.

Refer to the 311H-150 Copy Damage in the LVF BM RAP and the 311G-150 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

NOTE: *Paper is diverted to bin 0 when the bin 0 / bin 1 diverter gate solenoid is energized. Paper is fed to bin 1 when the bin 0 / bin 1 diverter gate solenoid is de-energized.*

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, code 011-001 to run transport motor 2, MOT11-001, Figure 1. **The motor runs.**

Y **N**

Go to Flag 3. Check MOT11-001.
Refer to:

- GP 10, How to Check a Motor.
- P/J309, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Transport motor 2, PL 11.70 Item 5.
- LVF PWB, PL 11.90 Item 8.

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Enter dC330, code 011-002 to energize the diverter gate solenoid, S11-002, Figure 1. **The diverter gate solenoid energizes.**

Y **N**

Go to Flag 2. Check SOL11-002.
Refer to:

- GP 12, How to Check a Solenoid.
- P/J306, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Bin 0/bin 1 diverter gate solenoid, PL 11.70 Item 12.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-130, actuate the top exit sensor, Q11-130, Figure 1. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-130.
Refer to:

- GP 11, How to Check a Sensor.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Top exit sensor, PL 11.70 Item 11.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-000 to energize the transport motor 1, MOT11-000, Figure 1. **The motor energizes.**

Y **N**

Go to Flag 4. Check MOT11-000.
Refer to:

- GP 10, How to Check a Motor.
- P/J305, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Transport motor 1, PL 11.62 Item 2.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

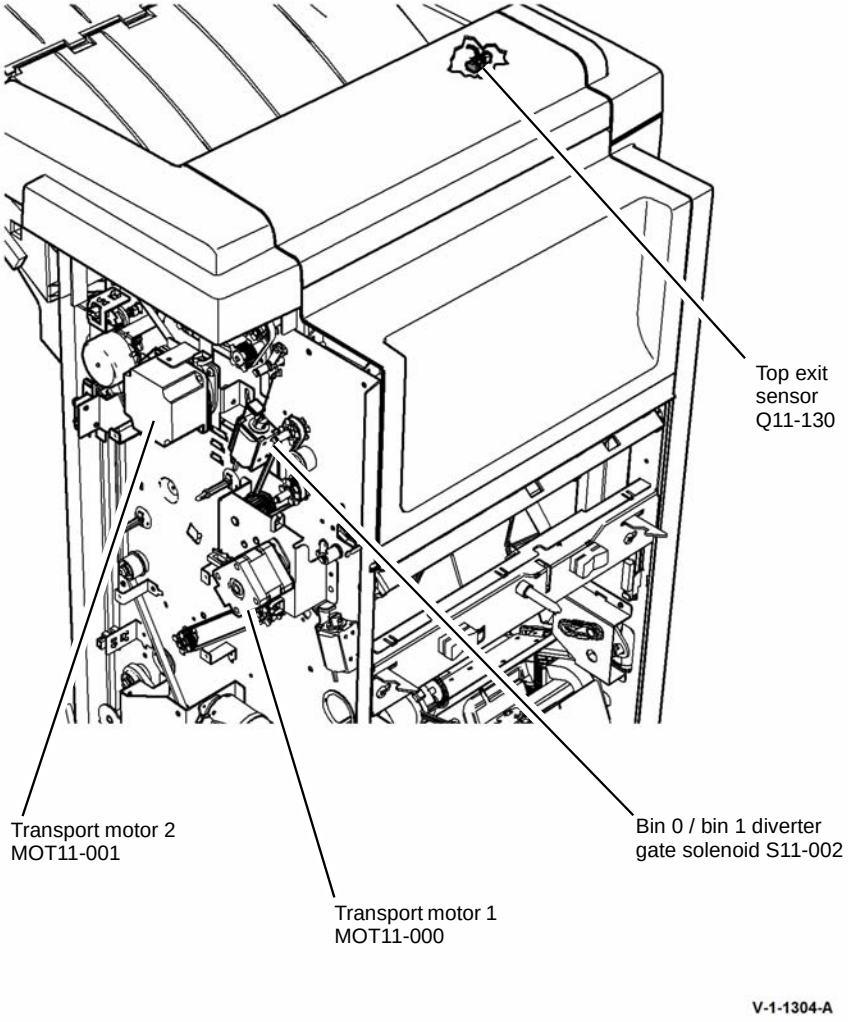
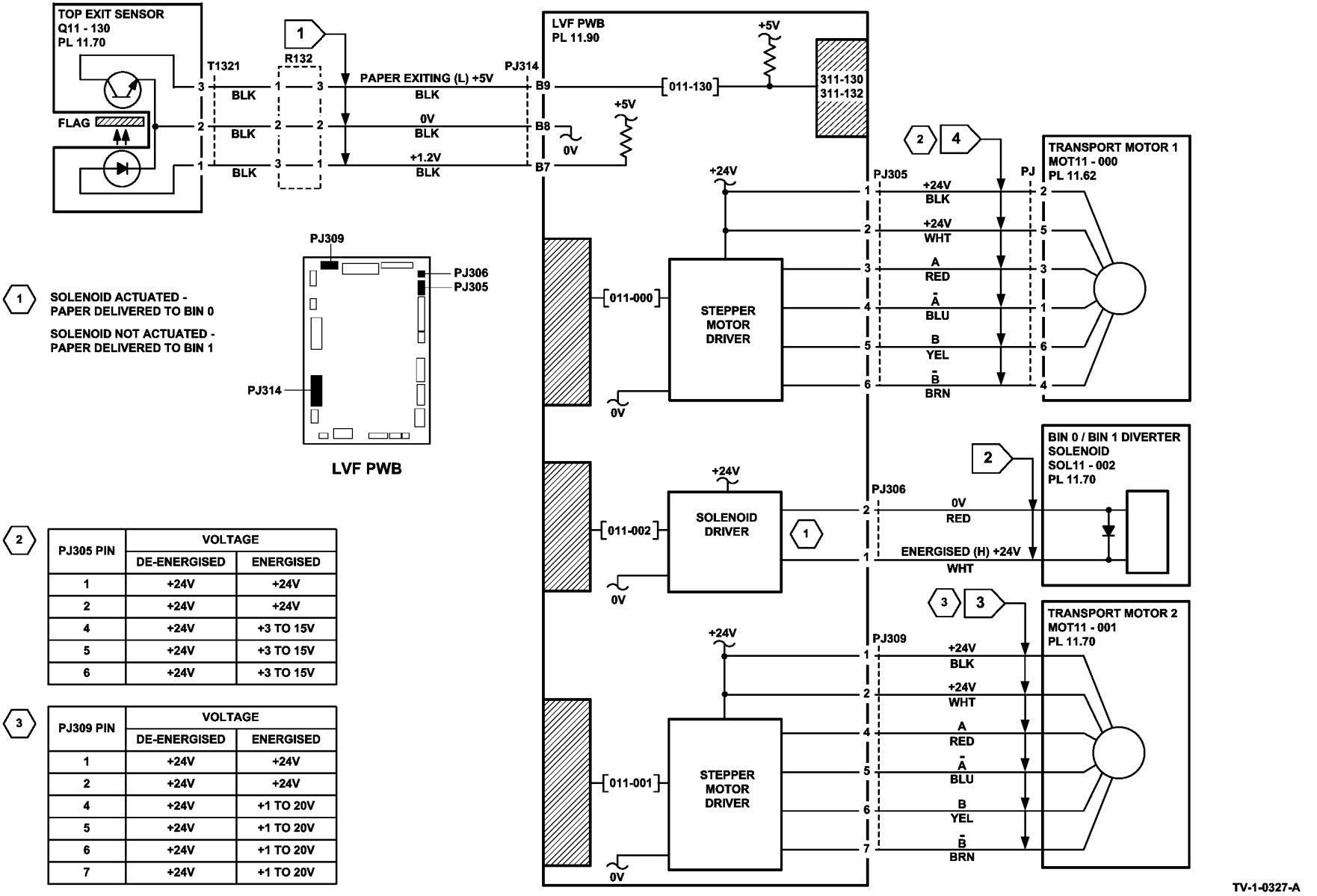


Figure 1 Component location



2

PJ305 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+3 TO 15V
5	+24V	+3 TO 15V
6	+24V	+3 TO 15V

3

PJ309 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+1 TO 20V
5	+24V	+1 TO 20V
6	+24V	+1 TO 20V
7	+24V	+1 TO 20V

Figure 2 Circuit diagram

311-140-00-150, 311-142-00-150 LVF BM Sheet Late to Bin 1 RAP

11-140-00-150 The leading edge of the sheet is late to the 2nd to top exit sensor, Q11-140.

311-142-00-150 The trailing edge of the sheet is late to the 2nd to top exit sensor, Q11-140.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Paper is diverted to bin 0 when the bin 0 / bin 1 diverter gate solenoid is energized. Paper is fed to bin 1 when the bin 0 / bin 1 diverter gate solenoid is de-energized.*

Check the following:

- LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Ensure the paper tray guides are set to the correct position for the size of paper in all trays.

  For trays 3 and 4, perform the following:
  - Select the systems settings button from the tools screen.
  - Select the tray management button and stock settings.
  - From the list, select tray 3. Select the change stock size button.
  - Select the paper size loaded in the tray. Select the save button.
  - Repeat for tray 4.
  - Save the stock setting and exit the tools mode.
- The tensioner on the intermediate paper drive belt. Check that the tensioner is free to move and that the tensioner pulley is free to rotate. If necessary re-lubricate the tensioner and tensioner pulley, REP 11.3-150. Refer to GP 18 Machine Lubrication.
- That the drive pulleys on both transport motor 1 and 2 are secure and do not slip on the motor shaft.
- All the transport drive belts are correctly fitted and are in a good condition
- All the transport rolls and idler pulleys are free to rotate.
- The diverter gate and linkage for free movement.
- A paper jam in the path to bin 1, to the compiler, and for poor stacking on bin 1.
- Ensure that the LVF BM is fully latched to the machine, refer to REP 11.13-150.
- Torn paper fragments from a previous jam clearance action.

Refer to the 311H-150 Copy Damage in the LVF BM RAP and the 311G-150 Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Figure 1. Enter dC330, code 011-001 to energize the transport motor 2, MOT11-001. **The motor energizes.**

Y N

Go to Flag 3. Check MOT11-001.
Refer to:
- GP 10, How to check a motor.
- P/J309, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:
- Transport motor 2, PL 11.70 Item 5.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-002 to energize the diverter solenoid, S11-002. Energize the solenoid. **The diverter solenoid energizes.**

Y N

Go to Flag 4. Check SOL11-002.
Refer to:
- GP 12, How to Check a Solenoid or Clutch.
- P/J306, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:
- Diverter gate solenoid, PL 11.22 Item 12.
- LVF PWB, PL 11.90 Item 8.

Figure 1. Enter dC330, code 011-140, actuate the 2nd to top exit sensor, Q11-140. **The display changes.**

Y N

Go to Flag 1. Check Q11-140.
Refer to:
- GP 11, How to Check a sensor.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:
- 2nd to top exit sensor, PL 11.23 Item 4.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-000 to energize the transport motor 1, MOT11-000. **The motor energizes.**

Y N

Go to Flag 2. Check MOT11-000.
Refer to:
- GP 10, How to Check a Motor.
- P/J305, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

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A

Repair or install new components as necessary:

- Transport motor 1, PL 11.62 Item 2.
- LVF PWB, PL 11.90 Item 8.

If the fault is still present, perform 311-319-00-150 Rear Tamper Move Failure RAP.

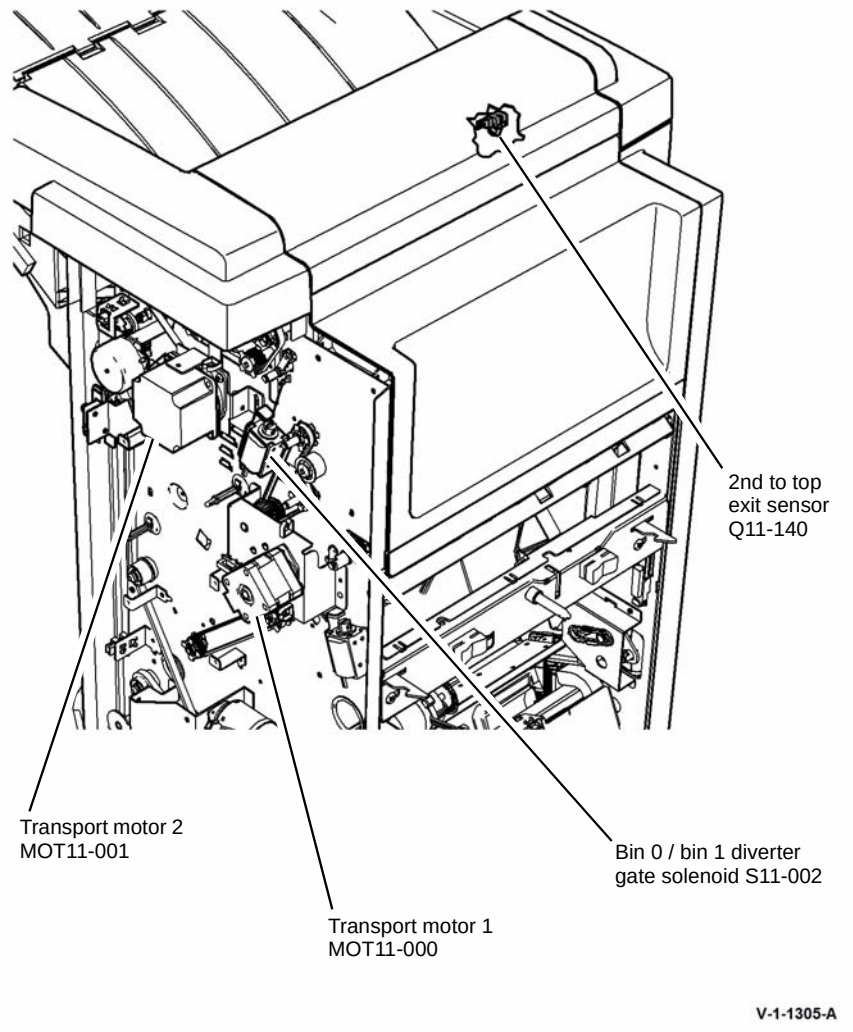
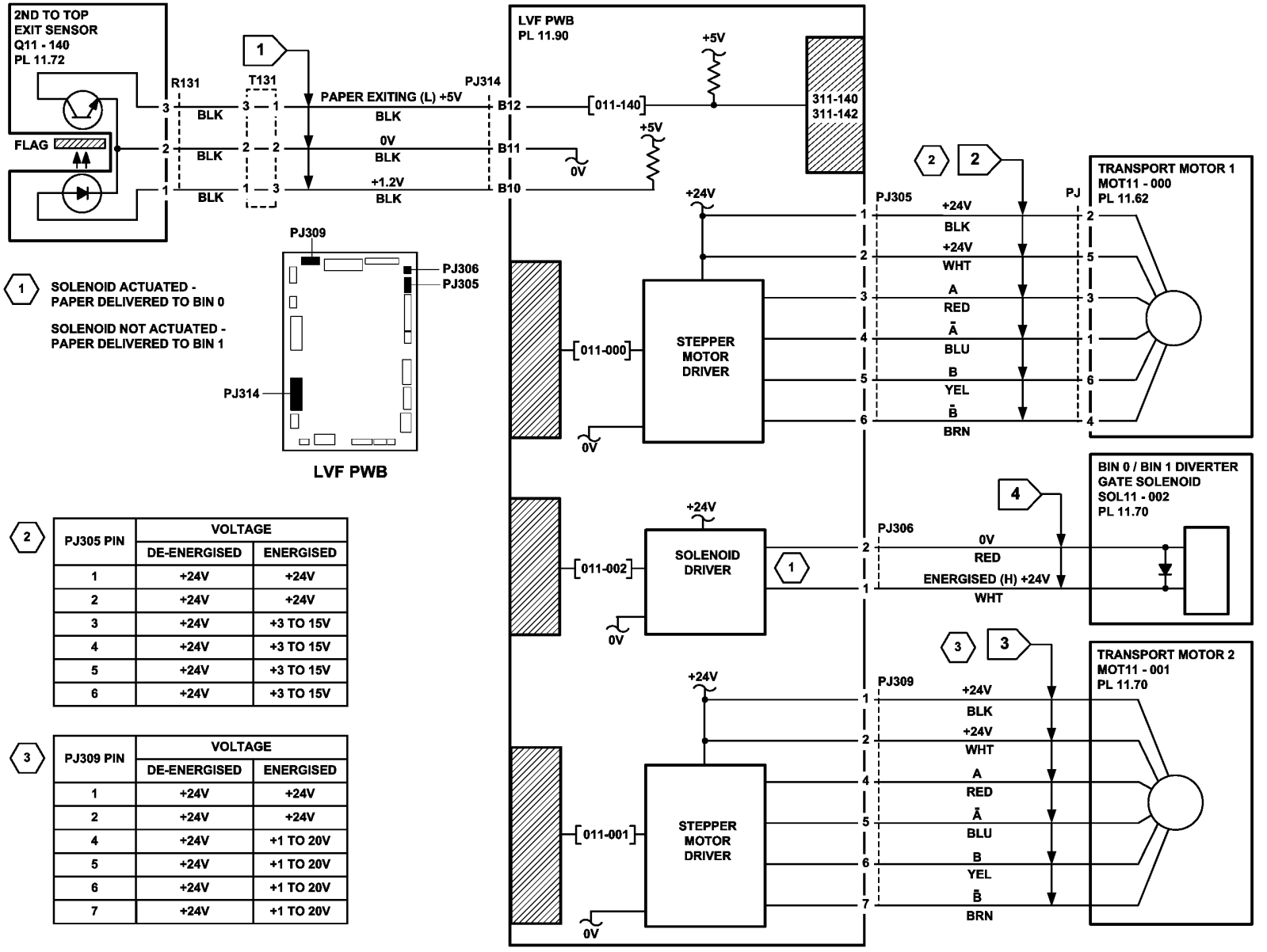


Figure 1 Component location



2 PJ305 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
3	+24V	+3 TO 15V
4	+24V	+3 TO 15V
5	+24V	+3 TO 15V
6	+24V	+3 TO 15V

3 PJ309 PIN	VOLTAGE	
	DE-ENERGISED	ENERGISED
1	+24V	+24V
2	+24V	+24V
4	+24V	+1 TO 20V
5	+24V	+1 TO 20V
6	+24V	+1 TO 20V
7	+24V	+1 TO 20V

Figure 2 Circuit diagram

311-160-00-150, 311-162-00-150 LVF Booklet Maker Entry RAP

311-160-00-150 The lead edge of the sheet was late to the booklet maker entry sensor.

311-162-00-150 The trail edge of the sheet was late from the booklet maker entry sensor.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Check the paper path to the booklet compiler. Clear the paper path of any jams or paper debris. Ensure the compiler guide assembly is correctly latched.

Procedure

Check the following parts for damage:

- Booklet diverter gate, PL 11.75 Item 2.
- Booklet compiler entrance guide, PL 11.75 Item 3.
- Booklet maker compiler guide assembly, PL 11.75 Item 6.

The parts are good,

Y N

Install new parts as necessary.

Enter dC330 code 011-160. Actuate the BM entry sensor, Figure 2. **The display changes.**

Y N

Go to Flag 1, check the BM entry sensor, Q11-160.

Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM entry sensor, PL 11.75 Item 7.

Enter dC330 code 011-391. Actuate the flapper home sensor, Figure 3. **The display changes.**

Y N

Go to Flag 4, check the flapper home sensor, Q11-391.

A

A

Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet maker compiler guide assembly, PL 11.75 Item 6.

Enter dC330 code 011-074 to energise the booklet diverter gate solenoid, SOL 11-074, Figure 1. **The solenoid energises.**

Y N

Go to Flag 3, booklet diverter gate solenoid, SOL 11-074.

Refer to:

- GP 12, How to Check a Solenoid or Clutch
- P/J303, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet diverter gate solenoid, PL 11.76/XX.

Enter dC330 code 011-000 to run transport motor 1, MOT11-000, Figure 1. **The motor runs.**

Y N

Go to Flag 2, check transport motor 1, MOT11-000.

Refer to:

- GP 10, How to Check a Motor.
- P/J305, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Transport motor 1, PL 11.62 Item 2.

Enter dC330 code 011-390 to run the BM flapper motor, MOT11-391, Figure 3. **The motor runs.**

Y N

Go to Flag 5, check the BM flapper motor, MOT11-391.

Refer to:

- GP 10, How to Check a Motor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet maker compiler guide assembly, PL 11.75 Item 6.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

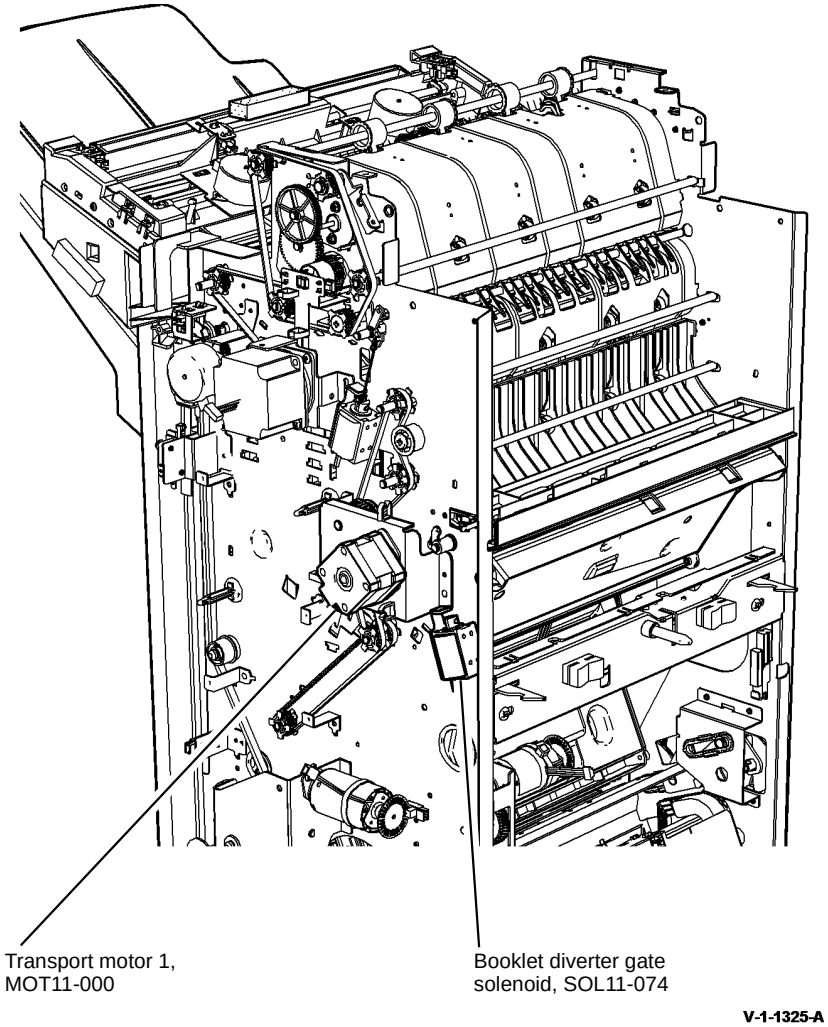


Figure 1 Component location

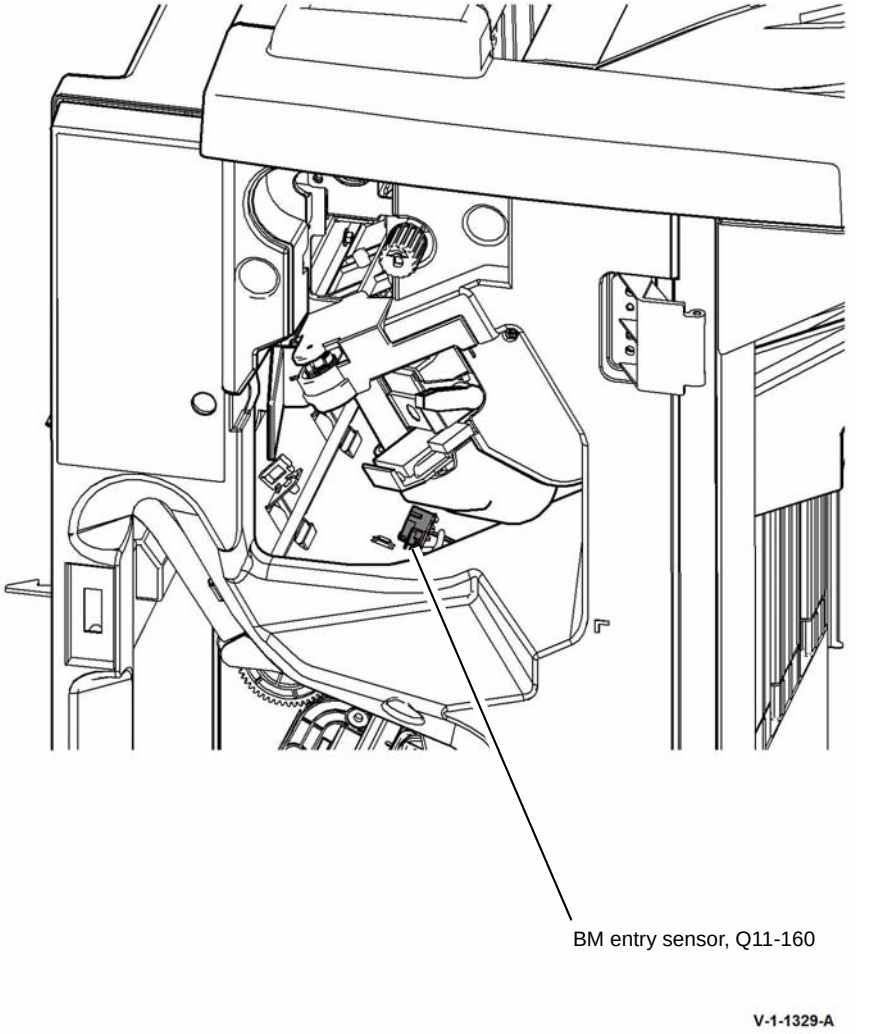


Figure 2 Component location

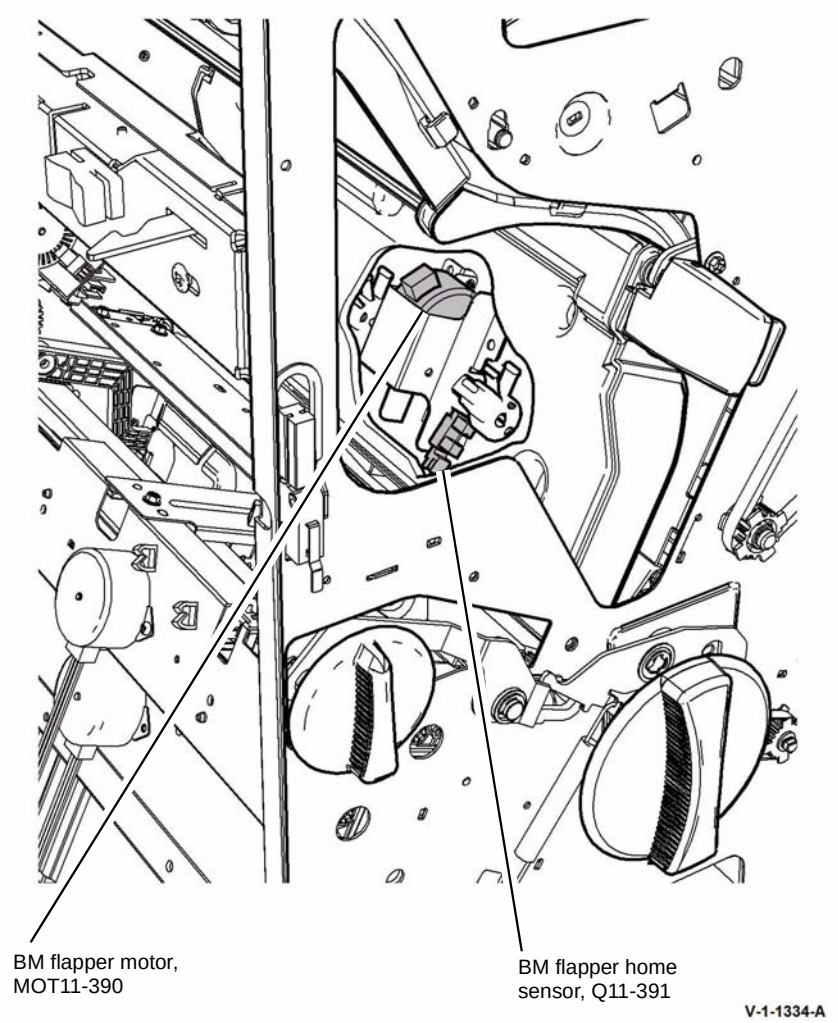


Figure 3 Component location

PJ305 PIN	PJ104 PIN	VOLTAGE	
		MOTOR DE-ENERGISED	MOTOR ENERGISED
1	B7	+24V	+24V
2	B6	+24V	+24V
3	B5	+24V	+15 TO 24V
4	B4	+24V	+15 TO 24V
5	B3	+24V	+15 TO 24V
6	B2	+24V	+15 TO 24V

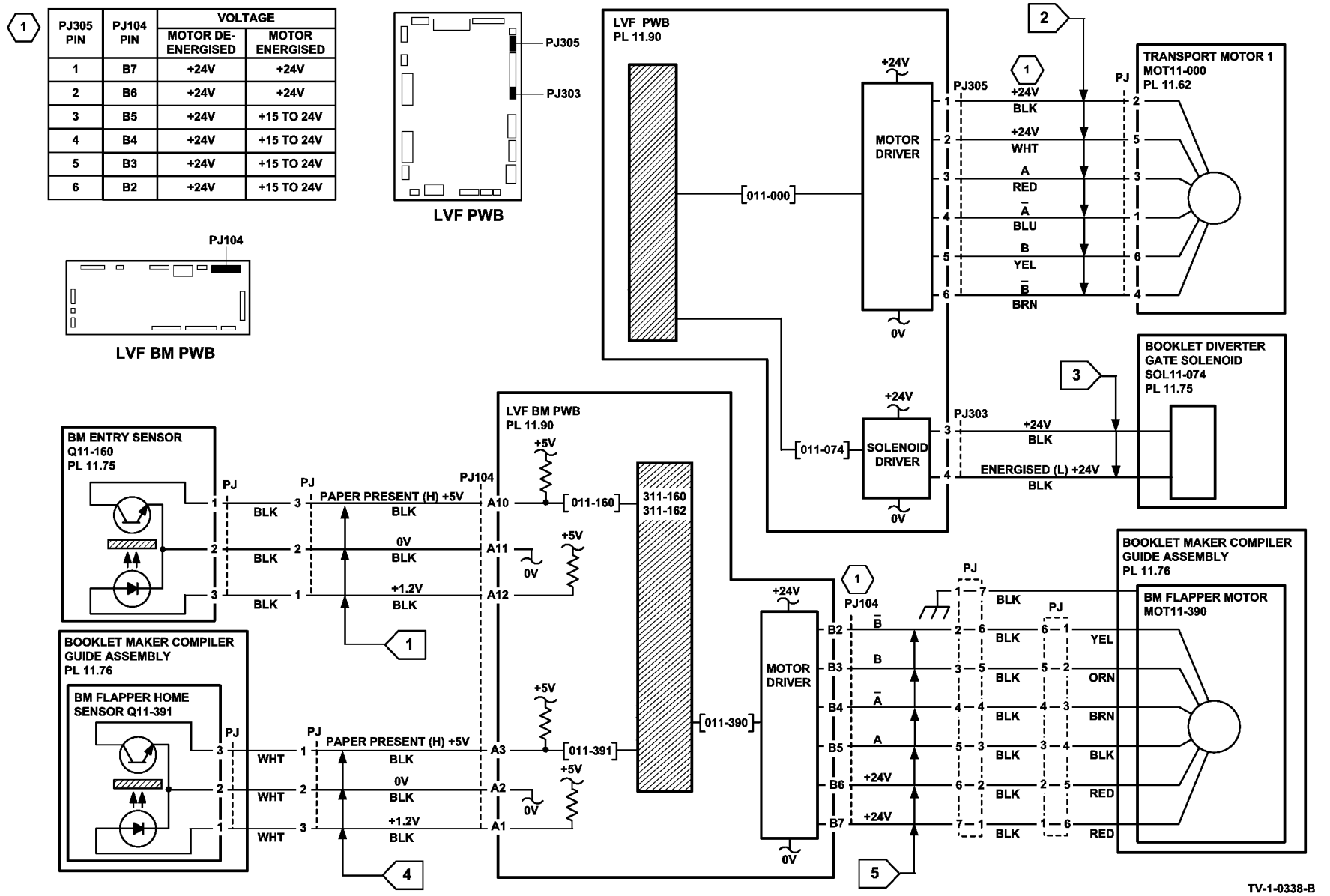


Figure 4 Circuit diagram

311-180-00-150, 311-182-00-150 LVF BM Exit Jam RAP

311-180-00-150 The lead edge is late arriving at the BM exit sensor.

311-182-00-150 The trail edge is late leaving the BM exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Turn the crease blade handle to ensure that the crease blade mechanism is free to move. If necessary, clear any paper jam in the exit area.

Procedure

Enter dC330 code 011-418. Actuate the crease blade motor encoder sensor, Q11-418, Figure 2, by rotating the crease blade handle. **The display changes.**

Y N

Go to Flag 2. Check Q11-418.
Refer to:
- GP 11, How to Check a Sensor
- P/J104, LVF BM PWB
- 311D-150 LVF BM Power Distribution RAP

Install new components as necessary:
- LVF BM PWB, PL 11.90 Item 1
- Crease blade motor encoder sensor, PL 11.82 Item 4

Release the crease roll nip pressure by moving the crease roll handle fully counter clockwise. Enter dC330 code 011-419. Actuate the BM crease roll motor encoder sensor, Q11-419, Figure 1 by rotating the crease roll handle slowly by hand. **The display changes.**

Y N

Go to Flag 1. Check Q11-419.
Refer to:
- GP 11, How to Check a Sensor
- P/J112, LVF BM PWB
- 311D-150 LVF BM Power Distribution RAP

Install new components as necessary:
- LVF BM PWB, PL 11.90 Item 1
- Crease roll motor encoder sensor, PL 11.86 Item 7

Enter dC330 code 011-409. Actuate the BM exit sensor, Q11-409, Figure 3. **The display changes.**

Y N

Go to Flag 3. Check Q11-409.
Refer to:
- GP 11, How to Check a Sensor

A

- P/J110, LVF BM PWB
- 311D-150 LVF BM Power Distribution RAP

Install new components as necessary:
- LVF BM PWB, PL 11.90 Item 1
- BM exit sensor, PL 11.88 Item 8

Enter dC330 code 011-062 to run the crease roll motor, MOT11-062, Figure 1. **MOT11-062 runs.**

Y N

Go to Flag 4. Check MOT11-062.
Refer to:
- GP 10 How to Check a Motor.
- P/J103, LVF BM PWB
- 311D-150 LVF BM Power Distribution RAP

Install new components as necessary:
- Crease roll motor, PL 11.86 Item 5
- LVF BM PWB, PL 11.90 Item 1.

Enter dC330 code 011-061 to run the crease blade motor, MOT11-061, Figure 2. **MOT11-061 runs.**

Y N

Go to Flag 5. Check MOT11-061.
Refer to:
- GP 10 How to Check a Motor
- P/J104, LVF BM PWB
- 311D-150 LVF BM Power Distribution RAP

Install new components as necessary:
- Crease blade motor, PL 11.82 Item 2
- LVF BM PWB, PL 11.90 Item 1

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install a new LVF BM PWB, PL 11.90 Item 1.

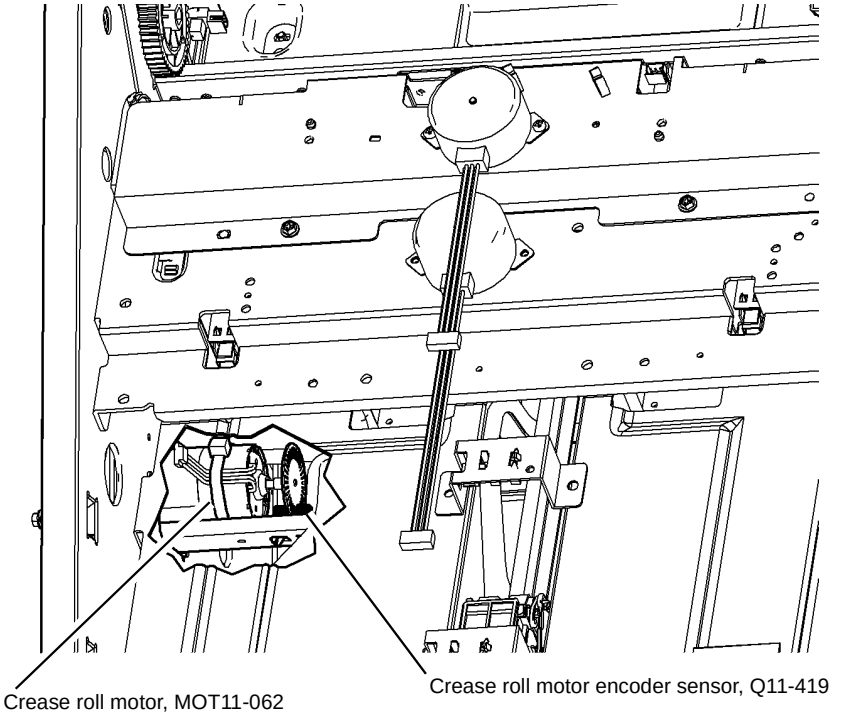


Figure 1 Component location

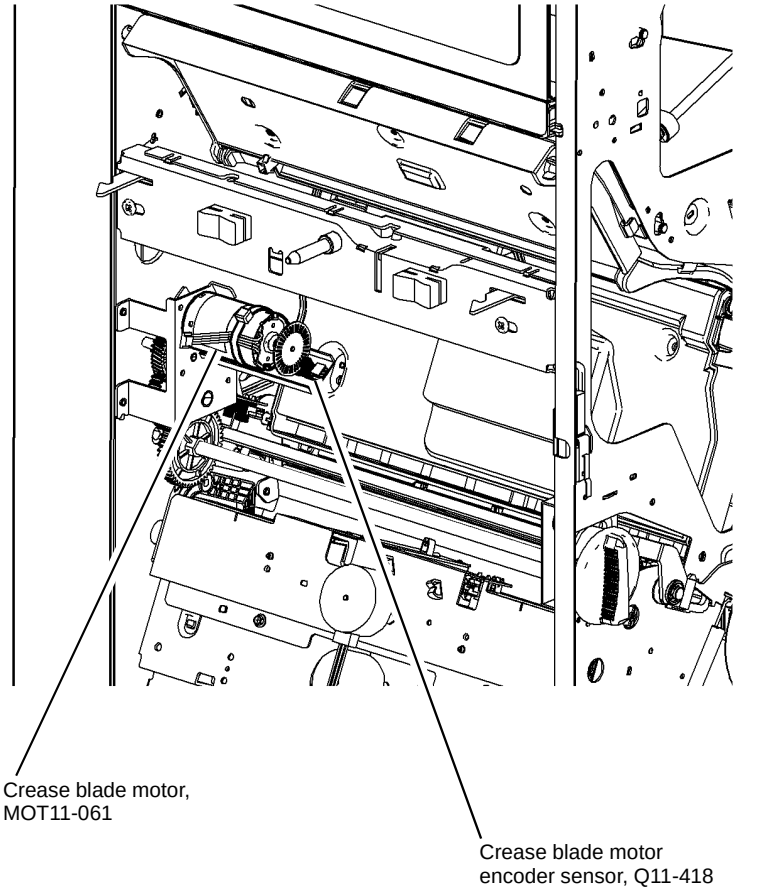


Figure 2 Component location

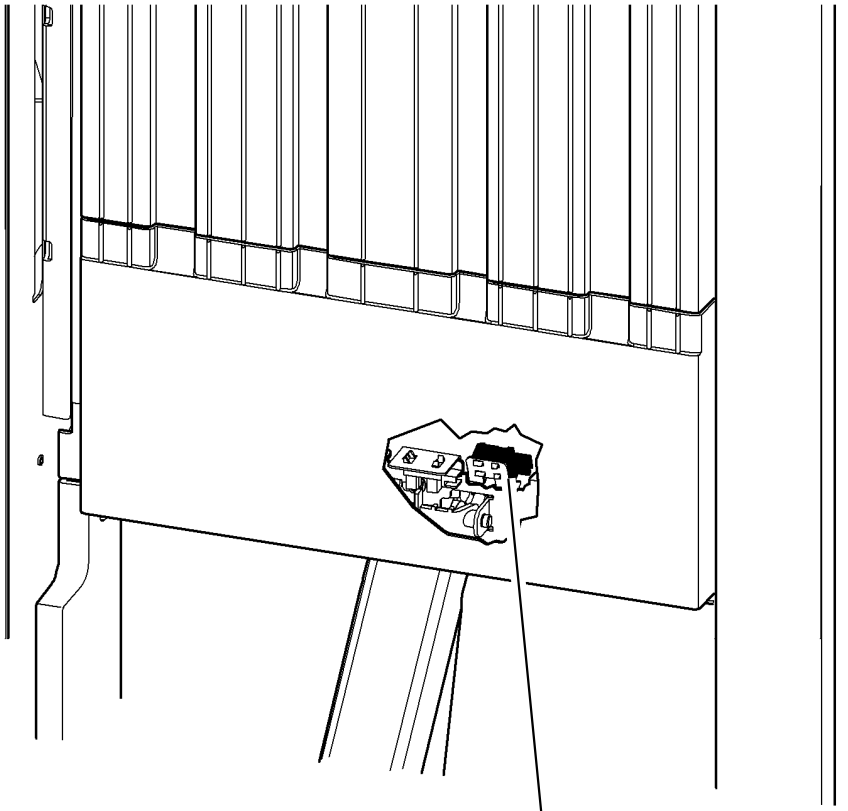
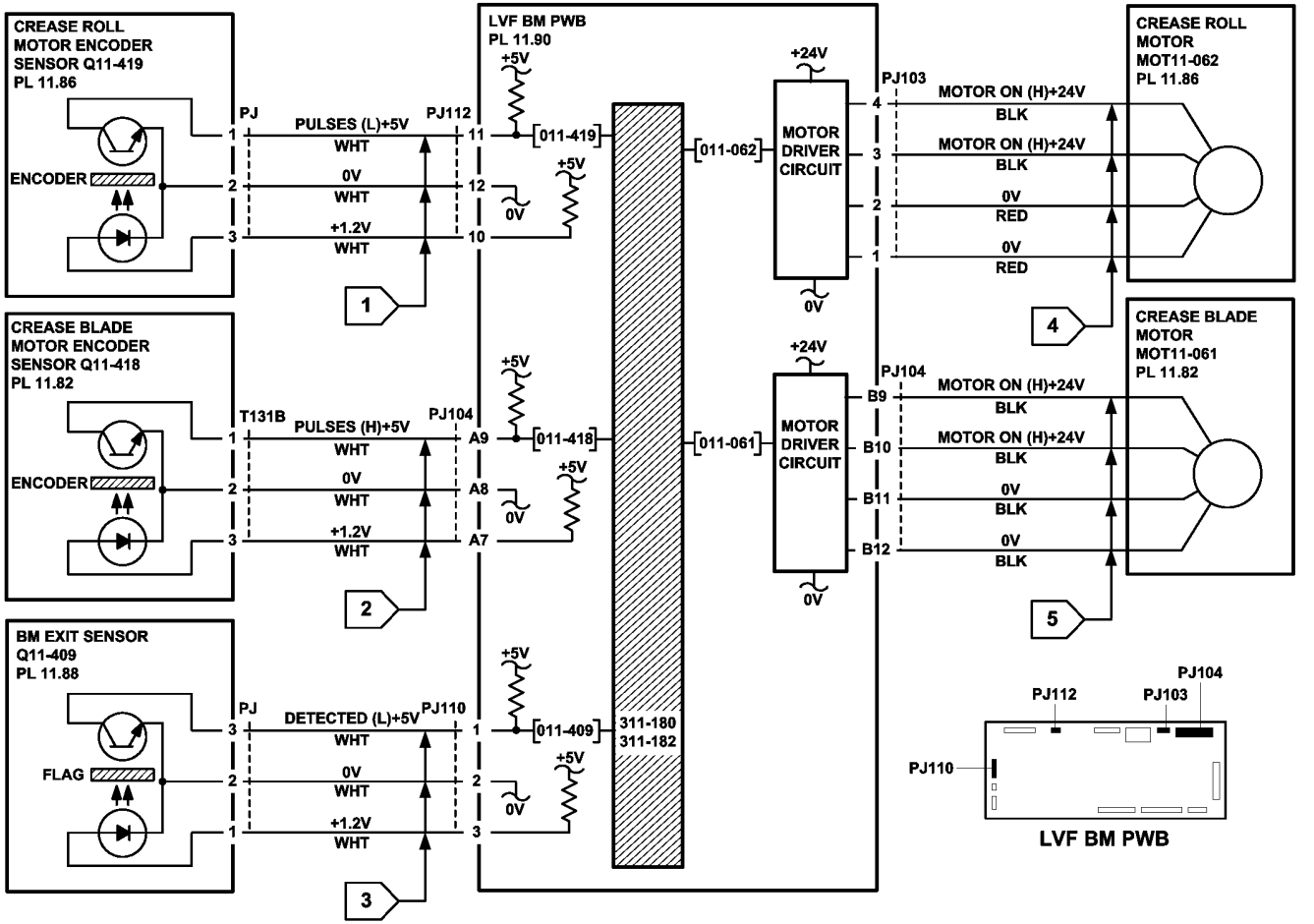


Figure 3 Component location



TV-1-0380-A

Figure 4 Circuit diagram

311-184-00-150, 311-494-00-150, 311-496-00-150 LVF BM Stray Sheet Detected RAP

311-184-00-150 A stray sheet is detected in the booklet maker after a jam clearance event.

311-494-00-150 A sheet is not detected at the BM staple paper detect sensor within the allowed time.

311-496-00-150 A sheet is not detected leaving the BM staple paper detect sensor within the allowed time.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Check the paper path to the booklet compiler. Clear the paper path of any jams or paper debris. Ensure the compiler guide assembly is correctly latched.

Procedure

Enter dC330 code 011-160. Actuate the BM entry sensor, Figure 3. **The display changes.**

Y N

Go to Flag 1, check the BM entry sensor, Q11-160.
Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM entry sensor, PL 11.75 Item 7.

Enter dC330 code 011-409. Actuate the BM exit sensor, Figure 2. **The display changes.**

Y N

Go to Flag 2, check the BM exit sensor, Q11-409.
Refer to:

- GP 11, How to Check a Sensor.
- P/J110, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.

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- BM exit sensor, PL 11.88 Item 8.

Enter dC330 code 011-444. Actuate the BM staple paper detect sensor, Figure 1. **The display changes.**

Y N

Go to Flag 3, check the BM staple paper detect sensor, Q11-444.
Refer to:

- GP 11, How to Check a Sensor.
- P/J108, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- BM staple paper detect sensor, PL 11.74 Item 4.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

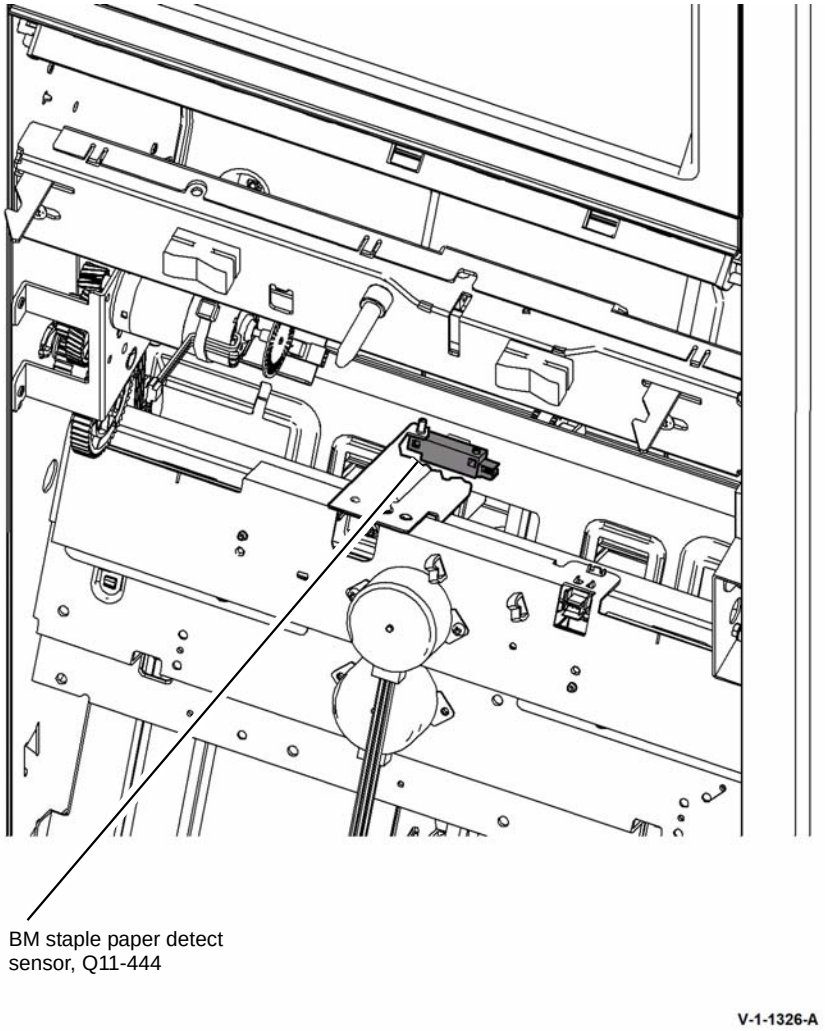

Figure 1 Component location

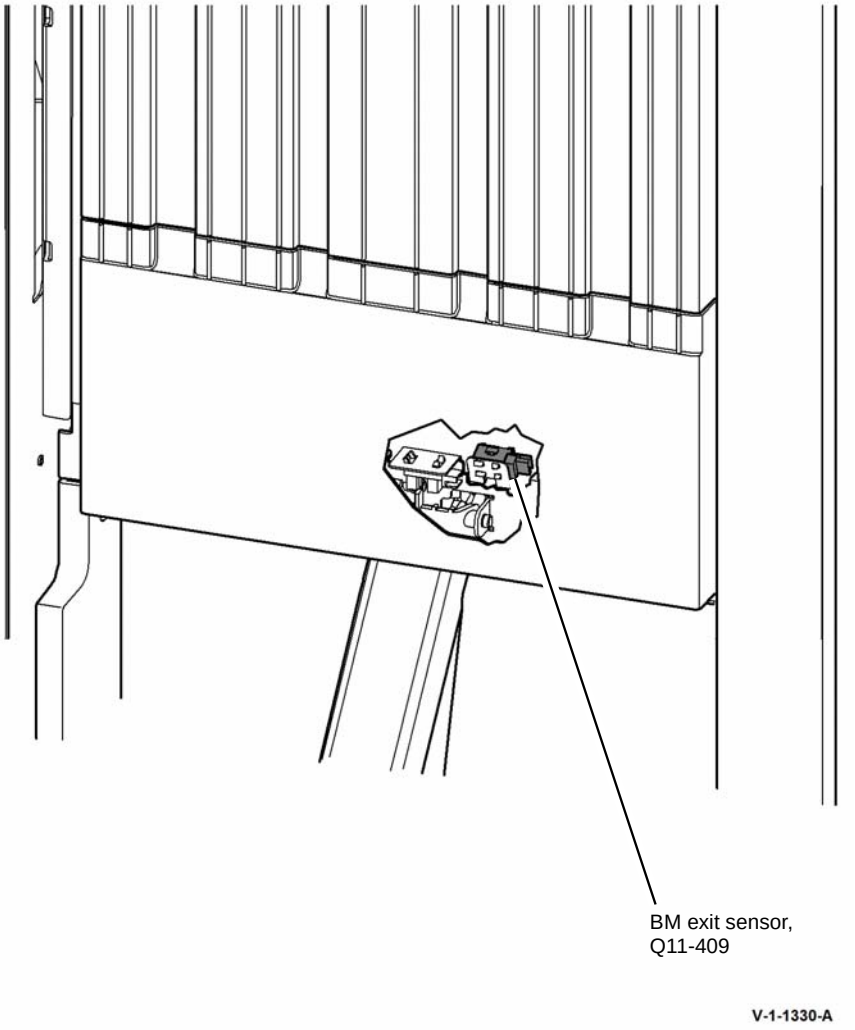

Figure 2 Component location

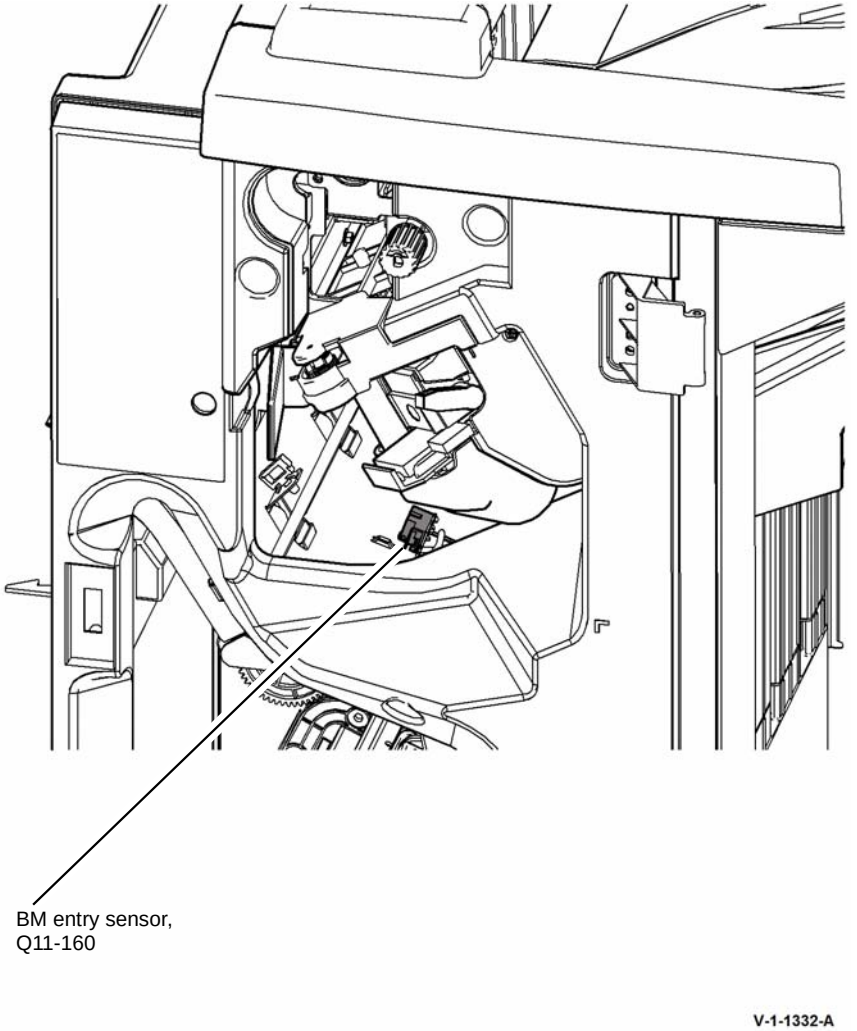

Figure 3 Component location

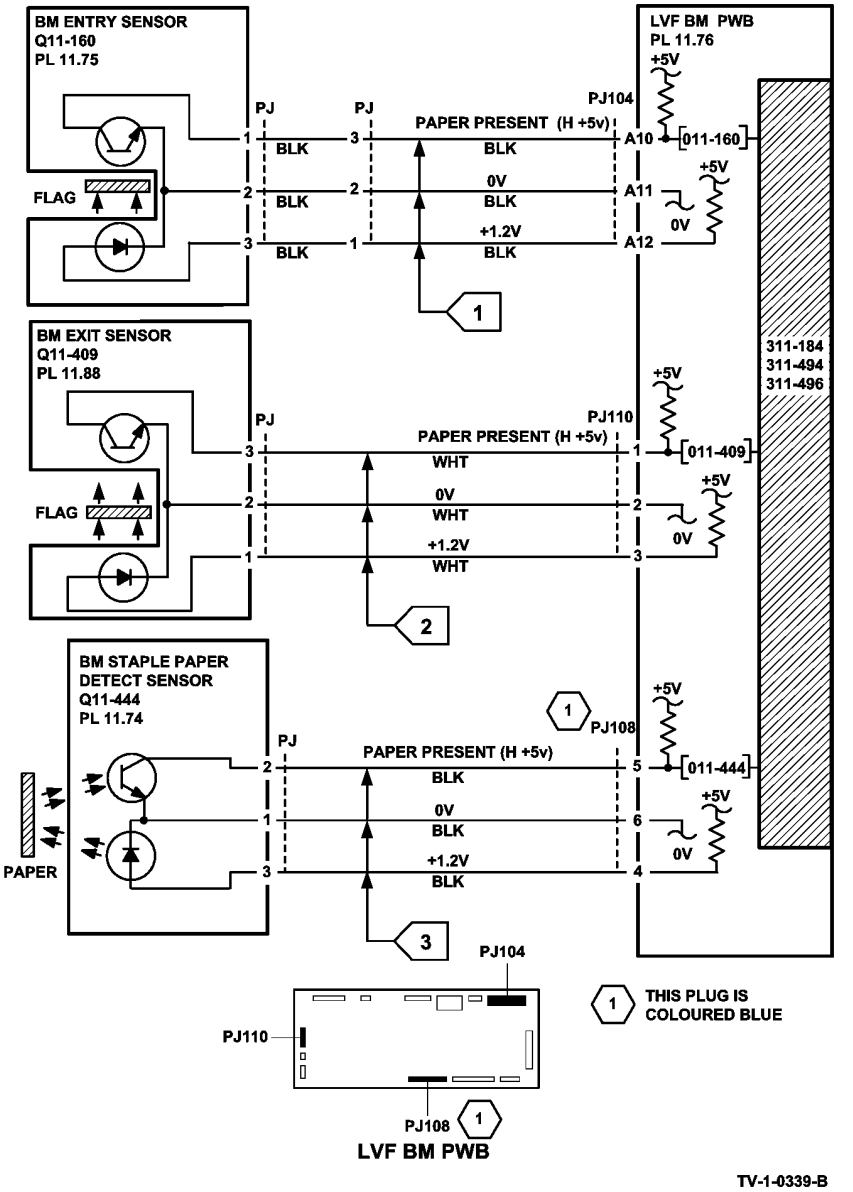

Figure 4 Circuit diagram

311-198-00-150 LVF Stray Sheet Detected RAP

311-198-00-150 A stray sheet is detected in the LVF after a jam clearance event.

Initial Actions

Check the paper path in the LVF. Clear the paper path of any jams or paper debris.

Procedure

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Lower the paper entry guide assembly, PL 11.62 Item 7, to access the finisher entry sensor, Figure 1. Enter dC330, code 011-100. Actuate the finisher entry sensor, Q11-100. **The display changes.**

Y N

Go to Flag 1. Check Q11-100.
Refer to:

- GP 11, How to Check a Sensor.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Finisher entry sensor, PL 11.74 Item 3.
- LVF PWB, PL 11.90 Item 8.

Figure 2. Enter dC330, code 011-110. Actuate the punch sensor, Q11-110. **The display changes.**

Y N

Go to Flag 2. Check Q11-110.
Refer to:

- GP 11, How to Check a Sensor.
- P/J307, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP

Repair or install new components as necessary:

- Punch sensor, PL 11.54 Item 7.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-130, actuate the top exit sensor, Q11-130, Figure 3. **The display changes.**

Y N

Go to Flag 3. Check Q11-130.
Refer to:

- GP 11, How to Check a Sensor.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

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Repair or install new components as necessary:

- Top exit sensor, PL 11.70 Item 11.
- LVF PWB, PL 11.90 Item 8.

Figure 4. Enter dC330, code 011-140, actuate the 2nd to top exit sensor, Q11-140. **The display changes.**

Y N

Go to Flag 4. Check Q11-140.
Refer to:

- GP 11, How to Check a sensor.
- P/J314, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- 2nd to top exit sensor, PL 11.23 Item 4.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

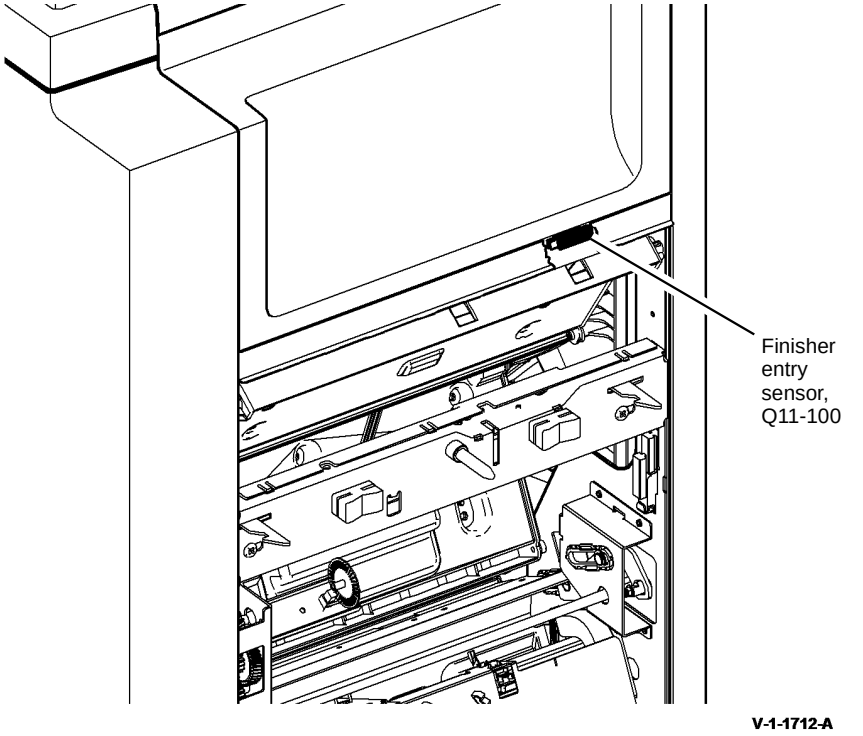


Figure 1 Component location

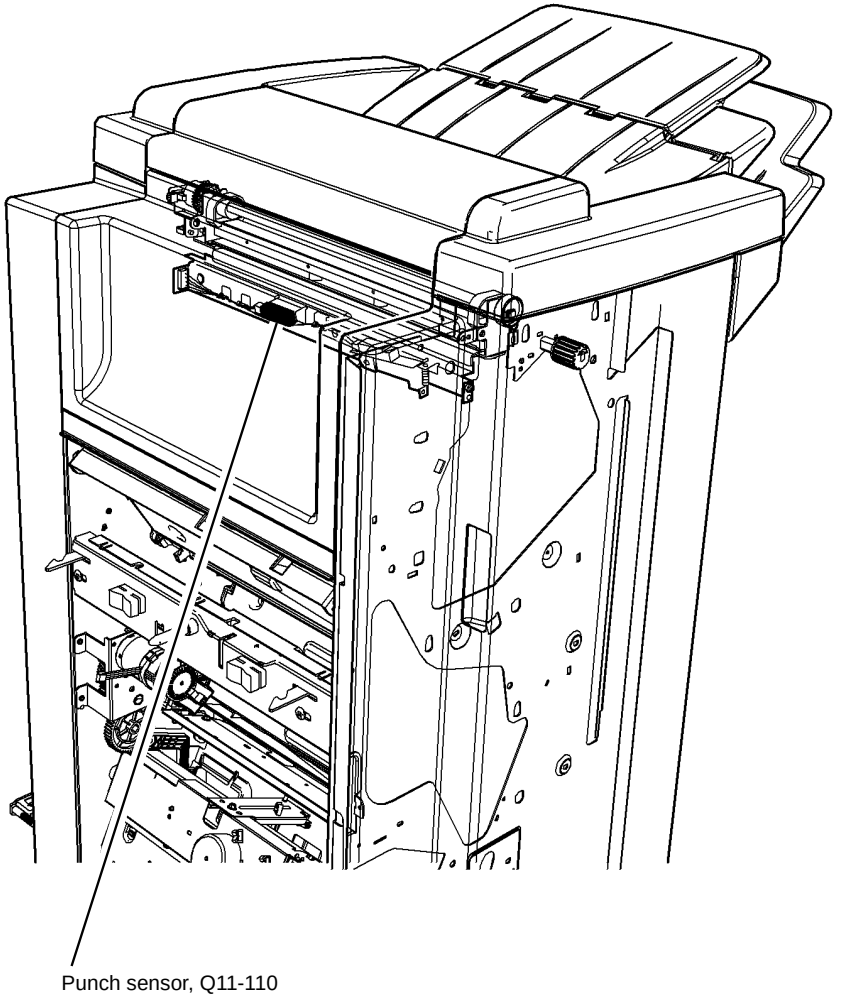


Figure 2 Component location

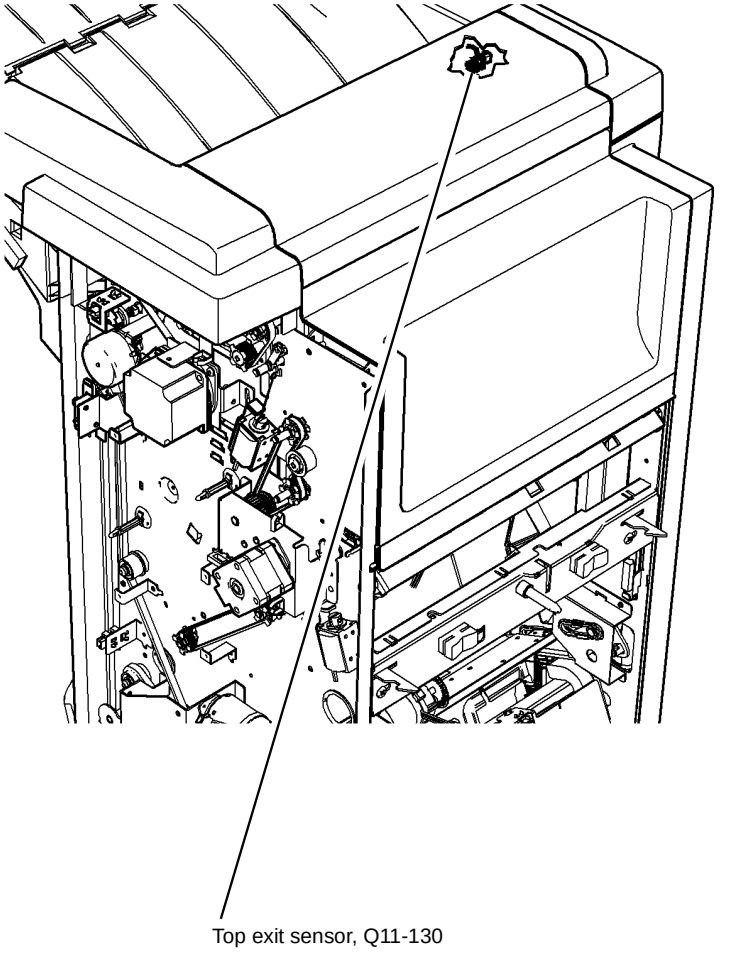
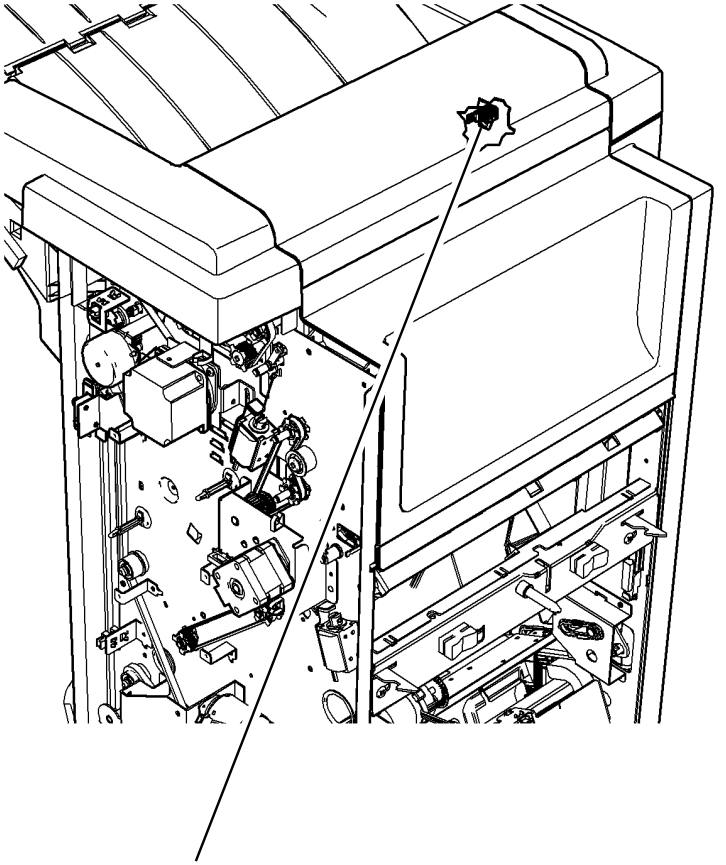
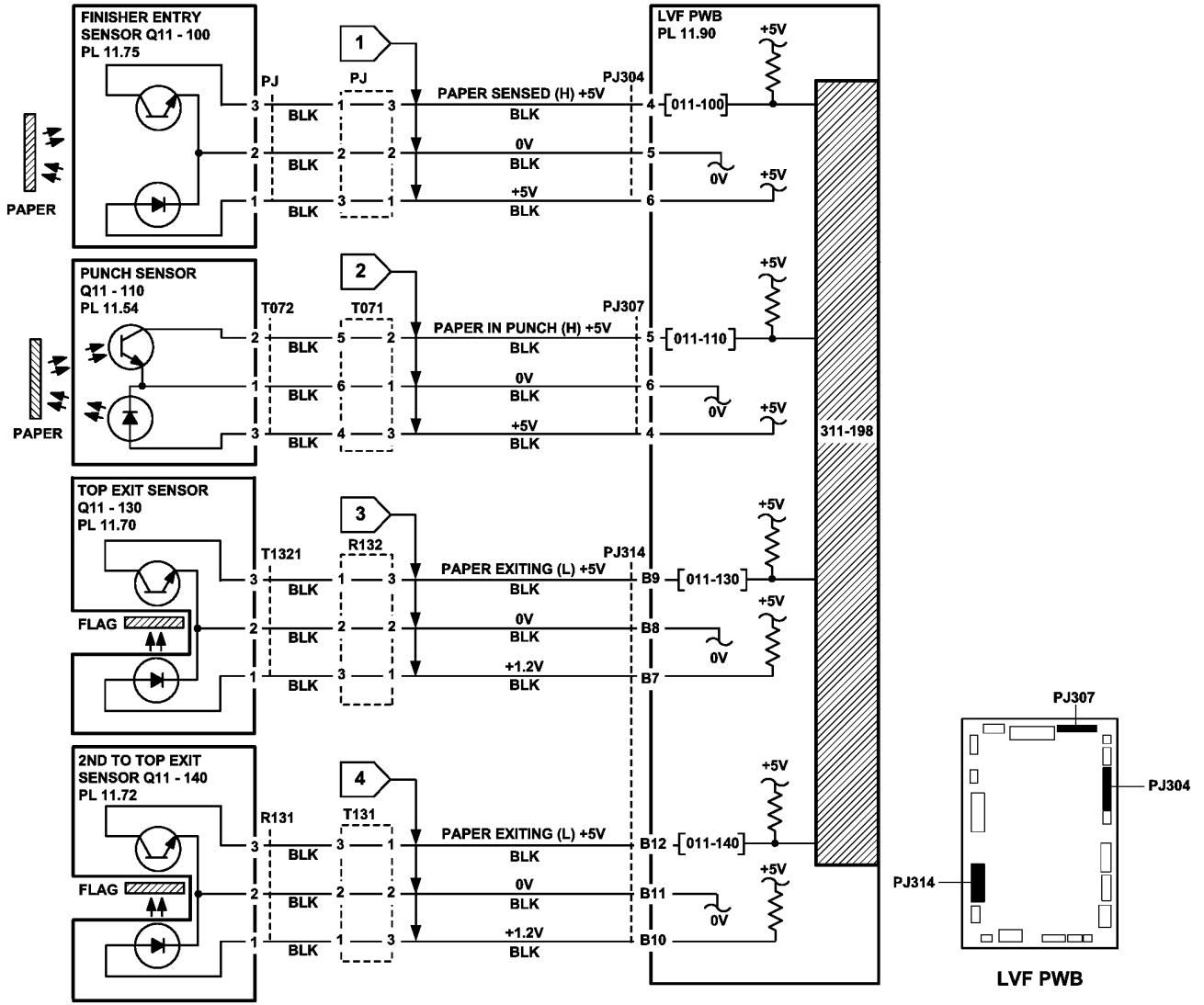


Figure 3 component location



V-1-1715-A

Figure 4 Component location



TV-1-0381-A

Figure 5 circuit diagram

311-300-00-150, 311-302-00-150, 311-303-00-150 Interlocks RAP

311-300-00-150 The docking interlock is open during run mode.

311-302-00-150 The top cover interlock is open during run mode.

311-303-00-150 The front door interlock is open during run mode.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Check the following:
  - The LVF BM is docked to the machine.
  - The LVF BM front door is closed.
  - The LVF BM top cover is closed.

Procedure

Go to Flag 1. Check for +24V on P/J302 pin 1. If the voltage is not present, refer to 311D-110 LVF BM Power Distribution RAP.

Go to the appropriate RAP:

- 311-300-00-150 Docking Interlock RAP
- 311-302-00-150 Top Cover Interlock RAP
- 311-303-00-150 Front Door Interlock RAP

311-300-00-150 Docking Interlock RAP

Un-dock the LVF BM, REP 11.13-150, Check the docking interlock switch, S11-300 as follows:

- Check the interlock actuator on the machine is not damaged or missing.
- Enter dC330, code 011-300. Actuate the switch, if the display does not change, refer to:
  - GP 13, How to Check a Switch
  - Figure 1.
  - P/J302, LVF PWB.
- Go to Flag 1. Check the wiring between P/J302 and the switch.
- If necessary, install a new switch, PL 11.52 Item 2.

311-302-00-150 Top Cover Interlock RAP

Check the top cover interlock switch, S11-302 as follows:

- Check the switch actuator.
- Enter dC330, code 011-302. Actuate the switch, if the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 1.
  - P/J315, LVF PWB.
- Go to Flag 3. Check the wiring between P/J315 and the switch.
- If necessary, install a new switch, PL 11.76 Item 6.

311-303-00-150 Front Door Interlock RAP

Check the front door interlock switch, S11-303 as follows:

- Check the switch actuator.
- Enter dC330, code 011-303. actuate the switch, if the display does not change, refer to:
  - GP 13, How to Check a switch
  - Figure 1.
  - P/J302, LVF PWB.
- Go to Flag 2. Check the wiring between P/J302 and the switch.
- If necessary, install a new switch, PL 11.76 Item 5.

Perform SCP 5 Final Actions.

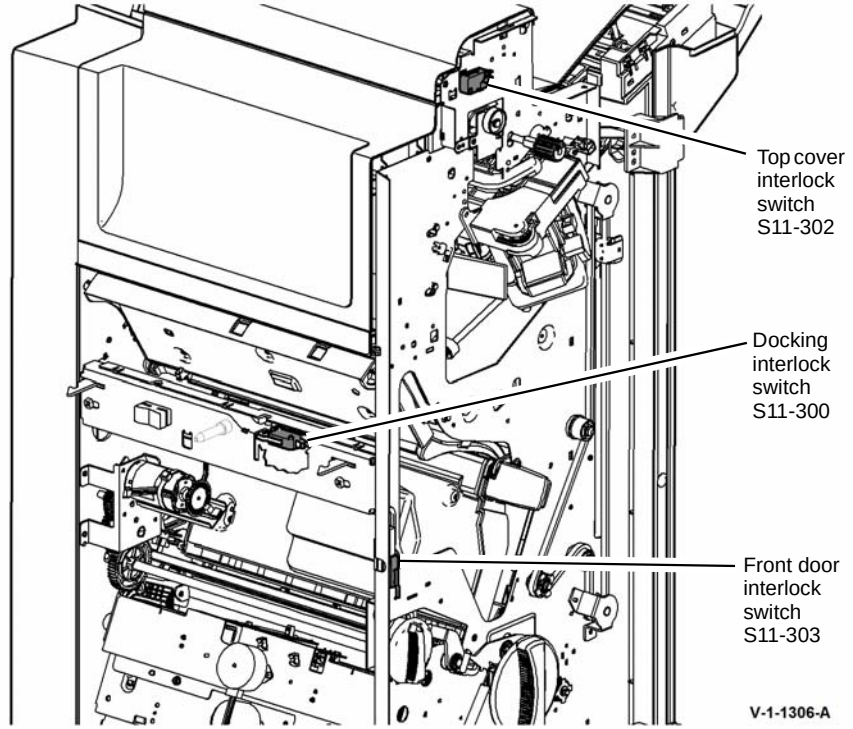


Figure 1 Component location

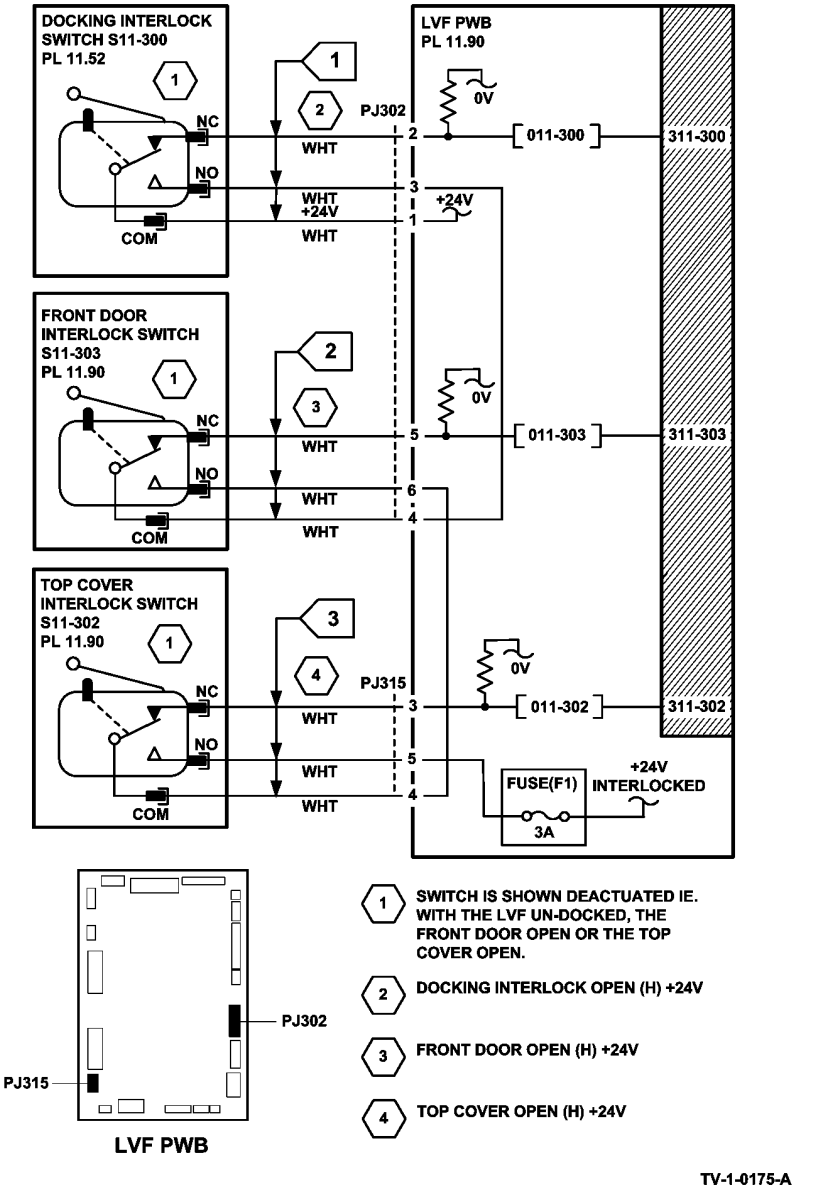


Figure 2 Circuit diagram

311-319-00-150 LVF BM Rear Tamper Move Failure RAP

3**11-319-00-150** The rear tamper away home sensor has failed.

NOTE: *The away home position is with the rear tamper approximately halfway along it's travel.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Check for damage or obstructions that would prevent the tamper assembly from operating correctly. If necessary, install a new tamper assembly, PL 11.64 Item 1.
- Jams can be caused by removing prints from bin 1 before the machine has finished printing. If the tampers are touched while they are moving, they may stall and cause the machine to shutdown. The resulting shutdown can cause un-clearable jams in the finisher and the tray 3 and tray 4 to paper path interface.
- Jams can also be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.
- Check the condition of the front tamper drive belt and that it is correctly tensioned. Tensioning is achieved by a spring on the motor, the motor should be free to move.
- If there is a large jam of paper above bin 1 that has obstructed the tampers, this has probably been caused by poorly stacked sets failing to actuate the bin 1 upper level sensor. Perform the following:
  - Check the paper for defects that could degrade the tamping operation e.g. curl, paper condition, buckling or paper type. Refer to IQ1 Image Quality Entry RAP.
  - Check the operation of the paddle roll, refer to 311-024-00-150, 311-025-00-150 Paddle Roll Failure RAP.
  - Check the operation of the bin 1 upper level sensor, refer to 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 Bin 1 Movement Failure RAP.
  - Refer to the 311G-150 LVF BM Mis-Registration in Stapled Sets and Non-Stapled Sets RAP.
  - Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, codes 11-004 and 11-006 alternately. **The rear tamper moves between the home and inboard positions, Figure 1.**

Y N

Go to Flag 3. Check the rear tamper motor, MOT11-004.
Refer to:

- GP 10, How to Check a Motor.
- P/J312, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

A

A

Repair or install new components as necessary:

- Tamper assembly, PL 11.64 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330 code 011-311, actuate the rear tamper home sensor Q11-311. **The display changes.**

Y N

Go to Flag 1 and check Q11-311.
Refer to:

- GP 11, How to Check a Sensor.
- P/J312, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Rear tamper home sensor, PL 11.64 Item 3.
- LVF PWB, PL 11.90 Item 8.

NOTE: *The away position is used for short edge feed small paper. This saves unnecessary rear tamper travel.*

Enter dC330, code 011-319, actuate the rear tamper away sensor Q11-319. **The display changes.**

Y N

Go to Flag 2 and check Q11-319.
Refer to:

- GP 11, How to Check a Sensor.
- P/J312, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Rear tamper away sensor, PL 11.64 Item 3.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

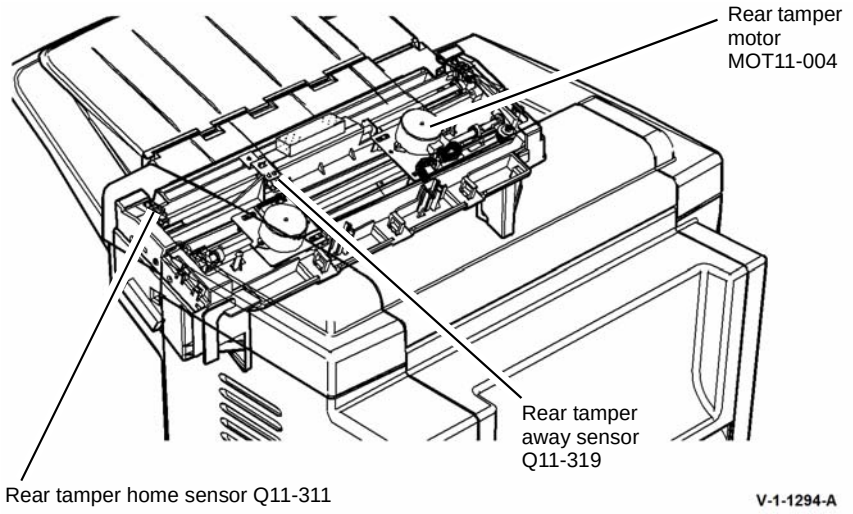
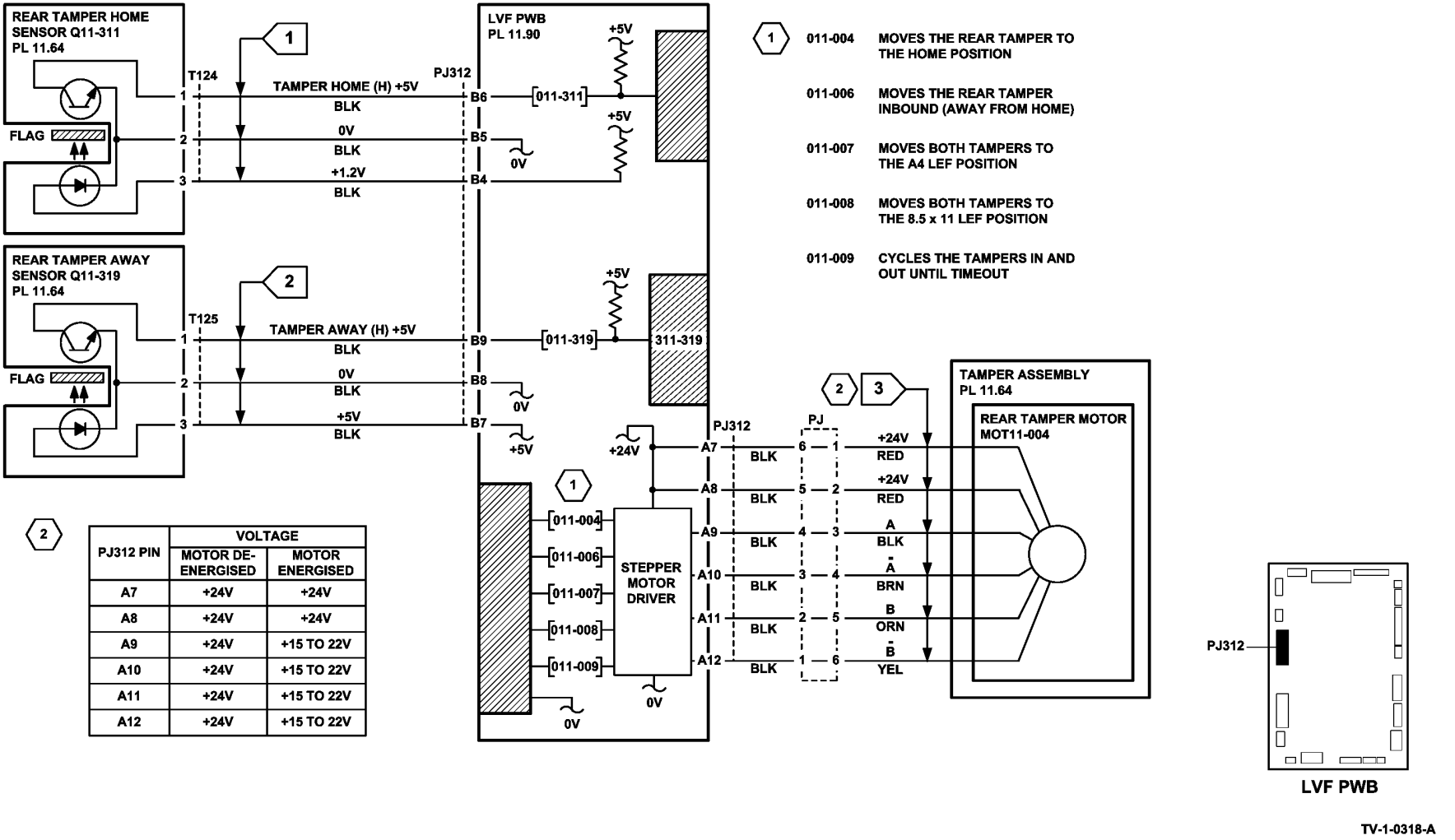


Figure 1 Component Location



PJ312 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
A7	+24V	+24V
A8	+24V	+24V
A9	+24V	+15 TO 22V
A10	+24V	+15 TO 22V
A11	+24V	+15 TO 22V
A12	+24V	+15 TO 22V

Figure 2 Circuit diagram

311-320-00-150, 311-322-00-150 Ejector Movement Failure RAP

311-320-00-150 The ejector is not at the home position.

311-322-00-150 The ejector fails to perform a cycle of operation.

NOTE: *A cycle of operation for the ejector is to cycle from the home position to the out position and back to the home position.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

- Check the operation of the ejector mechanism. If the operation is noisy or sluggish, perform the 1K LCSS, 2K LCSS and LVF BM Ejector Shafts and Slide Bearings procedure in ADJ 40.1 Machine Lubrication.
- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Check for any obstructions that would prevent the ejector from moving.

Procedure

NOTE: *All LVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330, code 011-322 actuate the ejector out sensor, Q11-322. **The display changes.**

Y N

Go to Flag 2. Check Q11-322.

Refer to:

- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Ejector out sensor, PL 11.66 Item 3.
- LVF PWB, PL 11.90 Item 8

Enter dC330, code 011-320, actuate the ejector home sensor, Q11-320. **The display changes.**

Y N

Go to Flag 1. Check Q11-320.

A

A

Refer to:

- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Ejector home sensor, PL 11.66 Item 3.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-023 ejector cycle, check the operation of the ejector motor MOT11-020. **The ejector motor runs.**

Y N

Go to Flag 3. Check the ejector motor, MOT11-020.

Refer to:

- GP 10, How to Check a Motor.
- Figure 1.
- P/J303, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or Install new components as necessary:

- Ejector assembly, PL 11.66 Item 1.
- LVF PWB, PL 11.90 Item 8.

Enter dC330, code 011-023 ejector cycle, check the ejector cycles. Stack the code 011-320 ejector sensor home, then cycle the ejector. Stack the code 011-322 ejector sensor out, then cycle the ejector. **The ejector actuates the ejector home sensor and the ejector out sensor.**

Y N

Refer to GP 7, check the following components, install new components as necessary;

- Pulley drive gear, PL 11.66 Item 8.
- Ejector belt, PL 11.66 Item 5.

The ejector cycles noisily, colliding with the end stops.

Y N

Check the stapler to ensure the staples are correctly formed. Mis-formed staples can cause the set to hang in the stapler causing ejector movement failures. **The staples are correctly formed.**

Y N

Clear the staple head of any mis-formed staples, then check the operation of the stapler. If necessary, install a new staple head unit, PL 11.68 Item 5.

If the ejector is still not moving, install a new ejector assembly, PL 11.66 Item 1.

Perform SCP 5 Final Actions.

Enter dC330, code 011-177, actuate the ejector motor encoder sensor, Q11-177. **The display changes.**

Y N

Go to Flag 4. Check Q11-177.

B

B

Refer to:

- GP 11 How to Check a Sensor.
- Figure 1.
- P/J304, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- Ejector motor encoder sensor, Q11-096, PL 11.66 Item 3.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

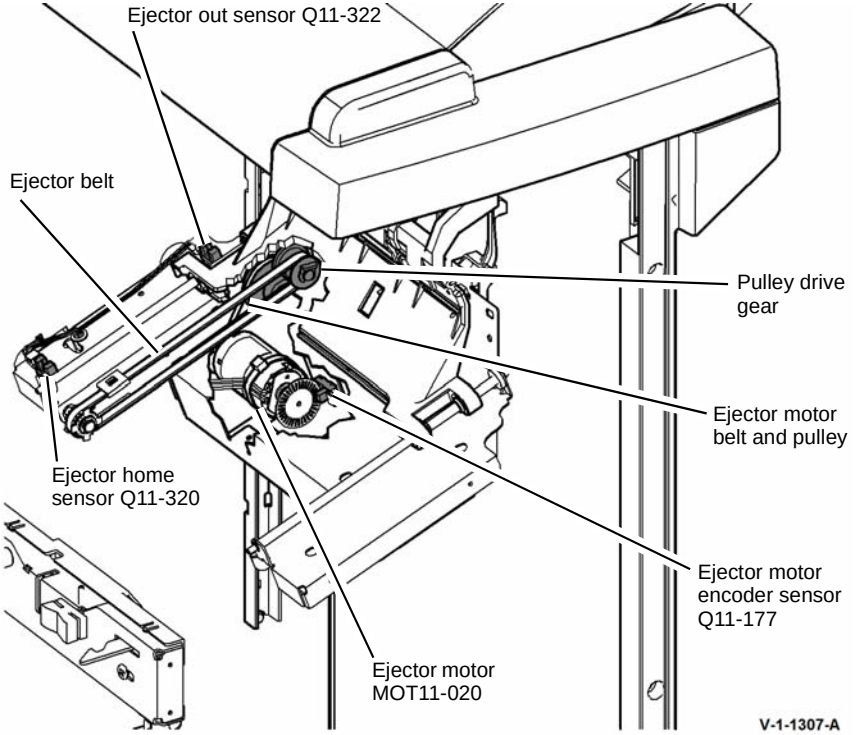


Figure 1 Component location

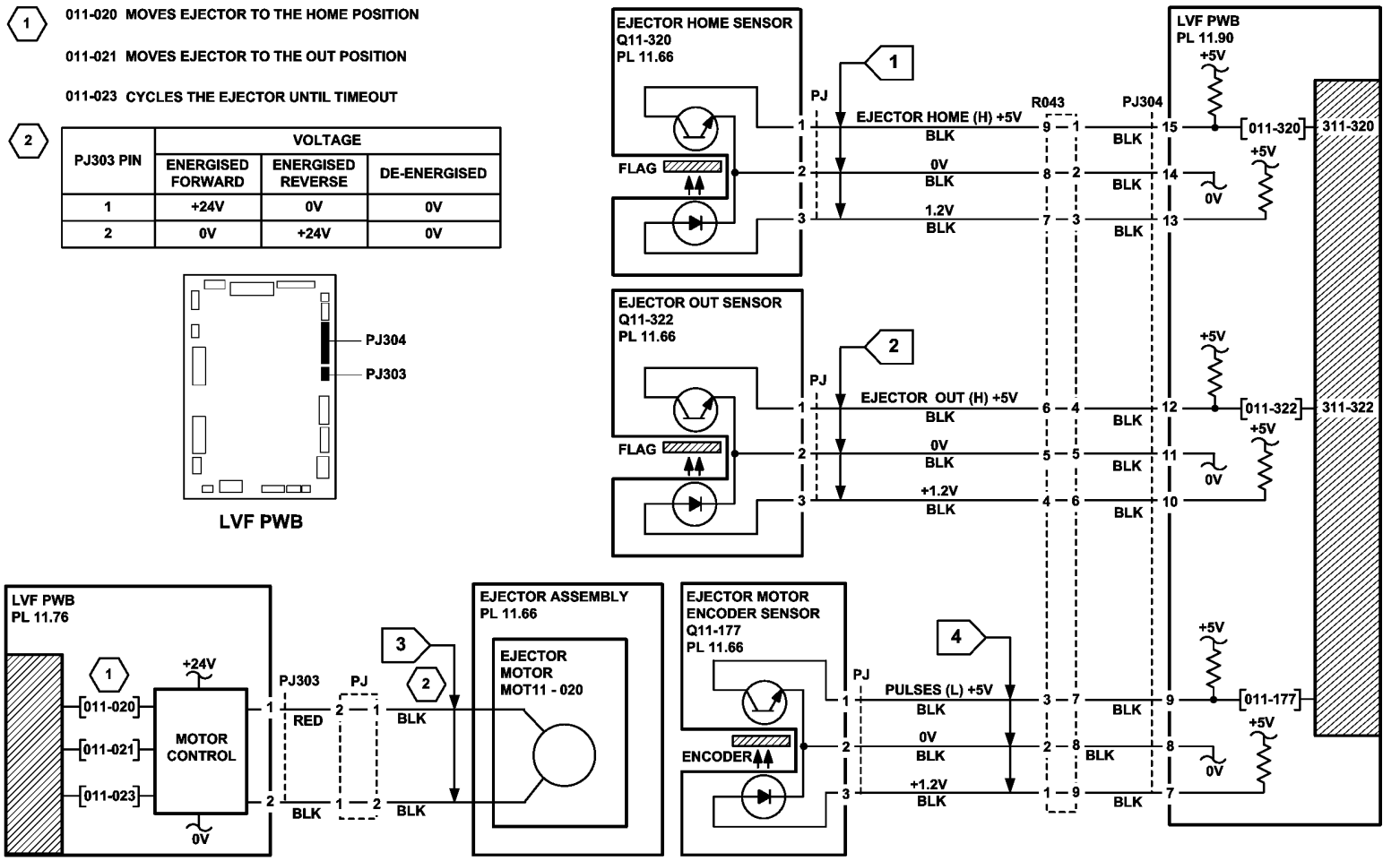


Figure 2 Circuit diagram

311-377-00-150 LVF BM Stapling Failure RAP

311-377-00-150 Staples in the staple head unit are not primed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Check the following:
  - The staple cartridge has staples in it and is correctly installed,
  - The leading staples in the staple head have been primed, Figure 2.
  - Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 11.68 Item 7.

NOTE: *The term "priming" refers to 2 staples at the front of the cartridge, that have been preformed automatically by the action of the stapler, refer to Figure 2.*

NOTE: *The SH 1 low staples sensor, SH 1 cartridge sensor, SH 1 home sensor and the SH 1 priming sensor are all integral to the staple head unit. These sensors can be checked using component control codes but they cannot be exchanged as components.*

Procedure

Figure 1. Enter dC330, code 011-361, actuate the SH 1 paper sensor, Q11-361. **The display changes.**

Y N

Go to Flag 1. Check Q11-361.

Refer to:

- GP 11, How to Check a Sensor.
- P/J308, LVF PWB.
- 311D-150 LVF BM Power Distribution RAP.

Repair or install new components as necessary:

- SH 1 paper sensor, PL 11.68 Item 4.
- LVF PWB, PL 11.90 Item 8.

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NOTE: *If the SH1 priming sensor does not see staples in the primed position, the staple head cycles a number of times to prime the staple head. This occurs when the LVF BM interlocks are made.*

Follow the customer instruction label inside the LVF BM front door to remove the staple cartridge, slide out the top sheet of staples from the cartridge, to expose a fresh sheet of staples on the top of the stack. Ensure the forming plate is fully closed, Figure 3. Install the staple cartridge and close the door. The stapler will now cycle a few times to feed and prime the new sheet of staples. Open the door and remove the staple cartridge. Examine the sheet of staples that have been fed to the staple forming part of the stapler, by opening the forming plate, Figure 2. **The first two staples have been partially formed.**

Y N

Install a new staple cartridge, PL 11.68 Item 7 and repeat the check. If the first two staples are not partially formed, install a new staple head unit, PL 11.68 Item 5. Perform SCP 5 Final Actions

Install a new staple head unit, PL 11.68 Item 5. Perform SCP 5 Final Actions.

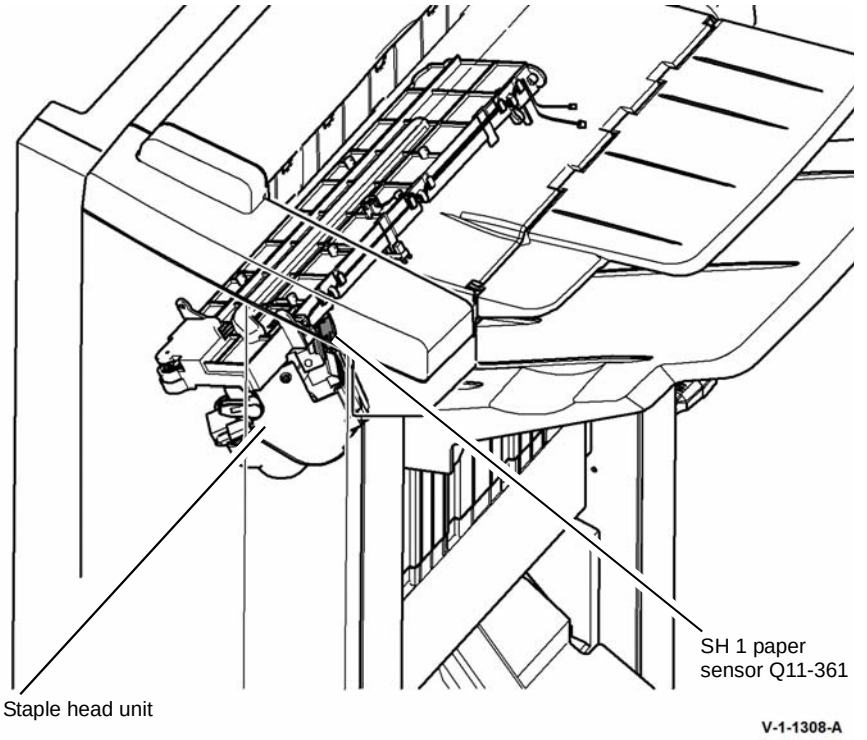


Figure 1 Component location

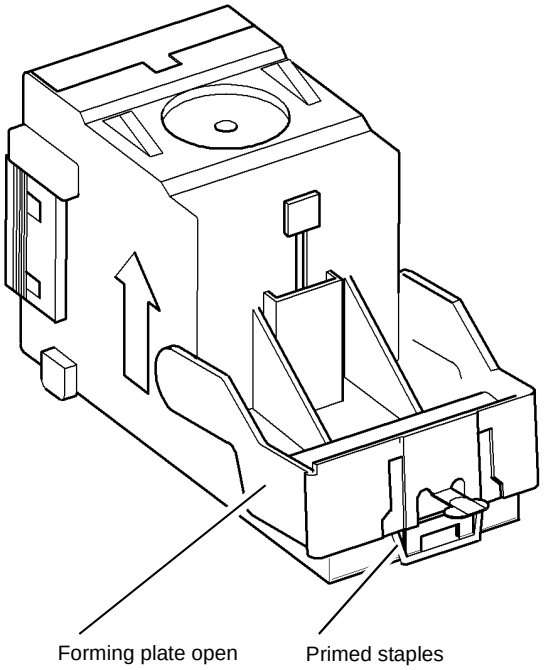


Figure 2 Staple cartridge open

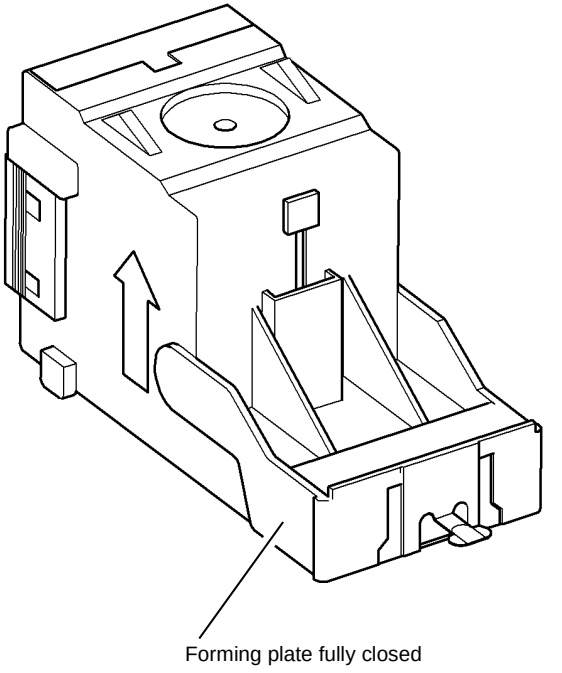
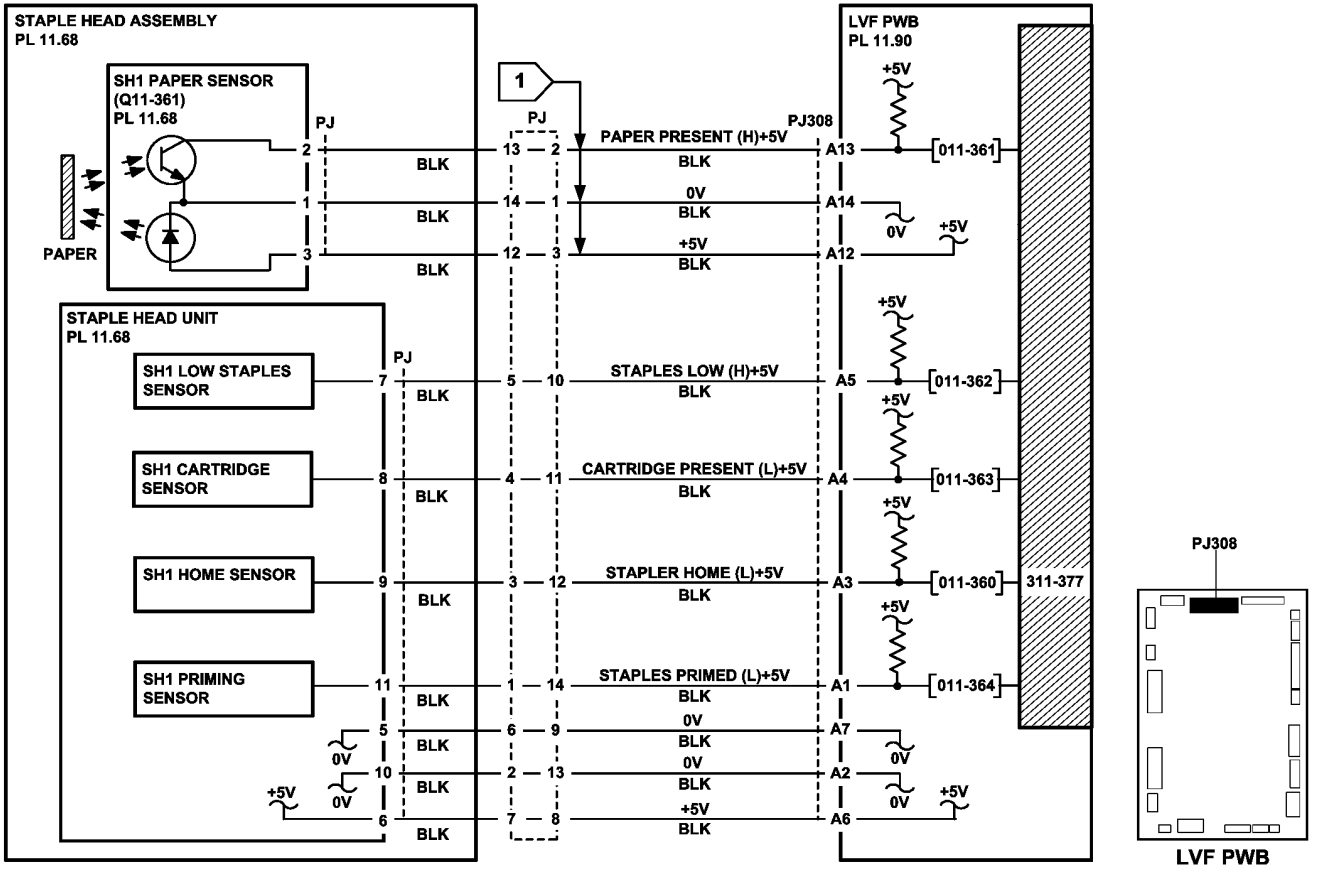


Figure 3 Staple cartridge closed



TV-1-0331-A

Figure 4 Circuit diagram

311-378-00-150, 311-379-00-150 LVF BM Booklet Stapler Assembly Failure RAP

311-378-00-150 The front booklet staple cartridge assembly has not been correctly primed within the required time.

311-379-00-150 The rear booklet staple cartridge assembly has not been correctly primed within the required time.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.
- Check the following:
  - The booklet staple cartridges have staples in them and are correctly installed,
  - The leading staples in the staple head have been primed, Figure 2.
  - Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 11.78 Item 8.

NOTE: *The term "priming" refers to 2 staples at the front of the cartridge, that have been preformed automatically by the action of the BM staple head assembly, refer to Figure 2.*

NOTE: *The low staples sensor, cartridge present sensor and the priming sensor for both the front and rear booklet staplers are all integral to the BM staple cartridge assembly. These sensors can be checked using component control codes but they cannot be exchanged as components.*

NOTE: *If the front or rear staple cartridge primed sensor does not see staples in the primed position, the staple head cycles a number of times to prime the staple head. This occurs when the LVF BM interlocks are made.*

NOTE: *Ensure that the staple forming plate is fully closed on both the front and rear staple cartridge assembly, Figure 3.*

Procedure

Enter dC330, code 011-442, actuate the front staple cartridge primed sensor, Q11-442 by inserting a staple cartridge that has correctly primed staples in the front staple cartridge holder, Figure 1, then remove that cartridge and insert a cartridge that does not have primed staples.
The display changes.

Y **N**

Go to Flag 1. Check Q11-442.
Refer to:
- GP 11, How to Check a Sensor
- P/J111, LVF PWB

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- 311D-150 LVF BM Power Distribution RAP
- REP 1.2 Wiring harness repairs

Repair or install new components as necessary:
- LVF PWB, PL 11.90 Item 8
- BM staple cartridge assembly, PL 11.78 Item 6

Enter dC330, code 011-443, actuate the rear staple cartridge primed sensor, Q11-443 by inserting a staple cartridge that has correctly primed staples in the rear staple cartridge holder, Figure 1, then remove that cartridge and insert a cartridge that does not have primed staples.
The display changes.

Y **N**

Go to Flag 2. Check Q11-442.
Refer to:
- GP 11, How to Check a Sensor
- P/J111, LVF PWB
- 311D-150 LVF BM Power Distribution RAP
- REP 1.2 Wiring harness repairs

Repair or install new components as necessary:
- LVF PWB, PL 11.90 Item 8
- BM staple cartridge assembly, PL 11.78 Item 6

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

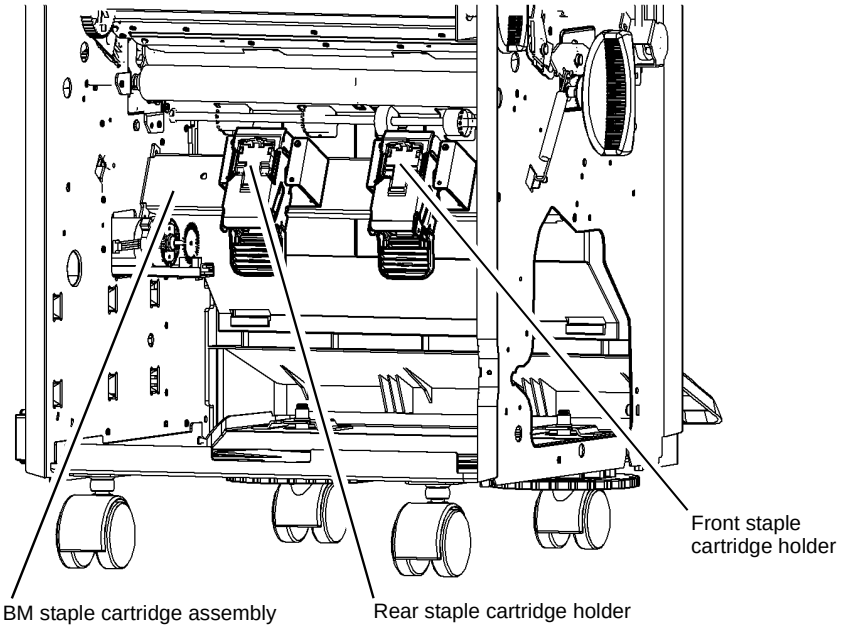


Figure 1 Component location

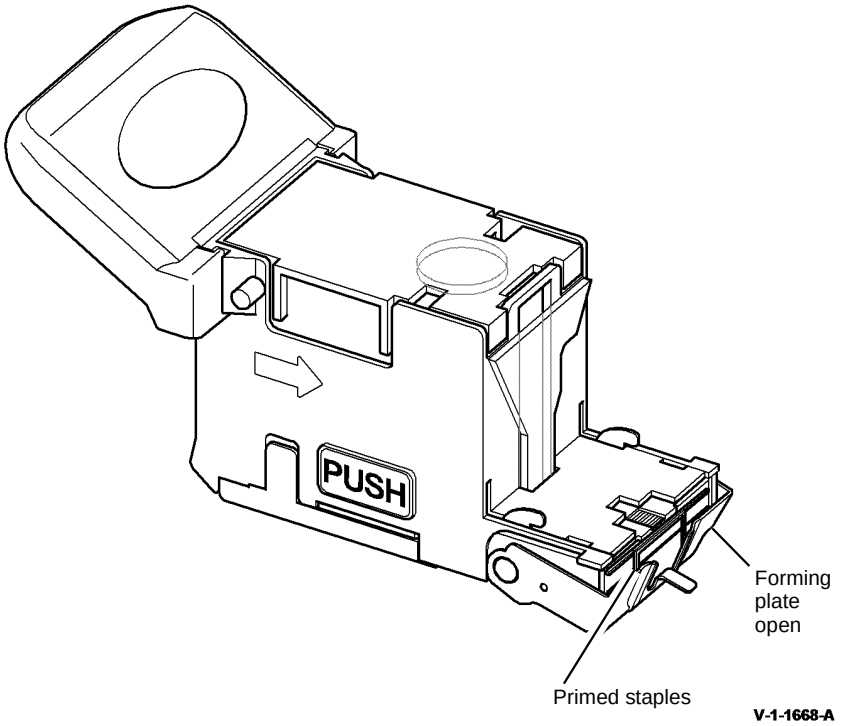


Figure 2 Staple cartridge open

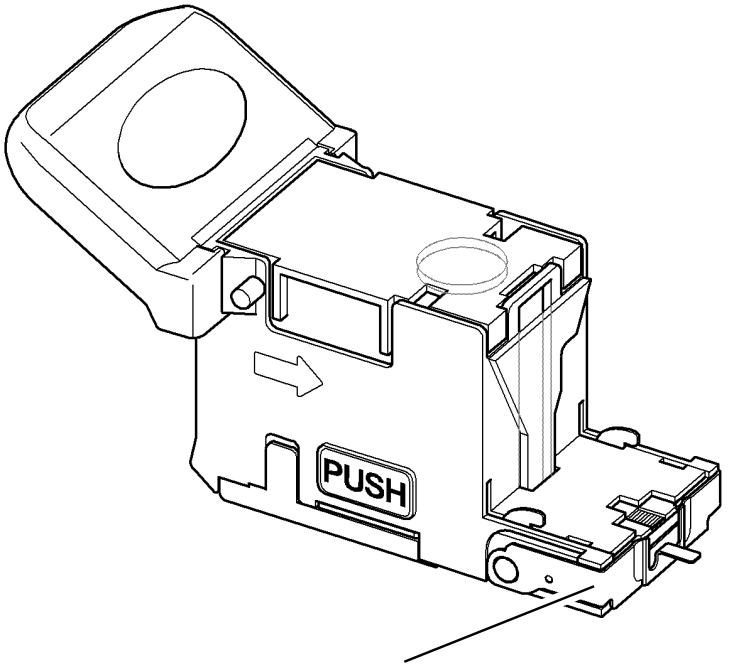


Figure 3 Staple cartridge closed

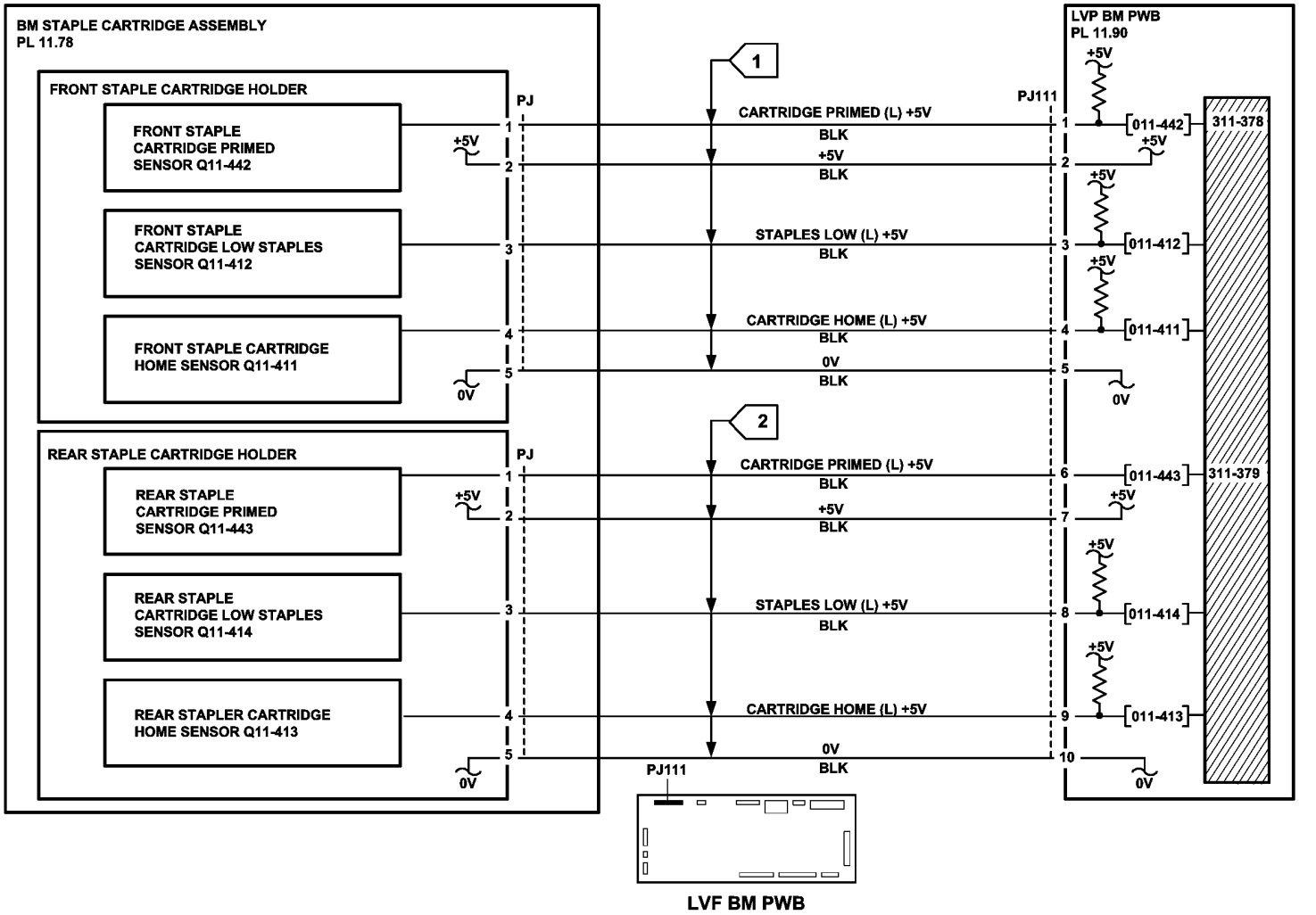


Figure 4 Circuit diagram

311-418-00-150 LVF BM Flapper Failure RAP

311-418-00-150 The booklet compiler flapper has failed.

Initial Actions

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker while the machine is powered on. The crease blade mechanism activates quickly and with great force.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Check the booklet maker compiler guide assembly for damage, PL 11.75 Item 6. If necessary install new parts.

Procedure

Enter dC330 code 011-391. Actuate the flapper home sensor, Figure 1. **The display changes.**

Y N

Go to Flag 1, check the flapper home sensor, Q11-391.
Refer to:

- GP 11, How to Check a Sensor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet maker compiler guide assembly, PL 11.75 Item 6.

Enter dC330 code 011-390 to run the BM flapper motor, MOT11-391, Figure 1. **The motor runs.**

Y N

Go to Flag 2, check the BM flapper motor, MOT11-391.
Refer to:

- GP 10, How to Check a Motor.
- P/J104, LVF BM PWB.
- 311D-150 LVF BM Power Distribution RAP.

Install new components as necessary:

- LVF BM PWB, PL 11.90 Item 1.
- Booklet maker compiler guide assembly, PL 11.75 Item 6.

The fault may be intermittent, check for damaged wiring or connectors, REP 1.2. If necessary repair the wiring or install new components.

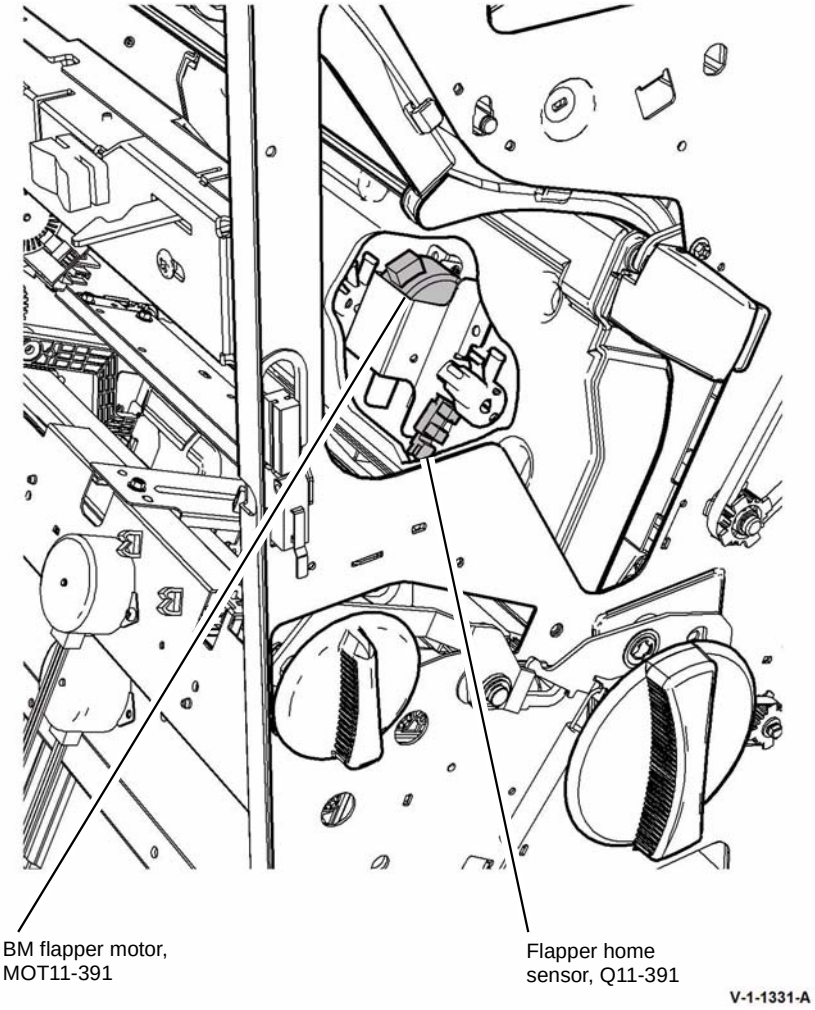
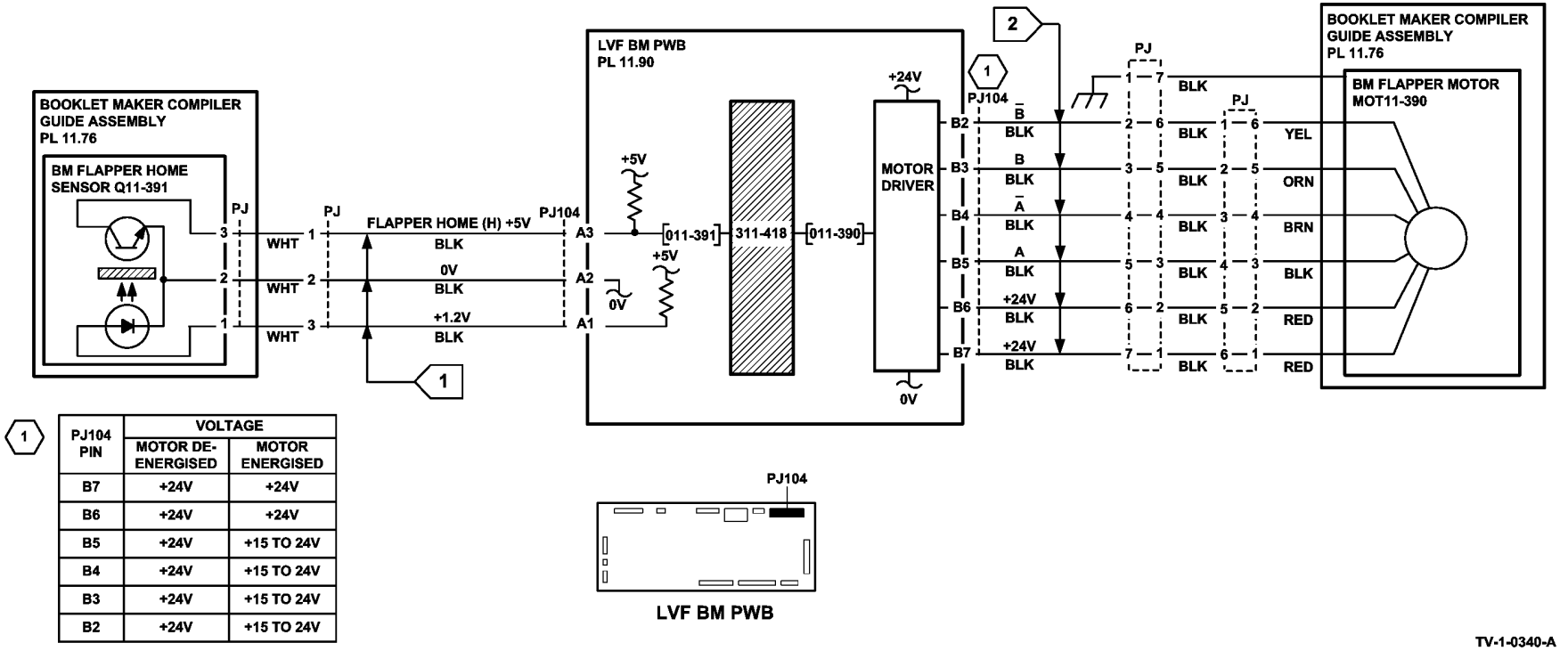


Figure 1 Component location



1

PJ104 PIN	VOLTAGE	
	MOTOR DE-ENERGISED	MOTOR ENERGISED
B7	+24V	+24V
B6	+24V	+24V
B5	+24V	+15 TO 24V
B4	+24V	+15 TO 24V
B3	+24V	+15 TO 24V
B2	+24V	+15 TO 24V

Figure 2 Circuit diagram

311A-150 LVF BM Poor Stacking RAP

Use this RAP to find the cause of poor stacking in the LVF BM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following;

- Look for sets that are not dropping back fully in bin 1 and therefore not operating the bin 1 level sensors:
  - Large paper sizes should not be stacked on top of small paper sizes.
  - Ensure that the paper stack in each paper tray has been fanned.
  - Turn over the paper stack in each paper tray.
  - Ensure that all paper or other copy stock being used is within the size and weight specifications. Refer to GP 20 Paper and Media Size Specifications.
  - Try using a fresh ream of paper.
  - Ensure that the edge guides of all paper trays are adjusted correctly for the paper size and that the trays are fully closed.
  - Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.50 Item 12.
- Labels must not be fed to bin 1, but to bin 0 only.
- It is recommended that transparencies are fed to bin 0 whenever possible.
- Check that bin 1 is level front to back, if necessary perform ADJ 11.1-150 LVF BM Bin 1 Level.
- Check that the bin 1 upper level sensor, Q11-332 and the bin 1 lower level sensor, Q11-333 are working correctly. Refer to the 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP.
- Check the operation of the front and rear tampers. Refer to the 311-005-00-150, 311-006-00-150, 311-311-00-150 LVF BM Front Tamper Move Failure RAP and 311-319-00-150 LVF BM Rear Tamper Move Failure RAP.
- Check that the LVF BM is not near an air conditioning or ventilation output duct. Air flow across the output bins can cause poor stacking.
- Check the output copies/prints for curl, refer to the IQ5 Print Damage RAP.

311B-150 LVF BM Bin 1 Overload RAP

Use this RAP to resolve a fault on the bin 1 90% full sensor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330, code 011-331, actuate the bin 1 90% full sensor, Q11-331. **The display changes.**

Y N

Go to Flag 1. Check Q11-331.

Refer to:

- GP 11, How to Check a sensor.
- Figure 1.
- P/J316, LVF PWB.
- 311D-150 LVF BM Power Generation RAP.

Repair or install new components as necessary:

- Bin 1 90% full sensor, PL 11.58 Item 5.
- LVF PWB, PL 11.90 Item 8.

Perform SCP 5 Final Actions.

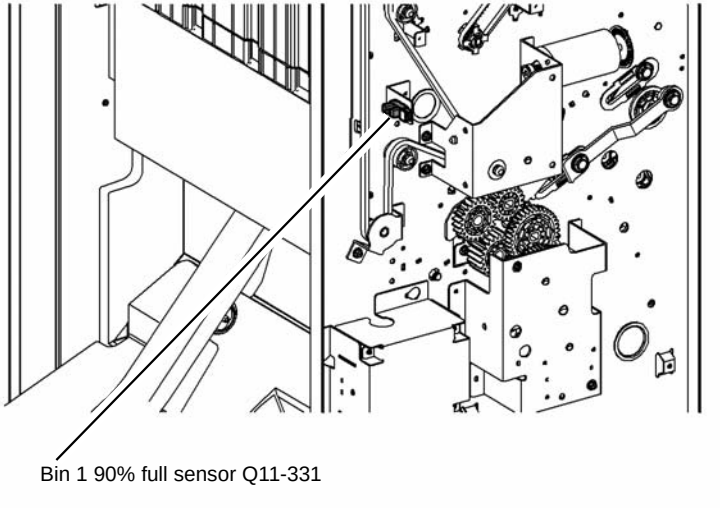


Figure 1 Component location

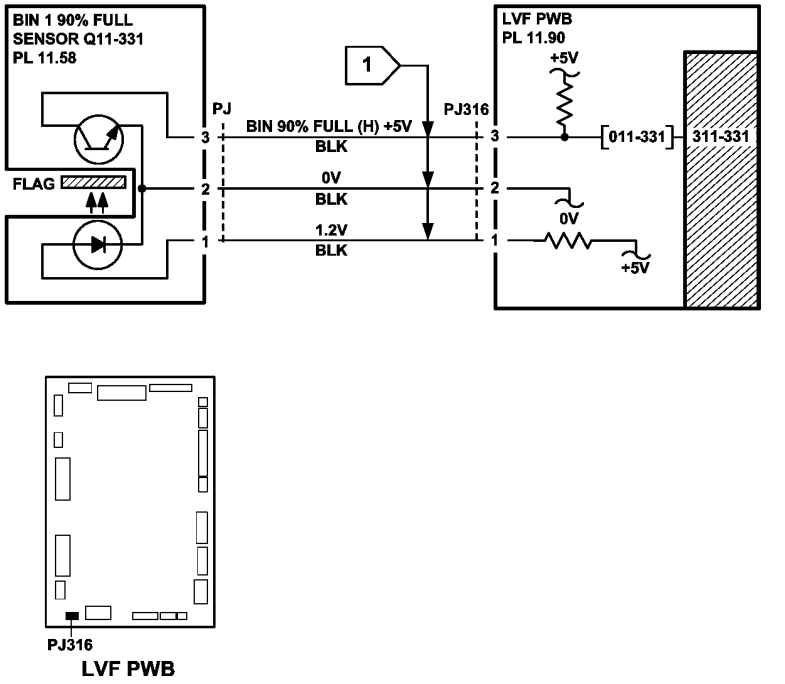


Figure 2 Circuit diagram

311C-150 LVF BM Initialization Failure RAP

When an initialization command is received from the machine, the units are initialized in two stages:

- The following units are initialized sequentially:
  1. If the staple head is not at the home position, it is driven to the home position.
  2. If the staple head unit is not at the home position, it is driven to the home position.
  3. If the ejector is not at the home position, it is driven to the home position.
- The following units are then initialized simultaneously:
  - If the front tamper is not at the home position, it is driven to the home position
  - If the rear tamper is not at the home position, it is driven to the home position
  - If the hole punch is not at the home position, it is driven to the home position
  - If the paddle wheel is not at the home position, it is driven to the home position
  - If the stacker is not at the home position, it is driven to the home position

  NOTE: *The staple cartridge must be fully pushed home.*
- The following booklet maker units are then initialised sequentially:
  1. If the BM back stop is not at the home position, it is driven to the home position.
  2. If the BM tampers are not in the home position, they are driven to the home position.
  3. If the BM stapler is not at the home position, it is driven to the home position.
  4. If the BM crease blade is not at the home position, it is driven to the home position.
  5. If the BM paddles are not in the home position, they are driven to the home position.
  6. The BM staplers are cycled to ensure the staples are primed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fuse on the LVF PWB, If the fuse is good, continue at the procedure. If the fuse not good, install a new LVF PWB, PL 11.90 Item 8.

Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.

Remove the LVF BM covers, REP 11.1-150, so that the units can be viewed. Cheat the front door interlock switch and the top cover interlock switch. Check that LED 2 is illuminated, this shows that all interlocks are made. If the LED fails to illuminate, go to 311-300-00-150, 311-302-00-150, 311-303-00-150 Interlocks RAP.

Procedure

Refer to Figure 1. Check that the software heartbeat is present on LED 1. The LED should flash twice per second if the LVF software is running. If necessary, re-load the LVF software, refer to GP 4 Machine Software.

If the initialization sequence fails to place any unit at the home position, refer to the appropriate RAPs:

- Front tamper not at home, refer to 311-005-00-150, 311-006-00-150, 311-311-00-150 LVF BM Front Tamper Move Failure RAP
- Rear tamper not at home, refer to 311-319-00-150 LVF BM Rear Tamper Move Failure RAP.
- Paddle not at home, refer to 311-024-00-150, 311-025-00-150 LVF BM Paddle Roll Failure RAP.
- Bin 1 not at home, refer to 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 LVF BM Bin 1 Movement Failure RAP.
- Punch not at home, refer to 311-043-00-150, 311-046-00-150 LVF BM Hole Punch Operation Failure RAP
- Staple head not at home, refer to 311-050-00-150, 311-360-00-150 LVF BM Staple Head Operation Failure RAP.
- Stapling unit not at home, refer to 311-053-00-150, 311-370-00-150, 311-371-00-150 LVF BM Staple Head Unit Movement Failure RAP.
- Ejector not at home, refer to 311-320-00-150, 311-322-00-150 LVF BM Ejector Movement Failure RAP.

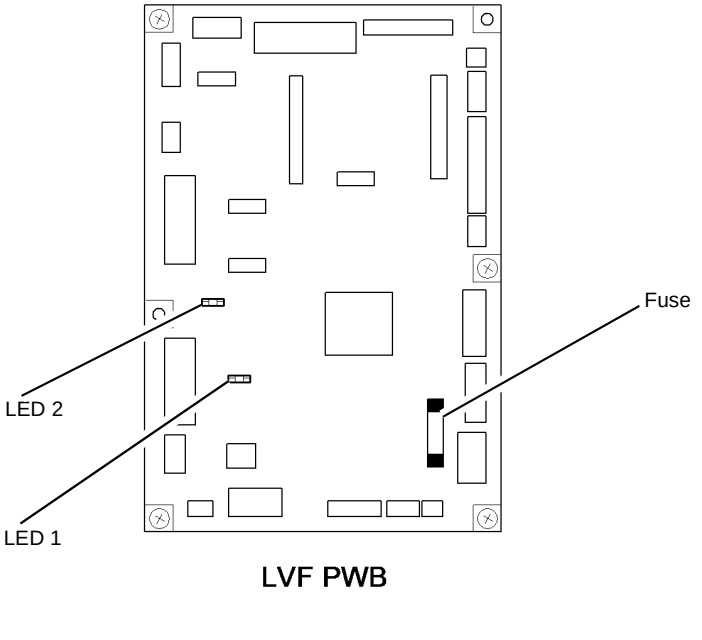


Figure 1 LED location

311D-150 LVF BM Power Distribution RAP

The LVF BM has an integral power supply providing +24V and +5V supplies to the LVF PWB and the LVF BM PWB. The AC power for the LVF BM power supply comes from the LVPS and base module of the machine.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

CAUTION

Do not connect the finisher power cord directly to the AC wall outlet. The finisher cannot operate without the machine. The machine controls the distribution of electricity to the finisher for correct power on and power off sequencing.

Close or cheat all the LVF BM interlocks. **LED 2 on the LVF PWB, Figure 1 is illuminated.**

Y **N**

+24V is available at Fuse (F1), Figure 1 on the LVF PWB.

Y **N**

Go to Flag 2. Check for +24V between the following pins on P/J300:

- Pin 1 and pin 3
- Pin 1 and pin 4
- Pin 1 and pin 5
- Pin 1 and pin 6
- Pin 2 and pin 3
- Pin 2 and pin 4
- Pin 2 and pin 5
- Pin 2 and pin 6

+24V is available between all the checked pins.

Y **N**

Disconnect P/J300, check for +24V between the following pins on the end of the harness:

- Pin 1 and pin 3
- Pin 1 and pin 4
- Pin 1 and pin 5
- Pin 1 and pin 6
- Pin 2 and pin 3
- Pin 2 and pin 4
- Pin 2 and pin 5
- Pin 2 and pin 6

A B C

A B C

+24V is available between all the checked pins on the end of the harness.

Y N

Figure 2. Loosen the 4 screws and lift the power supply module away from the LVF BM frame. Go to Flag 1. **ACL is available at CN1 between pins 1 and 3.**

Y N

Go to the 301C AC Power RAP and check the AC output voltages.

Check the wiring and connectors between CN2 and P/J300. **The wiring is good.**

Y N

Repair the wiring.

Install a new power supply module, PL 11.90 Item 2.

Check for a short or open circuit in the wiring or connectors between P/J300 on the LVF PWB and CN 2 on the power supply module. Refer to GP 7.

+24 V is available at PJ315 pin 5 on the LVF PWB.

Y N

Go to the 311-300-00-150, 311-302-00-150, 311-303-00-150 Interlocks RAP.

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Perform the following:

1. Switch off the machine, GP 14.
2. Go to Flag 3, Flag 4 Flag 5 and Flag 6. Disconnect all the +24V harnesses to components.
3. Check each harness for short circuits and overheating, GP 7.
4. Repair or install new components as necessary.
5. Install a new fuse F1 on the LVF PWB, Figure 1, switch on the machine, GP 14.
6. Monitor the voltage at the top end of the fuse and re-connect the circuits one at a time. Energize the re-connected components using dC330 control codes shown on Figure 3.
7. If the voltage drops below +22V, switch off the machine, GP 14. Re-check the component and harness for overheating or short circuits. Repair or install new components as necessary.

Install a new LVF PWB, PL 11.90 Item 8.

+5V is available at P/J300 between pins 5 and 7, also between pins 6 and 8.

Y N

Disconnect P/J300. **+5V is available at P/J300 between pins 5 and 7, also between pins 6 and 8 on the end of the harness.**

Y N

Check the wiring between CN2 and P/J300. **The wiring is good.**

D E

D E

Y N

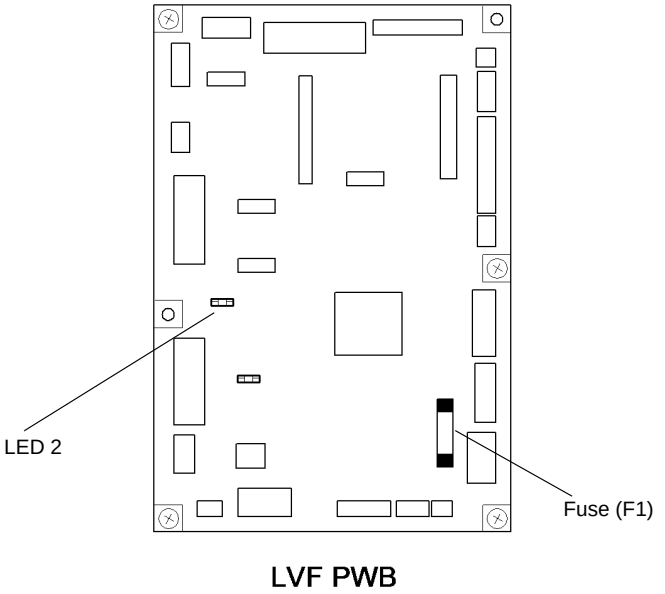
Repair the wiring.

Install a new power supply module, PL 11.90 Item 2.

Perform the steps that follow

1. Switch off the machine, GP 14.
2. Go to Flag 3, Flag 4 and Flag 5. Disconnect all the +5V components.
3. Check each circuit for short circuits and overheating, GP 7.
4. Install new components as necessary.
5. Reconnect P/J300 and switch on the machine, GP 14.
6. Monitor the voltage at P/J300 pin 8, reconnect the circuits one at a time using the dC330 control codes shown on Figure 4.
7. If the voltage falls below +4.7V switch off the machine, GP 14. Re-check the last re-connected component and harness for overheating or short circuits. Install new components as necessary.
8.

Perform SCP 5 Final Actions.



LVF PWB

V-1-1704-A

Figure 1 LED and Fuse Location

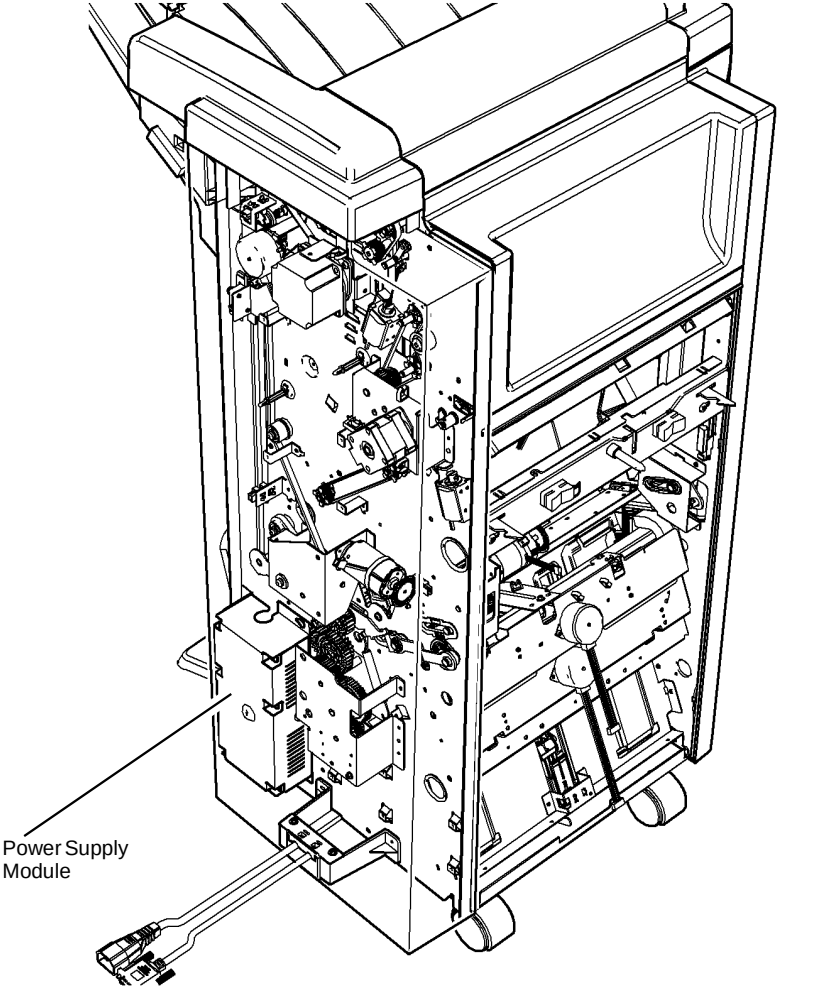


Figure 2 Component location

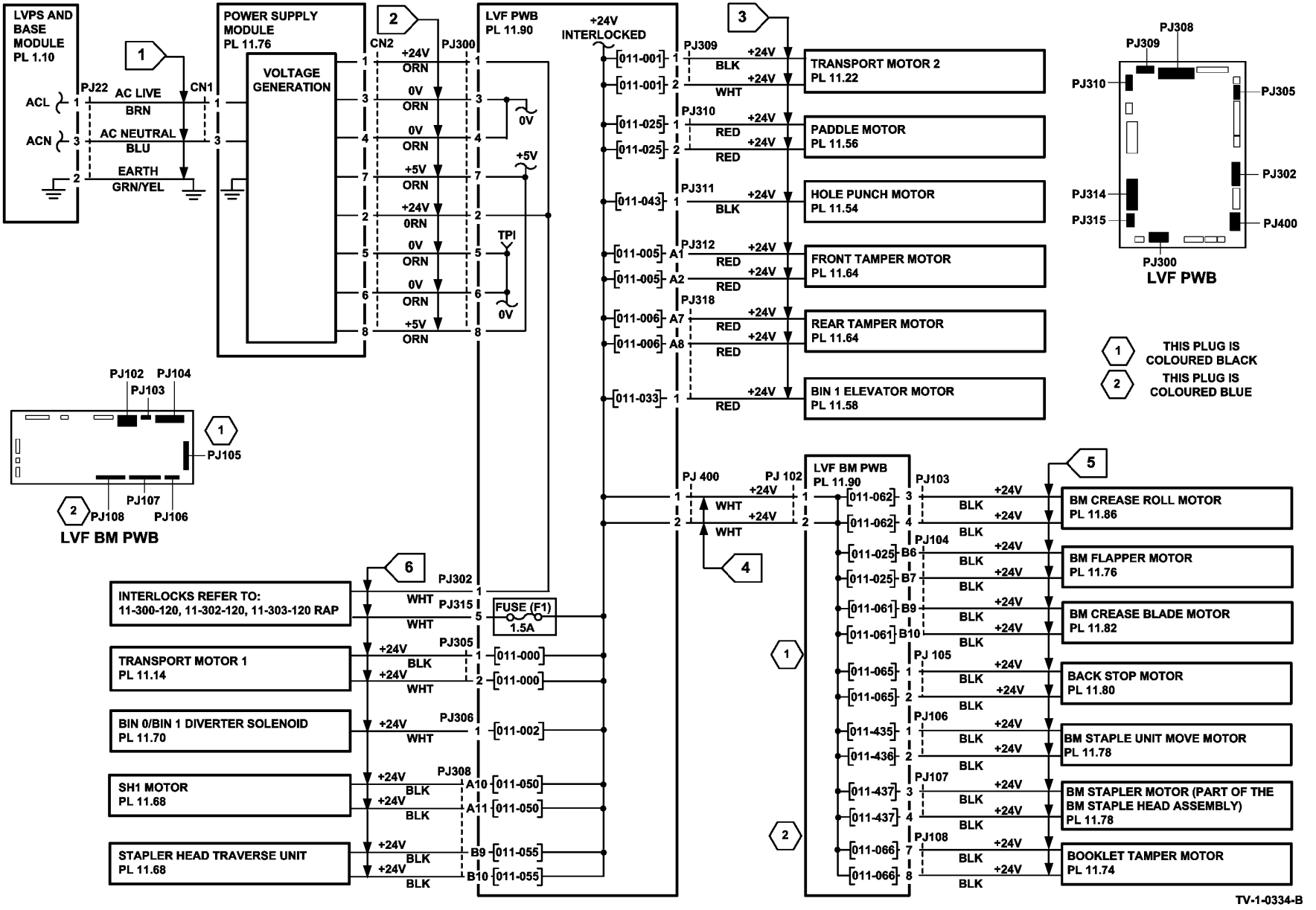


Figure 3 Circuit diagram

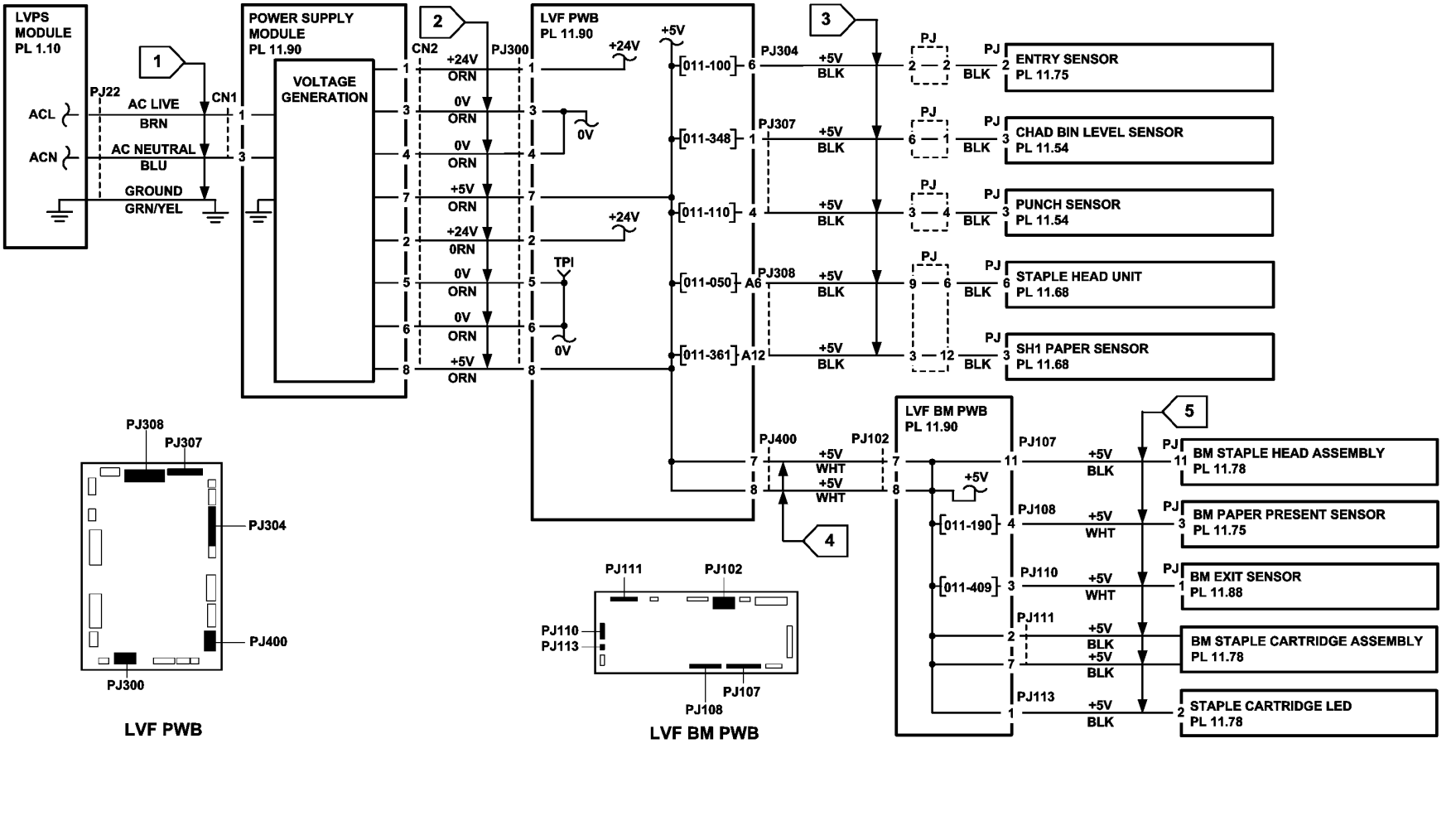


Figure 4 +5V circuit diagram

311E-150 LVF BM to Machine Communications Interface RAP

All communications between the machine and LVF BM are conducted through a single interface cable. A UI message **System Error** or **Finisher Comms Failure** may be seen.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the LVF PWB DIP switch settings, refer to 311F-150 LVF PWB DIP Switch Settings RAP. If the settings are correct, continue with this RAP.

Procedure

Observe the software heartbeat LED (LED 1) on the LVF PWB, Figure 1. **LED 1 is flashing at 1Hz (0.5 seconds on, 0.5 seconds off).**

Y N

LED 1 is flashing at 0.25Hz (2 seconds on, 2 seconds off) this indicates that the finisher software is corrupt. Re-load the finisher software, GP 4. If necessary install a new LVF PWB, PL 11.90 Item 8.

Observe the software heartbeat LED (LED 1) on the LVF BM PWB, Figure 1. **LED 1 is flashing at 1Hz (0.5 seconds on, 0.5 seconds off).**

Y N

LED 1 is flashing at 0.25Hz (2 seconds on, 2 seconds off) this indicates that the booklet maker software is corrupt. Re-load the finisher software, GP 4. If necessary install a new LVF BM PWB, PL 11.90 Item 1.

Go to Flag 1, check the wiring and connectors between P/J101 and P/J401. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

Go to Flag 2, check the wiring and connectors between P/J301and P/J11. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

The finisher checks are good. Switch off the machine, then switch on the machine, GP 14. If the fault remains, perform the Forced Altboot Software Loading Procedure, GP 4.

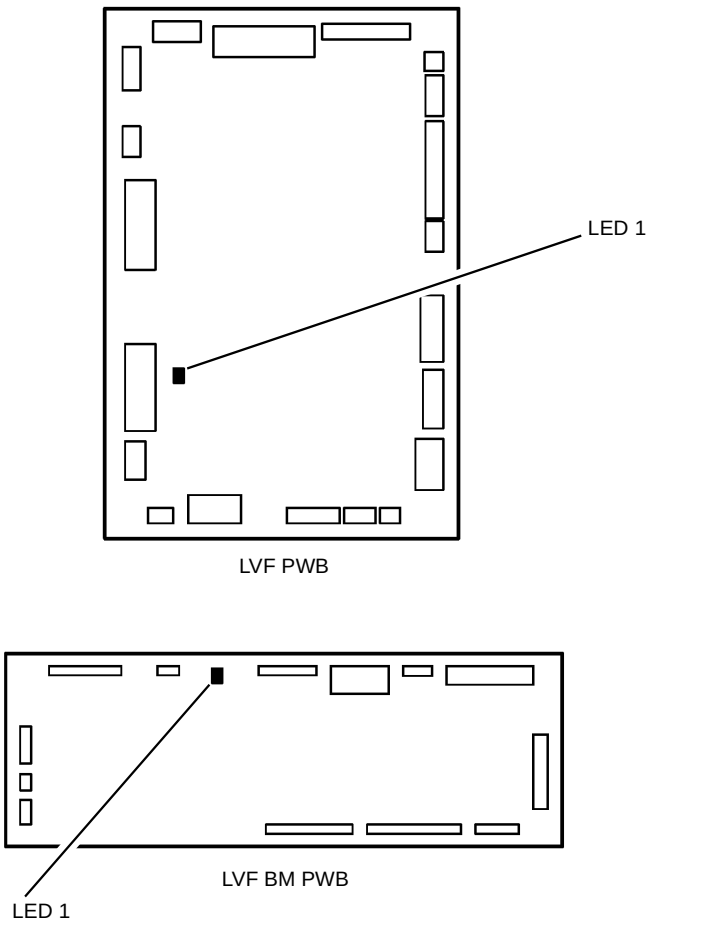
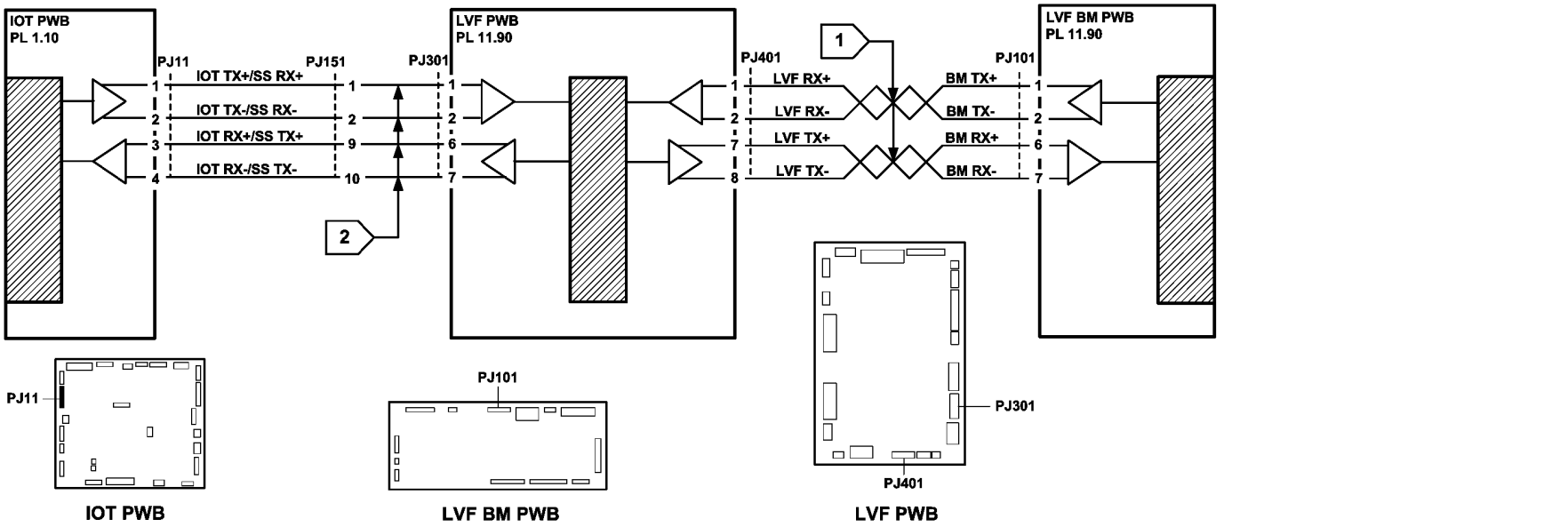


Figure 1 Component location



TV-1-0376-A

Figure 2 Circuit diagram

311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP

To show the correct settings for the DIP switches on the LVF PWB and LVF BM PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Problems that can result from incorrect DIP switch settings are:

- False jam clearance instructions for the LVF BM and/or the machine exit area.
- Communication errors between the LVF BM and machine.
- Erratic behavior of the LVF BM.

Check the DIP switch settings, Figure 1. If necessary, switch off the machine, GP 14. Correct the DIP switch settings, then switch on the machine, GP 14.

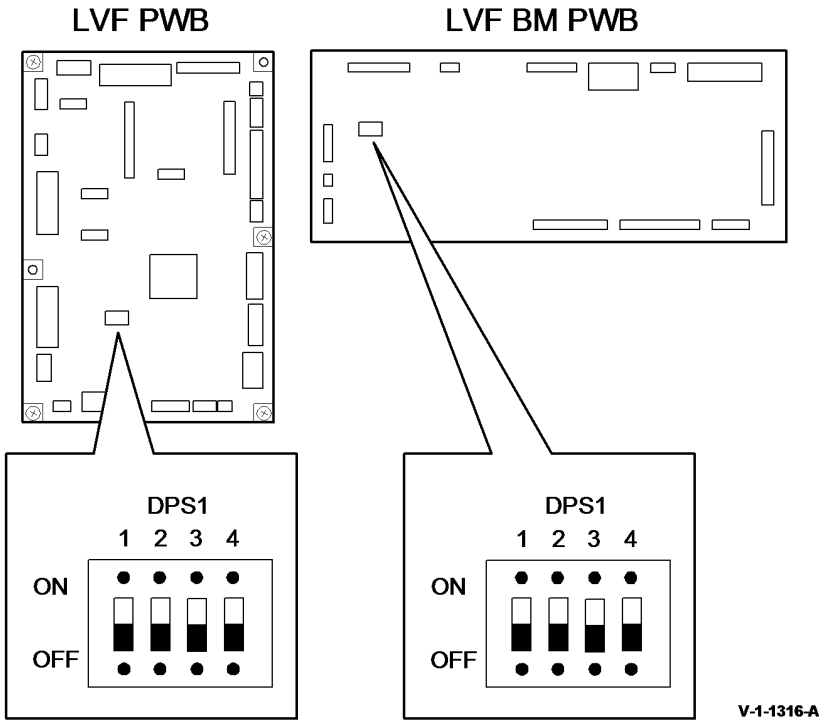


Figure 1 DIP switch settings

311G-150 LVF BM Mis-Registration in Stapled Sets and Non-Stapled Sets RAP

Use this RAP to identify and correct the causes of mis-registration in stapled sets, resulting in staples missing some sheets in the set, or poorly registered non-stapled sets.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The most likely cause of mis-registration is paper condition and/or damage such as curl, wrinkle, creases, dog ears, etc.

Curl, wrinkle and creases are probably caused in the IOT, go to IQ1 Image Quality Entry RAP.

For other copy/print damage and dog ears, go to the 311H-150 Copy Damage in the LVF BM RAP.

Check the following:

- Check that bin 1 is seated correctly and the bin 1 alignment clip is in position, PL 11.50 Item 12.
- Turn over the paper stack in the tray in use.
- Use a new ream of paper in the tray in use.
- Paper type especially recycled paper can lead to registration problems. Try changing to a different brand or type of paper.
- Ensure that the guides in the paper trays are correctly set and reported on the UI for the paper size loaded.
- Check that paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded.
- Check for obstructions in the compiler.
- Ensure that the paddle roll operates correctly and that the paddles are not damaged. The paddles should park completely inside the top section of the compiler, with the shorter paddle in a vertical position. If all of the paddles are out of position, check the paddle roll home sensor, PL 11.56 Item 4, the flag, PL 11.56 Item 7 and the paddle motor assembly, PL 11.56 Item 10. If only one paddle is mis-aligned with the others, it can be re-positioned by hand (they are not bonded to the shaft). If necessary install new paddles, PL 11.56 Item 3.
- Make sure the paddles are clean. If necessary, use formula A cleaning fluid, PL 26.10 Item 2 to clean the paddles.
- Ensure that the tampers operate correctly, i.e. are not stalling or losing position during the job. Inspect the tampers for damage, if necessary install new parts. PL 11.64.
- Inspect the bin 1 entry nips for roll damage. The idlers should be held against the rubber driving rolls and they should be free to rotate within their support springs. If necessary, install new parts, PL 11.72.
- Inspect the four spring loaded guides on the output cover, PL 11.56 Item 9. Ensure that they are correctly located and are free to move up and down.

311H-150 LVF BM Copy Damage in the LVF BM RAP

Use this RAP to identify and correct the causes of copy damage in the LVF BM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- Look for torn paper in the LVF BM paper path. Torn fragments can pass through the IOT and LVF BM paper path without causing a problem until they finally wedge themselves at some point. A likely place for a piece of paper to be wedged is at the hole punch assembly, where the top and bottom guides form the narrowest part of the paper path.
- Ensure that the bin 0 / bin 1 diverter assembly, PL 11.70 Item 13, operates correctly and has full movement.
- Ensure that the hole punches park at the fully open position. If they protrude even slightly, a jam will occur in the narrow paper path of the hole punch.
- Ensure that the paper entry guide assembly, PL 11.62 Item 7, closes and latches correctly. Check that the magnet at the rear is located and functions correctly. Check the clip at the front is positioned correctly, Figure 1.
- Ensure that all idler rolls in the LVF BM paper path are free to rotate, particularly those on the jam clearance guide, where the paper turns through 90 degrees.
- Ensure that the paper path ribs of the paper entry guide assembly, PL 11.62 Item 7, and the entry guide cover assembly, PL 11.50 Item 3, are free of “scores” and “nicks”. Check also for contamination and glue from label stock.

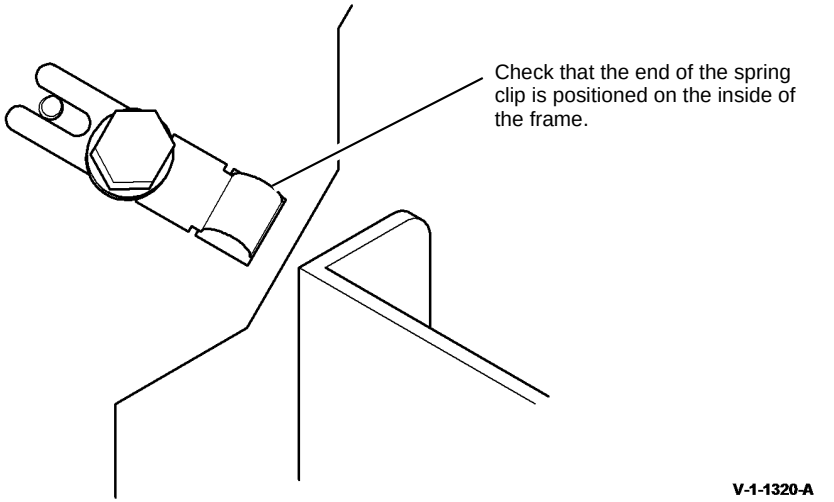


Figure 1 Position of the spring clip

312J-150 LVF BM Booklet Quality RAP

Use this RAP to identify and correct the causes of poor booklet quality in the LVF BM.

The booklet quality problems that follow are covered in this RAP:

- The alignment of the top and bottom edges of the booklet are not within specification.
- The alignment of the open side edges of the booklet are not within specification.
- The booklet staples are badly formed.
- The booklet crease is off centre.
- The booklet crease is skewed greater than the specification.
- The booklet staple position is not within the specification.
- The booklet is not sufficiently creased.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the paper loaded in the paper trays matches the paper size displayed on the UI. Refer to 371-500-00 Tray 1 Open During Run RAP and 372-500-00 Tray 2 Open During Run RAP.
- Ensure that the paper being fed to the BM conforms to the specification, GP 20 Paper and Media Size Specification.
- Ensure that the booklets being produced do not exceed the maximum contents given in Table 1.

Table 1 Booklet contents

Media	Media weight	Maximum number of sheets	Maximum number of booklet pages	Maximum number of unstapled sheets
Plain paper	60 to 80gsm (16 to 21lb bond)	15	60	5
Heavyweight	90gsm (24lb bond)	13	52	-
Heavyweight	120gsm (32lb bond)	10	40	-
Heavyweight	160gsm (43lb bond)	7	28	-
Heavyweight	216gsm (58lb bond)	5	20	-
Plain paper with heavyweight cover	60 to 80gsm (16 to 21lb bond) with 160gsm (43lb bond) cover	14 including 1 cover	56	-

- Check the machine and LVF BM paper paths for any obstruction that could cause misalignment of the paper fed to the BM compiling area.

Procedure

Produce three 4 sheet/16 page booklets using 80gsm (20lb) paper. Paper size and weight must conform to GP 20 Paper and Media Size Specification.

Examine the booklets for defects. Go to the appropriate defect and perform the appropriate actions:

- Top and Bottom Edge Alignment
- Open Side Edge Alignment
- Badly Formed Booklet Staples
- Booklet Crease Is Off Centre
- Skewed Booklet Crease
- Booklet Staple Position Is Not On the Crease
- The Booklet Is Not Sufficiently Creased

Top and Bottom Edge Alignment

Open out the booklet at the centre page and press it onto a flat surface. Measure the mis-alignment of the top and bottom edges of the booklet, Figure 1.

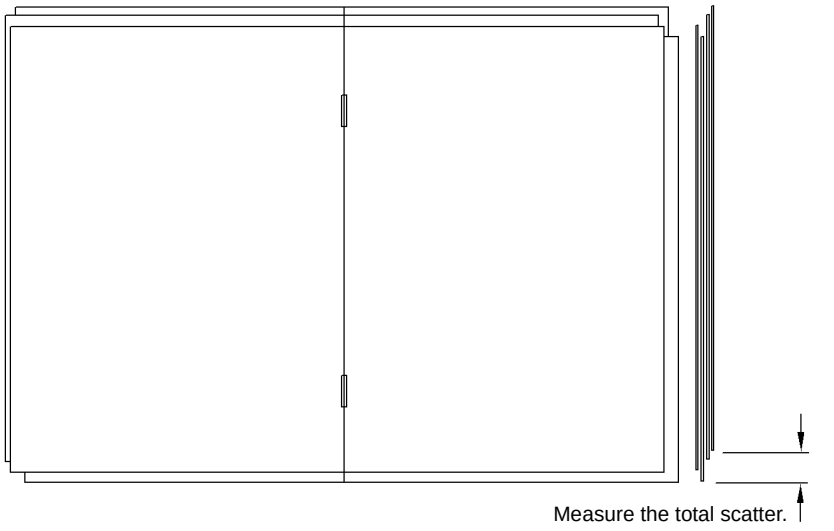


Figure 1 Top and bottom alignment

If the top and bottom edge alignment does not conform to the specification in Table 2, check the operation of the BM tampers. Refer to 311-066-00-150, 311-384-00-150 LVF BM Booklet Tamper 1 Move Failure RAP.

Table 2 Top and bottom edge alignment

	Paper size	4 sheet booklet	15 sheet booklet
95% of booklets	A4/8.5x11 inch	1.5mm	2.0mm
	8.5x14 inch	2.0mm	2.5mm
	A3	2.5mm	3.0mm
	11x17 inch	2.0mm	2.5mm
Worst 5% booklets	A4/8.5x11 inch	2.0mm	3.0mm
	8.5x14 inch	2.5mm	3.5mm
	A3	3.0mm	4.5mm
	11x17 inch	2.5mm	3.5mm

Open Side Edge Alignment

Open out the booklet at the centre page and press it onto a flat surface. Measure the mis-alignment of the open side edges of the booklet, Figure 2.

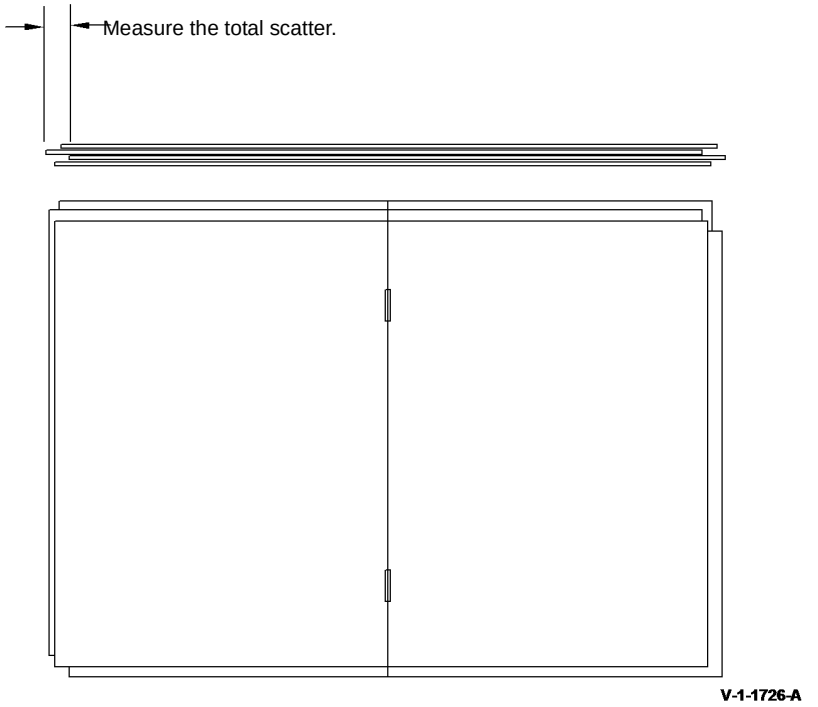


Figure 2 Open side edge alignment

If the open side edge alignment does not conform to the specification in Table 3, perform the RAPs that follow:

- 311-065-00-150, 311-383-00-150, 311-484-00-150, 311-486-00-150 LVF BM Back Stop Failure RAP.
- 311-418-00-150 LVF BM Flapper Failure RAP.

Table 3 Open side edge alignment

	Paper size	4 sheet booklet	15 sheet booklet
95% of booklets	A4/8.5x11 inch	1.5mm	2.0mm
	8.5x14 inch	1.5mm	2.0mm
	A3	2.0mm	2.5mm
	11x17 inch	1.5mm	2.0mm
Worst 5% booklets	A4/8.5x11 inch	2.0mm	3.0mm
	8.5x14 inch	2.0mm	3.0mm
	A3	2.5mm	3.5mm
	11x17 inch	2.0mm	3.0mm

Badly Formed Booklet Staples

If the front booklet staples are not formed correctly, perform ADJ 11.7-150 Booklet Stapler Anvil Position - Front.

If the rear booklet staples are not formed correctly, perform ADJ 11.8-150 Booklet Stapler Anvil Position - Rear.

Booklet Crease Is Off Centre

Open out the booklet at the centre page and press it onto a flat surface. Measure the position of booklet crease, Figure 3.

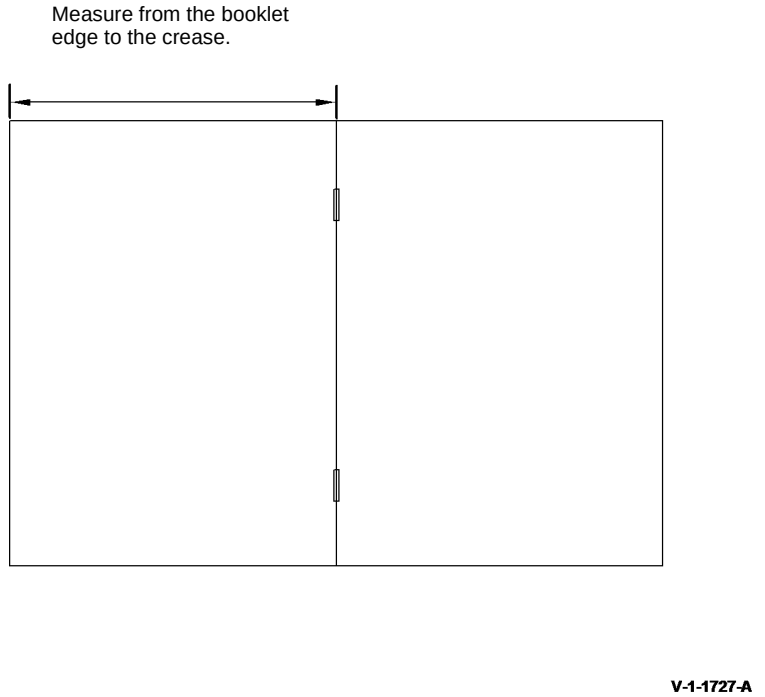


Figure 3 Booklet skew

If the booklet crease position does not conform to the specification in Table 4, perform ADJ 11.5-150 Booklet Crease Position.

Table 4 Crease position and tolerance

Paper size	Edge to crease measurement
A4	148.5 +/- 1.5mm
A3	210 +/- 1.5mm
8.5x11 inch	139.5 +/- 1.5mm
8.5x13 inch	165.1 +/- 1.5mm
8.5x14 inch	178.0 +/- 1.5mm
11x17 inch	216.0 +/- 1.5mm

Skewed Booklet Crease

Open out the booklet at the centre page and press it onto a flat surface. Measure the mis-alignment of the open side edges of the booklet, Figure 4.

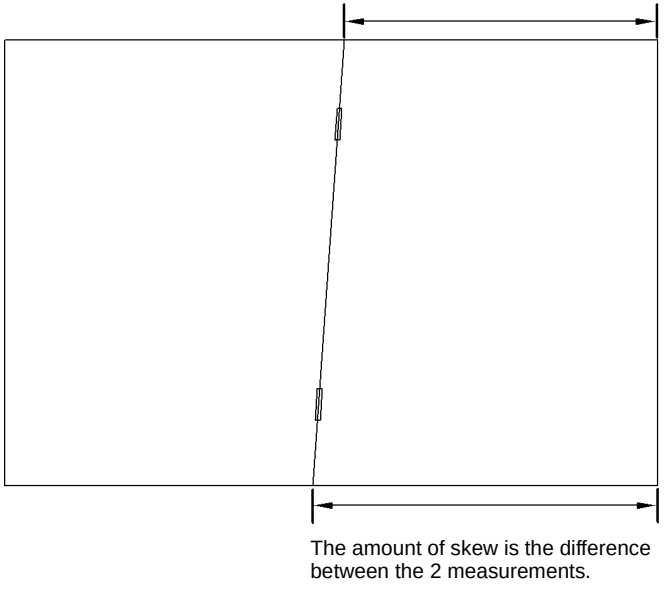


Figure 4 Booklet crease skew

If the booklet crease skew does not conform to the specification in Table 5, perform the RAPs that follow:

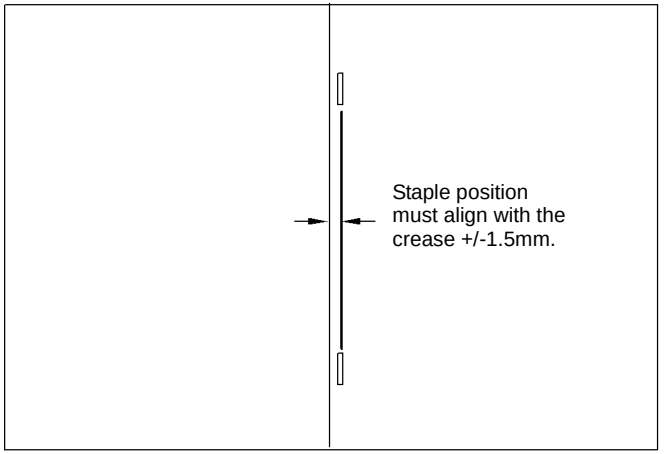
- 311-065-00-150, 311-383-00-150, 311-484-00-150, 311-486-00-150 LVF BM Back Stop Failure RAP.
- 311-418-00-150 LVF BM Flapper Failure RAP.

Table 5 Booklet crease skew

	Paper size	4 sheet booklet	15 sheet booklet
95% of booklets	A4/8.5x11 inch	1.5mm	2.0mm
	8.5x14 inch	1.5mm	2.0mm
	A3	2.0mm	2.5mm
	11x17 inch	1.5mm	2.0mm
Worst 5% booklets	A4/8.5x11 inch	2.0mm	3.0mm
	8.5x14 inch	2.0mm	3.0mm
	A3	2.5mm	3.5mm
	11x17 inch	2.0mm	3.0mm

Booklet Staple Position Is Not On the Crease

Open out the booklet at the centre page and press it down onto a flat surface. Measure the position of the booklet staple from the crease line, Figure 5.



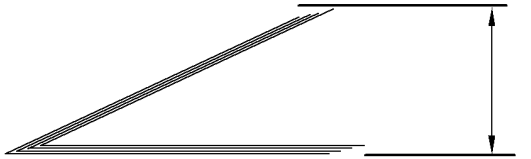
V-1-1729-A

Figure 5 Booklet staple position

If the booklet staple position does not conform to the specification in Figure 5, perform ADJ 11.6-150 Booklet Staple Position.

The Booklet Is Not Sufficiently Creased

Place the folded booklet onto a flat surface. Measure the maximum open dimension of the booklets within 20 seconds of being formed, Figure 6.



Measure from the flat surface to the highest point on the top face of the booklet.

V-1-1730-A

Figure 6 Booklet creasing

If the maximum height of the booklets does not conform to the specification in Table 6, check the parts that follow for damage:

- Crease blade assembly, PL 11.82 Item 5.
- Crease blade drive gear, PL 11.82 Item 7.
- Crease blade gearbox assembly, PL 11.82 Item 11.
- Crease blade cranks, PL 11.82 Item 12.
- Crease blade front blade arm, PL 11.82 Item 8.
- Crease blade rear blade arm, PL 11.82 Item 9.
- Crease blade guides, PL 11.82 Item 9.
- Upper crease roll, PL 11.84 Item 2.
- Lower crease roll, PL 11.84 Item 3.
- Crease roll gearbox assembly, PL 11.86 Item 10.
- Crease roll gear 1, PL 11.86 Item 1.
- Crease roll gear 2, PL 11.86 Item 2.
- Crease roll gear 3, PL 11.86 Item 3.

- Crease roll gear 4, PL 11.86 Item 4.

Table 6 Creasing tolerance

Number of sheets in booklet	Height of booklet at highest point
1-6 sheets of 80gsm (20lb)	25mm
7-10 sheets of 80gsm (20lb)	50mm
11-15 sheets of 80gsm (20lb)	100mm

311-024-00-171, 311-026-00-171 Paddle Roller Position RAP

311-024-00-171 The paddle roller has failed to return to the home position.

311-026-00-171 The paddle roller has failed to move from the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for damage or any obstruction that would prevent paddle movement. If necessary, install new components.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-025 paddle roller motor run, to check the movement of the paddle roller. **The paddle roller turns.**

Y N

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check the paddle roller motor, MOT11-025. Refer to:

- GP 10 How to Check a Motor.
- P/J202, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components ad necessary:

- Paddle module assembly, PL 11.145 Item 2
- HVF control PWB, PL 11.157 Item 2.

Stack the code 011-326. Manually operate the paddle roller home sensor, Q11-326. **The display changes.**

Y N

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check the paddle roller home sensor, Q11-326. Refer to:

- GP 11 How to Check a Sensor.
- P/J201, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Paddle module assembly, PL 11.145 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

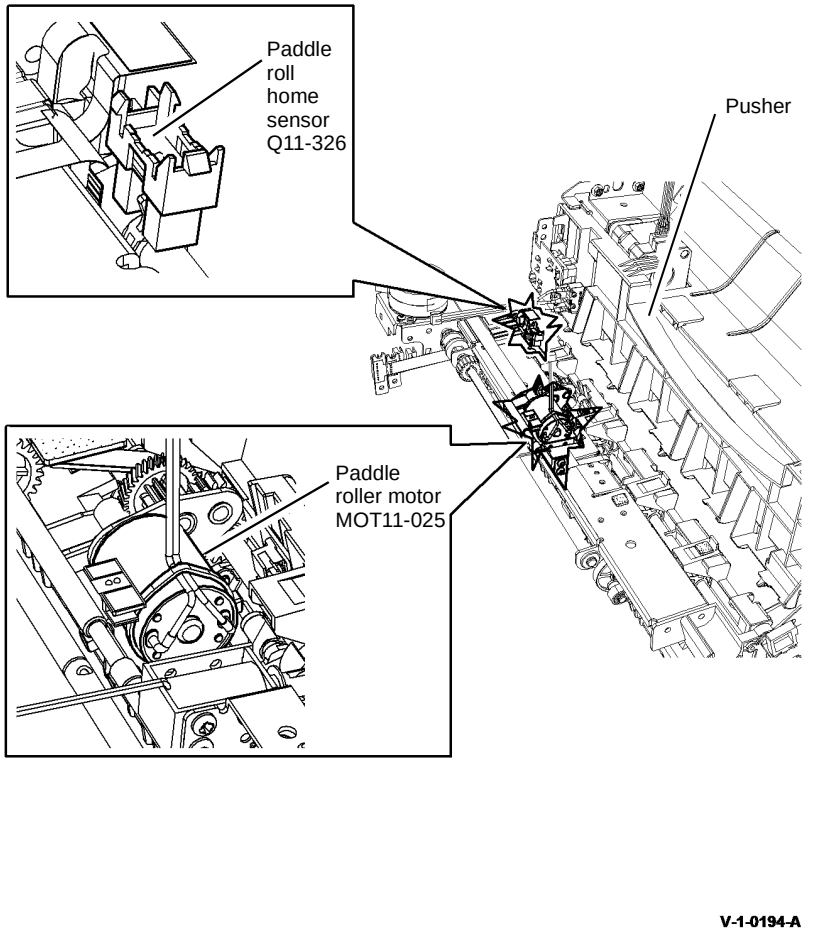


Figure 1 Component location

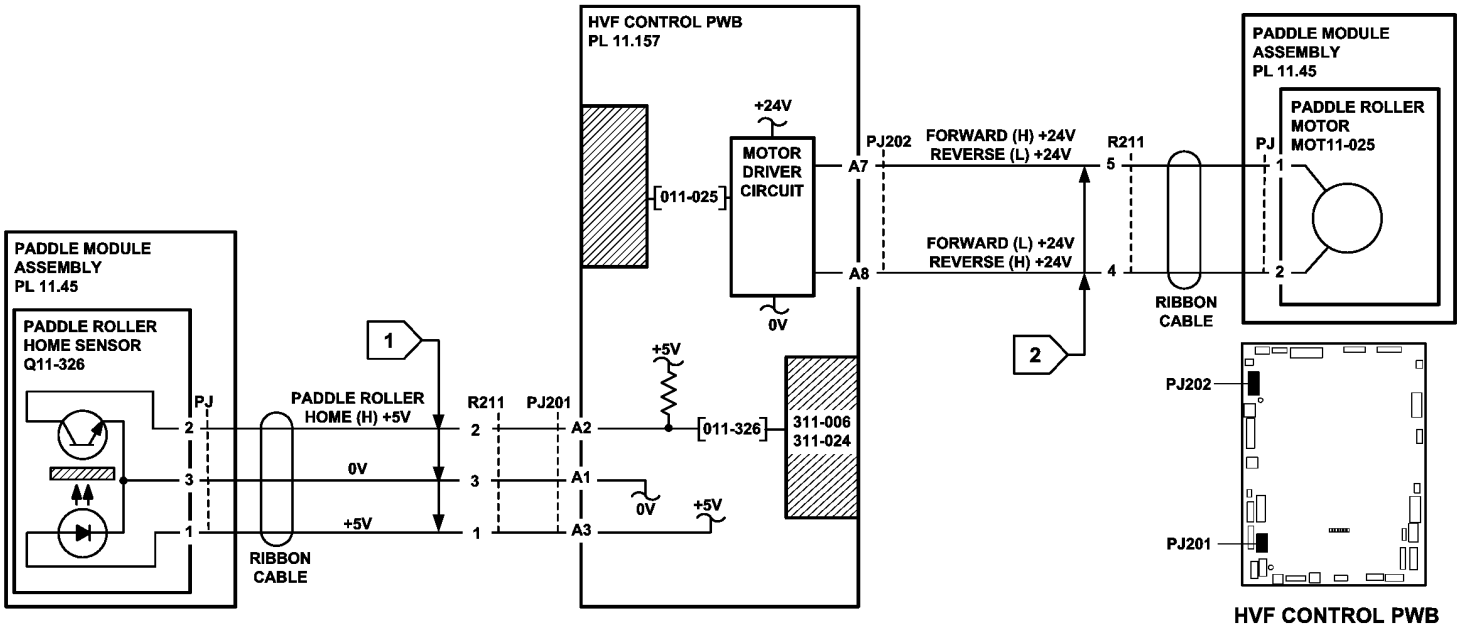


Figure 2 Circuit diagram

311-044-00-171 to 311-047-00-171 Punch Unit Head and Position RAP

311-044-00-171 The punch head has failed to return to the home position.

311-045-00-171 The punch head has failed to move from the home position.

311-046-00-171 The punch unit has failed to return to the home position.

311-047-00-171 The punch unit has failed to move from the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the punch head area for any obstruction or damage that could prevent the free movement of the head or the hole punch unit. If necessary, install new components.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-043 for the punch head motor, MOT11-043. **MOT11-043 runs.**

Y N

Go to Flag 2. Check the wiring from the motor to the PWB. Repair as necessary, REP 1.2. Check the punch head motor, MOT11-043. Refer to:

- GP 10 How to Check a Motor.
- P/J502, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- HVF hole punch carrier assembly, PL 11.153 Item 1
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-350 for the punch head home sensor and stack the code 011-043 for the punch head motor. Observe the condition of the sensor on the UI. **The display changes.**

Y N

Go to Flag 1. Check the wiring from the sensor to the PWB. Repair as necessary, REP 1.2. Check the punch head home sensor, Q11-350. Refer to:

- GP 11 How to Check a Sensor.
- P/J501, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- HVF hole punch carrier assembly, PL 11.153 Item 1
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-045 for the motor to travel in the forward direction, or enter the code 011-046 for the motor to travel in the reverse direction. **MOT11-045 runs.**

Y N

Go to Flag 4. Check the wiring from the motor to the PWB. Repair as necessary, REP 1.2. Check the punch unit motor, MOT11-045. Refer to:

- GP 10 How to Check a Motor.
- P/J502, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- HVF hole punch carrier assembly, PL 11.153 Item 1
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-044 for the punch unit home sensor and stack the code 011-045 or 011-046 to take the punch unit motor into, and out of, the home position. Observe the condition of the sensor on the UI. **The display changes.**

Y N

Go to Flag 3. Check the wiring from the sensor to the PWB. Repair as necessary, REP 1.2. Check the punch unit home sensor, Q11-044. Refer to:

- GP 11 How to Check a Sensor.
- P/J501, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- HVF hole punch carrier assembly, PL 11.153 Item 1
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

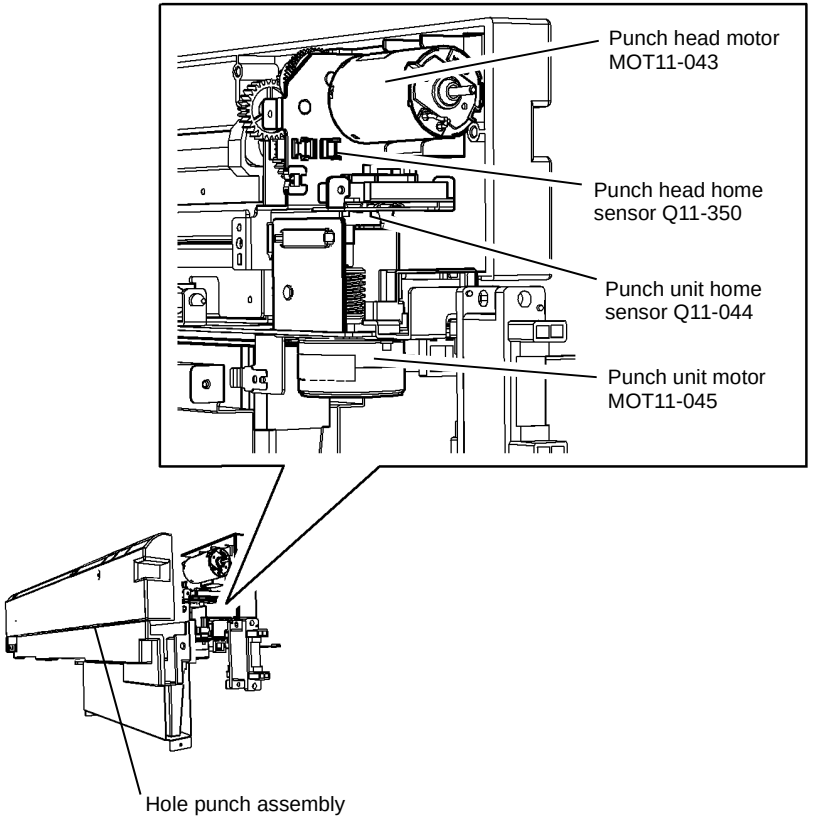


Figure 1 Component location

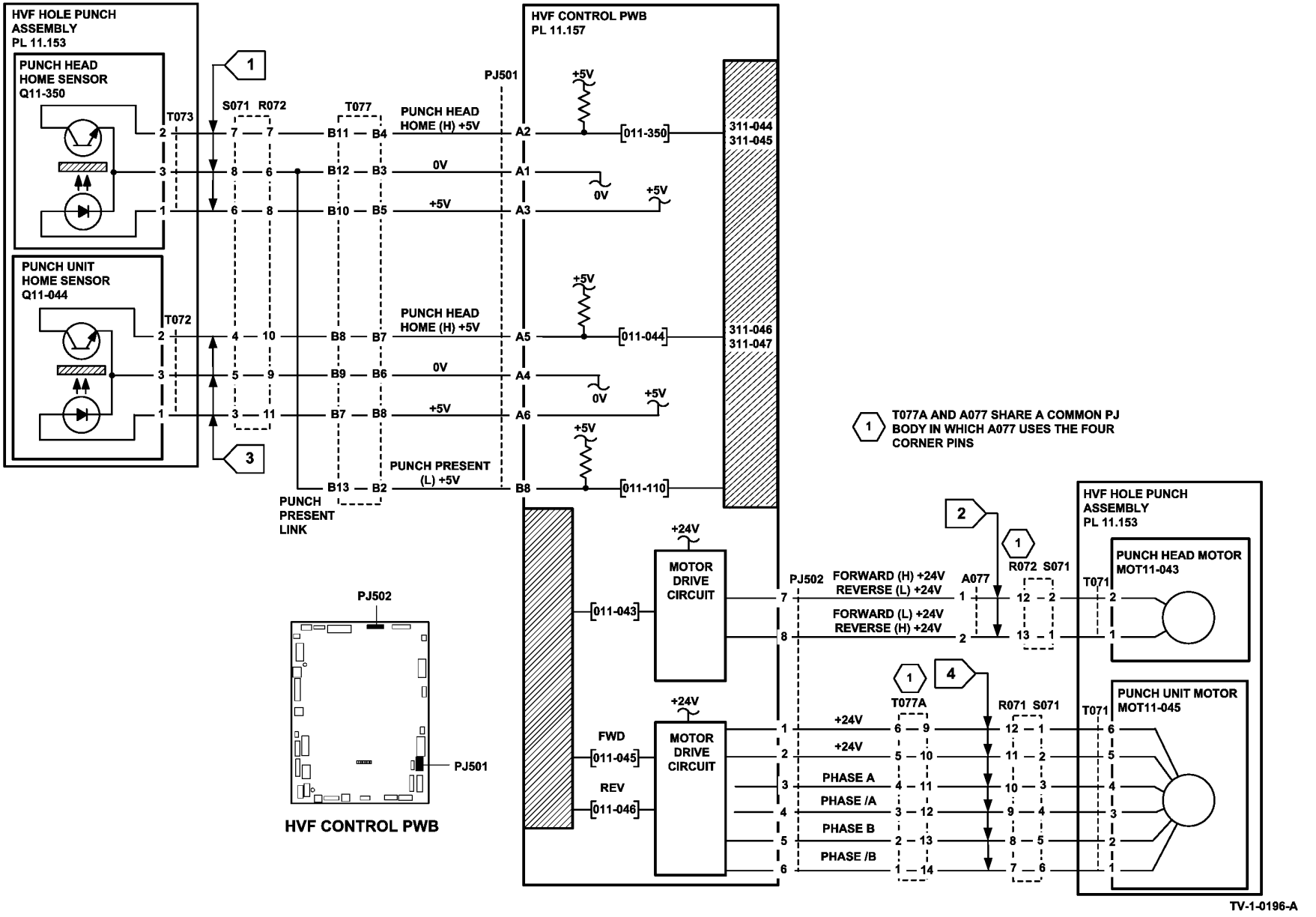


Figure 2 Circuit diagram

311-056-00-171, 311-057-00-171 Inserter Bottom Plate RAP

311-056-00-171 The inserter bottom plate has failed to return to the home position.

311-057-00-171 The inserter bottom plate has failed to lift.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the bottom plate area is clear and that there is no damage or obstructions. Install new components as necessary.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-078 for the inserter motor, MOT11-078. **MOT11-078 runs.**

Y N

Go to Flag 5 and Flag 6. Check the wiring from the motor to the HVF control PWB. Repair as necessary, REP 1.2. Check MOT-078. Refer to:

- GP 10 How to Check a Motor.
- P/J701, HVF Control PWB
- P/J4, P/J12, Inserter PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter motor, PL 11.181 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-156 for the inserter bottom plate sensor, Q11-156. Actuate the sensor. **The display changes.**

Y N

Go to Flag 1 and Flag 2. Check the wiring from the sensor to the HVF control PWB. Repair as necessary, REP 1.2. Check Q11-156. Refer to:

- GP 11 How to Check a Sensor.
- P/J701, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.
- P/J3, P/J4, Inserter PWB

Install new components as necessary:

- Bottom plate sensor, PL 11.175 Item 16.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 3 and Flag 4. Check the wiring from the IDG pickup sensor to the inserter PWB. Check the IDG pickup sensor. Refer to:

- GP 11 How to Check a Sensor.
- P/J701, HVF Control PWB
- P/J7, P/J4, Inserter PWB

Install new components as necessary:

- IDG pickup sensor, PL 11.179 Item 10.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

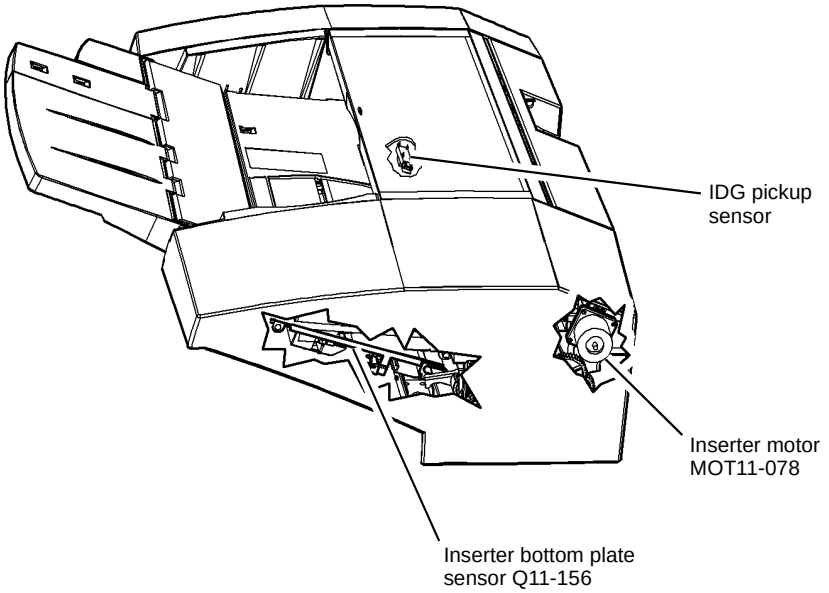


Figure 1 Component location

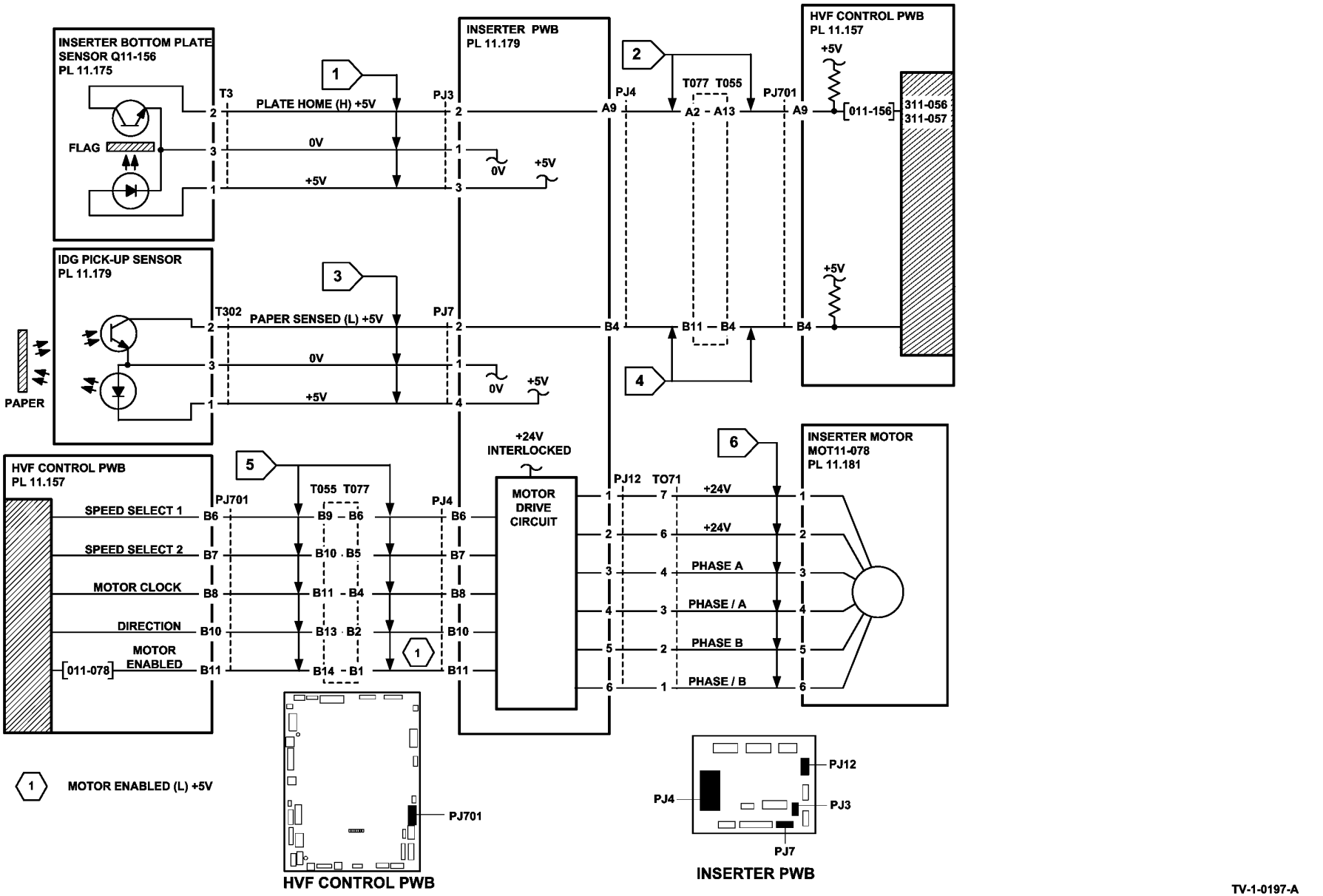


Figure 2 Circuit diagram

311-061-00-171, 311-416-00-171 HVF BM Creasing RAP

311-061-00-171 The crease blade has failed to clear the crease blade home sensor.

311-416-00-171 The crease blade has failed to return to the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker when the machine is powered on. The crease blade mechanism activates quickly and with great force.

- Turn the crease blade knob to ensure that the crease blade mechanism is free to move, Figure 1. If necessary, clear any paper jam in the area of the blade.
- Ensure that the crease roll is level front to back and is installed correctly, refer to REP 11.59-171.
- Check the following parts for damage:
  - Crease blade assembly, PL 11.165 Item 13.
  - Drive gear, PL 11.165 Item 6.
  - Connecting rods, PL 11.165 Item 9.
  - Crank, PL 11.165 Item 8.

Procedure

Enter dC330 code 011-416. Actuate the BM crease blade home sensor, Q11-416, Figure 1, by rotating the crease blade knob, so that the actuator moves into and out of the home sensor. **The display changes.**

Y N

Go to Flag 1. Check Q11-416.

Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- Crease blade home sensor, PL 11.165 Item 1.

Enter dC330 code 011-418. Actuate the BM crease blade motor encoder sensor, Q11-418, by slowly rotating the crease blade knob. **The display changes.**

Y N

Go to Flag 2. Check Q11-418.

A

Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM crease blade motor encoder sensor, PL 11.165 Item 1.

Enter dC330 code 011-061 to run the BM crease blade motor, MOT11-061, Figure 1. **MOT11-061 runs.**

Y N

Go to Flag 3. Check MOT11-061.

Refer to:

- GP 10 How to Check a Motor.
- P/J557, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM crease blade motor, PL 11.165 Item 3.
- BM PWB, PL 11.166 Item 10.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

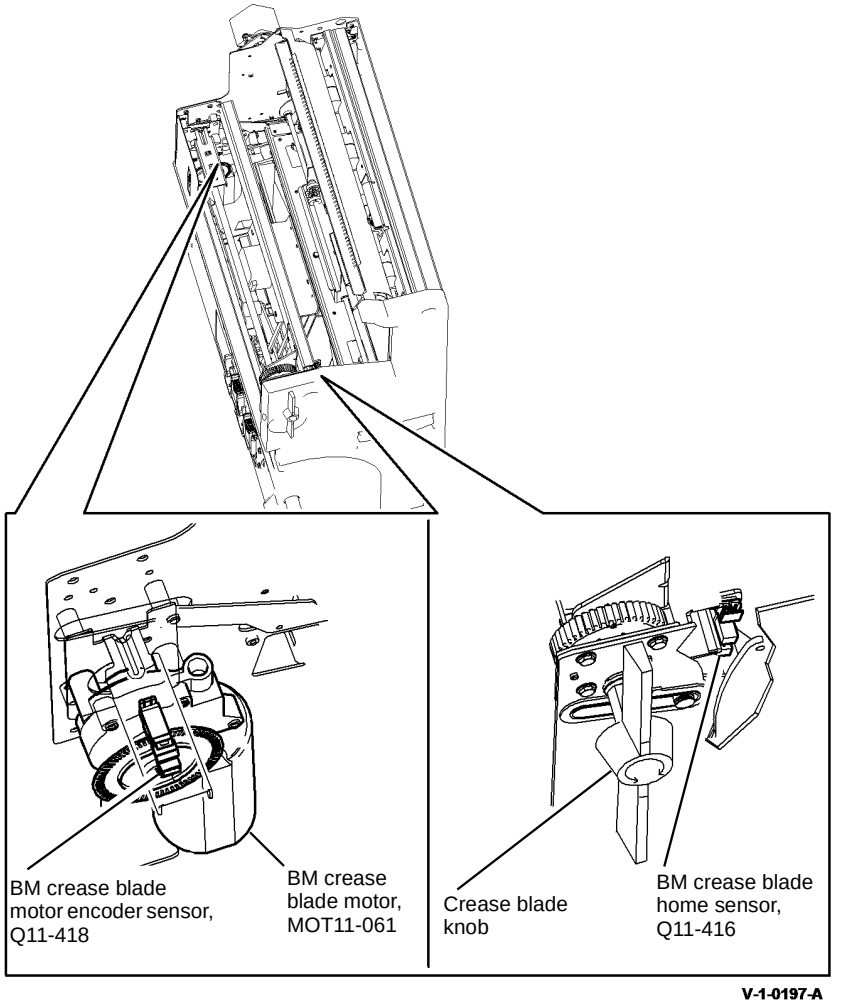
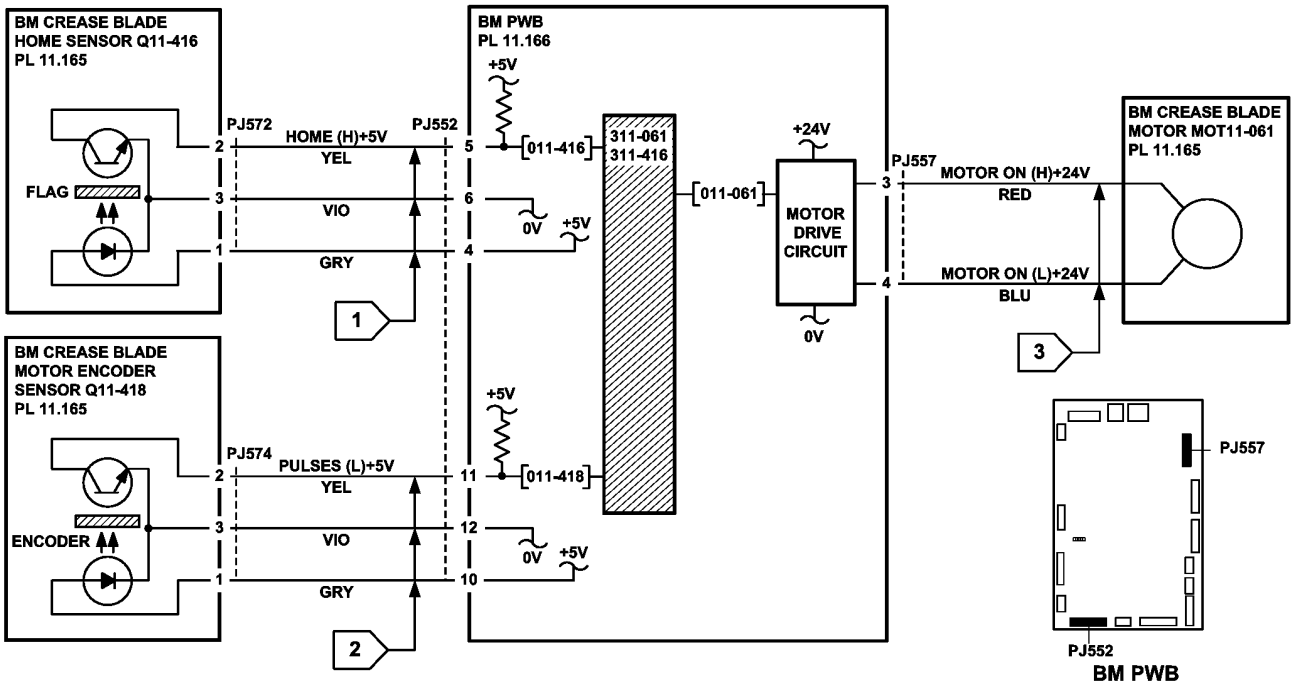


Figure 1 Component location



TV-1-0198-A

Figure 2 Circuit diagram

311-062-00-171 HVF BM Crease Roll Failure RAP

311-062-00-171 The HVF BM crease roll motor has failed to run.

Initial Actions

Clear any paper jam in the area of the crease rolls.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Keep away from the crease blade mechanism when working in close proximity to the booklet maker when the machine is powered on. The crease blade mechanism activates quickly and with great force.

Release the crease roll nip pressure by moving the crease roll handle, PL 11.161 Item 5, fully counter clockwise. Remove the BM right hand cover, PL 11.168 Item 15, to access the crease rolls. Enter dC330 code 011-419. Actuate the BM crease roll motor encoder sensor, Q11-419 by rotating the crease rolls slowly by hand. **The display changes.**

Y N

Go to Flag 1. Check Q11-419, Figure 1.
Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM crease roll motor encoder sensor, PL 11.166 Item 9.

Enter dC330 code 011-062 to run the BM crease roll motor, MOT11-062, Figure 1. **MOT11-062 runs.**

Y N

Go to Flag 2. Check MOT11-062.
Refer to:

- GP 10 How to Check a Motor.
- P/J557, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM crease roll motor, PL 11.166 Item 12.
- BM PWB, PL 11.166 Item 10.

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The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- BM crease roll motor encoder sensor, PL 11.166 Item 9.
- BM crease roll motor, PL 11.166 Item 12.
- BM PWB, PL 11.166 Item 10

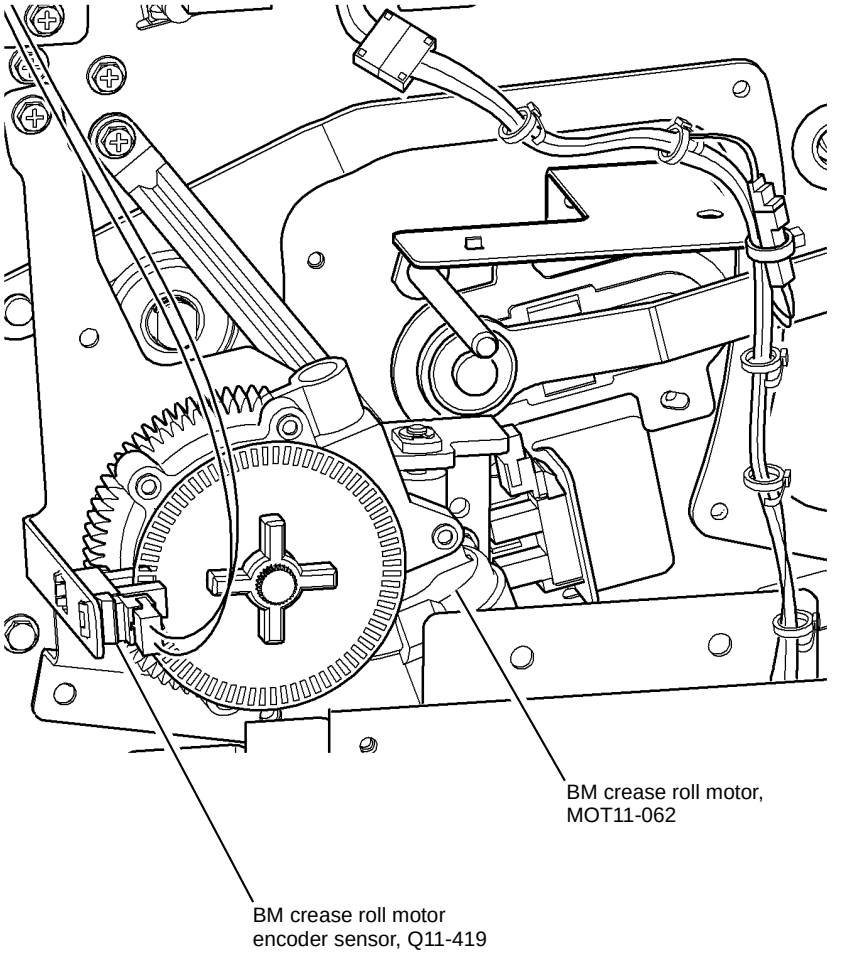
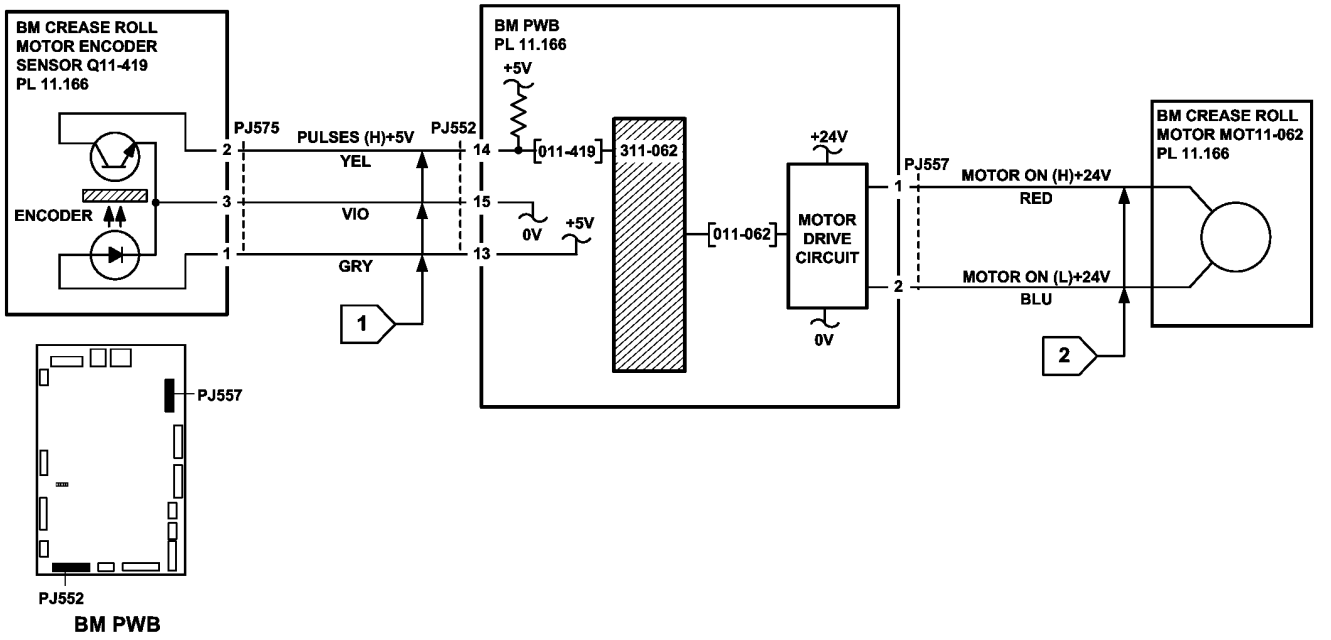


Figure 1 Component location



TV-1-0199-A

Figure 2 Circuit diagram

311-063-00-171, 311-411-00-171 HVF BM Staple Unit 1 Failure RAP

311-063-00-171 The HVF BM staple head 1 has failed to leave the home position.

311-411-00-171 The HVF BM staple head1 has failed to return to the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that there is no damage or obstruction that would prevent the stapling unit from cycling.
- Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 26.10 Item 11.
- Check for jammed staples in the stapler head.
- Ensure that the customer job does not exceed the capacity of the booklet maker. Refer to 311D-171 Booklet Quality RAP for booklet maker quality specifications.

Procedure

Enter dC330 code 011-421 to check the BM staple head carrier closed sensor, Q11-421, Figure 1. Open and close the staple head carrier. **The display changes.**

Y N

Go to Flag 1. Check Q11-421.

Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM staple head carrier closed sensor, PL 11.168 Item 18.
- BM PWB, PL 11.166 Item 10.

Remove the HVF front door and door support, refer to REP 11.1-171 HVF Covers. Pull out the BM module. Remove the staple head 1 cover, PL 11.168 Item 14. Enter dC330 code 011-411 to check the BM SH1 home switch S11-411. Manually rotate the staple head to actuate the BM SH1 home switch. **The display changes.**

Y N

Go to Flag 2. Check S11-411.

Refer to:

- GP 13, How to Check a Switch.
- P/J551, BM PWB.
- 311A-171 HVF Power Distribution RAP.

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Install new components as necessary:

- BM staple head 1, PL 11.168 Item 7.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-063 to run the BM SH1 motor, MOT11-063. **The staple head cycled.**

Y N

Go to Flag 3. Check the wiring and connectors between P/J560 and P/J585. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

Install a new BM staple head 1, PL 11.168 Item 7.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- BM staple head 1, PL 11.168 Item 7.
- BM PWB, PL 11.166 Item 10.

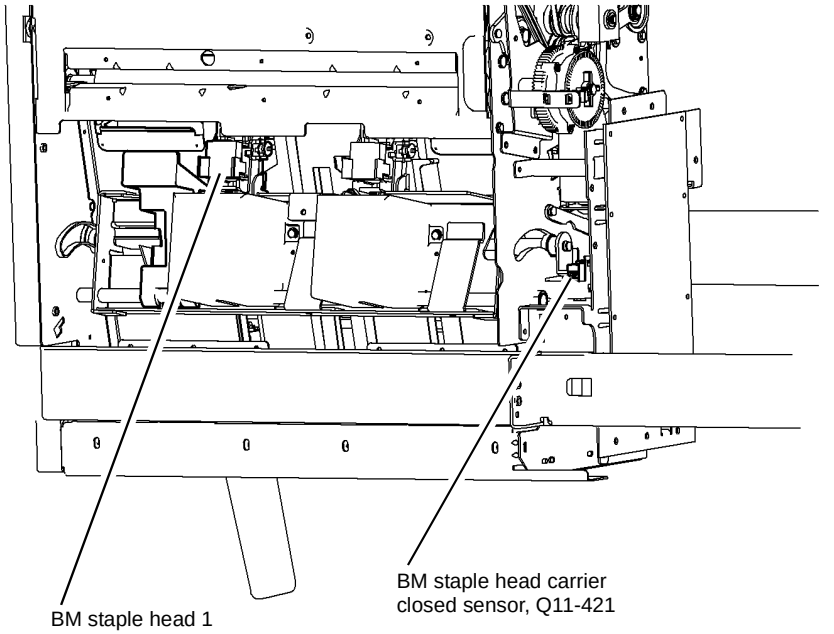
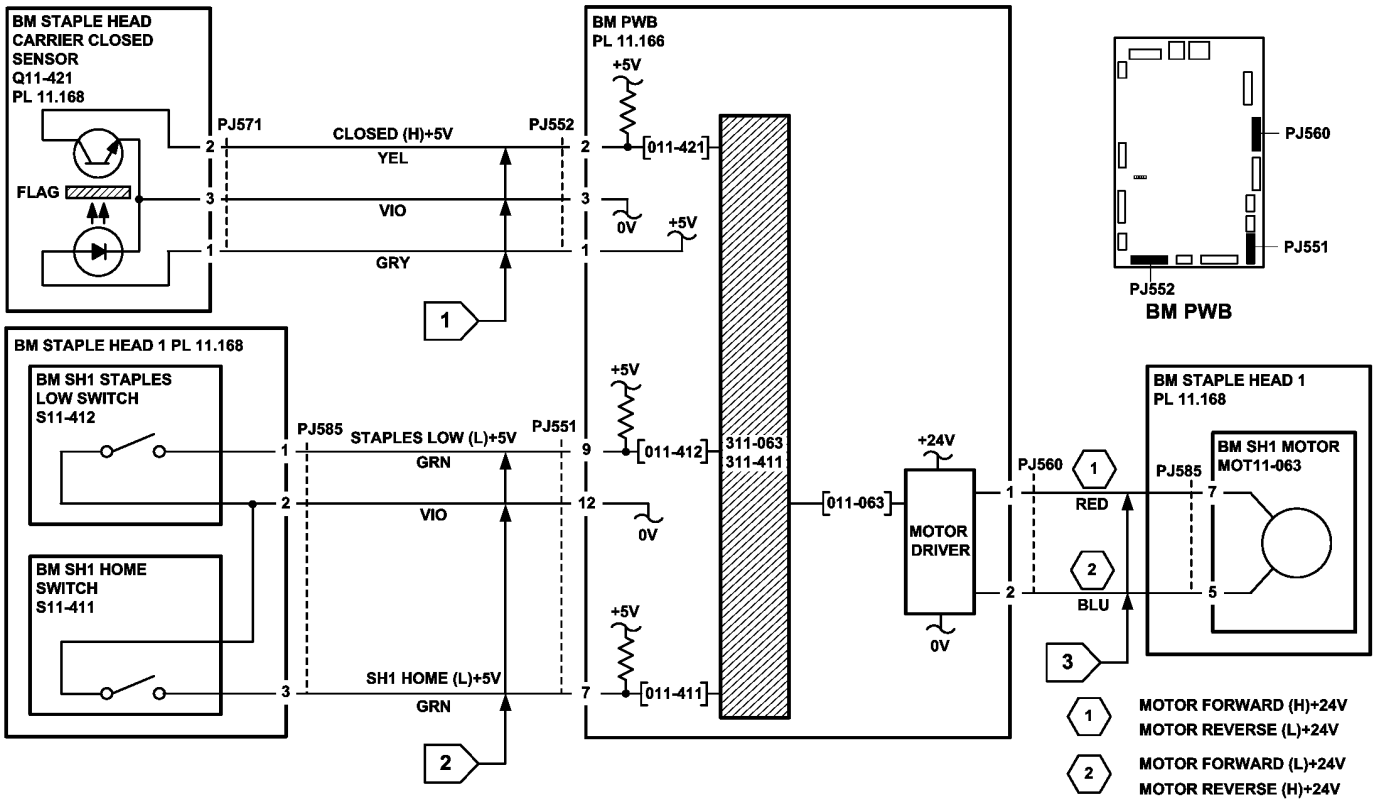


Figure 1 Component location



TV-1-0200-A

Figure 2 Circuit diagram

311-065-00-171, 311-383-00-171 HVF BM Backstop Failure RAP

311-065-00-171 The HVF BM staple unit 1 has failed to leave the home position.

311-383-00-171 The HVF BM staple unit 1 has failed to return to the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction that could prevent the backstop mechanism from moving.
- Check the following items:
  - Damaged BM back stop drive belt, PL 11.163 Item 7.
  - Damaged BM back stop belt, PL 11.164 Item 15.
  - Damaged pulley, PL 11.163 Item 5.
  - Damaged pulley on the BM back stop drive shaft, PL 11.164 Item 14.
  - Damaged pulley on the BM back stop idler shaft, PL 11.163 Item 13.
  - The BM back stop drive belt is tensioned correctly. Refer to REP 11.20-171.
  - The BM back stop belt is tensioned correctly. Refer to REP 11.26-171.

Procedure

Enter dC330 code 011-383. Actuate the BM backstop guide home sensor, Q11-383, Figure 1.
The display changes.

Y **N**

Go to Flag 1. Check Q11-383.
Refer to:
- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM backstop guide home sensor, PL 11.163 Item 18.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-065 to run the BM backstop motor, MOT11-065. **MOT11-065 runs.**

Y **N**

Go to Flag 2 and Flag 3. Check MOT11-065.
Refer to:
- GP 10 How to Check a Motor.
- P/J554, BM PWB.
- 311A-171 HVF Power Distribution RAP.

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Install new components as necessary:
- BM backstop motor, PL 11.163 Item 4.
- BM PWB, PL 11.166 Item 10.

Go to Flag 4. Check the BM stack hold solenoid SOL 11-076.
Refer to:
- GP 12, How to Check a Solenoid or Clutch.
- P/J555, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- Back stop assembly, PL 11.164 Item 17.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:
- BM backstop guide home sensor, PL 11.163 Item 18.
- BM backstop motor, PL 11.163 Item 4.
- BM PWB, PL 11.166 Item 10.

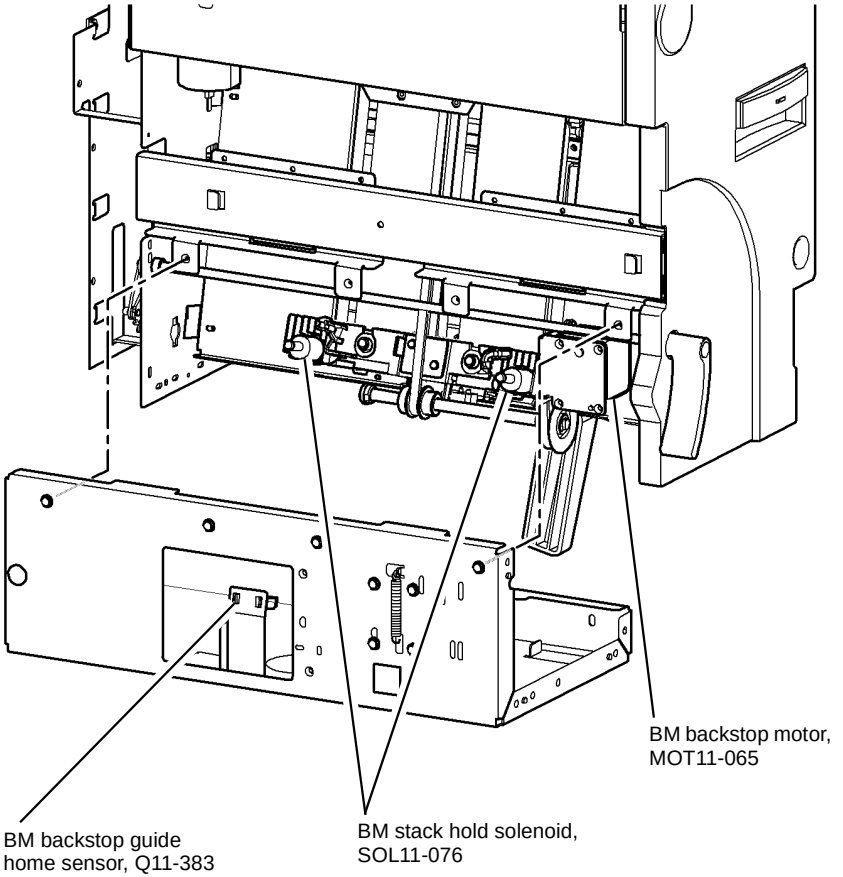
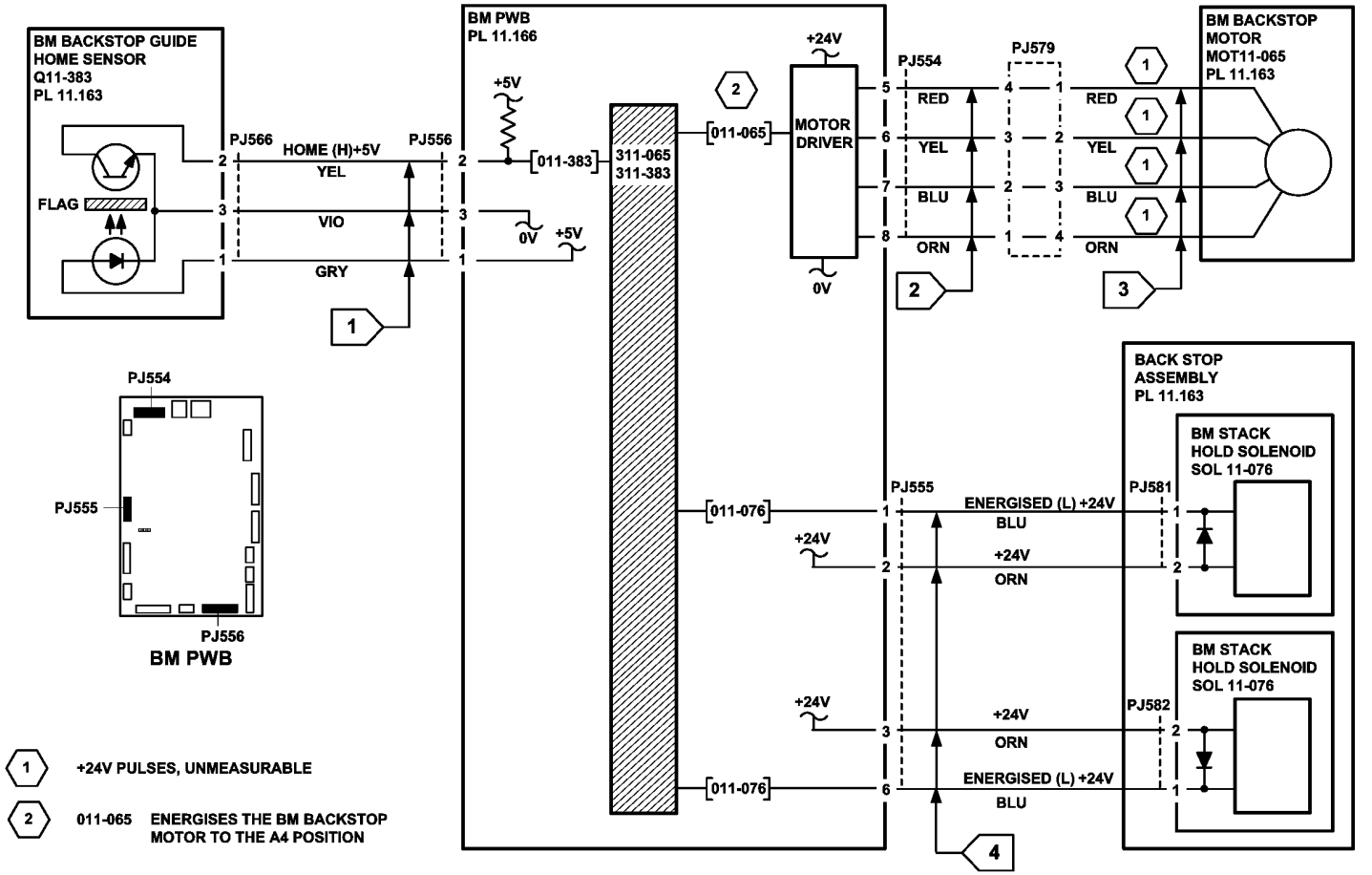


Figure 1 Component location



TV-1-0201-A

Figure 2 Circuit diagram

311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP

311-066-00-171 The HVF tamper has failed to clear the home sensor.

311-384-00-171 The HVF tamper is not at the home sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction that could prevent the tamper mechanism from moving.
- Check for damaged tamper components, PL 11.162.

Procedure

Enter dC330 code 011-384 Actuate the BM tamper 1 home sensor, Q11-384, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check Q11-384.
Refer to:
- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- BM tamper 1 home sensor, PL 11.162 Item 1.

Enter dC330 code 011-066, to run the BM tamper 1 motor, MOT11-066. **MOT11-066 runs.**

Y N

Go to Flag 2 and Flag 3. Check MOT11-066.
Refer to:
- GP 10 How to Check a Motor.
- P/J554, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- BM tamper 1 motor, PL 11.162 Item 3.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- BM tamper 1 home sensor, PL 11.162 Item 1.
- BM tamper 1 motor, PL 11.162 Item 3.
- BM PWB, PL 11.166 Item 10.

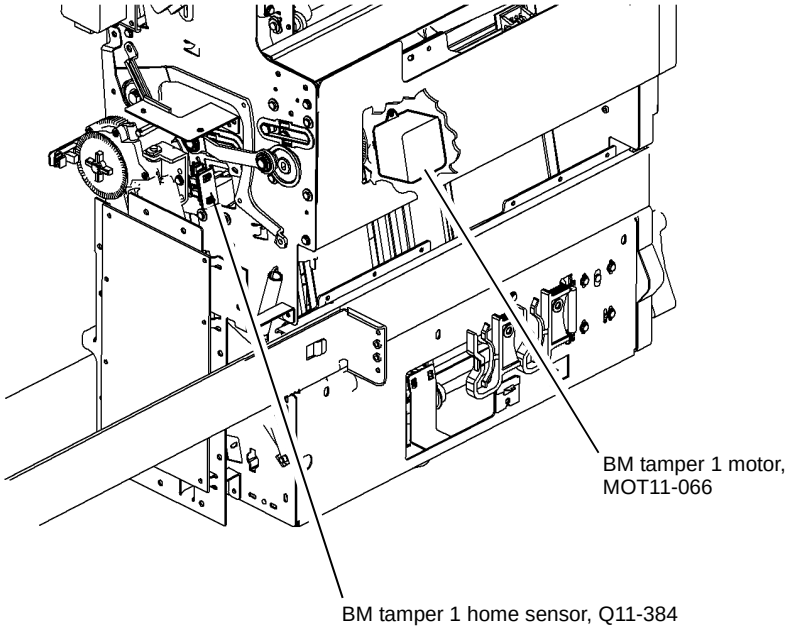
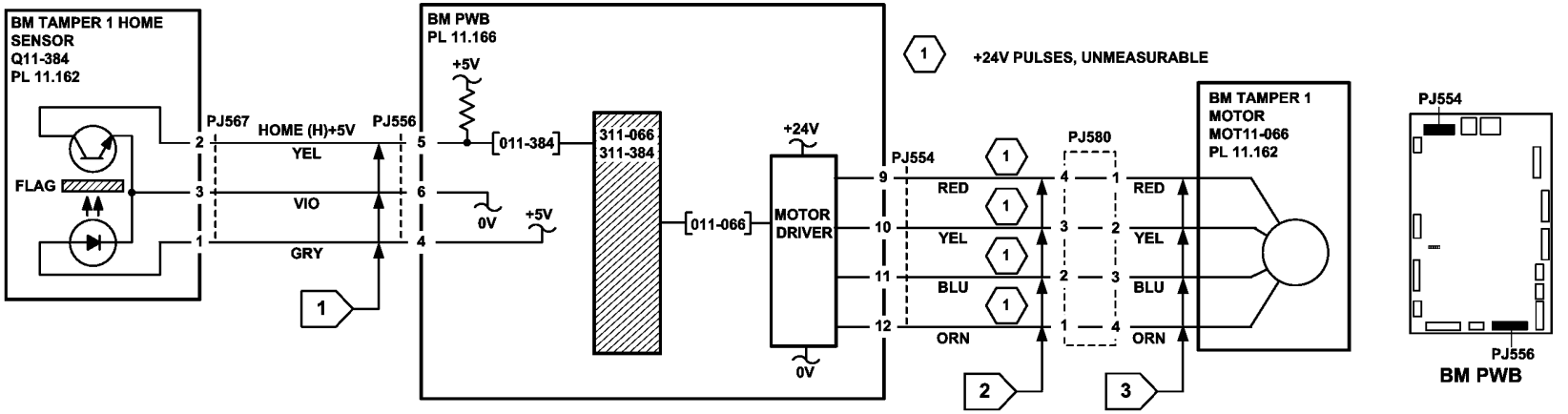


Figure 1 Component location



TV-1-0202-A

Figure 2 Circuit diagram

311-083-00-171, 311-440-00-171 to 311-443-00-171 Paper Pusher RAP

311-083-00-171 The paper pusher motor has stalled.

311-440-00-171 The paper pusher has failed to return to the home, (upper) position.

311-441-00-171 The paper pusher has failed to move from the home, (upper) position.

311-442-00-171 The paper pusher has failed to return to the away, (lower) position.

311-443-00-171 The paper pusher has failed to move from the away, (lower) position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction that could prevent the paper pusher from moving.
- Check for damaged paper pusher components.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-083 to run the paper pusher motor, MOT11-083. **MOT11-083 runs.**

Y **N**

Go to Flag 2. Check MOT11-083.

Refer to:

- GP 10 How to Check a Motor.
- P/J202, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Paper pusher motor, PL 11.145 Item 13.
- HVF control PWB, PL 11.157 Item 2

Go to Flag 4. Check the stapler gate safety switch, S11-365.

Refer to:

- GP 13 How to check a switch
- P/J304, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

S11-365 is good.

Y **N**

Install new components as necessary:

- Sensor assembly, PL 11.145 Item 22.
- HVF control PWB PL 11.157 Item 2.

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Enter dC330 code 011-171. Manually operate the paper pusher upper sensor, Q11-171, **The display changes.**

Y **N**

Go to Flag 1. Check Q11-171.

Refer to:

- GP 11 How to Check a Sensor.
- P/J201, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Paper pusher upper sensor, PL 11.145 Item 16.
- HVF control PWB PL 11.157 Item 2

Enter dC330 code 011-173. Manually actuate the paper pusher lower sensor, Q11-173. **The display changes.**

Y **N**

Go to Flag 3. Check Q11-173.

Refer to:

- GP 11 How to Check a Sensor.
- P/J201, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Paper pusher lower sensor, PL 11.145 Item 16.
- HVF control PWB PL 11.157 Item 2.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- Paper pusher upper sensor, PL 11.145 Item 22.
- Paper pusher lower sensor, PL 11.145 Item 22.
- Paper pusher motor, PL 11.145 Item 13.
- HVF control PWB, PL 11.157 Item 2.
- Stapler gate safety switch, PL 11.145 Item 17.

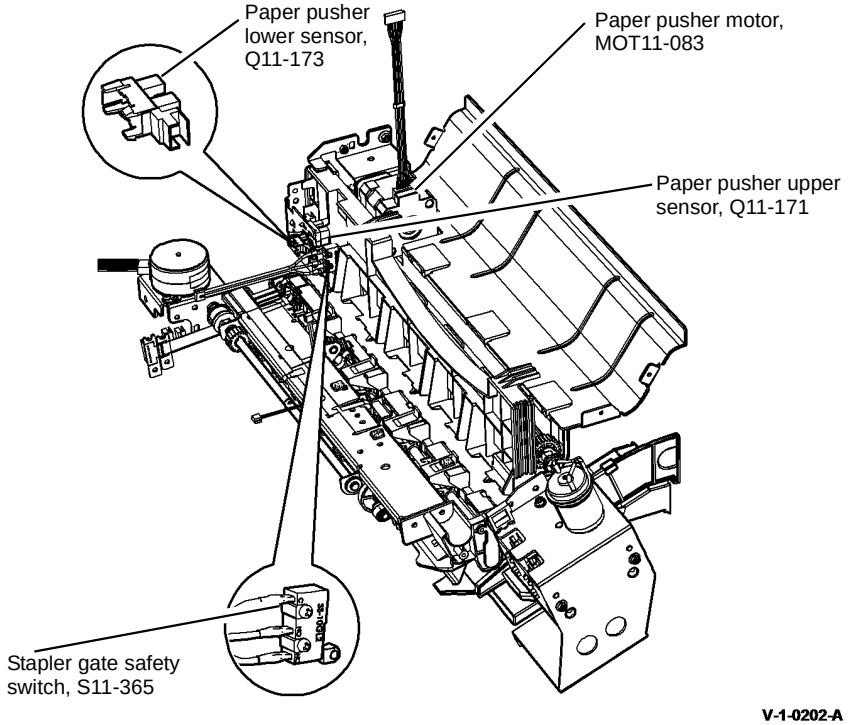
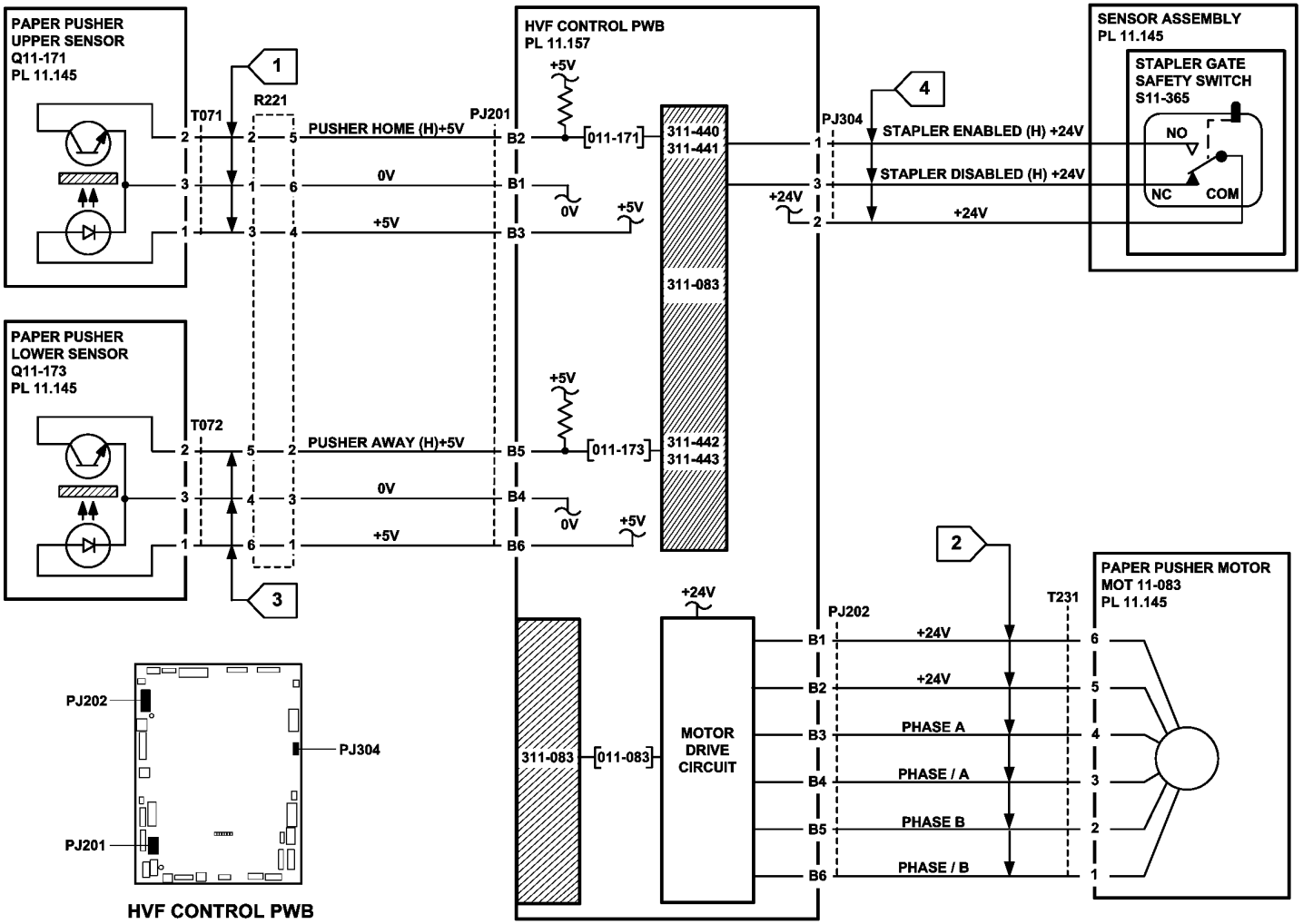


Figure 1 Component location



TV-1-0203-A

Figure 2 Circuit diagram

311-100-00-171, 311-101-00-171 HVF Entry Sensor RAP

311-100-00-171 The paper leading edge is late arriving at the entry sensor.

311-101-00-171 The paper trailing edge is late leaving the entry sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the entrance guide.
- Check the entrance guide for damage.
- Check if the HVF module has had the W/TAG V-006 modifications installed. If necessary perform ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006).

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-100. Manually operate the entry sensor, Q11-100. **The display changes.**

Y N

Go to Flag 1. Check Q11-100.

Refer to:

- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Entry sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-000 to run the Transport motor 1, MOT11-000. **MOT11-000 runs.**

Y N

Go to Flag 2. Check MOT11-000.

Refer to:

- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Transport motor 1, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 7.

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The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- Entry sensor, PL 11.156 Item 2.
- Transport motor 1, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.
- Check if the HVF module has the W/TAG V-006 modifications installed. If the modifications have not been installed perform ADJ 11.13-171 HVF Performance Improvements W/TAG V-006.

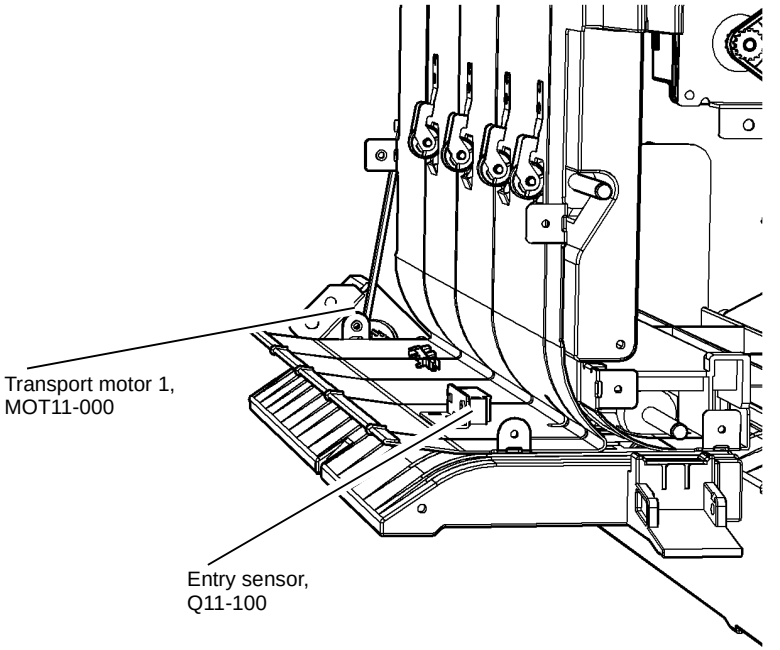
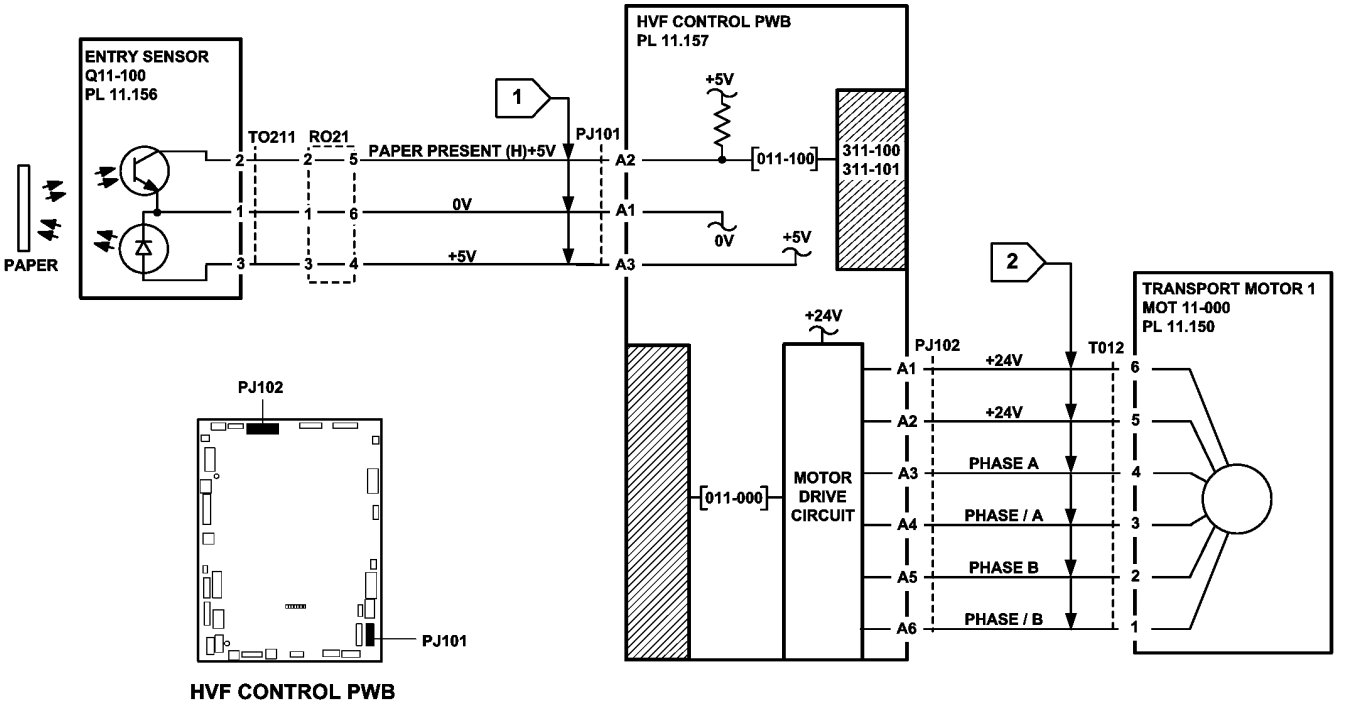


Figure 1 Component location



TV-1-0204-A

Figure 2 Circuit diagram

311-130-00-171, 311-132-00-171 HVF Top Exit Sensor RAP

311-130-00-171 The paper leading edge is late arriving at the top exit sensor.

311-132-00-171 The paper trailing edge is late leaving the top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the paper guide.
- Check the paper guide for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-130. Manually operate the top exit sensor, Q11-130. **The display changes.**

Y N

Go to Flag 1. Check Q11-130.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Top exit sensor, PL 11.156 Item 3.
- HVF control PWB, PL 11.157 Item 2

Enter dC330 code 011-002. Energize the exit diverter solenoid, SOL 11-002. **SOL11-002 energizes.**

Y N

Go to Flag 2. Check SOL 11-002.
Refer to:
- GP 12, How to Check a Solenoid or Clutch.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- Exit diverter solenoid, PL 11.150 Item 4.
- HVF control PWB, PL 11.157 Item 2

Enter dC330 code 011-001 to run the transport motor 2, MOT11-001. **MOT11-001 runs.**

Y N

Go to Flag 3. Check MOT11-001.
Refer to:
- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB

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- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Transport motor 2, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 7.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:
- Top exit sensor, PL 11.156 Item 3.
- Exit diverter solenoid, PL 11.150 Item 4.
- Diverter gate, PL 11.153 Item 9.
- Transport motor 2, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2.

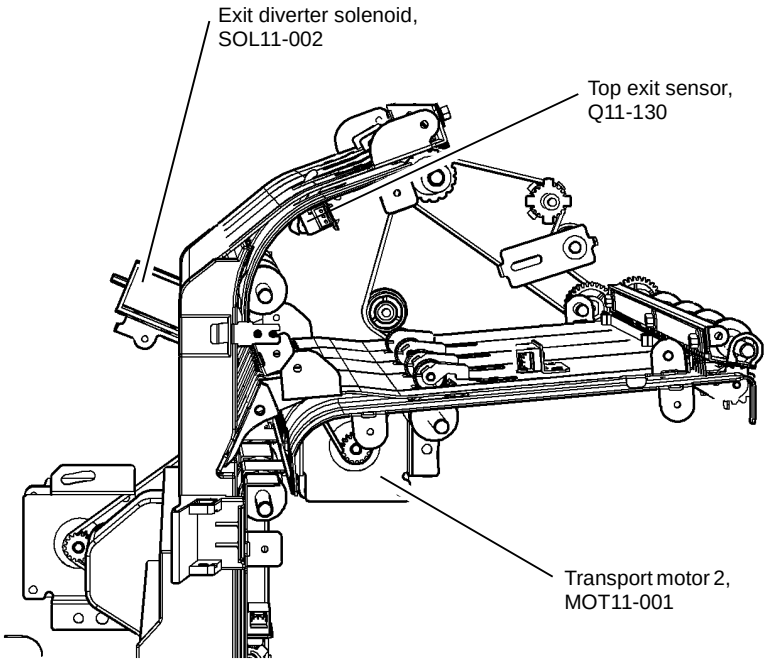
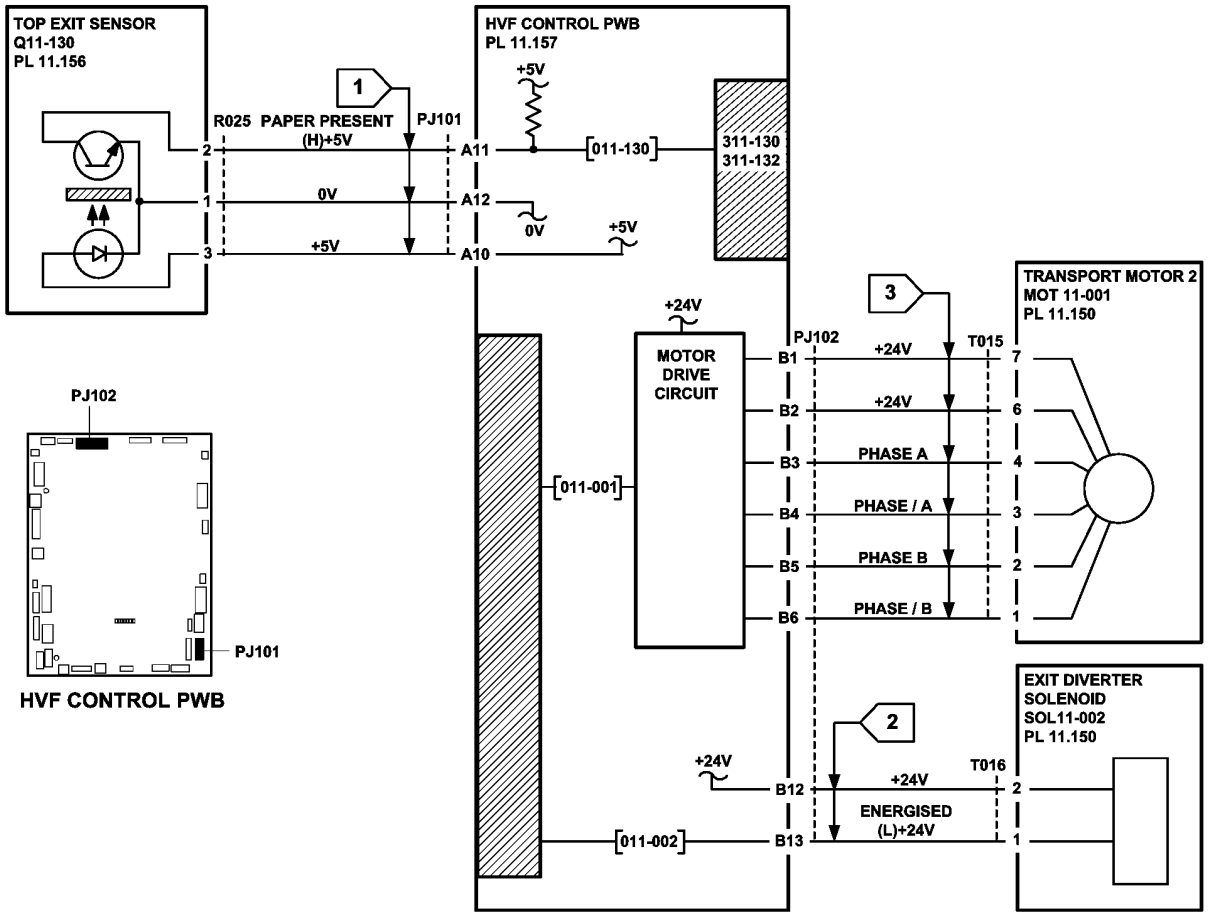


Figure 1 Component location



TV-1-0205-A

Figure 2 Circuit diagram

311-140-00-171, 311-142-00-171 HVF 2nd to Top Exit Sensor RAP

311-140-00-171 The paper leading edge is late arriving at the 2nd to top exit sensor.

311-142-00-171 The paper trailing edge is late leaving the 2nd to top exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the paper guide.
- Check the paper guide for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-140. Manually activate the 2nd to top exit sensor, Q11-140. **The display changes.**

Y N

Go to Flag 1. Check Q11-140.

Refer to:

- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- 2nd to top exit sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2

Enter dC330 code 011-002. Energize the exit diverter solenoid SOL11-002. **SOL11-002 energizes.**

Y N

Go to Flag 2. Check SOL11-002.

Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Exit diverter solenoid, PL 11.150 Item 4.
- HVF control PWB, PL 11.157 Item 2

Enter dC330 code 011-001 to run the transport motor 2, MOT11-001. **MOT11-001 runs.**

Y N

Go to Flag 3. Check MOT11-001.

Refer to:

- GP 10 How to Check a Motor.

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- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Transport motor 2, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 10.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- 2nd to top exit sensor, PL 11.156 Item 2.
- Exit diverter solenoid, PL 11.150 Item 4.
- Diverter gate, PL 11.153 Item 9.
- Transport motor 2, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2.
- Check if the HVF module has the W/TAG V-006 modifications installed. If the modifications have not been installed perform ADJ 11.13-171 HVF Performance Improvements W/ TAG V-006.

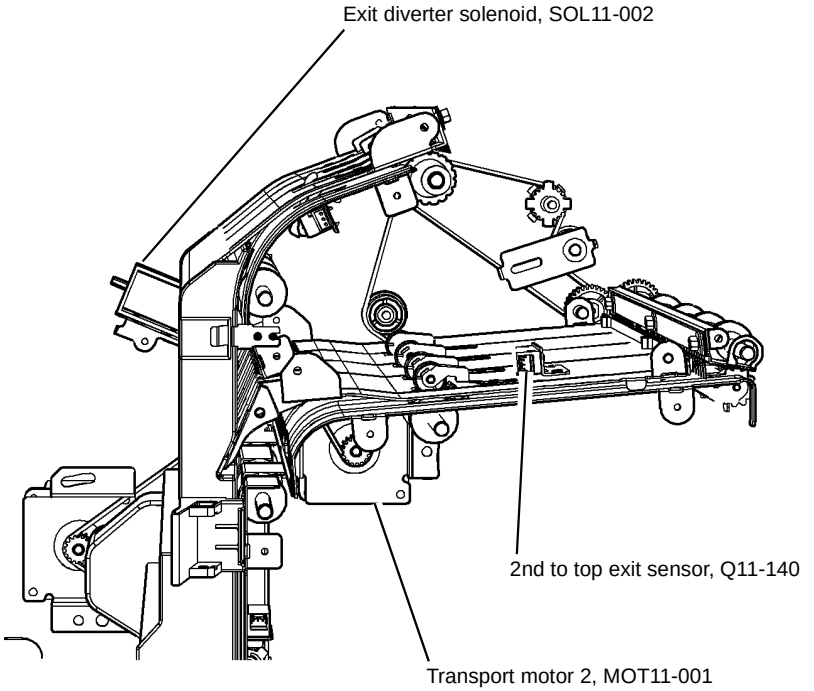
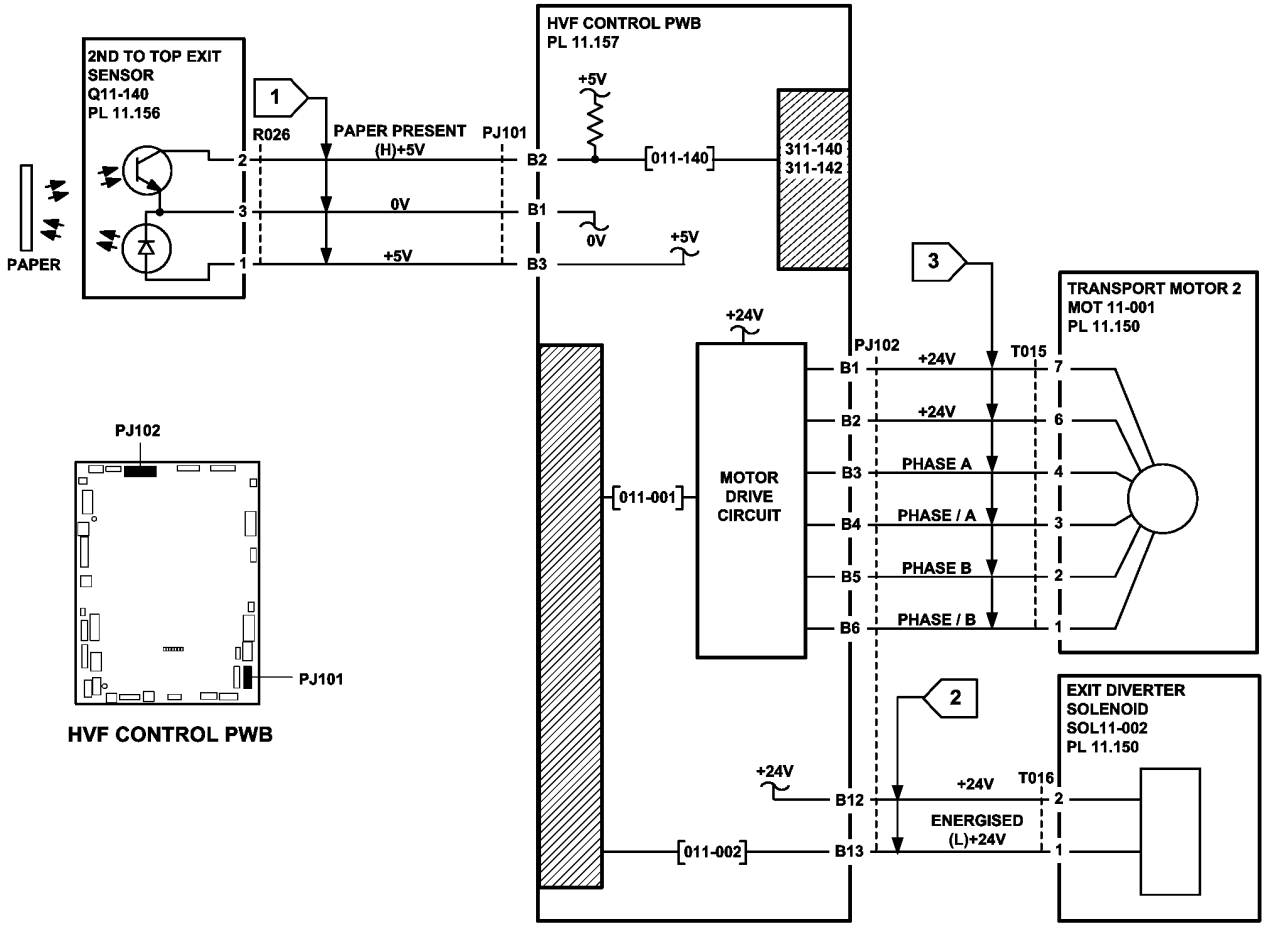


Figure 1 Component location



TV-1-0206-A

Figure 2 Circuit diagram

311-157-00-171, 311-161-00-171 HVF Buffer Position Sensor RAP

311-157-00-171 The paper leading edge is late arriving at the buffer position sensor.

311-161-00-171 The paper trailing edge is late leaving the buffer position sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in inserter transport.
- Check the paper guide for damage.
- Check the paper path of the hole punch assembly for obstructions
- Check if the HVF module has had the W/TAG V-006 modifications installed. If necessary perform ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006).

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-157. Manually activate the buffer position sensor, Q11-157. **The display changes.**

Y N

Go to Flag 1. Check Q11-157.

Refer to:

- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Buffer position sensor, PL 11.156 Item 2.
- HVF control PWB PL 11.157 Item 2.

Enter dC330 code 011-000 to run the Transport motor 1, MOT11-000. **MOT11-000 runs.**

Y N

Go to Flag 2. Check MOT11-000.

Refer to:

- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Transport motor 1, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 7.

Remove the hole punch unit. Check the mechanical operation of the hole punch unit. **The hole punch unit rotates unimpeded.**

Y N

Install a new hole punch unit, PL 11.153 Item 19.

Check the punch head motor, MOT11-043 and the punch head home sensor, Q11-350, refer to RAP 311-044-00-171 to 311-047-00-171Punch Unit Head and Position.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- Buffer position sensor, PL 11.156 Item 2.
- Transport motor 1, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.
- Hole punch carrier assembly, PL 11.153 Item 1.

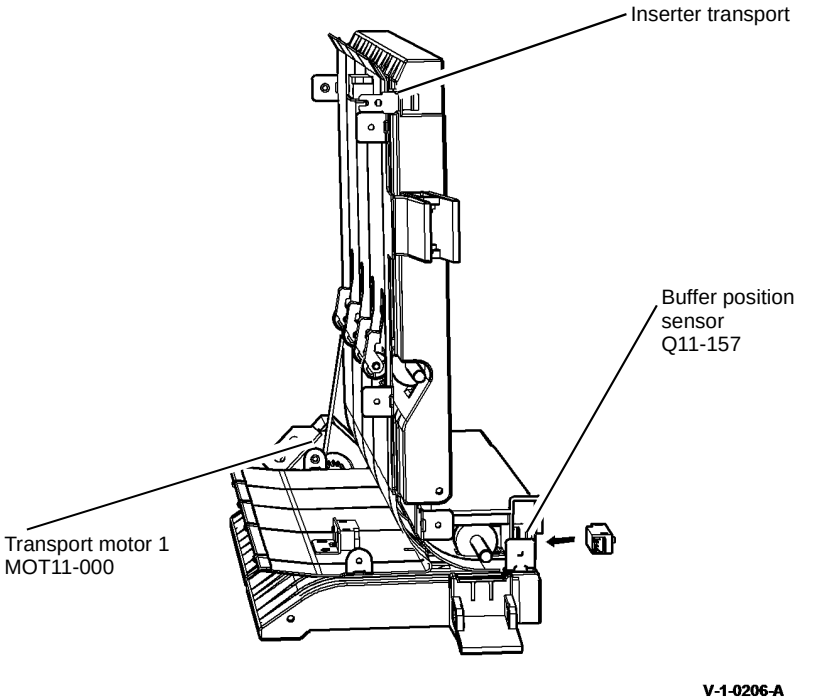
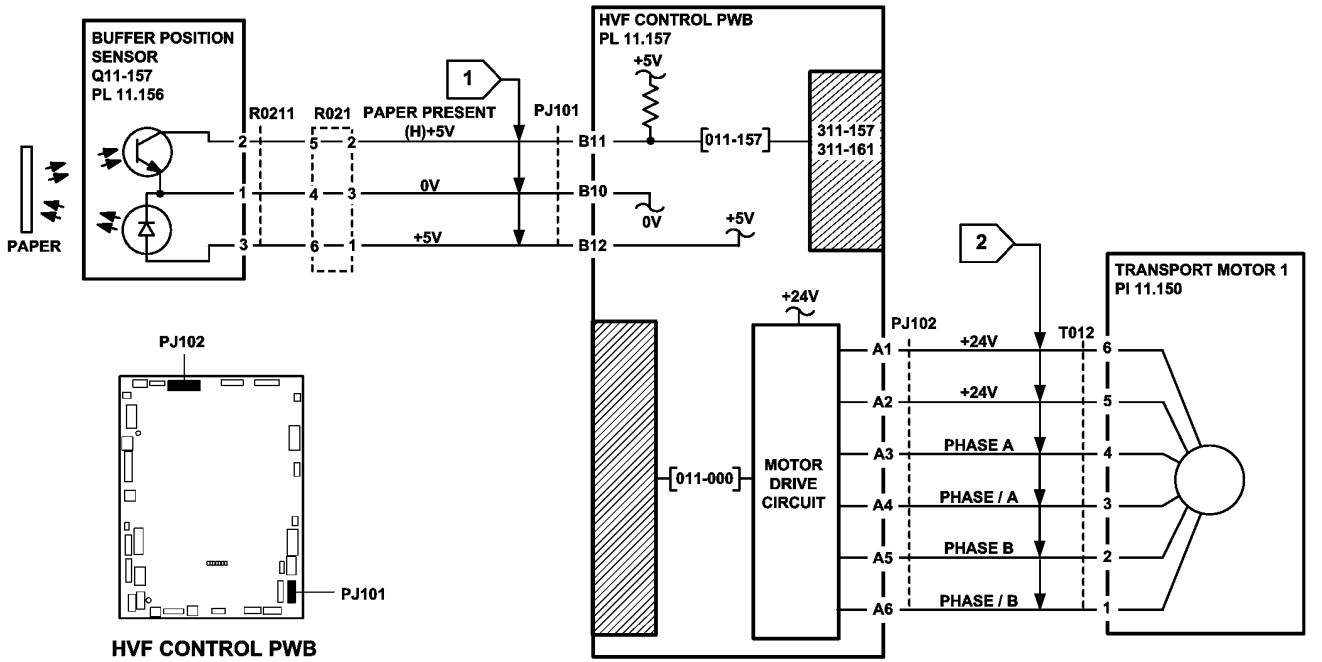


Figure 1 Component location



TV-1-0207-A

Figure 2 Circuit diagram

311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 HVF BM Entry RAP

311-158-00-171 The paper leading edge is late leaving the HVF booklet exit sensor to enter into the booklet maker.

311-160-00-171 The paper leading edge is late arriving at the BM entry sensor.

311-162-00-171 The paper trailing edge is late leaving the BM entry sensor.

311-163-00-171 The paper trailing edge is late leaving the HVF booklet exit sensor to enter into the booklet maker.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in bypass transport.
- Check or a jam or other obstruction in the BM paper entry guide.

Procedure

Figure 1 and Figure 2 show the location of the components.

Enter dC330 code 011-158. Manually activate the HVF booklet exit sensor, Q11-158. **The display changes.**

Y N

Go to Flag 1. Check Q11-158.

Refer to:

- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- HVF booklet exit sensor, PL 11.156 Item 3.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-074 to energize the BM diverter solenoid SOL11-074, Figure 1. **SOL11-074 energizes.**

Y N

Go to Flag 2. Check SOL11-074.

Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J102, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM diverter solenoid, PL 11.150 Item 4.
- HVF control PWB, PL 11.157 Item 2.

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Enter dC330 code 011-080 to run the bypass feed motor, MOT11-080. **MOT11-080 runs.**

Y N

Go to Flag 3. Check MOT11-080.

Refer to:

- GP 10 How to Check a Motor.
- P/J103, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bypass feed motor, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 8.

Enter dC330 code 011-160. Manually activate the BM entry sensor, Q11-160. **The display changes.**

Y N

Go to Flag 4. Check Q11-160.

Refer to:

- GP 11 How to Check a Sensor.
- P/J551, BM PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- BM entry sensor, PL 11.161 Item 16.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-060 to run the BM compiler motor, MOT11-060. **MOT11-060 runs.**

Y N

Go to Flag 5. Check MOT11-060.

Refer to:

- GP 10 How to Check a Motor.
- P/J554, BM PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- BM compiler motor, PL 11.166 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Lower the stapler bracket assembly, Figure 2. Enter dC330 code 011-190 BM paper present sensor, Q11-190. Actuate Q11-190. **The display changes.**

Y N

Go to Flag 6. Check Q11-190.

Refer to:

- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

B

B

Install new components as necessary:

- BM paper present sensor, PL 11.168 Item 5.
- BM PWB, PL 11.166 Item 10.

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.166 Item 16.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- HVF booklet exit sensor, PL 11.156 Item 3.
- BM diverter solenoid, PL 11.150 Item 4.
- BM diverter gate, PL 11.153 Item 9.
- BM compiler motor, PL 11.166 Item 1.
- Bypass feed motor, PL 11.150 Item 2.
- HVF control PWB, PL 11.157.

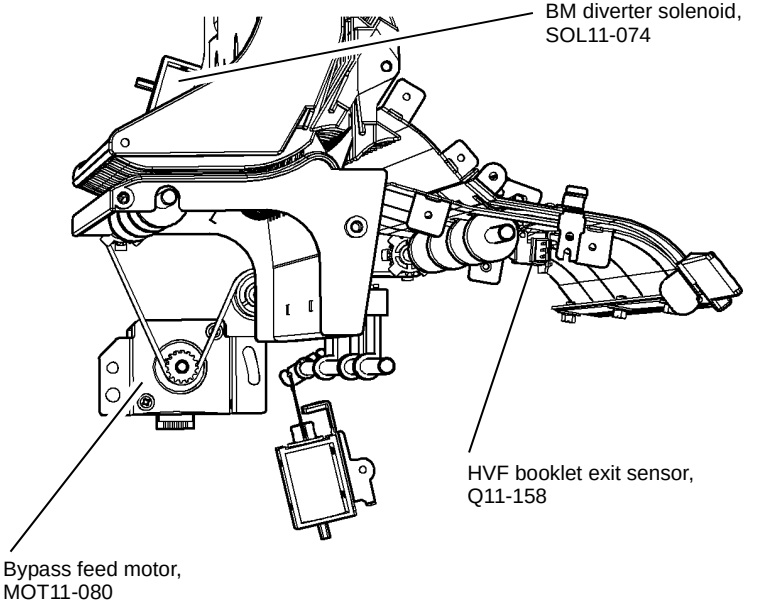


Figure 1 Component location

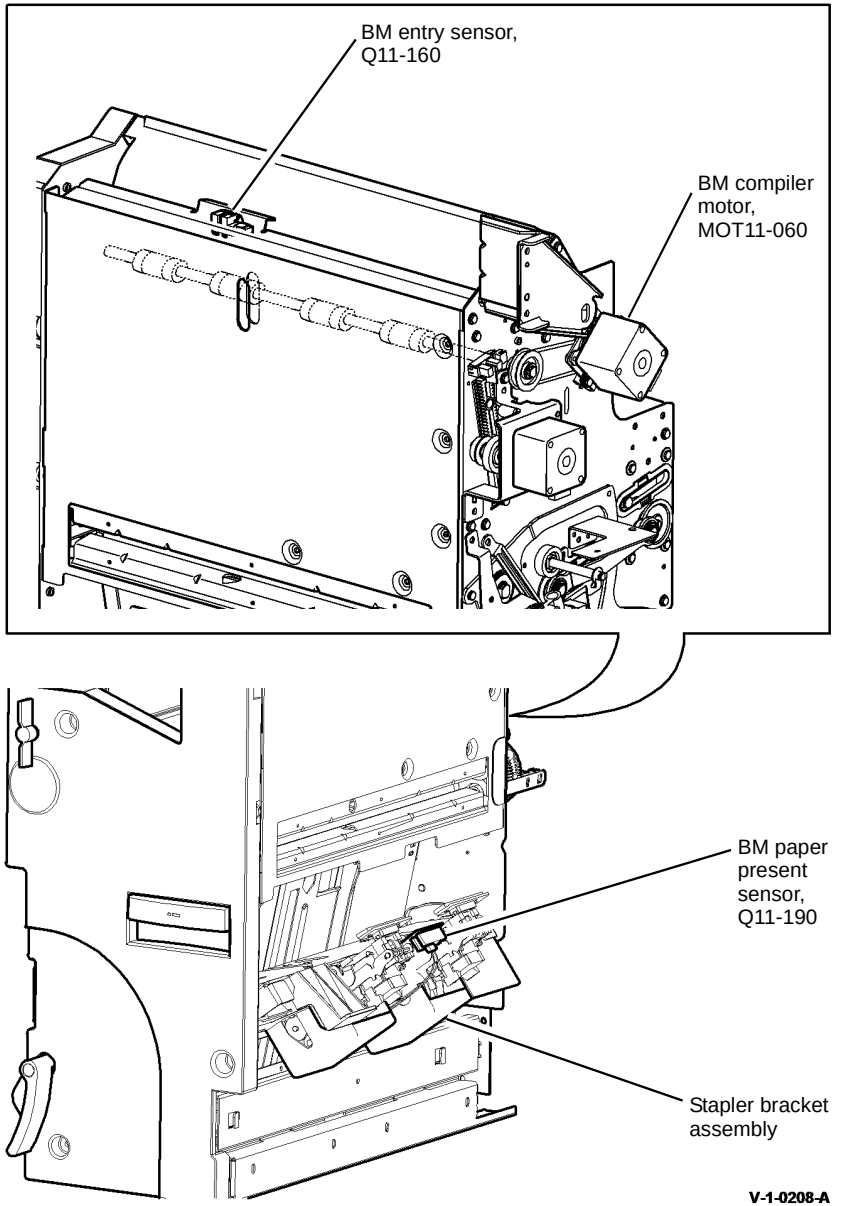


Figure 2 Component location

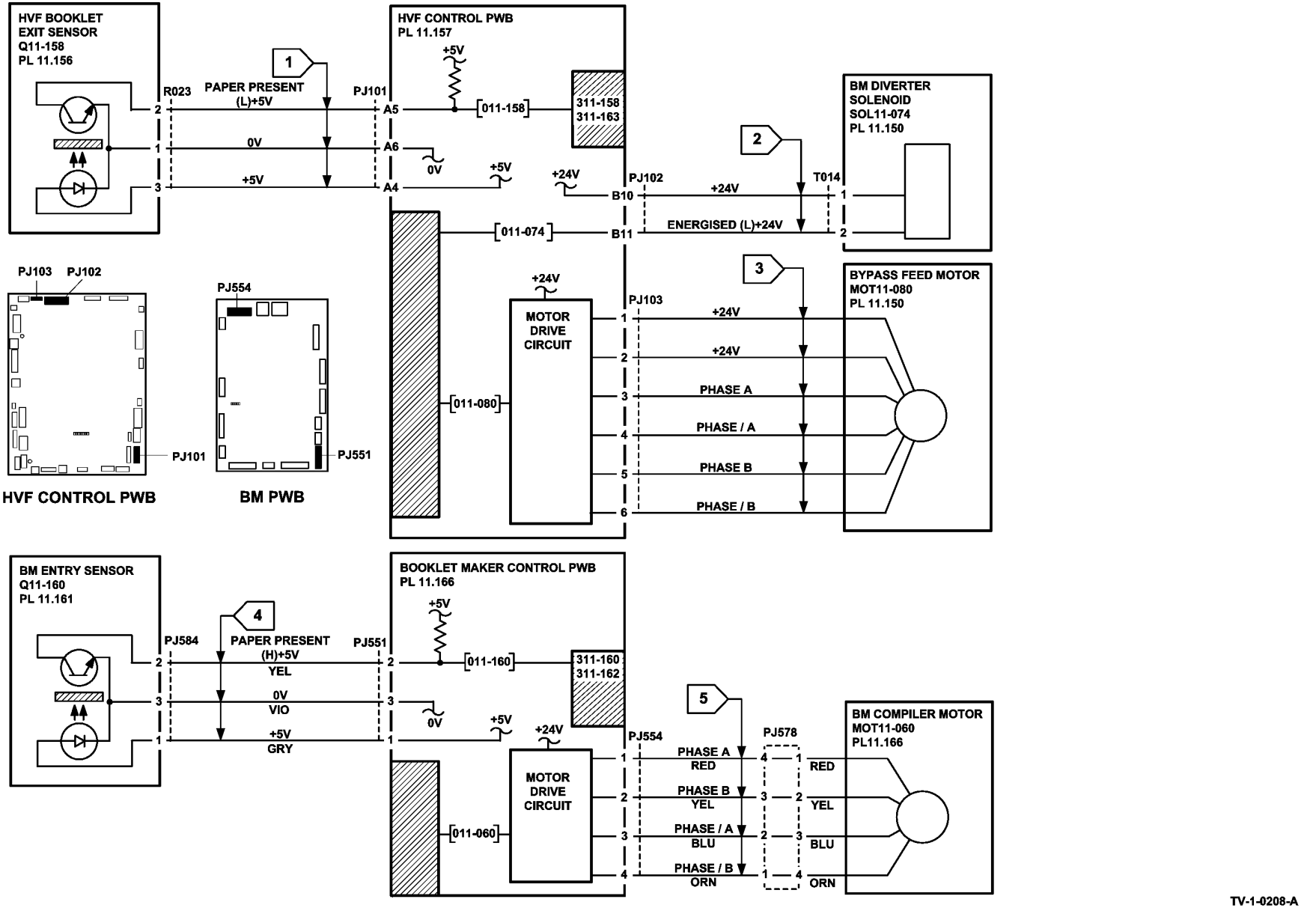


Figure 3 Circuit diagram

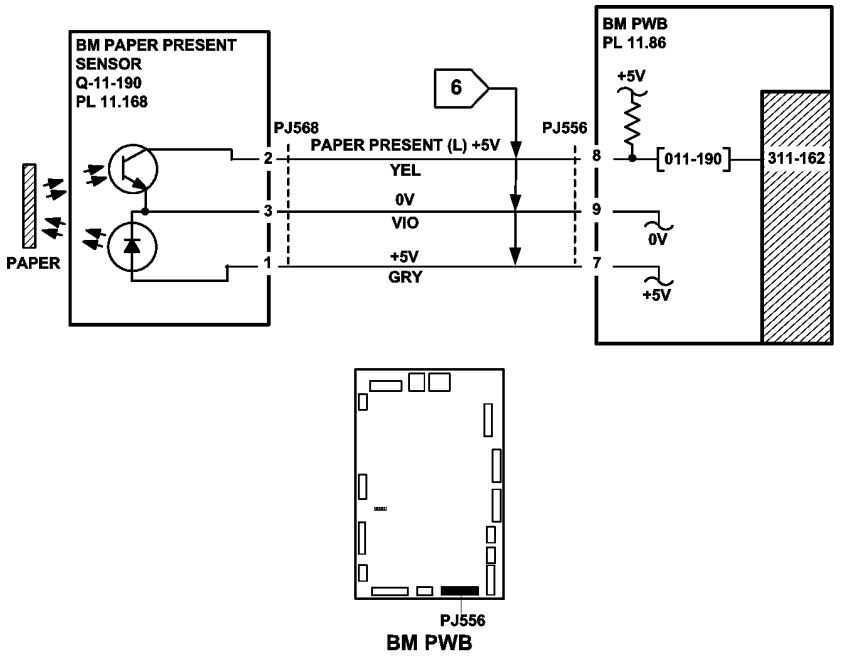


Figure 4 Circuit diagram

311-164-00-171, 311-165-00-171 HVF Buffer Path RAP

311-164-00-171 The paper trailing edge is late leaving the buffer path sensor.

311-165-00-171 The paper leading edge is late arriving at the buffer path sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in buffer path transport.
- Check the paper guide for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-164. Manually activate the buffer path sensor, Q11-164. **The display changes.**

Y N

Go to Flag 1. Check Q11-164.

Refer to:

- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Buffer path sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-079 to run the buffer feed motor 1, MOT11-079. **MOT11-079 runs.**

Y N

Go to Flag 2. Check MOT11-079.

Refer to:

- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Buffer feed motor, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2

Check the drive belt on the motor. **The drive belt is good.**

Y N

Install a new drive belt, PL 11.150 Item 9.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- Buffer path sensor, PL 11.156 Item 2.

- Buffer feed motor, PL 11.150 Item 1.
- HVF control PWB, PL 11.157 Item 2.

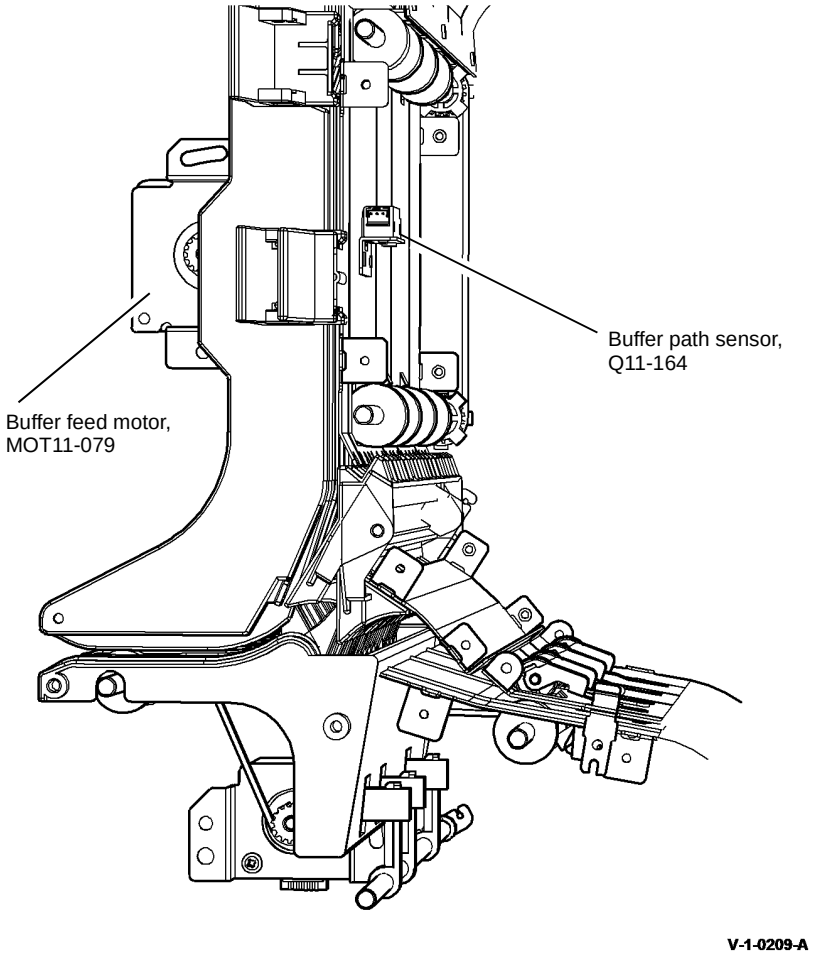
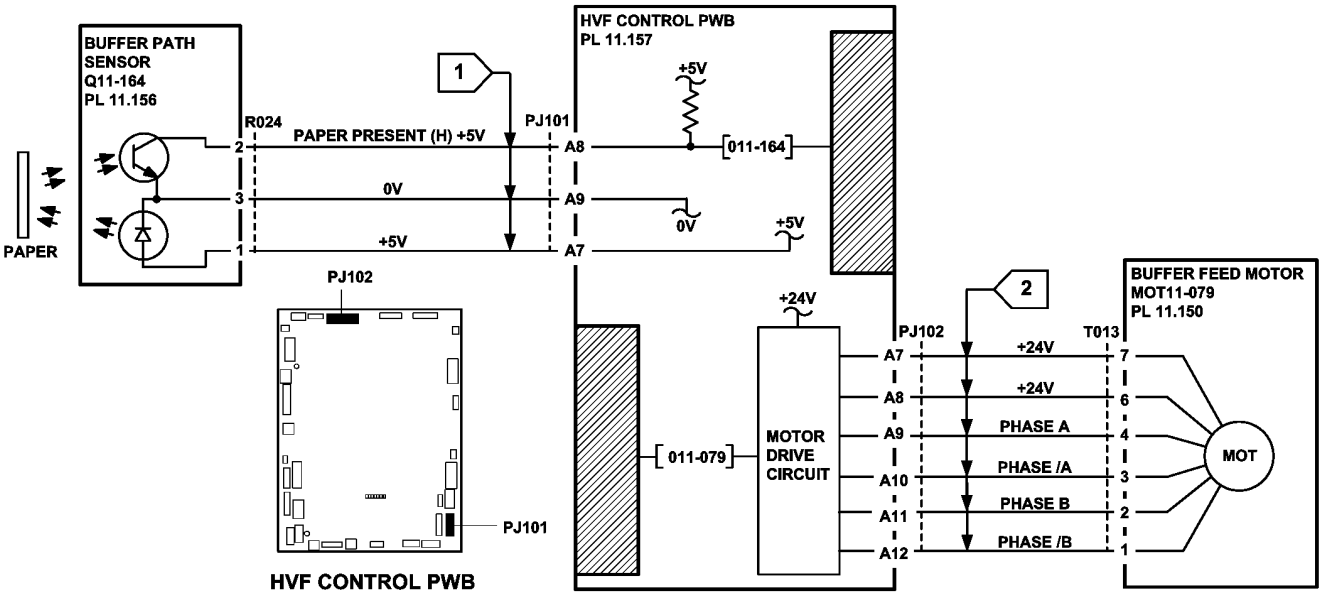


Figure 1 Component location



TV-1-0209-A

Figure 2 Circuit diagram

311-172-00-171 HVF BM Compiler Exit Jam RAP

311-172-00-171 The trail edge is late leaving the BM compiler exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- If necessary, remove any paper from the BM.
- Check that there is no damage or obstruction in the booklet compiling area or the paper path to the booklet compiling area.
- Check that the stapler bracket assembly, PL 11.168 Item 10, is correctly latched.
- Check the operation of the BM tampers, refer to the 311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP. If the tampers are operating correctly, go to ADJ 11.5-171 Booklet Tamping and check the tampers are correctly adjusted.

Procedure

Lower the stapler bracket assembly, Figure 1. Enter dC330 code 011-190 BM paper present sensor, Q11-190. Actuate Q11-190. **The display changes.**

Y N

Go to Flag 1. Check Q11-190.

Refer to:

- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM paper present sensor, PL 11.168 Item 5.
- BM PWB, PL 11.166 Item 10.

Go to Flag 1. Check the connectors and harness between PJ568 and P/J556. Refer to GP 7. **The wiring and connectors are good.**

Y N

Repair the wiring, REP 1.2 or install new components as necessary.

Enter dC330 code 011-060 BM compiler motor, MOT11-060. **MOT11-060 runs.**

Y N

Go to Flag 2. Check MOT11-060.

Refer to:

- GP 10 How to Check a Motor.
- P/J554, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary

- BM compiler motor, PL 11.166 Item 1.
- BM PWB, PL 11.166 Item 10.

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Unlatch the entrance baffle assembly, PL 11.161 Item 22. Run MOT11-060 again. **The BM entry roll rotates.**

Y N

Check the following components:

- BM compiler motor belt, PL 11.166 Item 15.
- BM entry roll pulley, PL 11.161 Item 14.
- BM entry roll, PL 11.161 Item 15.

Install new components as necessary.

Make a 60 page booklet (15 sheets of paper). Check that the top sheet of paper has not been torn from the booklet. **The booklet is good.**

Y N

Check that the components in the lower crease roll gear and clutch assembly are correctly installed. Refer to the replacement procedure in REP 11.52-171 BM Crease Rolls, Gears and Bearings.

Perform SCP 5 Final Actions.

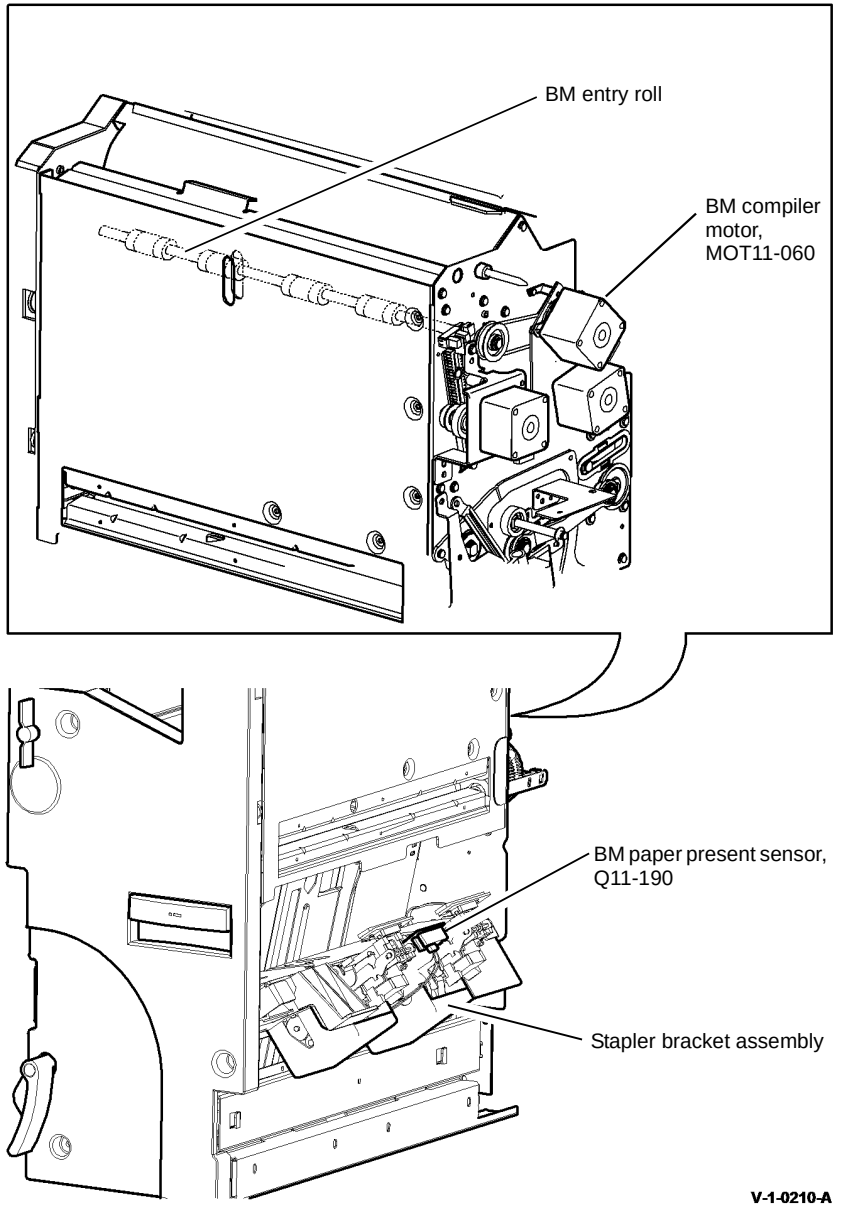
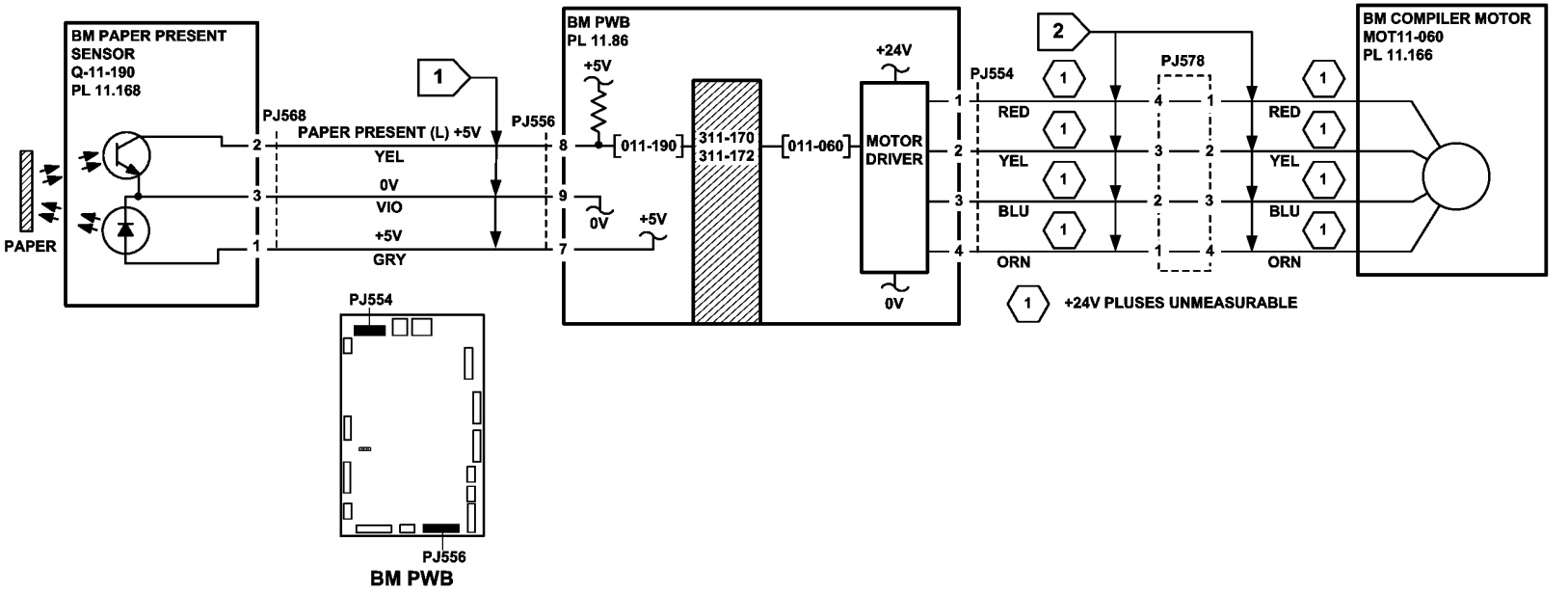


Figure 1 Component location



TV-1-0210-A

Figure 2 Circuit diagram

311-173-00-171 to 311-177-00-171 HVF Offset Unit RAP

311-173-00-171 The offset unit has failed to find its initialization point.

311-174-00-171 The offset unit has failed to return the home position.

311-175-00-171 The offset unit has failed to move from the home position.

311-176-00-171 The offset unit has failed to return to the away position.

311-177-00-171 The offset unit has failed to move from the away position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the offset unit.
- Check the offset unit for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-337. Manually activate the bin 1 offset sensor, Q11-337. **The display changes.**

Y N

Go to Flag 1. Check Q11-337.

Refer to:

- GP 11 How to Check a Sensor
- P/J302, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Bin 1 offset sensor, PL 11.140 Item 15
- HVF control PWB, PL 11.157 Item 2

Enter dC330 code 011-187. Manually activate the offset index sensor, Q11-187. **The display changes.**

Y N

Go to Flag 2. Check Q11-187.

Refer to:

- GP 11 How to Check a Sensor.
- P/J302, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Offset index sensor, PL 11.140 Item 15
- Ejector assembly, PL 11.140 Item 2
- HVF control PWB, PL 11.157 Item 2

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Enter dC330 code 011-176. Manually activate the offset away sensor, Q11-176. **The display changes.**

Y N

Go to Flag 3. Check Q11-176.

Refer to:

- GP 11 How to Check a Sensor
- P/J302, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Offset away sensor, PL 11.140 Item 15
- Ejector assembly, PL 11.140 Item 2
- HVF control PWB PL 11.157 Item 2

Enter dC330 code 011-034 to run the bin 1 offset motor, MOT11-034. **MOT11-034 runs.**

Y N

Go to Flag 4. Check MOT11-034.

Refer to:

- GP 10 How to Check a Motor.
- P/J801, HVF Control PWB
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Bin 1 offset motor, PL 11.140 Item 19
- HVF control PWB, PL 11.157 Item 2

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- Bin 1 offset sensor, PL 11.140 Item 15
- Offset index sensor, PL 11.140 Item 15
- Offset away sensor, PL 11.140 Item 15
- Bin 1 offset motor, PL 11.140 Item 19
- HVF control PWB, PL 11.157 Item 2

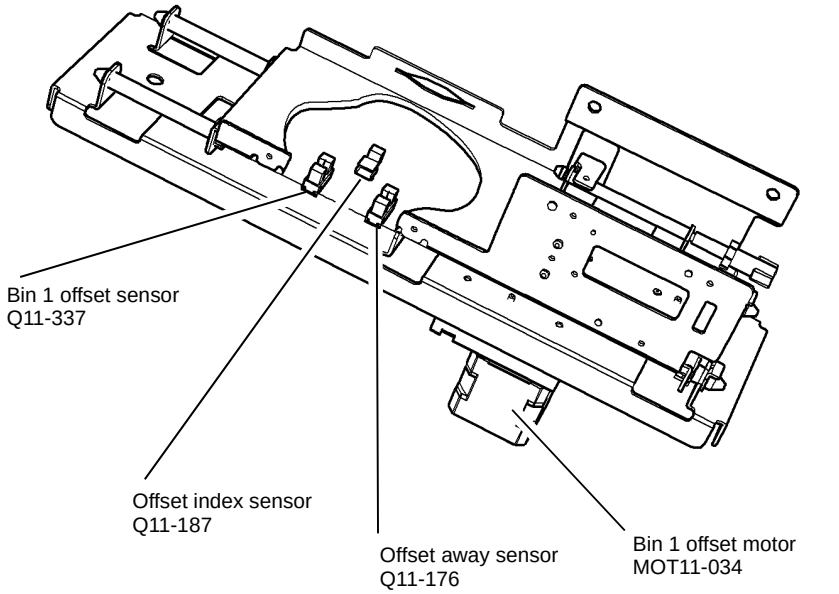
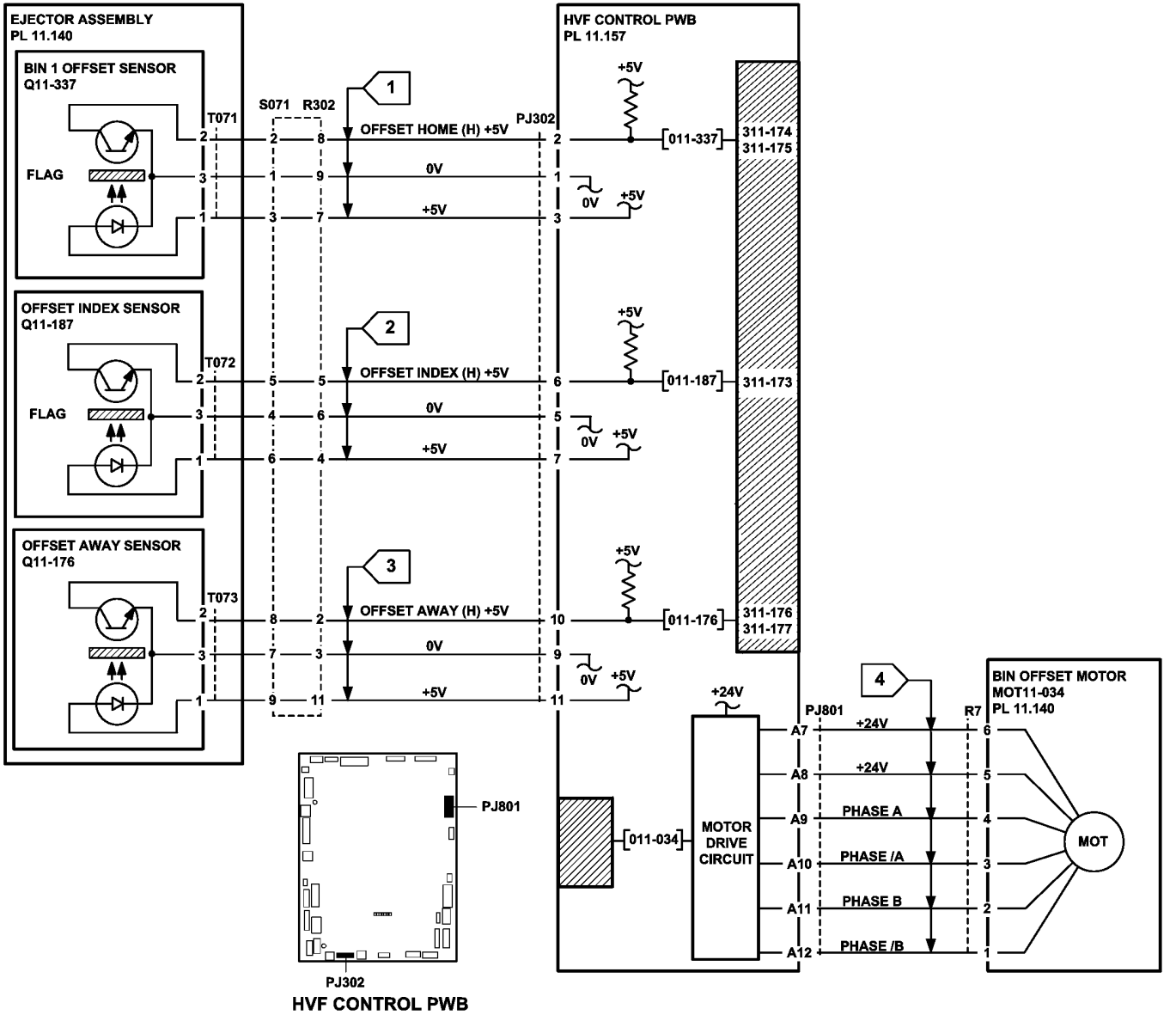


Figure 1 Component location



TV-1-0211-A

Figure 2 Circuit diagram

311-180-00-171, 311-182-00-171 HVF BM Exit Jam RAP

311-180-00-171 The lead edge is late arriving at the BM exit sensor.

311-182-00-171 The trail edge is late leaving the BM exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Turn the crease blade knob (6d) to ensure that the crease blade mechanism is free to move. If necessary, clear any paper jam in the exit area.

Procedure

Enter dC330 code 011-418. Actuate the BM crease blade motor encoder sensor, Q11-418, Figure 1 by rotating the crease blade knob (6d). **The display changes.**

Y N

Go to Flag 1. Check Q11-418.
Refer to:
- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- BM crease blade motor encoder sensor, PL 11.165 Item 1.

Release the crease roll nip pressure by moving the crease roll handle fully counter clockwise. Remove the BM right hand cover, PL 11.168 Item 15, to access the crease rolls. Enter dC330 code 011-419. Actuate the BM crease roll motor encoder sensor, Q11-419 by rotating the crease rolls slowly by hand. **The display changes.**

Y N

Go to Flag 2. Check Q11-419.
Refer to:
- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- BM crease roll motor encoder sensor, PL 11.166 Item 9.

Enter dC330 code 011-409. Actuate the BM exit sensor, Q11-409, Figure 2. **The display changes.**

Y N

Go to Flag 3. Check Q11-409.

A

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Refer to:
- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM PWB, PL 11.166 Item 10.
- BM exit sensor, PL 11.168 Item 17.

Enter dC330 code 011-062 to run the BM crease roll motor, MOT11-062. **MOT11-062 runs.**

Y N

Go to Flag 4. Check MOT11-062.
Refer to:
- GP 10 How to Check a Motor.
- P/J557, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM crease roll motor, PL 11.166 Item 12.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-061 to run the BM crease blade motor, MOT11-061. **MOT11-061 runs.**

Y N

Go to Flag 5. Check MOT11-061.
Refer to:
- GP 10 How to Check a Motor.
- P/J557, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM crease blade motor, PL 11.165 Item 3.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-401 to run the BM crease roll gate motor, MOT11-401. **MOT11-401 runs.**

Y N

Go to Flag 6 and Flag 7. Check MOT11-401.
Refer to:
- GP 10 How to Check a Motor.
- P/J555, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:
- BM crease roll gate motor, PL 11.166 Item 8.
- BM PWB, PL 11.166 Item 10.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install a new BM PWB, PL 11.166 Item 10.

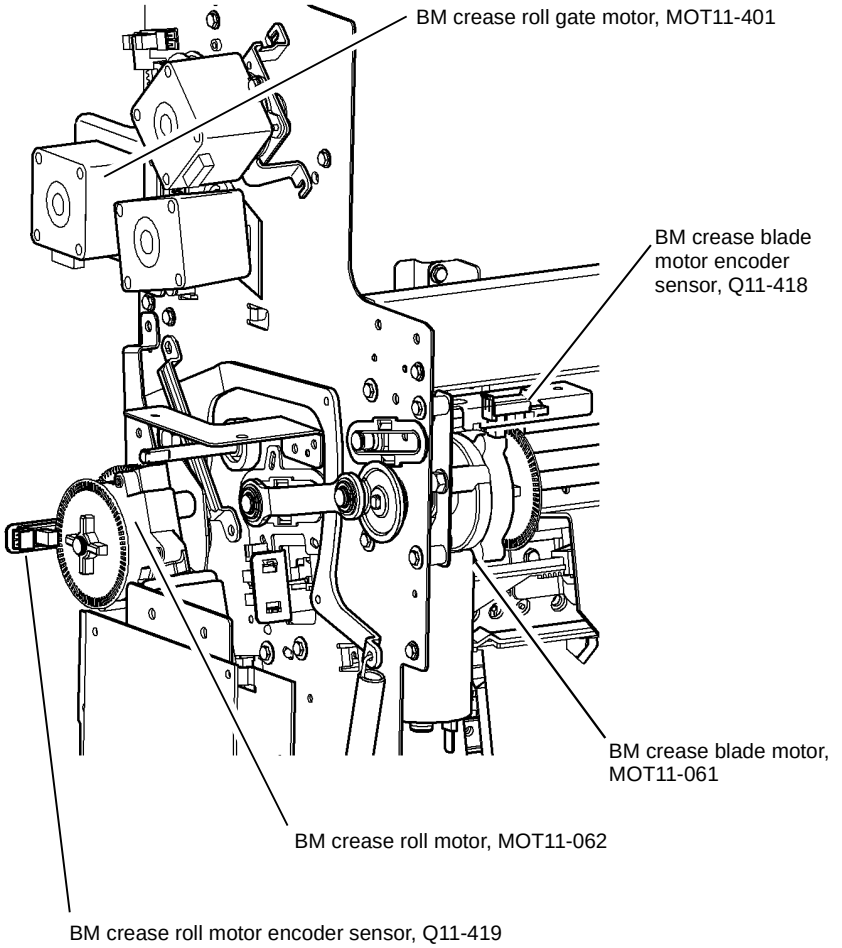

Figure 1 Component location

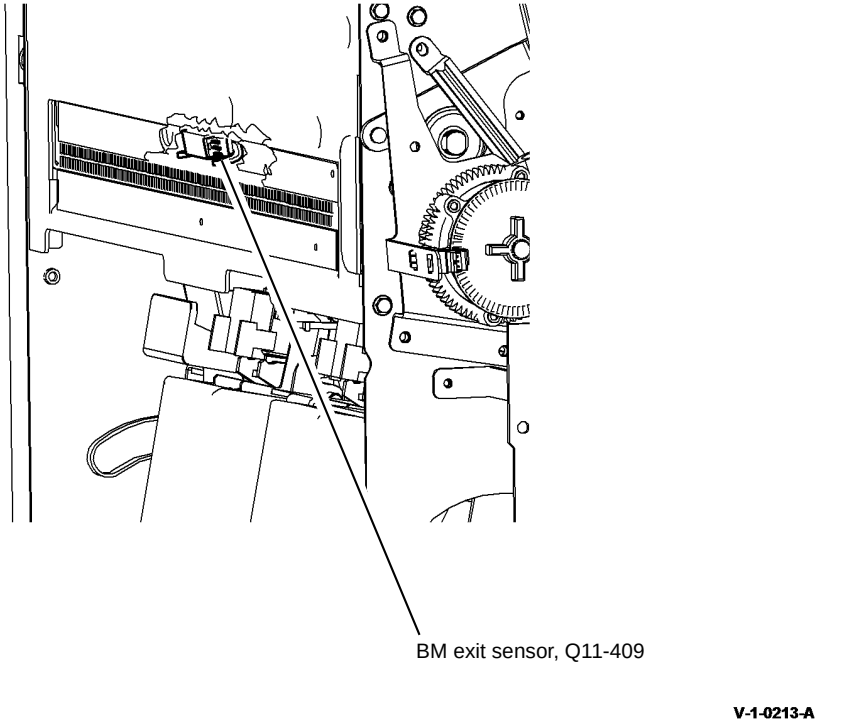

Figure 2 Component location

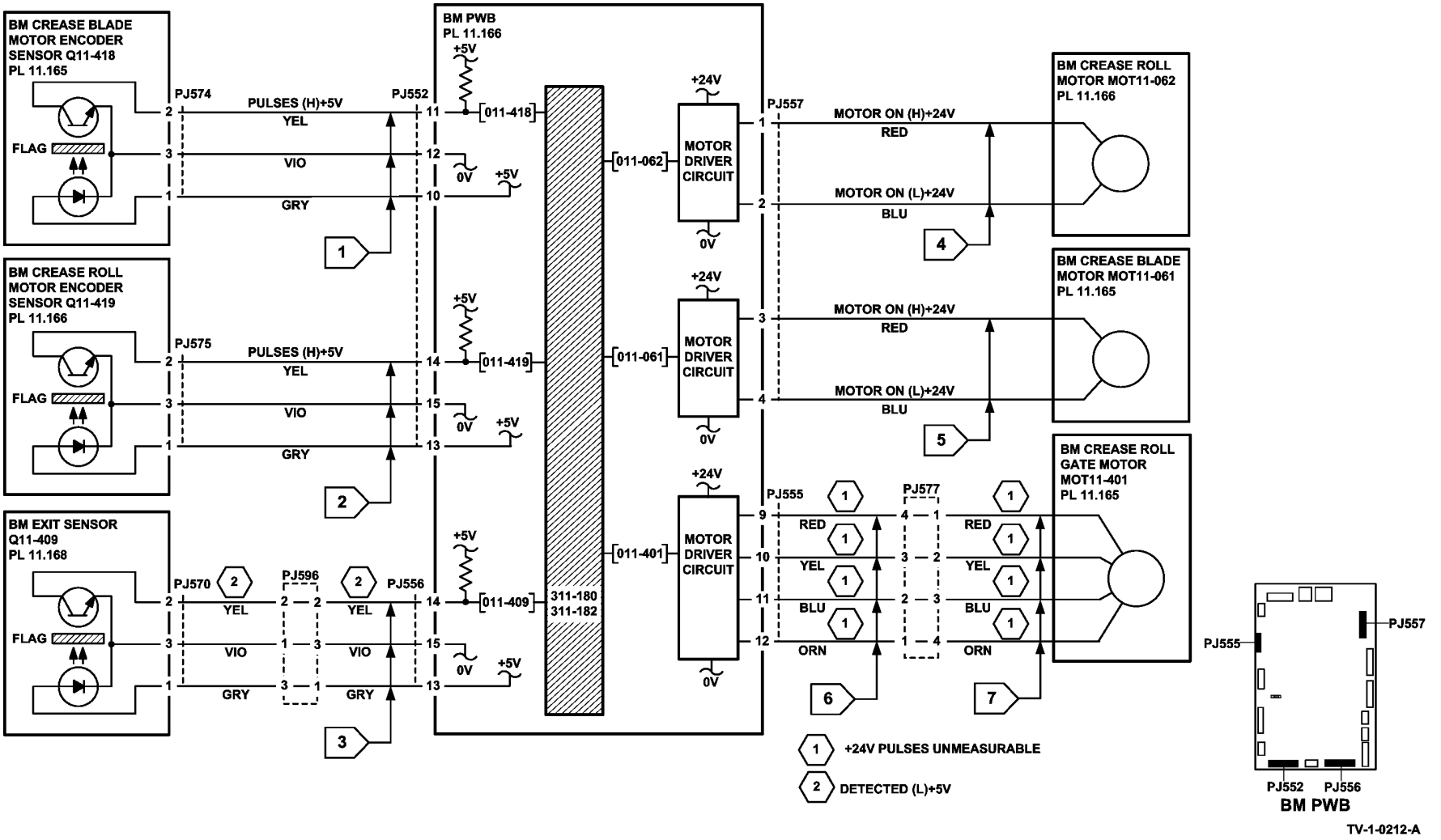

Figure 3 Circuit diagram

311-183-00-171, 311-184-00-171 HVF BM Paper Jam RAP

311-183-00-171 The BM control PWB has detected an unexpected sheet in the booklet maker paper path.

311-184-00-171 The BM control PWB has detected a stray sheet in the booklet maker paper path after jam clearance.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the booklet maker paper path.
- Check the paper path for damage.

Procedure

Figure 1, Figure 2 and Figure 3 show the location of the components.

Enter dC330 code 011-190. Manually actuate the BM paper present sensor, Q11-190. **The display changes.**

Y N

Go to Flag 1. Check Q11-190.

Refer to:

- GP 11 How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM paper present sensor, PL 11.168 Item 5.

Enter dC330 code 011-409. Manually actuate the BM exit sensor. **The display changes.**

Y N

Go to Flag 2. Check Q11-409.

Refer to:

- GP 11 How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM exit sensor, PL 11.168 Item 17.

Enter dC330 code 011-160. Manually actuate the BM entry sensor, Q11-160. **The display changes.**

Y N

Go to Flag 3. Check Q11-160.

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Refer to:

- GP 11 How to Check a Sensor.
- P/J551, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM entry sensor, PL 11.161 Item 16.

Enter dC330 code 011-183. Manually actuate the tri-folder entry sensor, Q11-183. **The display changes.**

Y N

Go to Flag 4. Check Q11-183.

Refer to:

- GP 11 How to Check a Sensor.
- P/J604, Tri Folder Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Tri-folder control PWB, PL 11.193 Item 16.
- Tri-folder entry sensor, PL 11.197 Item 11.

Enter dC330 code 011-183. Manually actuate the tri-folder entry sensor Q11-183. **The display changes.**

Y N

Go to Flag 5. Check between P/J602 pin 10 on the tri-folder control PWB and P/J563 pin 1 on the BM PWB.

Refer to:

- P/J563, BM PWB.
- P/J602, Tri-folder Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- Tri-folder control PWB, PL 11.193 Item 16.

The fault may be intermittent, check the wiring REP 1.2. If necessary, install a new BM PWB, PL 11.166 Item 10.

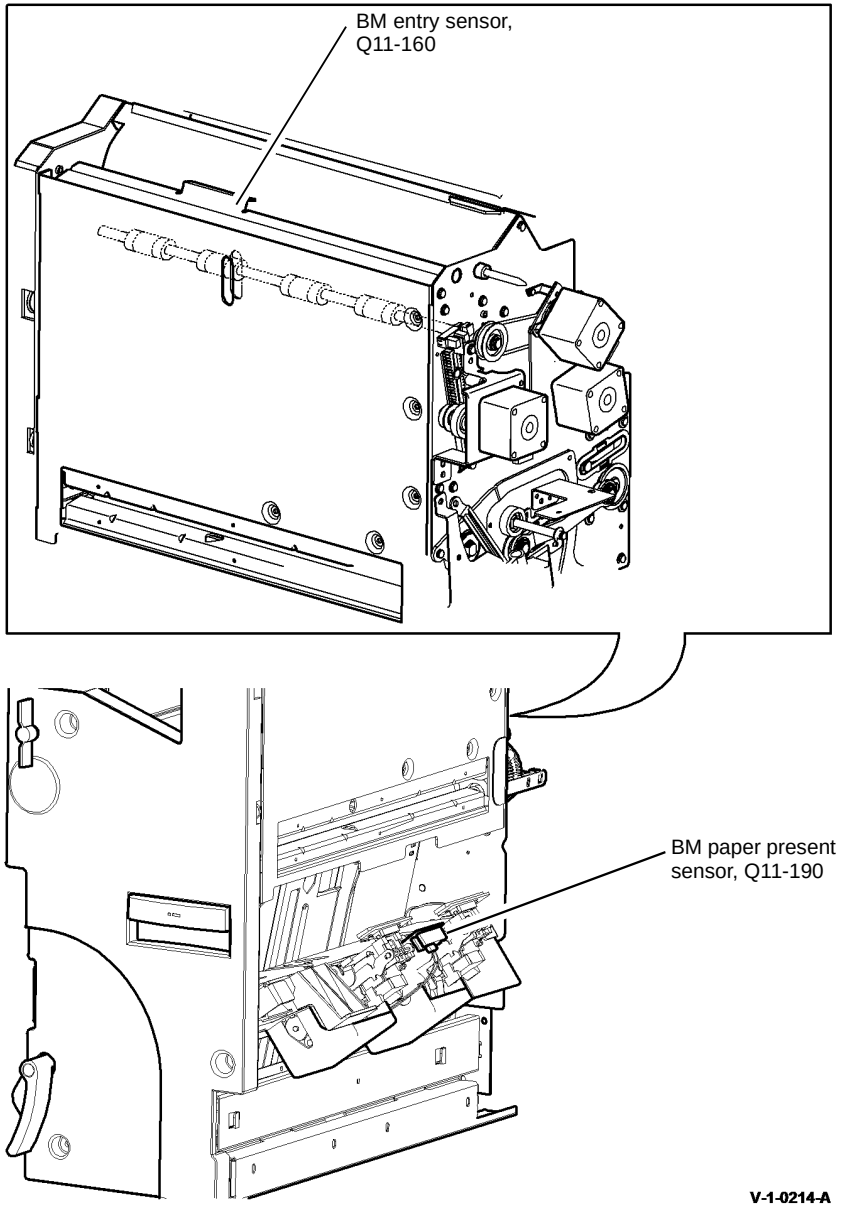


Figure 1 Component location

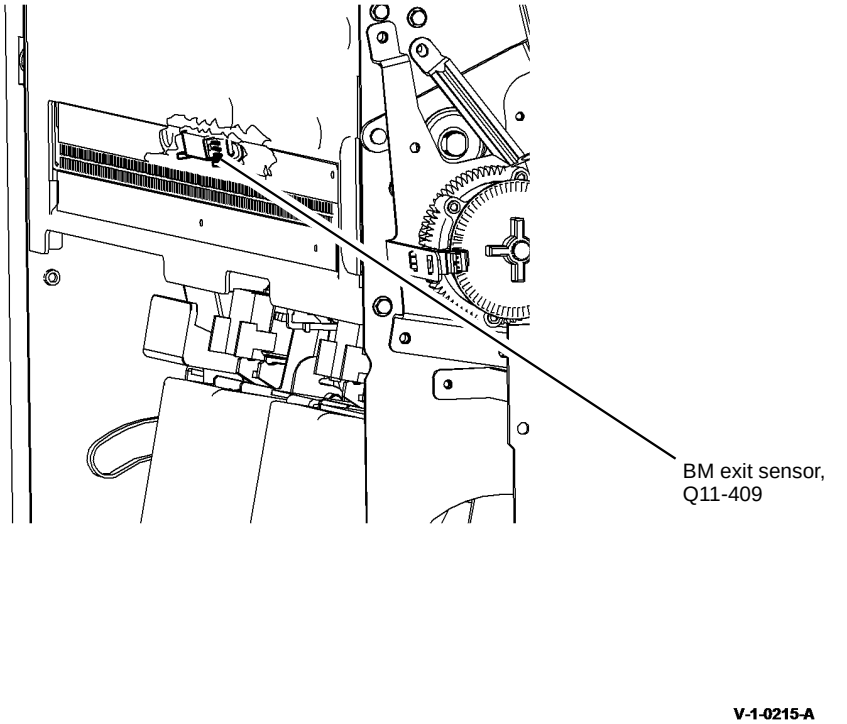


Figure 2 Component location

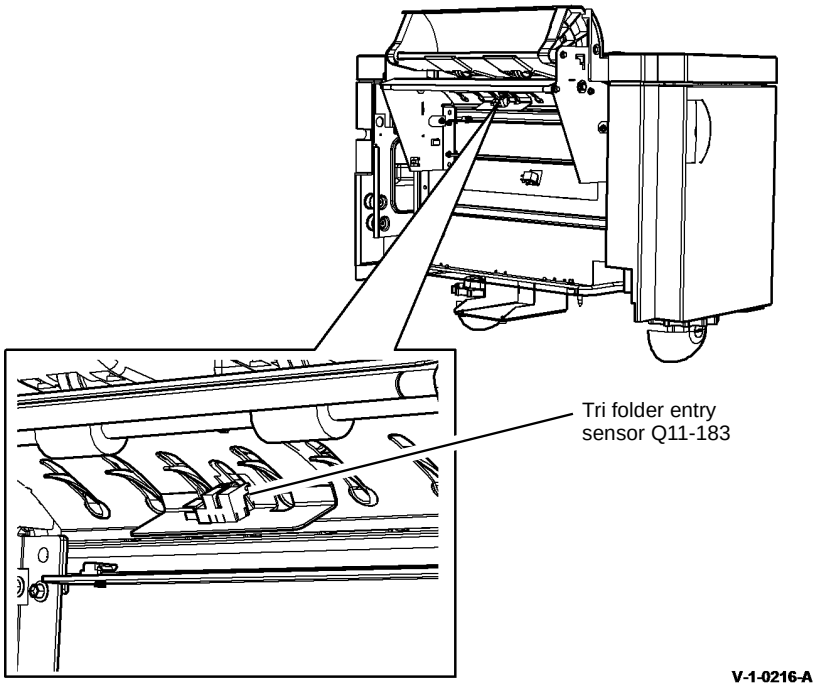
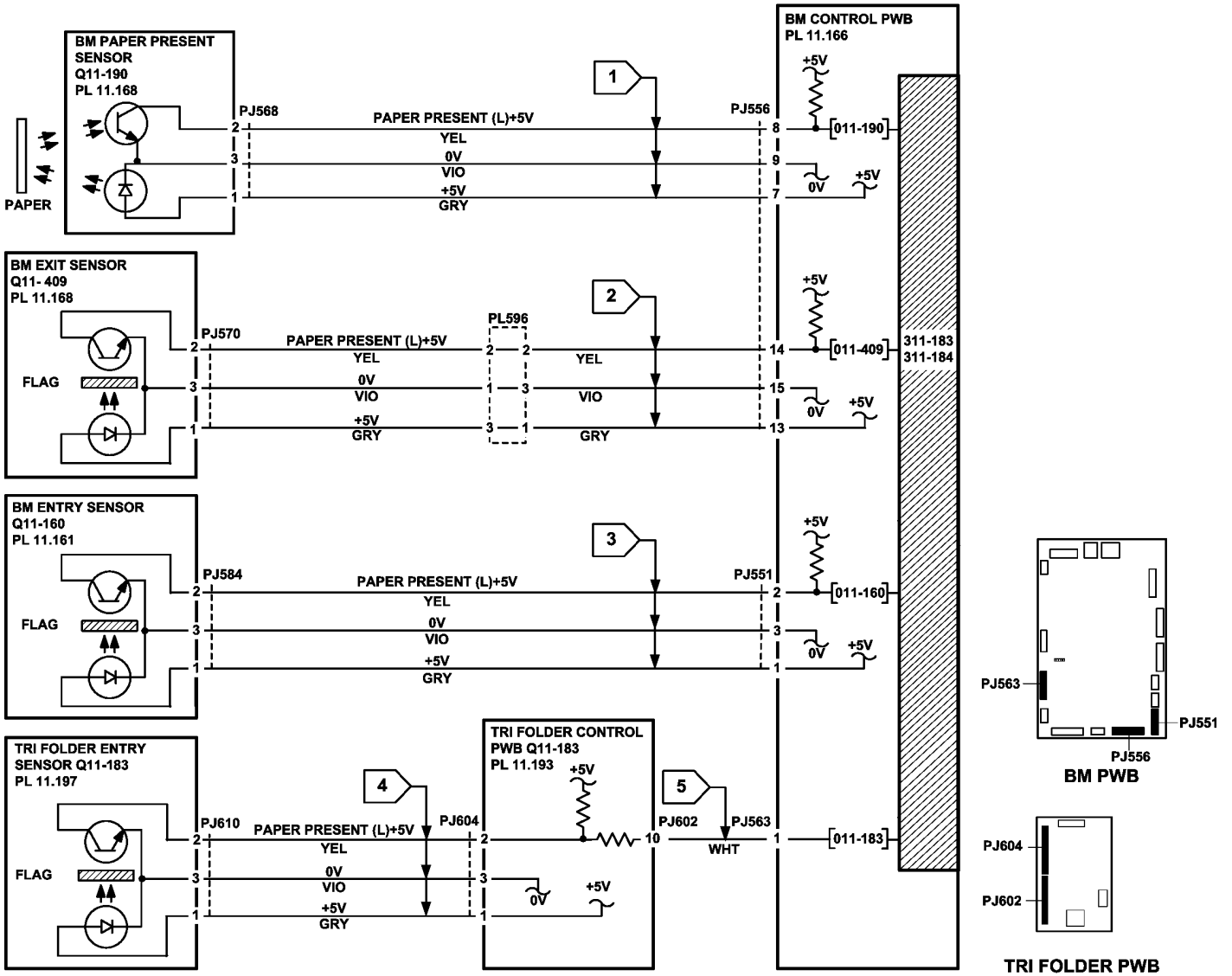


Figure 3 Component location



TV-1-0213-A

Figure 4 Circuit diagram

311-185-00-171 to 311-187-00-171 Tri-Folder Exit Sensor and Assist Sensor RAP

311-185-00-171 The lead edge is late arriving at the folder exit sensor.

311-186-00-171 The trail edge is late leaving the folder exit sensor.

311-187-00-171 The lead edge is late arriving at the tri folder assist sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the tri-folder.
- Check the tri-folder for damage.

Procedure

Figure 1, Figure 2 and Figure 3 show the location of the components.

Enter dC330 code 011-184. Manually actuate the tri folder assist sensor, Q11-184, Figure 1. **The display changes.**

Y N

Go to Flag 1 and Flag 2. Check the sensor, Q11-184.

Refer to:

- GP 11, How to Check a Sensor.
- P/J604, P/J602, Tri Folder Control PWB
- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Tri folder assist gate sensor, PL 11.197 Item 6.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-185. Manually actuate the folder exit sensor, Q11-185. **The display changes.**

Y N

Go to Flag 3 and Flag 4. Check Q11-185.

Refer to:

- GP 11, How to Check a Sensor.
- P/J604, P/J602, Tri Folder Control PWB.
- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Folder exit sensor, PL 11.197 Item 12.
- Tri-folder control PWB, PL 11.193 Item 16.

A

- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-085 to energize the tri folder diverter solenoid, SOL11-085. **SOL11-085 energizes.**

Y N

Go to Flag 5 and Flag 6. Check SOL11-085.

Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J602, P/J603, Tri Folder Control PWB.
- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Diverter solenoid, PL 11.197 Item 16.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-086 to energize the tri folder assist gate solenoid, SOL11-086. **SOL11-086 energizes.**

Y N

Go to Flag 7 and Flag 8. Check SOL 11-086.

Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J563, BM PWB.
- P/J602, P/J603, Tri Folder Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Tri-folder assist solenoid, PL 11.197 Item 8.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-087 to energize the drive clutch, CL11-087. **CL11-087 energizes.**

Y N

Go to Flag 9 and Flag 10. Check CL11-087.

Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J563, BM PWB.
- P/J602, P/J603, Tri Folder Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Drive clutch, PL 11.193 Item 9.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-062 to run the BM crease roll motor, MOT11-062. **MOT11-062 runs.**

Y N

Go to Flag 11. Check MOT11-062.

B

B

Refer to:

- GP 10 How to Check a Motor.
- P/J557, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM crease roll motor, PL 11.166 Item 8.
- BM PWB, PL 11.166 Item 10.

Perform SCP 5 Final Actions.

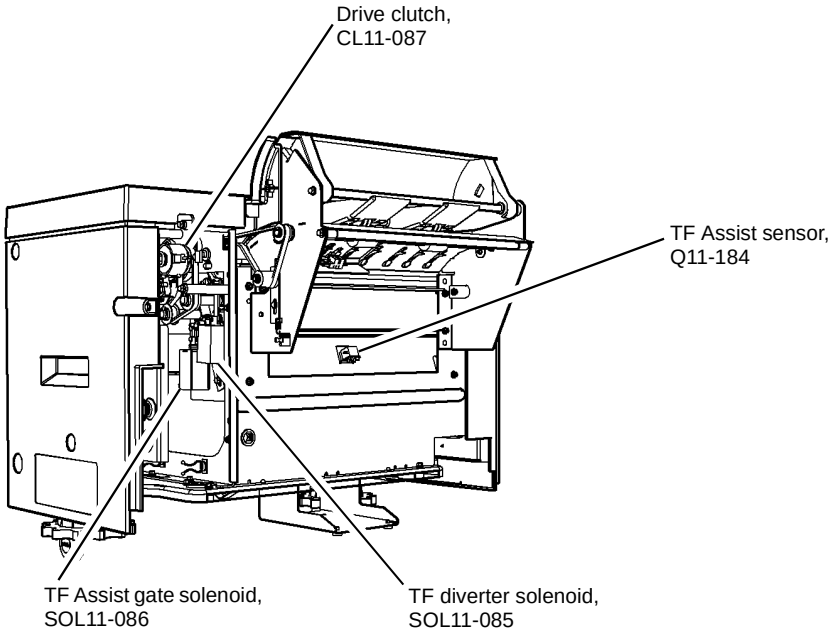


Figure 1 Component location

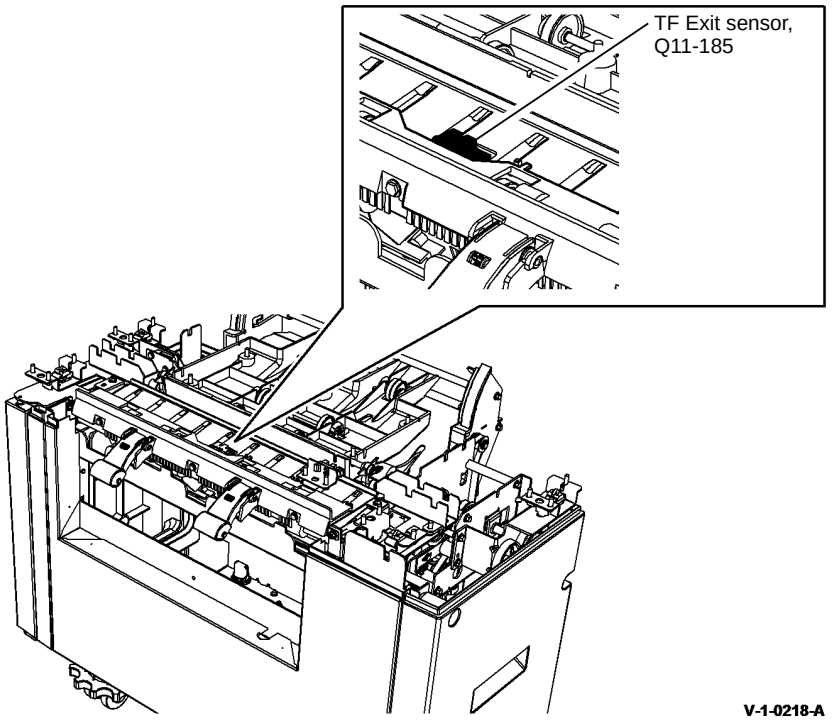
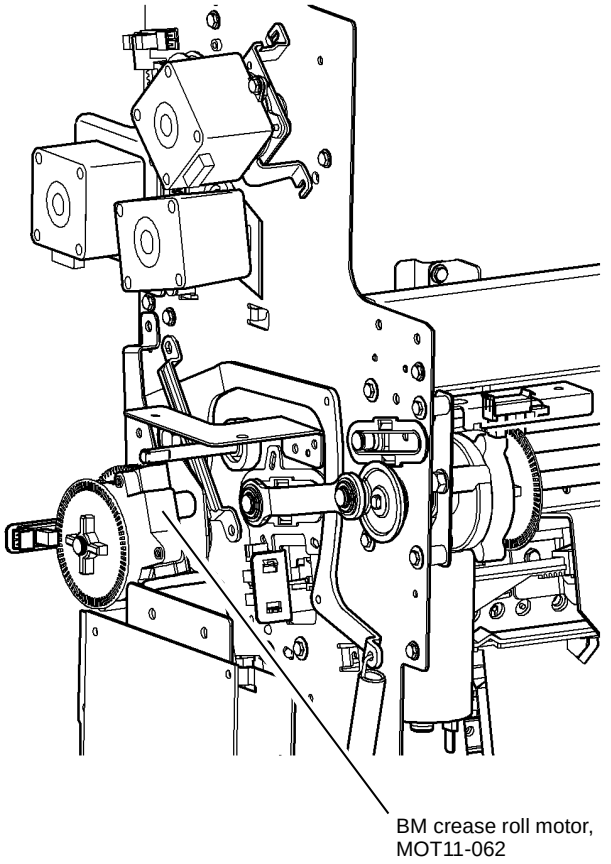


Figure 2 Component location



V-1-0219-A

Figure 3 Component location

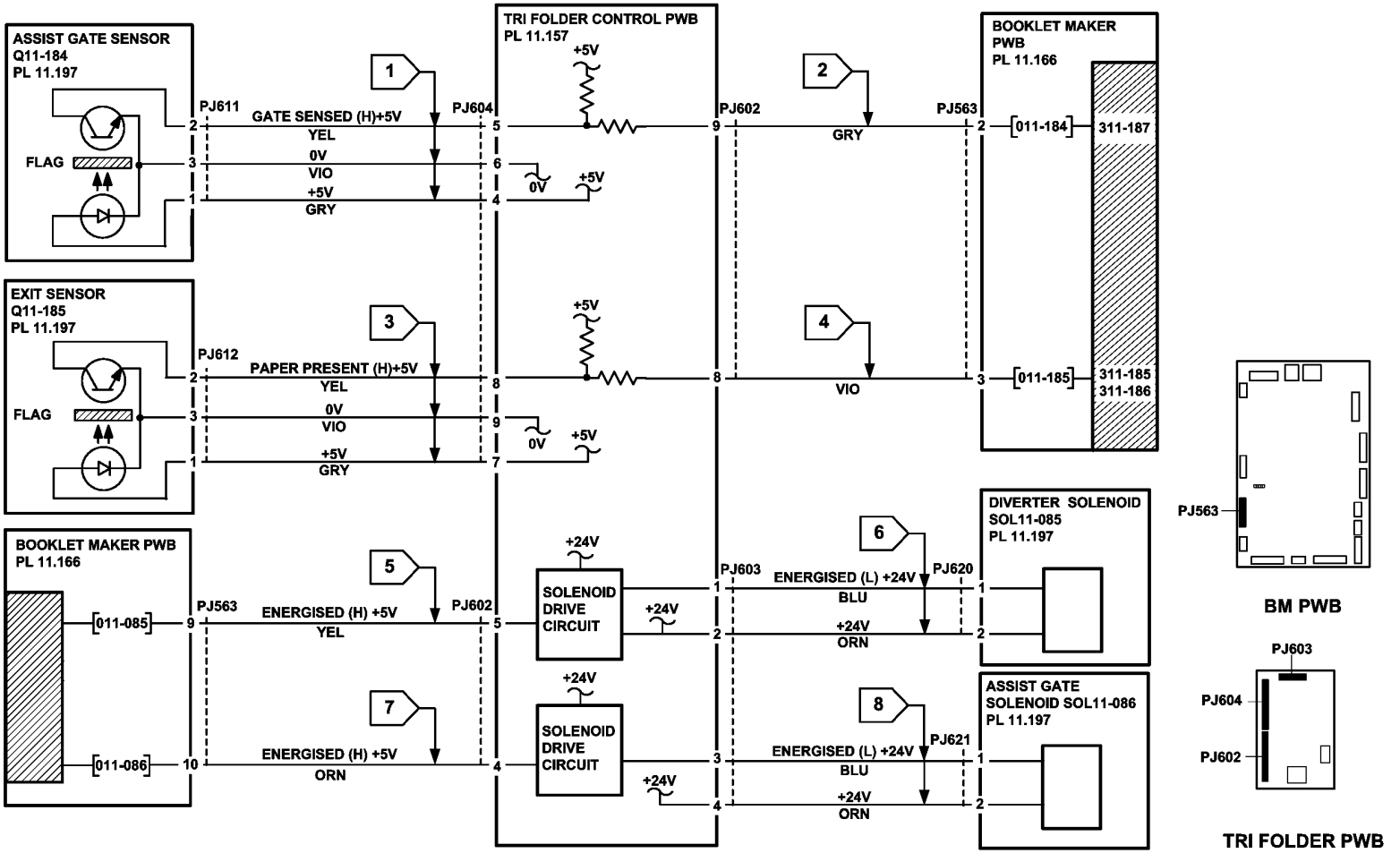
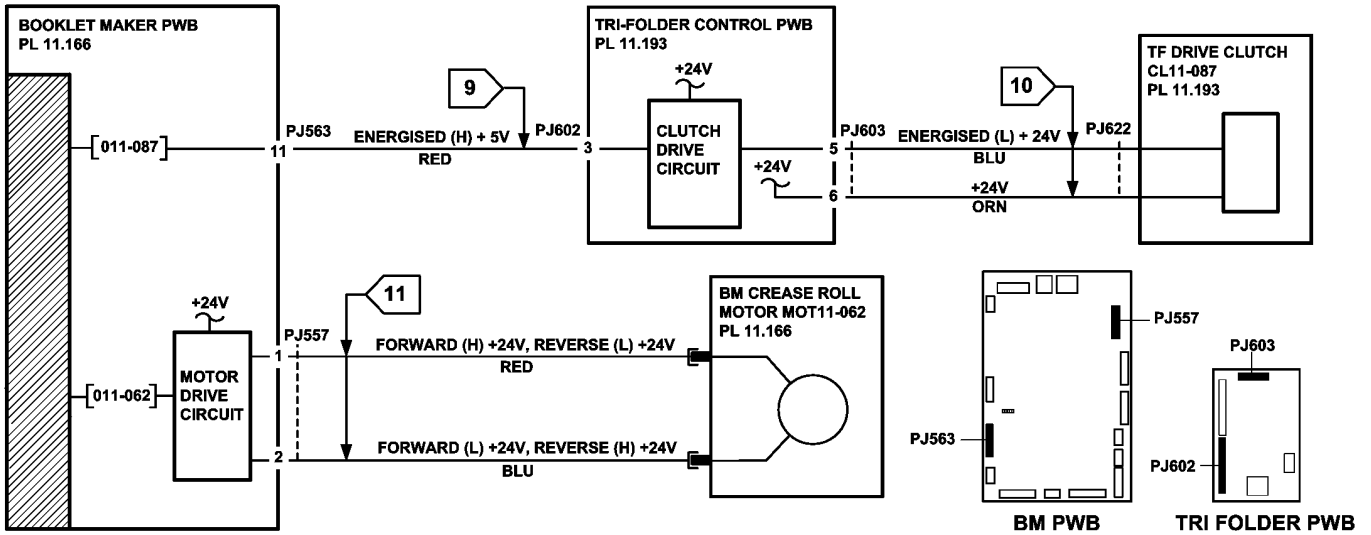


Figure 4 Circuit diagram



TV-1-0215-A

Figure 5 Circuit diagram

311-188-00-171, 311-189-00-171 HVF Nip Split RAP

311-188-00-171 The nip split has failed to operate.

311-189-00-171 The nip split has failed to return to the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the nip split.
- Check the nip split for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-081 to run the nip split motor, MOT11-081. **The nip-split mechanism can be heard.**

Y N

Go to Flag 3. Check MOT11-081.

Refer to:

- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Nip split motor, PL 11.153 Item 15.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-159. Manually actuate the nip home sensor, Q11-159. **The display changes.**

Y N

Go to Flag 1. Check Q11-159.

Refer to:

- GP 11, How to Check a Sensor.
- P/J101, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Nip home sensor, PL 11.156 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-170. Manually actuate the nip split sensor, Q11-170. **The display changes.**

Y N

Go to Flag 2. Check Q11-170.

Refer to:

- GP 11, How to Check a Sensor.

A

- P/J101, P/J102HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Nip split sensor, PL 11.156 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5, Final Actions.

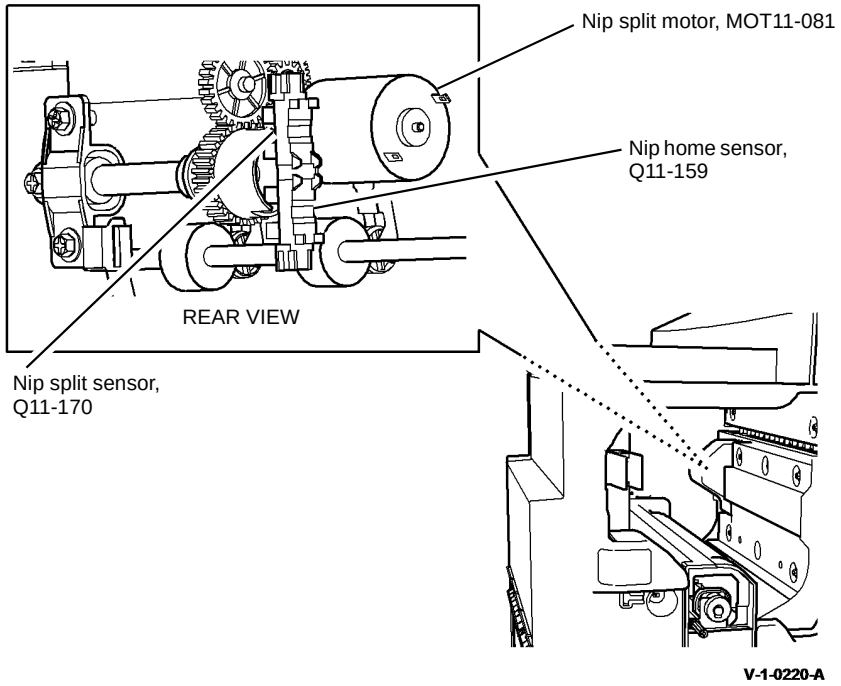
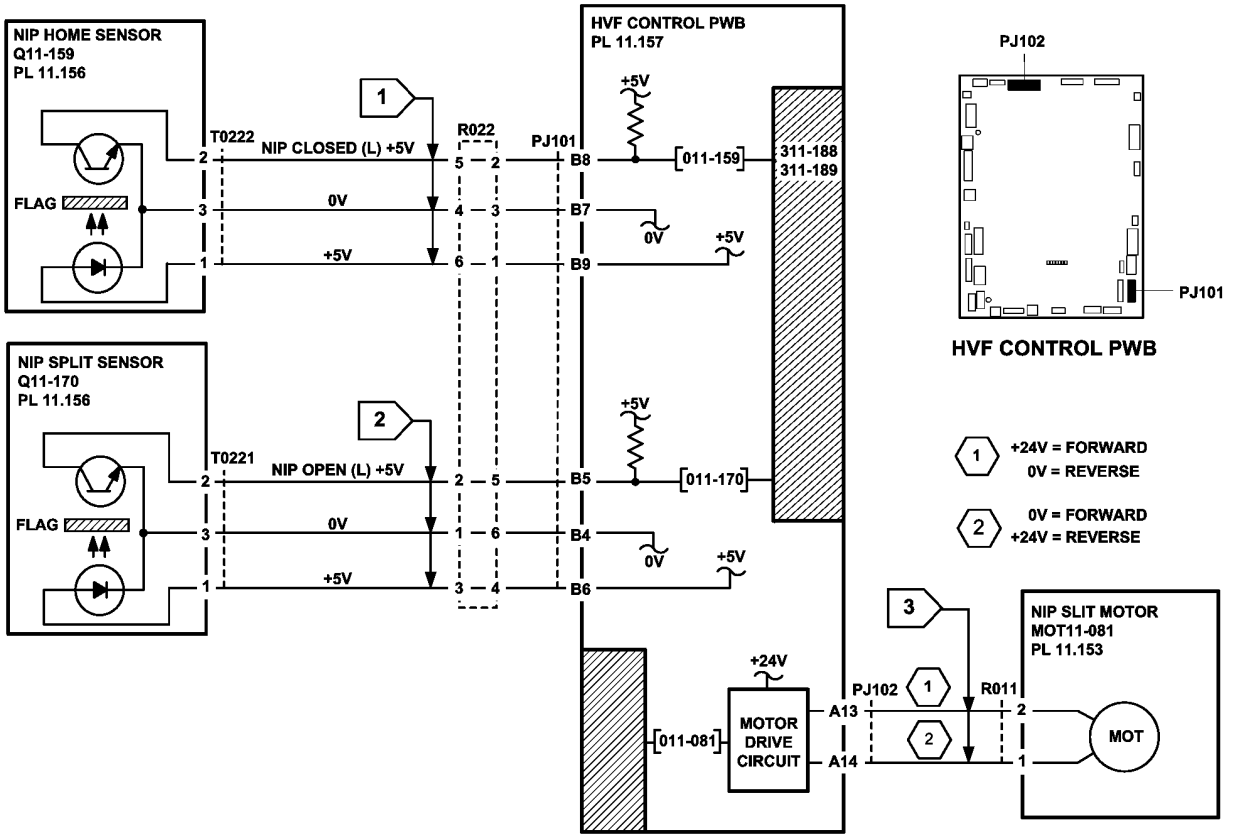


Figure 1 Component location



TV-1-0216-A

Figure 2 Circuit diagram

311-191-00-171, 311-193-00-171, 311-194-00-171, 311-196-00-171 Inserter Paper Jam RAP

311-191-00-171 The leading edge is late arriving at the inserter standby sensor.

311-193-00-171 The trailing edge is late leaving the inserter standby sensor.

311-194-00-171 The leading edge is late arriving at the inserter TE sensor.

311-196-00-171 The trailing edge is late leaving the inserter TE sensor.

Fault code 311-191-00 may also be generated where a fault in the inserter causes jamming in the IOT.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the inserter.
- Check the inserter for damage.

Procedure

Figure 1 shows the location of the components.
Enter dC330 code 011-155. Manually actuate the inserter TE sensor, Q11-155. **The display changes.**

Y N

Go to Flag 1 and Flag 2. Check Q11-155.
Refer to:

- GP 11, How to Check a Sensor.
- P/J6, P/J4, Inserter PWB.
- P/J701, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter TE sensor, PL 11.179 Item 11.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Measure the voltage of pin 2 of P/J11. Manually actuate the acceleration sensor. **The voltage changes.**

Y N

Go to Flag 3 and Flag 4. Check the sensor.
Refer to:

- GP 11, How to Check a Sensor.
- P/J6, P/J4, Inserter PWB.
- P/J701, HVF Control PWB

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Install new components as necessary:

- Acceleration sensor, PL 11.175 Item 10.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Measure the voltage at pin 2 of P/J702 on the HVF PWB. Open the front door and open 8a jam clearance guide. Manually actuate the inserter standby sensor with a sheet of paper. **The voltage changes.**

Y N

Go to Flag 5. Check the sensor.
Refer to:

- GP 11, How to Check a Sensor.
- P/J702, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter standby sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-077, to energize the inserter clutch, CL11-077. **CL11-077 energizes.**

Y N

Go to Flag 6 (W/O TAG V-001) or Flag 10 (W/TAG V-001) and Flag 7. Check CL11-077.
Refer to:

- GP 12, How to Check a Solenoid or Clutch.
- P/J13, P/J5, Inserter PWB.
- P/J703, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter clutch, PL 11.179 Item 3.
- Inserter control PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-078 to run the inserter motor, MOT11-078. **MOT11-078 runs.**

Y N

Go to Flag 8 and Flag 9. Check MOT11-078.
Refer to:

- GP 10 How to Check a Motor.
- P/J701, HVF Control PWB
- P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter motor, PL 11.181 Item 1.
- Inserter control PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

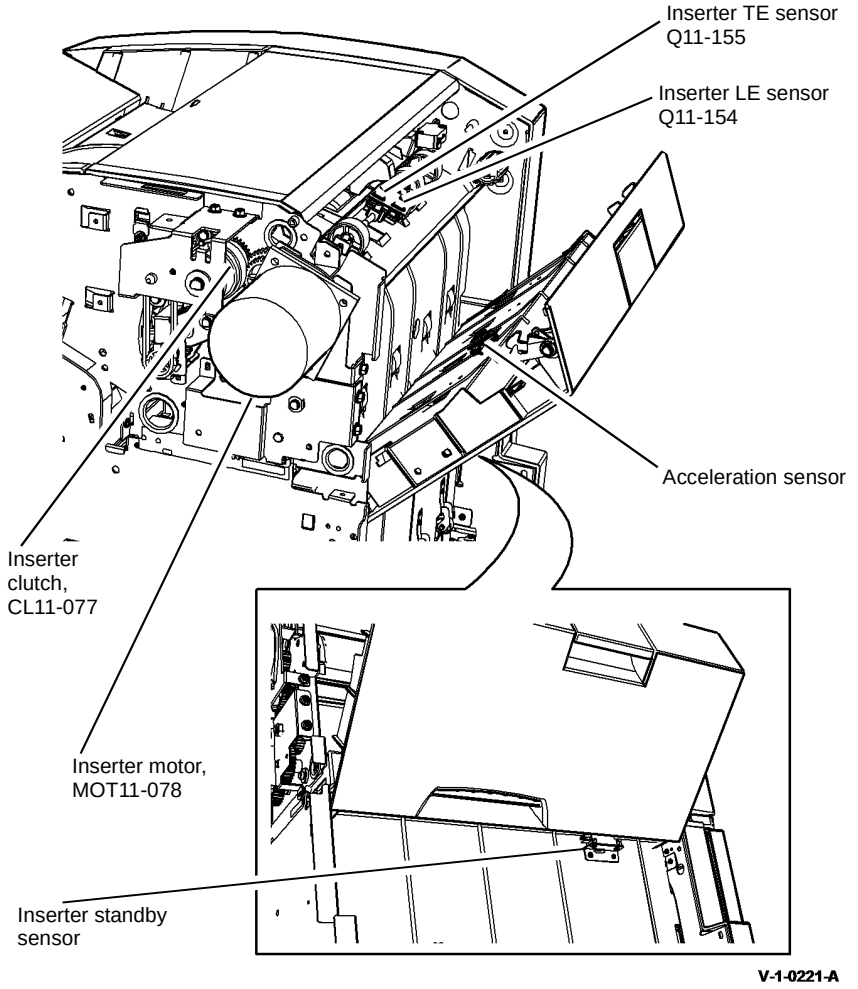


Figure 1 Component location

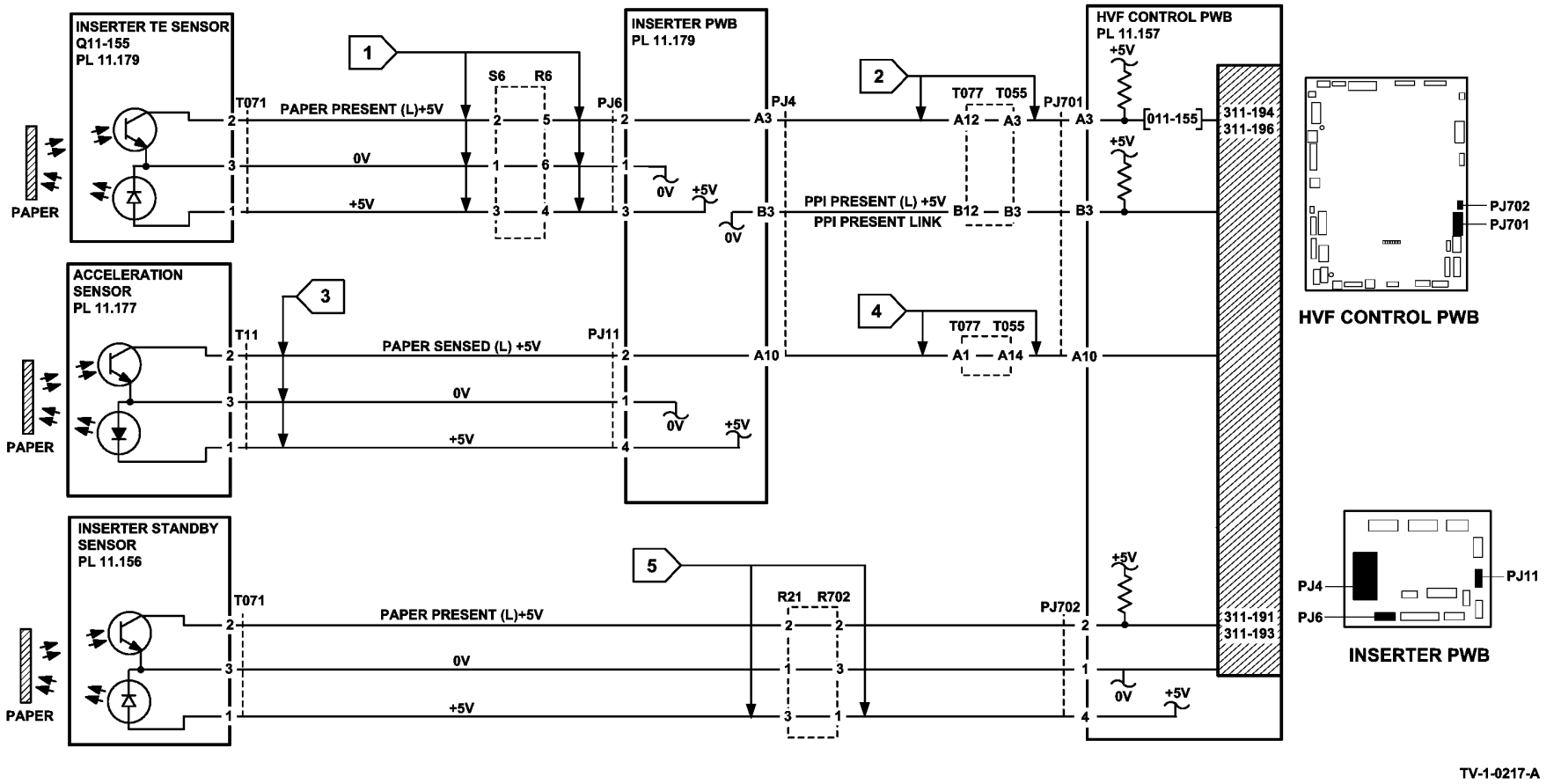


Figure 2 Circuit diagram

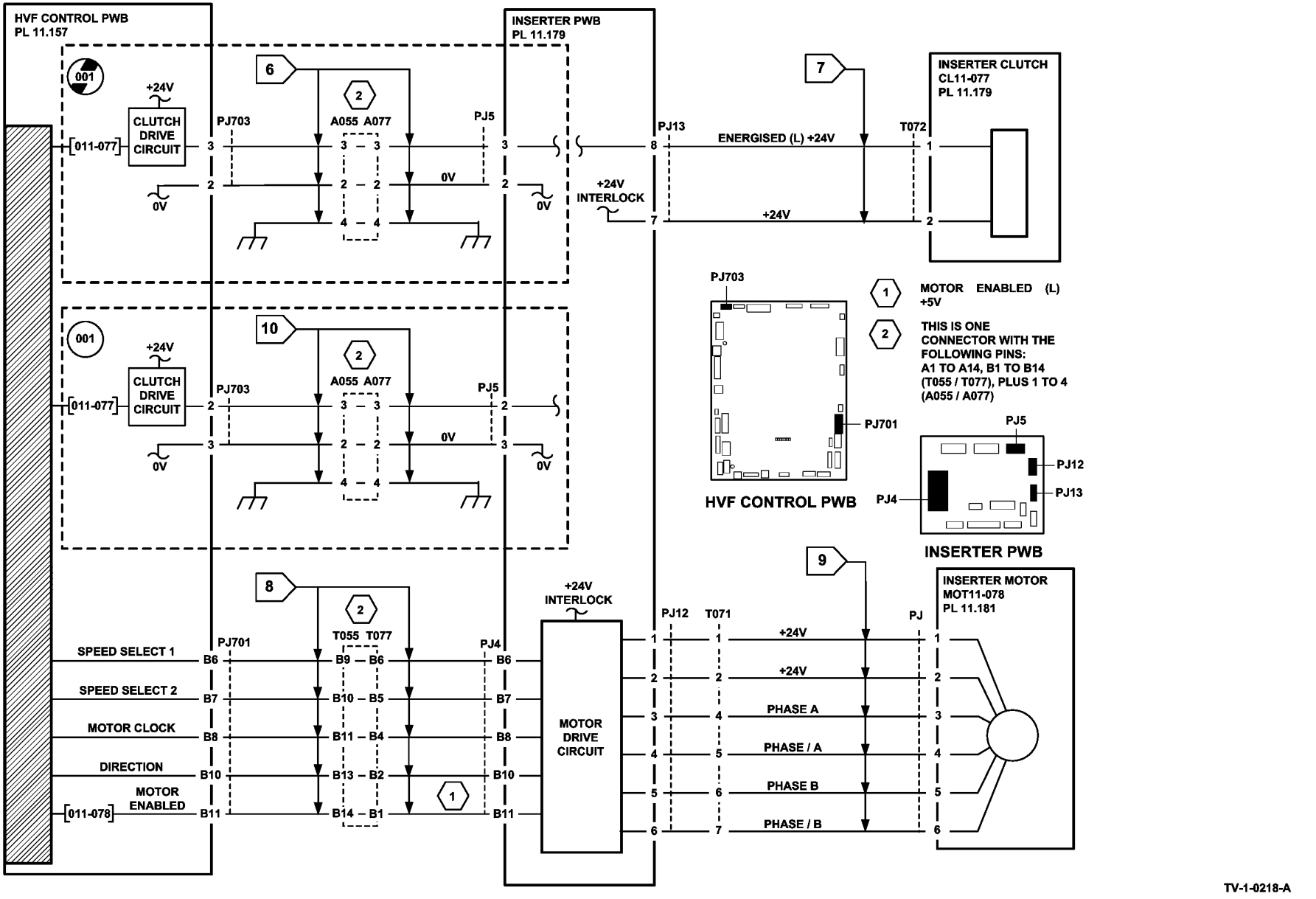


Figure 3 Circuit diagram

311-198-00-171, 311-199-00-171 HVF Paper Jam RAP

311-198-00-171 A stray sheet was detected in the finisher, after a jam clearance.

311-199-00-171 An unexpected sheet has been detected in the finisher.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction in the HVF paper path.
- Check the paper path for damage.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-100. Manually activate the entry sensor, Q11-100. **The display changes.**

Y N

Go to Flag 1. Check Q11-100.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Entry sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-157. Manually activate the buffer position sensor, Q11-157. **The display changes.**

Y N

Go to Flag 2. Check Q11-157.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Buffer position sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-164. Manually activate the buffer path sensor, Q11-164. **The display changes.**

Y N

Go to Flag 3. Check Q11-164.
Refer to:
- GP 11 How to Check a Sensor.

A

- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Buffer path sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-140. Manually activate the stacker exit sensor, Q11-140. **The display changes.**

Y N

Go to Flag 4. Check Q11-140.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Stacker exit sensor, PL 11.156 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-130. Manually activate the top exit sensor, Q11-130. **The display changes.**

Y N

Go to Flag 5. Check Q11-130.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- Top exit sensor, PL 11.156 Item 3.
- HVF control PWB, PL 11.157 Item 2.

HVF BM machines only, enter dC330 code 011-158. Manually activate the HVF booklet exit sensor, Q11-158. **The display changes.**

Y N

Go to Flag 6. Check Q11-158.
Refer to:
- GP 11 How to Check a Sensor.
- P/J101, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:
- HVF booklet exit sensor, PL 11.156 Item 3.
- HVF control PWB PL 11.157 Item 2.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components.

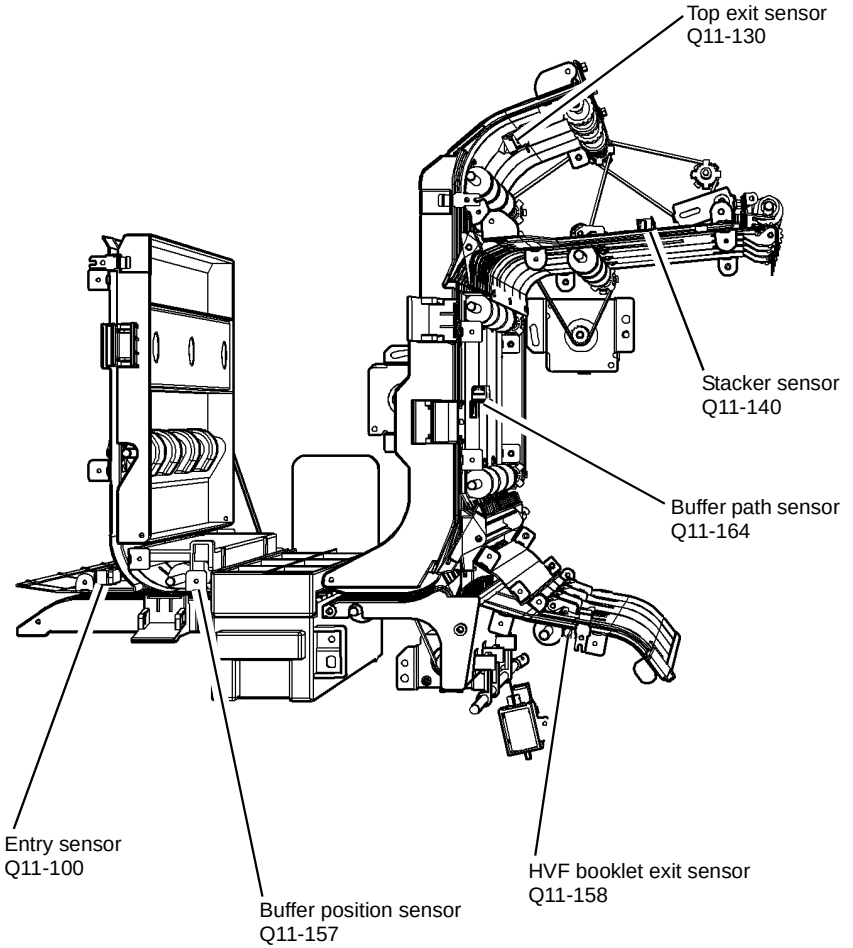
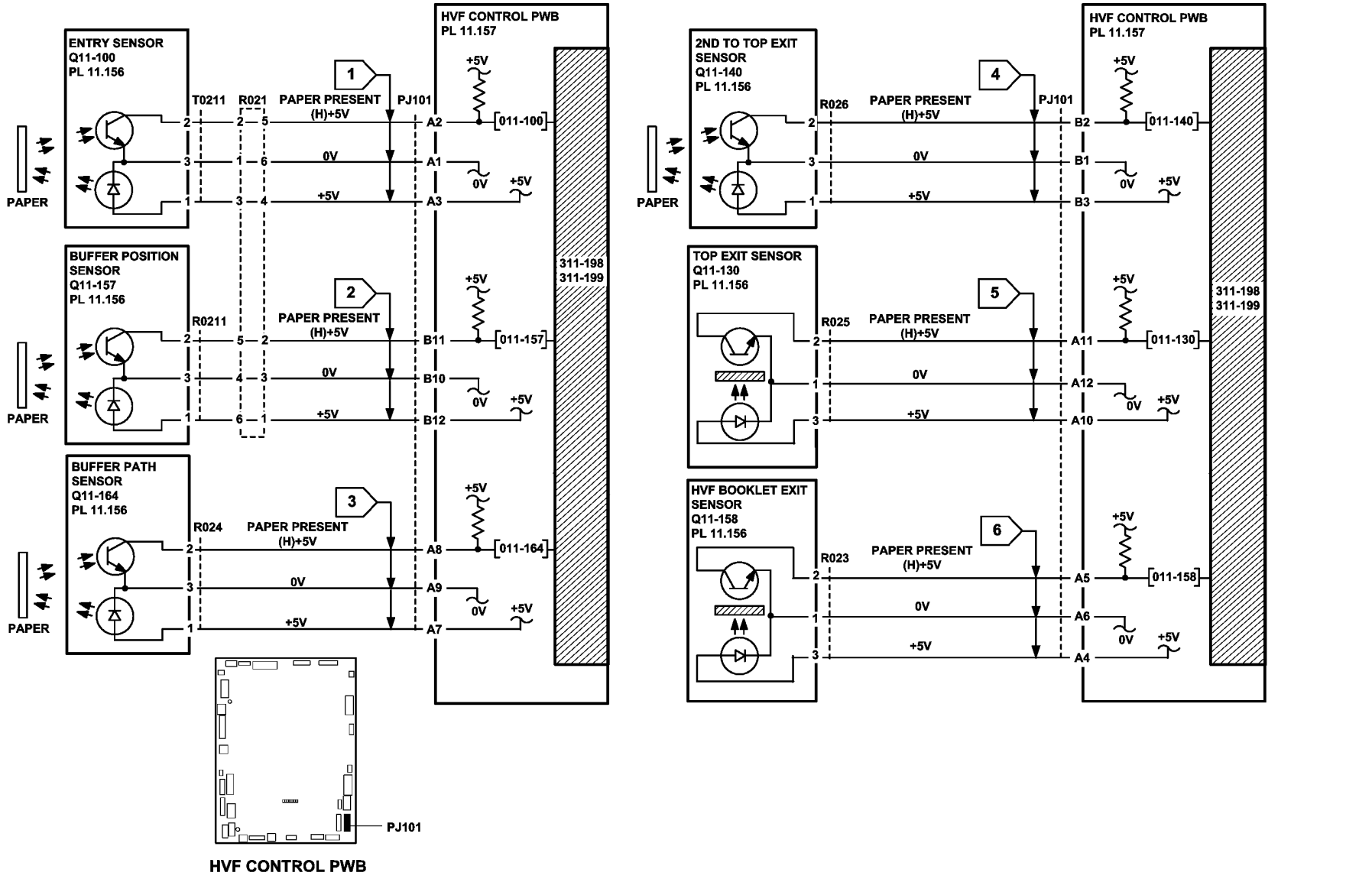


Figure 1 Component location



TV-1-0219-A

Figure 2 Circuit diagram

311-300-00-171, 311-302-00-171, 311-303-00-171 HVF Docking and Interlock RAP

311-300-00-171 The finisher was detected to be undocked in the run mode.

311-302-00-171 The top cover interlock was detected open during a run.

311-303-00-171 The finisher front door interlock was detected open during a run.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure the HVF is correctly docked to the machine and all interlocks are closed.

Procedure

Go to the appropriate procedure:

- 311-300-00-171 Docking Interlock Checkout
- 311-302-00-171 Top Cover Interlock Checkout
- 311-303-00-171 Front Door Interlock Checkout

311-300-00-171 Docking Interlock Checkout

Check the docking interlock switch, S11-300, Figure 1.

- Check the switch actuator mounted on the machine is correctly installed and un-broken.
- Enter dC330 code 011-300, actuate the switch and check the display.
  Refer to:
  - GP 13 How to Check a Switch.
  - P/J112, HVF Control PWB
  - Figure 1, Flag 3.
- Check the wiring, GP 7.
- If necessary, install new components:
  - Docking interlock switch, PL 11.130 Item 16.

311-302-00-171 Top Cover Interlock Checkout

Check the top cover interlock switch, S11-302, Figure 1.

- Check the switch actuator is not damaged.
- Enter dC330 code 011-302 actuate the switch and check the display.
  Refer to:
  - GP 13 How to Check a Switch.
  - P/J112, HVF Control PWB.
  - Figure 1, Flag 1.
- Check the wiring, GP 7.
- If necessary, install a new top cover interlock switch, PL 11.145 Item 24.

  .

311-303-00-171 Front Door Interlock Checkout

Check the front door interlock switch, S11-303, Figure 1.

- Check the switch actuator on the inside of the front door is not damaged.
- Enter dC330 code 011-303 actuate the switch and check the display.
  Refer to:
  - GP 13 How to Check a Switch.
  - P/J112, HVF Control PWB.
  - Figure 1, Flag 2.
- Check the wiring, GP 7.
- If necessary, install a new front door interlock switch, PL 11.145 Item 29.

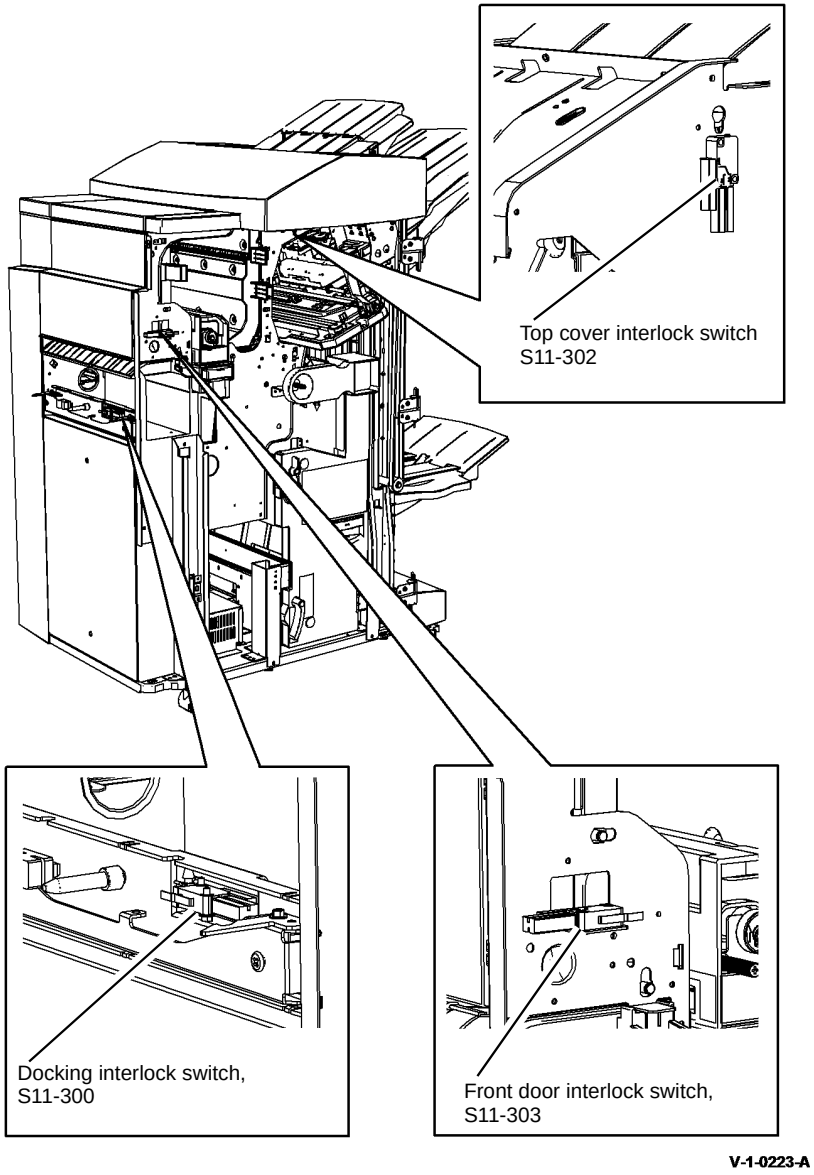


Figure 1 Component location

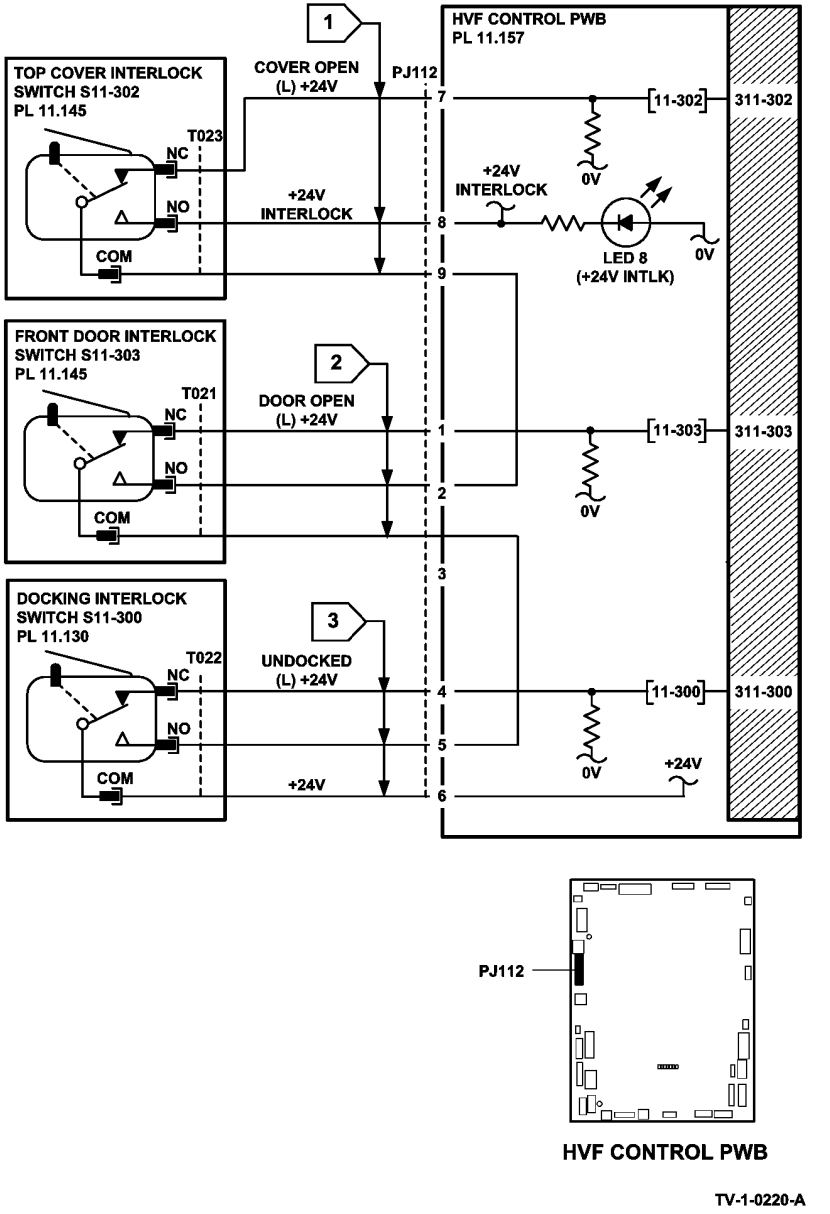


Figure 2 Circuit diagram

311-306-00-171, 311-309-00-171 HVF Inserter Interlock RAP

311-306-00-171 The inserter top cover interlock was detected open in the run mode.

11-309-00-171 The inserter left hand door was detected open in the run mode.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the inserter top cover and left hand door can be fully closed and that the interlocks are operated. Remove any obstruction as necessary.
- Check the actuator on the top cover is not damaged, PL 11.179 Item 17.
- Check the actuator on the left hand door is not damaged, PL 11.175 Item 7.

Procedure

Enter dC330 code 011-306. Open and close the top cover to actuate the switch, Figure 1. **The display changes**

Y N

Refer to:

- GP 13 How to Check a Switch.
- Figure 1, Flag 1 and Flag 2.
- P/J1, P/J5, P/J4, Inserter PWB.
- P/J701, P/J703, HVF Control PWB.
- Check the wiring, GP 7.

If necessary install new components:

- Inserter top cover interlock switch, PL 11.177 Item 8.
- Inserter PWB, PL 11.179 Item 9.
- HVF Control PWB, PL 11.157 Item 2.

Open the top cover. Enter dC330 code 011-431, open and close the left hand door to actuate the switch. **The display changes.**

Y N

Refer to:

- GP 13 How to Check a Switch.
- Figure 1, Flag 3 and Flag 4.
- P/J2, P/J4, Inserter PWB.
- P/J701, HVF Control PWB
- Check the wiring, GP 7.

If necessary install new components:

- Inserter left door interlock switch, PL 11.175 Item 18.
- Inserter PWB, PL 11.179 Item 9.
- HVF Control PWB, PL 11.157 Item 2.

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The fault may be intermittent. Check the wiring and the routing of the harness. Refer to GP 7.

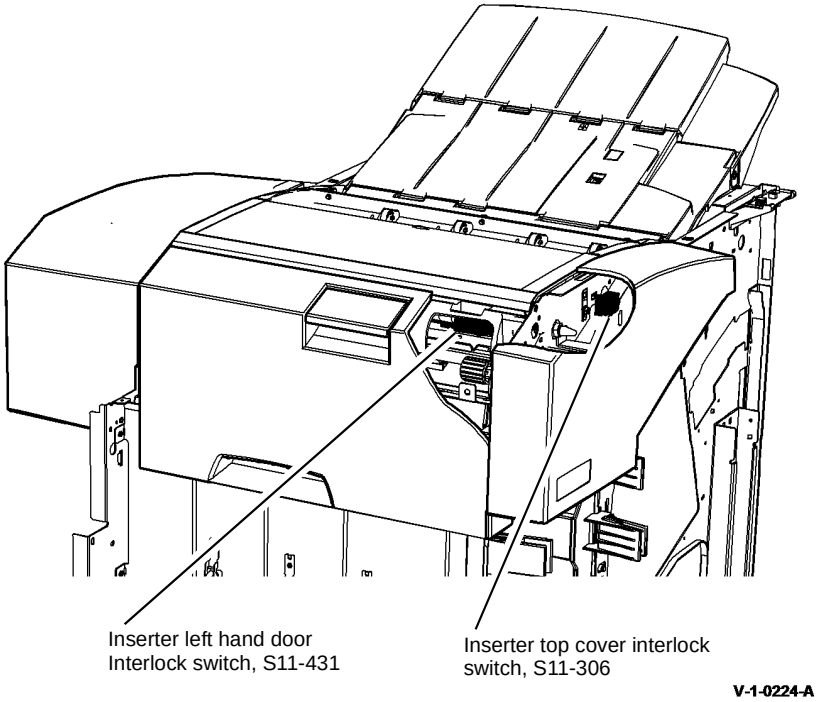
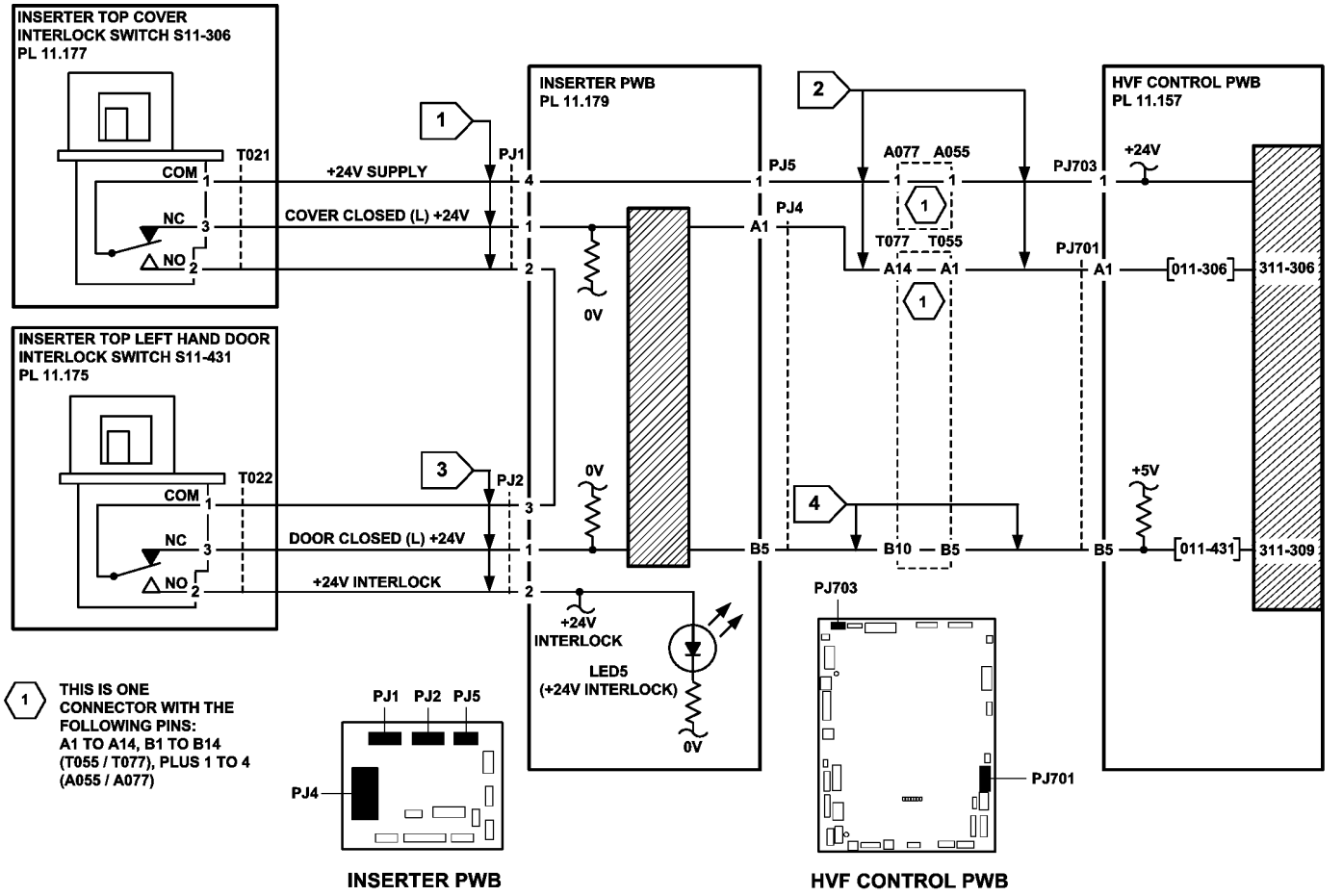


Figure 1 Component location



TV-1-0221-A

Figure 2 Circuit diagram

311-307-00-171, 311-308-00-171 Tri-folder Interlock RAP

311-307-00-171 The Tri-folder top cover interlock was detected open during a run.

311-308-00-171 The Tri-folder front door interlock was detected open during a run.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the tri-folder top cover and front door can be fully closed and that the interlocks are operated. Remove any obstruction as necessary.

Procedure

NOTE: *The two yellow, +24V interlock LEDs on the BM PWB will extinguish if a tri-folder interlock is open.*

Figure 1 shows the location of the components.

Check that the yellow, +24V interlock LED on the BM PWB is lit. **The LED is lit.**

Y N

Go to Flag 1, Flag 2 and Flag 3. Check the wiring and repair as necessary, REP 1.2. Check the TF top cover interlock switch and the TF front door interlock switch, S11-393. Refer to:

- GP 13 How to Check a Switch.
- P/J601, Tri Folder Control PWB.
- P/J553, BM PWB.
- P/J559, BM PWB.
- P/J131, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Top cover interlock switch, PL 11.197 Item 3.
- Front door interlock switch, PL 11.197 Item 2.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-393. Open the tri-folder front door. **The display changes.**

Y N

Go to Flag 4 and Flag 5. Check the wiring and repair as necessary, REP 1.2. Check the tri-folder front door interlock, S11-393. Refer to:

- GP 13 How to Check a Switch.
- P/J605, P/J602, Tri Folder Control PWB.
- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Tri-folder front door interlock switch, PL 11.197 Item 3.

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- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-394. Open the tri-folder top cover door assembly. **The display changes.**

Y N

Go to Flag 6 and Flag 7. Check the wiring and repair as necessary, REP 1.2. Check the Tri-folder top cover interlock sensor, Q11-394. Refer to:

- GP 11 How to Check a Sensor.
- P/J605, P/J602, Tri Folder Control PWB.
- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Top cover interlock sensor, Q11-394, PL 11.190 Item 10.
- Tri-folder control PWB, PL 11.193 Item 16.
- BM PWB, PL 11.166 Item 10.

Perform SCP 5 Final Actions.

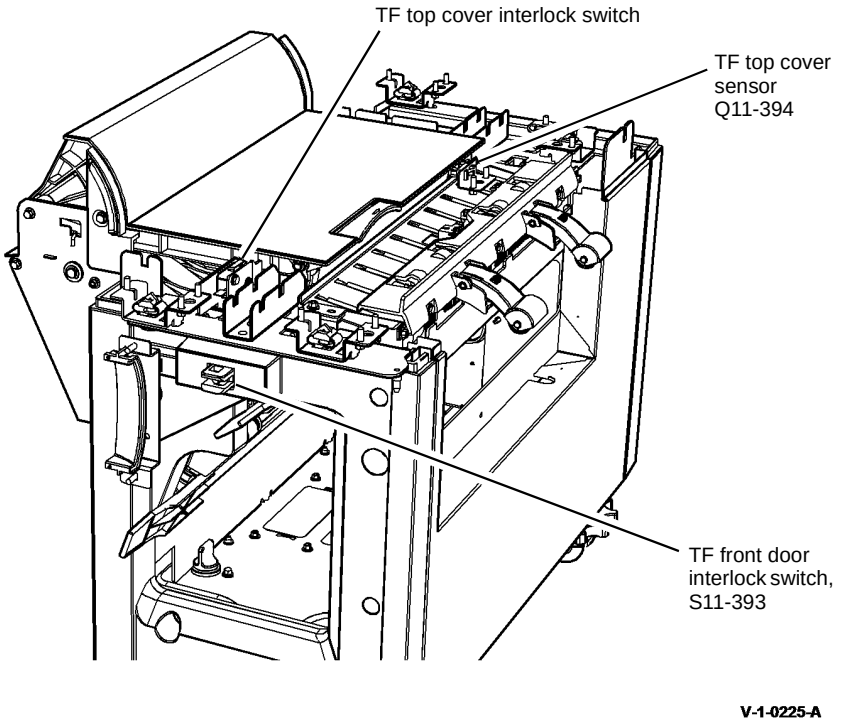

Figure 1 Component location

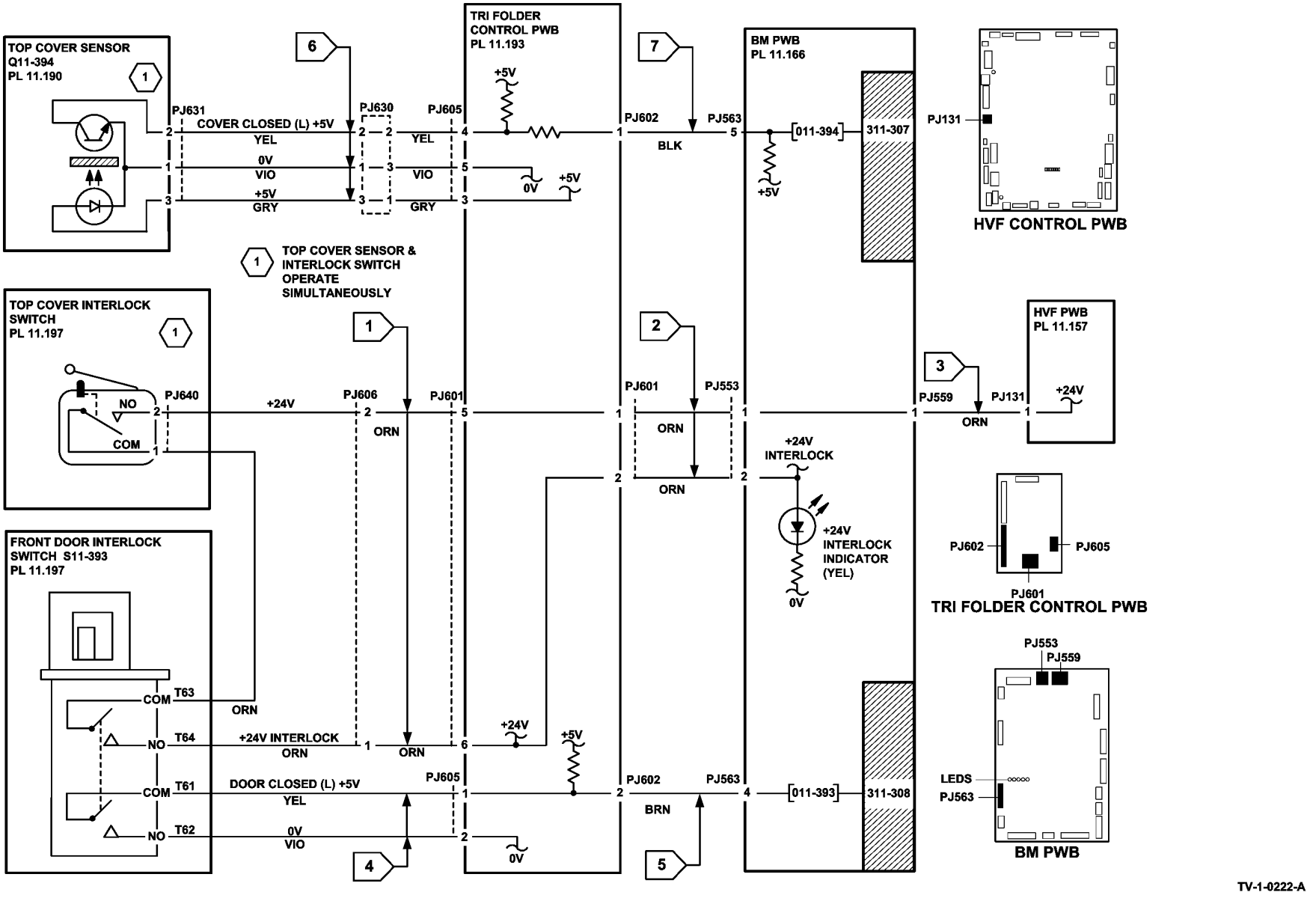

Figure 2 Circuit diagram

311-371-00-171 to 311-377-00-171 HVF Stapler Position and Priming RAP

311-371-00-171 The stapler did not move from the home position.

311-372-00-171 The stapler did not return to the home position.

311-373-00-171 The stapler did not enter the mid home position.

311-374-00-171 The stapler did not leave the mid home position.

311-375-00-171 The stapler jaw did not enter the home position.

311-376-00-171 The stapler jaw did not leave the home position.

311-377-00-171 A stapler priming failure was detected.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not run code 011-050 without two sheets of paper in the stapler jaws. Running this code without the paper in position can cause damage to the machine.

Check the fault history for 311-414-00 faults, if they exist switch off the machine, GP 14. Disconnect PJ131, PJ132 and PJ133 from the HVF PWB. Switch on the machine, GP 14. If the machine boots up without any faults and can run a stapled set into bin 1, then go to the 311-403-00-171, 311-413-00-171, 311-414-00-171 HVF BM Staple Head 2 and Stapler Module RAP to fix the fault, otherwise continue below.

If stapling has failed, perform the following:

- Check that the staple head unit is correctly installed.
- Check that the staple cartridge has staples in it and is correctly installed in the staple head.
- Check that the leading staples in the staple head have been primed.
- Check that the sheets of staples in the cartridge are feeding one at a time. If staples sheets overlap, they will jam in the cartridge. If necessary, install a new cartridge, PL 11.140 Item 33.

Procedure

NOTE: *The sensors Q11-364, Q11-363, Q11-360 and Q11-362 are integral to the staple head unit and although they can be checked they are not separately spared.*

Figure 1 and Figure 2 show the locations of the components.

Enter dC330 code 011-053 to run the stapler unit motor, MOT11-053 and send it to the inboard end of its travel. **The motor runs.**

Y **N**

Go to Flag 5. Check MOT11-053.
Refer to:

- GP 10 How to Check a Motor.
- P/J801, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Stapler assembly, PL 11.140 Item 14.
- HVF control PWB, PL 11.157 Item 2.

With the stapler unit still at the inboard end, enter dC330 code 011-360, stapler home sensor. Manually activate the stapler home sensor, Q11-360, Figure 2. **The display changes.**

Y **N**

Go to Flag 1. Check Q11-360.
Refer to:

- GP 11 How to Check a Sensor.
- P/J301, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Stapler assembly, PL 11.140 Item 14.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-054 to send the stapler unit to the outboard end of the machine. Enter code 011-175, stapler unit mid home sensor. Manually activate the stapler unit mid home sensor, Q11-175, Figure 2. **The display changes.**

Y **N**

Go to Flag 4. Check Q11-373.
Refer to:

- GP 11 How to Check a Sensor.
- P/J301, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP

Install new components as necessary:

- Stapler assembly, PL 11.140 Item 14.
- HVF control PWB, PL 11.157 Item 2.

Place two sheets of paper in the stapler jaws. Raise the finisher top cover. Figure 1, lower the paper pusher fully down and lower the top cover. Enter dC330 code 011-050 to run the staple head motor, MOT11-050. **MOT11-050 runs.**

Y **N**

Go to Flag 6. Check the wiring and repair as necessary, REP 1.2. Check the stapler gate safety switch.
Refer to:

- GP 13 How to Check a Switch.
- P/J304, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

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Install new components as necessary:

- Sensor assembly, PL 11.145 Item 22.
- Stapler assembly, PL 11.140 Item 14.
- HVF control PWB, PL 11.157 Item 2.

With the paper still in place, re-enter the code 011-050 to run the staple head motor, MOT11-050. **MOT11- 050 runs.**

Y N

Go to Flag 2. Check MOT11-050.

Refer to:

- GP 10 How to Check a Motor.
- P/J801, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Stapler assembly, PL 11.140 Item 14.
- HVF control PWB, PL 11.157 Item 2.

If the stapler is now working satisfactorily, perform SCP 5 Final Actions. If necessary, continue with this RAP.

Remove the stapled paper and raise the paper pusher fully upwards. Go to Flag 3. **+5V is available at T502 between pins 1 and 4, also between pin 1 and 7 on the staple head.**

Y N

Check the wiring between P/J T502 and P/J301. **The wiring is good.**

Y N

Repair the wiring, REP 1.2 or install a new stapler harness and P-clip assembly, PL 11.140 Item 25.

Install a new HVF control PWB, PL 11.157 Item 2.

Actuate the stapler priming sensor, Q11-364, by removing and installing the staple cartridge.Check for a change in signal level at P/J301 pin 9 when Q11-364 is being actuated **The signal level changes.**

Y N

Check the wiring between P/J301 pin 9 and the staple head unit. **The wiring is good.**

Y N

Repair the wiring, REP 1.2 or install a new stapler harness and P-clip assembly, PL 11.140 Item 25 as necessary.

Install a new stapler assembly, PL 11.140 Item 14.

Enter dC330 code 011-363 actuate the stapler cartridge sensor, Q11-363, by removing and installing the staple cartridge. **The display changes.**

Y N

Check for a change in signal level at P/J301 pin 10 when Q11-363 is being actuated. **The signal level changes.**

Y N

Check the wiring between P/J301 pin 10 and the staple head unit. **The wiring is good.**

B C

B C

Y N

Repair the wiring, REP 1.2 or install a new stapler harness and P-clip assembly, PL 11.140 Item 25 as necessary.

Install a new stapler assembly, PL 11.140 Item 14.

Install a new HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-360 to monitor the staple home sensor Q11-360, stack the code 011-050 to cycle the staple head. **The display changes.**

Y N

Go to Flag 3. Check for a change in signal level at P/J301 pin 12, while code 011-050 is running. **The signal level changes.**

Y N

Check the wiring between P/J301 pin 12 and the staple head unit. **The wiring is good.**

Y N

Repair the wiring, REP 1.2 or install a new stapler harness and P-clip assembly, PL 11.140 Item 25 as necessary.

Install a new stapler assembly, PL 11.140 Item 14.

Install a new HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-362, actuate the low staples sensor, Q11-362, by removing and installing the staple cartridge. **The display changes.**

Y N

Go to Flag 3. Check for a change in signal level at P/J301 pin 13 when Q11-362 is being actuated. **The signal level changes.**

Y N

Check the wiring between P/J301 pin 13 and the staple head unit. **The wiring is good.**

Y N

Repair the wiring, REP 1.2 or install a new stapler harness and P-clip assembly, PL 11.140 Item 25 as necessary.

Install a new stapler assembly, PL 11.140 Item 14.

Install a new HVF control PWB, PL 11.157 Item 2.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components.

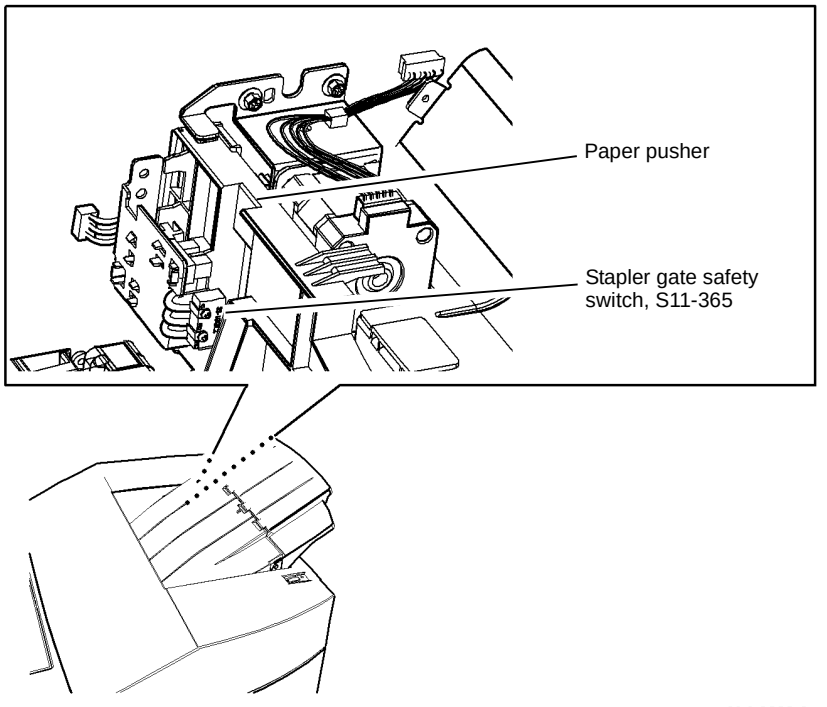


Figure 1 Component location

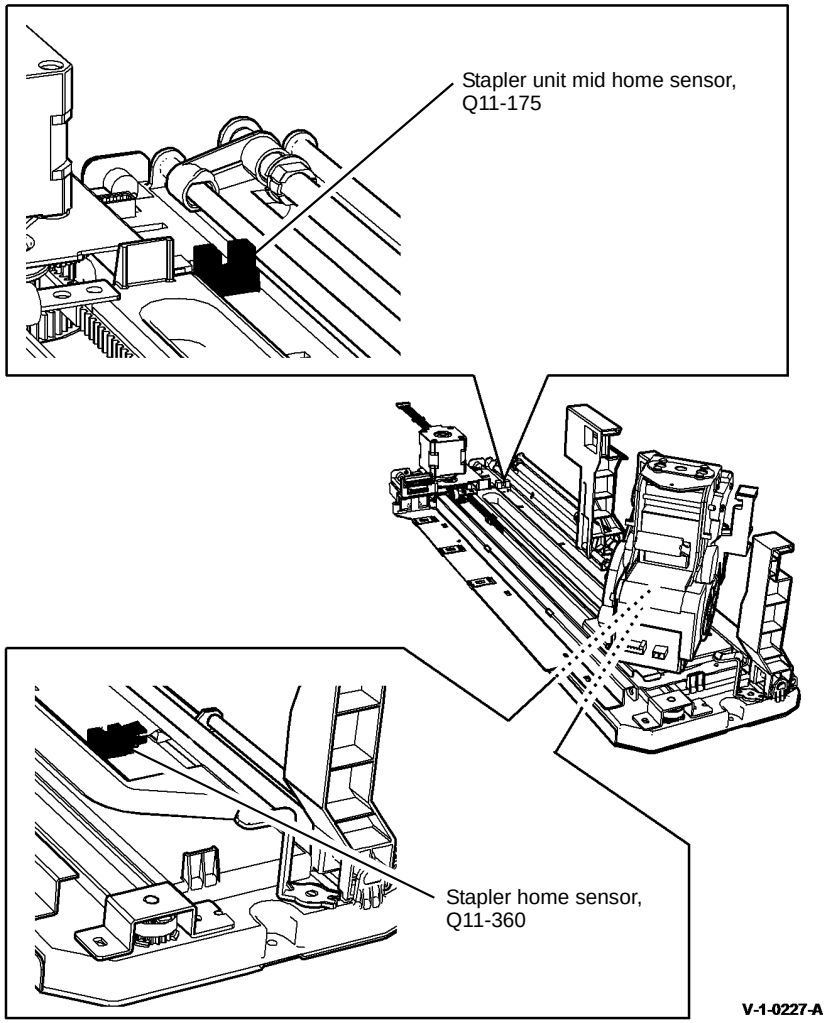
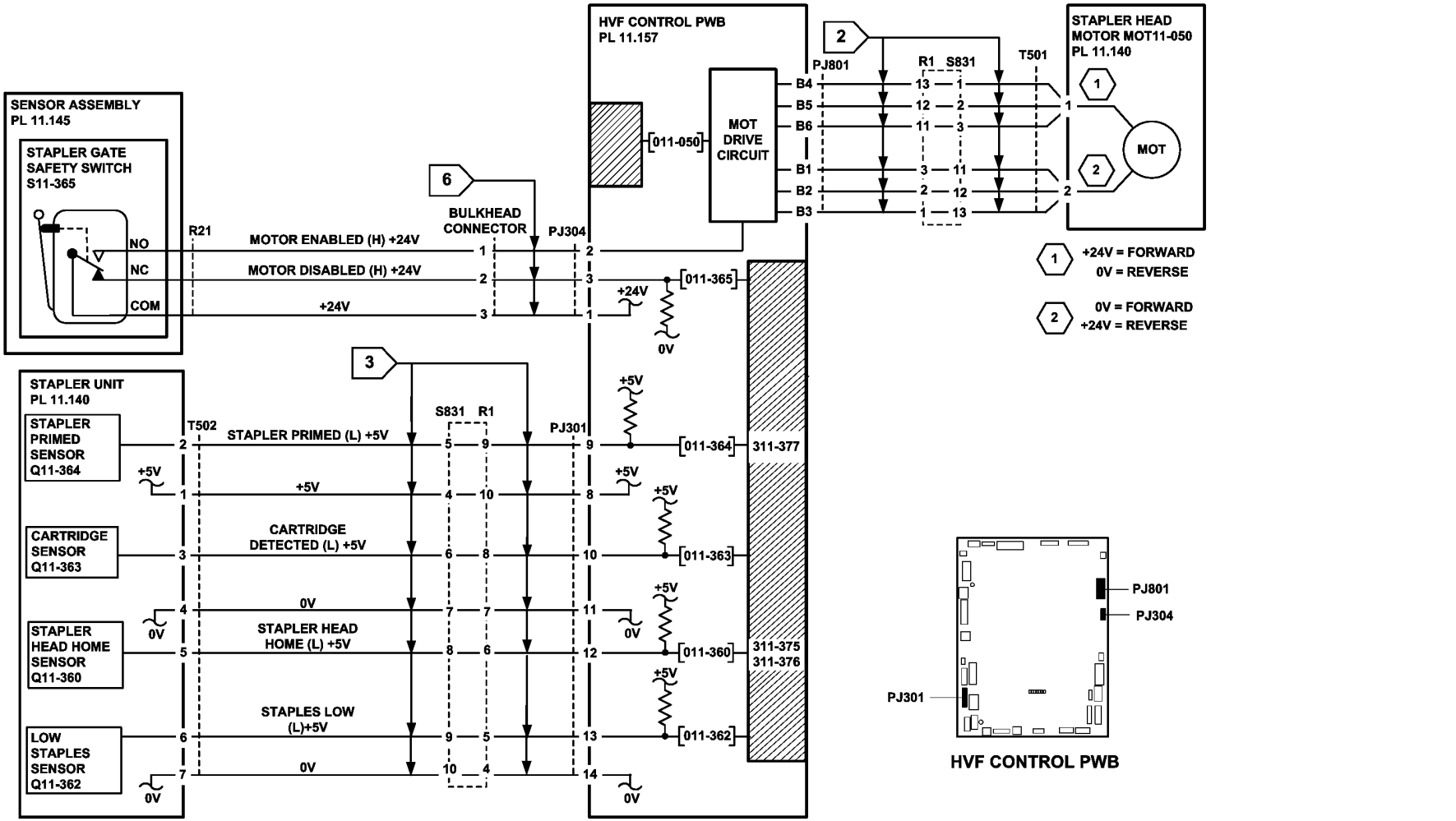


Figure 2 Component location



TV-1-0223-A

Figure 3 Circuit diagram

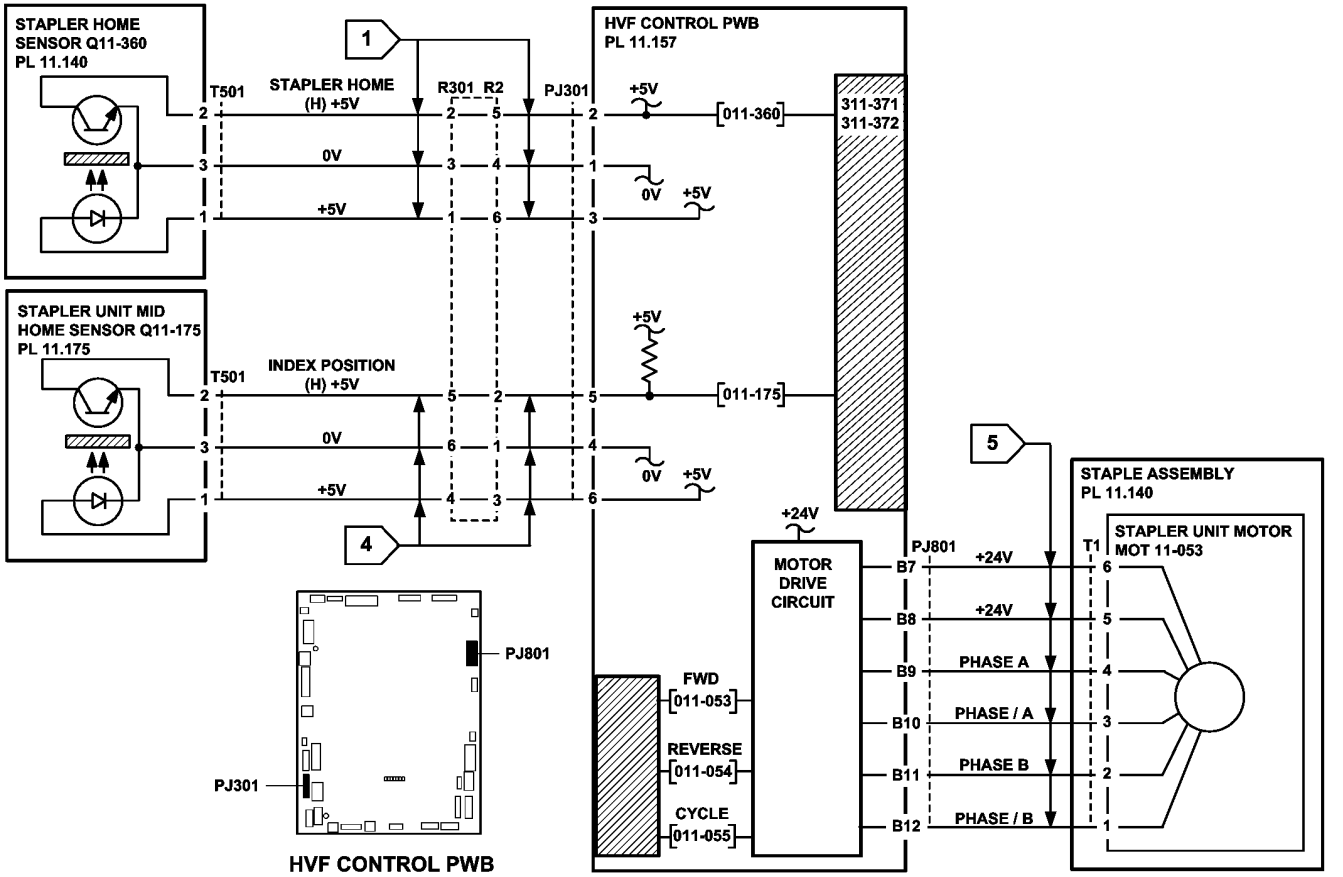


Figure 4 Circuit diagram

311-380-00-171 HVF Punch Unit Paper Edge Detect RAP

311-380-00-171 The punch unit failed to detect the edge of the paper.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the paper path through the punch is clear, Figure 1. Check the punch module is seated at the rear of the machine.
- Check if the HVF module has had the W/TAG V-006 modifications installed. If necessary perform ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006).
- Check to ensure that the correct type of hole punch carrier assembly has been installed. If a ColorQube type of hole punch carrier assembly has been installed 311-380-00 faults will occur, together with the punched holes of a sheet being too close to the top edge of the page. The correct hole punch carrier assembly has only one paper edge sensor, the ColorQube assembly has three. If necessary, install a new hole punch carrier assembly, PL 11.153 Item 1.

Procedure

NOTE: *There is no component control code for the paper edge sensor.*

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check the paper edge sensor, Q11-380, Figure 1 and Figure 2. Refer to:

- GP 11 How to Check a Sensor.
- P/J501, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Paper edge sensor, PL 11.153 Item 17.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-000, transport motor 1, MOT11-000. **MOT11-000 runs.**

Y N

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check transport motor 1, MOT11-000. Refer to:

- GP 10 How to Check a Motor.
- P/J102, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Transport motor 1, PL 11.150 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Perform the following:

- Decrease the downcurl on prints. Refer to ADJ 10.1.
- Check the tension of the transport motor 1 belt, PL 11.150 Item 7. Refer to ADJ 11.10-171.
- If the fault only occurs when paper is fed from tray 6, check the tray 6 alignment. Refer to ADJ 70.4.
- Reload the software, GP 4.

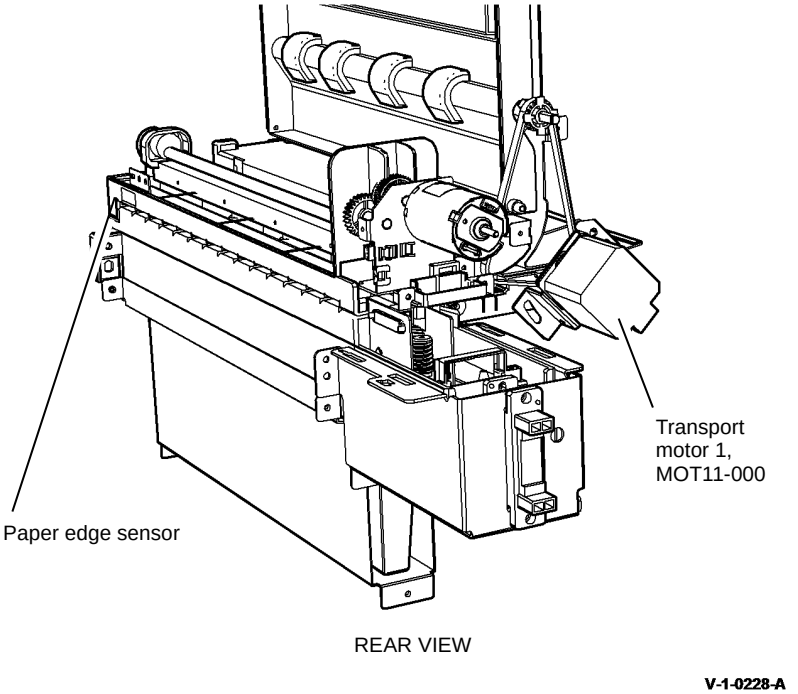
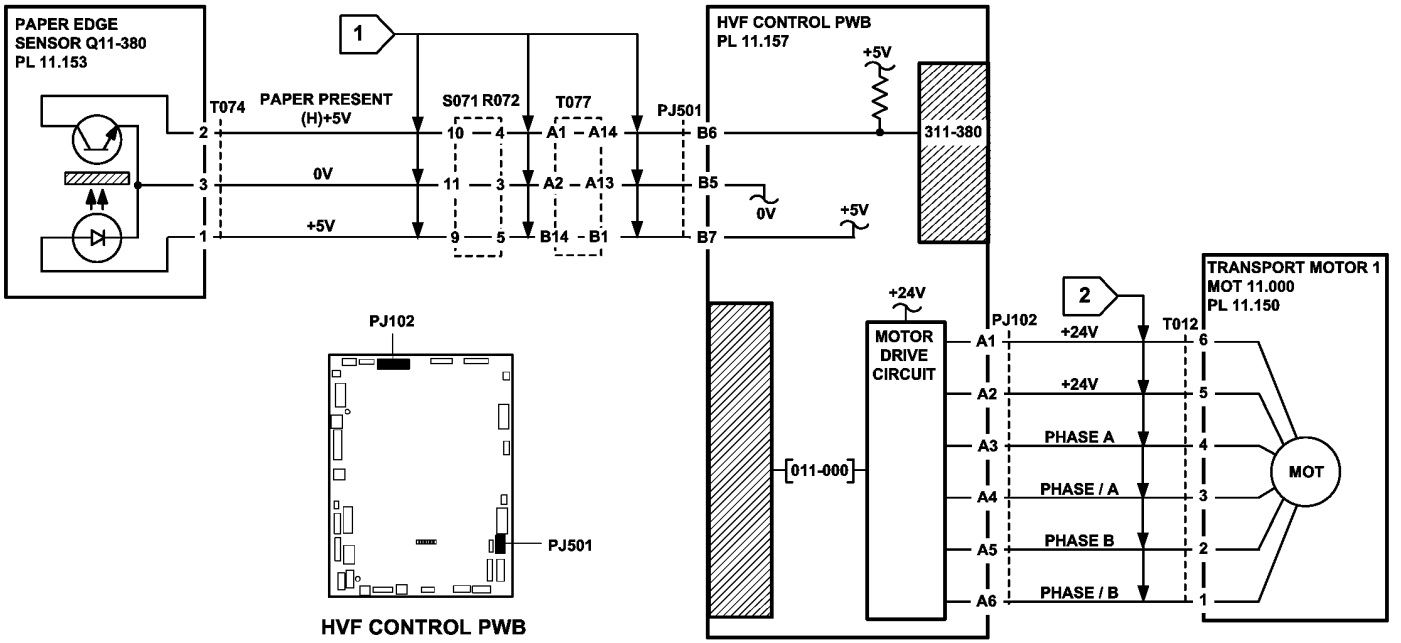


Figure 1 Component location



TV-1-0225-A

Figure 2 Circuit diagram

311-392-00-171 to 311-395-00-171 HVF Front Tamper Tray RAP

311-392-00-171 The front tamper tray did not move from the home position.

311-393-00-171 The front tamper tray did not return to the home position.

311-394-00-171 The front tamper tray did not enter the away position.

311-395-00-171 The front tamper tray did not move from the away position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for damage or obstructions that would prevent the front tamper tray from operating correctly.
- Jams can be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.

Procedure

Figure 1 shows the location of the components.
Enter dC330 code 011-003 to move the tamper inboard, and enter 11-005 to move the tamper outboard. **The tamper moves.**

Y N

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check the front tamper motor, MOT11-003. Refer to:

- GP 10 How to Check a Motor.
- P/J902, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Front tamper motor, PL 11.153 Item 6.
- HVF control PWB, PL 11.157 Item 2.

Stack the dC330 code 011-310, front tamper home sensor Q11-310. Move the motor using its control code 011-003 or 011-005. **The display changes.**

Y N

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check Q11-310. Refer to:

- GP 11 How to Check a Sensor.
- P/J901, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Front tamper home sensor, PL 11.156 Item 1.
- HVF control PWB, PL 11.157 Item 2.

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Stack the dC330 code 011-174, front tamper away sensor, Q11-174. Move the motor using its control code 011-003 or 011-005. **The display changes.**

Y N

Go to Flag 3. Check the wiring and repair as necessary, REP 1.2. Check Q11-174. Refer to:

- GP 11 How to Check a Sensor.
- P/J901, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Front tamper away sensor, Q11-174, PL 11.156 Item 1.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

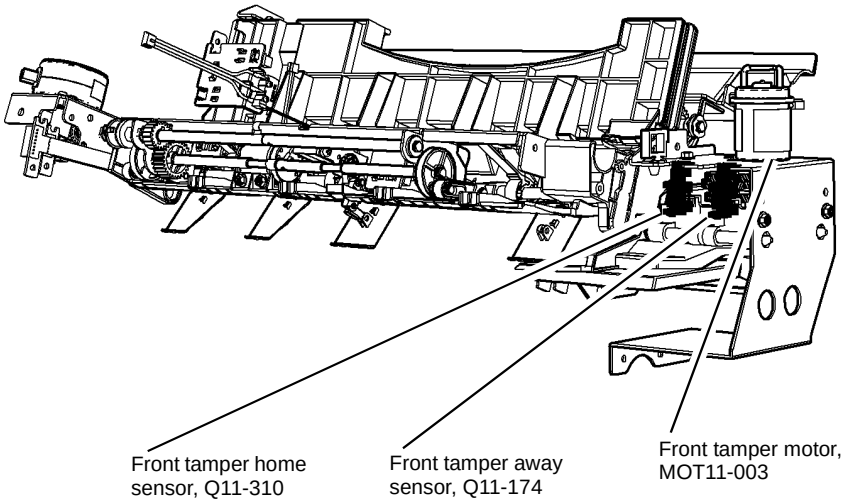
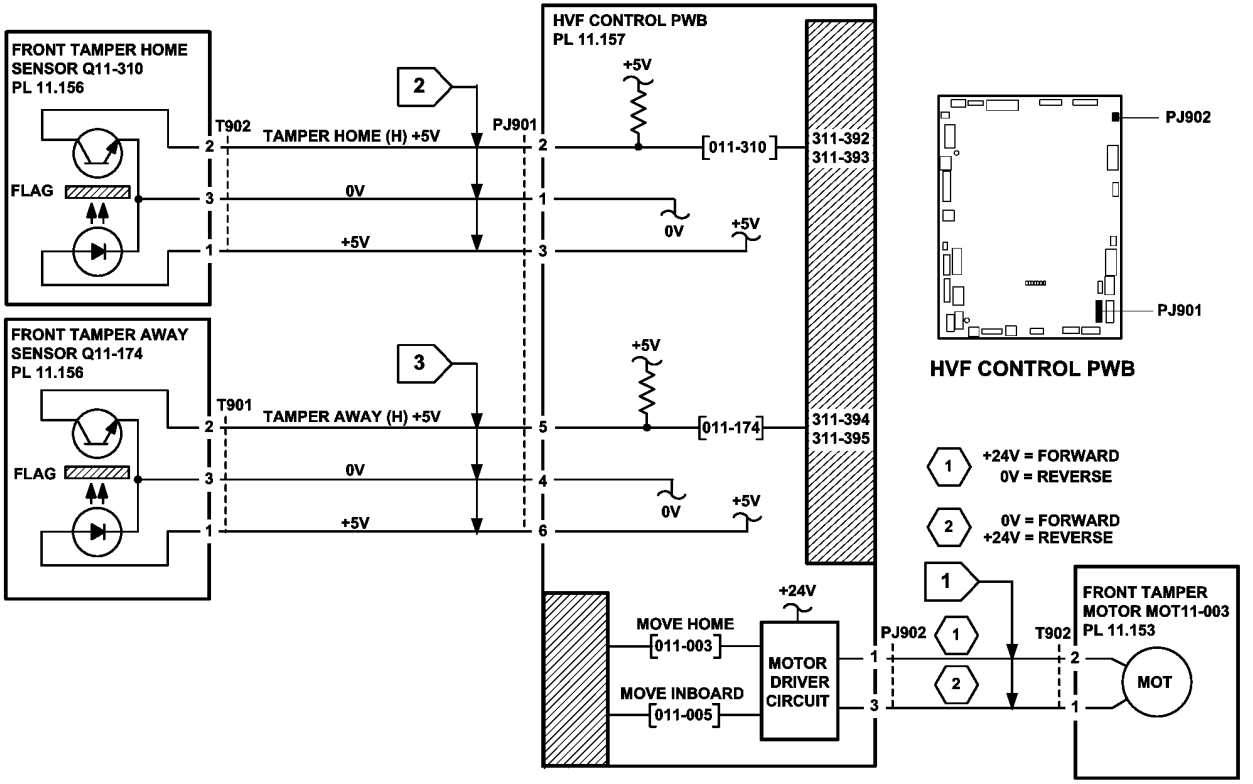


Figure 1 Component location



TV-1-0226-A

Figure 2 Circuit diagram

311-396-00-171 to 311-399-00-171 HVF Rear Tamper Tray RAP

311-396-00-171 The rear tamper tray did not move from the home position.

311-397-00-171 The rear tamper tray did not return to the home position.

311-398-00-171 The rear tamper tray did not move from the away position.

311-399-00-171 The rear tamper tray did not return to the away position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for damage or obstructions that would prevent the rear tamper tray from operating correctly.
- Check that the drive belt is securely in position. Figure 1.
- Jams can be caused if the tray settings do not match the paper in the trays. Make sure the tray settings are correct.

Procedure

Enter the dC330 code, 11-006, move rear tamper inboard. **The tamper moves.**

Y **N**

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check the rear tamper motor, MOT11-004. Refer to:

- GP 10 How to Check a Motor.
- P/J801, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper, PL 11.140 Item 13.
- HVF control PWB, PL 11.157 Item 2.

Stack the dC330 code, 11-311, rear tamper home sensor, Q11-311. Move the tamper motor using the code 011-006, move motor inboard. **The display changes.**

Y **N**

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check Q11-311. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper, PL 11.140 Item 13.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-319, rear tamper away sensor Q11-319. Actuate the rear tamper away sensor, using a piece of paper inserted from the rear of the machine. **The display changes.**

Y **N**

Go to Flag 3. Check the wiring and repair as necessary, REP 1.2. Check Q11-319. Refer to:

- GP 11 How to check a sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper, PL 11.140 Item 13.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

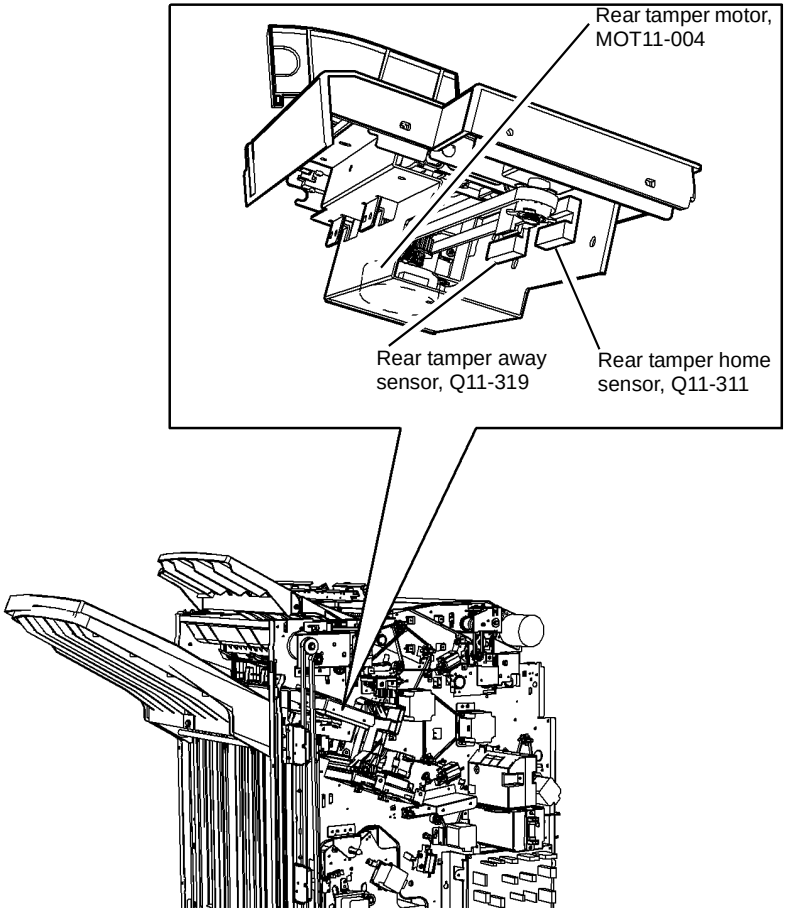


Figure 1 Component location

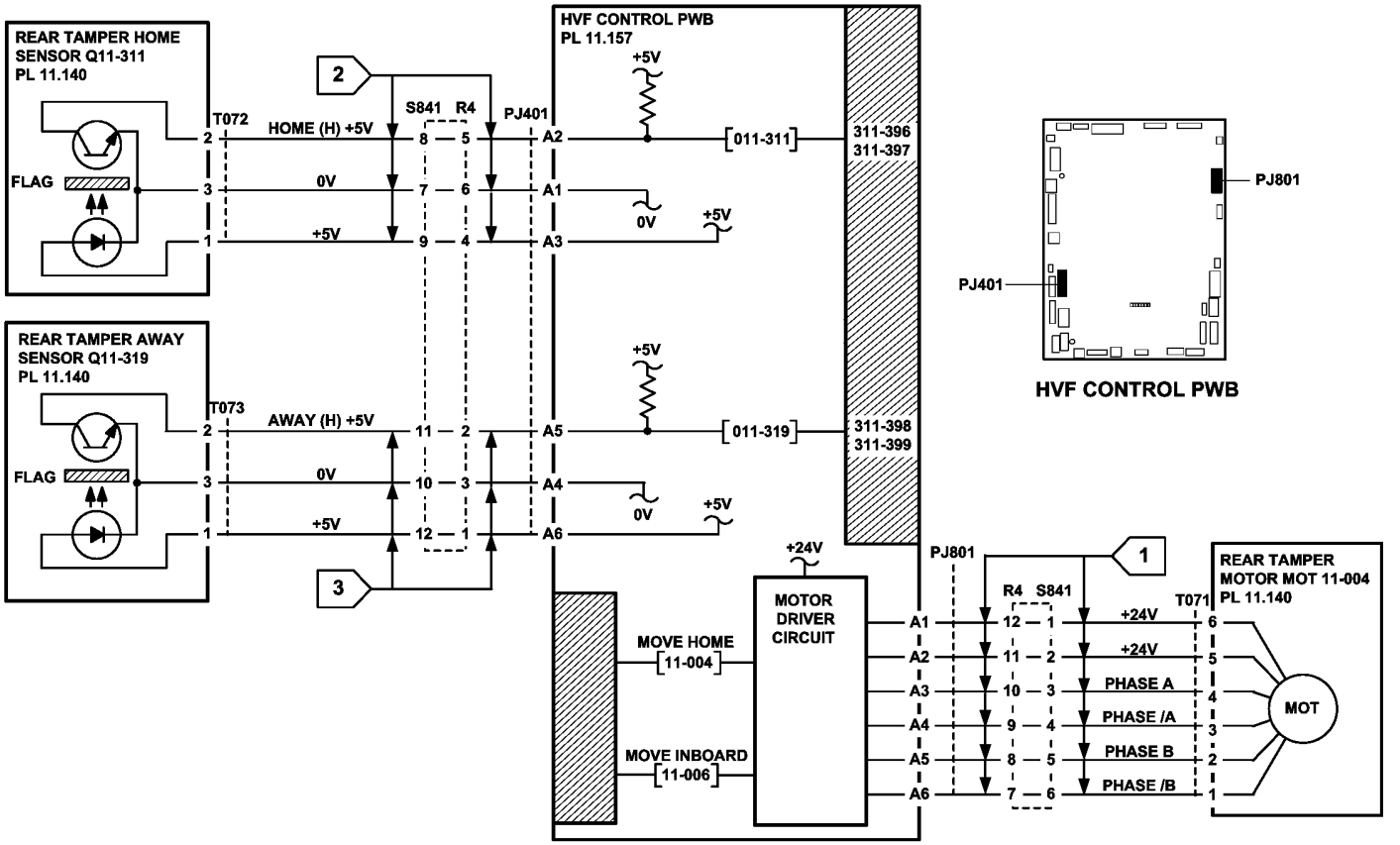


Figure 2 Circuit diagram

311-403-00-171, 311-413-00-171, 311-414-00-171 HVF BM Staple Head 2 and Stapler Module RAP

311-403-00-171 The HVF BM staple head 2 motor has failed to move.

311-413-00-171 The HVF BM staple head 2 is not detected in the home position.

311-414-00-171 The booklet maker stapler module is not detected in the home (staple head closed) position during hard / soft initialize, or at set boundary.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that there is no damage or obstruction that would prevent the stapling unit from cycling.
- Check that the sheets of staples in the cartridge are feeding one at a time. If staple sheets overlap, they will jam in the cartridge. If necessary, install a new staple cartridge, PL 11.168 Item 8.
- Ensure that the customer job does not exceed the capacity of the booklet maker. Refer to 311D-171 Booklet Quality RAP for booklet maker quality specifications.

Procedure

Enter dC330 code 011-421 to check the BM staple head carrier closed sensor, Q11-421. Open and close the staple head carrier. **The display changes.**

Y N

Go to Flag 1. Check Q11-421.
Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM staple head carrier closed sensor, PL 11.168 Item 18.
- BM PWB, PL 11.166 Item 10.

Remove the HVF front door and door support, refer to REP 11.1-171 HVF Covers. Pull out the BM module. Remove the staple head 2 cover, PL 11.168 Item 14. Enter dC330 code 011-413 to check the BM SH2 home switch, S11-413. Manually rotate the staple head to actuate the BM SH2 home switch. **The display changes.**

Y N

Go to Flag 2. Check S11-413.
Refer to:

- GP 13, How to Check a Switch.
- P/J551, BM PWB.
- 311A-171 HVF Power Distribution RAP.

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Install new components as necessary:

- BM staple head 2, PL 11.168 Item 7.
- BM PWB, PL 11.166 Item 10.

Enter dC330 code 011-403 to run the BM SH2 motor, Figure 1. **The staple head cycled.**

Y N

Go to Flag 3. Check the wiring and connectors between P/J560 and P/J586. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

Install a new BM staple head 2, PL 11.168 Item 7.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new components:

- BM staple head carrier closed sensor, PL 11.168 Item 18.
- BM staple head 2, PL 11.168 Item 7.
- BM PWB, PL 11.166 Item 10.

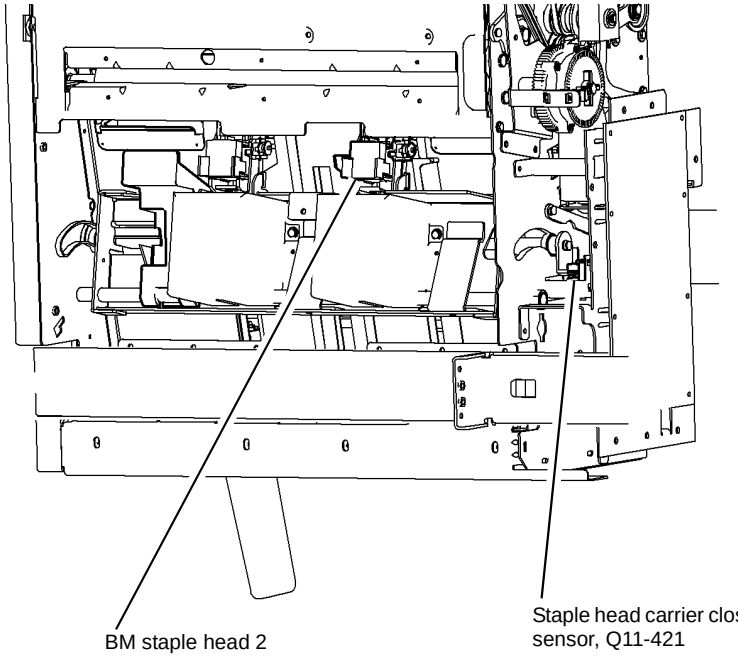
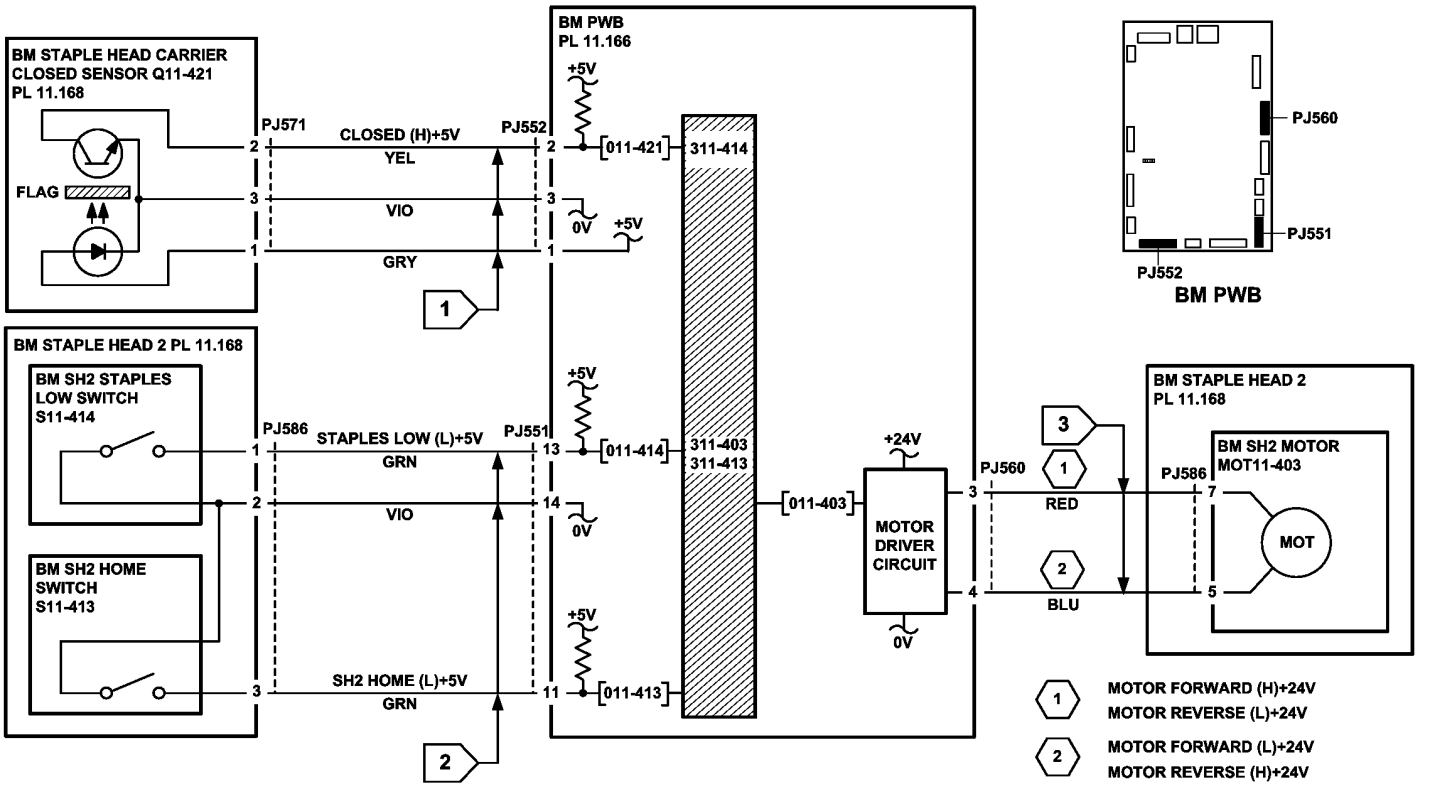


Figure 1 Component location



TV-1-0228-A

Figure 2 Circuit diagram

311-415-00-171 HVF BM Crease Roll Gate Home RAP

311-415-00-171 The crease roll gate is not at the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for a jam or other obstruction that can prevent the crease roll gate mechanism from moving.
- Check the following parts for damage:
  - Crease roll gate rack gears, PL 11.167 Item 8.
  - Crease roll gate racks, PL 11.167 Item 14.

Procedure

Enter dC330 code 011-415. Actuate the BM crease roll gate home sensor, Q11-415. **The display changes.**

Y N

Go to Flag 1. Check Q11-415.
Refer to:

- GP 11, How to Check a Sensor.
- P/J552, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM crease roll gate home sensor PL 11.166 Item 9.

Enter dC330 code 011-401 to run the BM crease roll gate motor, MOT11-401. **MOT11-401 runs.**

Y N

Go to Flag 2 and Flag 3. Check MOT11-401.
Refer to:

- GP 10 How to Check a Motor.
- P/J555, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM crease roll gate motor, PL 11.166 Item 8.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install a new BM PWB, PL 11.166 Item 10.

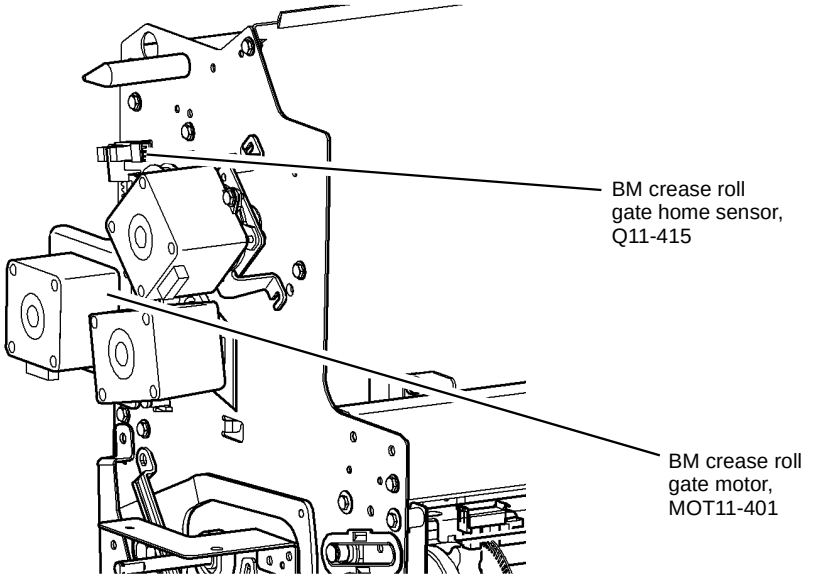
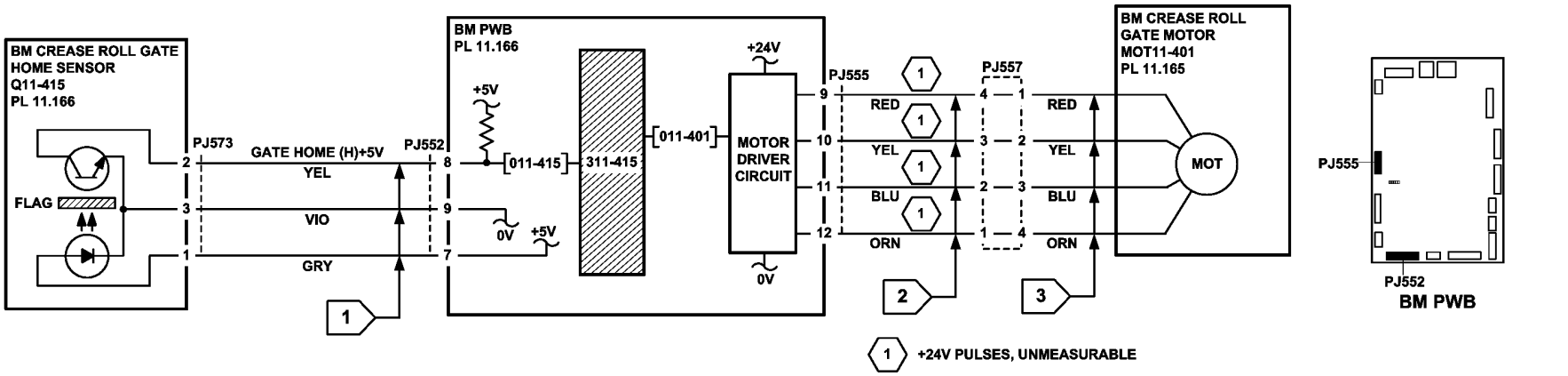


Figure 1 Component location



TV-1-0229-A

Figure 2 Circuit diagram

311-417-00-171, 311-418-00-171 HVF BM Flapper RAP

311-417-00-171 The booklet maker flapper did not return to the home position.

311-418-00-171 The booklet maker flapper did not move from the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for damage or obstructions that would prevent the BM flapper from rotating.

Procedure

NOTE: *All HVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-390 to check the BM flapper motor, MOT11-390, Figure 1. **The BM flapper rotates.**

Y N

Go to Flag 2. Check MOT11-390.

Refer to:

- GP 10, How to Check a Motor.
- P/J560, BM PWB.
- 311A-171, HVF Power Distribution RAP.

Install new components as necessary:

- BM flapper motor, PL 11.166 Item 1.
- BM PWB, PL 11.166 Item 10.
- BM flapper, PL 11.161 Item 23.

Enter dC330 code 011-391. Actuate the flapper home sensor, Q11-391. **The display changes.**

Y N

Go to Flag 1. Check Q11-391.

Refer to:

- GP 11 How to Check a Sensor.
- P/J551, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Flapper home sensor, PL 11.161 Item 12.
- BM PWB, PL 11.166 Item 10.

Perform SCP 5 Final Actions.

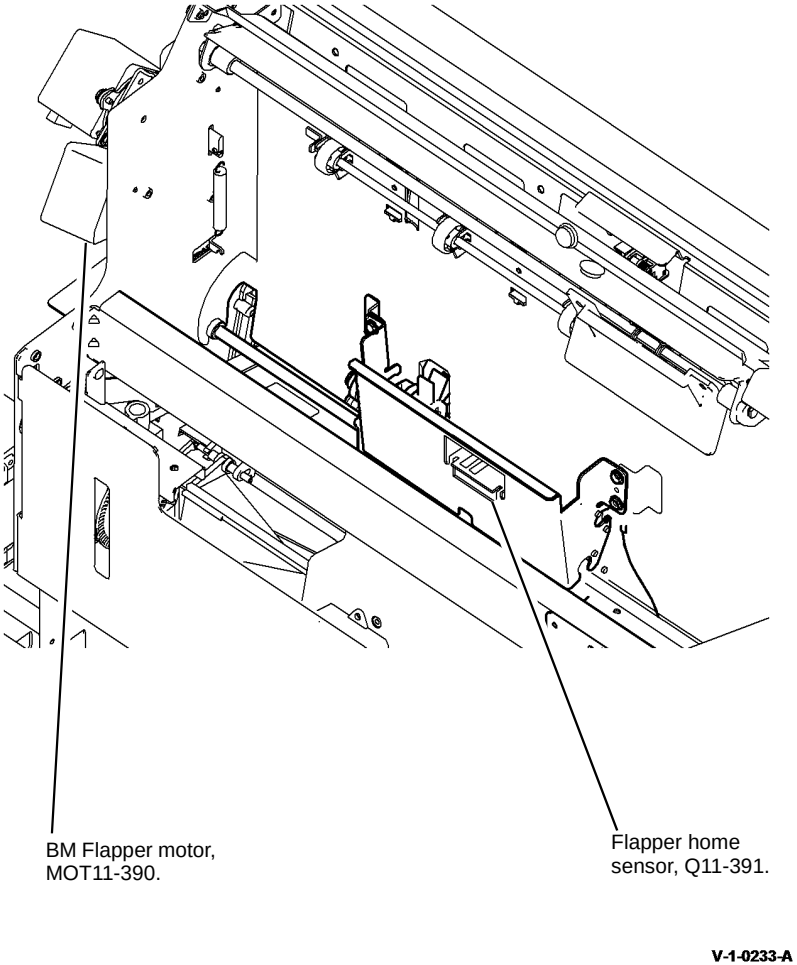


Figure 1 Component location

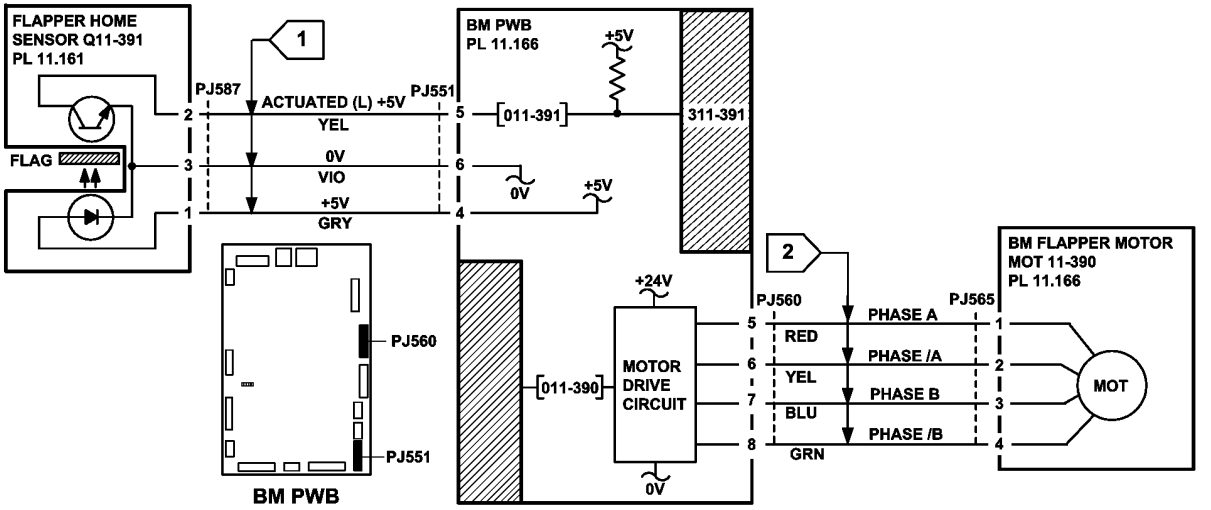


Figure 2 Circuit diagram

311-450-00-171, 311-456-00-171 to 311-459-00-171 HVF Ejector Module RAP

311-450-00-171 The ejector module motor has stalled

311-456-00-171 The ejector module did not return to the home position.

311-457-00-171 The ejector module did not move from the home position.

311-458-00-171 The ejector module did not return to the out position.

311-459-00-171 The ejector module did not move from the out position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for damage or obstructions that would prevent the ejector module from operating correctly.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-320, ejector home sensor, Q11-320. Stack the dC330 code 011-053 to move the stapler unit inboard, and observe the display. This action moves the stapler unit inboard, and moves the ejector module to the out position. **The display changes.**

Y **N**

The ejector module moved to the out position.

Y **N**

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check the ejector unit motor, MOT11-023. Refer to:

- GP 10 How to Check a Motor.
- P/J802, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check Q11-320. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

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Exit, then re-enter service mode. This returns the ejector module to the home position. Enter dC330 code, 11-322, ejector unit out sensor, Q11-322. Stack the dC330 code, 11-053 to move the stapler unit inboard. **The display changes.**

Y **N**

Go to Flag 3. Check the wiring and repair as necessary, REP 1.2. Check Q11-322. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Exit, then re-enter service mode. This returns the ejector module to the home position. Enter the dC330 code 011-177, ejector motor encoder, Q11-177. Stack the dC330 code 011-053 to move the stapler unit inboard. **The display changes condition for a few seconds.**

Y **N**

Go to Flag 4. Check the wiring and repair as necessary, REP 1.2. Check Q11-177. Refer to:

- GP 10 How to Check a Motor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

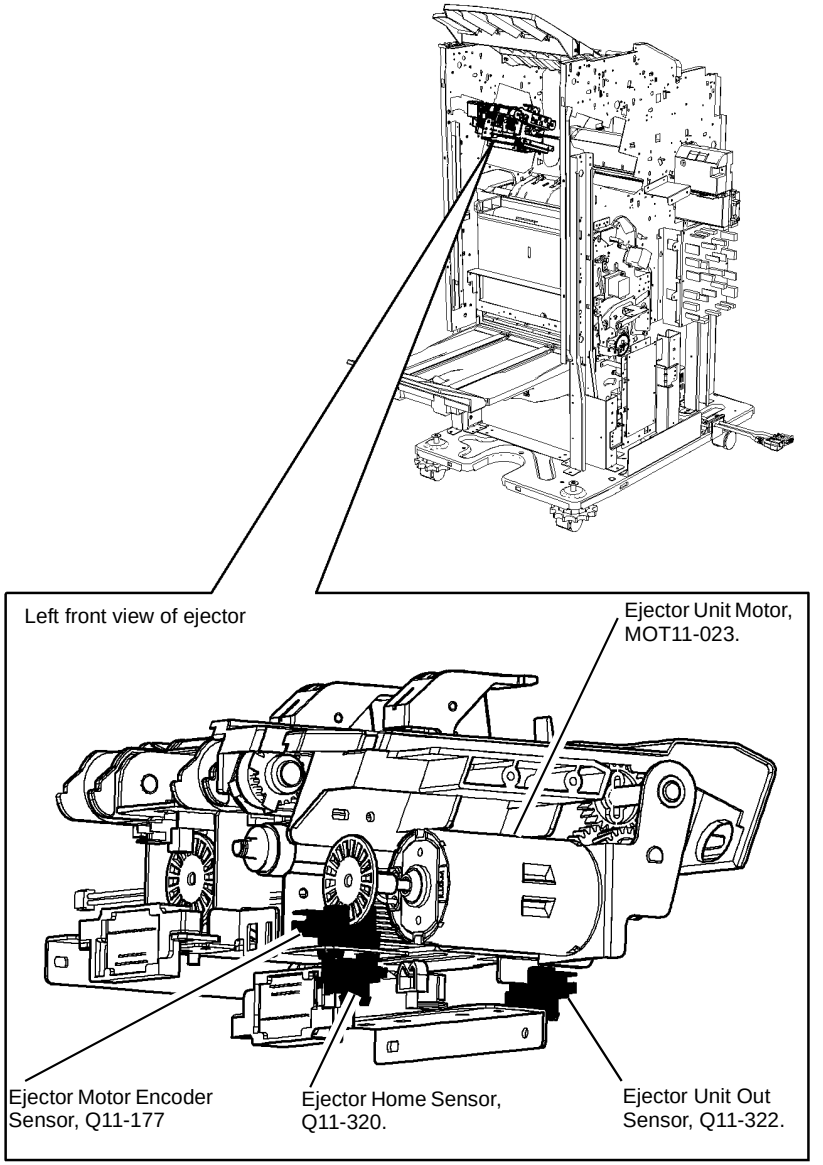
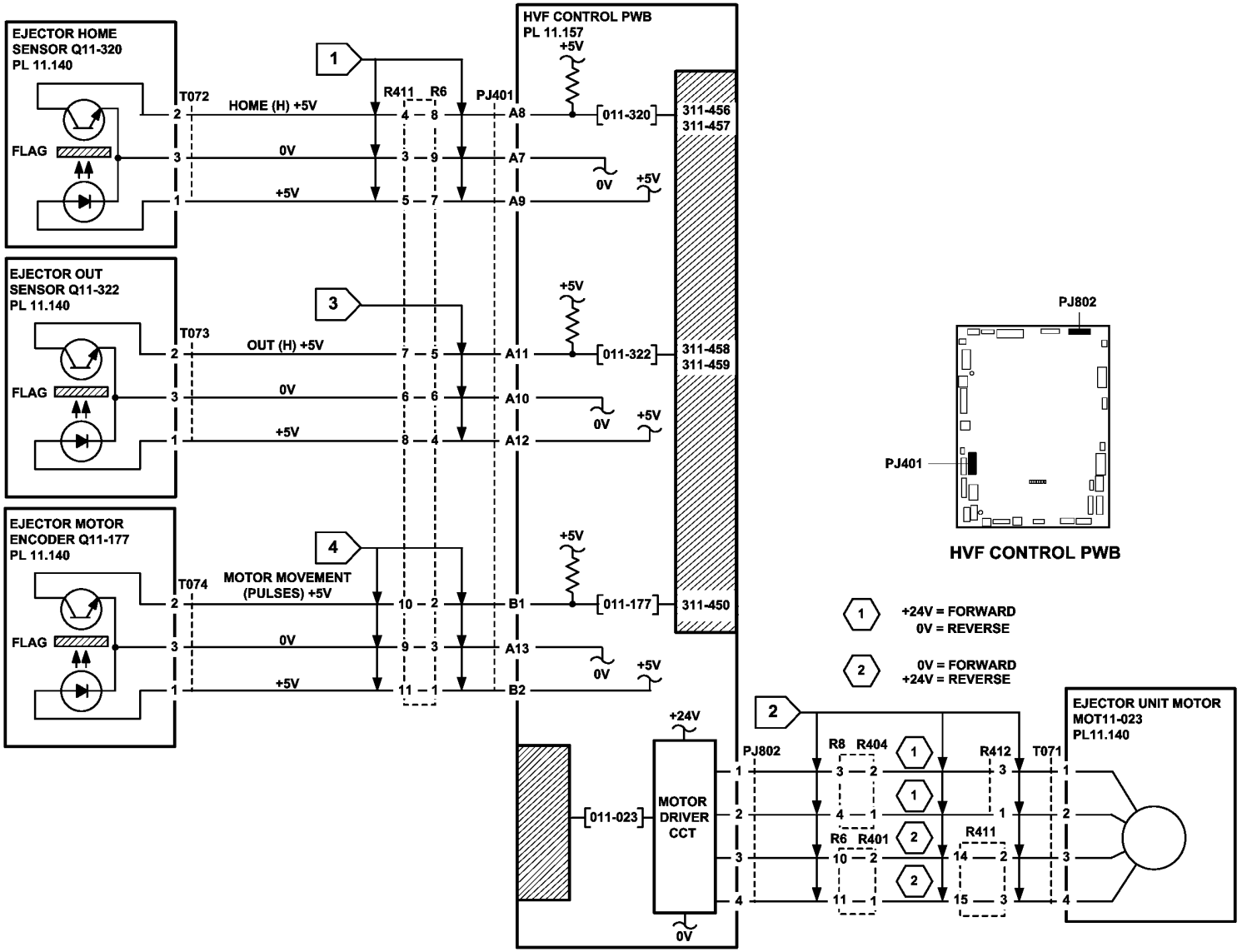


Figure 1 Component location



TV-1-0231-A

Figure 2 Circuit diagram

311-451-00-171 to 311-455-00-171 HVF Ejector Roll and Lower Paddle RAP

311-451-00-171 The ejector roll motor has stalled.

11-452-00-171 The ejector roll did not return to the home position.

311-453-00-171 The ejector roll did not move from the home position.

311-454-00-171 The lower paddle has failed to return to the home position.

311-455-00-171 The lower paddle has failed to move from the home position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for any damage or obstructions that would prevent the ejector roll and lower paddle from operating correctly. Damaged or mis-positioned fingers can catch on the ejector tee bar, causing 311-452-171 faults.
- Check that the curl suppressor solenoid SOL11-084 is operating correctly. If necessary, go to 311M-171 Curl Suppressor RAP.

Procedure

Figure 1, Figure 2 and Figure 3 show the component locations.

Enter dC330 code 011-032 to take the bin 1 stacker tray down. Enter code 011-053, staple unit 1 forward to move the ejector module to the out position. Enter code 011-179, ejector plate home sensor, Q11-179. Manually turn the ejector belts a few centimeters. **The display changes.**

Y N

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check Q11-179. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-178, ejector plate encoder sensor, Q11-178. Enter the code 011-088 to rotate the ejector roll motor one cycle of the ejector plates in the forward direction. **The display changes.**

Y N

The ejector roll motor turned.

A

A

Y N

Go to Flag 2. Check the wiring and repair as necessary, REP 1.2. Check the ejector roll motor, MOT11-088. Refer to:

- GP 10 How to Check a Motor.
- P/J802, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 3. Check the wiring and repair as necessary, REP 1.2. Check Q11-178. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Measure the voltage at P/J401, pin B4. Figure 3, rotate the lower home paddle upwards and inwards for one full rotation. **The voltage changes from a logic high to a low, and then back to high.**

Y N

Go to Flag 4. Check the wiring and repair as necessary, REP 1.2. Check the ejector lower paddle switch, S11-180. Refer to:

- GP 13 How to Check a Switch.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Measure the voltage at P/J401, pin B12. Actuate the ejector paper present sensor by placing a sheet of paper on the ejector module. **The voltage changes.**

Y N

Go to Flag 5. Check the wiring and repair as necessary, REP 1.2. Check the ejector paper present sensor. Refer to:

- GP 11 How to Check a Sensor.
- P/J401, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

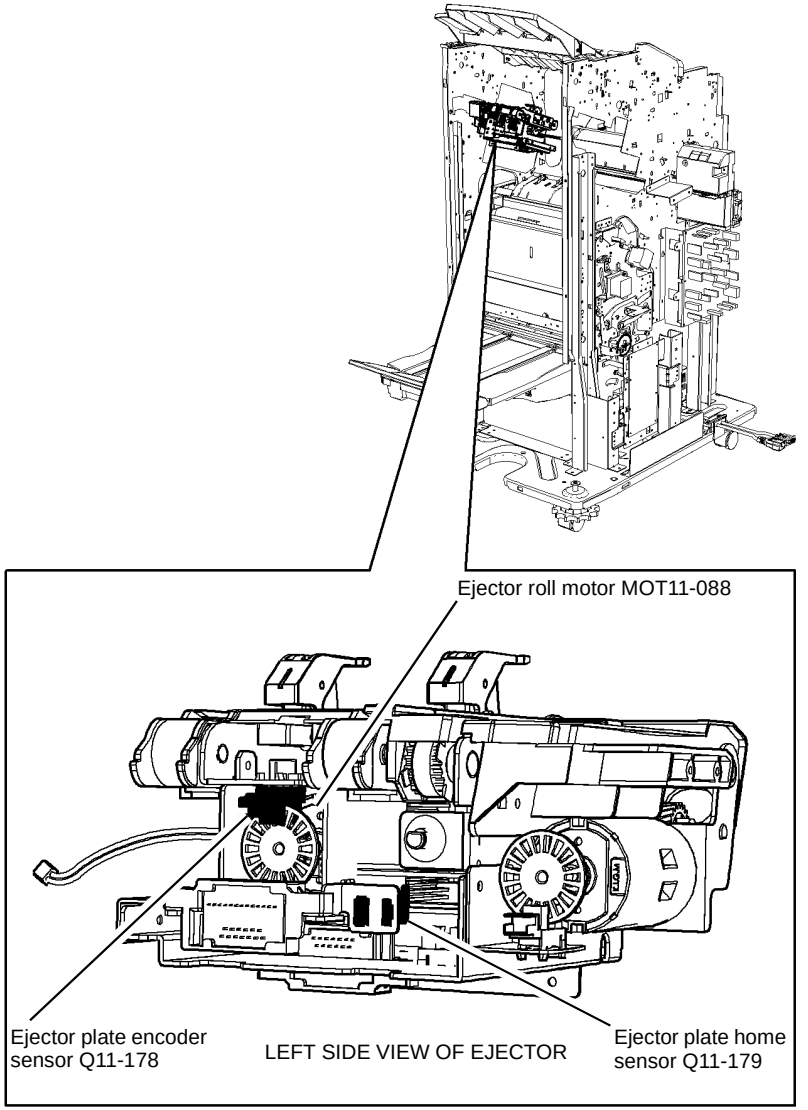


Figure 1 Component location

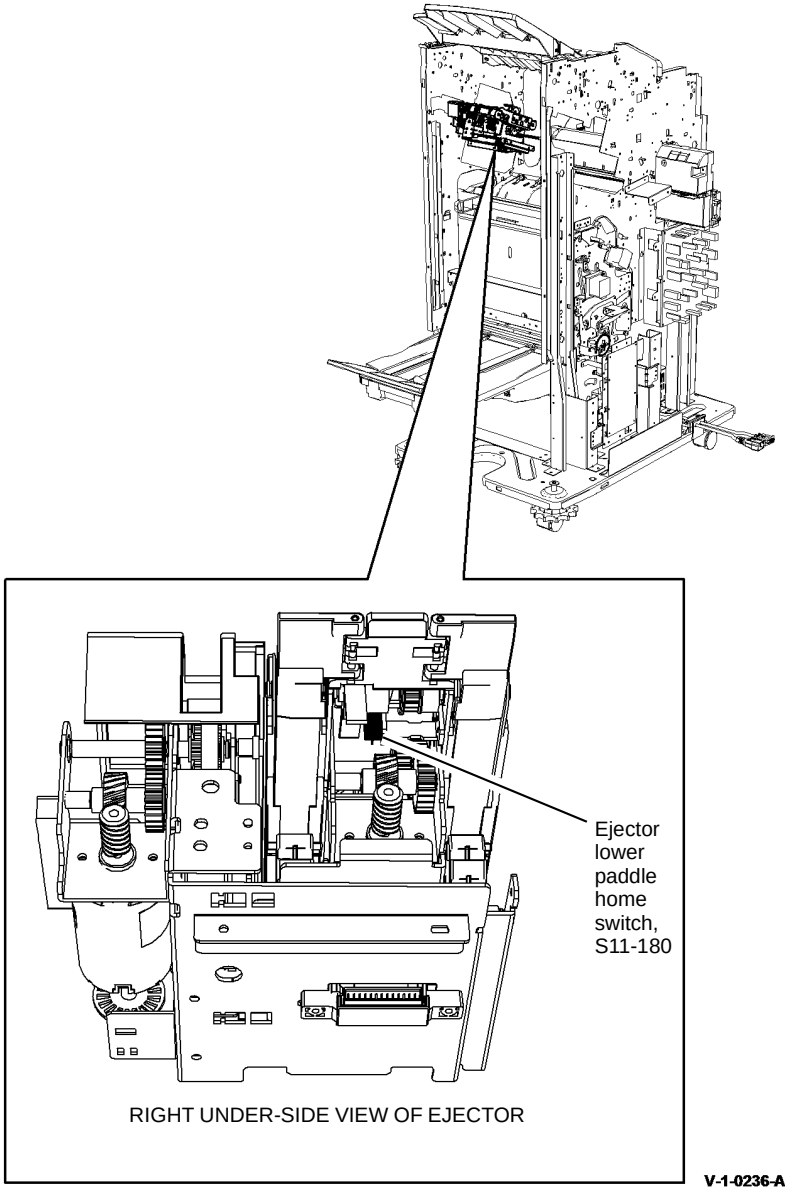


Figure 2 Component location

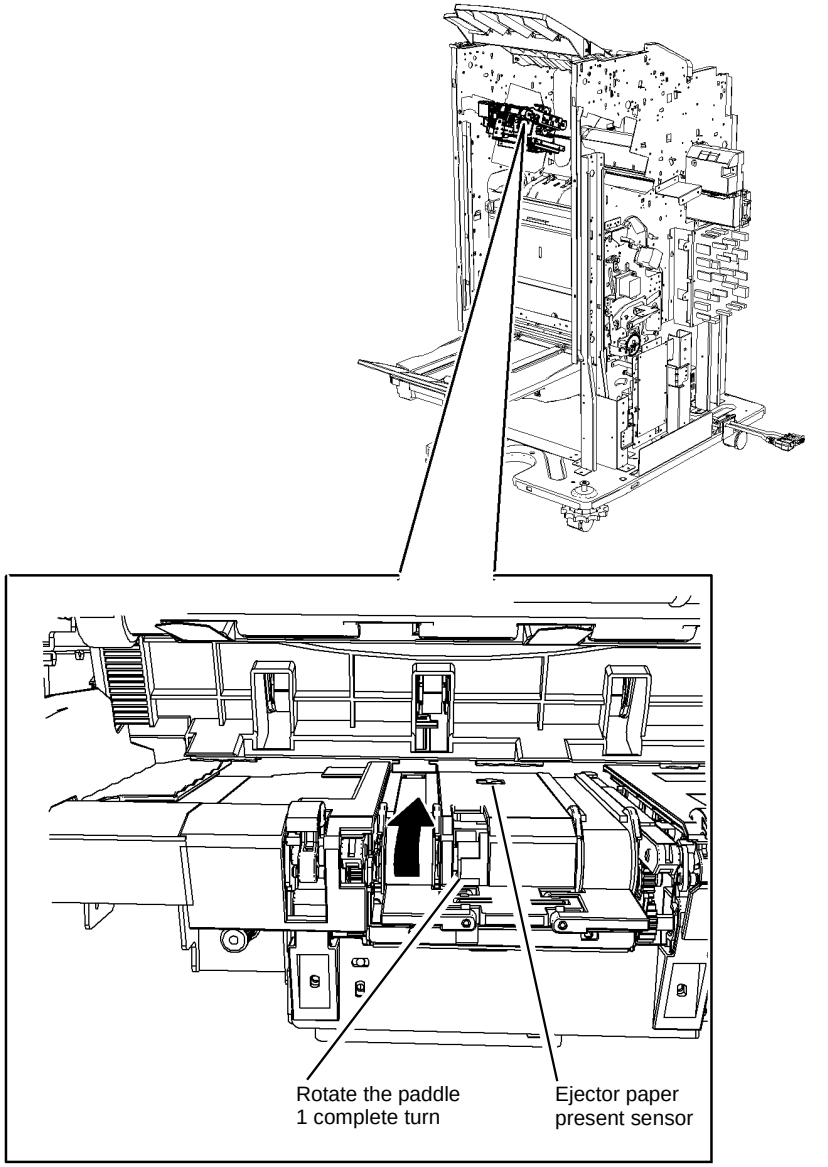


Figure 3 Component location

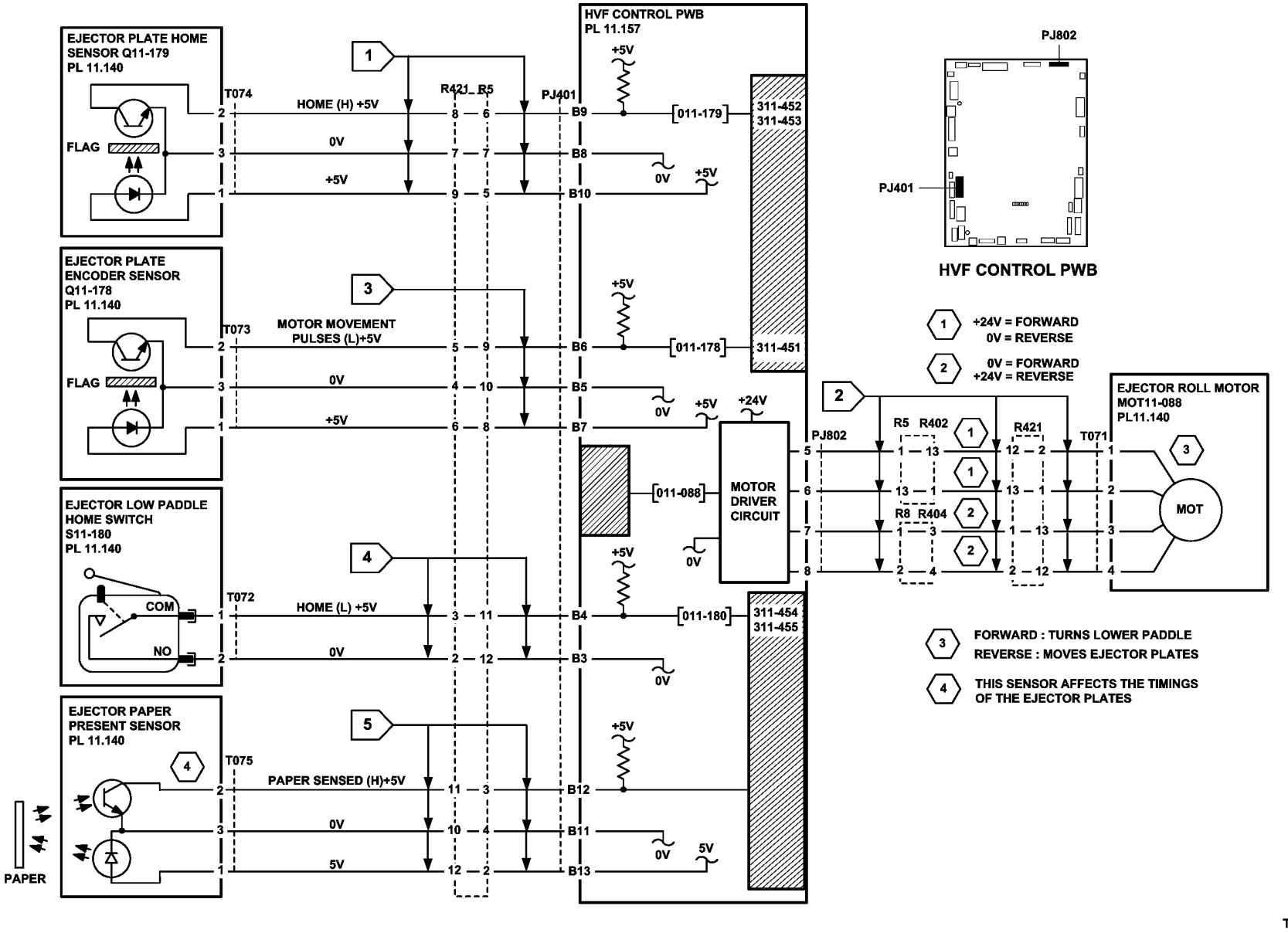


Figure 4 Circuit diagram

311-460-00-171 to 311-462-00-171 HVF Bin 1 Position RAP

311-460-00-171 Bin 1 motor has stalled.

311-461-00-171 Bin 1 did not actuate the bin 1 upper level sensor during stacking.

311-462-00-171 Bin 1 did not leave the bin 1 upper level sensor during stacking.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that bin1 is not damaged and there are no obstructions that would prevent bin 1 from moving
- Remove any obstructions that could prevent the full descent and elevation of bin 1
- Press the pause to unload button to lower bin 1. Press again the pause to unload button to raise bin 1
- Poor operation or misalignment of the inboard and outboard pressing plate fingers and support fingers can cause poor stacking in bin 1, leading to 311-462 faults. Check the following:
  - The pressing plate fingers move from and return to their home positions correctly
  - Missing or damaged gear teeth on the support finger motor assembly, PL 11.140 Item 9. If necessary install a new motor encoder assembly, PL 11.140 Item 18 and re-align the front and rear support fingers
  - Operation of the other mechanical components in the bin 1 and ejector assembly area

Procedure

NOTE: *The bin 1 90% full sensor, Q11-331, and the bin 1 lower limit switch are mounted on the same bracket. This bracket can be in either of two positions. It is in the upper position, only when a tri-folder module is installed.*

NOTE: *The bin 1 upper level sensor controls the height of the tray during normal use. The sensor is in two parts: the transmitter at the front of the tray and the receiver at the rear of the tray. Only the LED of the front sensor is used and only the light sensitive transistor of the rear sensor is used. Refer to Flag 3 and Flag 4.*

Figure 1 shows the location of the components.

Place about one centimeter thickness of paper on the bin 1 tray. Switch off, then switch on the machine, GP 14. **The bin 1 tray moves during initialization.**

Y **N**

If the tray is not at the upper limit, enter dC330 code 011-334, bin 1 upper limit switch, S11-334. Manually actuate S11-334. **The display changes.**

Y **N**

Go to Flag 5. Check the wiring and repair as necessary, REP 1.2. Check S11-334. Refer to:

- GP 13 How to Check a Switch.
- P/J602, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin 1 upper limit switch, PL 11.135 Item 7.
- HVF control PWB, PL 11.157 Item 2.

If the tray is not at the lower limit, enter dC330 code 011-335, bin 1 lower limit switch, S11-335. Manually actuate S11-335. **The display changes.**

Y **N**

Go to Flag 6. Check the wiring and repair as necessary, REP 1.2. Check S11-335. Refer to:

- GP 13 How to Check a Switch.
- P/J602, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin 1 lower limit switch, PL 11.135 Item 7.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 1. Check the wiring and repair as necessary, REP 1.2. Check the bin 1 elevator motor, 11-030. Refer to:

- GP 10 How to Check a Motor.
- P/J202, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin 1 elevator motor, PL 11.135 Item 10.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-182, bin 1 encoder sensor, Q11-182. Turn the bin 1 encoder wheel. **The display changes.**

Y **N**

Go to Flag 2. Check the wiring and repair as necessary. Check Q11-182. Refer to:

- GP 11 How to Check a Sensor.
- P/J601, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin 1 encoder sensor, PL 11.135 Item 3.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-332, bin 1 upper level sensor, Q11-332. Remove the paper from the tray. Actuate the sensor by breaking the light beam from the front transmitter to the rear receiver. **The display changes.**

Y **N**

Go to Flag 3 and Flag 4. Check the wiring and repair as necessary. Check the two parts of Q11-332. Refer to:

- GP 11 How to Check a Sensor.
- P/J601 and P/J901, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

C

Install new components as necessary:

- Bin 1 upper level sensor (transmitter), PL 11.140 Item 20.
- Bin 1 upper level sensor (receiver), PL 11.140 Item 16.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-331, bin 1 90% full sensor, Q11-331. Actuate the sensor using a piece of paper. **The display changes.**

Y N

Go to Flag 7. Check the wiring and repair as necessary. Check Q11-331. Refer to:

- GP 11 How to Check a Sensor.
- P/J601, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin1 90% full sensor, PL 11.135 Item 3.
- HVF control PWB, PL 11.157 Item 2.

Lower the bin 1 tray by pressing the PTU switch, or by entering dC330 code 011-032, bin1 elevator motor down. Enter the dC330 code 011-196, bin 1 rear wall sensor, Q11-196. Actuate Q11-196 using a sheet of paper. **The display changes.**

Y N

Go to Flag 8. Check the wiring and repair as necessary, REP 1.2. Check Q11-196. Refer to:

- GP 11 How to Check a Sensor.
- P/J403, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Bin 1 rear wall sensor, PL 11.140 Item 17.
- HVF control PWB, PL 11.157 Item 2.

If the fault is random and bin 1 has an erratic up / down movement and poor stacking. Check that the bin 1 rear wall sensor is clean. **The sensor is clean.**

Y N

Clean the bin 1 rear wall sensor. Use a brush to remove paper dust from the sensor and the plastic surround. Then use a damp cloth to clean the sensor and plastic surround.

Perform SCP 5 Final Actions.

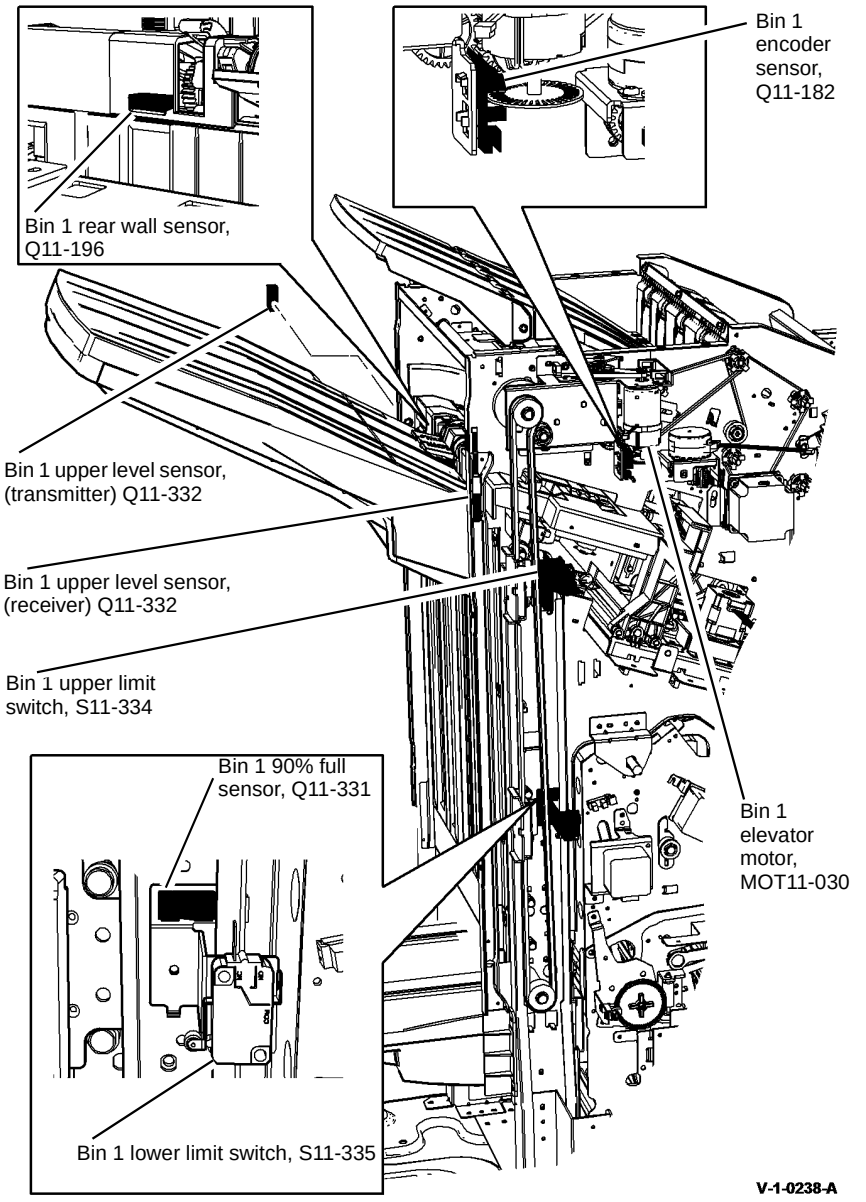


Figure 1 Component location

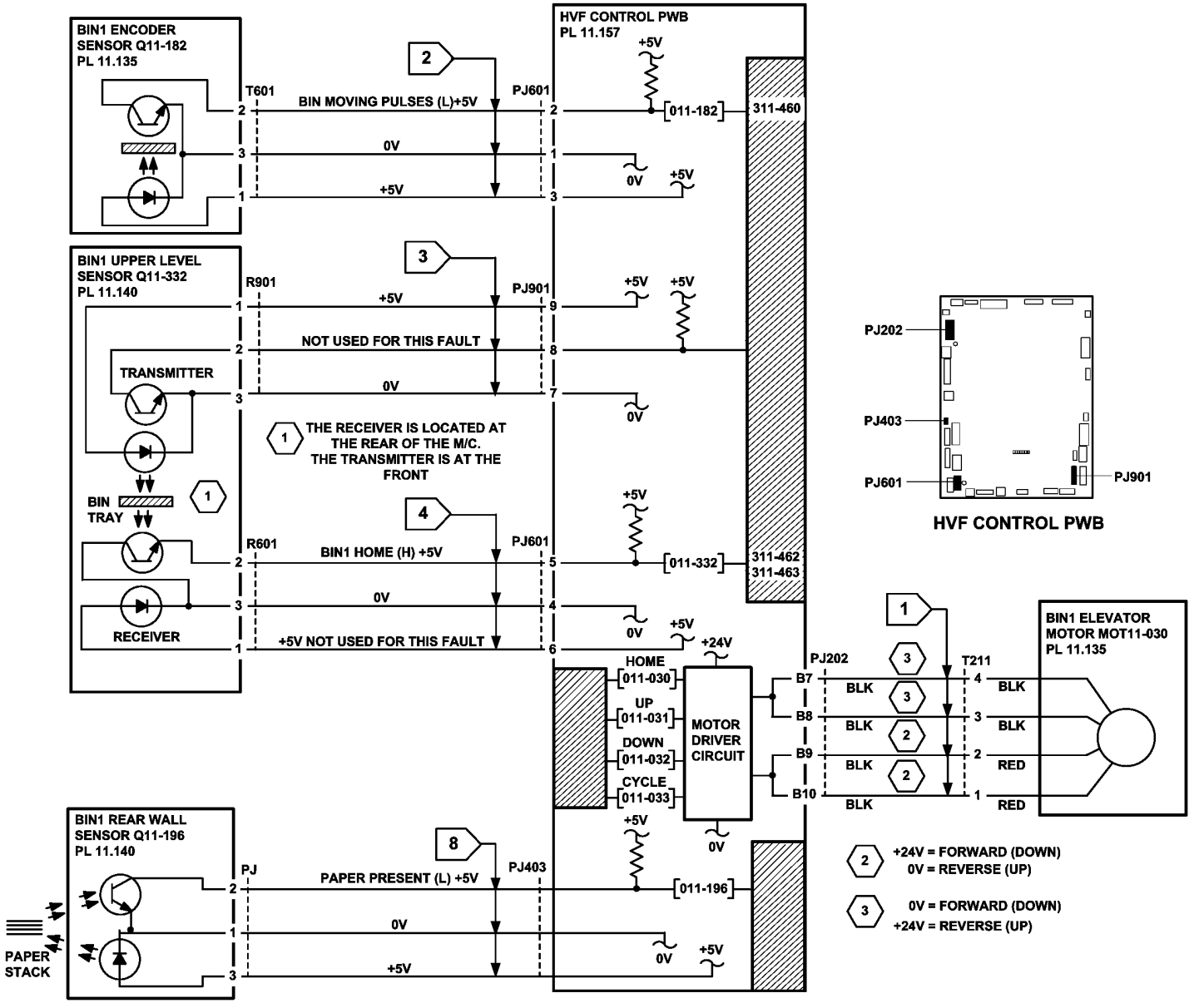


Figure 2 Circuit diagram

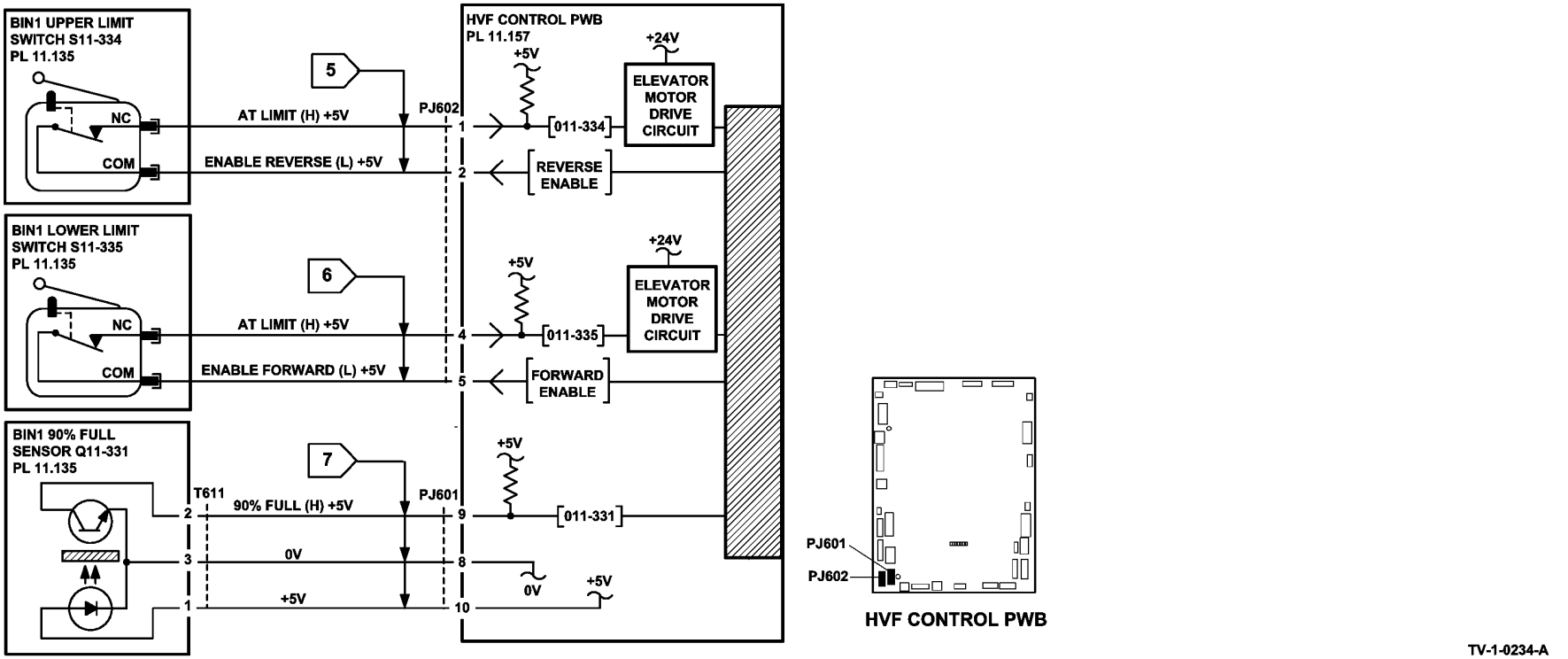


Figure 3 Circuit diagram

311-463-00-171, 311-464-00-171 HVF BM +24V Failure RAP

311-463-00-171 The booklet maker control PWB has failed to detect +24V at the input from the HVF.

311-464-00-171 The booklet maker control PWB has detected an internal +24V failure, such as over current, short circuit or under voltage.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

- Ensure the HVF BM is correctly docked to the machine and all interlocks are closed.

Procedure

Close or cheat all the HVF BM interlocks. **The HVF BM performs a mechanical reset.**

Y N

Go to Flag 1. **ACL is available at PJ22 on the LVPS and base module between pins 1 and 2.**

Y N

Go to the 301C AC Power RAP and check the AC output voltages.

Go to Flag 2. **+24V is available at P/J111 between pins 1 and 4.**

Y N

Refer to Figure 1. **+24V is available at T001 on the HVF power supply between pins 1 and 5.**

Y N

Install a new HVF power supply module, PL 11.157 Item 1.

Check the connectors and harness between T001 and PJ111. Repair the harness as necessary, REP 1.2.

Go to Flag 3. **+24V is available at P/J111 between pins 1 and 4, between pins 2 and 5 and between pins 3 and 6.**

Y N

Go to the 311-300-00-171, 311-302-00-171, 311-303-00-171 HVF Docking and Interlock RAP.

Go to Flag 4. **+24V is available at P/J559 between pins 1 and 2.**

Y N

+24V is available at P/J131 between pins 1 and 2.

Y N

Install a new HVF control PWB, PL 11.157 Item 2.

A B C

A B C

Check the connectors and harness between P/J559 and P/J131. Repair the harness as necessary, REP 1.2.

If an inserter is installed, go to P/J703. **+24V is available between P/J703 pin 1 and P/J111 pin 1.**

Y N

Go to 311-306-00-171, 311-309-00-171 HVF Inserter Interlock RAP

Go to Flag 5. **+24V is available at P/J601 between pins 1 and pin 4.**

Y N

Install a new BM PWB, PL 11.166 Item 10.

Go to Flag 6. **+24V is available at P/J601 between pins 4 and 6.**

Y N

Go to the 311-300-00-171, 311-302-00-171, 311-303-00-171 Docking and Interlocks RAP.

The +24V supply are good. Go to SCP 5 Final actions.

The +24V supply are good. Go to SCP 5 Final actions.

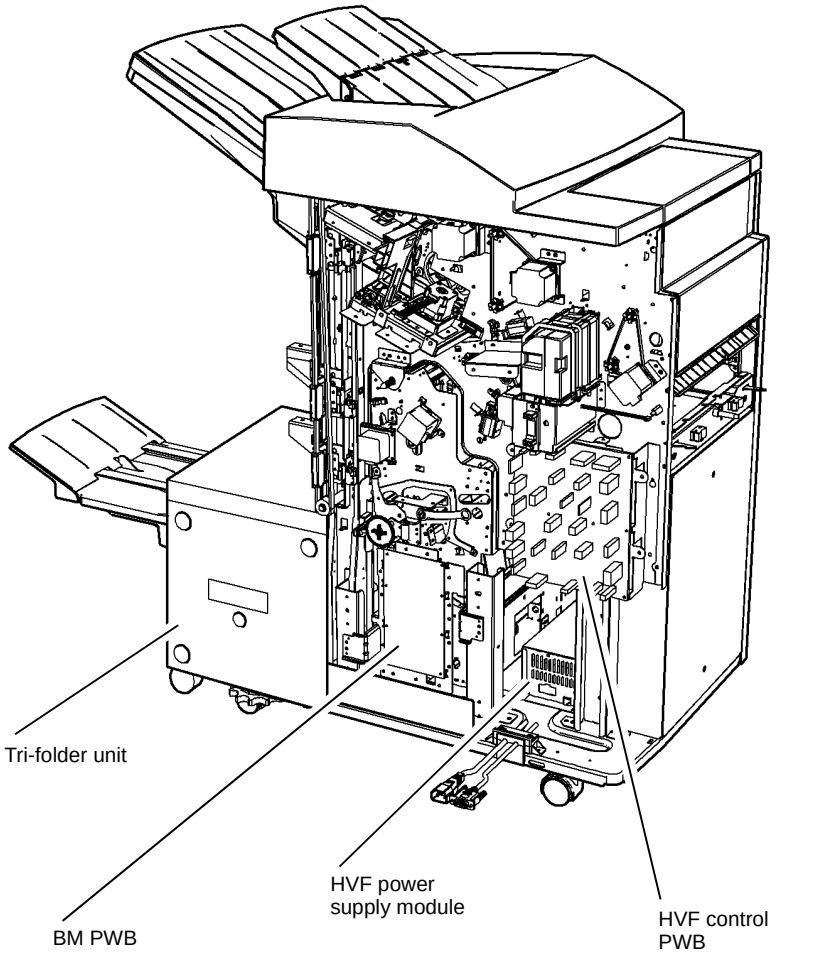


Figure 1 Component location

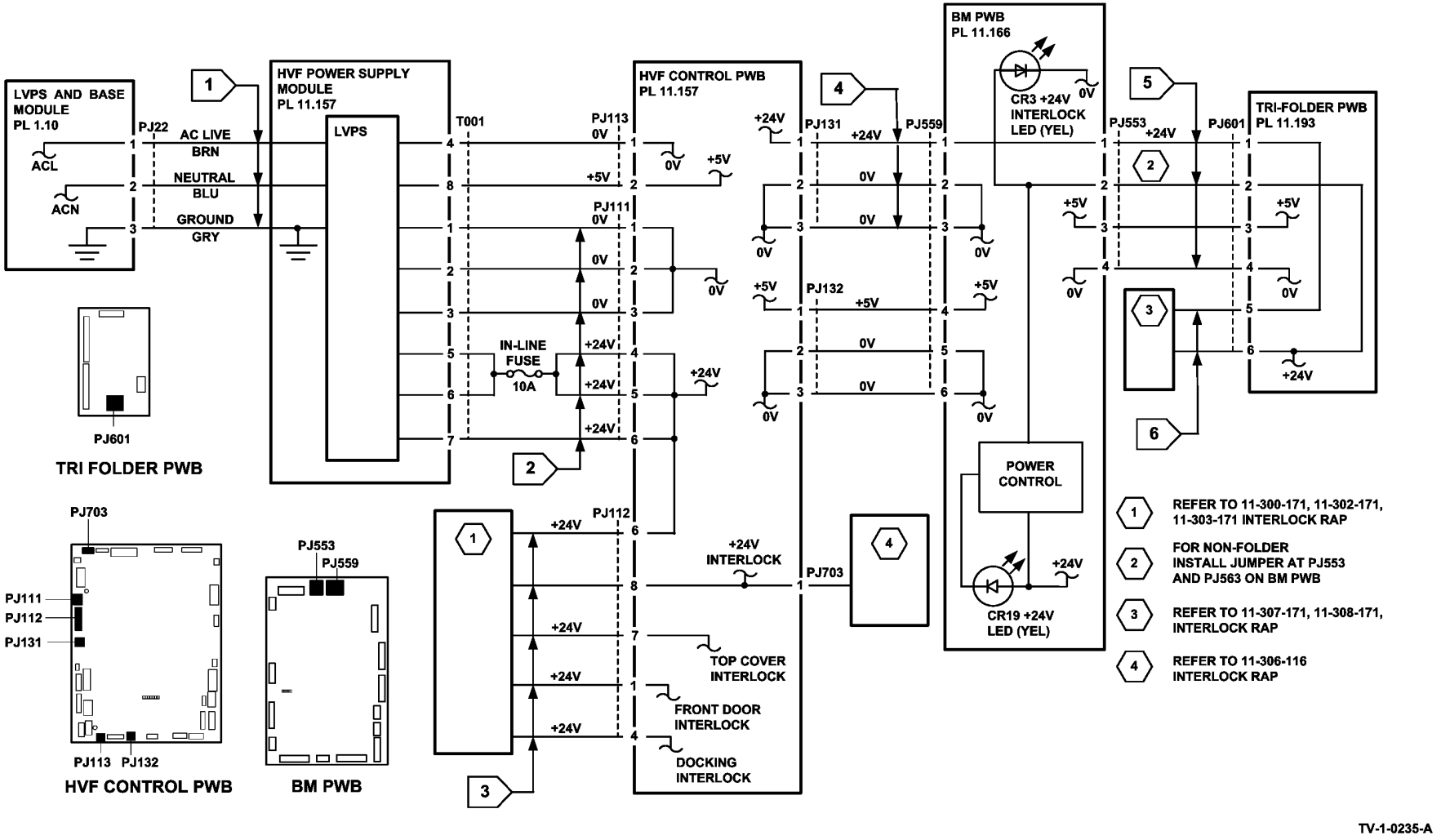


Figure 2 Circuit diagram

311-465-00-171 to 311-468-00-171 Paddle Unit Position RAP

311-465-00-171 The paddle unit has failed to return to the upper position.

311-466-00-171 The paddle unit has failed to move from the upper position.

311-467-00-171 The paddle unit has failed to return to the lower position.

311-468-00-171 The paddle unit has failed to move from the lower position.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for damage or obstructions that would prevent the paddle unit from operating correctly.

Procedure

NOTE: *All HVF BM interlocks must be made to supply +24V to the motors.*

Enter dC330 code 011-027 paddle unit motor, MOT11-027, Figure 1. Press Start. **MOT11-027 runs.**

Y N

Go to Flag 2. Check MOT11-027.

Refer to:

- GP 10, How to Check a Motor.
- P/J202, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Paddle module driving motor assembly, PL 11.150 Item 6.
- HVF control PWB, PL 11.157 Item 2.

Enter dC330 code 011-027 to check the paddle unit motor, MOT11-027. **The paddle unit moves.**

Y N

Check the drive gears on the paddle unit. Install new components as necessary. PL 11.145 Item 2.

Enter dC330 code 011-194 paddle unit upper sensor, Q11-194. Press Start. Select code 011-027 and press start. **The sensor status changes.**

Y N

Go to Flag 1. Check Q11-194.

Refer to:

- GP 11 How to Check a Sensor.
- P/J201, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Paddle module assembly, PL 11.145 Item 2.
- HVF control PWB, PL 11.157 Item 2.

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Enter dC330 code 011-195 paddle unit lower sensor, Q11-195. Select code 011-195 and press Start. Select code 011-027 and press start. **The sensor status changes.**

Y N

Go to Flag 3. Check Q11-195.

Refer to:

- GP 11 How to Check a Sensor.
- P/J201, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Paddle module assembly, PL 11.145 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

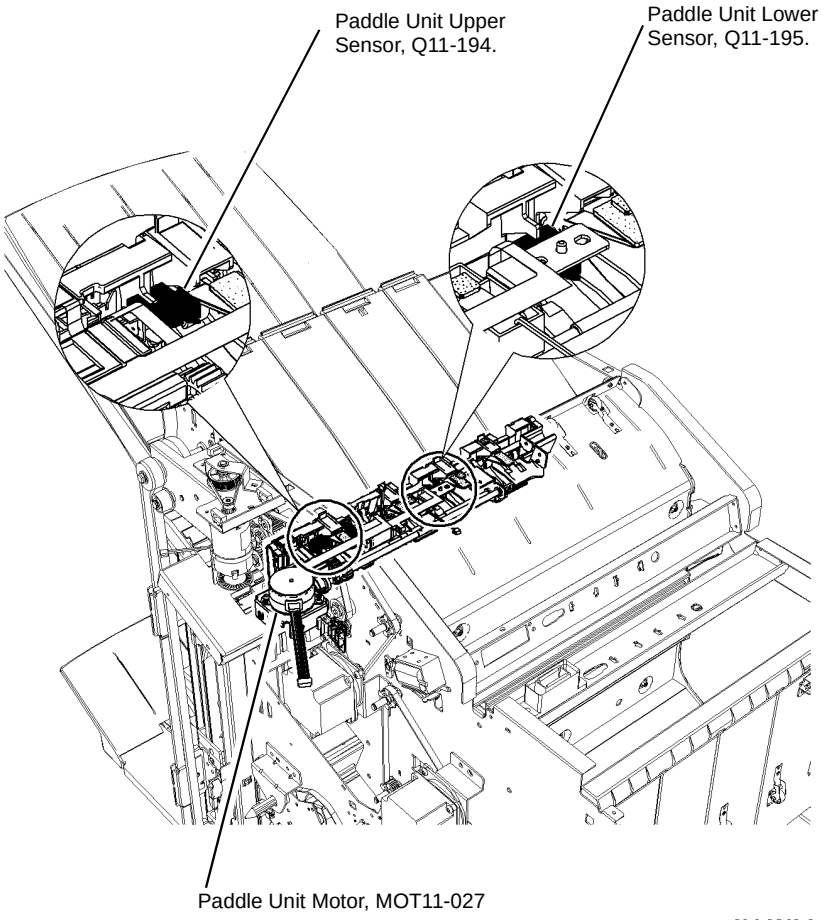


Figure 1 Component location

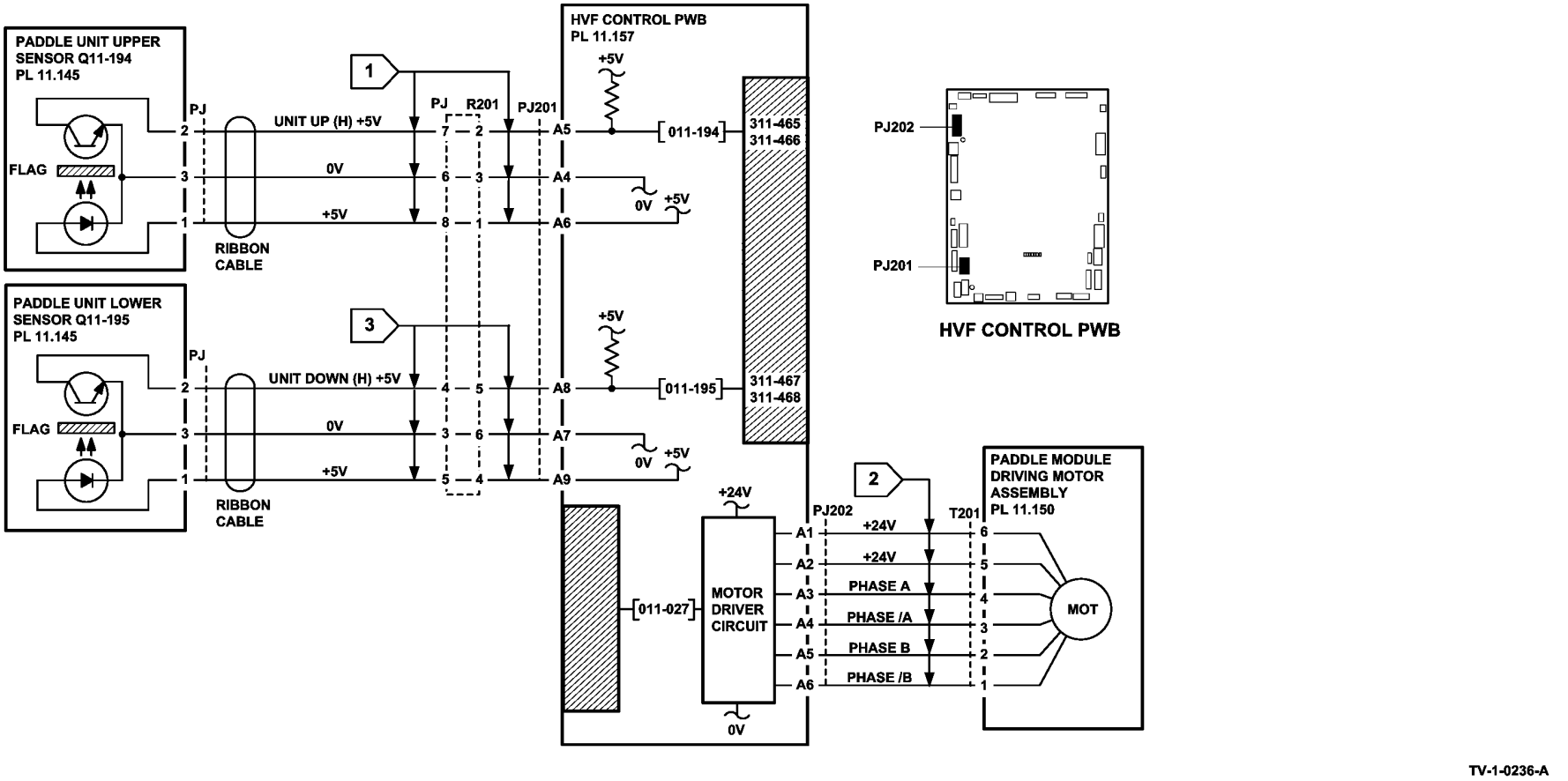


Figure 2 Circuit diagram

311-473-00-171 to 311-478-00-171 Support Finger Position RAP

311-473-00-171 The support finger has failed to return to the initial position.

311-474-00-171 The support finger has failed to move from the initial position.

311-475-00-171 The support finger has failed to return to the home position.

311-476-00-171 The support finger has failed to move from the home position.

311-477-00-171 The support finger has failed to return to the out position.

311-478-00-171 The support finger has failed to move from the out position.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *When manually extending the fingers to check the sensors, the home sensor operates first, followed by the init sensor. The away sensor operates when the fingers are fully extended. All three sensors are spared as part of the rear tamper assembly.*

Figure 1 shows the component locations.

Enter dC330 code 011-192, support finger home sensor, Q11-192. Note the position of the support fingers at rest. Using a screwdriver, or with a finger, turn the gear wheel shown in Figure 1, downwards. The support fingers extend to the right as the gear is turned. When the support fingers have extended by about six millimeters, the support finger home sensor changes state. **The display changes from High to Low.**

Y N

Go to Flag 1. Check Q11-192. Refer to:

- GP 11 How to Check a Sensor.
- P/J402, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper assembly, PL 11.140 Item 13.
- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-191 and continue turning the gear wheel. When the support fingers have extended by about 25mm, the support finger init sensor changes state. **The display changes from High to Low.**

Y N

Go to Flag 2. Check the support finger init sensor, Q11-191. Refer to:

- GP 11 How to Check a Sensor.
- P/J402, HVF Control PWB.

A

- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper assembly, PL 11.140 Item 13.
- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-193, support finger out sensor, Q11-193 and continue turning the gear wheel. When the support fingers have extended by about 105mm, the support finger out sensor changes state. **The display changes from High to Low.**

Y N

Go to Flag 3. Check Q11-193. Refer to:

- GP 11 How to Check a Sensor.
- P/J402, HVF Control PWB
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Rear tamper assembly, PL 11.140 Item 13.
- Ejector assembly, PL 11.140 Item 2.
- HVF control PWB, PL 11.157 Item 2.

Make several small sets of copies and observe that the support fingers are extended between each set.

NOTE: *If copies can not be made, go to the check of the support finger motor encoder.*

The support fingers are extended.

Y N

Remove the HVF top cover and rear cover, REP 11.1-171. Enter the dC330 code 011-172, support finger motor encoder, Q11-172. Manually turn the support motor encoder disc. **The encoder sensor changes state.**

Y N

Go to Flag 4. Check Q11-172. Refer to:

- GP 11 How to Check a Sensor.
- P/J402, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Support finger motor encoder sensor, PL 11.140 Item 15.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 5. Check the wiring between P/J802 and the support finger motor. Repair as necessary, REP 1.2. Install new components as necessary:

- Motor encoder assembly, PL 11.140 Item 18.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

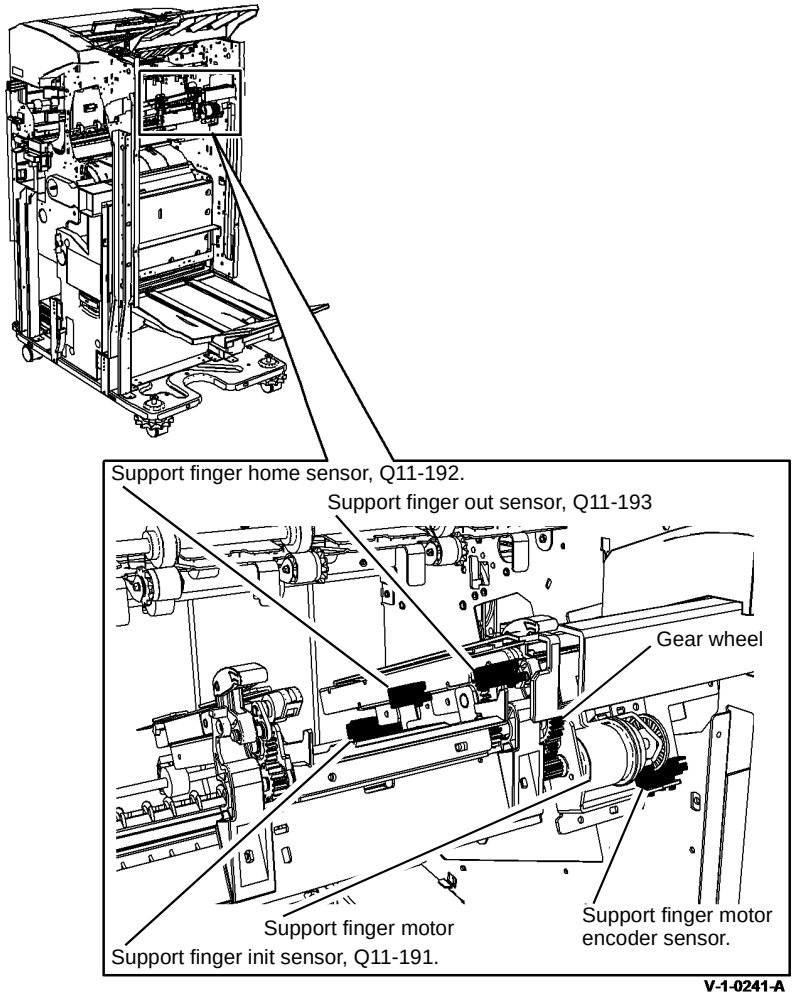


Figure 1 Component location

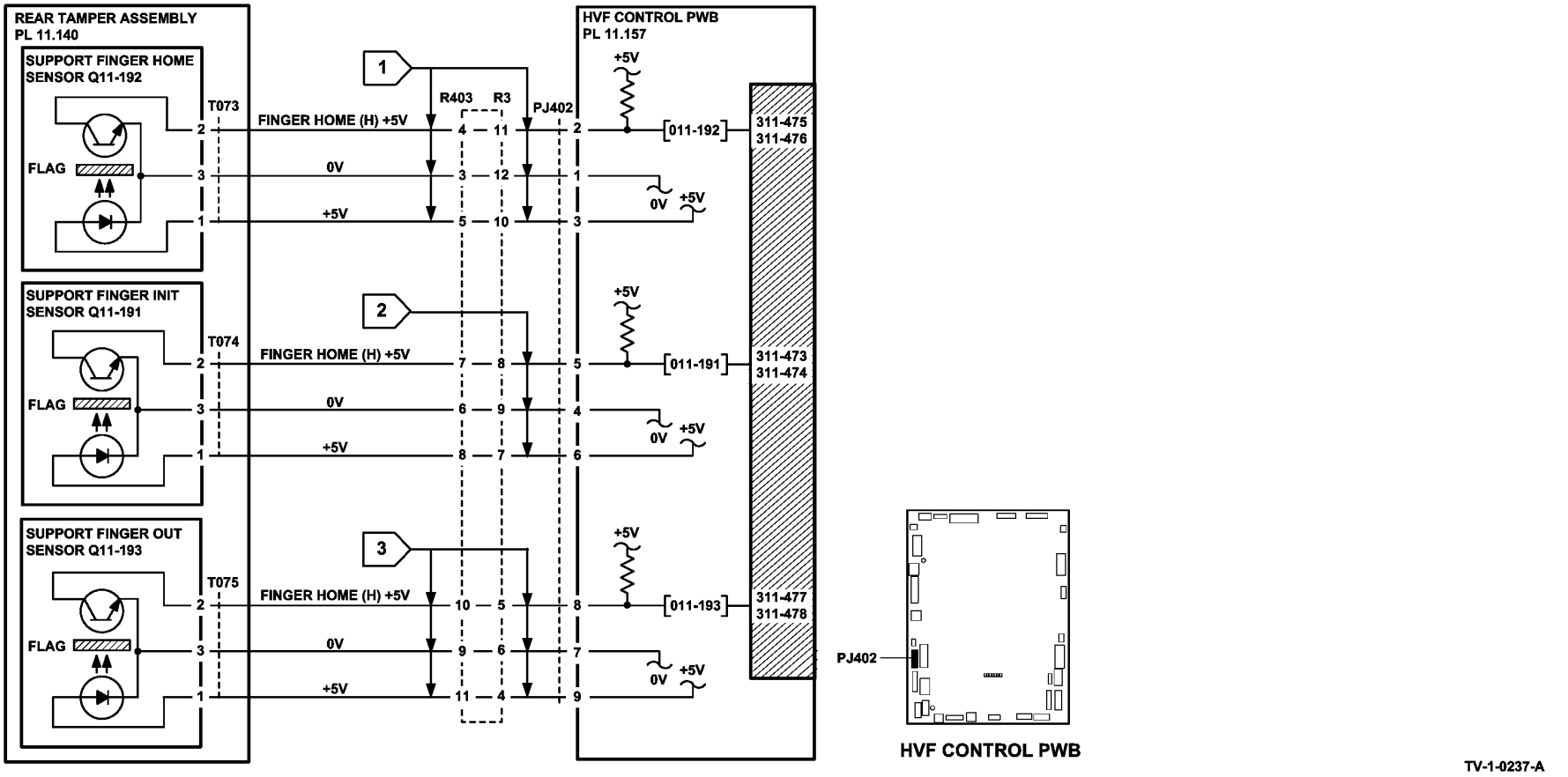


Figure 2 Circuit diagram

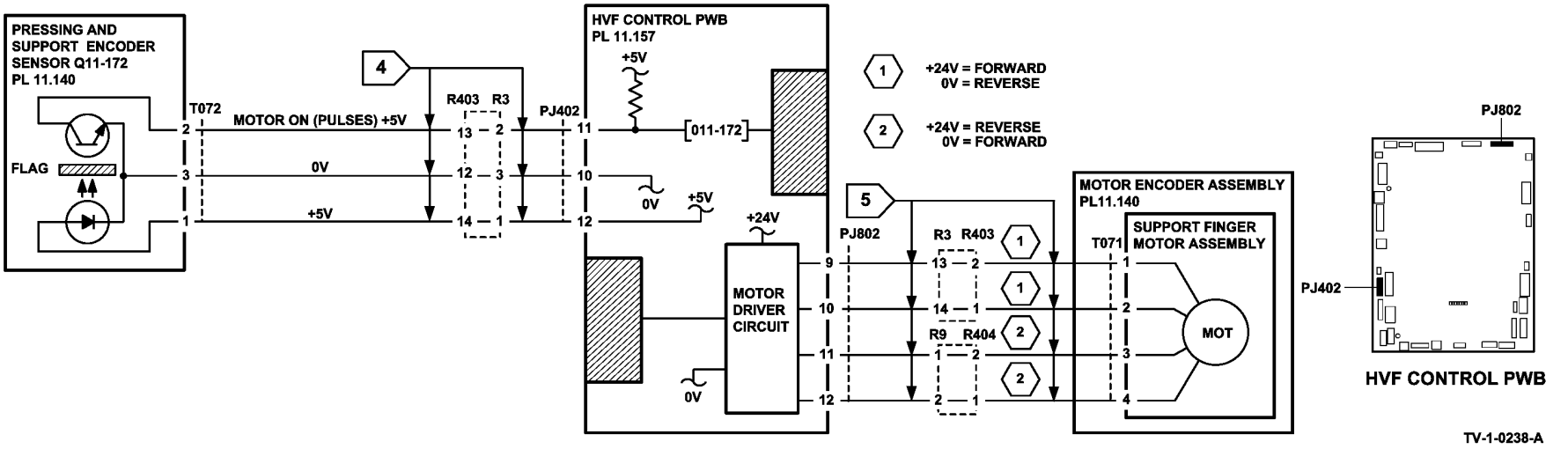


Figure 3 Circuit diagram

311-479-00-171 Inserter Paper Length Fault RAP

311-479-00-171 A shorter than expected sheet has been fed from the inserter.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the inserter paper path is clear of obstructions and the sensors are clean.

Procedure

Figure 1 shows the component locations.

Enter the dC330 code 011-150, inserter sheet size detector 1, Q11-150. Use a piece of paper to actuate the sensor. **The sensor display changes state.**

Y N

Go to Flag 1 and Flag 2. Check Q11-150. Refer to:

- GP 11 How to Check a Sensor.
- P/J9, P/J4, Inserter PWB.
- P/J701, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter sheet size detector 1, PL 11.175 Item 12.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-151, inserter sheet size detector 2, Q11-151. Use a piece of paper to actuate the sensor. **The sensor display changes state.**

Y N

Go to Flag 3 and Flag 4. Check Q11-151. Refer to:

- GP 11 How to Check a Sensor.
- P/J9, P/J4, Inserter PWB.
- P/J701, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter sheet size detector 2, PL 11.175 Item 12.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-155, inserter TE sensor, Q11-155. Use a piece of paper to actuate the sensor. **The sensor display changes state.**

Y N

Go to Flag 5 and Flag 6. Check Q11-155. Refer to:

- GP 11 How to Check a Sensor.
- P/J6, P/J4, Inserter PWB.

A

- P/J701, HVF Control PWB.
- 311A-171, HVF Power Distribution RAP.

Install new components as necessary:

- Inserter TE sensor, PL 11.179 Item 11.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-154, inserter LE sensor, Q11-154. Use a piece of paper to actuate the sensor. **The sensor display changes state.**

Y N

Go to Flag 7 and Flag 8. Check Q11-154. Refer to:

- GP 11 How to Check a Sensor.
- P/J6, P/J4, Inserter PWB.
- P/J701, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter LE sensor, PL 11.179 Item 11.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-077, to energize the inserter clutch, CL11-077. **CL11-077 energised.**

Y N

Go to Flag 9 (W/O TAG V-001) or Flag 13 (With TAG V-001) and Flag 10. Check CL11-077. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J703, HVF Control PWB.
- P/J5, P/J12, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter clutch, PL 11.179 Item 3.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code 011-078, to run the inserter motor, MOT11-078. **MOT11-078 runs.**

Y N

Go to Flag 11 and Flag 12. Check MOT11-078. Refer to:

- GP 10 How to Check a Motor.
- P/J701, HVF Control PWB.
- P/J4, P/J12, Inserter PWB.
- 311A-171, HVF Power Distribution RAP.

Install new components as necessary:

- Inserter motor, PL 11.181 Item 1.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

B

B

Perform SCP 5 Final Actions.

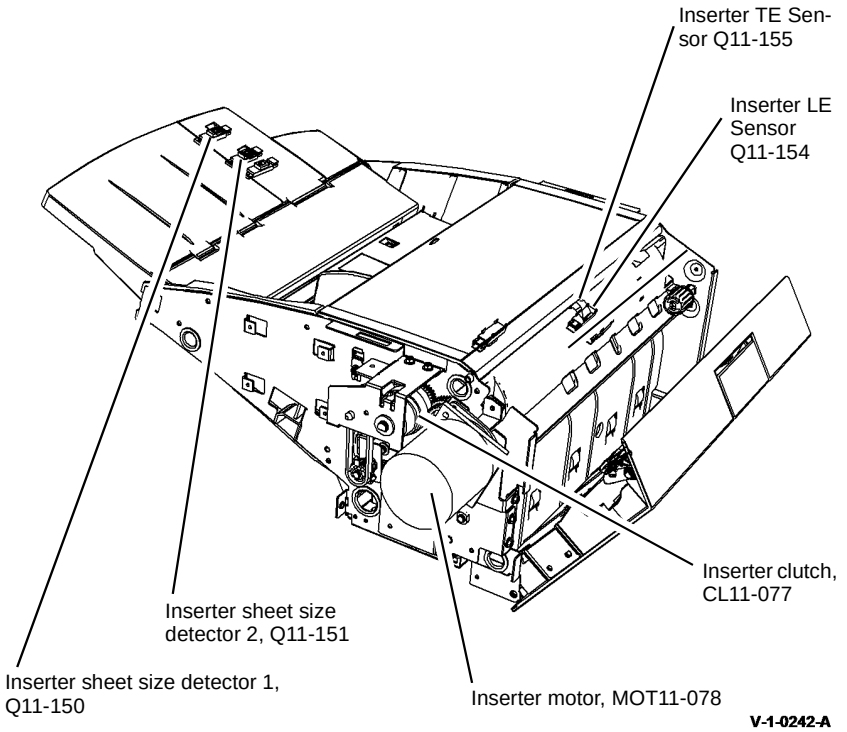


Figure 1 Component location

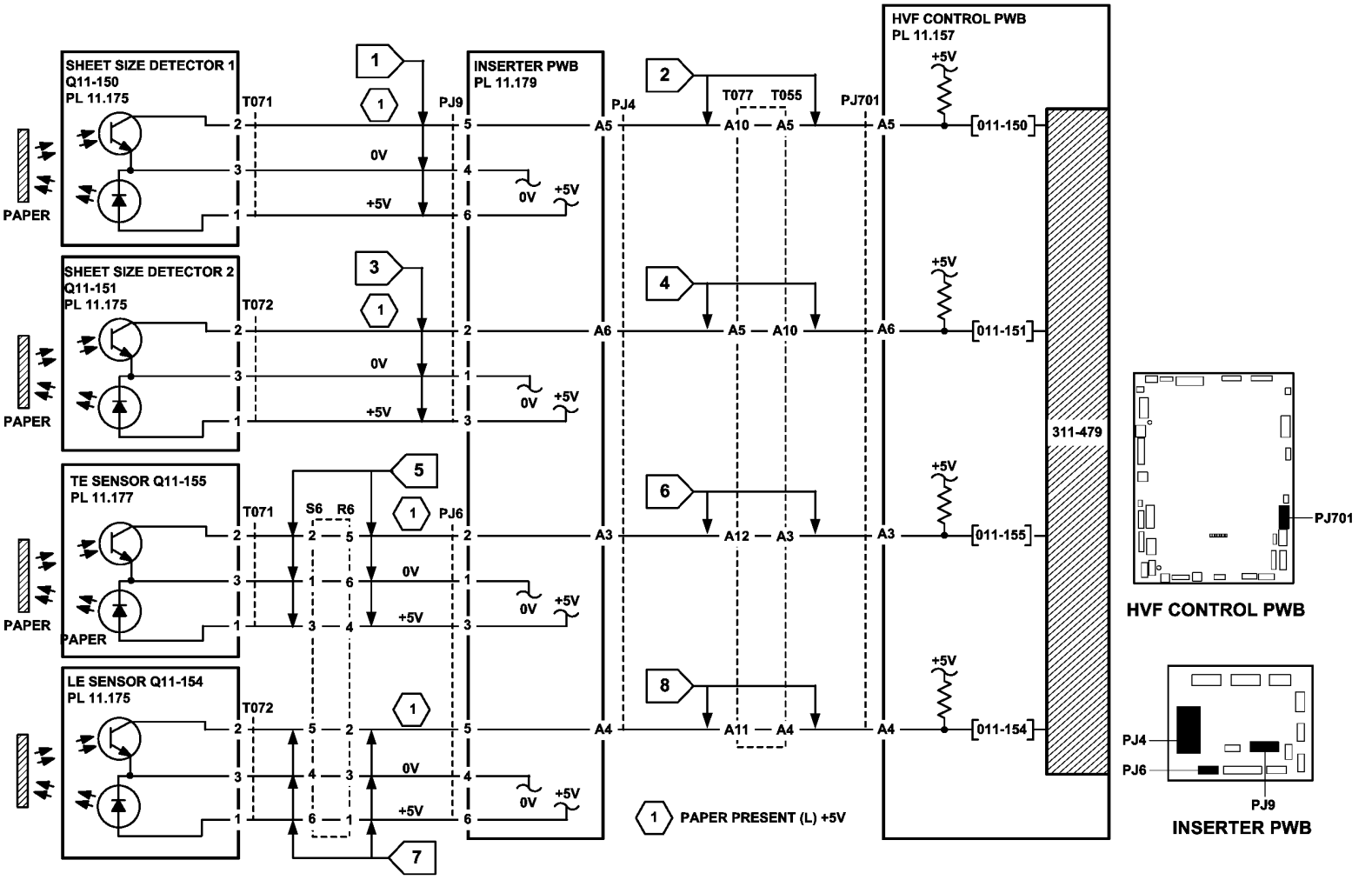


Figure 2 Circuit diagram

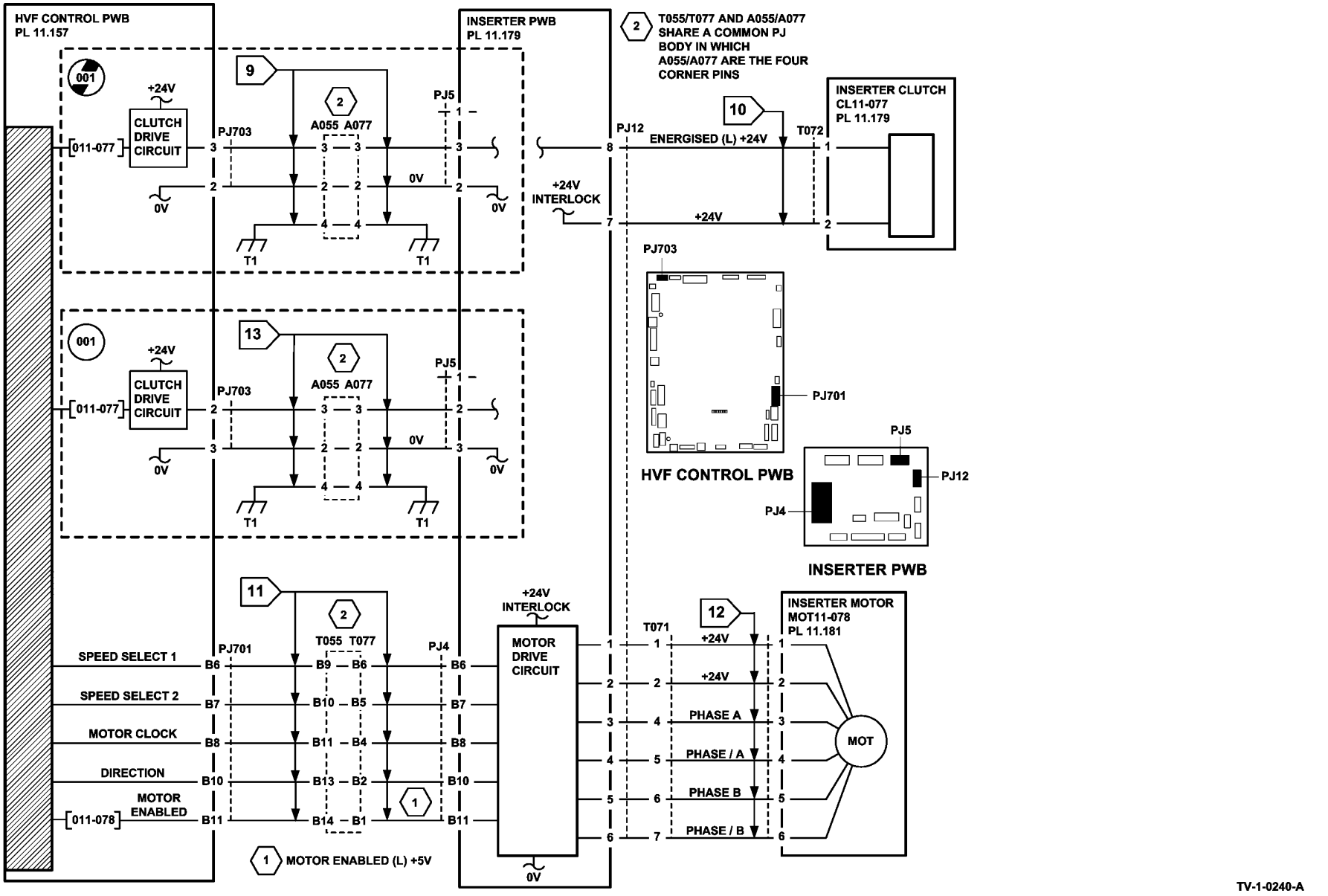


Figure 3 Circuit diagram

311A-171 HVF Power Distribution RAP

The HVF has an integral power supply providing +24V and +5V supplies to the HVF PWB and HVF BM PWB. The AC power for the HVF power supply comes from the LVPS and base module of the machine.

CAUTION

Do not connect the HVF power cord directly to the AC wall outlet. The HVF cannot operate without the machine. The machine controls the distribution of electricity to the HVF/HVF BM for correct power on and power off sequencing.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

Ensure the HVF/HVF BM is correctly docked to the machine and all interlocks are closed.

Procedure

Refer to Figure 3 for the location of components.
Refer to HVF Control PWB and BM PWB LEDs to identify the status of the PWBs.
Close or cheat all the HVF BM interlocks. **The HVF BM performs a mechanical reset.**

Y N

Go to Flag 2. **+5V is available at P/J113 between pins 1 and 2.**

Y N

+5V is available at T001 on the HVF power supply module between pins 4 and 8.

Y N

Go to Flag 1. **ACL is available at PJ22 on the LVPS and base module between pins 1 and 2.**

Y N

Go to the 301C AC Power RAP and check the AC output voltages.

Switch off the machine, GP 14. Disconnect all PJs on the HVF Control PWB except P/J111 and P/J113. Switch on the machine, GP 14. Go to Flag 2. **+5V is available at T001 on the HVF power supply module between pins 4 and 8.**

Y N

Install a new HVF power supply module, PL 11.157 Item 1.

A B C D

A B C D

NOTE: *Before each PJ is reconnected, switch off the machine, GP 14.*

The HVF has a short circuit. Reconnect each PJ one at a time until short circuit is found. When the short circuit is found, repair the harness, REP 1.2 or install new components as necessary.

Disconnect P/J113. Go to Flag 2. **+5V is available at the harness end of P/J113 between pins 1 and 2.**

Y N

Check the connectors and harness between T001 and P/J113. Repair the harness as necessary, REP 1.2.

Install a new HVF control PWB, PL 11.157 Item 2.

Go to Flag 2. **+24V is available at P/J111 between pins 1 and 4.**

Y N

+24V is available at T001 between pins 1 and 5.

Y N

Install a new HVF power supply module, PL 11.157 Item 1

Check the in-line fuse (10A), and as necessary install a new fuse PL 11.157 Item 5. Check the connectors and harness between T001 and PJ111. Repair the harness as necessary, REP 1.2.

Go to Flag 3. **+24V is available at P/J111 between pins 1 and 4, between pins 2 and 5 and between pins 3 and 6.**

Y N

Go to the 311-300-00-171, 311-302-00-171, 311-303-00-171 Docking and Interlocks RAP.

Go to Flag 4. **+5V is available at P/J559 between pins 4 and 5.**

Y N

+5V is available at P/J132 between pins 1 and 2.

Y N

Install a new HVF control PWB, PL 11.157 Item 2.

Check the connectors and harness between P/J132 and P/J559. Repair the harness as necessary.

Go to Flag 4. **+24V is available at P/J559 between pins 1 and 2.**

Y N

+24V is available at P/J131 between pins 1 and 2.

Y N

Install a new HVF control PWB, PL 11.157 Item 2.

Check the connectors and harness between P/J559 and P/J131. Repair the harness as necessary, REP 1.2.

If a inserter is installed, go to P/J703. **+24V is available between P/J703 pin 1 and P/J111 pin 1.**

Y N

Go to 311-306-00-171, 311-309-00-171 HVF Inserter Interlock RAP

A E

A E

Go to Flag 5. **+5V is available at P/J601 between pins 3 and 4.**

Y N

+5V is available at P/J553 between pins 3 and 4.

Y N

Install a new HVF control PWB, PL 11.157 Item 2.

Check the connectors and harness between P/J553 and P/J601. Repair the harness as necessary, REP 1.2.

Go to Flag 5. **+24V is available at P/J601 between pins 1 and pin 4.**

Y N

Install a new BM PWB, PL 11.166 Item 10.

Go to Flag 6 **+24V is available at P/J601 between pins 4 and 6.**

Y N

Go to the 311-300-00-171, 311-302-00-171, 311-303-00-171 Docking and Interlocks RAP.

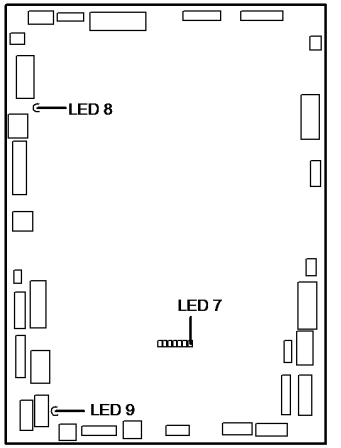
The +24V and +5V supplies are good. Go to SCP 5 Final actions.

The +24V and +5V supplies are good. Go to SCP 5 Final actions.

HVF Control PWB and BM PWB LEDs

Figure 1 shows the LED s on the HVF PWB. These are:

- LED 1 - red. Not used.
- LED 2 - red. Not used.
- LED 3 - red, flashing. This indicates the functioning of the CPU. When flashing at 2Hz, (every 1/2 second), the software is running normally. When flashing at about 1/4Hz, (every 4 seconds), this indicates that the software is encountering a code problem and a possible software upgrade is needed. If this LED is OFF, the CPU does not function and a new HVF control PWB is needed.
- LED 4 - red. Not used.
- LED 5 - red, toggling. This changes state whenever the paper is accelerated to 1,300 m/s. It is only used for paper that is longer than 220mm.
- LED 6 - red, steady. When this is ON, a paper jam has been detected. It remains ON until the HVF successfully initializes. In all other cases this LED is OFF.
- LED 7 - red. This LED is used during the machine production and is connected with the activity of the stacker nearly full sensor.
- LED 8 - red, steady. This indicates that the HVF top cover, front door and docking interlocks are all closed and +24V is available at the HVF module.
- LED 9 - red, steady. This indicates that the +5V supply is present in the HVF module.

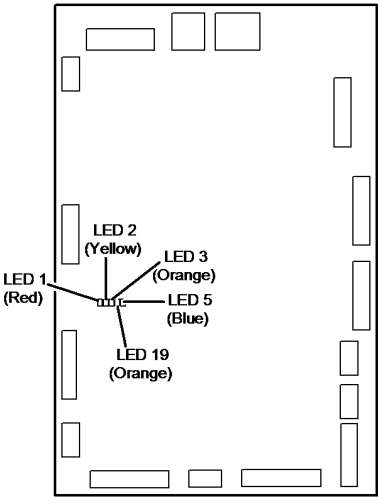


V-1-0243-A

Figure 1 LEDs on the HVF control PWB

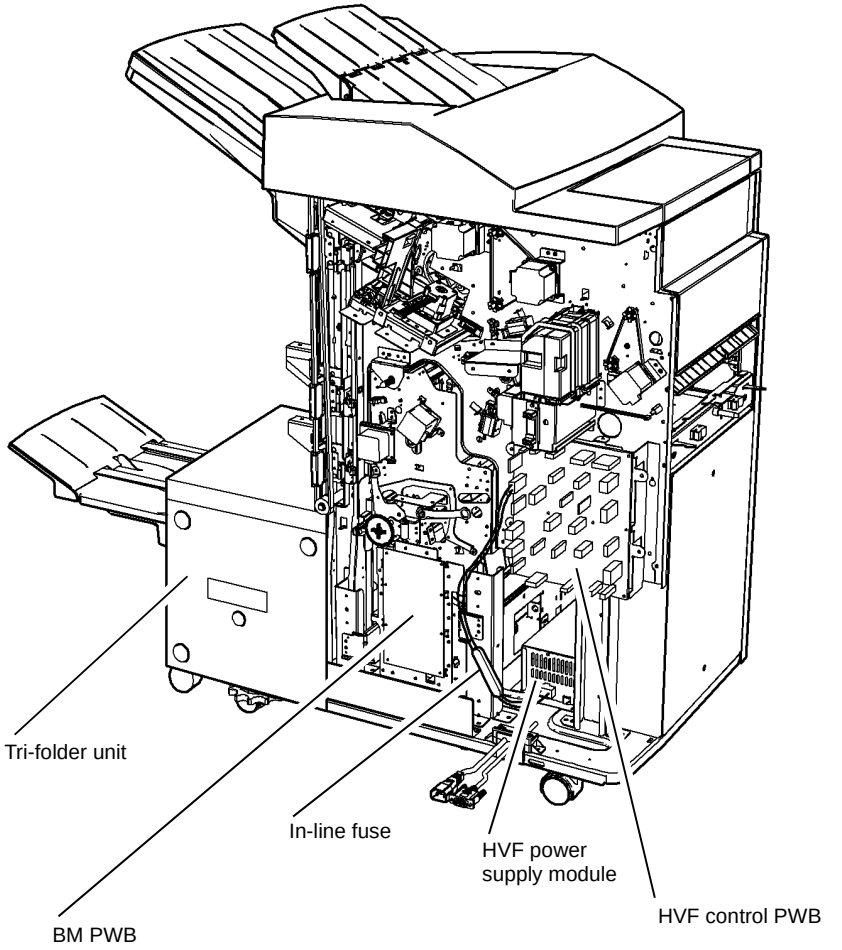
Figure 2 shows the LEDs on the BM PWB. These are:

- LED 1 - red, steady. This indicates a fault or other abnormal status.
- LED 2 - yellow, flashing at about 1Hz. This indicates that the software is operating in normal mode. In other modes, e.g., software downloading, the flashing rate is higher.
- LED 3 - orange, steady. This indicates either:
  - that the tri-folder front door and top cover interlocks are closed, and +24V is available to the BM module or, if the tri-folder in not installed;
  - that the interlock cheater is present in PJ553 on the BM control PWB the logic cheater is present in PJ563 on the BM control PWB.
- LED 19 - orange, steady. This indicates that the +24V supply is within voltage and current limits, and that the power limiting circuit has not been active for over a set time limit.
- LED 5 - blue, steady. this indicates that the +5V supply is present in the BM module.



V-1-0244-A

Figure 2 LEDs on the BM PWB



V-1-0245-A

Figure 3 Component location

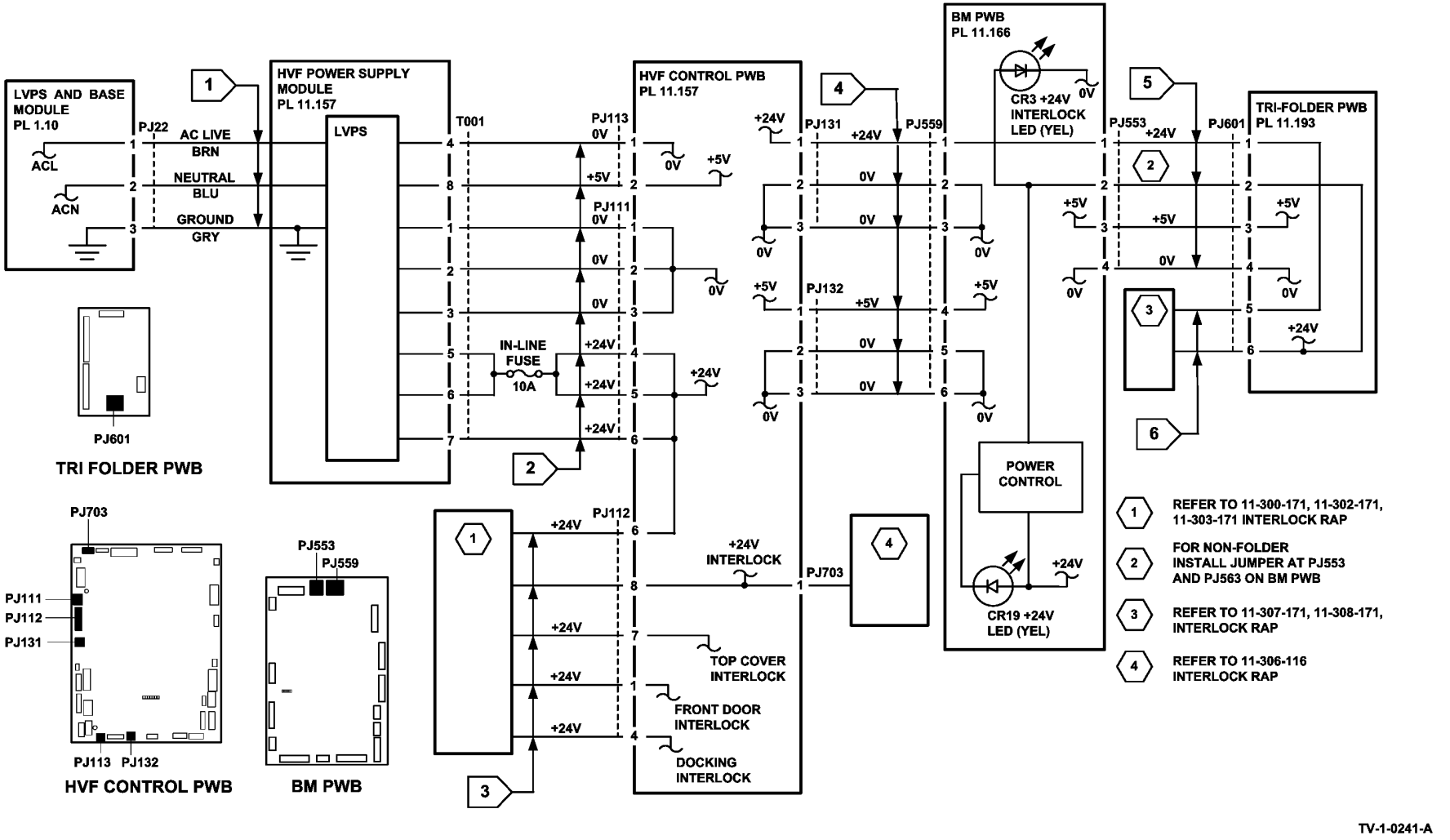


Figure 4 Circuit diagram

311B-171 HVF BM to Machine Communications Interface and BM Present RAP

A communication fault exists between the HVF BM and the machine. A UI message **System Error** or **Finisher Comms Failure** may be seen.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Observe the software heartbeat LED (LED 3) on the HVF control PWB, Figure 1. **LED 3 is flashing at 1Hz (0.5 seconds on, 0.5 seconds off).**

Y N

LED 3 is flashing at 0.25Hz (2 seconds on, 2 seconds off) this indicates that the finisher software is corrupt. Re-load the finisher software, GP 4. If necessary install a new HCF control PWB, PL 11.157 Item 2.

Observe the software heartbeat LED (LED 1) on the BM PWB, Figure 1. **LED 1 is flashing at 1Hz (0.5 seconds on, 0.5 seconds off).**

Y N

LED 1 is flashing at 0.25Hz (2 seconds on, 2 seconds off) this indicates that the booklet maker software is corrupt. Re-load the finisher software, GP 4. If necessary install a new BM PWB, PL 11.166 Item 10.

Go to Flag 1, check the wiring and connectors between P/J562and P/J133. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

Go to Flag 2, check the wiring and connectors between P/J121and P/J11. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors, REP 1.2.

The UI indicates that the booklet maker is present (booklet maker options are available).

Y N

Check that P/J133, pin 6 is held at 0V. If necessary, repair the wiring, REP 1.2 or install a new HCF control PWB, PL 11.157 Item 2.

The finisher checks are good. Switch off the machine, then switch on the machine, GP 14. If the fault remains, perform the Forced Altboot Software Loading Procedure, GP 4.

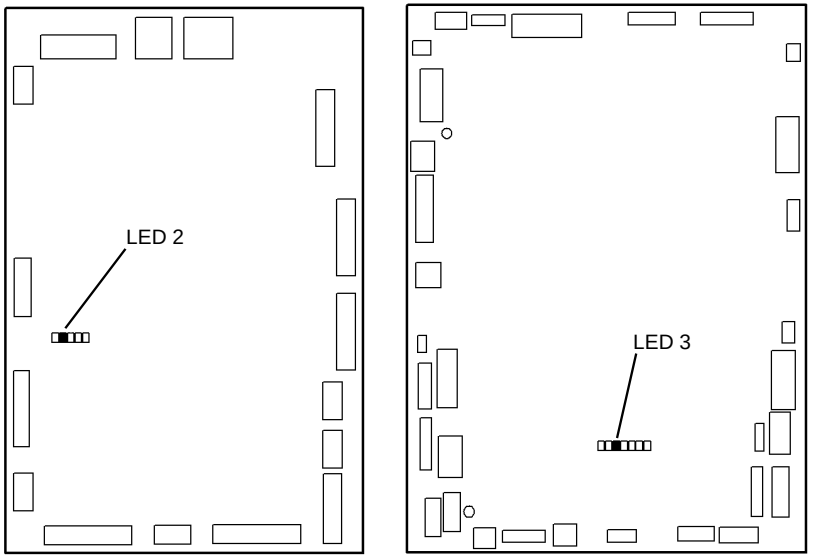
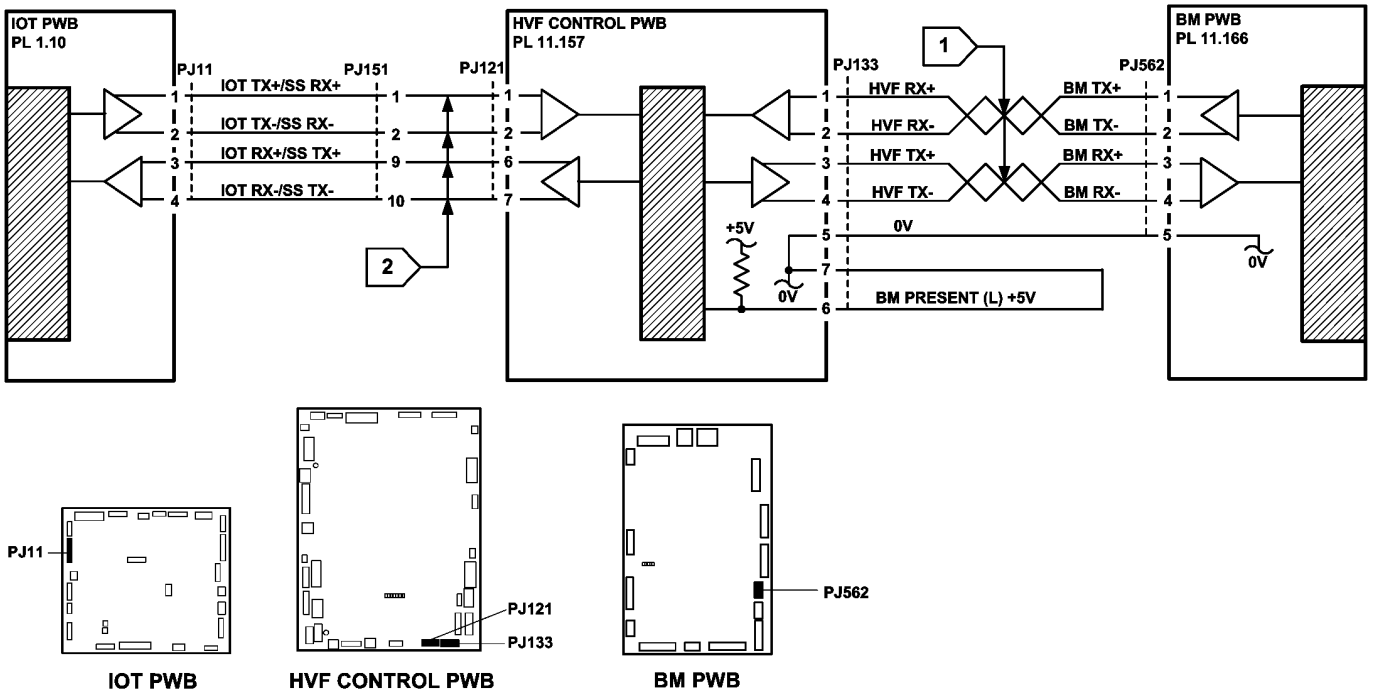


Figure 1 Component location



TV-1-0242-B

Figure 2 Circuit diagram

311C-171 HVF BM Bin 2 Failure RAP

Bin 2 fails to remove the finished booklets from the exit area of the booklet maker.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for a jam or any other obstruction that could prevent the conveyor belt mechanism from moving.

Procedure

Enter dC330 code 011-389. Actuate the BM bin 2 90% full sensor, Q11-389, Figure 1. **The display changes.**

Y N

If a tri-folder is installed, go to Flag 4. Check the connection at PJ583 on the tri-folder. **The connection are good.**

Y N

Check the connectors and harness at the tri-folder. Repair the harness as necessary, REP 1.2.

Go to Flag 1. Check Q11-389.

Refer to:

- GP 11, How to Check a Sensor.
- P/J556, BM PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- BM PWB, PL 11.166 Item 10.
- BM bin 2 90% full sensor PL 11.169 Item 5.

***NOTE:** The BM conveyor belts drive motor stops after 10 seconds.*

Enter dC330 code 011-402 to run the BM conveyor belts drive motor, MOT11-402. **MOT11-402 runs.**

Y N

If a tri-folder is installed, go to Flag 5. Check the connection at PJ583 on the tri-folder. **The connection are good.**

Y N

Check the connectors and harness at the tri-folder. Repair the harness as necessary, REP 1.2.

Go to Flag 3 or Flag 2. Check MOT11-402.

Refer to:

- GP 10 How to Check a Motor.
- P/J555, BM PWB.
- 311A-171 HVF Power Distribution RAP.

A

Install new components as necessary:

- BM conveyor belts drive motor, PL 11.169 Item 4.
- BM PWB, PL 11.166 Item 10.

The fault may be intermittent, check for damaged wiring or bad connectors, REP 1.2. If necessary install new conveyor belts, PL 11.169 Item 1.

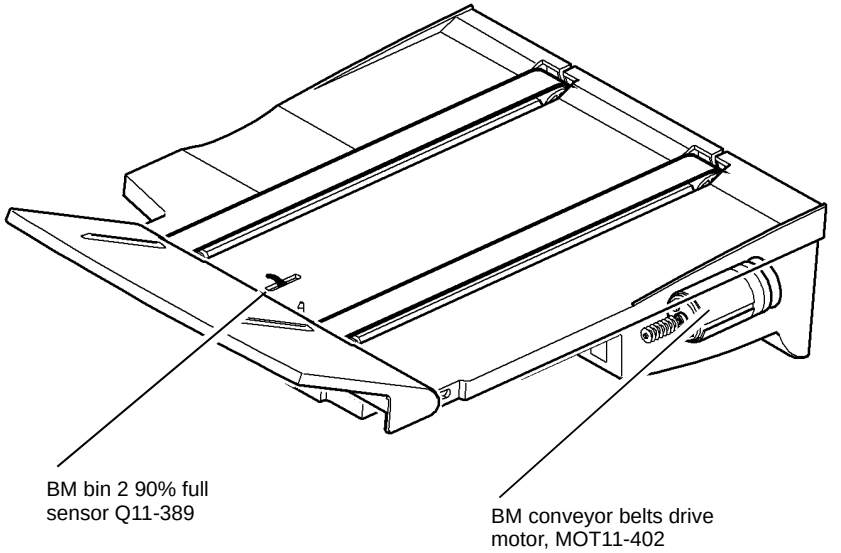


Figure 1 Component location

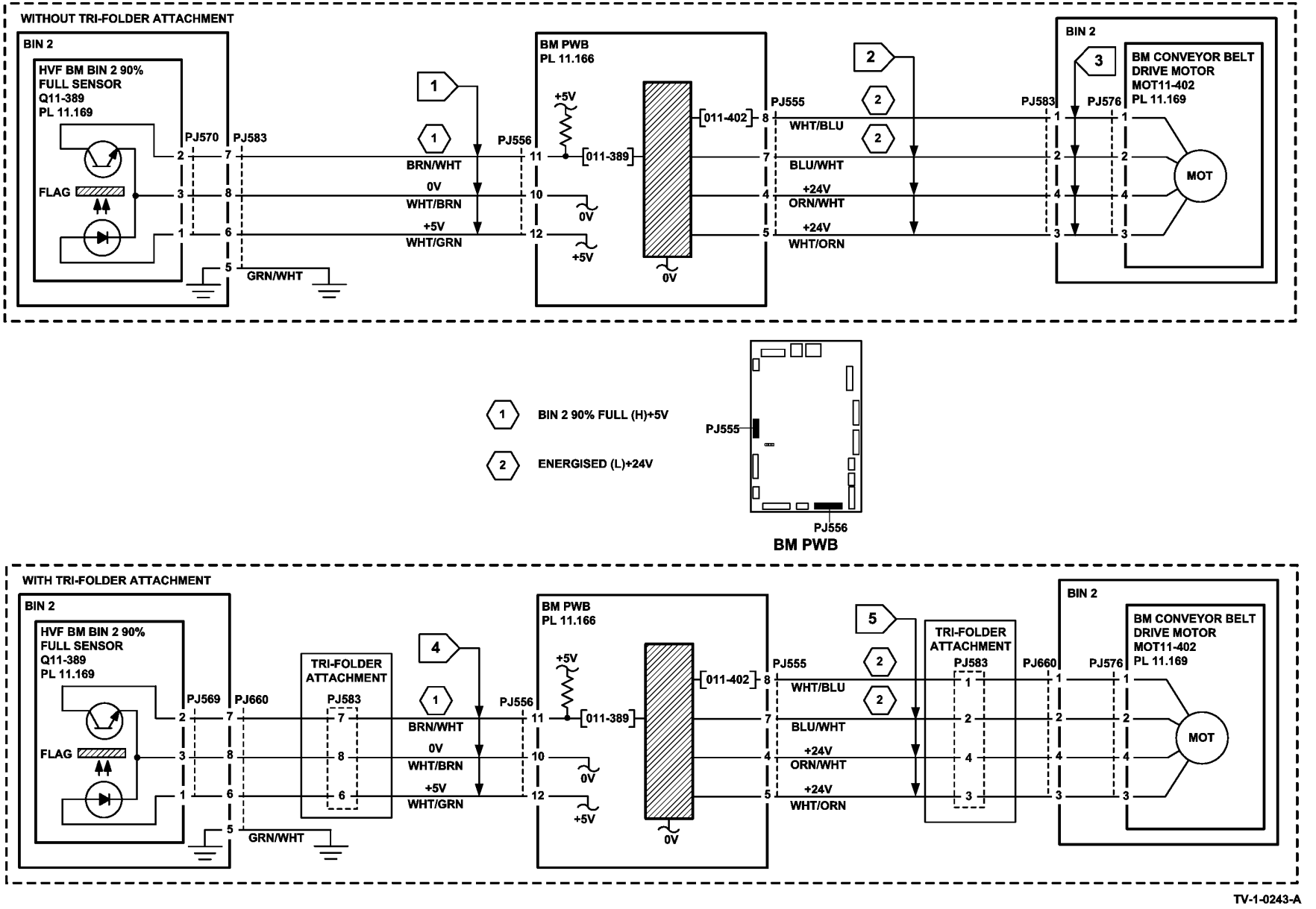


Figure 2 Circuit diagram

311D-171 Booklet Quality RAP

Use this RAP to identify and correct the causes of poor booklet quality in the HVF BM.

The following booklet quality problems are covered in this RAP:

- The alignment of the top and bottom edges of the booklet are not within specification.
- The alignment of the open side edges of the booklet are not within specification.
- The booklet staples are badly formed.
- The booklet compiling is not correct (page order is wrong).
- The booklet crease is skewed greater than the specification.
- The booklet crease is off-centre, greater than the specification.
- The booklet staple position is not within the specification.
- The booklet is not sufficiently creased.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the paper loaded in the paper trays matches the paper size displayed on the UI, refer to 371B Tray 1 and 2 Wrong Size Paper RAP.
- Ensure that the paper being fed to the BM conforms to the specification, GP 20 Paper and Media Size Specification.
- Ensure that the booklets being produced do not exceed the maximum contents given in Table 1.

Table 1 Booklet contents

Media	Paper weight	Maximum number of sheets	Maximum number of booklet pages	Maximum number of unstapled sheets
Plain paper	60 to 80gsm (16 to 21lb bond)	15	60	5
Heavyweight	90gsm (24lb bond)	13	52	-
Heavyweight	120gsm (32lb bond)	10	40	-
Heavyweight	160gsm (43lb bond)	7	28	-
Heavyweight	216gsm (58lb bond)	5	20	-
Plain paper with heavy-weight cover	60 to 80gsm (16 to 21lb bond) with 160gsm (43lb bond) cover	14 including 1 cover	56	-

- Check the machine and HVF BM paper paths for any obstruction that could cause mis-alignment of the paper fed to the BM compiling area.

Procedure

Produce three 4 sheet / 16 page booklets, using 80gsm (20lb) paper. Paper size and weight must conform the specification in GP 20 Paper and Media Size Specification.

Examine the booklets for defects. Refer to the following:

- Top and Bottom Edge Alignment.
- Open Side Edge Alignment.
- Badly Formed Booklet Staples
- Booklet Compiler is Not Correct
- Skewed Booklet Crease.
- Booklet Crease is Off Centre.
- Booklet Staple Position is Not On The Fold.
- The Booklet is Not Sufficiently Creased.

Top and Bottom Edge Alignment

Figure 1, open out the booklet at the centre page and press it onto a flat surface. Measure the mis-alignment of the top and bottom edges of the booklet.

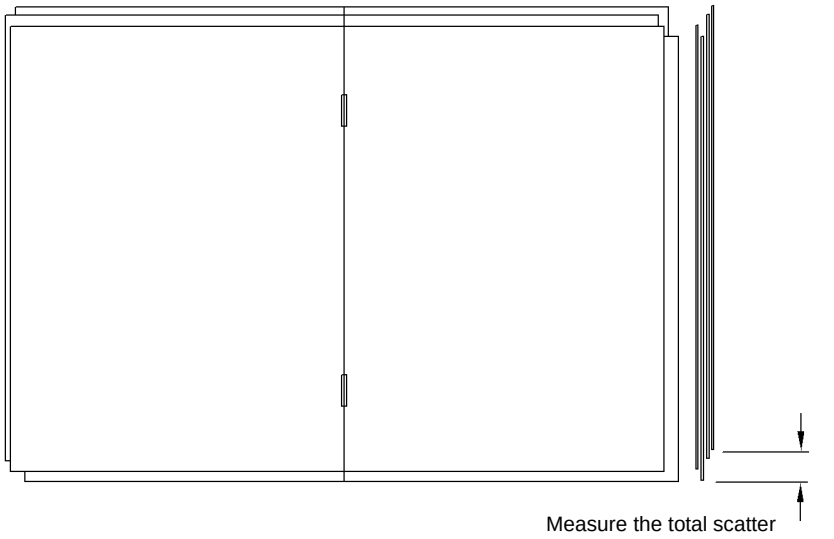


Figure 1 Top and bottom alignment

Table 2 Top and bottom edge alignment

Paper weight	95% of booklets	99.7% of booklets
80gsm (20lb)	1mm	2mm
All other BM approved weights in GP 20	2mm	3mm

If the top and bottom edge alignment does not conform to the specification in Table 2, check the operation of the BM tampers, refer to the 311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP. If the tampers are operating correctly, go to ADJ 11.5-171 Booklet Tamping and check the tampers are correctly adjusted.

If the booklet skew does not conform to the specification in Table 4. Perform the following:

- Check the operation of the BM stack hold solenoids, refer to 311-065-00-171, 311-383-00-171 HVF Booklet Back Stop failure RAP.
- If the stack hold solenoids are operating correctly, check for contamination or debris in the compiling area of the BM that could cause the mis-alignment.
- Perform ADJ 11.4-171 Crease Blade Position.

Open Side Edge Alignment

Figure 2, open out the booklet at the centre page and press it onto a flat surface. Measure the mis-alignment of the open side edges of the booklet.

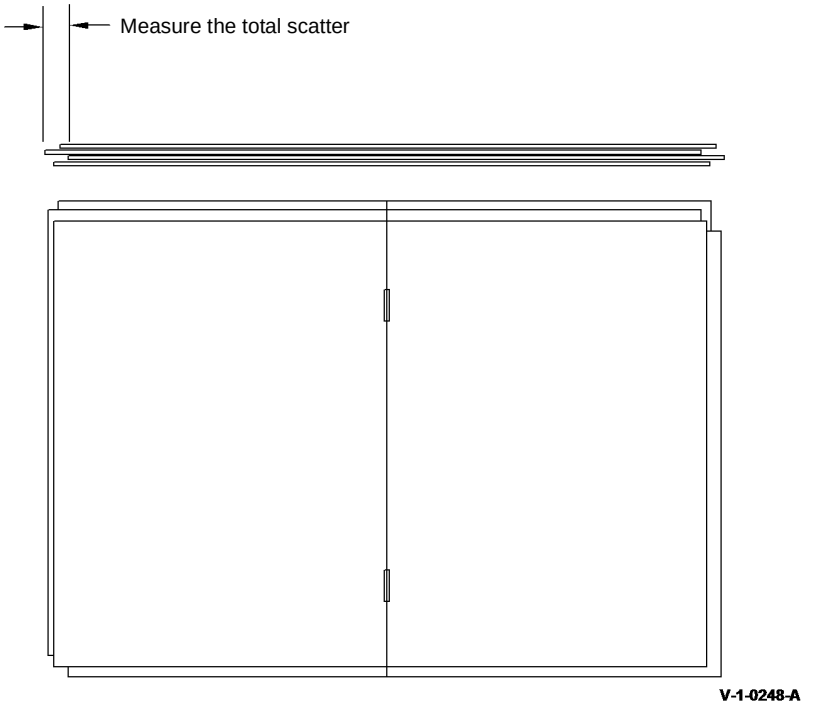


Figure 2 Open side edge alignment

Table 3 Open side edge alignment

Paper weight	95% of booklets	99.7% of booklets
80gsm (20lb)	1mm	2mm
All other BM approved weights in GP 20	2mm	3mm

If the open side edge alignment does not conform to the specification in Table 3, check the operation of the BM stack hold solenoids, refer to the 311-065-00-171, 311-383-00-171 HVF Booklet Back Stop Failure RAP. If the stack hold solenoids are operating correctly, check carefully for any contamination or debris in the compiling area of the BM, that could cause the mis-alignment.

Badly Formed Booklet Staples

If the booklet staples are not formed correctly, perform ADJ 11.3-171 Staple Anvil Alignment.

Booklet Compiler is Not Correct

If the page order of the booklets is not correct, perform ADJ 11.6-171 Booklet Compiling Position.

Skewed Booklet Crease

Figure 3, open out the booklet at the centre page and press it onto a flat surface. Measure the amount of booklet skew.

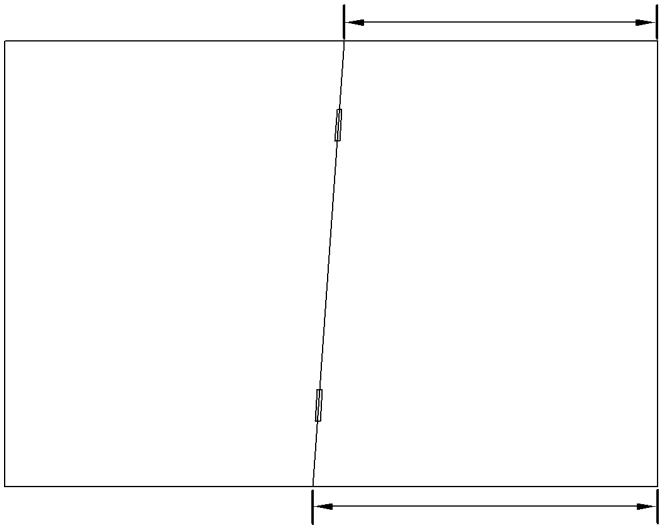


Figure 3 Booklet skew

Table 4 Skew tolerance

Paper weight	Paper size A4, 8.5x11in, 8.5x13in or 8.5x14in	Paper size A4, 8.5x11in, 8.5x13in or 8.5x14in	Paper size A3 or 11x17in	Paper size A3 or 11x17in
-	95% of booklets	99.7% of booklets	95% of booklets	99.7% of booklets
80gsm (20lb)	Less than 1.0mm	Less than 2.5mm	Less than 1.4mm	Less than 3.1mm
All other booklet maker approved weights in GP 20	Less than 1.5mm	Less than 3.0mm	Less than 2.1mm	Less than 3.6mm

If the booklet skew does not conform to the specification in Table 4, perform the following:

1. Check the operation of the BM stack hold solenoids, refer to the 311-065-00-171, 311-383-00-171 HVF Booklet Back Stop Failure RAP. If the stack hold solenoids are operating correctly, check for any contamination or debris in the compiling area of the BM, that could cause the mis-alignment.
2. ADJ 11.9-171 Booklet Maker Skew.
3. Check the BM back stop assembly for damage. If necessary, install a new BM back stop assembly, PL 11.164 Item 17.

Booklet Crease is Off Centre

Figure 4, open out the booklet at the centre page and press it onto a flat surface. Measure the position of the booklet crease.

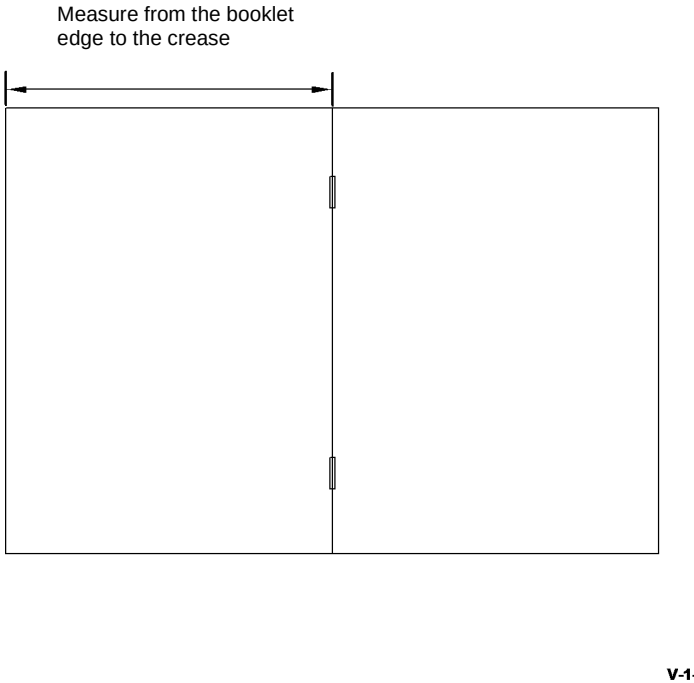


Figure 4 Booklet crease position

Table 5 Crease position and tolerance

Paper size	Edge to crease measurement
A4	148.5 +/- 1.5mm
A3	210 +/- 1.5mm
8.5x11 inch	139.5 +/- 1.5mm

Table 5 Crease position and tolerance

Paper size	Edge to crease measurement
8.5x13 inch	165.1 +/- 1.5mm
8.5x14 inch	178.0 +/- 1.5mm
11x17 inch	216.0 +/- 1.5mm

If the booklet crease position does not conform to the specification in Table 5, perform ADJ 11.7-171 Booklet Crease Position.

Booklet Staple Position is Not On The Fold

Figure 5, open out the booklet at the centre page and press it onto a flat surface. Measure the position of the booklet staple from the crease line.

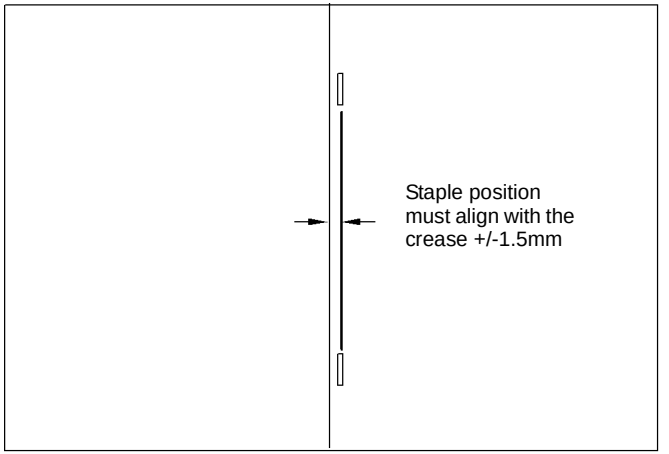


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Figure 5 Booklet staple position

If the booklet staple position does not conform to the specification in Figure 5, perform ADJ 11.8-171 Booklet Staple Position.

The Booklet is Not Sufficiently Creased

Figure 6, Measure the open dimension of the booklets.

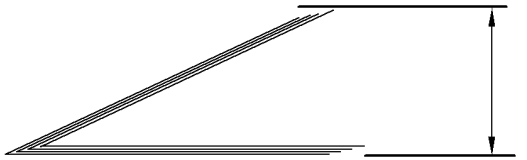

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Figure 6 Booklet creasing

Table 6 Creasing tolerance

Paper weight	Paper size A4, 8.5x11in, 8.5x13in or 8.5x14in	Paper size A4, 8.5x11in, 8.5x13in or 8.5x14in	Paper size A3 or 11x17in	Paper size A3 or 11x17in
-	95% of booklets	99.7% of booklets	95% of booklets	99.7% of booklets
80gsm (20lb)	Less than 30mm	Less than 35mm	Less than 22mm	Less than 25mm

If the open dimension of the booklets does not conform to the specification in Table 6, install new crease nip springs, PL 11.165 Item 12.

311E-171 Copy Damage in the HVF BM RAP

Use this RAP to identify and correct the causes of copy damage in the HVF BM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following:

- Check the alignment between the IOT and the HVF BM, ADJ 11.1-171.
- Look for paper fragments in the HVF BM paper path. Paper fragments can move through the IOT and HVF BM paper path without causing a problem until they finally wedge themselves at some point. A likely place for a fragment of paper to be wedged is at the hole punch assembly, where the top and bottom guides form the narrowest part of the paper path.
- Ensure that the exit diverter gate solenoid, PL 11.150 Item 4, operates correctly and has it's full movement.
- Ensure that the hole punches park at the fully open position. If they protrude, even slightly, a jam will occur in the narrow paper path of the hole punch. Refer to the 311-044-00-171 to 311-047-00-171 Punch Head Position RAP.
- Check that all the idler rolls in the HVF BM paper path are free to rotate, particularly those on the jam clearance guides. Refer to ADJ 40.1 Machine Lubrication.
- Make sure that the jam clearance guides 5a, 5b and 5c close and latch correctly.
- Check that the paper path ribs of the jam clearance guide 5b, PL 11.161 Item 7 and the exit path PL 11.168 are free of scores and nicks. Check also for contamination and glue from label stock.
- Make sure that the compiler carriage tampers move to the correct paper size.
- Check that the paper size reported on the user interface corresponds to the actual paper size loaded in the trays, refer to the 371B Tray 1 and 2 Wrong Size Paper RAP.
- Make sure that the BM tampers move to the correct paper size, refer to the 311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP.
- Ensure that the BM paper guide, PL 11.161 Item 7, closes and latches correctly.
- If the top sheet of paper is being been torn from booklets, check that the components in the lower crease roll gear and clutch assembly are correctly installed. Refer to the replacement procedure in REP 11.52-171 BM Crease Rolls, Gears and Bearings.
- If heavy-weight paper is used, the paper can stop in the vertical transport and cause a 10-126 fault. The fault is caused when the vertical transport motor is over loaded. Check the position of the jam clearance guides 5a, 5b and 5c. Check the vertical transport rolls and bearings for contamination. If necessary remove and clean the drive shaft and the bearings. If the problem continues then install a new transport motor,.

311F-171 Mis-Registration in Stapled and Unstapled Sets RAP

Use this RAP to identify and correct the causes of mis-registration in stapled sets, resulting in staples missing some sheets in the set, or poorly registered non-stapled sets.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

A probable cause of mis-registration is the condition of the paper and/or damage such as, curl, wrinkle, creases, dog ears, etc.

- Curl, wrinkle and creases are probably caused in the IOT, go to the IQ1 Image Quality Entry RAP.
- For other copy / print damage and dog ears, go to the 311E-171 Copy Damage in the HVF BM RAP.

Check the following:

- Check the alignment between the IOT and the HVF BM, ADJ 11.1-171.
- Turn over the paper stack in the tray in use.
- Use a new ream of paper in the tray in use.
- Paper type, especially recycled paper, can lead to registration problems. Try changing to a different brand or type of paper.
- Ensure that the guides in the paper trays are correctly set and reported on the UI for the paper size loaded, refer to the 371B Tray 1 and 2 Wrong Size Paper RAP.
- Check that paper type is set correctly. If heavyweight paper is used but not set in the UI, the compiler capacity can be exceeded.
- Check for obstructions in the compiler.
- Ensure the paddle roll mechanism in the eject housing operating correctly, refer to the 311-024-00-171, 311-026-00-171 Paddle Roll Position RAP.
- Make sure that the compiler carriage tampers move to the correct paper size.
- Make sure that the BM tampers move to the correct paper size, refer to 311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP.
- Check if the HVF module has had the W/TAG V-006 modifications installed. If necessary perform ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006).

311G-171 HVF BM Poor Stacking RAP

Use this RAP to find the cause of poor stacking in the HVF BM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the following;

- Look for sets that are not dropping back fully in the bin 1 tray and therefore not being detected by the kicker fingers and sensors:
  - Large paper sizes should not be stacked on top of small paper sizes.
  - Ensure that the paper stack in each paper tray has been fanned.
  - Turn over the paper stack in each paper tray.
  - Ensure that all paper or other copy stock being used is within the size and weight specifications. Refer to GP 20 Paper and Media Size Specifications.
  - Try using a fresh ream of paper.
  - Ensure that the edge guides of all paper trays are adjusted correctly for the paper size and that the trays are fully closed.
- Labels must not be fed to bin1, but to bin 0 only.
- It is recommended that transparencies are fed to bin 0 whenever possible.
- Check that the bin 1 upper limit switch, S11-334 and the bin 1 lower limit switch, S11-335 are working correctly. Refer to the 311-460-00-171 to 311-462-00-171 Bin 1 Position RAP.
- Make sure that the compiler carriage tampers move to the correct paper size.
- Check that the HVF BM is not positioned near an air conditioning or ventilation output duct. Air flow across the output bins can cause poor stacking.
- Check the output copies for curl, refer to IQ5.

311H-171 Pause to Unload (PTU) RAP

Use this RAP to diagnose Pause to Unload (PTU) problems.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 shows the component locations. Go to Flag 1. Check the wiring and the voltages. Refer to P/J901. Repair the wiring as necessary, REP 1.2. Install new components as necessary:

- Pause to unload PWB, PL 11.157 Item 3.
- HVF control PWB, PL 11.157 Item 2.

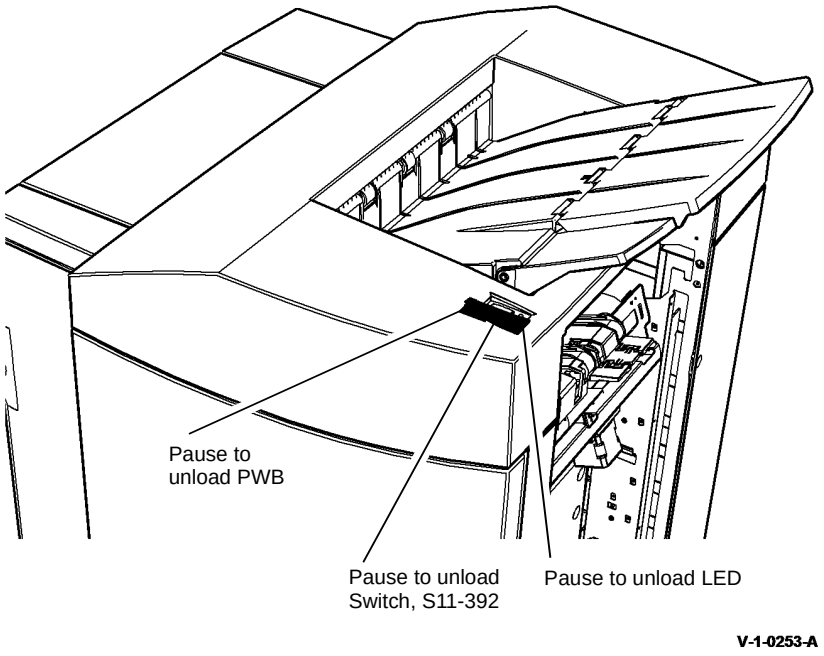

Figure 1 Component location

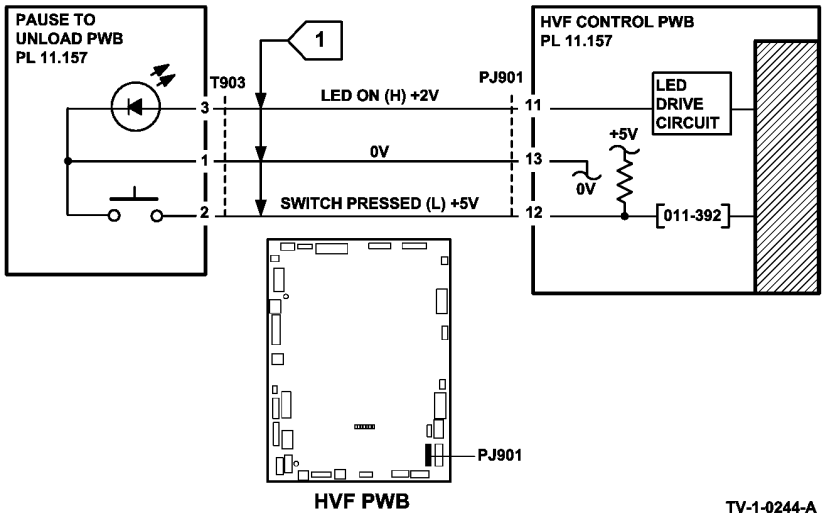

Figure 2 Circuit diagram

311J-171 Inserter Paper Sensing and +5V Supply RAP

Use this RAP to find the cause of inserter empty, inserter paper width and +5v supply problems.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 and Figure 2 show the component locations.

If a +5V supply problem is suspected, perform the following:

Go to 311A-171 and check the 0V and +5V supply from the HVF control PWB to the inserter control PWB. Repair the wiring as necessary, REP 1.2, or refer to 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

To diagnose inserter paper sensing and paper width problems, perform the following:

Enter the dC330 code 011-153, inserter unit empty sensor, Q11-153. Use a sheet of paper to actuate Q11-153. **The sensor display changes.**

Y N

Go to Flag 1 and Flag 2. Check Q11-153. Refer to:

- GP 11 How to Check a Sensor.
- P/J8 and P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP

Install new component as necessary:

- Unit empty sensor, PL 11.175 Item 11.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 3 and Flag 4. Measure the voltage from the inserter paper width sensor 1, Q11-152, while sliding paper width guide. **The voltage changes.**

Y N

Check Q11-152. Refer to:

- GP 11 How to Check a Sensor.
- P/J8 and P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter paper width sensor 1, PL 11.175 Item 13.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 5 and Flag 6. Measure the voltage from the inserter paper width sensor 2, Q11-152 while sliding paper width guide. **The voltage changes.**

Y N

Check Q11-152. Refer to:

- GP 11 How to Check a Sensor.
- P/J8 and P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Inserter paper width sensor 2, PL 11.175 Item 13.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Go to Flag 7 and Flag 8. Measure the voltage from the acceleration sensor, while actuating the sensor with paper. **The voltage changes.**

Y N

Check the acceleration sensor. Refer To:

- GP 11 How to check a Sensor.
- P/J11 and P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Acceleration sensor, PL 11.175 Item 10.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Got to Flag 9 and Flag 10. Measure the voltage from the IDG pickup sensor while actuating the sensor with paper. **The voltage changes.**

Y N

Check the IDG Pickup sensor. Refer to:

- GP 11 How to check a Sensor.
- P/J7 and P/J4, Inserter PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- IDG pickup sensor, PL 11.179 Item 10.
- Inserter PWB, PL 11.179 Item 9.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

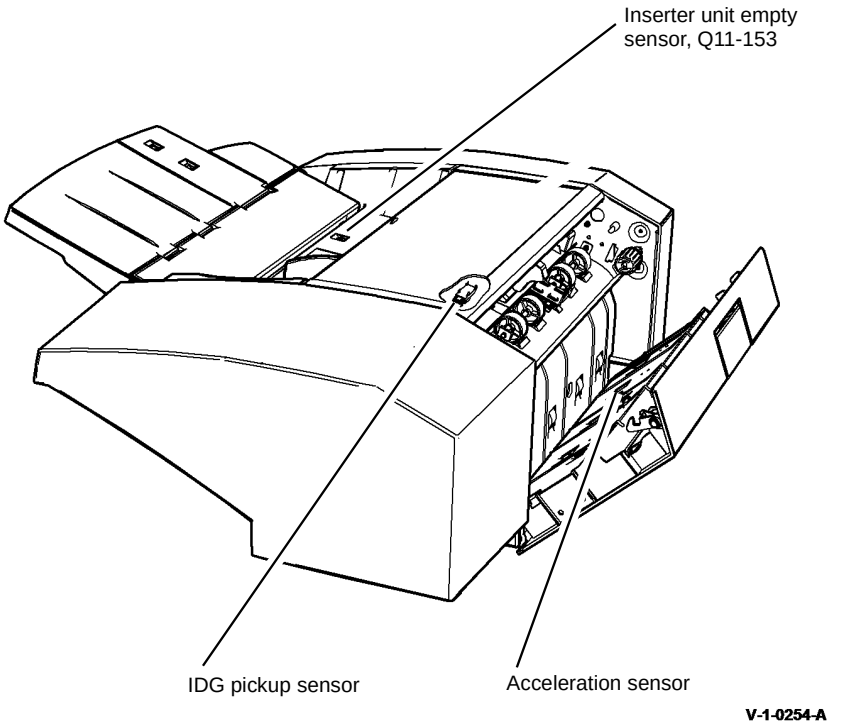

Figure 1 Component location

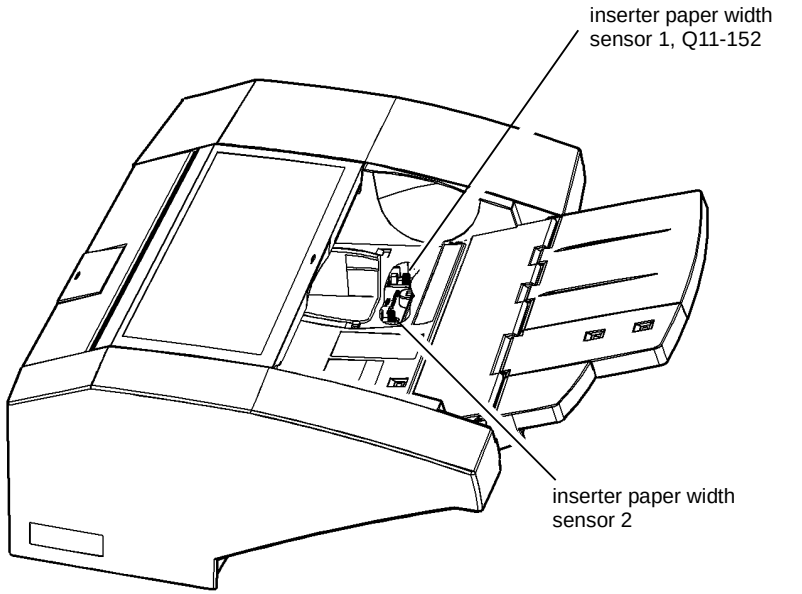

Figure 2 Component location

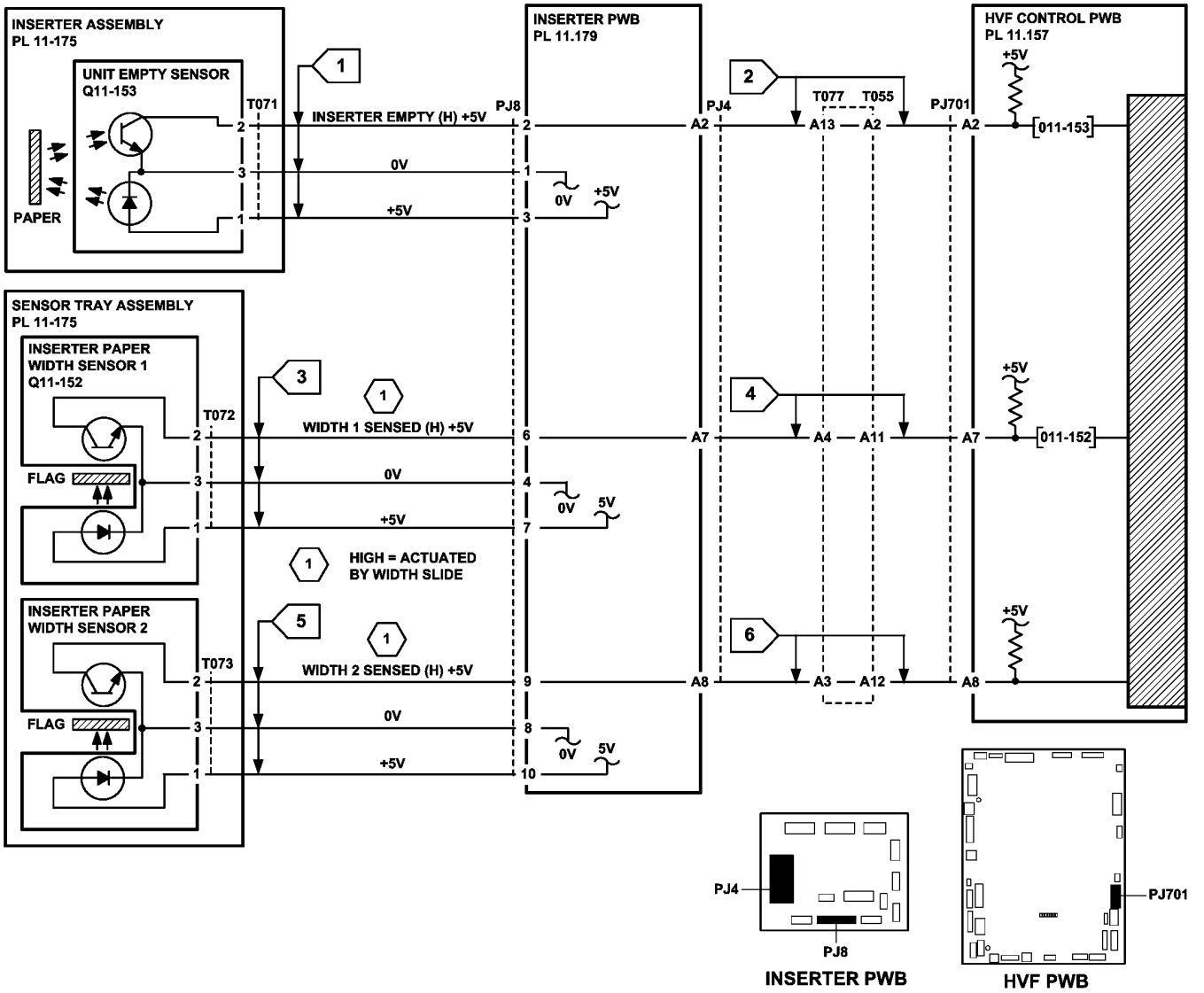

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Figure 3 Circuit diagram

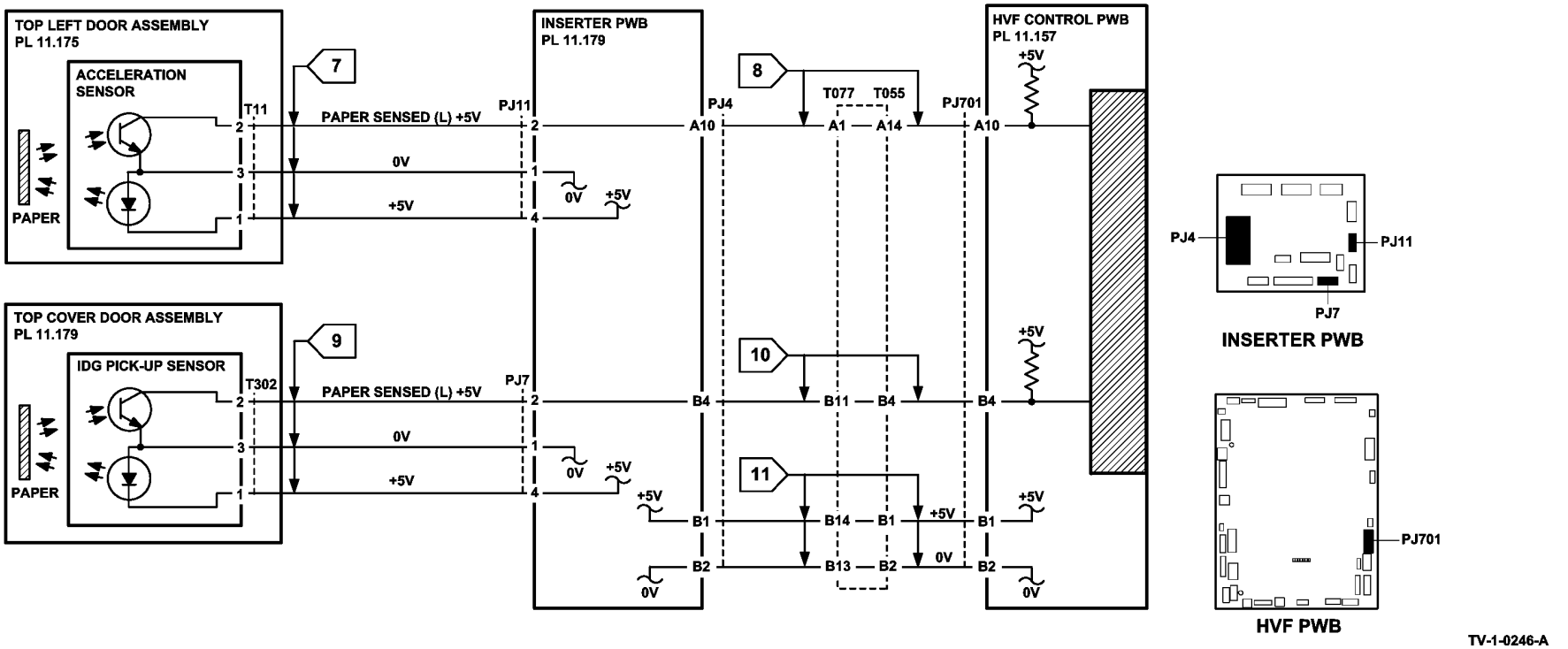


Figure 4 Circuit diagram

311K-171 HVF Initialization Failure RAP

When an initialization command is received from the machine, the HCF polls all of the relevant sensors to check if the various HCF modules are in their home positions. If any sensor reports that a module is not in the home position, the HCF attempts to drive that module to the home position. If unsuccessful, a fault status is raised and that module is disabled. If all modules are reported in their home position, the HVF is initialized with the following actions:

1. Bin 1 lowers then raises.
2. The ejector assembly paddle performs two revolutions.
3. The curl suppression solenoid energises and raises the paddle module's centre flap.
4. The paddle module moves to the up position.
5. The paper pusher moves to the down position.
6. The ejector assembly travels to the out position.
7. The curl suppression solenoid de-energises and the paddle module's centre flap drops down.
8. The stapler module travels to the inboard position.
9. The stapler module returns to the outboard position
10. The curl suppression solenoid energises and raises the paddle module's centre flap.
11. The paper pusher moves to the up position.
12. The ejector assembly returns to the home position.
13. The support finger motor turns on and drives the support fingers to the initialisation position, which in turn pushes the pressing plate fingers down onto bin 1.
14. The support finger motor reverses and drives the support fingers to the home position, which in turn retracts the pressing plate fingers.
15. The the front tamper moves to the away position then moves to the home position.
16. The bin 1 offset motor turns on and moves the ejector assembly, front taper and rear tamper to the away position and then to the home position.
17. The paddle module moves to the down position.
18. Transport motor 1, bypass feed motor, buffer feed motor and transport motor 2 turn on.
19. The booklet maker diverter solenoid actuates, if applicable.
20. The exit diverter solenoid actuates.
21. The booklet maker diverter solenoid de-actuates, if applicable.
22. The exit diverter solenoid de-actuates.
23. The hole punch unit motor and hole punch head motor turn on momentarily, if applicable.
24. Transport motor 1, bypass feed motor, buffer feed motor and transport motor 2 turn off.

NOTE: *The HVF initialization procedure can be triggered by opening and closing the HVF front door, or by raising and lowering the top tray. When this is done the tray will not lower completely, but will adjust its position.*

The booklet maker is initialized as follows:

1. The BM tampers are driven to their home position, unless already home.
2. The BM backstop is driven to the home position, unless already home
3. The BM crease roll gate is driven to the home position, unless already home
4. The BM crease blade is driven to the home position, unless already home
5. The BM staple heads are driven to their home position, unless already home.

- The BM crease blade is not at the home position, refer to 311-061-00-171, 311-416-00-171 HVF BM Creasing RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Open the HVF front door. Cheat the front door interlock switch. Fully pull out the BM module

Procedure

If the initialization sequence fails to place any unit at the home position, refer to the appropriate RAPs:

- The front tamper is not at the home position, refer to 311-392-00-171 to 311-395-00-171 HVF Front tamper Tray RAP
- The rear tamper is not at the home position, refer to 311-396-00-171 to 311-399-00-171 HVF Rear Tamper Tray RAP.
- The paddle roll is not at the home position, refer to 311-024-00-171, 311-026-00-171 Paddle Roll Position RAP.
- Bin 1 is not at the home position, refer to 311-460-00-171 to 311-462-00-171 HVF Bin 1 Position RAP.
- The punch head is not at the home position, refer to 311-044-00-171 to 311-047-00-171 Punch head Position RAP
- The staple head not at the home position, refer to 311-371-00-171 to 311-377-00-171 HVF stapler Position and Priming RAP.
- The ejector is not at the home position, refer to 311-450-00-171, 311-456-00-171 to 311-459-00-171 HVF Ejector Module RAP.
- The buffer feed motor fails to start, refer to 311-164-00-171, 311-165-00-171 HVF Buffer Path RAP.
- Transport motor 1 fails to start, refer to 311-100-00-171, 311-101-00-171 HVF Entry Sensor RAP.
- Transport motor 2 fails to start, refer to 311-130-00-171, 311-132-00-171 HVF Top Exit Sensor RAP.
- Bin 1 fails to offset, refer to 311-173-00-171 to 311-177-00-171 HVF Offset Unit RAP.
- The booklet maker diverter solenoid fails to operate, refer to 311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 HVF BM Entry RAP.
- The exit diverter solenoid fails to operate, refer to 311-130-00-171, 311-132-00-171 HVF Top Exit Sensor RAP.
- Either of the BM staple heads are not at the home position, refer to 311-063-00-171, 311-411-00-171 HVF BM Stapler Unit 1 Failure RAP or 311-403-00-171, 311-413-00-171, 311-414-00-171 HVF BM Stapler Head 2 and Stapler Module RAP.
- The BM tampers are not at the home position, refer to 311-066-00-171, 311-384-00-171 HVF BM Tamper Failure RAP.
- The BM backstop is not at the home position, refer to 311-065-00-171, 311-383-00-171 HVF BM Backstop Failure RAP.
- The BM crease roll gate is not at the home position, refer to 311-415-00-171 HVF BM Crease Roll Gate Home RAP.

311L-171 Tri-Folder Not Detected RAP

Use this RAP when the machine fails to detect the tri-folder module.

NOTE: *The machine must be loaded with A4 or 8.5 x 11 inch SEF paper for the tri-folder to function. Also, booklet mode will only be available if A4, 11, 14 or 17 inch paper is loaded in the machine.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for damage or obstructions that would prevent the tri-folder from operating correctly.

Procedure

Go to Flag 1. Check the wiring of the tri-folder present link, and repair as necessary, REP 1.2. Check for 0V at P/J563 pin 7. Refer to:

- P/J563, BM PWB.
- 311A-171 HVF Power Distribution RAP.

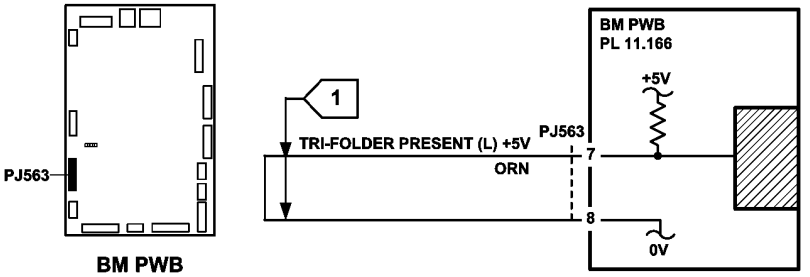


Figure 1 Circuit diagram

311M-171 Curl Suppressor RAP

Use this RAP to fix curl suppressor problems.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC330 code 011-084 curl suppressor solenoid, SOL11-084, Figure 1. **SOL11-084 energizes.**

Y N

Go to Flag 1. Check SOL11-084.

Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J202, HVF Control PWB.
- 311A-171, HVF Power Distribution RAP.

Install new components as necessary:

- Paddle module assembly, PL 11.145 Item 2.
- HVF control PWB, PL 11.157 Item 2

Perform SCP 5 Final Actions.

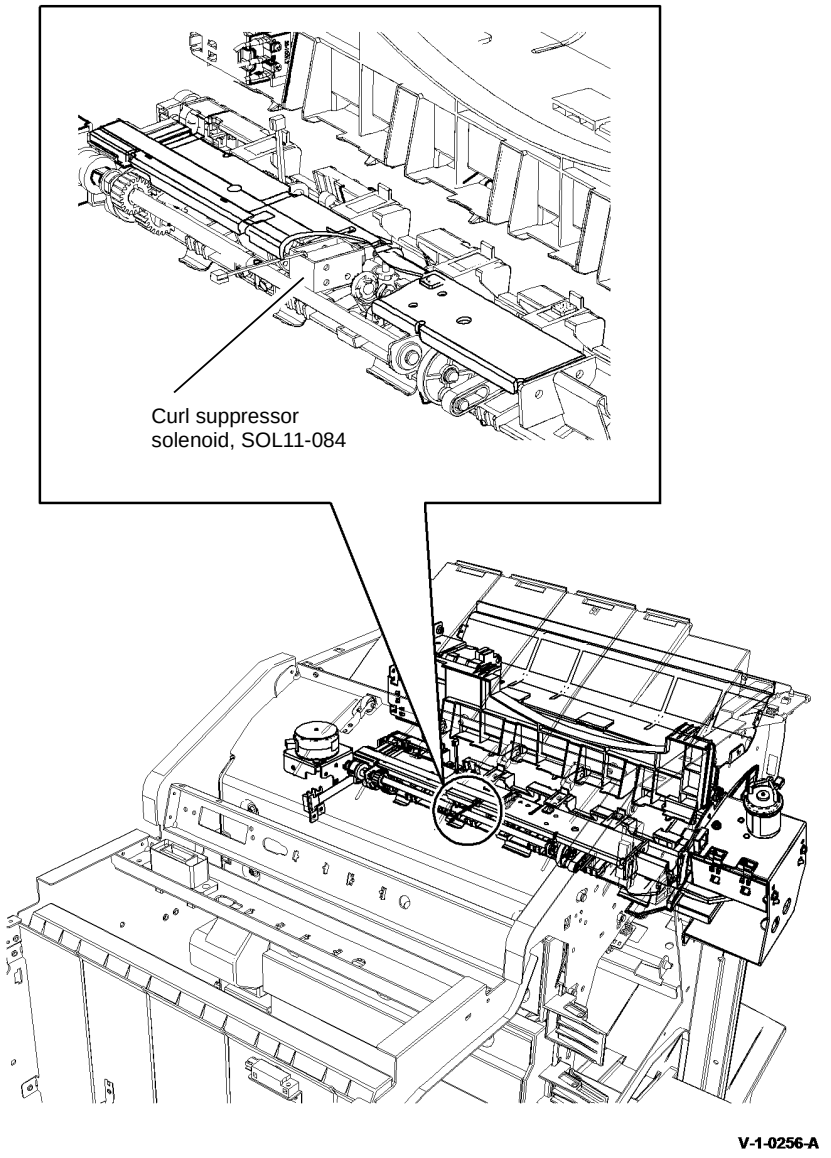
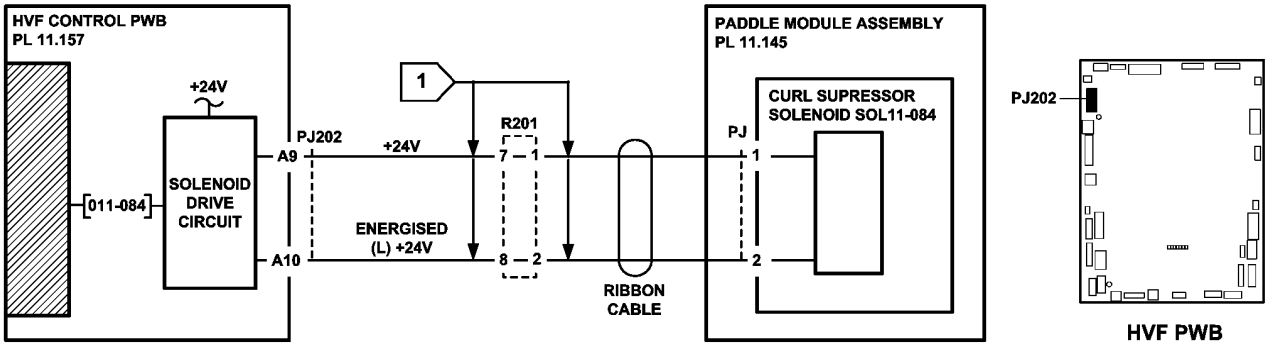


Figure 1 Component location



TV-1-0248-A

Figure 2 Circuit diagram

311N-171 Chad Bin Present and Bin Full RAP

Use this RAP when there is a false indication of a missing or full chad bin.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the chad sensor hole in the side of the bin is clear of obstruction. Check that the bin is fully inserted and is empty.

Procedure

Figure 1 shows the location of the components.

Enter dC330 code 011-112, chad bin present sensor, Q11-112. Remove the chad bin and operate the sensor manually. **The display changes.**

Y N

Go to Flag 1. Check the wiring. Repair as necessary, REP 1.2. Check Q11-112. Refer to:

- GP 11 How to Check a Sensor.
- P/J501, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

As necessary, install new components:

- Chad bin present sensor, PL 11.153 Item 18.
- HVF control PWB, PL 11.157 Item 2.

Enter the dC330 code, 11-348, chad bin full sensor, Q11-348. Remove the chad bin and use a piece of paper to activate the sensor. **The display changes.**

Y N

Go to Flag 2. Check the wiring. Repair as necessary, REP 1.2. Refer to:

- GP 11 How to Check a Sensor.
- P/J501, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Chad bin full sensor, PL 11.153 Item 17.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

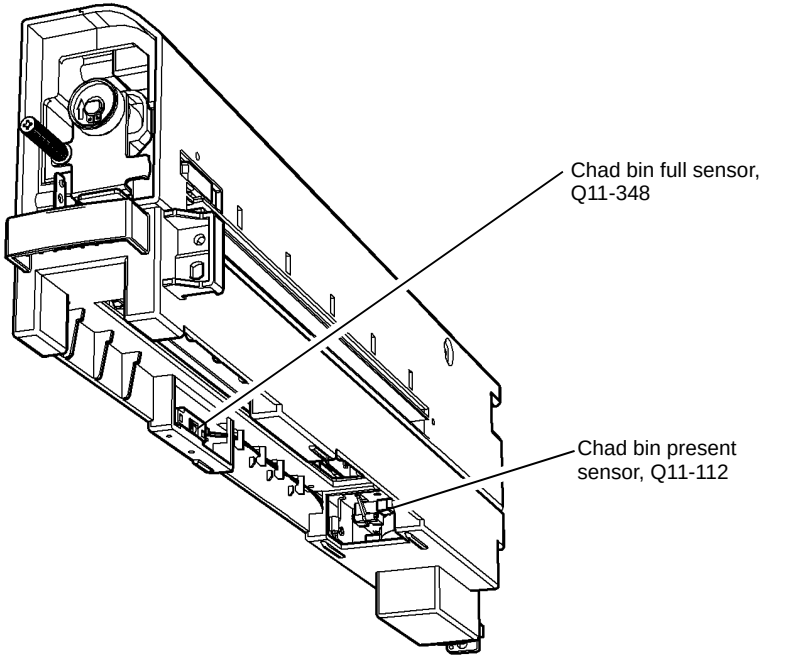
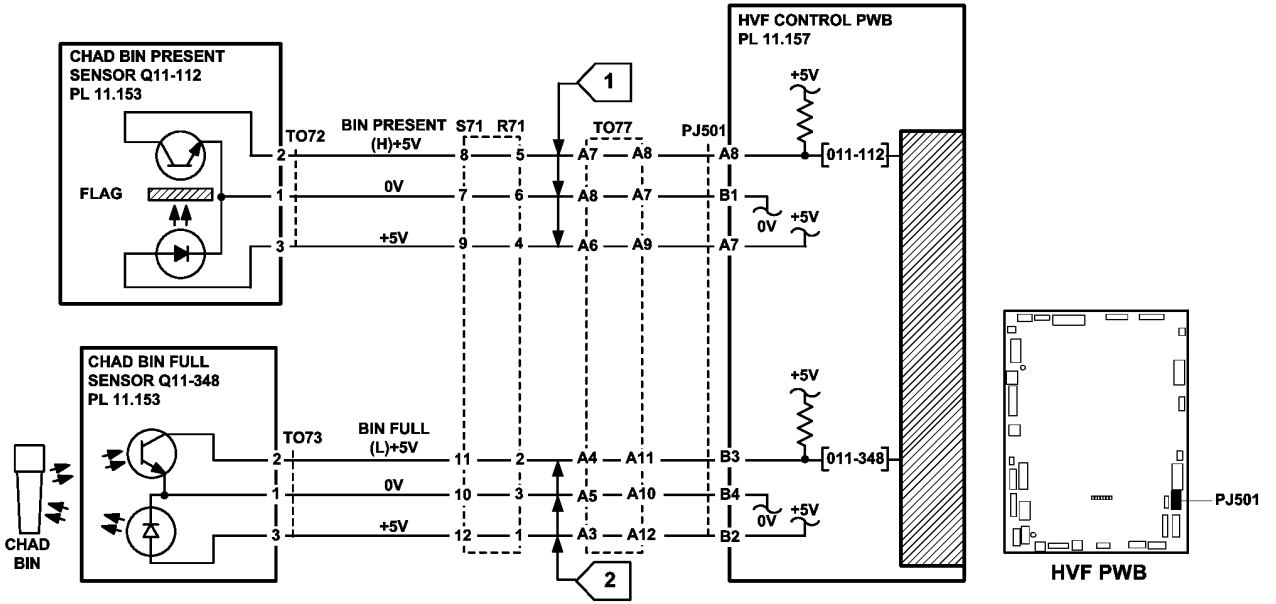


Figure 1 Component location



TV-1-0249-A

Figure 2 Circuit diagram

311P-171 Buffer Clamp RAP

Use this RAP when having problems with the buffer clamp on the HVF. Problems in this area result in paper jams at the exit and poor compiling.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the solenoid and the clamp can move freely without obstruction.

Procedure

Figure 1 shows the location of the components.

Enter the dC330 code 011-082, buffer clamp solenoid, SOL11-082. **SOL11-082 energises.**

Y N

Go to Flag 1. Check the wiring. Repair as necessary, REP 1.2. Check SOL11-082. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J104, HVF Control PWB.
- 311A-171 HVF Power Distribution RAP.

Install new components as necessary:

- Buffer clamp solenoid, PL 11.150 Item 4.
- HVF control PWB, PL 11.157 Item 2.

Perform SCP 5 Final Actions.

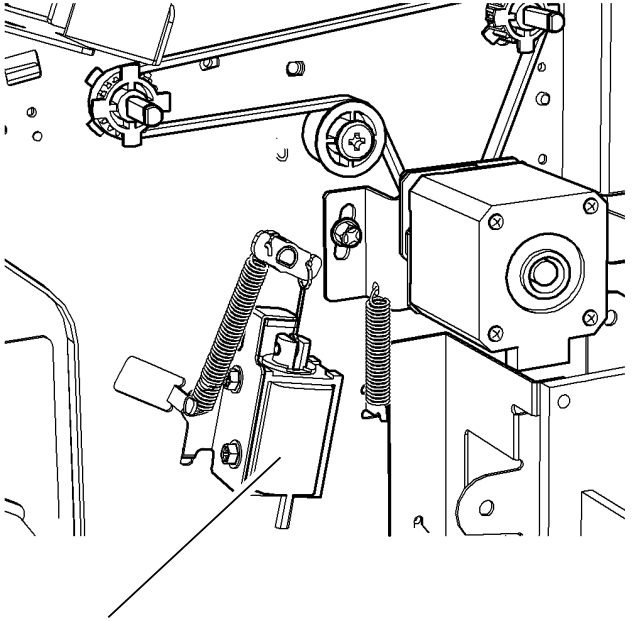


Figure 1 Component location

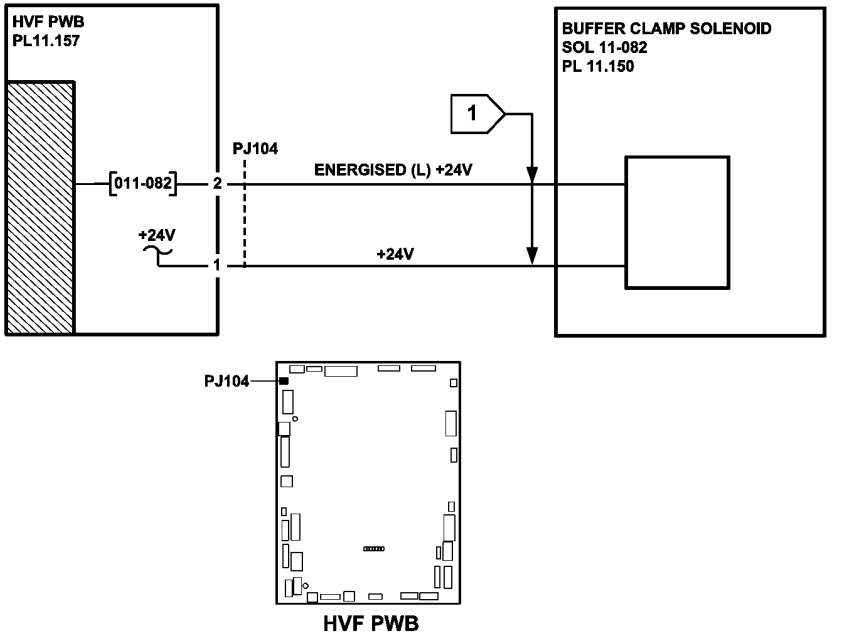


Figure 2 Circuit diagram

312-301-00 Offset Catch Tray Failure RAP

312-301 The offset catch tray has not made an index position within 450 ms of the last index position being made.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the offset catch tray is correctly installed and there is no obstruction to prevent movement between offset positions. If the tray is damaged, install a new OCT PL 12.10 Item 1.

Procedure

Figure 1. Go to Flag 1 and Flag 2. Check the OCT wiring, GP 7. **The wiring is good.**

Y N

Repair the wiring or install a new OCT, PL 12.10 Item 1.

Enter dC330, code 012-005 to check the OCT motor, MOT12-005. **MOT12-005 runs.**

Y N

Install a new OCT, PL 12.10 Item 1.

Enter dC330, code 012-005 and stack code 012-301 to check the OCT index sensor, Q12-301. **The display changes as the motor runs.**

Y N

Install a new OCT, PL 12.10 Item 1.

Enter dC330, code 012-300 to check the OCT tray 90% full sensor, Q12-300. Actuate the sensor, Figure 1. **The display changes.**

Y N

Check the sensor actuator. If necessary install a new OCT, PL 12.10 Item 1.

Perform SCP 5 Final Actions RAP.

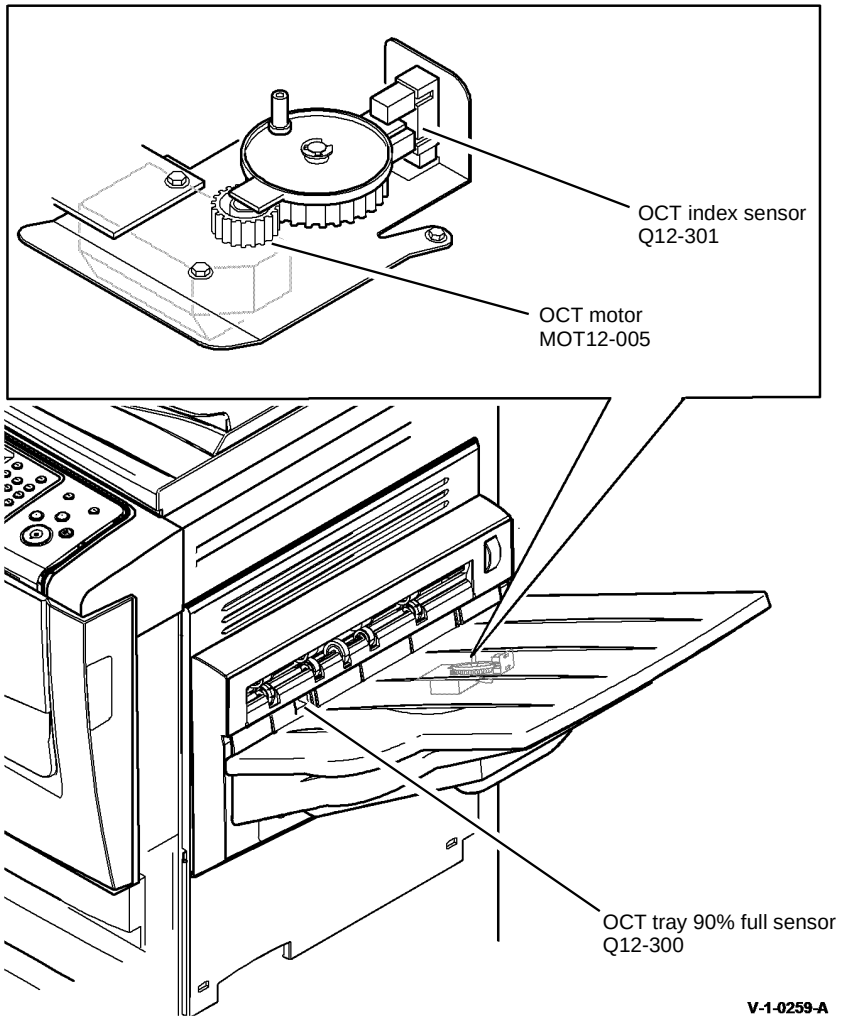
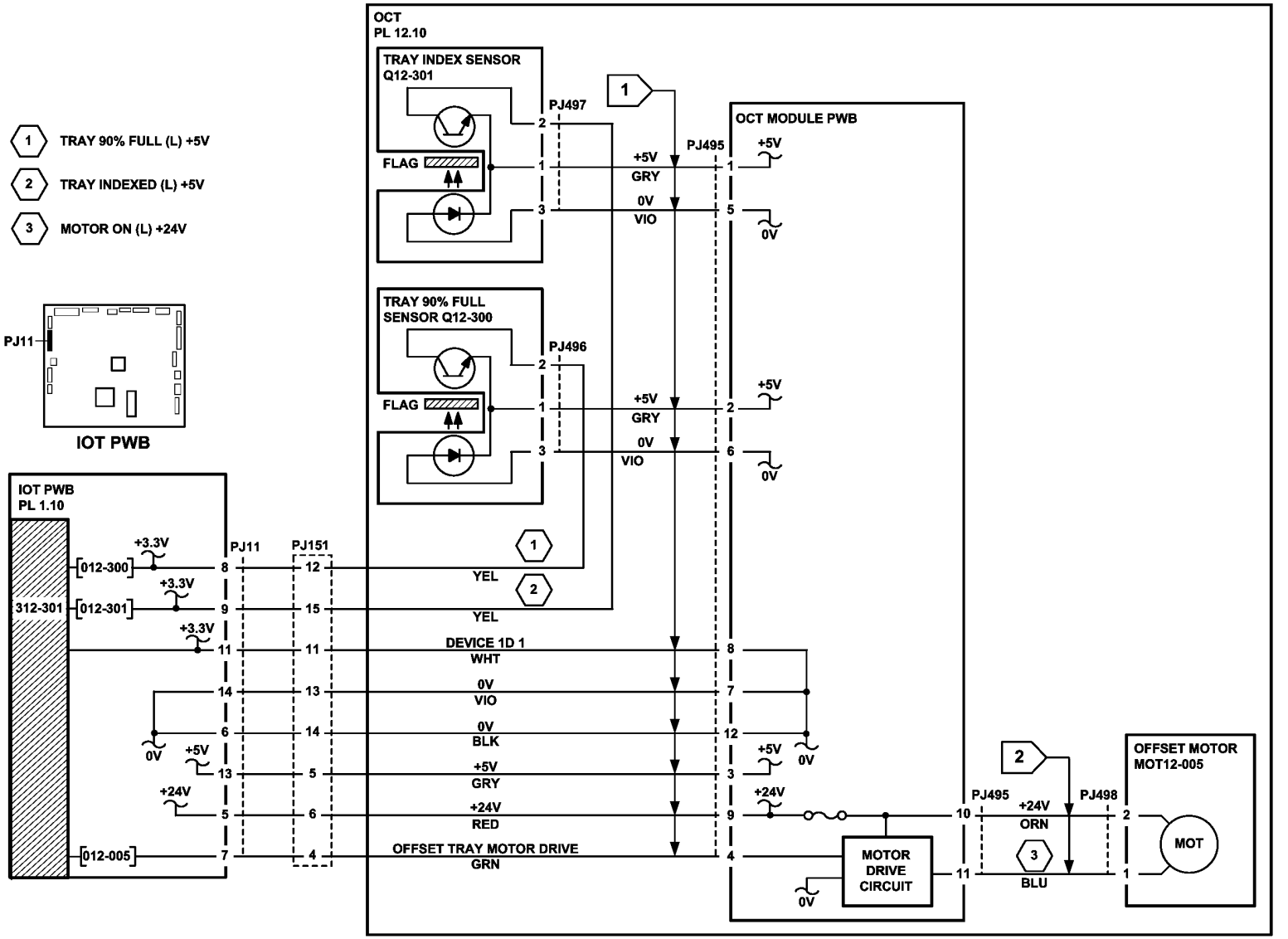


Figure 1 Component location



TV-1-0251-A

Figure 2 Circuit Diagram

316-000-00 to 316-000-26 Cannot Create RPC With ENS RAP

316-000-00 Format services non shutdown ESS faults

316-000-01 ENS service non shutdown ESS faults

316-000-09 Cannot create RPC connection with ENS

316-000-14 Cannot create RPC connection with ENS

316-000-19 Cannot create RPC connection with ENS

316-000-26 Cannot create RPC connection with ENS

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, the network controller (ESS) will automatically re-boot.
2. For multiple occurrences, reinstall software, GP 4.

316-001-09 to 316-001-90 Unable to Synchronize Startup RAP

316-001-09 Unable to do startup synchronization

316-001-14 Unable to do startup synchronization

316-001-19 Unable to do startup synchronization

316-001-26 Unable to Start up and synchronize with SC

316-001-47 Unable to do startup synchronization

316-001-90 Unable to do startup synchronization

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-002-09 to 316-002-46 Unable to Register as RPC RAP

316-002-09 Unable to Register as an RPC server

316-002-14 Unable to Register as an RPC server

316-002-19 Unable to Register as an RPC server

316-002-26 Unable to Register as an RPC server

316-002-46 Unable to Register as an RPC server

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-003-09 to 316-003-90 Too Many IPC Handles RAP

316-003-09 Too many IPC handles

316-003-14 Too many IPC handles

316-003-19 Too many IPC handlers

316-003-90 Utility insert handler failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-004-14 to 316-005-92 RPC Failure to Register RAP

316-004-14 RPC call failure to ESS registration service

316-004-19 RPC connect failure to ESS registration service

316-004-26 RPC connect failure to ESS registration service

316-004-46 RPC connect failure to ESS registration service (to register with)

316-005-14 RPC call failure to ESS registration service

316-005-19 RPC call failure to ESS registration service

316-005-26 RPC call failure to ESS registration service

316-005-46 RPC call failure to ESS registration service (to register with)

316-005-68 RPC call failure to ESS registration service (to register with)

316-005-90 RPC call failure to ESS registration failed

316-005-92 RPC call failure to ESS registration service (to register with)

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-006-09, 316-006-19 Cannot Register for Events RAP

316-006-09 Cannot register for events

316-006-19 Cannot register for events

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-007-92 to 316-010-99 Invalid IPC / RPC Data RAP

316-007-92 Invalid RPC data received

316-009-09 Invalid IPC data received

316-010-14 Unable to send IPC

316-010-99 IPC open, create, signal queue failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-013-14, 316-014-14 Copier Synchronization Error RAP

316-013-14 Digital copier ENS synchronization error

316-014-14 Digital copier ENS synchronization error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-015-14, 316-015-19 Data Store Variable Not Set RAP

316-015-14 SESS data store environmental variable not set

316-015-19 SESS data store environmental variable not set

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall the software, GP 4.

316-016-14 to 316-016-99 Data Store Initialization Failed RAP

316-016-14 Data store initialization failed

316-016-19 Data store initialization failed

316-016-99 Data store initialization failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, the network controller (ESS) will automatically re-boot.
2. For multiple occurrences, reinstall the software, GP 4.

316-017-19 to 316-021-26 Send Event Failure / Could Not Get Host Name RAP

316-017-19 Send event failure. Unable to send event to ESS ENS

316-021-19 ESS PM registration connect error

316-021-26 Service could not get Host name

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-021-46 Unable to Get Host Name RAP

316-021-46 Unable to get Host Name

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall the software, GP 4.

316-023-09, 316-023-26 RPC Call Failure RAP

316-023-09 RPC call failure to ENS

316-023-26 RPC call failure to ENS

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-026-09 to 316-026-92 Memory Allocation Error RAP

316-026-09 Memory allocation failure

316-026-14 Malloc error

316-026-46 Memory allocation failure

316-026-90 Malloc error

316-026-92 Memory allocation failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14
3. If the fault remains, reinstall software, GP 4.

316-027-90 Unable to Obtain Queue ID RAP

316-027-90 Unable to obtain well known queue ID

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall the software, GP 4.

316-028-09, 316-028-90 Unable to Complete RPC Call / Invalid Range RAP

316-028-09 Unable to complete RPC call

316-028-90 Invalid range string

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14
3. If the fault remains, reinstall software, GP 4.

316-030-19 Unable to Obtain Client RAP

316-030-19 Unable to obtain client RPC handle to EJS

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-031-09 Invalid Event Notification RAP

316-031-09 Invalid event notification received

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-032-19, 316-039-00 NVM Connection Failure / Pthread Create Error RAP

316-032-19 NVM connection failure

316-039-00 Pthread create error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall the software, GP 4.

316-040-92 Semaphore Fault RAP

316-040-92 Semaphore fault

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-048-09 Unable to Set Binding RAP

316-048-09 Unable to set binding

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-048-14, 316-048-90 Cannot Set ESS Client Binding RAP

316-048-14 Cannot set ESS client binding

316-048-90 Cannot set ESS client binding

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14
2. If the fault remains, reinstall software, GP 4.

316-048-99 Unable to Set Client Binding RAP

316-048-99 Unable to set client binding

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-150-09 Cannot Send Registration Event RAP

316-150-09 Cannot send Registration Event

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-150-14 Unable to Obtain RPC Transport RAP

316-150-14 Unable to obtain RPC transport

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-150-19 Unable to Sync Peer RAP

316-150-19 Unable to sync peer (within ESS) infrastructure services

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-150-26 Fault Service Failed to Write Log RAP

316-150-26 Fault Service Failed to write log

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-150-90 Invalid IPC Request Destination RAP

316-150-90 Invalid IPC request destination

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-150-92 Consumer Interface Fault RAP

316-150-92 Consumer interface fault

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14
2. If the fault remains, reinstall software, GP 4.

316-151-09 to 316-151-19 Invalid IPC Command / SNMP Reg Failure RAP

316-151-09 Invalid IPC command

316-151-14 SNMP event registration failed

316-151-19 Invalid IPC command

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14
3. If the fault remains, reinstall software, GP 4.

316-151-26 Fault Service Failed to Get a Log RAP

316-151-26 Fault service failed to get a log handle

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-151-90 Environment Variable Failure RAP

316-151-90 Put environment variable failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall software, GP 4.

316-152-09 Internal IPC Failure RAP

316-152-09 Internal IPC failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-152-14 Empty Internal Event Failure RAP

316-152-14 Empty internal event received by ENS

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-152-19 Unable to Send Request to SESS RAP

316-152-19 Unable to send request to SESS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-152-26 Fault Service Could Not Open Fault Log RAP

316-152-26 Fault Service could not open fault log.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-153-09 Unable to Obtain IPC Queue RAP

316-153-09 Unable to obtain IPC queue

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-153-14 Unable to Initialize Event List RAP

316-153-14 Can not initialize internal event list

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-153-19 NVM Save Failure RAP

316-153-19 NVM save failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall software, GP 4.

316-154-09 NC Registration Configuration Error RAP

316-154-09 NC Registration service configuration error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, reinstall software, GP 4.
2. If problem persists there could be a bad software release. Install new software, GP 4.

316-154-14 Cannot Create Internal Event Queue RAP

316-154-14 Cannot create internal event

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-154-19 NVM Read Failure RAP

316-154-19 NVM read failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall software, GP 4.

316-155-19 NC Failed to Boot from Alternate Disk RAP

316-155-19 NC failed to boot from alternate disk partition

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, reinstall software, GP 4.

316-156-19 Service Run Loop Failed RAP

316-156-19 Service run loop failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-160-09 NC Reg Service Process Death RAP

316-160-09 NC Registration Service Process Death

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-161-09, 316-164-09 Cannot Send Reg Event / List Access Failure RAP

316-161-09 Cannot send registration event

316-164-09 List access failure (create, add, find, delete)

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-162-09, 316-163-09 NC Platform Manager Service Process Death / NC DM Agent Service Process Death RAP

316-162-09 NC platform manager services process death

316-163-09 NC DM agent services process death

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-429-00, 316-431-00 Unable to Write to Data Store / Get System Time RAP

316-429-00 Unable to write to data store

316-431-00 Unable to get system time

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-432-00 Unknown Scheduler Received RAP

316-432-00 Unknown scheduler received

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-433-00 RPC Call Failed RAP

316-433-00 RPC call failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-434-00 Unable to Change Scheduler RAP

316-434-00 Unable to change scheduler received

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-600-07 to 316-600-67 Cannot Create RPC Connection RAP

316-600-07 Cannot create RPC connection to ENS

316-600-35 Cannot create RPC connection to ENS

316-600-46 Cannot create RPC connection to ENS

316-600-66 Unable to create RPC connection to ENS

316-600-67 Unable to create RPC connection to ENS

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, the network controller (ESS) will automatically re-boot.
2. For multiple occurrences, reinstall the software, GP 4.

316-601-26 to 316-601-46 Queue Setup / System Control Failed / Invalid UI Info RAP

316-601-26 Fault Service Failed IPC Queue Setup

316-601-35 System control initialization Failed

316-601-46 Invalid UI information (RPC data) returned

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-601-47 Diagnostics Service Failed IPC Queue Setup RAP

316-601-47 Diagnostics service failed IPC queue setup

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-601-66, 316-601-67 Unable to Do Start Up Sync RAP

316-601-66 Unable to do start up synchronization

316-601-67 Unable to do start up synchronization

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-601-68 Unable to Start Up and Sync RAP

316-601-68 Unable to start up & synchronize with SC

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-601-105 Unable Synchronize At Start Up RAP

316-601-105 Unable to do start up synchronization

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-602-07 to 316-602-105 RPC Service Registration Failure RAP

316-602-07 RPC service registration failure

316-602-09 Unable to unregistered as RPC service during shutdown

316-602-11 RPC server register failed

316-602-28 RPC server registration failed

316-602-35 RPC server registration failed

316-602-38 RPC server registration failed

316-602-66 Unable to register as an RPC server

316-602-67 Unable to register as an RPC server

316-602-68 Unable to register as an RPC server

316-602-105 Unable to register as an RPC server

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-603-11, 316-603-28 Replace Handler Call Failed RAP

316-603-11 Replace handler call failed

316-603-28 Replace handler call failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-603-46 to 316-603-67 Too Many IPC Handlers RAP

316-603-46 Too many IPC handlers

316-603-66 Too many IPC handlers

316-603-67 Too many IPC handlers

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-603-68, 316-604-105 Replace Handler Call Failed / Data Store Variable Not Set RAP

316-603-68 Replace handler call failed

316-604-105 SESS data store environmental variable not set

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-603-105, 316-604-14 RPC Call Failure to NC Reg Service RAP

316-603-105 RPC call failure to network controller registration service.

316-604-14 Unable to unregister as RPC service during shutdown. Registration failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-604-38 to 316-605-07 Could Not Register With Reg Service RAP

316-604-38 Could not register with registration service

316-604-99 Could not register with registration service

316-605-07 Unable to register with registration service

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-605-14, 316-605-105 Unable to Unregister As RPC Service / RPC Call Failure RAP

316-605-14 RPC call failure to ESS registration service

316-605-105 Unable to unregister as RPC service during shutdown

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-605-26 Fault Service Timed Out Registering RAP

316-605-26 Fault service timed out registering with registration service

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-605-35 to 316-605-67 RPC Call Failure to NC RAP

316-605-35 RPC call failure to NC registration service

316-605-47 RPC call failure to NC registration service (to register with)

316-605-66 RPC call failure to NC registration service

316-605-67 RPC call failure to NC registration service

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-606-07 Cannot Register For Events RAP

316-606-07 Cannot register for events

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-606-35 to 316-606-99 Cannot Register For Events RAP

316-606-35 Cannot register for events

316-606-46 Cannot register for events

316-606-99 Cannot register for events

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-606-105 OS Problem RAP

316-606-105 OS problem

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-607-19 to 316-608-14 Invalid RPC Data / Unable to Free Resources RAP

316-607-19 Invalid RPC data received

316-607-46 Invalid RPC data received

316-607-47 Invalid RPC disk diagnostic data received

316-607-92 Invalid RPC data received

316-607-105 Service run loop failed

316-608-09 Unable to free IPC resources

316-608-11 IPC unregister failed

316-608-14 Unable to free IPC resources

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-608-26 Fault Service Failed to Unbind RAP

316-608-26 Fault service failed to unbind with SC

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, reinstall software, GP 4.
2. For multiple occurrences, first check the harness connections then if problem persists install a new HDD, PL 3.22 Item 2.

316-608-28 to 316-608-68 Unable to Free IPC Resources RAP

316-608-28 IPC unregister fail

316-608-35 Unable to free IPC resources

316-608-38 Unable to unregister as IPC server

316-608-46 Unable to free IPC resources

316-608-66 Unable to free IPC resources

316-608-67 Unable to free IPC resources

316-608-68 Unable to free IPC resources

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-608-105 Unable Build UI SVC Obtain Client Failed RAP

316-608-105 Unable build UI SVC obtain client failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-609-07 Unknown Message Received RAP

316-609-07 Unknown message received from DM agent

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, reinstall software, GP 4.
2. For multiple occurrences, first check the harness connections then if problem persists install a new HDD, PL 3.22 Item 2.

316-609-19, 316-609-105 Too Many IPC Handlers / Invalid RPC Data RAP

316-609-19 Invalid RPC data received

316-609-105 Too many IPC handlers

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-609-26 Fault Service Encountered Error RAP

316-609-26 Fault service encountered error trying to get IPC message

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, reinstall software, GP 4.
2. For multiple occurrences, first check the harness connections then if problem persists install a new HDD, PL 3.22 Item 2.

316-609-46 to 316-609-92 Invalid IPC Data Received RAP

316-609-46 Invalid IPC data received

316-609-47 Invalid IPC data received. Get SC diagnostics handle failed;

316-609-92 Invalid IPC data received

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-610-00, 316-610-07 IPC Send Failure RAP

316-610-00 IPC send failure to ESS triple A service for queue command authorization

316-610-07 IPC send failure to DM agent

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-610-09 Cannot Send IPC Message RAP

316-610-09 Cannot send IPC message to ESS platform manage

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-610-11 to 316-610-90 Unable to Send IPC Message RAP

316-610-11 IPC communication failed

316-610-19 Unable to send IPC message

316-610-26 Unable to send IPC message

316-610-28 IPC communication failed

316-610-35 Unable to send IPC message

316-610-46 Unable to send IPC message

316-610-90 IPC send response error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-610-92 Failure to Send Queue Status RAP

316-610-92 Failure to send queue status

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-610-99 Unable to Send IPC Message RAP

316-610-99 Unable to send IPC message

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-611-07, 316-611-38 Client Removal Failed RAP

316-611-07 Client removal failure

316-611-38 Client removal failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-611-19 to 316-611-47 Unable to Remove RPC Connection RAP

316-611-09 Unable to remove RPC connection

316-611-14 Unable to remove RPC connection

316-611-19 Unable to remove RPC connection

316-611-26 Unable to remove RPC connection

316-611-46 Unable to remove RPC connection

316-611-47 Unable to remove RPC connection

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-611-66 to 316-611-99 Unable to Remove RPC Connection RAP

316-611-66 Unable to remove RPC connection

316-611-67 Unable to remove RPC connection

316-611-99 Unable to remove RPC connection

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-612-09 to 316-612-68 Unable to Do Shutdown Sync RAP

316-612-09 Unable to do shutdown synchronization

316-612-14 Unable to do shutdown synchronization

316-612-35 Unable to do shutdown synchronization

316-612-46 Unable to do shutdown synchronization

316-612-47 Downgrade not permitted

316-612-68 Unable to do shutdown synchronization

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, take no action.
2. For multiple occurrences, switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall software, GP 4.

316-613-09 to 316-614-19 DC Sync / Comms Error RAP

316-613-09 DC registration synchronization error

316-613-14 DC ENS synchronization error

316-613-19 DC sys mgr sync error

316-614-09 DC registration communications error

316-614-14 Digital copier ENS registration error

316-614-19 DC sys mgr communications error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, then switch on the machine, GP 14.
2. If the fault remains, reinstall software, GP 4.

316-614-47 Invalid Software Upgrade RAP

316-614-47 Invalid SW upgrade file

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Verify that the correct software file is being used, refer to GP 4.

316-615-35, 316-615-46 Data Store Variable Not Set RAP

316-615-35 SESS data store environmental variable not set

316-615-46 SESS data store environmental variable not set

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-615-47 Multiple Software Upgrade File RAP

316-615-47 Multiple SW upgrade files in directory

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Ensure that there is only one software upgrade file in the directory, refer to GP 4.

316-615-66 Data Store Variable Not Set RAP

316-615-66 SESS data store environmental variable not set

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-615-67, 316-615-90, 316-616-38, 316-616-46 SESS Data Store Environmental Variable RAP

316-615-67 SESS data store environmental variable not set.

316-615-90 Corrupt environment variable, configuration script error.

316-616-35 SESS Faults 206 or 207. Data store not created. Corrupt environment.

316-616-38 Shared memory fault when initializing with the data store.

316-616-46 SESS Faults 206 or 207, data store not created, corrupt environment variable.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall the software, GP 4.

316-616-47 IPC Message Failure RAP

316-616-47 IPC message failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall the software, GP 4.

316-616-67 Submission Of E-mail OR IFax Job Failed RAP

316-616-67 Submission of e-mail or IFax job failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, take no action.
2. For multiple occurrences switch off the machine, then switch on the machine, GP 14.
3. If the fault remains, reinstall the software, GP 4.

316-617-19 RPC Information Corrupt RAP

316-617-19 Invalid event information or data. ENS failure, system RPC information corrupt.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-617-47 TAR Extraction Failure RAP

316-617-47 TAR extraction failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-618-47 DLM SPI Extraction Failure RAP

316-618-47 DLM SPI Extraction failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For a multiple occurrence, reinstall software, GP 4.

316-619-14 to 316-619-93 Cannot Unregister From Registration Service RAP

316-619-14 Registration service failed to respond in time.

316-619-19 Registration service failed to respond in time.

316-619-26 Could not register with Registration Service. Communication failure, software error.

316-619-46 Unable to unregister with Network Controller Registration Service. Registration Service was too slow to respond.

316-619-47 DMPR Failure at web.

316-619-68 Unable to unregister with Network Controller Registration Service. Registration Service was too slow to respond.

316-619-93 Unable to unregister with Network Controller Registration Service. Registration Service was too slow to respond.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For a multiple occurrence, reinstall software, GP 4.

316-620-07 to 316-620-90 Registration Service Failed RAP

316-620-07 Registration Service failed.

316-620-14 Registration Service failed.

316-620-19 Registration Service failed.

316-620-35 Registration Service failed.

316-620-38 Registration Service failed.

316-620-46 Registration Service failed.

316-620-47 Upgrade request rejected.

316-620-90 Registration Service failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For a multiple occurrence, reinstall software, GP 4.

316-620-92, 316-620-93, 316-620-99 Unable to Register With Network Controller Registration Service RAP

316-620-92 Unable to unregister with network controller registration service due to registration service failure.

316-620-93 Unable to unregister with network controller registration service due to registration service failure.

316-620-99 Registration Service failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For a multiple occurrence, reinstall software, GP 4.

316-621-00, 316-621-07, 316-621-11, 316-621-28, 316-621-35, 316-621-38, 316-621-47, 316-621-66, 316-621-67, 316-621-93, 316-621-99 Unable to Obtain Host Name RAP

316-621-00 Unable to get host name. Configuration error.

316-621-07 Unable to get host name. Configuration error.

316-621-11 Unable to get host name. Configuration error.

316-621-28 Unable to get host name. Configuration error.

316-621-35 Failed to get host name using GetHostName call.

316-621-38 Failed to get host name using GetHostName call.

316-621-47 Failed to get host name using GetHostName call.

316-621-66 Unable to get host name.

316-621-67 Unable to get host name.

316-621-93 Failed to get host name using GetHostName call.

316-621-99 Failed to get host name using GetHostName call.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For single occurrence, switch on the machine, then switch off the machine, GP 14.
2. For multiple occurrence, reinstall software, GP 4.

316-622-07, 316-622-09, 316-622-11, 316-622-14, 316-622-19, 316-622-26, 316-622-28, 316-622-35, 316-622-38, 316-622-46, 316-622-47 Corrupt RPC Table RAP

316-622-07 Corrupt O/S RPC table.

316-622-09 Corrupt O/S table.

316-622-11 Corruptly O/S table.

316-622-14 Corruptly O/S table.

316-622-19 Corruptly O/S table.

316-622-26 Corruptly O/S table.

316-622-28 Corruptly O/S table.

316-622-35 Corruptly O/S table.

316-622-38 Corruptly O/S table.

316-622-46 Corruptly O/S table.

316-622-47 Software upgrade file failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For single occurrence, switch on the machine, then off the machine, GP 14.
2. For multiple occurrence, reinstall software, GP 4.

316-622-66, 316-622-67, 316-622-68 Unable to Register RPC Service RAP

316-622-66 Unable to unregister as RPC service during shutdown.

316-622-67 Unable to register as RPC service during shutdown.

316-622-68 Unable to register as RPC service during shutdown.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-623-35, 316-623-47, 316-624-46 ENS Service Failed to Respond In Time RAP

316-623-35 ENS Service failed to respond in time.

316-623-47 ENS service failed to respond in time.

316-624-46 RPC corrupted o/s failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrences, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-625-35, 316-625-46, 316-625-66, 316-625-67, 316-625-90 Invalid IPC Type RAP

316-625-35 Unknown message received. Software version mismatch.

316-625-46 Software version mismatch.

316-625-66 Invalid IPC message type.

316-625-67 Invalid IPC message type.

316-625-90 Known service sends message that does not make sense.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-626-00 to 316-626-67 Memory Leak RAP

316-626-00 Memory leak, software bug memory corrupt. Virtual memory exhausted. Process size exceeding system limits.

316-626-11 Memory leak, software bug memory corrupt. Virtual memory exhausted. Process size exceeding system limits.

316-626-38 Memory leak, software bug memory corrupt. Virtual memory exhausted. Process size exceeding system limits.

316-626-47 Memory leak, software bug memory corrupt. Virtual memory exhausted. Process size exceeding system limits.

316-626-66 Memory allocation failed.

316-626-67 Memory allocation failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-628-07, 316-628-35, 316-628-46, 316-628-66, 316-628-67 Range Environment Variable RAP

316-628-07 Range environment variable not set. Set to invalid numeric string.

316-628-35 Range environment variable not set. Set to invalid numeric string.

316-628-46 Range environment variable not set. Set to invalid numeric string.

316-628-66 Range environment variable not set. Set to invalid numeric string.

316-628-67 Range environment variable not set. Set to invalid numeric string.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-628-09 to 316-629-93 No Acknowledgment For RPC Message RAP

316-628-09 Unable to complete RPC call.

316-629-11 Fault service call to PSW callback failed.

316-629-26 Fault service call to PSW callback failed.

316-629-46 No acknowledgment for RPC message.

316-629-66 No acknowledgment for RPC message.

316-629-67 No acknowledgment for RPC message.

316-629-68 No acknowledgment for RPC message.

316-629-92 No acknowledgment for RPC message. RPC time out calling program received void response due to corrupt RPC.

316-629-93 No acknowledgment for RPC message. RPC time out calling program received void response due to corrupt RPC.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-630-09, 316-630-26, 316-630-35, 316-630-38, 316-630-46, 316-630-47, 316-630-66, 316-630-67, 316-630-68, 316-630-99 Corrupt RPC RAP

316-630-09 Corrupt O/S RPC table.

316-630-26 Corrupt system configuration.

316-630-35 Unable to get RPC client handle. Corrupt system configuration.

316-630-38 Null pointer returned when obtain client attempted.

316-630-46 Corrupt system configuration.

316-630-47 Corrupt system configuration.

316-630-66 Unable to get RPC client handle.

316-630-67 Unable to get RPC client handle.

316-630-68 Unable to get RPC client handle.

316-630-99 Corrupt system configuration.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-631-19, 316-631-46, 316-631-19, 316-633-19, 316-634-46, 316-635-07, 316-635-35, 316-635-46, 316-635-99-316-636-35, 316-636-99 XDR Data Error RAP

316-631-19 Software error in the ENS service or in the service generating the fault.

316-631-46 Software error in the ENS or in the service generating the fault.

316-633-19 Invalid system configuration. NVM corrupted.

316-634-46 Unable to specify shutdown routine during initialization.

316-635-07 Cannot free XDR data.

316-635-35 Cannot free XDR data.

316-635-46 Unable to free XDR data.

316-635-99 Unable to convert serialized data to internal data structure.

316-636-35 Unable to convert serialized data to internal data structure. Unable to free XDR data.

316-636-99 Unable to convert serialized data to internal structure. Unable to free XDR data.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-637-11, 316-637-26, 316-637-38, 316-637-47, 316-637-66, 316-637-67, 316-637-93, 316-637-95 File Error RAP

316-637-11 Failed to open system jobs file.

316-637-26 Failed to open system jobs file.

316-637-38 Disk write error.

316-637-47 Failed to open a file. Bad disk.

316-637-66 File I/O error.

316-637-67 File I/O error.

316-637-93 File I/O error.

316-637-95 File I/O error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-638-66, 316-638-67, 316-639-38, 316-639-46, 316-640-28, 316-640-35, 316-640-46, 316-641-00, 316-641-26, 316-641-46 O/S Failure RAP

316-638-66 Unable to initialize with queue library.

316-638-67 Unable to initialize with queue library.

316-639-38 O/S failure memory.

316-639-46 O/S failure memory.

316-640-28 Calling program received void.

316-640-35 RPC send corrupt.

316-640-46 O/S failure.

316-641-00 Cannot log fault to network controller fault log. Either registration or network controller fault service is not available.

316-641-26 Unable to log a fault on the network controller.

316-641-46 Cannot log fault to network controller fault service.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-642-46, 316-642-47, 316-643-19, 316-643-26, 316-643-47, 316-644-11 Unable To Close File RAP

316-642-46 Software error.

316-642-47 Software error.

316-643-19 Disk write error.

316-643-26 Failed to close system jobs file.

316-643-47 Failed to close a file.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-644-11, 316-644-26, 316-644-46, 316-644-47, 316-644-66, 316-644-67, 316-645-11, 316-645-26, 316-645-46, 316-645-47, 316-645-66, 316-645-67 Unable To Read From File RAP

316-644-11 Common logging utility failed to get log size.

316-644-26 Common logging utility failed to get log size.

316-644-47 Failed while trying to get data for next process to be verified.

316-644-66 File I/O error.

316-644-67 File I/O error.

316-645-11 Failed write to system jobs file.

316-645-26 Failed write to system jobs file.

316-645-46 Failed to write to a file.

316-645-47 Failed to write to a file.

316-645-66 File I/O error.

316-645-67 File I/O error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software GP 4.

316-646-26, 316-647-19, 316-647-26, 316-649-35, 316-650-35, 316-650-99 Invalid Service Attribute RAP

316-646-26 Failed to delete system jobs file.

316-647-19 Lynx OS not responding

316-647-26 Diagnostic failure, O/S failure.

316-649-35 Software error.

316-650-35 Service making invalid attribute request.

316-650-99 Service making invalid attribute request.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-651-19 to 316-656-38 Register Failure RAP

316-651-19 IPC, OS, SESS or SC operation.

316-651-35 IPC and OS failure. SESS not responding.

316-651-99 IPC and OS failure. SESS not responding.

316-652-38 SPI enroll failed. Unable to enroll SPI callbacks.

316-652-98 SPI enroll failed. Unable to enroll SPI callbacks.

316-652-99 SPI enroll failed. Unable to enroll SPI callbacks.

316-653-38 When DM passes completed job logged an invalid job.

316-654-14 Log initialisation/ log close fault.

316-654-38 DM returned from SPI register function because of error.

316-654-99 DM returned from log function because of error.

316-655-38 DM returned to SPI register function because of error.

316-656-38 RPC processing fault.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-658-07, 316-659-11, 316-659-28, 316-659-93, 316-659-95, 316-660-95, 316-660-99, 316-661-95 Parser Utility Open Failure RAP

316-658-07 Unable to get host name. Configuration error.

316-659-11 Parser utility open failure.

316-659-28 Parser utility open failure.

316-659-93 Parser utility open failure.

316-659-95 Parser utility open failure.

316-660-95 Cannot read local directory entries.

316-660-99 Service initialization failed.

316-661-95 Cannot create spool directory.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-662-11, 316-662-28, 316-662-93, 316-662-95, 316-663-28, 316-663-93, 316-663-95 Parser Utility Template Failed To Parse RAP

316-662-11 Parser utility template failed to parse.

316-662-28 Parser utility template failed to parse.

316-662-93 Parser utility template failed to parse.

316-662-95 Parser utility template failed to parse.

316-663-11 Parser utility template failed to parse.

316-663-28 Parser utility template failed to parse.

316-663-93 Parser utility template failed to parse.

316-663-95 Parser utility template failed to parse.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-664-11, 316-664-28, 316-664-93, 316-664-95, 316-665-95 Parser Utility Closing Failure RAP

316-664-11 Parser utility parser closing failed.

316-664-28 Parser utility parser closing failed.

316-664-93 Parser utility parser closing failed.

316-664-95 Parser utility parser closing failed.

316-665-95 Unable to detach from child thread.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-666-11, 316-666-28, 316-666-93, 316-666-95 Parser Utility Invocation Failed RAP

316-666-11 Parser utility invocation failed.

316-666-28 Parser utility invocation failed.

316-666-93 Parser utility invocation failed.

316-666-95 Parser utility invocation failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-667-11, 316-667-28, 316-667-95, 316-668-47 Parser Utility Set Status Failure RAP

316-667-11 Parser utility set status failed.

316-667-28 Parser utility set status failed.

316-667-95 Parser utility set status failed.

316-668-47 Failed to write NVM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-668-93, 316-668-95 Unable To Determine Local File Statistics RAP

316-668-93 Unable to determine local file statistics.

316-668-95 Unable to determine local file statistics.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-669-28, 316-669-93, 316-669-95, 316-670-00 Unable To Write Job Template RAP

316-669-28 Unable to write job template to network controller disk.

316-669-93 Unable to write job template to network controller disk.

316-669-95 Unable to write job template to network controller disk.

316-670-00 Unable to lock/unlock data store.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-670-11, 316-670-28, 316-670-47, 316-670-93, 316-671-00, 316-671-47 Unable To Decode Template File RAP

316-670-11 Unable to decode template file.

316-670-28 Unable to decode template file.

316-670-47 Failed to save NVM.

316-670-93 Unable to decode template file.

316-671-00 Sort jobs failed.

316-671-47 Failed to initialize NVM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-671-93, 316-671-95, 316-672-09, 316-672-95, 316-673-95, 316-674-00, 316-674-09, 316-675-00, 316-670-00, 316-700-35 File Error RAP

316-671-93 Unable to encode template file.

316-671-95 Unable to encode template file.

316-672-09 Software error. File system corruption.

316-672-95 Software error. File system corruption.

316-673-95 Software error. File system corruption.

316-674-00 RPC server not responding.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-674-09 to 316-709-00 XSA Database Failure RAP

316-674-09 RPC server not responding.

316-675-00 Database server not responding.

316-700-00 In a list job request, an unknown attribute was requested.

316-700-35 Unknown attribute requested passes into a function.

316-701-00 LOA failure. Unable to communicate with XSA database.

316-701-99 LOA failure. Unable to communicate with XSA database.

316-701-110 Unable to communicate with XSA Database

316-702-00 LOA failure. Unable to communicate with XSA database.

316-702-95 LOA failure. Unable to communicate with XSA database.

316-707-00 Unknown queue request received.

316-709-00 Unknown modify request received.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-710-00, 316-710-35, 316-716-00, 316-728-00, 316-730-00, 316-730-28, 316-730-35, 316-730-66, 316-740-19, 316-750-07, 316-750-11 Unable To Create Client Handle RAP

316-710-00 Service being communicated to is dead. System resource corrupted.

316-710-35 Service trying to communicate to is dead. System resources corrupted.

316-716-00 Data store not created. Corrupt environment variable.

316-728-00 Range environment variable set to invalid numeric string.

316-730-00 Unable to create client handle.

316-730-28 Unable to create client handle.

316-730-35 Unable to create client handle.

316-730-66 Unable to create client handle.

316-740-19 Immediate image overwrite failed on network controller hard disk.

316-750-07 Message received from DM not processed correctly.

316-750-11 Template cache file is missing.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-742-19 Hard Disk ODIO Failure RAP

316-742-19 Hard disk ODIO failure

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-750-14, 316-750-19, 316-750-26, 316-750-35, 316-750-38, 316-750-46, 316-750-47, 316-750-66, 316-750-67, 316-750-90 Invalid Request RAP

316-750-14 Too many messages sent to SESS system control.

316-750-19 Invalid request data from calling service.

316-750-26 Invalid number of faults requested.

316-750-35 Data store failure.

316-750-38 Initialization of SPI and job tracking table failed in SVC initialize service.

316-750-46 Client requested an unknown object or invalid object type.

316-750-47 Bad parameter returned.

316-750-66 Failure to set service state.

316-750-67 Failure to set service state.

316-750-90 Unexpected service sends this message.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-750-92, 316-750-93, 316-750-95, 316-751-00, 316-751-07, 316-751-09, 316-751-11, 316-751-14, 316-751-19, 316-751-26 Database Error RAP

316-750-92 Unable to open bit map captured to disk. bad or full disk.

316-750-93 IFS error when requesting memory.

316-750-95 Local spool area does not exist.

316-751-00 Database err known by service registry or registry not available.

316-751-07 Message received from network controller AAA not processed correctly.

316-751-09 Registration receives unrequested ENS notification.

316-751-11 Initialization procedure fails.

316-751-14 SC not responding.

316-751-19 Invalid permission to change date.

316-751-26 Unrecognized code. Service raises code that the fault service doesn't know how to handle.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-751-28, 316-751-35, 316-751-38, 316-751-46, 316-751-66, 316-751-67, 316-751-92, 316-751-93 Unknown Attribute RAP

316-751-28 Templates attributes are invalid, or syntax error.

316-751-35 Invalid queue ID.

316-751-38 Unknown attribute returned for completed job list.

316-751-46 Client requested an unknown object or invalid object type.

316-751-47 Failed to replace the current directory with directory from alt. partition.

316-751-66 Unable to send event to network controller ENS.

316-751-67 Unable to send event to network controller ENS.

316-751-92 Cannot set job to complete.

316-751-93 Invalid template attribute.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-752-00, 316-753-00 File Cabinet Application Registration Error RAP

316-752-00 File cabinet application registration error

316-753-00 File cabinet application un-registration error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-752-07, 316-752-09, 316-752-14, 316-752-19, 316-752-26, 316-752-28, 316-752-35, 316-752-46, 316-752-47 Invalid File Details RAP

316-752-07 Data store error.

316-752-09 Configuration control problem.

316-752-14 SC not responding. SC IPC queue does not exist.

316-752-19 RPC failure.

316-752-26 Unrecognized SESS error code.

316-752-28 Template cache file is missing.

316-752-35 Invalid queue ID.

316-752-46 Invalid row of table object.

316-752-47 Invalid test pattern source.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-752-66, 316-752-67, 316-752-92, 316-752-93, 316-752-95, 316-753-09, 316-753-14, 316-753-19, 316-753-26, 316-753-28 Scan to FAX Registration Error RAP

316-752-66 Scan to FAX services registration error.

316-752-67 Scan to FAX services registration error.

316-752-92 Configuration problem.

316-752-93 Error accessing jobs in job list.

316-752-95 File transfer failure.

316-753-09 Software bug.

316-753-14 Calling service used an invalid event number.

316-753-19 Invalid event information or data. ENS failure. System RPC information corrupt.

316-753-26 PSW failure. O/S failure. CCM failure.

316-753-28 Cannot communicate with UI for template list request.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-753-35, 316-753-46, 316-753-47, 316-753-66, 316-753-67, 316-753-90, 316-753-92, 316-753-93, 316-753-95, 316-753-09 Data Store Read Failure RAP

316-753-35 Unable to change EJS status to offline.

316-753-46 Invalid table row.

316-753-47 Failed to close a directory during verification check. Corrupt disk.

316-753-66 Data store read failure.

316-753-67 Data store read failure.

316-753-90 Software error.

316-753-92 Configuration problem.

316-753-93 Error adding jobs in job list.

316-753-95 Requested transfer protocol not supported.

316-754-09 Still registered services after time out.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-754-14, 316-754-19, 316-754-26, 316-754-28, 316-754-35, 316-754-46, 316-754-47, 316-754-66, 316-754-67, 316-754-68 OS Error RAP

316-754-14 Receipt is not there. Failure on ENS side.

316-754-19 Shutdown request reason unknown.

316-754-26 Fault service encountered error reading fault log. File system corrupted.

316-754-28 Initialization procedure fails.

316-754-35 OS corrupt.

316-754-46 Attempted to write a read only object. Software configuration error.

316-754-47 Failed to replace a file that was missing with file from alt. partition.

316-754-66 OS problem.

316-754-67 OS problem.

316-754-68 Initialize procedure fails.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-754-90, 316-754-92, 316-754-92, 316-754-93, 316-754-95, 316-755-00, 316-755-09, 316-755-14, 316-755-19, 316-755-26, 316-755-28 Fault Service Error RAP

316-754-90 Software bug.

316-754-92 Data store failure.

316-754-93 Error deleting jobs from job list.

316-754-95 Unable to remove advisory lock on network server.

316-755-00 Service registry cannot initialize database.

316-755-09 Cannot register new service due to too many entries in SRV table.

316-755-14 Message buffer full. Full queue.

316-755-19 SESS system control broken or too many IPC messages.

316-755-26 Disk write error. Software error.

316-755-28 Cancel request failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-755-35 to 316-756-28 Request Error RAP

316-755-35 OS corrupt. Software corrupt. Data store corrupt.

316-755-46 Mismatched data type during object write. Software configuration error or request mishandled configuration index data.

316-755-47 Failed to repair the permission of the current file being checked.

316-755-67 Cancel request failed.

316-755-90 Software limit reached.

316-755-92 Invalid IPC Data Received.

316-755-93 Unable to initialize with IFS.

316-755-99 Unable to abort job fault.

316-756-09 Service not registered.

316-756-14 Client provided wrong binding information. Client not required as RPC server.

316-756-26 Software error.

316-756-28 Range string error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-756-35 to 316-757-28 NVM Corrupt RAP

316-756-35 OS corrupt. Software error. NVM error.

316-756-46 Poll select failed.

316-756-47 Executable missing or corrupt. Invalid test parameters.

316-756-66 Unable to read NVM value.

316-756-67 Unable to read NVM value.

316-756-92 Invalid IPC data received.

316-756-93 IPA operation failed.

316-757-09 System RPC corrupt.

316-757-14 Programming bug. Attempted to shorten time out.

316-757-19 System manager died or communications link failed.

316-757-26 Software error. Bad disk.

316-757-28 Unknown message received

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-757-35 to 316-758-28 Unable to Write NVM Value RAP

316-757-35 OS corrupt. Software error. NVM corrupt.

316-757-46 O/S failure.

316-757-47 Failed while trying to replace the file with a file from alt. partition. Configuration error.

316-757-66 Unable to write NVM.

316-757-67 Unable to write NVM.

316-757-92 Invalid IPC data received.

316-757-93 Unable to set ICS document state.

316-758-14 RPC communications error to client.

316-758-19 Unable to unregister registration service.

316-758-26 Fault service encountered error trying to access its own queue ID.

316-758-28 State error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-758-35 to 316-759-28 Service Run Loop Failed RAP

316-758-35 Unable to change EJS state to offline.

316-758-46 Failed setting up monitor routine with registration service.

316-758-47 Error searching for job ID during print job submission. Print submission tool failed.

316-758-66 Service run loop failed.

316-758-67 Service loop failed.

316-758-93 Unable to obtain data store object handle.

316-759-09 Software error.

316-759-14 Request for wildcard from non-NC

316-759-19 Network controller failed cold reset 3 times in a row.

316-759-26 Service requesting information of fault service. Software error.

316-759-28 SC initialisation fault.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-759-46 to 316-760-46 Fail to Enable Process RAP

316-759-46 Process no in correct state, O/S failure.

316-759-47 Failed to abort the requested process.

316-759-66 OA event register failed.

316-759-67 OA event register failed.

316-759-93 Unable to create.dat file.

316-760-09 Software error. Check fault log for more specific reasons.

316-760-14 Software error. Calling service not registered.

316-760-19 Any network controller start up.

316-760-26 Software failure.

316-760-28 Unable to Ack SC.

316-760-46 Software failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-760-47 to 316-761-46 File Error RAP

316-760-47 Found incorrect checksum partition 1 during software verify check. Bad disk and bad software.

316-760-67 Create list failed.

316-760-68 SRS returns to login service. Invalid fields, invalid data or missing data.

316-760-93 Job report failure from CCM.

316-760-99 RPC failure. CCM not responding.

316-761-09 Software error. Check fault log for more specific reasons.

316-761-14 Invalid RPC data.

316-761-19 Any network controller shut down.

316-761-26 Unable to become client of UI.

316-761-28 Unable to submit a job.

316-761-46 Hardware failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-761-47 to 316-769-95 Other Network Faults 1 RAP

316-761-47 Failed to initialize. Files needed for software verify.

316-761-67 Failed to retrieve public list.

316-761-68 Login gets no response from SRS.

316-761-93 Image conversion to TIFF failed.

316-761-95 Unable to read template pool configuration information.

316-762-09 Netware process failed. Software error. Check fault log for more specific reasons.

316-762-14 Invalid internal table type.

316-762-19 DC platform mgr communication error.

316-762-26 Unable to become client of SCS diagnostic service.

316-762-46 Hardware failure.

316-762-47 Missing file found during software verify check. Disk access problem. Configuration problem.

316-762-67 Invalid index for recipient list.

316-762-68 Service registry bad data corrupted.

316-762-93 IFS Image done call failed.

316-762-95 Unable to read document repository configuration information.

316-763-09 Software error. Check fault log for more specific reasons.

316-763-14 Reached internal limit for events.

316-763-19 System manager died, its platform crashed or RPC comm corrupt.

316-763-26 No acknowledgment to RPC message. RPC time-out.

316-763-46 Hardware failure.

316-763-47 Invalid permission found during software verify check.

316-763-67 Failed to retrieve LDAP list.

316-763-93 Document image count not found.

316-763-95 Internal destination error.

316-764-09 Apple talk process failure. Software error. Check fault log for more specific reasons.

316-764-14 Internal logic error.

316-764-19 System call to signal failed.

316-764-26 Fault service encountered an error while trying to get IPC message.

316-764-46 Hardware failure.

316-764-47 Found incorrect checksum during software verify check. Bad disk and bad software.

316-764-67 Create list failed.

316-765-09 Software error. Check fault log for more specific reasons.

316-765-19 Set status failed.

316-765-26 Fault service call to PSW callback failed.

316-765-46 Software failure.

316-765-47 Novell daemon not running.

316-765-67 Failed to retrieve recipient list.

316-765-93 Unable to access data store.

316-766-09 Adobe process failure. Check faults log for more specific reasons.

316-766-19 DM admin error.

316-766-26 Fault service call to UI callback failed.

316-766-46 Software failure.

316-766-47 No servers responded.

316-766-67 Failed to bind to LDAP server.

316-766-93 TIFF handle has become null.

316-766-95 Cannot create image file name.

316-767-09 Software error. Check fault log for more specific reasons.

316-767-19 Request to cancel spooling job error. Job map library unable to cancel job.

316-767-26 Fault service call to RDT callback failed.

316-767-46 Software failure.

316-767-47 Server name in configuration list is not up.

316-767-67 Error performing LDAP search.

316-767-93 Get document image count failed.

316-767-95 Cannot determine filing policy for transfer.

316-768-09 Software error. Check fault log for more specific reasons.

316-768-19 Job map library unable to hold or release jobs.

316-768-46 Software failure.

316-768-47 Network controller not attached to server.

316-768-67 Error performing public search.

316-768-93 Increment image count failed.

316-768-95 Cannot get network advisory lock file name.

316-769-09 Software error. Check fault log for more specific reasons.

316-769-19 Novell network failed to respond to request.

316-769-46 Software failure.

316-769-47 Network controller not attached to the print queue.

316-769-67 Failed to cancel search request.

316-769-93 IFS de-register call failed.

316-769-95 Cannot determine appropriate lock name and address.

Procedure

WARNING

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1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-770-09 to 316-779-95 Other Network Faults 2 RAP

316-770-09 Software error. Check fault log for more specific reasons.

316-770-19 SESS/DM job command not processed.

316-770-46 Software failure.

316-770-47 Network controller attached to both queue and server.

316-770-67 Required attribute missing.

316-771-09 Software error. Check fault log for more specific reasons.

316-771-19 UI/PSW/RDT/ RPC corrupt.

316-771-46 Software failure.

316-771-47 Failed to configure novell network.

316-772-09 Software error. Check fault log for more specific reasons.

316-772-19 Software error.

316-772-46 TCPIP address already being used.

316-772-47 Failed doing registration or RPC call.

316-772-95 Invalid transfer request.

316-773-09 Software error. Check fault log for more specific reasons.

316-773-19 Software error.

316-773-46 Failed requesting platform reset.

316-774-09 Check fault log for more specific reasons.

316-774-19 Client provided wrong binding info. Client not registered as RPC server. System RPC info is corrupt.

316-774-46 BOOTP status file error.

316-775-19 Data store not configured. Software error.

316-775-46 TCPIP missing configuration data.

316-775-95 Cannot create temporary file name.

316-776-09 Software error. Check fault log for more specific reasons.

316-776-19 Software error.

316-776-46 TCPIP invalid interface.

316-776-95 Cannot clean up after job completion.

316-777-09 Software error. Check fault log for more specific reasons.

316-777-19 Software error. Data store corrupt, missing configuration.

316-777-46 TCPIP invalid addressing.

316-777-95 Cannot log requested network server.

316-778-09 Software error. Check fault log for more specific reasons.

316-778-19 Software error.

316-778-46 TCPIP socket failure.

316-778-95 Cannot generate confirmation sheet.

316-779-00 System manager power saver complete callback failed. System manager failed or communications link failed.

316-779-09 Software error. Check fault log for more specific reasons.

316-779-19 System manager callback SM power save completed failed.

316-779-46 TCPIP interface attach.

316-779-47 SESS diagnostic failure.

316-779-95 Cannot create the template/job log name.

Procedure

WARNING

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1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-780-00 to 316-789-47 Other Network Faults 3 RAP

316-780-00 Power save request time out.

316-780-09 Software error. Check fault log for more specific reasons.

316-780-19 Power saver request time out.

316-780-46 TCPIP enable interface.

316-780-47 SESS diagnostic failure.

316-780-95 Cannot determine the remote directory.

316-781-09 Software error. Check fault log for more specific reasons.

316-781-19 Customer software upgrade file is corrupted on transfer.

316-781-46 TCPIP NVRAM failure.

316-781-47 SESS diagnostic failure.

316-782-09 Network controller configuration synchronization process failure. Software error. check fault log for more specific reasons.

316-782-19 Software upgrade manifest file does not match software upgrade files.

316-782-46 TCPIP gateway failure.

316-782-47 SESS diagnostic failure.

316-783-09 Software error. IPC failure. SC not processing IPC.

316-783-19 Network controller does not enter upgrade mode. Network controller does not respond to upgrade prep command.

316-783-46 TCPIP host file failure.

316-783-47 SESS diagnostic failure.

316-784-19 Software upgrade aborted, IOT failed to enter upgrade mode. IOT does not respond to upgrade prep command.

316-784-46 TCPIP resolve file failure.

316-784-47 SESS diagnostic failure.

316-785-09 Network controller agent process failure. Software error. Check fault log for more specific reasons.

316-785-19 UI does not respond to upgrade prep command.

316-785-46 TCPIP resolve file failure.

316-785-47 SESS diagnostic failure.

316-786-09 Software error. Check alt log for more specific reasons.

316-786-19 Network controller ntar of upgrade file fails.

316-786-46 TCPIP ELT file failure.

316-786-47 SESS diagnostic failure.

316-787-09 Software error. Check fault log more specific reasons.

316-787-19 Network controller times out. Cannot communicate with IOT.

316-787-46 TCPIP IPC failure.

316-787-47 SESS diagnostic failure.

316-788-09 Software error. Check fault log for more specific reasons.

316-788-19 Option load failure software.

316-788-46 Failed performing dynamic DNS update.

316-788-47 SESS diagnostic failure.

316-789-09 Software error. Check fault log for more specific reasons.

316-789-19 Option load failure software.

316-789-46 Failed performing autonet IP process.

316-789-47 SESS diagnostic failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-790-09 to 316-799-47 Other Network Faults 4 RAP

316-790-09 Software error. Check fault log for more specific reasons.

316-790-19 Option load failure software.

316-790-46 IPv6 address error.

316-790-47 SESS diagnostic failure.

316-791-09 Software error. Check fault log for more specific reasons.

316-791-19 Scan to file DLM is not defined.

316-791-46 DHCP V6 failure.

316-791-47 SESS diagnostic failure.

316-792-09 Software error. Check fault log for more specific reasons.

316-792-19 Lan fax DLM is not defined.

316-792-47 SESS diagnostic failure.

316-793-09 Software error. Check fault log for more specific reasons.

316-793-19 Job based accounting DLM is not defined.

316-793-47 SESS diagnostic failure.

316-794-09 Cross platform synchronization error.

316-794-19 Install password mismatch.

316-794-47 SESS diagnostic failure.

316-795-09 Software error. Check fault log for more specific reasons.

316-795-19 Option load failure software.

316-795-47 SESS diagnostic failure.

316-796-09 Software error. Check fault log for more specific reasons.

316-796-19 Option load failure software.

316-796-47 SESS diagnostic failure.

316-797-09 Software error. Check fault log for more specific reasons.

316-797-19 Option load failure software.

316-797-47 SESS diagnostic failure.

316-798-09 Software error. Check fault log for more specific reasons.

316-798-19 Option already enabled.

316-798-47 SESS diagnostic failure.

316-799-09 Software error. Check fault log for more specific reasons.

316-799-19 Option already enabled.

316-799-47 SESS diagnostic failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-800-09 to 316-809-47 Other Network Faults 5 RAP

316-800-09 List access failure (create, add, find, delete.)

316-800-19 Option not supported.

316-800-46 Unable to connect to device when setting up IP over Ethernet.

316-800-47 SESS diagnostic failure.

316-801-09 Invalid SESS event/IPC error.

316-801-19 Serial mismatch.

316-801-46 Unable to connect to device when setting up IP over token ring.

316-801-47 SESS diagnostic failure.

316-802-09 Web service edge client process death.

316-802-19 Counters do not match.

316-802-46 Error occurred when attempting to get the IP data from the DHCP server.

316-802-47 SESS diagnostic failure.

316-803-09 Web service edge client process death.

316-803-46 Unable to get the IP address from the RARP server.

316-803-47 SESS diagnostic failure.

316-804-09 Web service edge client process death.

316-804-47 SESS diagnostic failure.

316-805-09 Web service edge client process death.

316-805-19 Accounting install failed.

316-805-47 SESS diagnostic failure.

316-806-00 CPI death error.

316-806-09 CPI service unavailable.

316-806-19 Counters did not increment.

316-806-47 SESS diagnostic failure.

316-807-00 Job log service death error.

316-807-09 Job log service unavailable.

316-807-19 State change failed.

316-807-47 SESS diagnostic failure.

316-808-00 Job tracker death error.

316-808-09 Job tracker service unavailable.

316-808-47 SESS diagnostic failure.

316-809-00 Kerberos death error.

316-809-09 Kerberos service unavailable.

316-809-47 SESS diagnostic failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-810-00 to 316-819-47 Other Network Faults 6 RAP

316-810-00 Scan to distribution death error.

316-810-09 Scan service available.

316-810-19 Failed to remove accounting.

316-810-47 SESS diagnostic failure.

316-811-00 SMB death error.

316-811-09 SMB service unavailable.

316-811-19 Failed to initiate operation.

316-811-47 SESS diagnostic failure.

316-812-00 TCP/IP death error.

316-812-09 TCPIP service unavailable.

316-812-19 Failed to change the enable upgrade flag.

316-812-47 SESS diagnostic failure.

316-813-00 WS scan temp death error.

316-813-09 Scan service unavailable.

316-813-19 DEF error occurred on NC.

316-813-47 SESS diagnostic failure.

316-814-00 Scan compressor death error.

316-814-09 Scan compressor service unavailable.

316-814-19 DEF was enabled on the NC.

316-814-47 SESS diagnostic failure.

316-815-09 Service registry process death.

316-815-47 SESS diagnostic failure.

316-816-09 EIP service not responding.

316-8316-47 SESS diagnostic failure.

316-817-47 SESS diagnostic failure.

316-818-47 SESS diagnostic failure.

316-819-47 SESS diagnostic failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-820-47 to 316-829-47 Other Network Faults 7 RAP

316-820-47 SESS diagnostics failure.

316-821-47 SESS diagnostics failure.

316-822-47 SESS diagnostics failure.

316-823-47 SESS diagnostics failure.

316-824-47 SESS diagnostics failure.

316-825-47 SESS diagnostics failure.

316-826-47 SESS diagnostics failure.

316-827-47 SESS diagnostics failure.

316-828-47 SESS diagnostics failure.

316-829-47 SESS diagnostics failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-830-47 to 316-839-47 Other Network Faults 8 RAP

316-830-47 Unable to get the default router for the device.

316-831-47 Unable to get the subnet mask for the device.

316-832-47 Failure while getting local IP devices on the network.

316-833-47 Failure while perfuming ARP command.

316-834-47 Failed to get a default file server from the config. utility.

316-835-47 Failed to the novell frame type from the config. utility.

316-836-47 Failed SESS call to initialize netware.

316-837-47 Diagnostic name returned from SESS not found in list.

316-838-47 Failed to setup catching alarm signals for repair time outs.

316-839-47 Failure to repair a file of file length 0. Corrupt disk.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-840-47 to 316-849-47 Other Network Faults 9 RAP

316-840-47 Corrupt OS, software error.

316-841-47 Corrupt file system.

316-842-47 Machine out of configuration. Software error.

316-843-47 Corrupt OS machine in bad running state. Software error.

316-844-47 Corrupt OS machine in bad running state. Software error.

316-845-47 Corrupt OS machine in bad running state. Software error.

316-846-47 Corrupt OS machine in bad running state. Software error.

316-847-47 Corrupt OS machine in bad running state. Software error.

316-848-47 Error reading the fault file from fault service.

316-849-47 Error creating command array from stream editor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-850-47 to 316-859-47 Other Network Faults 10 RAP

316-850-47 Failed adding stream to stream editor array.

316-851-47 Failed on call to stream editor.

316-852-47 Unable to read a fault for the error report.

316-853-47 Failed getting the last reset time for the error report.

316-854-47 Failed calling fault service for the error report.

316-855-47 Failed sending event for diagnostic test.

316-856-47 Failed doing a unix c system call.

316-857-47 Abort request, unable to find process.

316-858-47 Failed to dump the fault logs.

316-859-47 Software verify test returned error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-860-47 to 316-869-47 Other Network Faults 11 RAP

316-860-47 No machines responded to an ICMP echo request.

316-861-47 Failed setting up monitor routine with registration service.

316-862-47 Command not valid to cancel.

316-863-47 Illegal buffer length.

316-864-47 Illegal local session number.

316-865-47 SESS NETBIOS test session closed.

316-866-47 SESS NETBIOS test command cancelled.

316-867-47 SESS NETBIOS test name de-registered. Name de-registered, session active.

316-868-47 SESS NETBIOS test local session table full. Local session table full.

316-869-47 SESS NETBIOS test no listen in remote computer.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-870-47 to 316-879-47 Other Network Faults 12 RAP

316-870-47 SESS NETBIOS test illegal name number.

316-871-47 SESS NETBIOS test cannot find name or no answer.

316-872-47 SESS NETBIOS test name in use.

316-873-47 SESS NETBIOS test name deleted.

316-874-47 SESS NETBIOS test session abnormal end.

316-875-47 SESS NETBIOS test name conflict. Name conflict on network.

316-876-47 Software verify setup SIGTERM failed.

316-877-47 SESS PCI test unknown error.

316-878-47 SESS PCI test failed to open driver.

316-879-47 SESS PCI test failed flushing stream buffer.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-880-47 to 316-890-47 Other Network Faults 13 RAP

316-880-47 SESS PCI test failed on put message call.

316-881-47 SESS PCI test invalid argument.

316-882-47 SESS PCI test failed on put message call.

316-883-47 SESS PCI test failed on ioctl call.

316-884-47 SESS PCI test control flag area too small.

316-885-47 SESS PCI test driver not initialized.

316-886-47 SESS PCI test info request failed.

316-887-47 SESS PCI test driver failed to register.

316-888-47 SESS PCI test driver failed to unregister.

316-889-47 Software verify get data failed.

316-890-47 Software verify get next proc failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-891-00 to 316-895-47 Edge Server Auto Registration Failed RAP

316-891-00 Edge server auto registration failed.

316-891-19 SMart eSolutions failed to register.

316-891-47 Invalid RPC submit job data received.

316-892-00 Edge server communication failed.

316-892-19 SMart eSolutions cannot contact edge host.

316-892-47 Invalid RPC data received; Unknown diagnostic action.

316-893-47 Invalid RPC data received; Invalid job type

316-894-47 Invalid RPC disk diagnostics Data Received.

316-895-47 SESS Apple test zip failure - network unreachable.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-900-19 to 316-909-19 Other Network Faults 14 RAP

316-900-19 Failed to open SMC driver.

316-901-19 Failed to make ioctl call using SMC driver.

316-902-19 Address specified is invalid.

316-903-19 Result from ioctl does not match FD.

316-904-19 Invalid ioctl request.

316-905-19 Unknown ioctl failure.

316-906-19 Malloc failed for net upgrade.

316-907-19 Attempt to get pinned memory failed.

316-908-19 Error opening file.

316-909-19 Error transfer data to CCM.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-910-19 to 316-919-19 Other Network Faults 15 RAP

316-910-19 Failed untar file.

316-911-19 Error changing directory.

316-912-19 Install script did not execute.

316-913-19 Write failure to file.

316-914-19 Shared memory was corrupted.

316-915-19 Open failed.

316-916-19 CRC failed.

316-917-19 Failed to close on checksum.

316-918-19 CRC comparison failed.

316-919-19 Restart request failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-920-19 to 316-929-19 Other Network Faults 16 RAP

316-920-19 ELT daemon start failed.

316-922-19 NVM store failed.

316-923-19 Failed saving persistent data.

316-924-19 Failed in restoring persistent data.

316-925-19 Failed saving web config data.

316-926-19 Failed to save data store values.

316-927-19 Failed to restore web config data.

316-928-19 Failed to install files.

316-929-19 Failed to restore data store values.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-930-19 to 316-939-19 Other Network Faults 17 RAP

316-930-19 Failed to remove jobs.

316-931-19 Failed to close on SMC driver.

316-932-19 NVM write failure.

316-933-19 Failed to remove file.

316-934-19 Job based accounting not enough dc memory.

316-935-19 Auto-upgrade failed. Cannot read/write attributes to machine.

316-936-19 Auto-upgrade failed. Cannot connect to remote server.

316-937-19 Auto-upgrade failed. Cannot access directory on remote server.

316-938-19 Auto-upgrade failed. Cannot access directory remote server.

316-939-19 Auto-upgrade failed. Multiple upgrade files found on remote server.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-940-19 to 316-949-19 Other Network Faults 18 RAP

316-940-19 Auto-upgrade failed. Machine in diagnostics mode.

316-941-19 Auto-upgrade failed. Network controller cannot communicate with main controller.

316-942-19 Auto-upgrade failed upgrade is invalid. Incompatible with main controller.

316-943-19 Auto-upgrade failed. Upgrade file invalid. Installed software is more recent.

316-944-19 Auto-upgrade failed. Upgrade file is invalid. File corruption detected.

316-945-19 Auto-upgrade failed. Upgrade file is invalid. File not appropriate for current machine software.

316-946-19 Failed install scan to email.

316-947-19 Failed to install internet fax.

316-948-19 Remove of scan to email option failed.

316-949-19 Remove of internet fax option failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. Verify that the correct software file is being used, refer to GP 4.
3. For multiple occurrences, reinstall software, GP 4.

316-950-19 to 316-959-19 Other Network Faults 19 RAP

316-950-19 Scan to email image processing hardware not available.

316-951-19 Internet fax image processing hardware not available.

316-952-19 Scan to email memory size error.

316-953-19 Internet fax memory size error.

316-954-19 Set by internet fax service when it gets no response from service registry when trying to register.

316-955-19 Internet Fax application un-registration error

316-956-19 E-mail application registration error

316-957-19 E-mail application un-registration error

316-958-19 Failed to install kerberos.

316-959-19 Failed to install SMB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-960-19 to 316-969-19 Other Network Faults 20 RAP

316-960-19 Failed to install SMTP.

316-961-19 Failed to remove kerberos.

316-962-19 Failed to remove SMB.

316-963-19 Failed to remove SMTP.

316-964-19 Failed to cancel operation.

316-965-19 Failed to send platform unavailable.

316-966-19 Failed to install job tracker.

316-967-19 Failed to remove job tracker.

316-968-19 Failed to install POP3.

316-969-19 Failed to remove POP3.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-970-19 to 316-979-35 Other Network Faults 21 RAP

316-970-19 Over allocation of contiguous memory.

316-971-19 Auto-Upgrade not attempted due to machine being offline.

316-975-19 Failed to install immediate image overwrite.

316-976-19 Failed to install immediate image overwrite.

316-977-00 Queue list jobs failure. Request to SESS's document manager failed for list jobs. Corrupt data sent to DM communication problem Dm failed.

316-977-19 Network controller PM failed to remove disk overwrite. Option load failure software.

316-977-35 Queue list jobs failure. Request to SESS's document manager failed for list jobs. Corrupt data sent to DM. Communication problem DM failed.

316-978-00 Unable to get copy jobs. Invalid data communication problem.

316-978-19 Network controller PM failed to remove job overwrite. Option load failure software.

316-978-35 Unable to get copy jobs. Invalid data communication problem.

316-979-00 Unknown attribute returned. Invalid data returned data store corrupt

316-979-19 Network controller PM failed to remove embedded fax. Option load failure software.

316-979-35 Unknown attribute returned. Invalid data returned data store corrupt.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-980-00 to 316-989-35 Other Network Faults 22 RAP

316-980-00 DM request handle NULL. Null data received from DM.

316-980-19 Network controller PM failed to install G4. Option load failure software.

316-980-35 DM request handle NULL. Null data received from DM.

316-981-00 Object handler corrupted. Null handle returned. Data store corrupt.

316-981-35 Unable to obtain job handle which is used to fetch data store attributes.

316-982-00 Unknown finishing value returned. Unable to map attribute or invalid data.

316-982-19 Failed to remove embedded fax.

316-982-35 Unknown finishing value returned. Unable to map attribute or invalid data.

316-983-00 Unknown offset value returned. Unable to map attribute or invalid data.

316-983-19 Failed to remove G4.

316-983-35 Unknown offset value returned. Unable to map attribute or invalid data.

316-984-00 Unknown job state reason value returned. Unable to map attribute or invalid data.

316-984-19 CPSR Memory Size Error.

316-984-35 Unknown job state reason value returned. Unable to map attribute or invalid data.

316-985-00 Unknown medium type value returned. Unable to map attribute or invalid data.

316-985-35 Unknown medium type value returned. Unable to map attribute or invalid data.

316-986-00 Unknown collection value returned. Unable to map attribute or invalid data.

316-986-35 Unknown collection value returned. Unable to map attribute or invalid data.

316-987-00 Unknown tray value returned. Unable to map attribute or invalid data.

316-987-35 Unknown tray value returned. Unable to map attribute or invalid data.

316-988-00 Unknown signature value returned. Unable to map attribute or invalid data.

316-988-35 Unknown signature value returned. Unable to map attribute or invalid data.

316-989-00 Unknown plex value returned. Unable to map attribute. Invalid information received 2.

316-989-35 Unknown plex value returned. Unable to map attribute. Invalid information received 3.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-985-19, 316-986-19 Network Scanning Application Registration Error RAP

316-985-19 Network scanning application registration error

316-986-19 Network scanning application un-registration error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-987-19, 316-988-19 Server Fax Application Registration Error RAP

316-987-19 Server Fax application registration error

316-988-19 Server Fax application un-registration error

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-989-19 Disk Encryption Operation Failed RAP

316-989-19 Disk encryption operation failed

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. If a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316-990-00 to 316-999-35 Other Network Faults 23 RAP

316-990-00 Promote response from DM received with errors. Software error.

316-990-35 Promote response from DM received with errors. Software error.

316-991-00 Request to DM to promote job failed. Failure status returned on call to request library to promote job. Data store problem.

316-991-35 Request to DM to promote job failed. Failure status returned on call to request library to promote job. Data store problem.

316-992-00 Unable to build SESS job identifier for promote routing that converts the job ID returned. Null memory allocation error.

316-992-35 Unable to build SESS job identifier for promote routine that converts the job ID returned. Null memory allocation error.

316-993-00 Unable to get admin name from data store for promote. Request library call failed.

316-993-35 Unable to get admin name from data store for promote. Request library call failed.

316-994-00 Cancel response from DM received with errors. Software error.

316-994-35 Cancel response with errors. A job could not be cancelled.

316-995-00 Request to DM to cancel job failed.

316-995-35 Request to DM to cancel job failed.

316-996-00 Routine that converts the job ID returned. Null memory allocation error.

316-996-35 Routine that converts the job ID returned. Null memory allocation error.

316-997-00 Request library call failed.

316-997-35 Request library call failed.

316-998-00 Job not found in held table.

316-998-35 Job not set to released state. Job not found in held table.

316-999-00 Could not obtain job PIN for authorization.

316-999-35 Could not obtain job PIN for authorization.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, switch off the machine, then switch on the machine, GP 14.
2. For multiple occurrences, reinstall software, GP 4.

316A Workflow Scanning Error Entry RAP

Use this RAP when the customer reports network failures. e.g. Cannot connect to the scan server when using the FPT or SMB protocols, or when a folder on the scan server cannot be opened.

NOTE: *The fault message will be printed on the confirmation report. The report may take several minutes to print after scanning the document.*

Initial Actions

Consult your manager before troubleshooting the customer's network, as the policy varies according to region.

Procedure

NOTE: *If it is possible to log into the web UI by entering the IP address of the machine, then the network controller on the single board controller PWB is good.*

Perform the following:

1. Check that the machine's date and time are correctly set. Refer to GP 31.
2. Print a configuration report.
3. Check with customer that the printing of the confirmation report is enabled. If necessary, ask the customer to enable printing of the confirmation report.
4. Ensure that the machine is configured for scan to file. Check the back of the configuration report under the heading Workflow Scanning (Default Repository Protocol). If an IP address or name is not listed, ask the customer to configure the machine before continuing.
5. Go to the relevant procedure:
   - 316B FTP or SMB Unable to Connect to Remote Server RAP.
   - 316C Remote Directory Lock Failed RAP.

316B FTP or SMB Unable to Connect to Remote Server RAP

Either the machine cannot connect, find or login to the scan server.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The FTP/SMB protocol will be followed by a colon and port number, :21 is for FTP and :139 is for SMB.*

Scan the document using the default template and one other template. **The fault is present on both templates.**

Y N

The template that failed is incorrectly configured. Ask the customer or system administrator to verify the settings of the web template that failed, including the login password.

Ask the customer to open the machines CWIS page. **The machine's CWIS page can be opened.**

Y N

Look at the front of the configuration report. Make sure that HTTP is enabled and set to port 80. **The settings are correct.**

Y N

Enable HTTP, GP 32 and set the port to 80 on the UI. Restart this RAP from the beginning. If this path has been followed previously, escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Disconnect the network cable from the machine. Make sure the PWS network adaptor settings are set to Auto. Use a crossover cable, PL 26.10 Item 6 to connect the PWS to the machine. **Either the two LEDs on the SBC PWB or the PWS are lit, indicating a connection.**

Y N

Perform the following:

1. Change the network speed setting of the machine, GP 35.
2. If either the two LEDs on the SBC PWB or the PWS are not lit, repeat the steps in GP 35.
3. If the LEDs light, use the new network speed setting. Inform the customer that the network speed has been changed then follow the Yes path from this step.
4. If the LEDs do not light, perform the 303D SBC PWB Diagnostics RAP.

Correctly configure the IP address of the PWS, GP 34. Make sure the firewall of the PWS is disabled, GP 30. Ping the machine from the PWS, GP 33.

A

A

NOTE: *Re-enable the PWS firewall after completion of this procedure.*

The machine responds to the ping request.

Y N

Perform an Altboot, GP 4.

The machine software is up to date.

Y N

Upgrade the software, GP 4. **The fault persists.**

Y N

Perform SCP 5 Final Actions.

Perform the Customers Settings Check. **Changes were made to the customers settings.**

Y N

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Retry the job. **The job was successful.**

Y N

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform SCP 5 Final Actions.

Perform the Customers Settings Check. **Changes were made to the customers settings.**

Y N

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Retry the job. **The job was successful.**

Y N

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform SCP 5 Final Actions.

Ask the customer to ping the scan servers IP address or name.

NOTE: *The scan server is the computer that the job is being sent to. The scan servers IP address or name is displayed on the confirmation report.*

The customer can ping the scan server.

Y N

Check the configuration report for default gateway IP address listed under TCP/IPv4 Settings. **A default gateway IP address is listed.**

B

Y **N**

Perform the Customers Settings Check. **Changes were made to the customers settings.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Retry the job. **The job was successful.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform SCP 5 Final Actions.

The customer can ping the default gateway IP address.

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform the Customers Settings Check. **Changes were made to the customers settings.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Retry the job. **The job was successful.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform SCP 5 Final Actions.

Perform the Customers Settings Check. **Changes were made to the customers settings.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Retry the job. **The job was successful.**

Y **N**

Escalate the fault to the system Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

Perform SCP 5 Final Actions.

Customers Settings Check

NOTE: *Both the configuration and confirmation reports are required to check the customers settings. Corrections must be made through the machines CWIS page.*

Check the following with the customer, ask the customer to correct any errors:

1. That the scan server is switched on and online.

   NOTE: *The scan server is the computer that the job is being sent to.*

2. That the scan servers IP address or name is correct.
3. That the path and user name are correct.
4. **(SMB protocol only)** That the Share name is correct, referred too as the Volume on the configuration report.
5. Check with System Administrator that the correct password has been entered on the machines CWIS page.

   NOTE: *The password is not printed on the configuration or confirmation reports.*

316C Remote Directory Lock Failed RAP

Use this RAP when the customer reports that the machine has logged onto the scan server, but cannot create a folder inside of the scan directory. The creation of the scan folder is necessary for the machine to successfully complete the can to file job.

NOTE: *The scan server is the computer that the job is being sent to.*

Procedure

The machines login name that it is using to log onto the scan server, for this file repository, does not have sufficient rights. Ask the customer to verify the rights for this user at the scan server, or escalate the problem to their System Administrator. If the customer does not have a System Administrator, they should contact the Customer Support Centre or request a Xerox analyst troubleshoot their network which will be subject to a charge.

316D Wireless Connectivity RAP

Use this RAP when the customer reports wireless network failures when using the Xerox wireless print kit.

NOTE: *The customer must use the Xerox wireless adapter kit, PL 31.13 Item 1. Other wireless network adapters are not supported.*

NOTE: *Wireless connectivity instructions are contained in the System Administrator Guide.*

Initial Actions

Consult your manager before troubleshooting the customer's network, as the policy varies according to region.

Procedure

Perform the following:

1. Check that the USB wireless network adapter, PL 3.22 Item 28 is plugged into a USB port on the machine.
2. If the USB wireless network adapter is connected using the USB extension cable, PL 3.22 Item 29 check that the extension cable is also plugged into a USB port on the machine.
3. Print a configuration report.
   a. Check with the customer that printing of configuration reports is enabled. If necessary, ask the customer to enable printing of the configuration report.
4. Ensure that the USB ports are enabled.
   a. Check the configuration report under the heading Connectivity Physical Connections.
   b. If Software Tools is not listed next to USB Connection Mode, ask the customer to enable USB. Or enter Customer Administration Tools, GP 24. Enable USB.
      i. Refer to the USB Port Security Setting Check in GP 4.
      ii. Refer to GP 28 USB Connection Mode.
5. Confirm the USB port is functional.
   a. Check that the LED on the wireless network adapter flashes when the machine is in standby.
   b. Connect the wireless network adapter to a different USB port if available.
   c. Perform dC361 NVM Save. If the NVM can be saved to a USB flash drive, the USB port is functional.

      NOTE: *It is not necessary to perform the NVM restore procedure.*

   d. If the USB port checks fail, go to 303D SBC PWB Diagnostics.
6. Ensure that the machine is configured for wireless printing.
   a. Check the configuration report under the heading Connectivity Physical Connections.
   b. If wireless is disabled, ask the customer to enable wireless printing. Or enter Customer Administration Tools, GP 24. Enable wireless printing.
      i. Select Network Settings.
      ii. Select Network Connectivity.
      iii. Select Wireless.
      iv. Select OK.

v. Select Enable Wireless Network.

c. Check the network name listed next to SSID on the configuration report.

d. If the network name does not match the customer's wireless network, ask the customer to configure the wireless network setup before continuing.

e. Check the IP address under the heading Connectivity Protocols.

f. Ask the customer to confirm that the correct IP address is listed under TCP/IPv4 or TCP/IPv6.

g. If the wireless IP address is incorrect or is not present, ask the customer to configure the wireless network setup before continuing.

h. Check the wireless connection status on the configuration report. If it displays as Authenticating, ask the customer to check and configure the wireless network settings in Internet Services before continuing - in particular check the encryption, authentication and user name settings.

7. Confirm that the customer's wireless network can be detected at the machine's location.

   a. Ask the customer to confirm that the wireless network is switched on and can be received at the machine's location. Or use your PWS or a smartphone to detect the customer's wireless network.

   b. To use a PWS to confirm the customer's wireless network can be detected, perform the relevant procedure below.

      Windows 7

      i. Click on the Wireless Networking icon in the notification area of the task bar. If necessary, click on the Show hidden icons button to show the wireless networking icon.

      ii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

      Windows XP

      i. Right click on the Network Connection icon in the notification area of the taskbar.

      ii. Click on View Available Wireless Networks.

      iii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

      NOTE: *Do not attempt to connect the PWS or smartphone to the customer's wireless network.*

8. If the wireless network signal strength is weak, ensure that the wireless network adapter is connected via the USB extension lead. If possible change the mounting position of the adapter to improve the reception. To view the signal strength, enter Customer Administration Tools, GP 24.

   a. Select Network Settings.

   b. Select Network Connectivity.

   c. Select Wireless.

   d. The signal strength is displayed in the text frame.

   e. Move the wireless network adapter and extension lead until the strongest signal strength is found.

9. If necessary, install a new wireless network adapter kit, PL 31.13 Item 1.

319-300-00 to 319-310-00 Hard Disk Drive Failure RAP

319-300-00 Unable to read or write data from the hard disk drive.

319-301-00 Unable to write data to the hard disk drive.

319-302-00 Bad data received from the hard disk drive (i.e. disk returns data other than a read or write operation in response to a read or write request from).

319-303-00 Unable to format the hard disk drive.

319-310-00 hard disk drive does not return capacity information during power up.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to Flag 1. Check that the HDD cable between P/J115 on the SBC PWB and PJ998 on the hard disk drive is correctly connected and not damaged. **The HDD cable is good.**

Y N

Correctly connect the cable. If necessary, install a new HDD cable, PL 3.22 Item 4.

Go to Flag 2. Check the wiring from P/J116 on the SBC PWB and PJ999 on the hard disk drive. **The wiring is good.**

Y N

Repair the harness, REP 1.2 or install a new HDD cable, PL 3.22 Item 4.

Go to Flag 2. Check for +5V between pins 3 and 4 on PJ999 at the hard disk drive. **+5V was measured.**

Y N

Check the voltages, refer to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

As necessary, perform the following:

- A software upgrade, GP 4.
- Install a new hard disk drive, PL 3.22 Item 2.
- The 303D SBC PWB Diagnostics RAP.

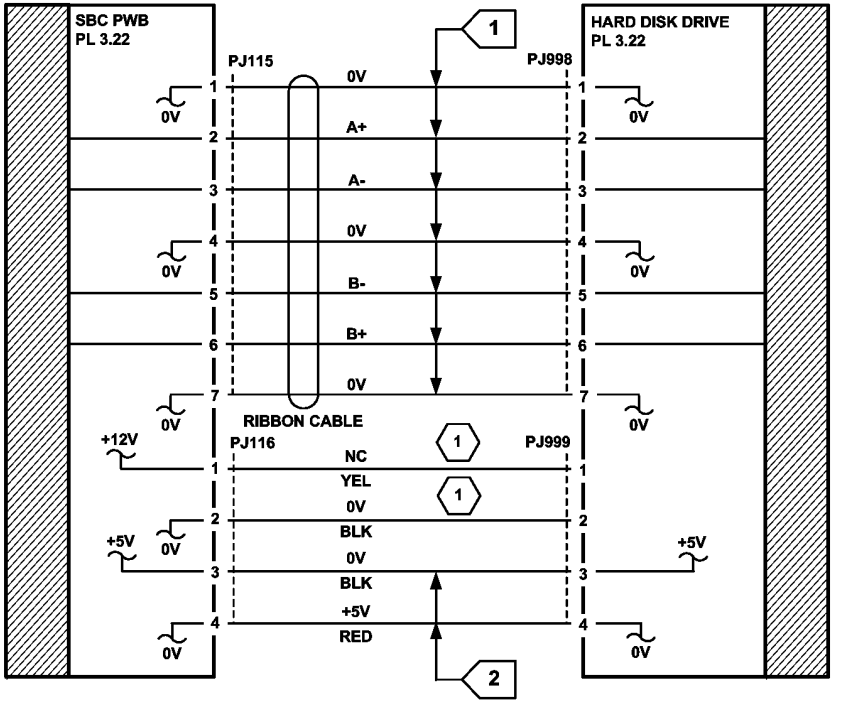


Figure 1 Circuit diagram

319-401-00, 319-402-00 Stress Out of Memory RAP

319-401-00 Out of memory caused by a stress document.

319-402-00 Out of memory caused by a stress job.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

If this fault remains for more than five minutes, switch off the machine, then switch on the machine, GP 14. **The fault has cleared.**

Y **N**

Perform a software upgrade, GP 4.

Go to SCP 5 Final Actions.

319-403-00 EPC Out of Memory RAP

319-403-00 Out of memory with greater than one job in EPC.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

No service action is required. Re-scan the job.

319-409-00 Job Integrity Failure RAP

319-409-00 Video determines that it cannot guarantee the integrity of the job being processed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch the off machine, then switch on the machine, GP 14.
2. Re-run all the uncompleted jobs.

319-410-00 to 319-410-13 Image Structure Failure RAP

319-410-00 The system has detected a mark output time-out.

319-410-01 The system has detected a mark output time-out.

319-410-02 The system has detected a compress image time-out.

319-410-03 The system has detected a decompress image time-out.

319-410-04 The system has detected a merge image time-out.

319-410-05 The system has detected a rotate image time-out.

319-410-06 The system has detected a network Input failure.

319-410-07 The system has detected an e-fax send/receive failure.

319-410-08 The system has detected a scan input failure.

319-410-09 The system has detected a byte counter error.

319-410-10 The system has detected the image set up was too late.

319-410-11 The system has detected a DMA master abort.

319-410-12 The system has detected a Huffman error, (image encoding error).

319-410-13 The system has detected an EOR error.

Initial Actions

Check that the dC131 NVM locations 801-68, mag compensation side 1, and 801-69, mag compensation side 2, are set to the default values.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

If this fault remains for more than five minutes, switch off the machine, then switch on the machine, GP 14. Re-run the job. **The fault has cleared.**

Y **N**

The message 'All jobs deleted due to system image error' is displayed and fault code 319-410-08 is logged in fault history.

Y **N**

Reload the software, GP 4.

A B

A B

Check the SBC PWB/scanner PWB data cable and connectors, Refer to the following:

- REP 1.2 Wiring Harness Repairs
- Wiring Diagram 44
- SBC PWB, PJ250
- Scanner PWB, PJ411

If necessary, install new parts:

- SBC PWB/scanner PWB data cable, PL 3.22 Item 20
- Scanner PWB, PL 60.20 Item 4
- SBC PWB, PL 3.22 Item 3

Go to SCP 5 Final Actions.

319-750-00 EPC Memory Change Detected RAP

319-750-00 The system detects that the EPC memory size configuration has changed during the power on sequence.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

No service action required. Re-run the job.

319-752-00 Image Rotation Detected RAP

319-752-00 The system detects that the image rotation configuration has changed during the Power On sequence.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14. Re-run the job.

319-754-00 Hard Disk Drive Change RAP

319-754-00 The system detects that the hard disk drive configuration (present vs. not present) has changed during the power on sequence.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14. Re-run the job. **The fault has cleared.**

Y N

Go to the 319-300-00 to 319-310-00 Hard Disk Drive Failure RAP.

Go to SCP 5 Final Actions.

319-760-00 Test Patterns Missing From EPC RAP

319-760-00 Test patterns missing from EPC.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

320-302-00, 320-303-00 Fax Reset Failure RAP

The fax module automatically resets itself.

320-302-00 Unexpected reset fault due to fax module hardware or software error.

320-303-00 Unrecoverable fault due to fax module hardware or software error.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Go to SCP 5 **Final Actions**.

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y **N**

Reload the software, GP 4. **The fault is cleared.**

Y **N**

Go to RAP 20G Fax Module Checkout.

Perform SCP 5 **Final Actions**.

Perform SCP 5 **Final Actions**.

320-305-00 Fax System Low Memory Unrecoverable RAP

The fax module automatically resets itself.

320-305-00 Unrecoverable fax system low memory due to fax module hardware or software error

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions**.

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y **N**

Reload the software, GP 4.

Perform SCP 5 **Final Actions**.

320-320-00 Fax Fault Not Cleared by Reset RAP

320-320-00 Five instances of an unrecoverable fax fault occurred and were not cleared by a card reset.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.
- Ensure the machine has either a W/TAG X-001 fax module or a W/TAG X-002 fax module installed, PL 20.05.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y **N**

Reload the software, GP 4.

Perform SCP 5 **Final Actions**.

320-322-00 Non-Volatile Device Not Installed RAP

320-322-00 The non-volatile device was not detected on the fax module.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

If necessary, install a new fax PWB, PL 20.05 Item 7.

320-323-00, 320-324-00 Fax System Memory Low RAP

320-323-00 The fax system memory was low, less than 6Mb.

320-324-00 There was not enough memory to use the fax service.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y **N**

If necessary install a new fax PWB, PL 20.05 Item 7.

Perform SCP 5 **Final Actions.**

320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 Fax Network Line 1 Fault RAP

320-331-00 No communication via the PSTN 1 port.

320-338-00 Fax Communication Error at power up or reboot.

320-339-00 Internal fax module fault.

320-341-00 Miscellaneous basic card problems.

320-345-00 Fax port 1 modem failure.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

Check the connection between the fax module, PL 20.05 Item 1 and the fax connector PWB, PL 20.05 Item 2. **The connection is good.**

Y **N**

Install new parts as necessary:

- Fax connector PWB, PL 20.05 Item 2.
- Fax PWB, PL 20.05 Item 7.

Check that the customer fax line is operational. Plug a phone into the line then check for a dial tone. If a phone is not available then use a line test tool, PL 26.10 Item 3. **The fax line connection is good.**

Y **N**

The fax line has a fault. Inform the customer to have the fax line checked by the telephone company.

Install new parts in the following order:

- Telephone cable, PL 20.05 Item 3.
- Fax PWB, PL 20.05 Item 7.
- Fax connector PWB, PL 20.05 Item 2.

If the fault persists, perform the 303D SBC PWB Diagnostics RAP.

320-327-00, 320-332-00, 320-340-00 Fax Network Line 2 Fault RAP

320-327-00 Registers cannot be accessed on the extended card.

320-332-00 No communication via the PSTN 2 port.

320-340-00 Fax port 2 modem failure.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists**

Y N

Perform SCP 5 **Final Actions.**

Check that the customer line is operational. Plug a phone into the fax line then check for a dial tone. If a phone is not available then use a line test tool, PL 26.10 Item 3. **The fax line connection is good.**

Y N

The fax line has a fault. Advise the customer to have the line checked by the telephone company.

Install new parts in the following order:

- Telephone cable, PL 20.05 Item 3.
- Fax PWB, PL 20.05 Item 7.

320-342-00 Fax File Integrity Fault RAP

320-342-00 An error occurred when accessing the file on a non-volatile device.

Initial Actions

- Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14. **The fault still persists.**

Y N

Perform SCP 5 **Final Actions.**

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y N

Reload the software, GP 4.

Perform SCP 5 **Final Actions.**

320-701-00 Fax Phone Book Download Failed RAP

320-701-00 The fax phone book download failed.

Initial Actions

Check the ground connection on the fax module. Refer to 301A Ground Distribution RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Reload the machine software, GP 4.
2. Perform the 303D SBC PWB Diagnostics RAP.

320-710-00, 320-711-00 Image Overwrite Error RAP

320-710 Immediate image overwrite error occurred on the fax module when overwriting the job.

320-711 On demand image overwrite error occurred on the fax module when overwriting the memory.

Initial Actions

Make a backup of the phone book and the customer settings, refer to dC361 NVM Save and Restore.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 14. **The fault persists.**

Y **N**

Perform SCP 5 **Final Actions.**

Clear the fax module NVM. Go to dC301 NVM Initialization. Select **Embedded Fax NVM initialization** then perform the routine, **All Data**. **The fault is cleared.**

Y **N**

Perform an Altboot, GP 4. **The fault is cleared.**

Y **N**

Install a new fax PWB, PL 20.05 Item 7. If the fault persists, perform the 303D SBC PWB Diagnostics RAP.

Perform SCP 5 **Final Actions.**

Perform SCP 5 **Final Actions.**

20A Fax Entry RAP

Use this RAP to isolate components which contribute to fax communication failure.

Initial Actions

- Check that the fax line cables are properly connected. Fax Line 1 from the telephone line outlet connects to line 1 socket on the machine. Fax line 2 (if installed) from the telephone line outlet connects to line 2 socket on the machine.
- Use a hand set to dial a remote number then listen to dial type, Dual Tone Multiple Frequency (DTMF or tone) or pulse.
- Check the ground connection on the fax module, refer to 301A Ground Distribution RAP.
- Check the Fault History. If the fault codes are 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 or 320-327-00, 320-332-00, 320-340-00, then go to the appropriate RAP.
- Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print an activity report. Check for error codes.
- Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print an options report. Check for any active feature that would inhibit the sending or receiving of a fax, such as:
  - Line 1 setup is set to 'Send and Receive'.

    Select Service Settings / Embedded Fax Settings / Line 1 Setup to change if necessary.
  - Line 2 setup (if present) is set to 'Send and Receive'.

    Select Service Settings / Embedded Fax Settings / Line 2 Setup to change if necessary.
  - Fax country setting is correct.

    Select Service Settings / Embedded Fax Settings / Fax Country Setting to change it if necessary.
  - Answer mode is set to 'Auto'.

    Enter dC131 NVM Read/Write, NVM ID 200-019 FaxAnswerMode to change the setting. 0 = auto, 1 = manual.
  - Junk fax prevention (enabled/disabled).

    Enter dC131 NVM Read/Write, NVM ID 200-033 FaxMachJunkEnabled to change the setting. 0 = disabled, 1 = enabled.
  - Dial type setting is correct (tone/pulse).

    Enter dC131 NVM Read/Write, NVM ID 200-201 FaxLine1DialTypeDef to change the setting. 0 = tone, 1 = pulse.

    Enter dC131 NVM Read/Write, NVM ID 200-202 FaxLine2DialTypeDef to change the setting. 0 = tone, 1 = pulse.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The fax is connected to an analogue network.

Y **N**

Perform the 20H Fax Problems on Digital Networks RAP.

The Fax tab is available

Y **N**

Go to 20F Fax Tab Not Available RAP.

The machine will send a fax to all machines.

Y **N**

The machine will send a fax to some machines.

Y **N**

Go to 20B Unable To Send A Fax RAP.

Go to 20C Unable To Send A Fax To Some Machines RAP.

The machine will receive a fax from the remote machine.

Y **N**

Go to 20D Unable To Receive A Fax RAP.

The fax prints out.

Y **N**

Go to 20E Fax Will Not Print RAP.

The fault is cleared.

Y **N**

Go to 20G Fax module Checkout RAP.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors.

NOTE: *If applicable, ensure that any sending or receiving feature adjustments that were made during this procedure are reset to the customer's preferences.*

20B Unable To Send A Fax RAP

Use this RAP to isolate components which contribute to a fax send failure.

Initial Actions

Refer to the 20A Fax Entry RAP and complete all of the initial actions.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Verify with the customer that Public Switched Telephone Network/Private Automatic Branch Exchange (PSTN/PABX) line is operational. Connect a telephone handset into the line outlet. Listen for a dial tone. Use a known good telephone handset. **The dial tone is present.**

Y N

Use the line test tool, PL 26.10 Item 3 to check the fax line. **The green normal indicator light is on.**

Y N

Ask the customer to request a line check by the telephone company.

Use a telephone handset to dial a known good number. **The ring back is heard.**

Y N

Ask the customer to request a line check by the telephone company.

Enable audio line monitor. Refer to How to Enable Audio Line Monitor.
Dial the fax number. Listen for dial tones or dialing and answer tones. **Fax tones are present.**

Y N

Enter dC131 NVM Read/Write. Reset the values at the NVM ID locations that follow:

- 200-415 Line1CurrentDetect = 0.
- 200-416 Line2CurrentDetect = 0.

Fax tones are present.

Y N

Perform the 20G Fax Module Checkout.
Install new components as necessary:

- Fax PWB, PL 20.05 Item 7.
- Telephone cable, PL 20.05 Item 3.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors.

The dial tone/dialling answer tones are present.

Y N

The exchange is receiving the digits too quickly or is not processing the digits correctly. Ask the customer if the exchange uses **tone** or **pulse** dialing.

A B

Perform the steps that follow:

- Ensure that the machine is set for the correct dialing tone.
- Enter dC131 NVM Read/Write. Reset the values at the NVM ID locations that follow. Set to 0 = tone or 1 = pulse:
  - 200-201 FaxLine1DialTypeDef.
  - 200-202 FaxLine2DialTypeDef.
- Insert a pause (,) between the first and second digit of the dial string. In the Fax tab Dialling Options select Dialling Characters / Pause / Add Character / Save.

The fax only dials once and hangs up, or the busy tone has unusual timing, frequency or level. **The busy tones are recognized.**

Y N

Check the number for a voice or tone answer.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors. Re-enter the details from the Fax options.

Check that the customer is dialing the correct number. **The number is correct.**

Y N

Ask the customer to dial the number using the appropriate access codes.

Enable audio line monitor. Refer to How to Enable Audio Line Monitor.
Dial the fax number. Listen for a dial tone or dialing and answer tones. **Fax tones are present.**

Y N

Enter dC131 NVM Read/Write. Reset the values at the NVM ID locations that follow:

- 200-415 Line1CurrentDetect = 0.
- 200-416 Line2CurrentDetect = 0.

Fax tones are present.

Y N

Perform the 20G Fax Module Checkout.
Install new components as necessary:

- Fax PWB, PL 20.05 Item 7.
- Telephone cable, PL 20.05 Item 3.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors.

The dial tone/dialling answer tones are present.

Y N

The exchange is receiving the digits too quickly or is not processing the digits correctly. Ask the customer if the exchange is **tone** or **pulse** dialing.
Perform the steps that follow:

- Ensure that the machine is set for the correct dialing tone.

A B C

C

- Enter dC131 NVM Read/Write. Reset the values at the NVM ID locations that follow. Set to 0 = tone or 1 = pulse.
  - 200-201 FaxLine1DialTypeDef.
  - 200-202 FaxLine2DialTypeDef.
- Insert a pause (,) between the first and second digit of the dial string. In the Fax tab Dialling Options select Dialling Characters / Pause / Add Character / Save.
- Enter dC131 NVM Read/Write. Set NVM ID 200-397 TimeBeforeDial to 13.

The fax only dials once and hangs up, or the busy tone has unusual timing, frequency or level. **The busy tones are recognized.**

Y N

- Check the number for a voice or tone answer.
- Enter dC131 NVM Read/Write, Check that the values at the NVM ID locations that follow are set to the correct defaults to match the appropriate country setting.
  - 200-237 FaxBusy1MakeMin1.
  - 200-238 FaxBusy1MakeMax1.
  - 200-239 FaxBusy1MakeHole1.
  - 200-240 FaxBusy1BreakMin1.
  - 200-241 FaxBusy1BreakMax1.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors.

How to Enable Audio Line Monitor

1. Enter Customer Administration Tools, GP 24.
2. Select Service Settings.
3. Select Embedded Fax Settings.
4. Select Transmission Defaults.
5. Select Audio Line Monitor.
6. Select Enable and High Volume.

20C Unable To Send A Fax To Some Machines RAP

Use this RAP to isolate components which contribute to a failure to send a fax to some machines.

Initial Actions

Refer to the 20A Fax Entry RAP. Complete all of the Initial Actions.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The correct number is being dialled to make the connection. **The connection is made.**

Y N

The exchange is not processing the digits correctly. The machine needs a longer pause between digits:

- Insert a pause (,) between the first and second digit of the dial string. In the Fax tab Dialling Options select Dialling Characters / Pause / Add Character / Save.
- Enter dC131 NVM Read/Write. Change the setting at NVM ID 200-410 DTMF Tone-Time to 100.

Call the fax number from a known good telephone then listen for the answer fax tones. **The fax tones are heard.**

Y N

Fax on remote end is not picking up or no fax is connected. Advise customer to check the machine at the remote end.

Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. The protocol report shows Receive Not Ready (RNR) is received from the remote fax repeatedly until time out and Disconnect (DCN). Check for a communication failure after 'V34-PH2/V34-PH3' or 'DCS/TCF'. **The remote fax receives and prints the fax.**

Y N

There is a compatibility problem with the remote fax. Check the items that follow:

- Check the protocol report for communication errors.
- The fax line quality is too poor for V34 (Super G3) to function correctly. This is possibly caused by mains interference on the line.
- Disable V34. Enter dC131 NVM Read/Write. Reset the values at the NVM ID locations that follow:
  - 200-087 T30MaxSpeedL1Tx = 11 (14400).
  - 200-088 T30MaxSpeed2Tx = 11 (14400).

  If mains noise persists, install and use line 2 instead of line 1 (if available).
- When sending to a PC fax or fax server that has an ISDN card, there is a need to customize the CEQ values. Enter dC131 NVM Read/Write. Set the value at NVM ID 203-031 CEQTX to 0.

A

A

The Protocol Report shows Message Confirmation (MCF) is not sent by the remote fax (last page), only DCN (Disconnect). **The failure report printed out, but the remote fax prints multiple copies of the job or failed page.**

Y N

The fax is working correctly. Send a three page test fax to a known good fax machine. Print a Protocol Report then check for errors.

The machine will resend up to 5 times before printing the failure report.
Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Transmission Defaults / Automatic Resend. Set the number of resends to 1 or 2.

20D Unable To Receive A Fax RAP

Use this RAP to isolate components which contribute to a fax receive failure.

Initial Actions

Refer to the 20A Fax Entry RAP and complete all of the initial actions.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Verify with the customer that Public Switched Telephone Network/Private Automatic Branch Exchange (PSTN/PABX) line is operational. Use a known good telephone handset or use the line test tool, PL 26.10 Item 3 to check the fax line. **The dial tone is present.**

Y N

Ask the customer to request a line check by the telephone company.
Ensure the fax service is enabled and supported on that line by a PBX administrator.

Call the handset from another telephone. **The phone rings.**

Y N

Ask the customer to request a line check by the telephone company.
Ensure the fax service is enabled and supported on that line by a PBX administrator.

Enable audio line monitor. Refer to How to Enable Audio Line Monitor. Dial the fax number. Listen for a dial tone or dialing and answer tones. **Fax tones are present.**

Y N

Perform the 20G Fax Module Checkout RAP.
Install new components as necessary:

- Fax PWB, PL 20.05 Item 7.
- Telephone cable, PL 20.05 Item 3.

Reconnect the fax. Call the fax number from another telephone. Listen for fax tones. **The machine answers and fax tones are heard.**

Y N

Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print an activity report. Check for receive calls on the activity report. The machine probably does not **beep** to indicate an incoming call.
Check that the NVM ID locations that follow are set to the defaults:

- 200-203 FaxAutoAnswerDelay.
- 200-423 FaxRing1MakeMin1.
- 200-426 FaxRing1BreakMin1.

Call the fax number from another telephone. Listen for fax tones. **The machine answers and fax tones are heard.**

Y N

Perform the 20G Fax Module Checkout.
If necessary, install a new fax PWB, PL 20.05 Item 7.

A B

A B

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report then check for errors.

Receive a 3 page test fax from the original fax machine. Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Print Fax Reports. Print a protocol report. Check for errors. The protocol report may show a communication failure after 'Called Subscriber Identified/Digital Identification Signal' (CSI/DIS) or 'Digital Command Signal/Training Check' (DCS/TCF) or after 'V34-PH2/V34-PH3' or 'Eye Quality Monitor' (EQM) value greater than 5000. **The protocol report shows a communication failure.**

Y N

The problem may be intermittent. Inform the operator of the remote machine that they should report the problem to the telephone company.

Perform the steps that follow:

- Confirm the fax line is a standard PSTN/PBX analogue line.
- The fax line quality is too poor for Super G3 or G3 to function correctly. There is possibly mains interference on the line. The DSL line may not be properly filtered.
- Ask the customer to request a fax capable service from telephone company.
- If mains noise is apparent, install a new fax PWB, PL 20.05 Item 7. Use line 1.
- Enter dC131 NVM Read/Write. Set the values at the NVM ID locations that follow:
  - 200-085 T30MaxResL1Rx = 7.
  - 200-086 T30MaxResL2Rx = 7.

  This sets the receive resolution capabilities for line 1 and line 2 to 400 x 400 max. This will shorten the DIS.
- The DIS field is too long to enable successful communication.

  Enter dC131 NVM Read/Write. Change NVM ID 200-141 USSTOCKSUPPORT... to 0 (disable).
- Disable V34 (Super G3). Enter dC131 NVM Read/Write and reset the values at the NVM ID locations that follow:
  - 200-089 T30MaxSpeedL1Rx = 11 (14400).
  - 200-090 T30MaxSpeedL2Rx = 11 (14400).

  If the fault persists, use a lower line receive (Rx) speed: 12 = 12000, 13 = 9600, 14 = 7200, 15 = 4800, 16 = 2400.
- Send a 3 page test fax from a known good fax machine.

How to Enable Audio Line Monitor

1. Enter Customer Administration Tools, GP 24.
2. Select Service Settings.
3. Select Embedded Fax Settings.
4. Select Transmission Defaults.
5. Select Audio Line Monitor.
6. Select Enable and High Volume.

20E Fax Will Not Print RAP

Use this RAP to solve fax printing problems.

Initial Actions

- Check the condition of the paper in all trays.
- Check that the paper trays are loaded with the appropriate paper sizes for printing the fax. Refer to GP 20.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- If the received fax has mixed size documents (for example, the first prints are 8.5 x 11 and then followed by 8.5 x 14 prints), check the All Incomplete Jobs queue. The job will print 8.5 x 11 pages without printing 8.5 x 14 pages. Then the job will be deleted. Perform the steps that follow:
  - Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Incoming Fax Defaults:
  - Select Paper Settings. Change to Manual.
  - Select Paper Sizes, Normal Size. Select the correct paper size to match the paper in the trays. This is usually A4 or 8.5 x 11 LEF and SEF. Select Save.
  - Change Paper Settings back to Automatic. Save, then exit.
- If the UI requests a paper size that is not loaded in the trays, perform the steps that follow:
  - Enter Customer Administration Tools, GP 24. Select Service Settings / Embedded Fax Settings / Incoming Fax Defaults:
  - Select Paper Sizes, Other Sizes.
  - For Small, Long or Large paper sizes, select None if the corresponding paper is not loaded in the paper trays. Select Save.
  - Change Paper Settings back to Automatic. Save, then exit.

20F Fax Tab Not Available RAP

Use this RAP to isolate the problem when the Fax tab is not available, or is greyed out.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the fax setup. Enter Customer Administration Tools, GP 24. Perform the steps that follow:

- Select Service Settings / Embedded Fax Settings / Fax Setup. Check that the fax install was completed:
  - If Disabled is selected, select Enabled.
  - If the Run Setup option is displayed, select it. Follow the prompts on the UI screen to complete the install of the fax.
- Select Service Settings / Service Registration. Check that the fax service is registered to display on the UI screen:
  - Scroll down the list of services to Fax.
  - Check that the fax service is selected (indicated by a 'tick' symbol).
  - If necessary, select Fax.

Exit Customer Administration Tools, GP 24. Press the All Services button on the UI. **The Fax tab is displayed.**

Y N

Check that the fax module is installed correctly, PL 20.05 Item 1.

Perform the steps that follow:

1. Switch off the machine, GP 14.
2. Check the connection between the fax module and the fax connector PWB, PL 20.05.

   Check the fax connector PWB ribbon cable, PL 3.22 Item 10 connection between the SBC PWB, PL 3.22 Item 3 and the fax connector PWB, PL 20.05 Item 2.
3. Switch on the machine, GP 14.

The Fax tab is displayed.

Y N

Perform an AltBoot, GP 4.

NOTE: *Software should only be loaded on a working machine. Loading or reloading software onto a machine (or fax module) that has a fault will not work.*

Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

20G Fax Module Checkout RAP

Use this RAP to check for problems with the fax module.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off, then switch on the machine, GP 14.
- Check that the fax module, PL 20.05 Item 1 is located correctly.
- Check the ground connection on the fax module, refer to the 301A Ground Distribution RAP.
- For image quality defects, go to IQ9 Unacceptable Received Fax Image Quality RAP.

Procedure

Switch off the machine GP 14. Disconnect the components that follow:

- The fax module from the fax connector PWB, PL 20.05.
- The fax connector PWB ribbon cable from the SBC PWB, PL 3.22.

Check that the connectors are clean and not damaged. If the connectors are damaged then install new components as necessary:

- Fax connector PWB, PL 20.05 Item 2.
- Fax PWB, PL 20.05 Item 7.
- Fax connector PWB ribbon cable, PL 3.22 Item 10
- Perform the 303D SBC PWB Diagnostics RAP

Reconnect the components that follow:

- The fax connector PWB ribbon cable to the SBC PWB.
- The fax module to the fax connector PWB.

Switch on the machine, GP 14. **The fault is cleared.**

Y N

Return to the original fault code RAP and perform the remaining actions in the procedure.

Perform SCP 5 Final Actions.

20H Fax Problems on Digital Networks RAP

Use this RAP to isolate fax problems when using digital networks.

The fax option was designed as an analogue Group 3 device. This will have the best performance when connected to a dedicated analogue phone Public Switched Telephone Network (PSTN) line or Plain Old Telephone system (POTS).

- The fax option will function on the following technologies:
  - Asymmetric Digital Subscriber Line (ADSL)
  - Digital Subscriber Line (DSL)
  - Voice Over Internet Protocol (VOIP)
  - Fax Over Internet Protocol (FOIP), (T.38 protocol).
  - T1 Trunk/E1 Trunk (Europe).

    NOTE: *Due to the compression used on the technologies, the level of performance will be lower than on a PSTN or POTS.*
- The fax option will not function on Integrated Services Digital Network (ISDN).

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off, then switch on the machine, GP 14.
- Check with the customer or IT person on what network the fax service is being used and what is the quality of service.
- Check that an analogue adapter or a connection for analogue terminals are available.
- Ask the customer to check with service provider that an analogue port for fax service has been provided and enabled.

Procedure

Perform the steps that follow:

- Request the latest SPAR release.
- Disable V34.

  Enter dC131 NVM Read/Write and reset the values at the NVM ID locations that follow:
  - 200-087 T30MaxSpeedL1Tx = 11 (14400).
  - 200-088 T30MaxSpeedL2Tx = 11 (14400).
  - 200-089 T30MaxSpeedL1Rx = 11 (14400).
  - 200-090 T30MaxSpeedL2Rx = 11 (14400).
- If problems are still not resolved after these actions, escalate the problem using the normal escalation process.

322-300-05 to 322-309-04 Other Network Faults 01 RAP

322-300-05 Image complete not received from video.

322-300-10 Failed to transfer image due to decoding error.

322-300-16 When machine determines that it needs to do a reset in order to avoid an impending real time clock overflow.

322-301-05 Scan resources not available.

322-309-04 Consecutive no accepts received from a module exceeds threshold value (currently 20). Five consecutive 322-309-04 will cause 322-319-04.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-310-04 to 322-318-04 Other Network Faults 02 RAP

322-310-04 Pages received from extended job service out of sequence.

322-311-04 Sequencer did not respond with proposal within the required time.

322-314-04 Module registration error.

322-315-04 One or more modules did not respond with a completion message.

322-316-04 Job requires paper tray that does not exist.

322-317-04 Job requires finishing capability that does not exist.

322-318-04 Job requires an IOT capability that does not exist.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-319-04 IOT Integrity Problem While Printing a Job RAP

322-319-04 Integrity problem while printing a job. The IOT cycles down and up 10 times without printing a page within the same job causing the fault. The system automatically executes a reset.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Delete the original job, then rerun the job.

322-320-00 Failed to Install Scan to File RAP

322-320-00 System manager failed to install scan to file (workflow scanning).

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-321-00 Failed to Remove Scan to File RAP

322-321-00 System manager failed to remove scan to file (workflow scanning).

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

22-321-04 Proposal Response Time Out Error RAP

322-321-04 Proposal response time out error - RS422 configuration mismatch.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Check machine configuration.

322-322-00 Failed to Install LAN Fax RAP

322-322-00 System manager failed to install LAN (server) Fax.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-323-00 Failed to Remove LAN Fax RAP

322-323-00 System manager failed to remove LAN (server) Fax.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-324-00 Failed to Install Scan to Email RAP

322-324-00 System manager failed to install scan to email.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-325-00 Failed to Remove Scan to Email RAP

322-325-00 System manager failed to remove scan to email.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-326-00 Failed to Install IFAX RAP

322-326-00 System manager failed to install IFAX.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-327-00 Failure to Remove IFAX RAP

322-327-00 System manager failed to remove IFAX.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-328-00 Incomplete System Information RAP

322-328-00 Incomplete system information. The accounting service data has been corrupted.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-330-00 Page Pack PIN Entry Locked RAP

322-330-00 An incorrect page pack PIN has been entered more than 3 times and entry is now locked for 24 hours. Only one retry is now possible every 24 hours.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Obtain a new PIN and try again.

322-330-01 to 322-330-05 List Jobs Request Timed Out RAP

322-330-01 List jobs request timed out between UI and single board controller.

322-330-02 List jobs request timed out between single board controller and ESS print service.

322-330-03 List jobs request timed out between single board controller and scan to file service.

322-330-04 List jobs request timed out between single board controller and scan to Fax service.

322-330-05 List jobs request timed out between queue utility and DC job service.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-330-06 ESS Scan to Distribution Service not Responding to List Jobs RPC Call RAP

322-330-06 ESS scan to distribution service not responding to list RPC call.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-332-00 Invalid Plan Conversion RAP

322-332-00 Plan conversion entry locked due to repeated incorrect entry attempts.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Obtain a new PIN and try again.

322-335-00 Failed to Install Job Based Accounting RAP

322-335-00 System manager failed to install job based (network) accounting.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-336-00 Failed to Remove Job Based Accounting RAP

322-336-00 System manager failed to remove job based (network) accounting.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-337-00 Failed to Install Disk Overwrite RAP

322-337-00 System manager failed to install disk overwrite (image overwrite security).

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-338-00 Failed to Remove Disk Overwrite RAP

322-338-00 System manager failed to remove disk overwrite (image overwrite security).

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-339-00 Failed to Install Job Overwrite RAP

322-339-00 System manager failed to install job overwrite.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-340-00 Failed to Remove Job Overwrite RAP

322-340-00 System manager failed to remove job overwrite.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Reload the software, GP 4.
3. Install a new SBC PWB, PL 3.22 Item 3.

322-350-01, 322-350-02 Software Detects Non-Valid Xerox SOK RAP

322-350-01 Software detected non-valid Xerox SOK 1.

322-350-02 Software detected non-valid Xerox SOK 2 or 3.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to 303-405-00, 303-406-00 SIM Card Fault RAP.

322-351-01 to 322-351-03 SOK Write Failure RAP

322-351-01 SOK 1 write failure.

322-351-02 SOK 2 write failure.

322-351-03 SOK 3 write failure.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to 303-405-00, 303-406-00 SIM Card Fault RAP.

322-352-00 to 322-353-01 Serial Number Fault RAP

322-352-00 Serial number has been lost.

322-352-01 Password routine will be required to write serial number to the SOK 1, IOT and CCM.

322-353-00 IOT serial number is null or zero.

322-353-01 IOT serial number does not match system serial number. May be a legitimate case where machine was reserialized in re-manufacturing.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.

Procedure

1. Enter the correct serial number, refer to dC132 Serial Number.

322-360-00 Service Plan Mismatch RAP

322-360-00 Three way sync of the service plan could not be resolved. The service plan information has been lost.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Set the service plan, dC136.

322-370-00 Cannot Communicate to the XSA Database RAP

322-370-00 A loss of data communications on the single board controller.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Perform an Altboot, GP 4.

322-371-00, 322-372-00 Fax Application Registration Error RAP

322-371-00 Set by the fax service when it gets no response from the service registry when trying to register.

322-372-00 Set by the fax service when it gets no response from the service registry when trying to un-register.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Check the fax connections.
3. Reload the software, GP 4.

322-407-00 Embedded Fax Install Failure RAP

322-407-00 The system manager failed to install the embedded fax option.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Perform the 20G Fax Module Checkout.
3. Go to dC301 NVM initialization. Select All Copier NVM and reset the NVM. Re-install the fax module, PL 20.05 Item 1.
4. Reload the software, GP 4.

322-417-00 Embedded Fax Remove Failure RAP

322-417-00 The system manager failed to remove the embedded fax option.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. To remove the option perform the following:
   a. Enter Customer Administration Tools, GP 24.
   b. Press the Machine Status key.
   c. Select the Tools tab.
   d. Select Service Settings.
   e. Select Embedded Fax Settings.
   f. Select Fax Setup.
   g. Select Disable.

      NOTE: *An option must be disabled before it can be removed.*

   h. Select Save.
   i. Select Exit Tools.
3. If the embedded fax remove failure still occurs, go to dC301 NVM initialization and select All Copier NVM and reset the NVM.
4. If the fax module is to be removed from the machine. Switch off the machine, GP 14. Remove the fax module, PL 20.05 Item 1. Switch the machine on, GP 14.

   A fax hardware not detected window appears. Perform the following:
   a. Select Yes.
   b. Select Restart.

322-419-00 Embedded Fax Enable Failure RAP

322-419-00 The system manager failed to enable the embedded fax option.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. Perform the 20G Fax Module Checkout.
3. To enable the option perform the following:
   a. Enter Customer Administration Tools, GP 24.
   b. Press the Machine Status key.
   c. Select the Tools tab.
   d. Select Service Settings.
   e. Select Embedded Fax Settings.
   f. Select Fax Setup.
   g. Select Enable.
   h. Select Save.
   i. Select Exit Tools.
4. Go to dC301 NVM initialization. Select All Copier NVM and reset the NVM.
5. Reload the software, GP 4.

322-421-00 Embedded Fax Disable Failure RAP

322-421-00 The system manager failed to disable the embedded fax option.

Procedure

Perform the following:

1. Switch off the machine, then switch on the machine, GP 14.
2. To disable the option perform the following:
   a. Enter Customer Administration Tools, GP 24.
   b. Press the Machine Status key.
   c. Select the Tools tab.
   d. Select Service Settings.
   e. Select Embedded Fax Settings.
   f. Select Fax Setup.
   g. Select Disable.
   h. Select Save.
   i. Select Exit Tools.
3. Go to dC301 NVM initialization. Select Copier NVM and reset the NVM.
4. Reload the software, GP 4.

322-701-04 Module Completion Message Received RAP

322-701-04 Module completion message received after IOT returned to standby.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-720-00 Service Registry Bad Data/Corrupted RAP

322-720-00 Service bad data/corrupted.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-721-00 No Response From The Service Registry RAP

322-721-00 Triple A gets no response from the service registry service.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

322-750-17 to 322-755-17 Configuration Mismatch RAP

322-750-17 When the system detects that the accessory card configuration mismatch has changed during the power on sequence.

322-754-17 When the system detects the UI configuration has changed during the power on sequence.

322-755-17 After the 2nd user confirmation of configuration mismatch if the system detects that the RDT configuration has changed during the power on sequence.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

340A Main Drive Motor and Photoreceptor Motor RAP

Use this RAP to determine failures of the main drive motor and the photoreceptor motor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to Flag 1. Check for +24V between P/J147 pin 1 and pin 2 on the Main Drive PWB. **+24V is measured.**

Y **N**

Ensure that the drum cartridge is correctly installed and that the CRUM connector is not damaged.

Check the wiring, GP 7, to the LVPS. Refer to:

- 301H Short Circuit and Overload RAP.
- 301B 0V Distribution RAP.

Enter dC330, code 042-010 main drive motor and code 091-010 photoreceptor motor, Figure 1. Press Start. **The main drive motor and the photoreceptor motor turn.**

Y **N**

If the photoreceptor motor does not turn, go to the 04A Photoreceptor Motor Checkout. If the main drive motor does not turn, go to the 04A Main Drive Motor Checkout.

Check all the wiring and connections between the IOT PWB and the main drive module for damage and loose connections.

04A Photoreceptor Motor Checkout

Go to Flag 3 and Flag 4. Check the wiring, GP 7. Refer to:

- P/J3, IOT PWB.
- P/J148, Main Drive PWB.
- P/J151, Main Drive PWB.

Install new components as necessary:

- Main drive motor and PWB assembly (45-55 ppm), PL 40.15 Item 6.
- Main drive motor and PWB assembly (65-90 ppm), PL 40.10 Item 6.
- Main drive module (45-55 ppm), PL 40.15 Item 1.
- Main drive module (65-90 ppm), PL 40.10 Item 1.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

04A Main Drive Motor Checkout

Go to Flag 2. Check the wiring, GP 7. Refer to:

- P/J3, IOT PWB
- P/J148, Main Drive PWB.

Install new components as necessary:

- Main drive motor and PWB assembly (45-55 ppm), PL 40.15 Item 6.
- Main drive motor and PWB assembly (65-90 ppm), PL 40.10 Item 6.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

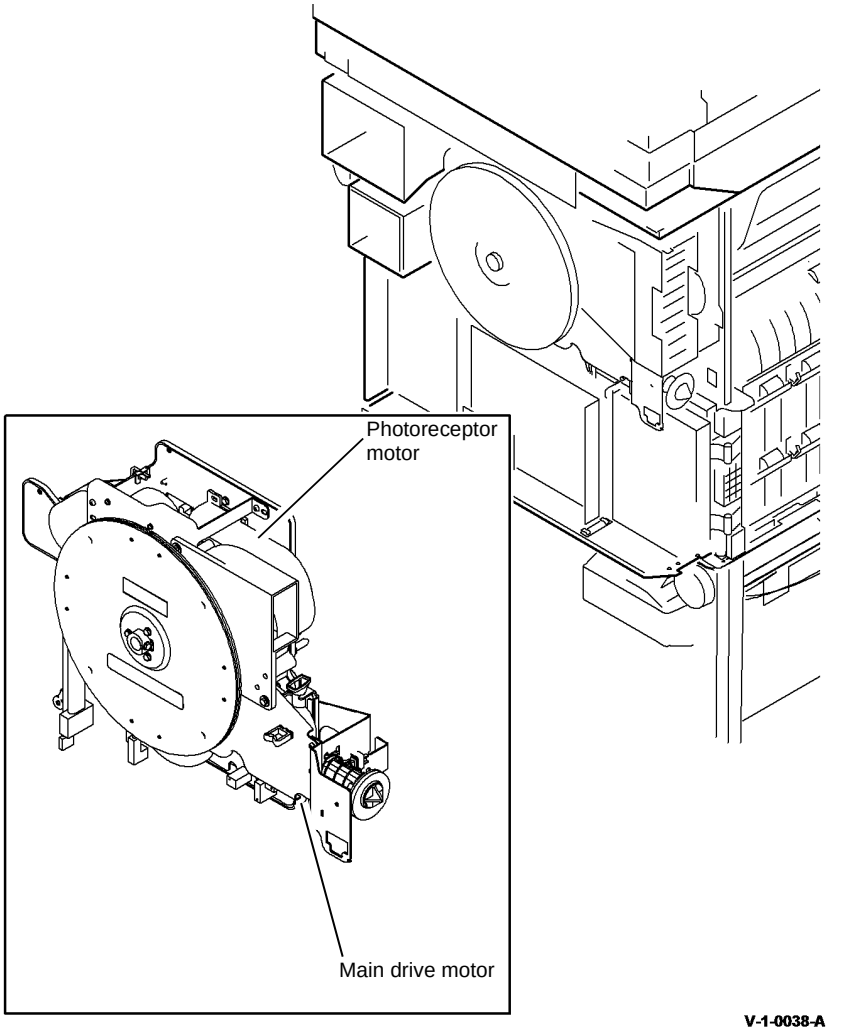


Figure 1 Component location

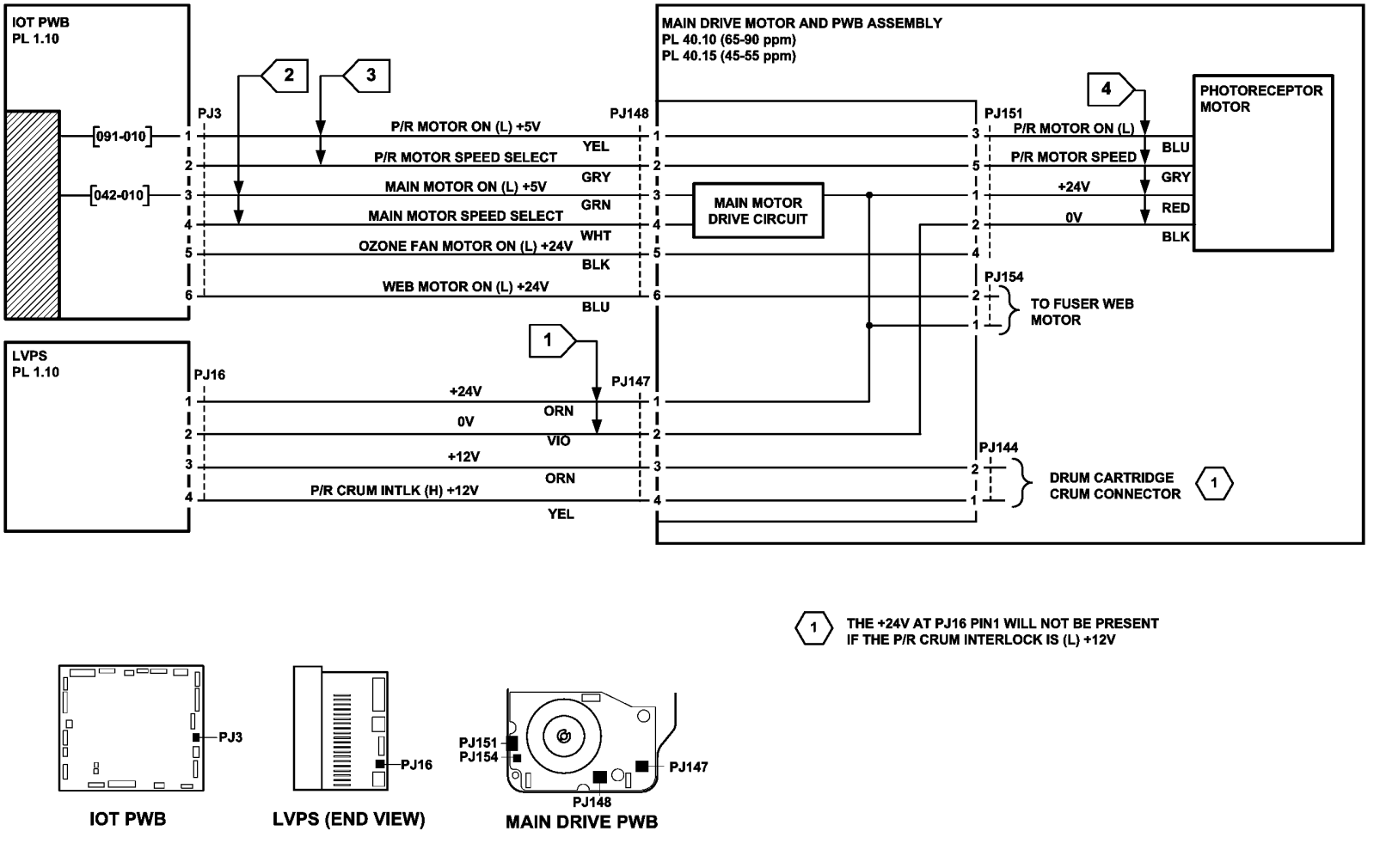


Figure 2 Circuit diagram

341-350-00, 341-351-00, 341-354-00 IOT to Tray 1 and Tray 2 PWB Error RAP

341-350-00 The IOT has detected no response from the tray 1 and 2 control PWB to the ping request.

341-351-00 Tray 1 and 2 control PWB has detected a feed buffer overflow.

341-354-00 Communications failure. Tray 1 and 2 control PWB has detected a communications failure.

Initial Actions

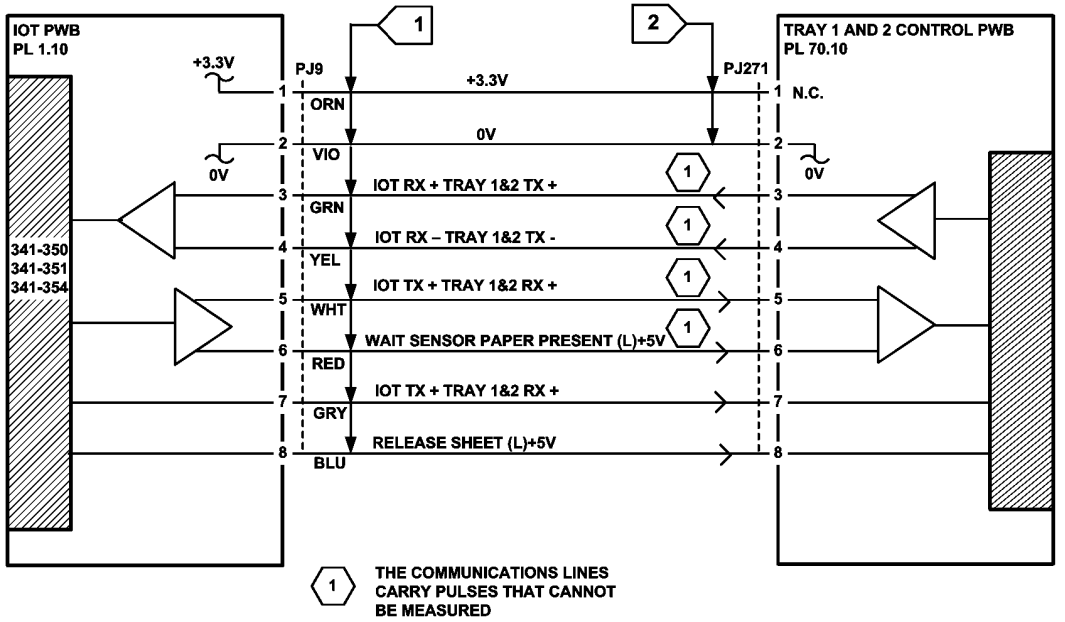
WARNING

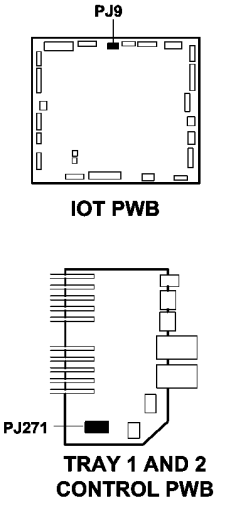
Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for 03-XXX or 4X-XXX fault codes. If the 03-XXX and 4X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

1. Switch off the machine, GP 14. Ensure P/J9 and P/J271 are correctly and securely connected.
2. Go to Flag 1. Check the harness. Repair as necessary, GP 7.
3. Go to Flag 2. Check the +3.3V and 0V lines. Refer to:
   - 301D +3.3V Distribution RAP.
   - 301B 0V Distribution RAP.
4. Re-load the software, GP 4 Machine Software.
5. Install a new tray 1 and 2 control PWB, PL 70.10 Item 2.
6. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.





TV-1-0076-A

Figure 1 Circuit diagram

341-359-00 HCF Communications and Detection Error RAP

341-359-00 The HCF has failed to respond to tray 1 and 2 control PWB ping requests.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for 303-XXX or 34X-XXX fault codes. If the 303-XXX and 4X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

1. Ensure the P/Js on the tray 1 and 2 control PWB, PL 70.10 Item 2 and the HCF PWB, PL 70.21 Item 2 are correctly and securely connected.
2. Go to Flag 1. Check the harness. Repair as necessary, GP 7.
3. Go to Flag 1. Check the power supply lines. Refer to:
   - 301G +24V Distribution RAP.
   - 301E +5V Distribution RAP.
   - 301B 0V Distribution RAP.
4. Go to Flag 2. Check for the presence of pulses on the two data lines, using the AC volts range of the meter.

   NOTE: *Pulses should be measured approximately every 20 seconds. Between pulses, the voltage should be approximately 1.5VAC.*
5. As necessary, install new components:
   - Tray 1 and 2 control PWB, PL 70.10 Item 2.
   - HCF control PWB, PL 70.21 Item 2.
6. Reload the software, GP 4, Machine Software.

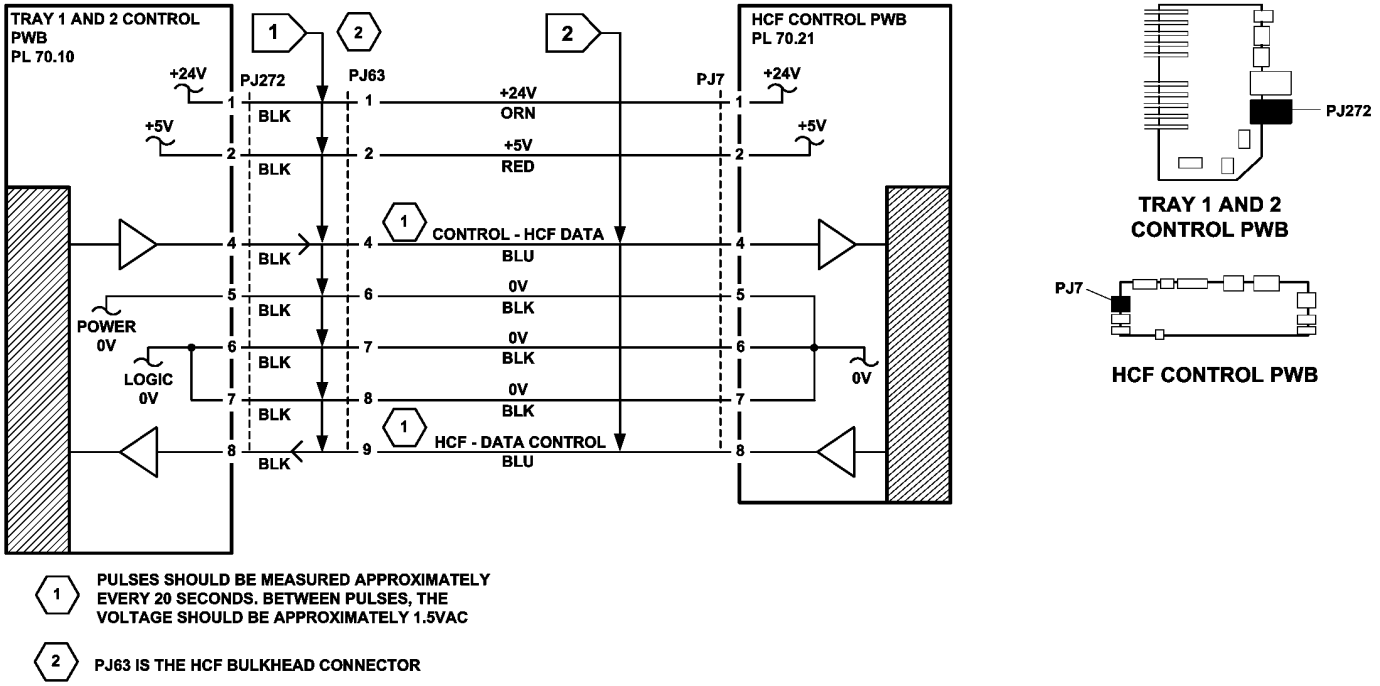


Figure 1 Circuit diagram

341-360-00 IOT to Output Device Error RAP

341-360 The IOT to output device communications have failed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure the output device power cord is connected to PJ22 on the Power and Control Module.
- **1K LCSS Only.** Un-dock the 1K LCSS from the machine, refer to REP 11.11-120 1K LCSS Removal. Check that the docking actuator, PL 11.102 Item 7 is correctly installed.
- **2K LCSS Only.** Perform REP 11.13-110 LCSS Un-docking. Check that the docking actuator, PL 11.4 Item 7 is correctly installed.
- **HVF and HVF BM Only.** Perform 311-300-00-171, 311-302-00-171, 311-303-00-171, HVF Un-docking RAP. Check that the docking actuator, PL 11.130 Item 17, is correctly installed.
- **LVF BM Only.** Perform REP 11.13-150 LVF BM Un-docking. Check that the docking actuator, PL 11.52 Item 8 is correctly installed.
- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for 03-XXX or 4X-XXX fault codes. If the 03-XXX and 4X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

CAUTION

Do not connect the output device power cord directly to the AC wall outlet. The output device cannot operate without the machine. The machine controls the distribution of electricity to the output device for correct power on and power off sequencing.

***NOTE:** No parts of the OCT are spared. Where necessary, install a new OCT, PL 12.10 Item 2.*

***NOTE:** Figure 1 and Figure 2 show the external connections to the output devices.*

1. As necessary, ensure that the connectors that follow are correctly and securely connected:
   - **OCT Only.** P/J495 on the OCT PWB, P/J151 on the Power and Control Module and P/J11 on the IOT PWB.
   - **1K LCSS Only.** P/J3 on the 1K LCSS PWB, P/J151 on the Power and Control Module and P/J11 on the IOT PWB.
   - **2K LCSS Only.** P/J301 on the 2K LCSS PWB, P/J151 on the Power and Control Module and P/J11 on the IOT PWB.
   - **HVF and HVF BM Only.** P/J121 on the HVF PWB, P/J151 on the Power and Control Module and P/J11 on the IOT PWB.
   - **LVF BM Only.** P/J301 on the LVF PWB, P/J151 on the Power and Control Module and P/J11 on the IOT PWB.
2. Go to Flag 1 and Flag 2. Check the harnesses. Repair as necessary, GP 7.
3. **OCT Only.** If the problem persists install a new OCT, PL 12.10 Item 2.
4. **1K LCSS Only.** Perform the following:
   - Go to the 311C-120 1K LCSS Power Distribution RAP. Check the +5V and +24V supply from the power supply module to the 1K LCSS PWB. Ensure that the voltages are steady.
   - Ensure that there is a good ground continuity between the power supply module, PL 11.124 Item 2 and the 1K LCSS frame.
   - Install new components as necessary:
     - Power supply module, PL 11.124 Item 2.
     - 1K LCSS PWB, PL 11.124 Item 1.
5. **2K LCSS Only.** Perform the following:
   - Remove fuse F1 from the 2K LCSS PWB. Check the fuse. If the fuse is good, re-install the fuse. If fuse F1 is blown, install a new 2K LCSS PWB, PL 11.26 Item 1.
   - Go to the 311D-110 2K LCSS Power Distribution RAP. Check the +5V and +24V supply from the power supply module to the 2K LCSS PWB. Ensure that the voltages are steady.
   - Ensure that there is a good ground continuity between the power supply module, PL 11.26 Item 2 and the 2K LCSS frame.
   - Install new components as necessary:
     - Power supply module, PL 11.26 Item 2.
     - 2K LCSS PWB, PL 11.26 Item 1.
6. **HVF and HVF BM Only.** Perform the following:
   - Go to the 311A-171 HVF Power Distribution RAP. Check the +5V and +24V supply from the power supply module to the HVF PWB. Ensure that the voltages are steady.
   - Ensure that there is a good ground continuity between the power supply module, PL 11.157 Item 1 and the HVF frame.
   - Install new components as necessary:
     - Power communications cable, PL 11.157 Item 7.
     - Power supply module, PL 11.157 Item 1.
7. **LVF BM Only.** Perform the following:
   - Remove fuse F1 from the LVF PWB. Check the fuse, PL 11.90 Item 3. If the fuse is good, re-install the fuse. If fuse F1 is blown, install a new LVF PWB, PL 11.90 Item 8.
   - Go to the 311D-150 LVF Power Distribution RAP. Check the +5V and +24V supply from the power supply module to the LVF PWB. Ensure that the voltages are steady.
   - Ensure that there is a good ground continuity between the power supply module, PL 11.90 Item 2 and the LVF BM frame.
   - Install new components as necessary:
     - Power supply module, PL 11.90 Item 2.
     - LVF PWB, PL 11.90 Item 8.
8. If the correct output device is not detected, go to Flag 3. Check that the voltages on the device ID lines are correct according to the table in Figure 1. Install new components as necessary:
   - 1K LCSS PWB, PL 11.124 Item 1.
   - 2K LCSS PWB, PL 11.26 Item 1.
   - HVF PWB, PL 11.157 Item 2.
   - LVF PWB, PL 11.90 Item 8.
   - OCT, PL 12.10 Item 2.

9. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

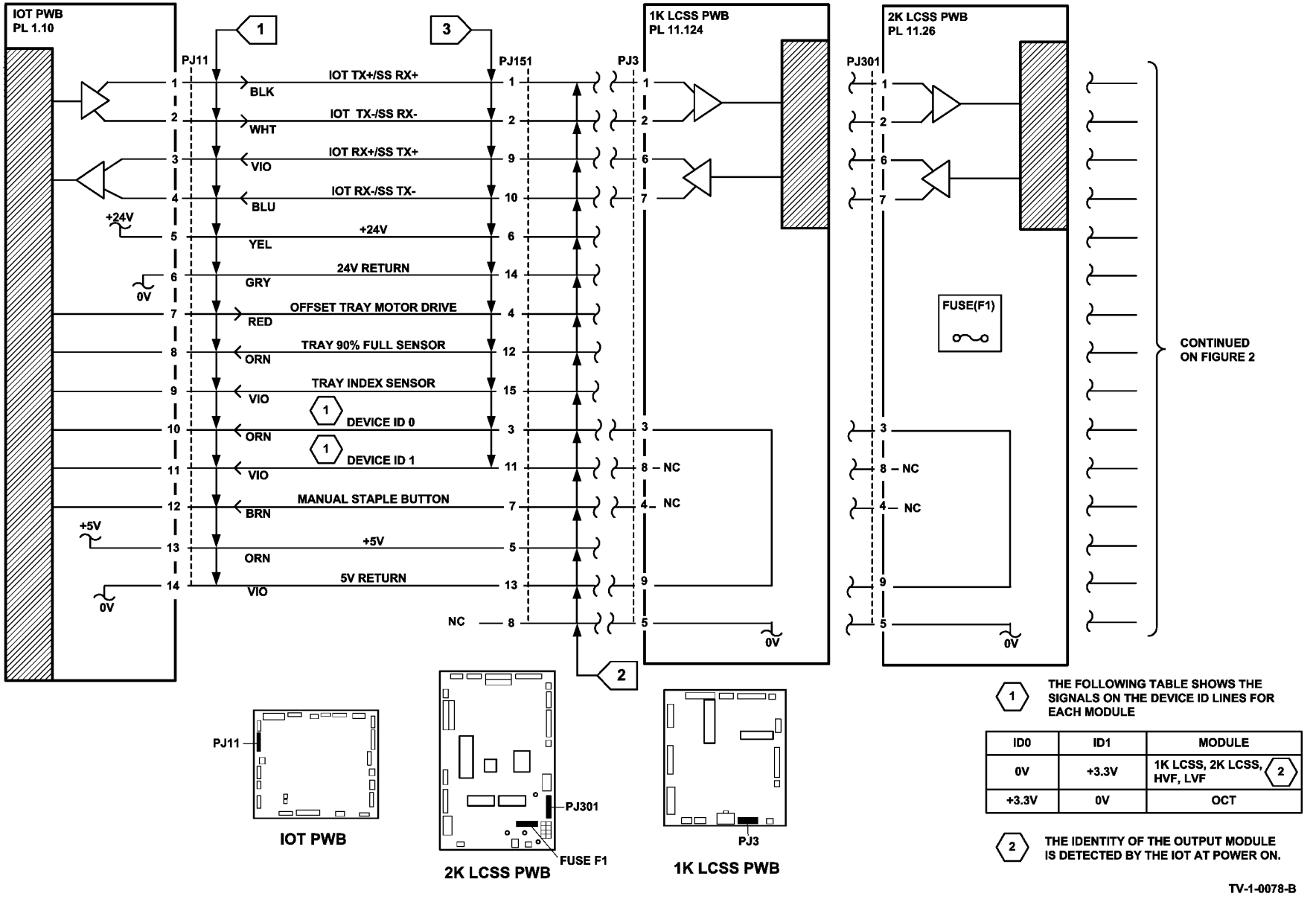


Figure 1 Circuit diagram

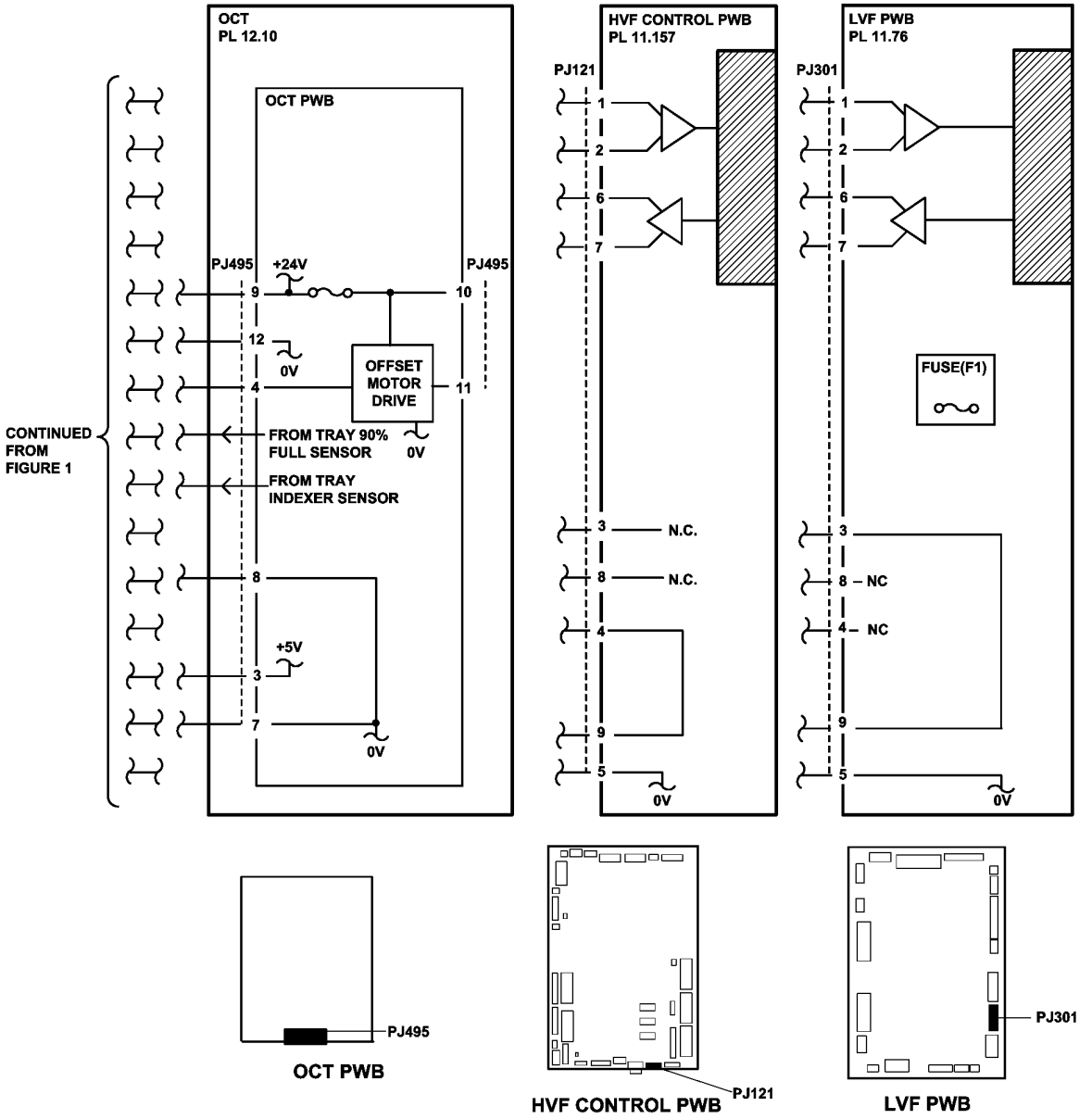


Figure 2 Circuit diagram

341-366-00 IOT to Tray 6 Module Communication Failure RAP

341-366-00 The IOT PWB has detected a communications failure with the tray 6 module.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of P/J501 on the sleeved harness from the tray 6 module, paying attention to the condition of the pins.
- Check that P/J501 is correctly and securely connected at the rear of the machine.

Procedure

1. Go to Flag 1. Check the wiring. Repair the wiring as necessary, GP 7.
2. If necessary install a new tray 6 control PWB, PL 70.68 Item 8.
3. If the fault remains, perform the OF7 IOT Diagnostics RAP.

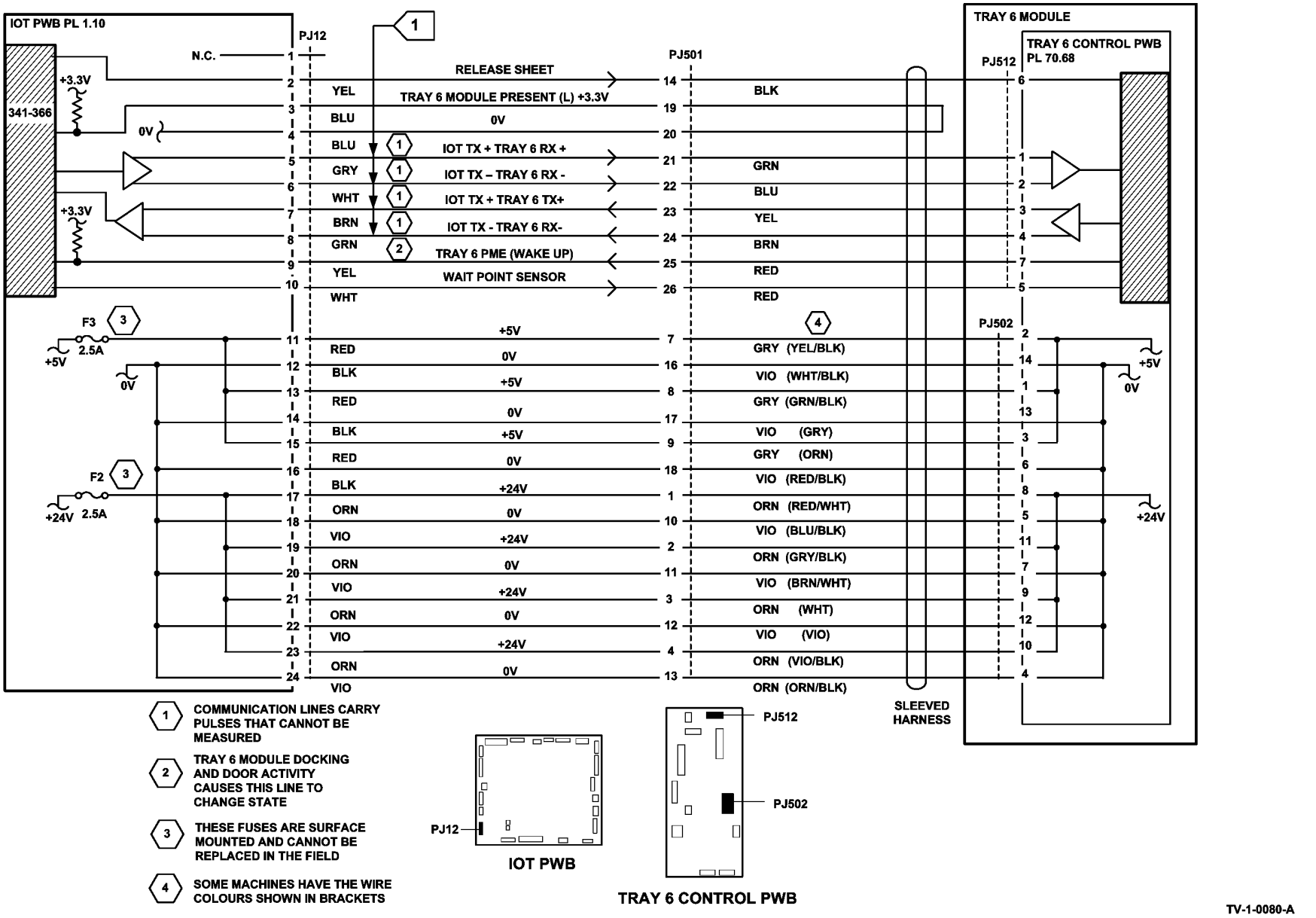


Figure 1 Circuit diagram

341-371-00, 41-372-00 Fuser and Xerographic CRUM Communication Error RAP

341-371-00 The fuser CRUM communications have failed.

341-372-00 The xerographics CRUM communications have failed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Ensure the fuser module, (45-55 ppm), PL 10.8 Item 1 or (65-90 ppm), PL 10.10 Item 1 is correctly installed.
- Ensure the xerographic module, PL 90.20 Item 2 is correctly installed.
- Check the fault history file for 303-XXX or 34X-XXX fault codes. If the 303-XXX and 34X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

CAUTION

Remove the fuser and xerographic modules to prevent damage to the CRUMs when checking for continuity.

1. Ensure the P/Js on the IOT PWB, PL 1.10 Item 2 and the main drive motor and PWB assembly, (45-55 ppm) PL 40.15 Item 6 or (65-90 ppm) PL 40.10 Item 6 are correctly and securely connected.
2. Perform the OF7 IOT PWB Diagnostics RAP.
3. Switch off the machine, GP 14. Go to Flag 1. Disconnect P/J8 on the IOT PWB. Switch on the machine, GP 14. Make a copy. Check the fault history for new occurrences of 41-371-00 and 41-372-00 faults. If new occurrences are not listed, install a new IOT PWB, PL 1.10 Item 2.
4. Go to Flag 1. Check the harness, GP 7 and measure the voltages. As necessary, refer to:
   - 301B 0V Distribution RAP.
   - 301E +5V Distribution RAP.

   NOTE: *PJ141 and PJ144 are in-line connectors on the rear panel, (refer to Flag 2 and Flag 3). They are connected when the module is installed and are susceptible to damage.*
5. **41-371-00 Only:** Go to Flag 2. Check the harness. Remove any torn paper/debris from the fuser CRUM connector, (45-55 ppm) PL 40.17 Item 12 or (65-90 ppm) PL 40.12 Item 12. Repair as necessary, REP 1.2.
6. **41-372-00 Only:** Go to Flag 3. Check the harness. Remove any torn paper/debris from the xerographic CRUM connector, (45-55 ppm) PL 40.17 Item 4 or (65-90 ppm) PL 40.12 Item 4. Repair as necessary, REP 1.2.
7. Install new components as necessary:
   - **41-371-00 Only:** Fuser connector assembly, (45-55 ppm) PL 40.15 Item 9 or (65-90 ppm) PL 40.10 Item 9.
   - **41-371-00 Only:** Fuser Module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.
   - **41-372-00 Only:** Xerographic module, PL 90.20 Item 2.
   - Main drive motor PWB assembly, (45-55 ppm) PL 40.15 Item 6 or (65-90 ppm) PL 40.10 Item 6.
   - Main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.
8. Reload the software, GP 4 Machine Software.

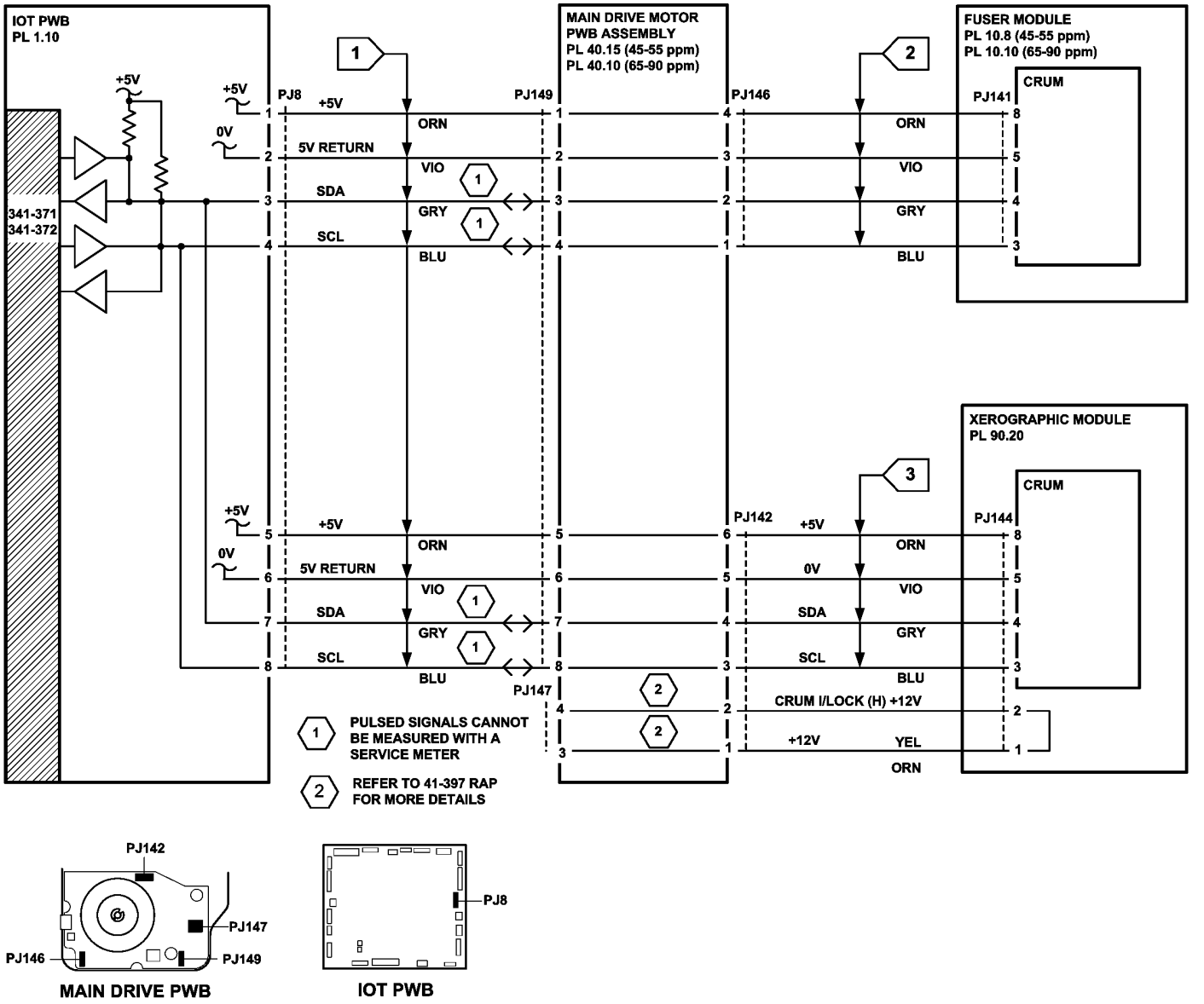


Figure 1 Circuit diagram

341-395-00, 341-396-00, 341-852-00 IOT PWB Fault RAP

341-395-00 The IOT has cycled without printing.

341-396-00 The photoreceptor is detected not turning while the laser is on.

341-852-00 IOT has detected that it is out of timers.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for 303-XXX or 34X-XXX fault codes. If the 303-XXX and 34X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

1. Ensure all the P/Js on the IOT PWB, PL 1.10 Item 2 are correctly and securely connected.
2. **341-395-00 Only:** This fault can be caused by a poor ground on the duplex tray or a paper path problem. Check the active fault list for an 8X-XXX or 9X-XXX fault. Go to the indicated RAP. This fault can also be caused by a paper guide in a paper tray being set to the wrong paper size. Check the paper guide settings in the paper trays.
3. Reload the software set, GP 4, Machine Software.

   NOTE: *The supply harness is a flying lead that is a part of the LVPS and is not spared separately.*

4. Go to Flag 1. Check the voltages. As necessary, refer to:
   - 301G +24V Distribution RAP.
   - 301F +12V Distribution RAP.
   - 301E +5V Distribution RAP.
   - 301D +3.3V Distribution RAP.
   - 301B 0V Distribution RAP.
5. **341-396-00 Only:** If necessary, go to the 340A Main Drive Motor and Photoreceptor Motor RAP. Perform the photoreceptor motor checkout.
6. Perform the 301L LVPS Checkout RAP.
7. Perform the OF7 IOT PWB Diagnostics RAP.

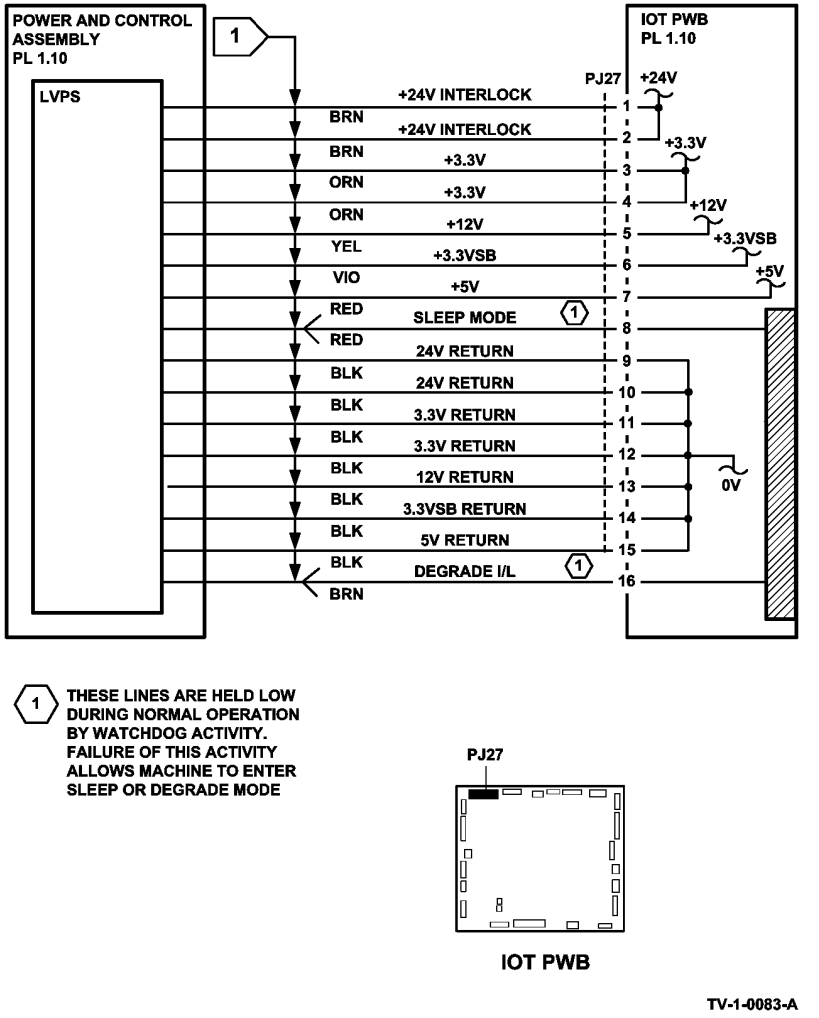


Figure 1 Circuit diagram

341-397-00 Main Motor Not Controlled RAP

341-397-00 The IOT software has detected that the main motor is not being controlled. The software that monitors the main motor and the photoreceptor motor was not reset within the expected time.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for 303-XXX or 34X-XXX fault codes. If the 303-XXX and 34X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

Ensure that the connectors on the components that follow are securely connected:

- IOT PWB, PL 1.10 Item 2.
- LVPS and base module, PL 1.10 Item 3.
- Main drive motor and PWB, (45-55 ppm) PL 40.15 Item 6 or (65-90 ppm) PL 40.10 Item 6.

The fault is still present.

Y **N**

Perform SCP 5 Final Actions.

Go to Flag 1 and Flag 2. Check the wiring, GP 7. **The wiring is good.**

Y **N**

Repair the wiring, GP 7.

Go to Flag 1. Check the voltages at P/J16, pins 1 and 2 on the LVPS. **The voltages are correct.**

Y **N**

As necessary, refer to:

- 301B 0V Distribution RAP.
- 301G +24V Distribution RAP.

Go to Flag 2. Measure the voltage at P/J3 pin 3, on the IOT PWB. Enter dC330 code 042-010, Main Motor On. Stack the photoreceptor motor code, 091-010. **The voltage changes from high to low and the main motor runs.**

Y **N**

Install a new main drive motor and PWB, (45-55 ppm) PL 40.15 Item 6 or (65-90 ppm) PL 40.10 Item 6. If the fault remains, perform the OF7 IOT Diagnostics RAP.

Reload the software, GP 4, Machine Software. **The fault is still present.**

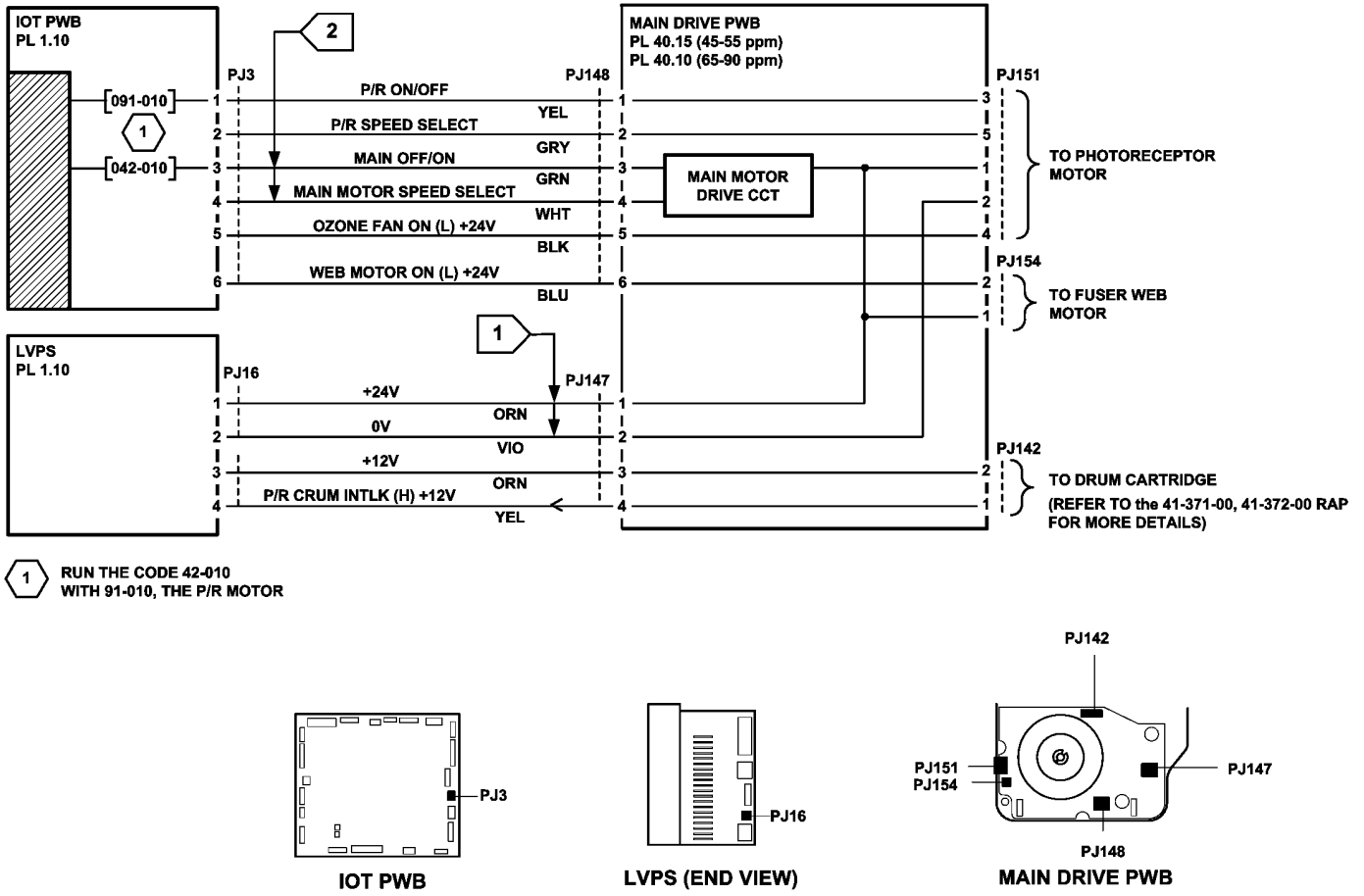
Y **N**

Perform SCP 5 Final Actions.

A

A

Install a new main drive motor and PWB, (45-55 ppm) PL 40.15 Item 6 or (65-90 ppm) PL 40.10 Item 6. If the fault remains, perform the OF7 IOT Diagnostics RAP.



TV-1-0084-A

Figure 1 Circuit diagram

341-423-00 Print Command Late RAP

341-423-00 The IOT detected print command late with respect to page sync in simplex 3 mode.

This fault will be seen as output pages out of order caused by confused software.

Procedure

This code records events in the fault history file, but does not prevent the machine operating normally. This faults will also result in a blank sheet being delivered to the output tray.

Delete the job. Switch off the machine, then switch on the machine, GP 14.

341-480-00 IOT +24V Supply Failure RAP

341-480-00 The IOT has detected a +24V supply fault.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Measure the voltage from F1 fuse on the IOT PWB to the machine frame. If the voltage is less than +24V, perform the 301L LVPS Checkout RAP.

   NOTE: *F1 is a small white fuse under PJ27 on the IOT PWB. Refer to the 301G +24V Distribution RAP.*

2. Perform the OF7 IOT PWB Diagnostics RAP.
3. If the fault is still present, perform the 301G +24V Distribution RAP.

341-805-00 SBC PWB to IOT PWB Error RAP

341-805 The IOT PWB has received an un-recognized message from the SBC PWB.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- If the fault occurs during a software upgrade, wait 15 minutes for the software programming operation to complete, before the next action.
- Switch off the machine, then switch on the machine, GP 14. If the machine fails to switch off, go to the 303F Switch Off Failure RAP.
- Check the fault history file for 303-XXX or 34X-XXX fault codes. If the 303-XXX and 34X-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

1. Switch off the machine, GP 14. Ensure all the connectors on the SBC PWB, PL 3.22 Item 3 and the IOT PWB, PL 1.10 Item 2 are correctly and securely seated. Switch on the machine, GP 14.
2. If the fault was detected during a software upgrade, perform the relevant procedure:
   - If one of the rear USB ports was utilized, go to Flag 1. Check P/J107 on the SBC PWB. Re-load the software, GP 4 Machine Software.
   - If the front USB ports was utilized, go to Flag 3. Check the cable between P/J284 on the SBC PWB and UI USB connector. Re-load the software, GP 4 Machine Software.
   - If P/J44 was utilized, go to Flag 4. Check the cable between P/J44 on the SBC PWB and the PWS. Re-load the software, GP 4 Machine Software.
3. Perform the OF7 IOT PWB Diagnostics RAP.
4. Go to Flag 2. Check the wiring, GP 7. If necessary, install a new SBC PWB/IOT PWB harness, PL 3.22 Item 25.
5. Perform the following as necessary:
   - 303D SBC PWB Diagnostics RAP.
   - OF7 IOT PWB Diagnostics RAP.

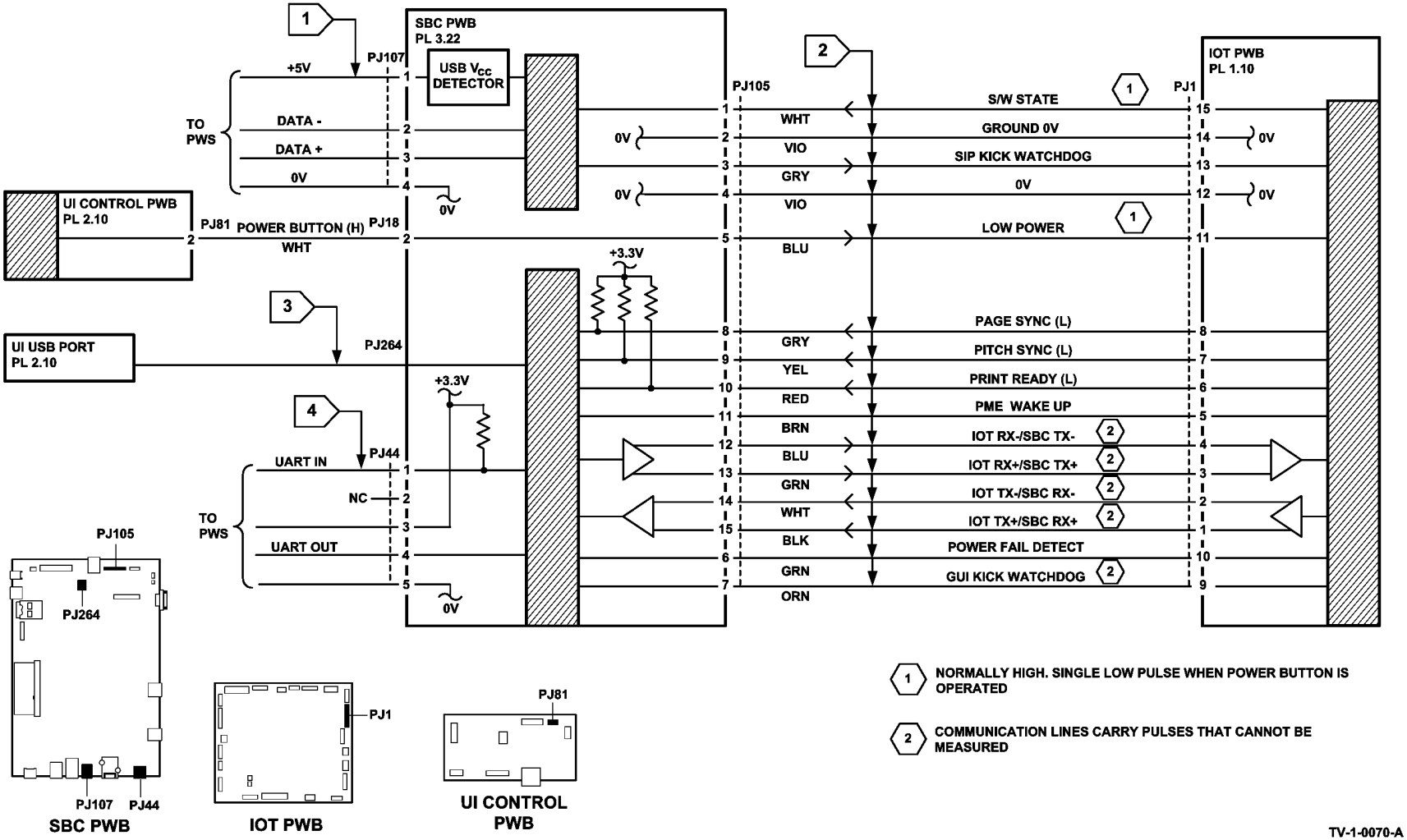


Figure 1 Circuit diagram

361-020-00 ROS Motor Failure RAP

361-020-00 This fault code has two failure modes:

- The ROS motor ready signal was not received by the IOT PWB within the set time of the ROS being powered on.
- The IOT PWB recognizes a change of state of the ROS motor ready signal during operation.

Initial Actions

- Check that the harness connector at PJ2 on the IOT PWB is fully inserted.
- Check that the harness connector at PJ121 on the ROS is fully inserted Figure 3.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

Figure 1 Laser beam symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Figure 2 ESD symbol

Switch off the machine, then switch on the machine, GP 14. **The 361-020 fault still exists.**

Y N

Perform SCP 5 Final Actions.

Enter the dC330 output code 061-020 and listen for the ROS motor. **The ROS motor gives a distinctive ascending frequency sound, of a short duration (5 to 6 seconds) during transition from standby to run.**

Y N

The xerographic module is fully home and the front door is fully closed or the front door interlock is cheated.

Y N

Correct the condition. If necessary go to the 301-300-00 Front Door Open RAP.

Go to Flag 1. Check the following voltages at P/J18 on the LVPS:

- +24V between pins 1 and 2.
- +3.3V between pins 3 and 4.

The voltages are good.

Y N

Go to the relevant RAP:

- 301B 0V Distribution RAP, refer to the 3.3V return and 24V return.
- 301D +3.3V Distribution RAP.
- 301G +24V Distribution RAP.

Enter the dC330 output code 061-020 to run the ROS motor. Go to Flag 2. **0V is available at P/J2 pin 1 on the IOT PWB.**

Y N

Go to Flag 3. **0V is available at P/J2 pin 6 on the IOT PWB.**

Y N

Perform the OF7 IOT PWB Diagnostics RAP.

NOTE: *To disconnect P/J1 and P/J2 the ROS must be removed from the machine, refer to REP 60.15. The ROS PWB may not be marked with the correct PJ numbers, where P/J1 and P/J2 are connected. P/J1 can be identified as a four way power harness. P/J2 can be identified as a seven way signal harness.*

Go to Flag 1, Flag 2 and Flag 3. Disconnect P/J1 and P/J2. Check the wiring. **The wiring is good.**

Y N

Repair the wiring or install a new ROS power distribution/communication harness, PL 60.10 Item 5.

Install a new ROS, PL 60.10 Item 4.

Perform the OF7 IOT PWB Diagnostics RAP.

Go to Flag 2. **0V is available at P/J2 pin 1.**

Y N

NOTE: *To disconnect P/J1 and P/J2 the ROS must be removed from the machine, REP 60.15. The ROS PWB may not be marked with the correct PJ numbers, where P/J1 and P/J2 are connected. P/J1 can be identified as a four way power harness. P/J2 can be identified as a seven way signal harness.*

Check the continuity of the seven way signal harness between P/J2 on the ROS and P/J2 on the IOT PWB. **The harness is good.**

Y N

Install a new ROS power distribution/communication harness, PL 60.10 Item 5.

Install a new ROS, PL 60.10 Item 3.

If the fault condition persists, perform the following:

- Check the condition of the associated wiring and connectors. Repair the wiring or install new components as necessary.
- Install a new ROS, PL 60.10 Item 4.
- Perform the OF7 IOT PWB Diagnostics RAP.

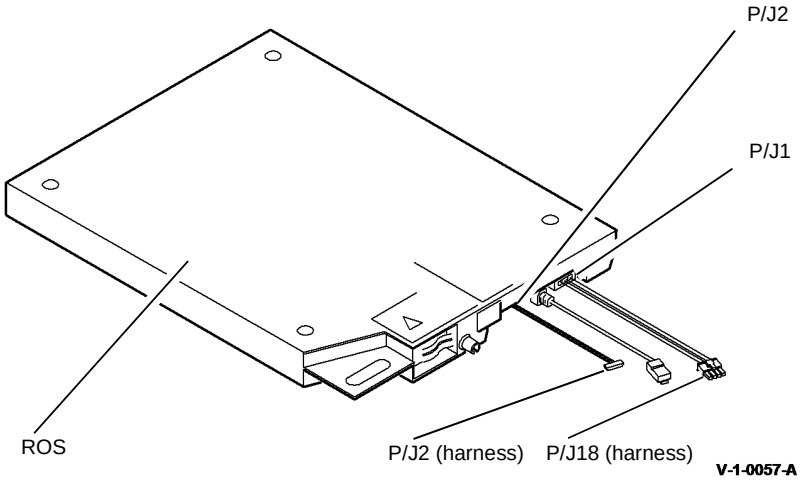


Figure 3 Component location

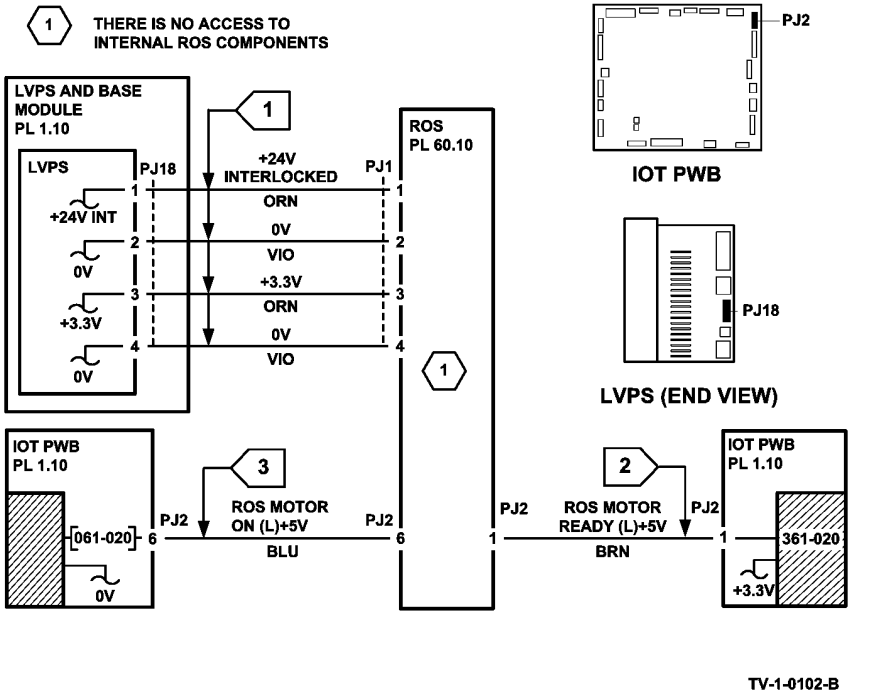


Figure 4 Circuit diagram

361-340-00 ROS Laser Failure RAP

361-340-00 The IOT PWB has not detected the ROS laser reaching the operating speed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

Figure 1 Laser beam symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Figure 2 ESD symbol

Go to Flag 3. Connect a service meter to P/J2 pin 7 and make a set of 5 copies. **0V is measured at P/J2 pin 7 on the IOT PWB during run.**

Y N

The xerographic module is fully home and the front door is fully closed or the front door interlock is cheated.

Y N

Correct the condition.

Go to Flag 1. Disconnect P/J18 from the LVPS. Check the following voltages on the LVPS:

- +24V between pins 1 and 2.
- +3.3V between pins 3 and 4.

The voltages are good.

A

A

Y N

Go to the relevant RAP:

- 301B 0V Distribution RAP, refer to the 3.3V return and 24V return.
- 301D +3.3V Distribution RAP.
- 301G +24V Distribution RAP.

Enter the dC330 output code 061-020 and listen for the ROS motor. Go to Flag 2.. **The ROS motor gives a distinctive ascending frequency sound, of a short duration (5 to 6 seconds) during transition from standby to run.**

Y N

Go to the 361-020-00 ROS Motor Failure RAP.

***NOTE:** . To disconnect P/J1 and P/J2 the ROS must be removed from the machine, REP 60.15. The ROS PWB may not be marked with the correct PJ numbers, where P/J1 and P/J2 are connected. P/J1 can be identified as a four way power harness. P/J2 can be identified as a seven way signal harness.*

Check the wiring at Flag 1, Flag 2 and Flag 3. . **The wiring is good.**

Y N

Repair the wiring or install a new ROS power distribution/communication harness, PL 60.10 Item 5.

Install a new ROS, PL 60.10 Item 4.

Go to Flag 4. Check that P/J112 on the SBC PWB is securely connected. If the fault is still present, remove the ROS, REP 60.15. If the fault is still present, go to Flag 4. Check the continuity of the ROS data cable (P/J112 to P/J7).. **The ROS data cable is good.**

Y N

Install a new ROS power distribution/communications harness, PL 60.10 Item 5.

Install a new ROS, PL 60.10 Item 4.

If the fault remains, perform the following as necessary:

- 303D SBC PWB Diagnostics RAP.
- OF7 IOT PWB Diagnostics RAP.

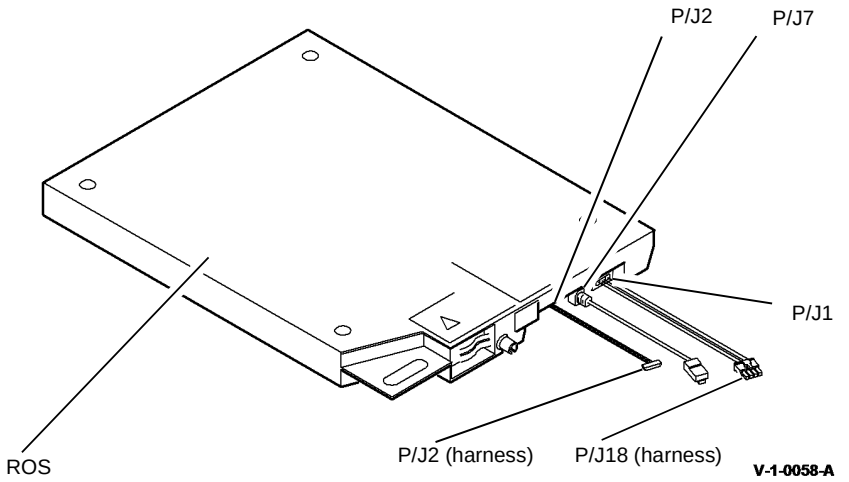


Figure 3 Component Location

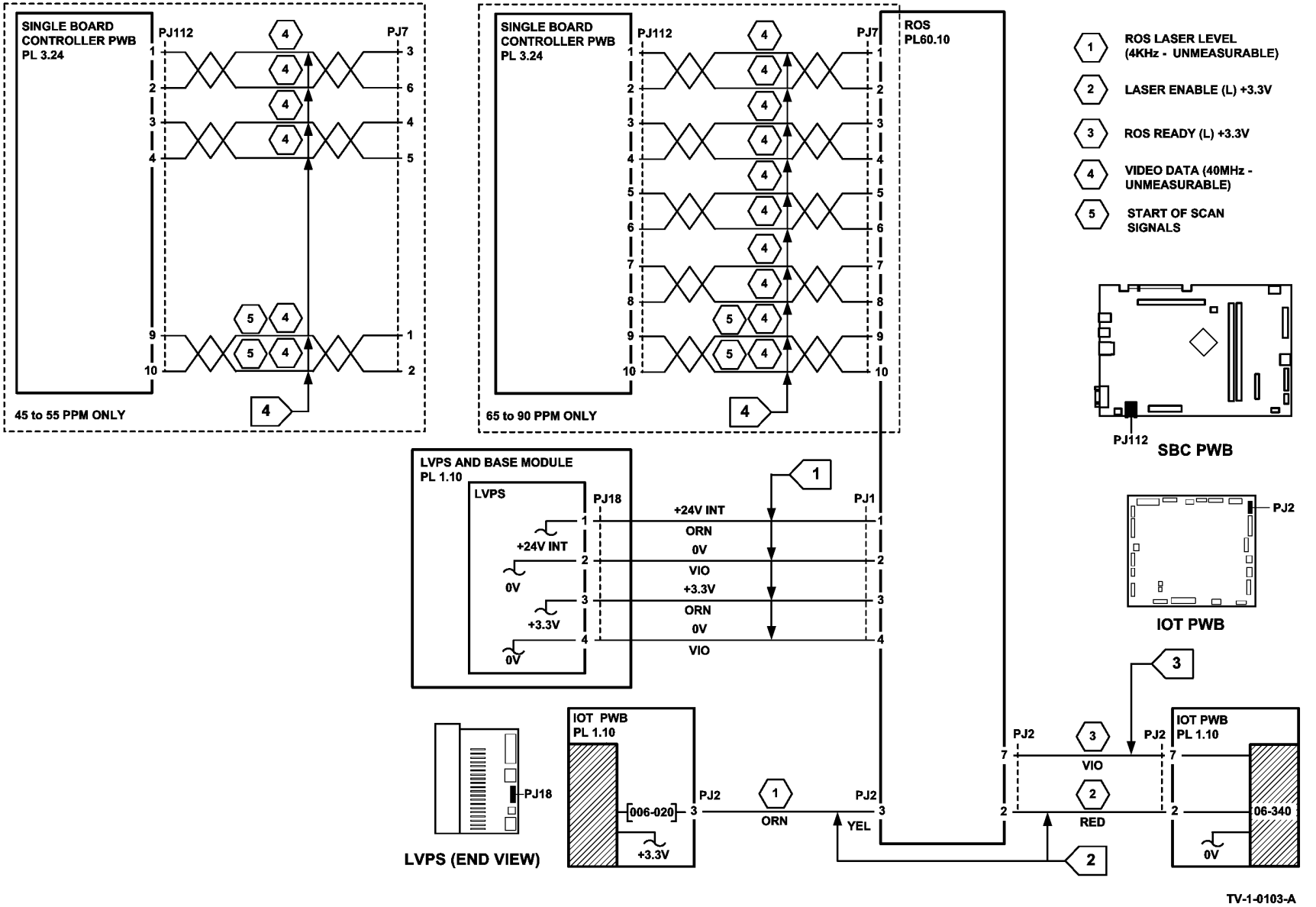


Figure 4 Circuit diagram

361-350-00 ROS Laser Not Under Control RAP

361-350-00 The IOT monitor has not received a reset command from the IOT ROS controller for more than 5 seconds during print.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check the fault history file for other 303-XXX fault codes. If the 303-XXX fault codes occur randomly, the cause may be due to electrical noise. Go to the OF10 intermittent Failure RAP.

Procedure

1. Ensure all the P/Js on the IOT PWB, PL 1.10 Item 2 are correctly and securely connected.
2. Perform the OF7 IOT PWB Diagnostics RAP.
3. Reload the software set, GP 4, Machine Software.

   NOTE: *The supply harness is a flying lead that is a part of the LVPS and is not spared separately.*

4. Go to Flag 1. Check the voltages. As necessary, refer to:
   - 301G +24V Distribution RAP.
   - 301F +12V Distribution RAP.
   - 301E +5V Distribution RAP.
   - 301D +3.3V Distribution RAP.
   - 301B 0V Distribution RAP.
5. Perform the following as necessary:
   - OF7 IOT PWB Diagnostics RAP.
   - 301L LVPS Checkout RAP.

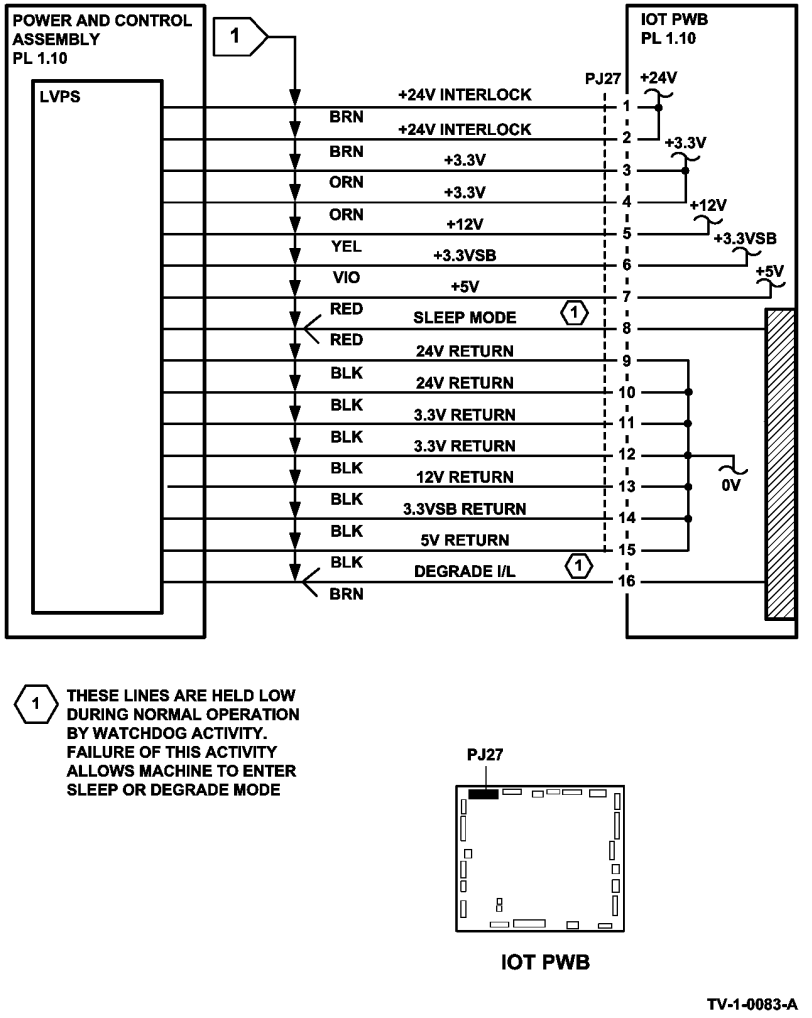


Figure 1 Circuit diagram

362-310-00 Scanner to SBC Communications Failure RAP

362-310-00 A communication failure has occurred between the Scanner and the SBC.

Initial Actions

- Switch off, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Go to Flag 1. Disconnect then check the SBC PWB/Scanner PWB data cable and connectors P/J411 on the scanner PWB and P/J250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

Y **N**

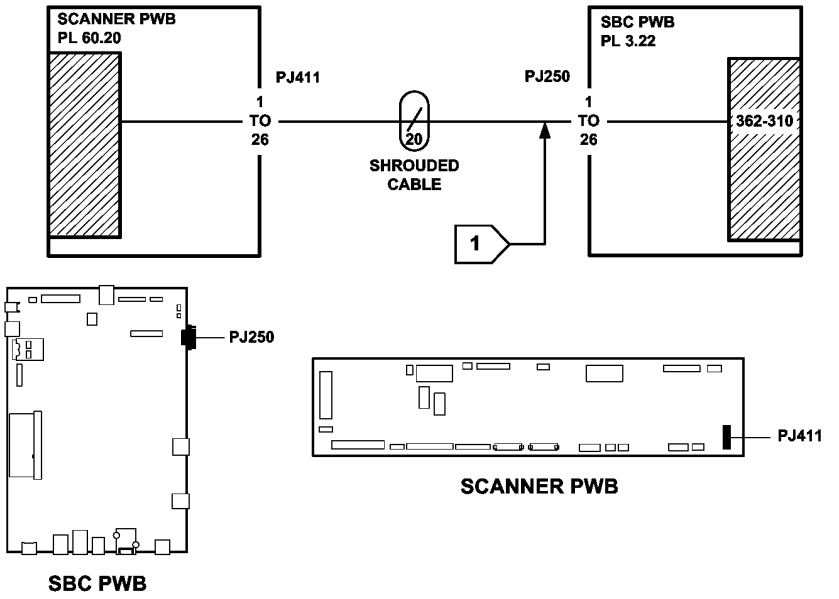
Clean the connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Perform the following actions:

- Install a new SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Install a new scanner PWB, PL 60.20 Item 4.
- The 303D SBC PWB Diagnostics RAP.



TV-1-0368-B

Figure 2 Circuit diagram

362-399-00 SPDH to Scanner Data Cable Failure RAP

362-310-00 A cable failure has occurred between the SPDH and the Scanner.

Initial Actions

- Switch off, then switch on the machine, GP 14.

Procedure

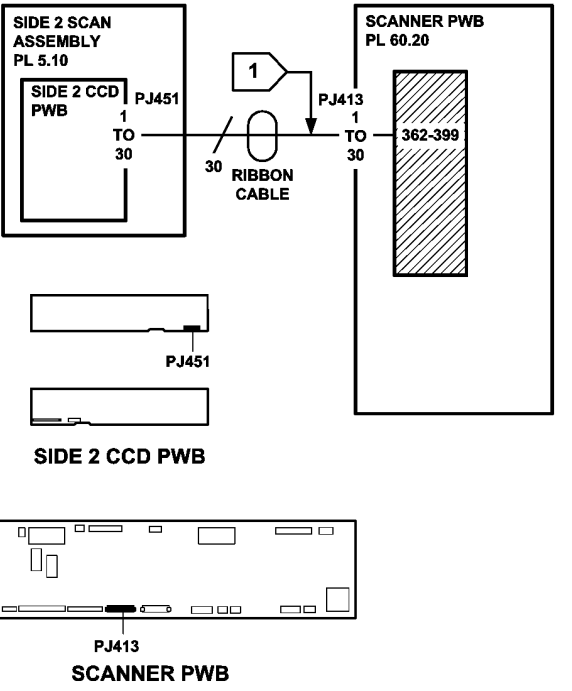
WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Figure 1 ESD symbol



TV-1-0373-A

Figure 2 Circuit diagram

Go to Flag 1. Disconnect and check the ribbon cable and connectors P/J451 on the side 2 scan assembly and P/J413 on the scanner PWB. **The ribbon cable and connectors are clean and undamaged.**

Y N

Clean or repair the ribbon cable or connectors. Install new components as necessary:

- Side 2 scan assembly data ribbon cable, PL 5.10 Item 16.
- Scanner PWB, PL 60.20 Item 4.
- Side 2 scan assembly, PL 60.30 Item 1.

Re-install the ribbon cable, then check the operation of the machine. **The fault remains.**

Y N

Perform SCP 5 Final Actions.

Install new components as necessary:

- Side 2 scan assembly data ribbon cable, PL 5.10 Item 16.
- Scanner PWB, PL 60.20 Item 4.
- Side 2 scan assembly, PL 60.30 Item 1.

362-450-00 to 362-472-00, 362-781-00 Scanner Calibration Faults RAP

362-450-00 Dark range status bit is not clear prior to calibration.

362-451-00 Dark range status bit is not set after calibration.

362-452-00 Pixel offset status bit is not clear prior to calibration.

362-453-00 Pixel offset status bit is not set after calibration.

362-454-00 Gain range status bit is not clear prior to calibration.

362-455-00 Gain range status bit is not set after calibration.

362-456-00 Pixel gain status bit is not clear prior to calibration.

362-457-00 Pixel gain status bit is not set after calibration.

362-458-00 Highest intensity image pixel value exceeds maximum tolerance.

362-459-00 Pixel offset error (Hi) exceeds maximum adjustment allowed during dark calibration.

362-460-00 Pixel offset error (Lo) exceeds maximum adjustment allowed during dark calibration.

362-461-00 Highest intensity image pixel value is lower than the minimum tolerance.

362-462-00 Pixel gain error (Hi) exceeds maximum adjustment allowed during white calibration.

362-463-00 Pixel gain error (L0) exceeds maximum adjustment allowed during white calibration.

362-464-00 The scanner is requested to perform another operation while busy.

362-466-00 Pixels out of range during black calibration.

362-467-00 Pixels out of range during white calibration.

362-468-00 Pixel clock error from the full width array.

362-469-00 Calibration ASIC comms. error with m/c.

362-470-00 Unable to read the registers in the calibration ASIC.

362-471-00 Calibration ASIC write buffer is full.

362-472-00 Calibration ASIC comms. time-out.

362-781-00 IIT Remote NVM out of range.

Initial Actions

Switch off the machine, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration. **The fault persists.**

N

Go to SCP 5 Final Actions.

Go to Flag 1, disconnect then check the scan carriage ribbon cable and connectors P/J445 on the scanner CCD BWB and P/J412 on the scanner PWB. Figure 1. **The ribbon cable and connectors are clean and undamaged.**

N

Clean or repair the ribbon cable or connectors, if necessary install new components:

- Scan carriage data ribbon cable, PL 60.20 Item 17.
- Scan carriage assembly, PL 60.20 Item 1.
- Scanner PWB, PL 60.20 Item 4.

Reconnect the P/J445 to P/J412 scan carriage data ribbon cable. Go to Flag 2, disconnect then check the SBC PWB/Scanner PWB data cable and connectors, P/J411 on the scanner PWB and PJ250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

N

Clean or repair the cable connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Perform dC301 scanner system NVM initialization, then ADJ 60.5 IIT Registration, Magnification and Calibration. If the problem continues reload the software using the AltBoot Software Loading Procedure, go to GP 4 Machine Software.

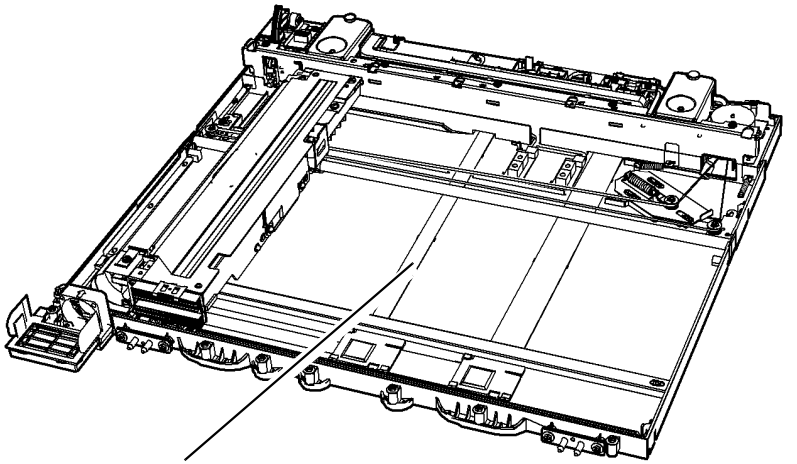


Figure 2 Component location

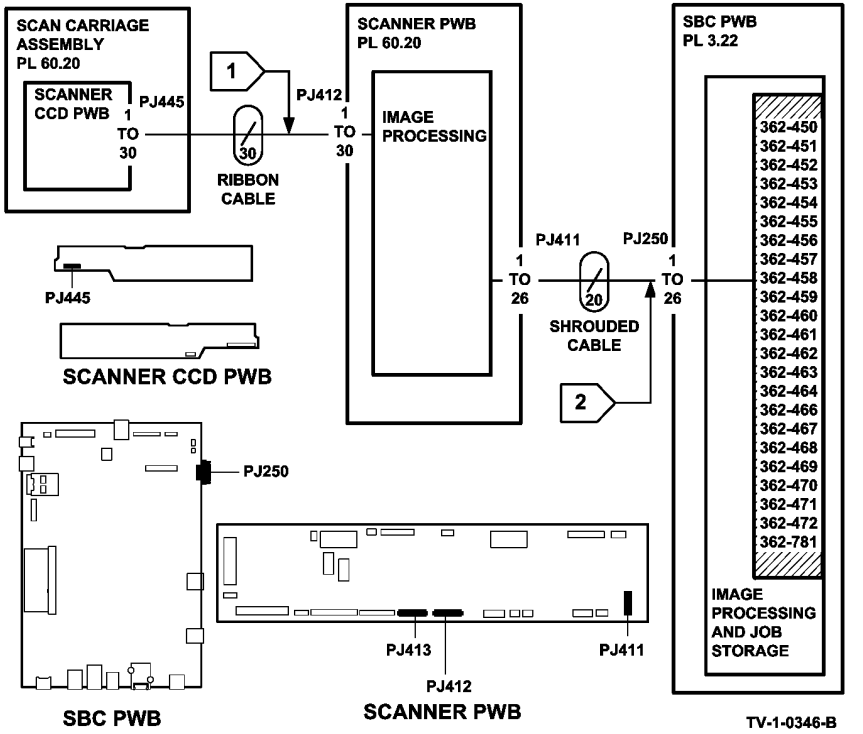


Figure 3 Circuit diagram

362-473-00 UART RX Wrap Error RAP

362-473-00 UART RX wrap error.

Initial Actions

- Switch off, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Go to Flag 1. Disconnect then check the SBC PWB/Scanner PWB data cable and connectors P/J411 on the scanner PWB and P/J250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

Y **N**

Clean the cable connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Perform the following actions:

- Install a new SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Install a new scanner PWB, PL 60.20 Item 4.
- The 303D SBC PWB Diagnostics RAP.

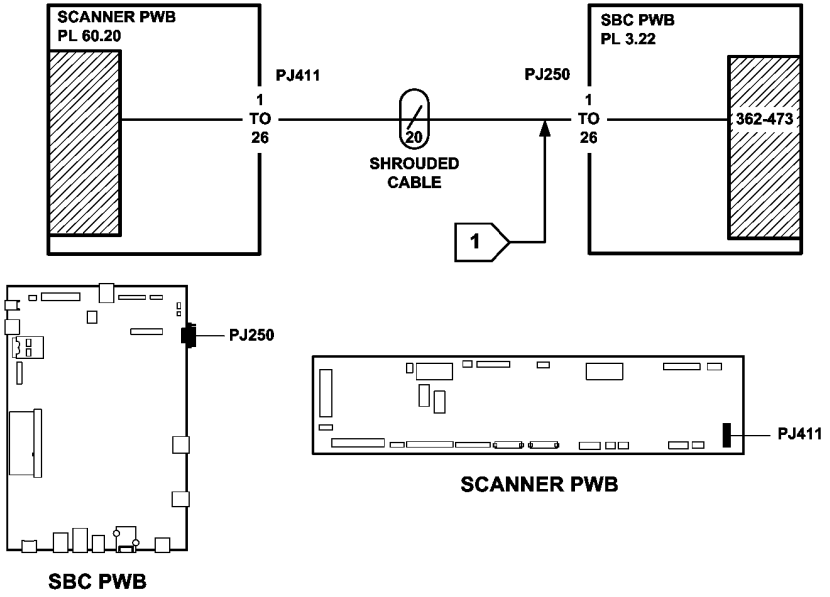


Figure 2 Circuit diagram

362-474-00, 362-475-00 Stepper Speed/Reset Error RAP

362-474-00 Stepper speed error.

362-475-00 Move before reset error.

Procedure

Perform the 362-473-00 UART RX Wrap Error RAP.

362-476-00 Scan Carriage Home Sensor RAP

362-476-00 Carriage home sensor is not cleared or made in time.

Initial Actions

- Ensure the scan carriage is unlocked, refer to REP 60.9 figure 2.
- Switch off, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Visually check the scanner carriage alignment through the document glass. **Carriage alignment is good.**

Y N

Perform REP 60.5 Scan Carriage Assembly.

Enter dC330 code 062-024 scan carriage to document size position, then cancel the code. Enter dC330 code 062-031 scan carriage to home position, then cancel the code. **The scan carriage moves to the document size position then returns to the home position.**

Y N

Check the condition and adjustment of the scan drive belt, refer to REP 60.11 Scan Carriage Drive Belt. **The scan carriage drive belt is good.**

Y N

Install a new scan carriage drive belt, PL 60.20 Item 8.

Check the scan carriage motor, MOT62-031. Refer to:

- Flag 2 and Figure 1
- GP 10, How to Check a Motor.
- P/J438, P/J420, Scanner PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Carriage motor assembly PL 60.20 Item 2.
- Scanner PWB, PL 60.20 Item 4.

Enter dC330 code 062-100 carriage home sensor, Q62-100. Stack codes 62-023 carriage home sensor test, the carriage will move into and out of the home position. **The display changes.**

Y N

Check the carriage home sensor, Q62-100, refer to:

- Flag 1 and Figure 1
- GP 11, How to Check a Sensor.
- P/J439, P/J420, Scanner PWB.
- 301D +3.3V Distribution RAP.

A

A

- 301B 0V Distribution RAP.

Install new components as necessary:

- Carriage home sensor, Q62-100, PL 60.20 Item 7.
- Scanner PWB, PL 60.20 Item 4

Perform SCP 4 Final Actions.

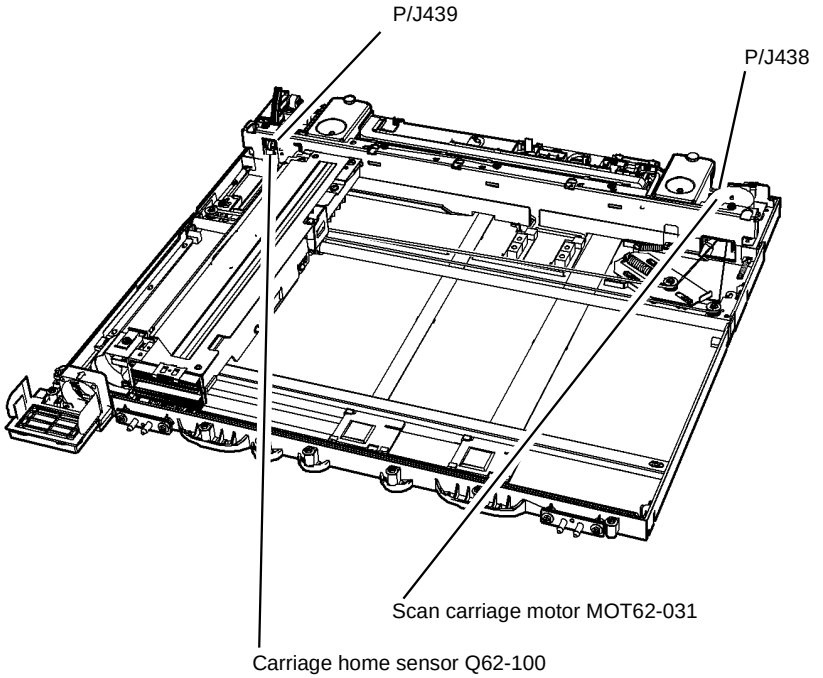


Figure 1 Component location

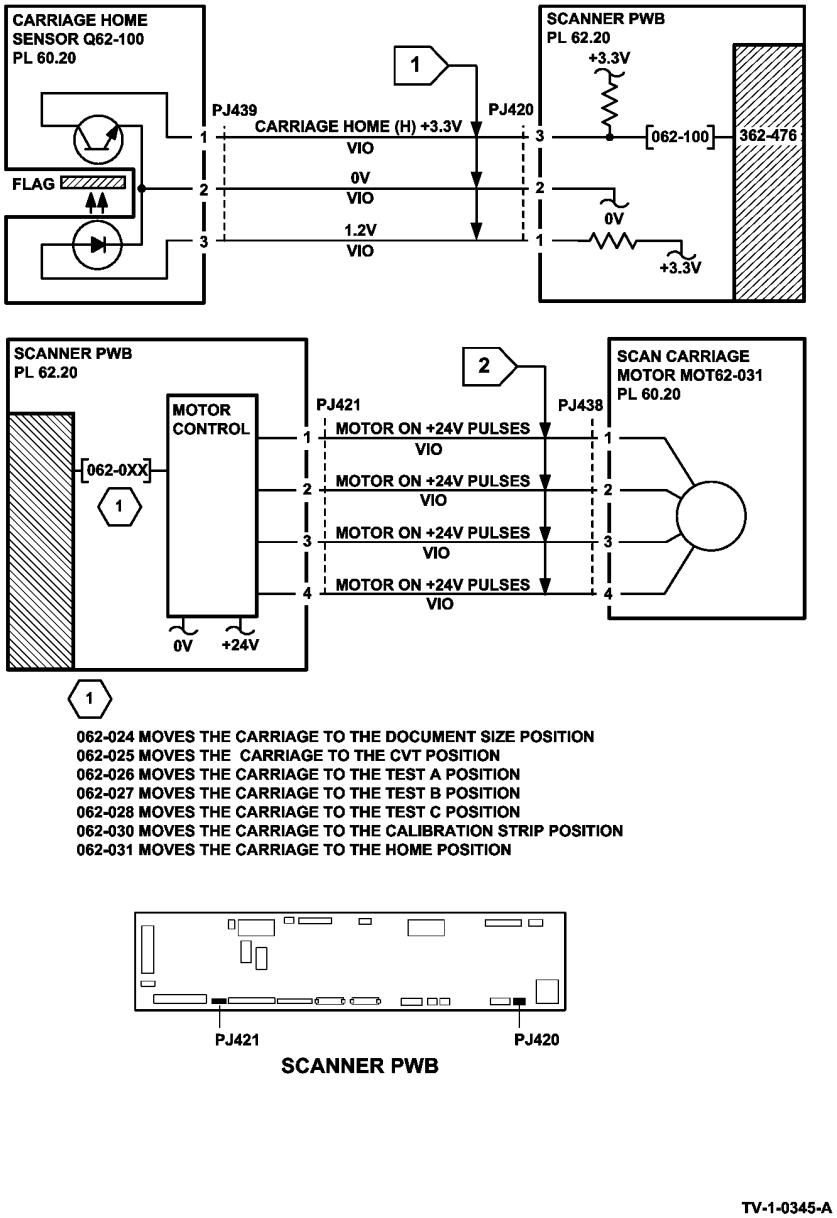


Figure 2 Circuit diagram

362-477-00 to 362-481-00, 362-782-00, 362-785-0, 362-786-00 Timing Errors RAP

362-477-00 Stepper busy error.

362-478-00 Real time error.

362-479-00 Page synchronization error.

362-480-00 Initialize time error.

362-481-00 DADH client time-out.

362-782-00 IIT Remote NVM read time-out.

362-785-00 Taurus 2 capability retry.

362-786-00 Taurus 2 capability time-out.

Procedure

Perform the 362-473-00 UART RX Wrap Error RAP.

362-484-00 Apps Code Not Present RAP

362-484-00 Apps code not present.

Procedure

Perform the 362-473-00 UART RX Wrap Error RAP.

362-485-00 +12V Supply Error RAP

362-485-00 +12V supply error.

Initial Actions

- Switch off, then switch on the machine, GP 14.

Procedure

If the fault is still present, perform the 301F +12V Distribution RAP. Check the +12V supply to the scanner PWB.

362-486-00 +24V Supply Error RAP

362-486-00 +24V supply error.

Initial Actions

- Switch off, then switch on the machine, GP 14.

Procedure

If the fault is still present, perform the 301G +24V Distribution RAP. Check the +24V supply to the scanner PWB.

362-487-00 System Phase Lock Loop (PLL) Error RAP

362-487-00 System phase lock loop (PLL) error.

Procedure

Perform the 362-473-00 UART RX Wrap Error RAP.

362-490-00, 362-491-00 Data Steerer Error RAP

362-490-00 A side 1 data steerer error has been found during the transfer of data between the scanner PWB and the SBC PWB.

362-491-00 A side 1 data steerer TX error has been found during the transfer of data between the scanner PWB and the SBC PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14. **The fault still remains**

Y **N**

The faults returns after less than 1000 copies/prints have been made.

Y **N**

Go to SCP 5 Final actions.

Install a new scanner PWB, PL 60.20 Item 4.

Install a new scanner PWB, PL 60.20 Item 4.

362-777-00, 362-778-00 Motor Communications Failure RAP

62-777-00 A motor communication failure has occurred.

362-778-00 A motor client failure has occurred.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to Flag 1. Disconnect and check the harness and connectors P/J417 on the SPDH PWB and P/J460 on the scanner PWB. **The harness and connectors are good.**

Y **N**

Clean or repair the harness and connectors. Install new components as necessary:

- SPDH PWB, PL 5.10 Item 5.
- Scanner PWB, PL 60.20 Item 4.

Switch off the machine, then switch on the machine, GP 14. **The fault still remains**

Y **N**

Go to SCP 5 Final actions.

Perform the following actions:

- Install a new SPDH PWB, PL 5.10 Item 5.
- Install a new scanner PWB, PL 60.20 Item 4.

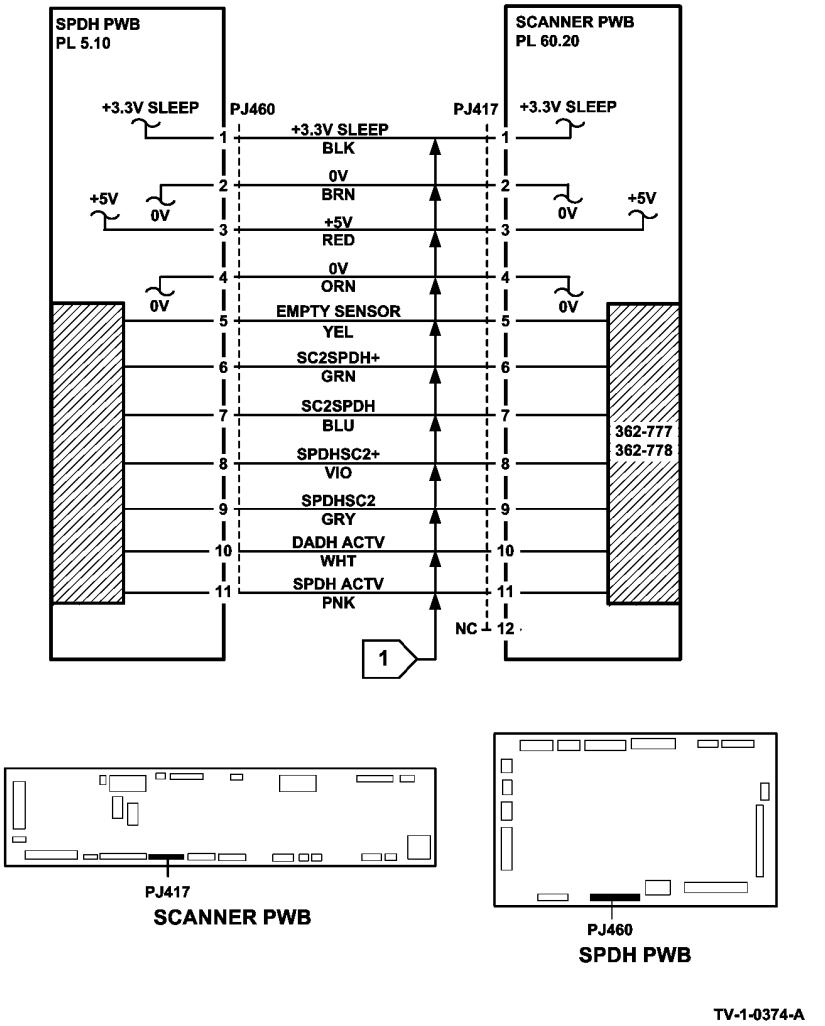


Figure 1 Circuit diagram

362-779-00, 362-780-00 Scanner Software Upgrade Error RAP

362-779-00 FPGA not loaded. FPGA has corrupted image or hasn't been loaded.

362-780-00 FPGA CRC error. FPGA has corrupted image or hasn't been loaded.

Procedure

Perform the 395-150-00 to 395-156-00, 395-170-00 Scanner Software Upgrade Errors RAP.

362-783-00, 366-783-00 SPDH Hotline Error RAP

362-783-00 SPDH side 1 hotline error.

366-783-00 SPDH side 2 hotline error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to RAP GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Figure 1 ESD symbol

Switch off the machine, then switch on the machine, GP 14. **The fault is still present.**

Y **N**

Perform SCP 5 Final Actions.

Re-load the software set, GP 4 Machine Software. **The fault is still present.**

Y **N**

Perform SCP 5 Final Actions.

Go to Flag 1. Disconnect then check the harness and connectors P/J460 on the SPDH PWB and P/J417 on the scanner PWB. **The harness and connectors are good.**

Y **N**

Repair the harness and connectors, REP 1.2. Install new components as necessary:

- SPDH PWB, PL 5.10 Item 5
- Scanner PWB, PL 60.20 Item 6

Re-install the harness, then check the operation of the machine. **The fault is still present.**

Y **N**

Perform SCP 5 Final Actions.

Go to Flag 2. Disconnect then check the harness and connectors P/J410 on the scanner PWB and P/J140 on the power distribution PWB. **The harness and connectors are good.**

Y N

Repair the harness and connectors, REP 1.2. Install new components as necessary:

- Scanner PWB, PL 60.20 Item 6
- Power distribution PWB, PL 3.22 Item 1

Re-install the harness, then check the operation of the machine. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Go to Flag 3. Disconnect then check the harness and connectors P/J141 on the power distribution PWB and P/J266 on the SBC PWB. **The harness and connectors are good.**

Y N

Repair the harness and connectors REP 1.2. Install new components as necessary:

- SBC PWB, PL 3.22 Item 3
- Power distribution PWB, PL 3.22 Item 1

Re-install the harness, then check the operation of the machine. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Go to the 305A Document Size Sensors RAP and check document size sensor 1 and document size sensor 2. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Check the appropriate sensor:

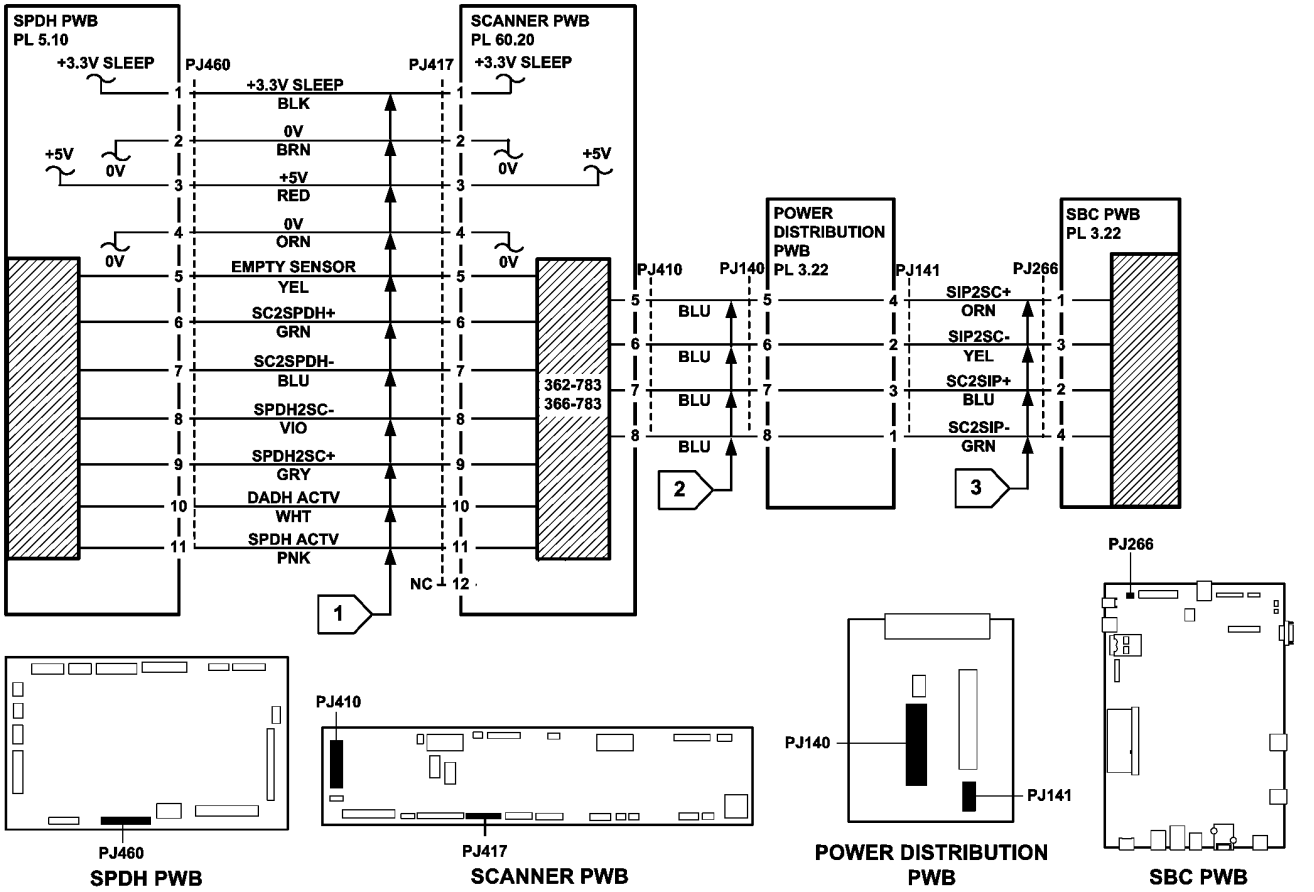
- For 362-783-00 faults check the reg sensor. Perform the RAP 305-340-00, 305-341-00 SPDH Reg Sensor Failure.
- For 366-783-00 faults check the side 2 reg sensor. Perform the RAP 305-342-00, 305-343-00 SPDH Side 2 Reg Sensor Failure.

The fault is fixed.

Y N

Perform 303D SBC PWB Diagnostics RAP.

Perform SCP 5 Final Actions.



TV-1-0379-A

Figure 2 Circuit diagram

362-784-00 Platen Hotline Error RAP

362-784-00 Platen hotline error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to RAP GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Figure 1 ESD symbol

Switch off the machine, then switch on the machine, GP 14. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Re-load the software set, GP 4 Machine Software. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Go to Flag 1. Disconnect then check the harness and connectors, P/J410 on the scanner PWB and P/J140 on the power distribution PWB. **The harness and connectors are good.**

Y N

Repair the harness and connectors REP 1.2. Install new components as necessary:

- Scanner PWB, PL 60.20 Item 6
- Power distribution PWB, PL 3.22 Item 1

Re-install the harness, then check the operation of the machine. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Go to Flag 2. Disconnect then check the harness and connectors, P/J141on the power distribution PWB and P/J266 on the SBC PWB. **The harness and connectors are good.**

Y N

Repair the harness and connectors REP 1.2. Install new components as necessary:

- Scanner PWB, PL 60.20 Item 6

A

A

- Power distribution PWB, PL 3.22 Item 1

Re-install the harness, then check the operation of the machine. **The fault is still present.**

Y N

Perform SCP 5 Final Actions.

Go to the 362A Side 1 Scanning Document Size RAP and check document size sensor 1 and document size sensor 2. **The fault is fixed.**

Y N

Go to the 362A Scan Carriage Position RAP and check the carriage home sensor. **The fault is fixed.**

Y N

Install new components as necessary:

- Scanner PWB, PL 60.20 Item 6
- Power distribution PWB, PL 3.22 Item 1
- SBC PWB, PL 3.22 Item 3

The fault is fixed.

Y N

Perform 303D SBC PWB Diagnostics RAP.

Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

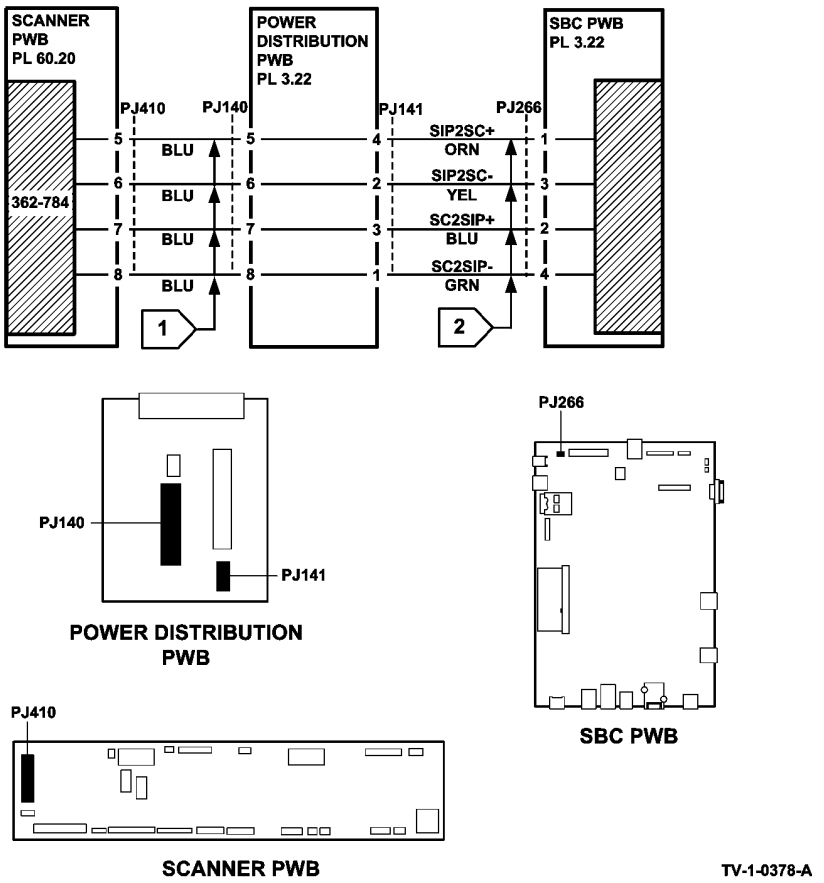


Figure 2 Circuit diagram

362-960-00 LED Fan Lock Alarm RAP

362-960-00 The cooling fan is not rotating.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Remove the scanner module top cover assembly, PL 60.15 Item 2. Hold the top cover interlock switch closed. Enter dC330 code 062-029 to run the cooling fan, MOT62-029. **MOT62-029 runs.**

Y N

Go to Figure 1 and Flag 1, check MOT62-029.

Refer to:

- GP 10 How to Check a Motor
- P/J424
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Cooling fan, PL 60.15 Item 6
- Scanner PWB, PL 60.20 Item 4

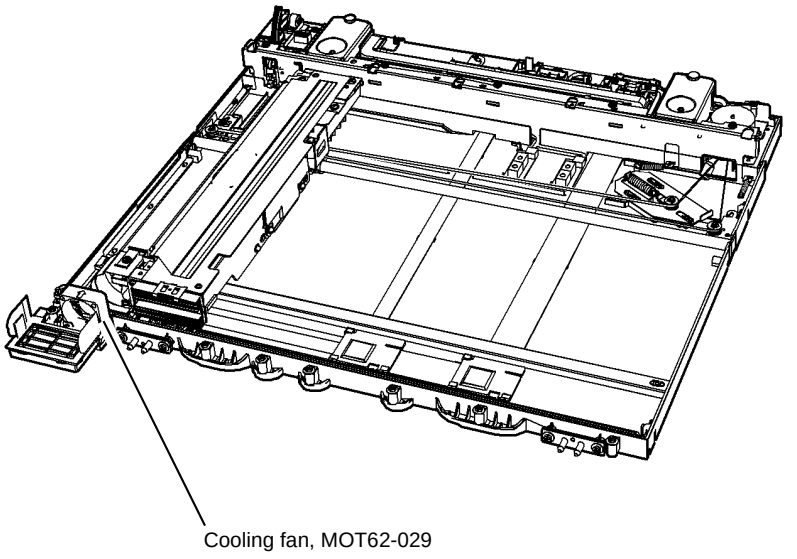
Stack the dC330 code 062-034 to check the cooling fan lock alarm. **The display reads high.**

Y N

Switch off the machine, then switch on the machine. If the fault remains, install new parts:

- Cooling fan, PL 60.15 Item 6
- Scanner PWB, PL 60.20 Item 4

Install a new cooling fan, PL 60.15 Item 6.



V-1-1671-A

Figure 1 Component location

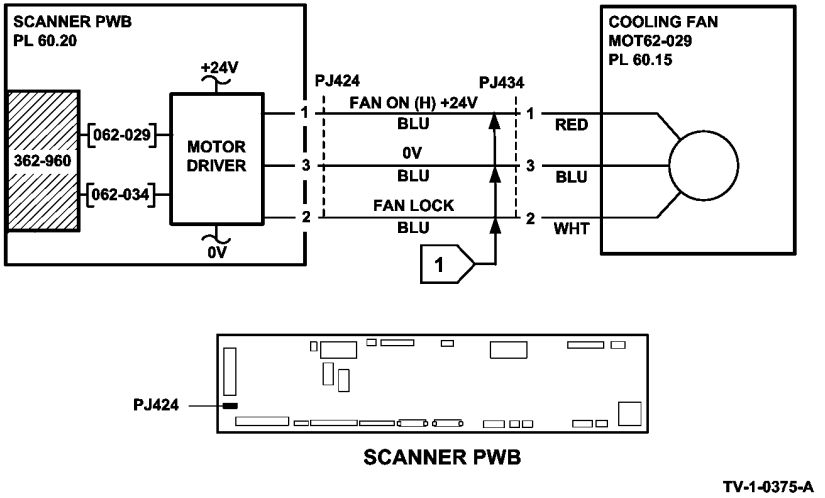


Figure 2 Circuit diagram

362A Side 1 Scanning Document Size RAP

The side 1 scanner has encountered a document that is larger than expected.

The side 1 scanner has encountered a document of unknown size.

The side 1 document size sensors have incorrectly determined the size of the document.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check that the input module angle sensor actuator is not damaged. If necessary install a new input module angle sensor actuator, PL 60.20 Item 12.

Enter dC330 code 062-301 SPDH angle sensor Q62-301, actuate the sensor. **The display changes.**

Y N

Check the SPDH angle sensor, Q62-301, refer to:

- Flag 1 and Figure 1
- GP 11, How to Check a Sensor
- P/J423, Scanner PWB
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- SPDH angle sensor, PL 60.20 Item 7
- Scanner PWB, PL 60.20 Item 4

Enter dC330 code 062-019 SPDH platen down sensor Q62-019, actuate the sensor. **The display changes.**

Y N

Check the SPDH platen down sensor Q62-019, refer to:

- Flag 2 and Figure 1
- GP 11, How to Check a Sensor
- P/J423, Scanner PWB
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- SPDH platen down sensor, PL 60.20 Item 7
- Scanner PWB, PL 60.20 Item 4

Raise the SPDH. Enter dC330 code 062-251 document size sensor 1, Q62-251. Actuate the sensor by placing a piece of paper on the document glass above the sensor. **The display changes.**

Y N

Check the document size sensor 1, Q62-251, refer to:

- Flag 3 and Figure 1
- GP 11, How to Check a Sensor
- P/J422, Scanner PWB
- 301E +5V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Document size sensor 1, Q62-251, PL 60.20 Item 3
- Scanner PWB, PL 60.20 Item 4

Enter dC330 code 062-253 document size sensor 2, Q62-253. Actuate the sensor by placing a piece of paper on the document glass above the sensor. **The display changes.**

Y N

Check the document size sensor 2, Q62-253, refer to:

- Flag 4 and Figure 1
- GP 11, How to Check a Sensor
- P/J422, Scanner PWB
- 301E +5V Distribution RAP
- 301B 0V Distribution RAP

Install new components as necessary:

- Document size sensor 2, Q62-253, PL 60.20 Item 3
- Scanner PWB, PL 60.20 Item 4

Go to Flag 5. Disconnect then check the SBC PWB/Scanner PWB data cable and connectors P/J411 on the scanner PWB and P/J250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

Y N

Clean or the connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

If the problem continues, reload the software using the AltBoot Software Loading Procedure, go to GP 4 Machine Software.

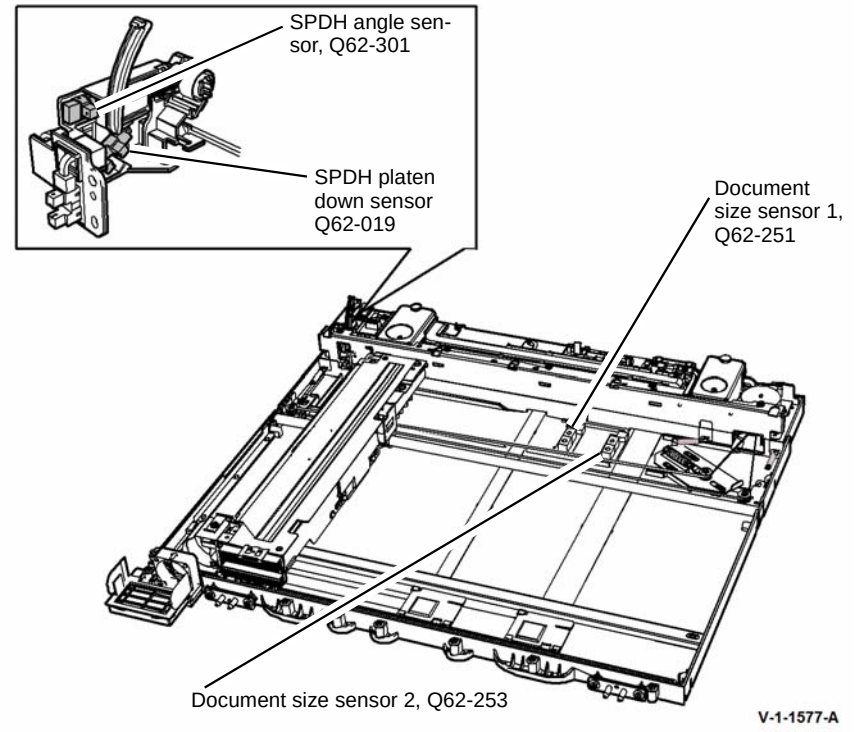


Figure 1 Component location

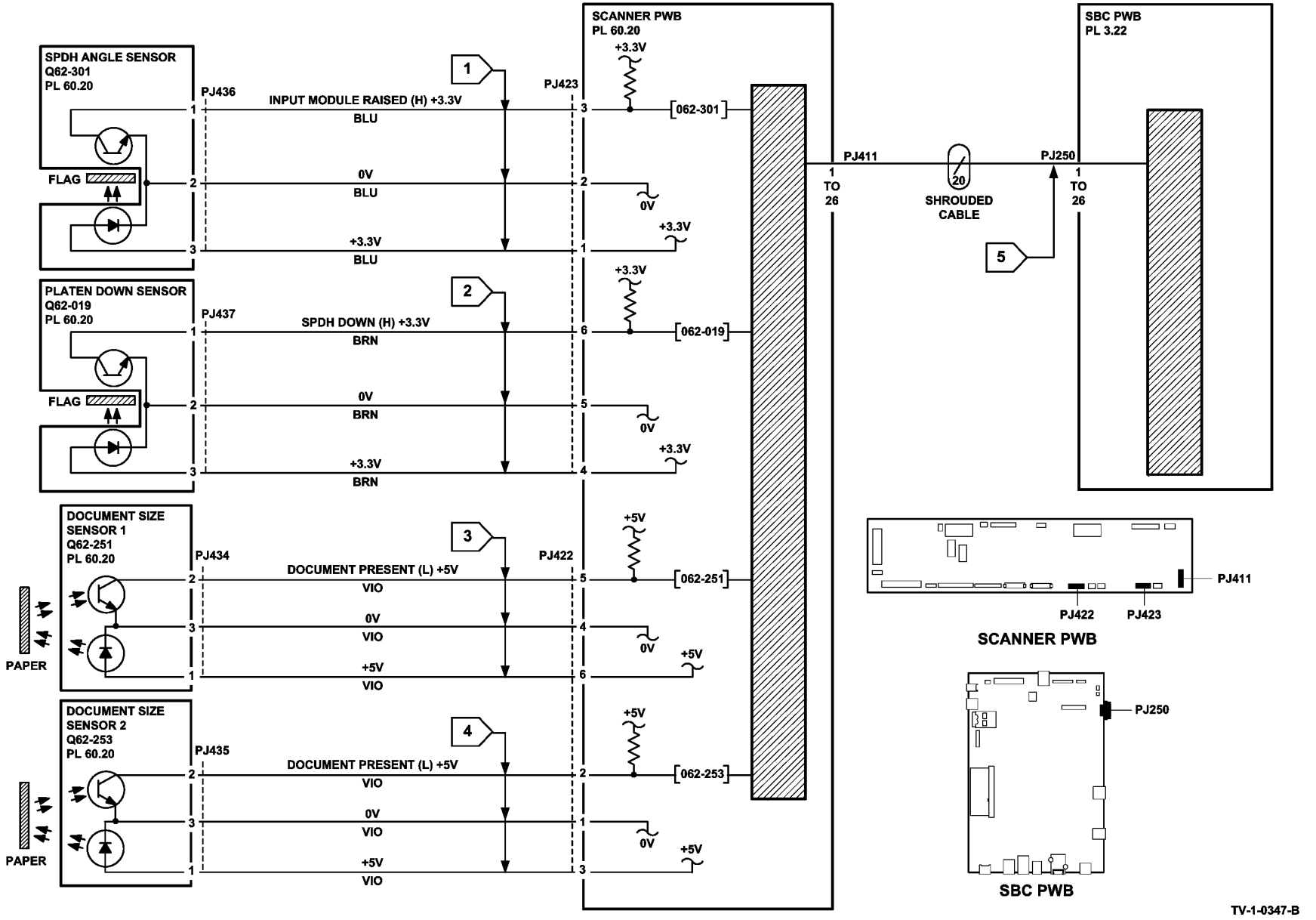


Figure 2 Circuit diagram

362B Side 1 Exposure Lamp Failure RAP

The side 1 exposure lamp fails to illuminate.

The side 1 exposure lamp does not illuminate consistently throughout the scanning process.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Open the SPDH. Enter the dC330 code 062-002, platen exposure lamp. **The LED lamp assembly in the scan carriage assembly, Figure 1, illuminates.**

Y N

Go to Flag 4. **+24V is available at P/J447 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Go to Flag 1. **+24V is available at P/J410 between pins 19 and 20, pins 21 and 22, pins 23 and 24, pins 25 and 26, also pins 27 and 28.**

Y N

+24V is available at P/J140 between pins 19 and 20, pins 21 and 22, pins 23 and 24, pins 25 and 26, also pins 27 and 28.

Y N

Refer to the 301B 0V Distribution RAP and the 301G +24V Distribution RAP to fix the fault.

Check and repair the harness and connectors between P/J140 on the power distribution PWB and P/J410 on the scanner PWB, REP 1.2.

Go to Flag 1 and Flag 2, disconnect, check and clean if necessary, then reconnect P/J410, P/J416 and P/J446. **+24V is now available at P/J447 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Install new components as necessary:

- Scan carriage power ribbon cable, PL 60.20 Item 10
- Scanner CCD PWB, PL 60.25 Item 4
- Scanner PWB, PL 60.20 Item 6

Go to Flag 4. **+24V is available at P/J448 between pin 6 and pin 4, also between pin 5 and pin 3.**

Y N

Check and repair the wiring and connectors between P/J447 and P/J448, REP 1.2.

Go to Flag 5, check the wiring and connectors between P/J449 and P/J450. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors as necessary. REP 1.2.

A B C

A B C

Go to Flag 3, check both ends of the scan carriage data ribbon cable are clean and securely connected. **The ribbon cable connections are good.**

Y N

Clean and reconnect the ribbon cable, if necessary install a new scan carriage data ribbon cable, PL 60.20 Item 17.

Install a new scan carriage assembly, PL 60.25 Item 1.

Go to Flag 4. **+24V is available at P/J448 between pin 6 and pin 4, also between pin 5 and pin 3.**

Y N

Check and repair the wiring and connectors between P/J447 and P/J448., REP 1.2.

Go to Flag 5, check the wiring and connectors between P/J449 and P/J450. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors as necessary. REP 1.2.

Go to Flag 3, check the both ends of the scan carriage data ribbon cable are clean and securely connected. **The ribbon cable is good.**

Y N

Clean and reconnect the ribbon cable, if necessary install a new scan carriage data ribbon cable, PL 60.20 Item 17.

1. Install a new scan carriage assembly, PL 60.25 Item 1.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.
3. Perform SCP 5 Final Actions.

Go to dC612, make a print of internal test pattern 2. Make a copy of the test pattern print from the document glass. **The copy has uneven bands in the cross process direction.**

Y N

Perform SCP 5 Final Actions.

Go to Flag 3, check the both ends of the scan carriage data ribbon cable are clean and securely connected. **The ribbon cable is good.**

Y N

Clean and reconnect the ribbon cable, if necessary install a new scan carriage data ribbon cable, PL 60.20 Item 17.

Install a new scan carriage data ribbon cable, PL 60.20 Item 17.

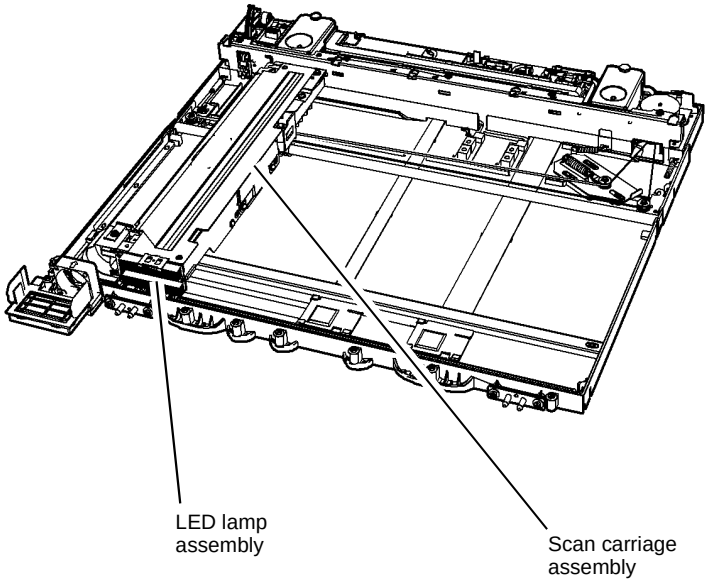


Figure 1 Component location

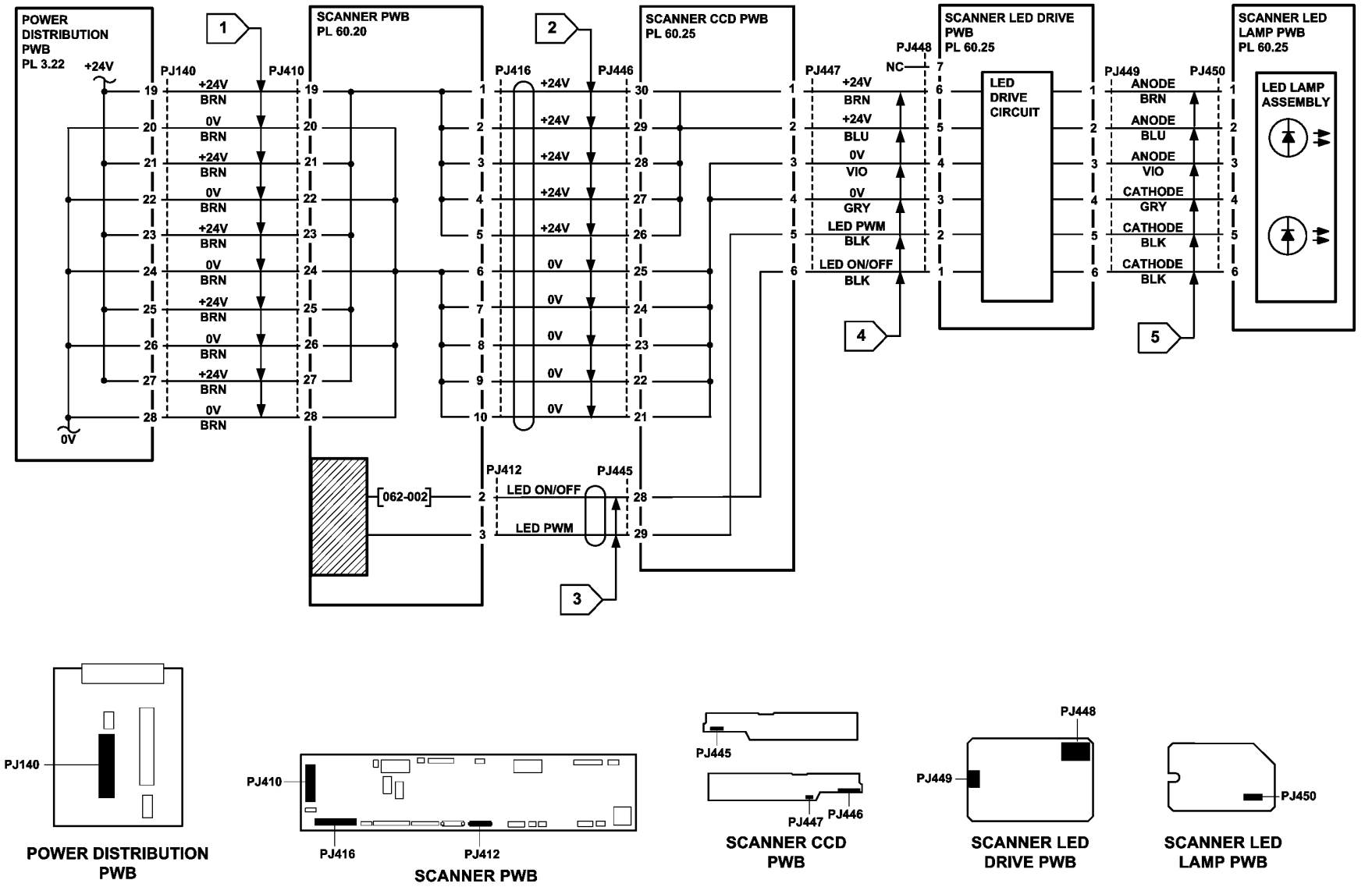


Figure 2 Circuit diagram

362C Side 2 Exposure Lamp Failure RAP

The side 2 exposure lamp fails to illuminate.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Open the SPDH.
2. Cover the document glass above the scan carriage assembly with several sheets of paper, to improve the visibility of the side 2 exposure lamp when it is lit.
3. Pull down the small green latch and lower the SPDH jam clearance guide.
4. On the UI, select 2>2 side on the 2 sided copying menu.
5. Push down and hold the SPDH angle sensor actuator, PL 60.20 Item 12.
6. Load one sheet in the SPDH input tray.
7. Look up inside the SPDH and locate the clear window of the side 2 scan assembly, it is to the right of the white strip.
8. Press start. Ignore the sheet of paper that feeds through the SPDH.

The LED lamp assembly in the side 2 scan assembly illuminates.

Y N

Go to Flag 5. **+24V is available at P/J453 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Go to Flag 1. **+24V is available at P/J410 between pins 19 and 20, pins 21 and 22, pins 23 and 24, pins 25 and 26, also pins 27 and 28.**

Y N

+24V is available at P/J140 between pins 19 and 20, pins 21 and 22, pins 23 and 24, pins 25 and 26, also pins 27 and 28.

Y N

Refer to the 301B 0V Distribution RAP and the 301G +24V Distribution RAP to fix the fault.

Check and repair the harness and connectors between P/J410 on the power distribution PWB and P/J140 on the scanner PWB, REP 1.2.

Go to Flag 1, Flag 2 and Flag 3, disconnect, check and clean if necessary, then reconnect P/J140, P/J418, P/J459, P/J458 and P/J452. **+24V is now available at P/J453 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Install new components as necessary:

- Side 2 scan assembly power ribbon cable, PL 5.10 Item 6
- Side 2 CCD PWB, PL 60.30 Item 4
- SPDH PWB, PL 5.10 Item 5
- Scanner PWB, PL 60.20 Item 6

A B C

A B C

Go to Flag 6. **+24V is available at P/J454 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Check and repair the wiring and connectors between P/J453 and P/J454, REP 1.2.

Go to Flag 7 and Flag 8, check the wiring and connectors between P/J454 and P/J455. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors as necessary, REP 1.2.

Go to Flag 4, check both ends of the side 2 scan assembly data ribbon cable are clean and securely connected. **The ribbon cable connections are good.**

Y N

Clean and reconnect the ribbon cable, if necessary, install a new side 2 scan assembly data ribbon cable, PL 5.10 Item 16.

Install a new side 2 scan assembly data ribbon cable, PL 5.10 Item 16.

Go to Flag 6. **+24V is available at P/J454 between pin 1 and pin 3, also between pin 2 and pin 4.**

Y N

Check and repair the wiring and connectors between P/J453 and P/J454, REP 1.2.

Go to Flag 7 and Flag 8, check the wiring and connectors between P/J454 and P/J455. **The wiring and connectors are good.**

Y N

Repair the wiring or connectors as necessary, REP 1.2.

Go to Flag 4, check both ends of the side 2 scan assembly data ribbon cable are clean and securely connected. **The ribbon cable connections are good.**

Y N

Clean and reconnect the ribbon cable, if necessary, install a side 2 scan assembly data ribbon cable PL 5.10 Item 16.

1. Install a new side 2 scan assembly data ribbon cable, PL 5.10 Item 16.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.
3. Perform SCP 5 Final Actions.

Perform SCP 5 Final Actions.

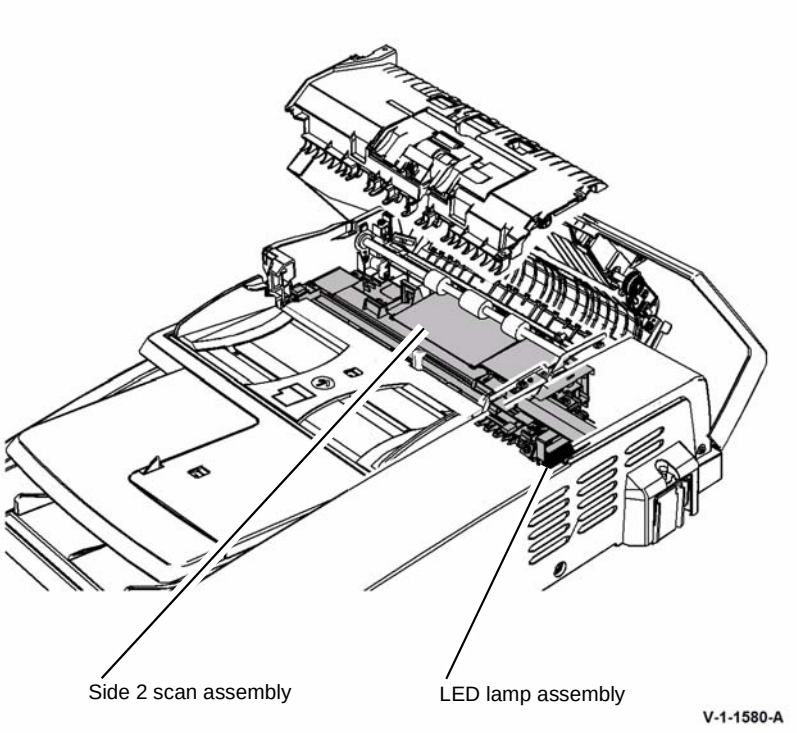


Figure 1 Component location

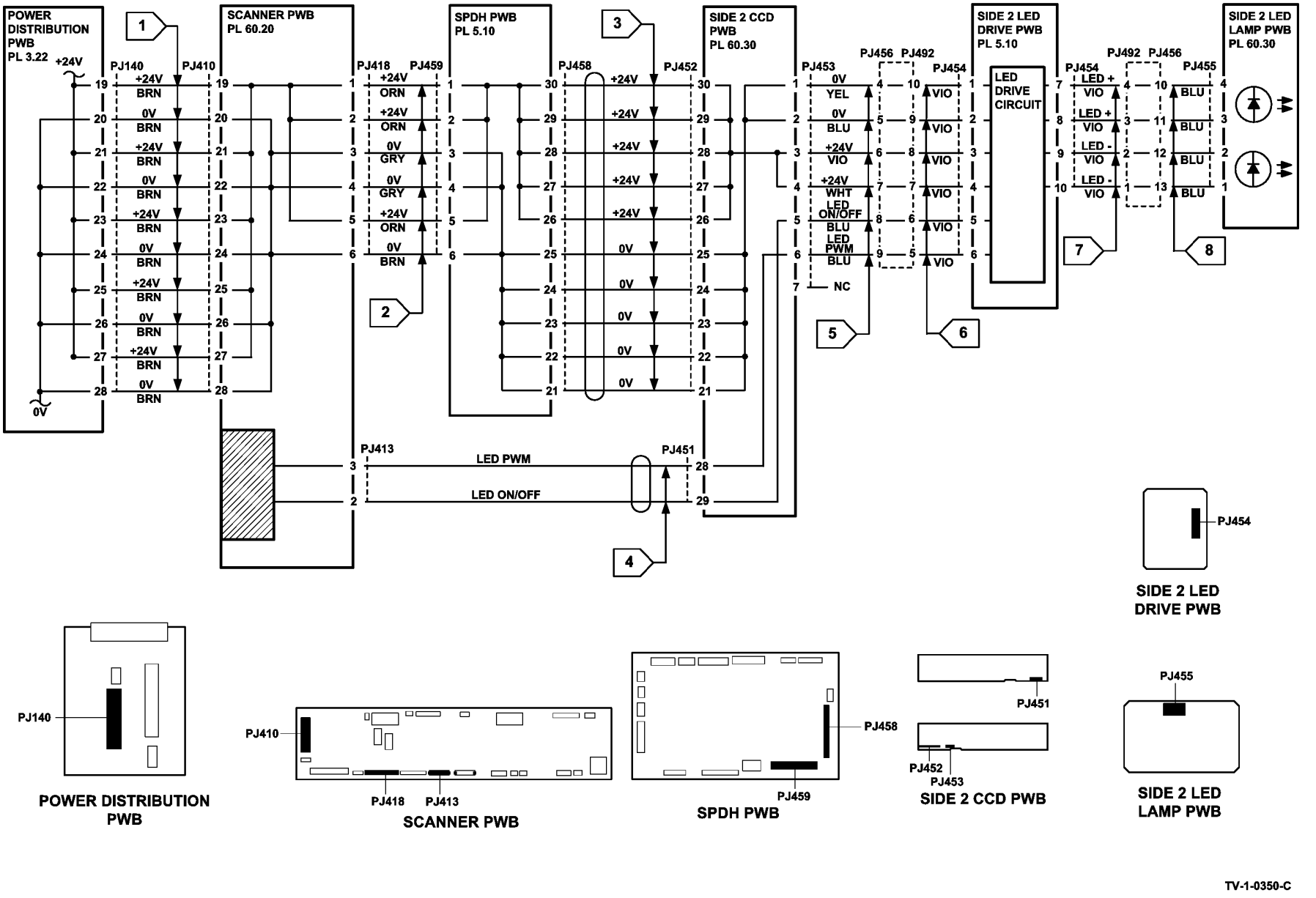


Figure 2 Circuit diagram

366-450-00 to 366-463-00, 366-466-00 to 366-468-00 SPDH Scanner Calibration Faults RAP

366-450-00 Dark range status bit is not clear prior to calibration.

366-451-00 Dark range status bit is not set after calibration.

366-452-00 Pixel offset status bit is not clear prior to calibration.

366-453-00 Pixel offset status bit is not set after calibration.

366-454-00 Gain range status bit is not clear prior to calibration.

366-455-00 Gain range status bit is not set after calibration.

366-456-00 Pixel gain status bit is not clear prior to calibration.

366-457-00 Pixel gain status bit is not set after calibration.

366-458-00 Highest Intensity image pixel value exceeds maximum tolerance.

366-459-00 Pixel error exceeds maximum adjustment allowed during dark calibration.

366-460-00 Pixel error exceeds maximum adjustment allowed during dark calibration.

366-461-00 Highest Intensity image pixel value is lower than the minimum tolerance.

366-462-00 Pixel error exceeds maximum adjustment allowed during white calibration.

366-463-00 Pixel error exceeds maximum adjustment allowed during white calibration.

366-466-00 Pixels out range during black calibration.

366-467-00 Pixels out range during white calibration.

366-468-00 Pixel clock error from the full width array.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration. **The fault is still present.**

Y **N**

Go to SCP 5 Final Actions.

Go to Flag 1, disconnect then check the Side 2 scan assembly data ribbon cable and connectors P/J451 on the side 2 CCD PWB and P/J413 on the scanner PWB. **The ribbon cable and connectors are clean and undamaged.**

Y **N**

Clean or repair the ribbon cable or connectors. Figure 2, if necessary install new components:

- Side 2 scan assembly data ribbon cable, PL 5.10 Item 16.
- Side 2 scan assembly, PL 5.10 Item 12.
- Scanner PWB, PL 60.20 Item 4.

Reconnect the P/J451 to P/J413 Side 2 scan assembly data ribbon cable. Go to Flag 2. Disconnect then check the SBC PWB/Scanner PWB data cable and connectors P/J411 on the scanner PWB and P/J250 on the SBC PWB. **The data cable and connectors are clean and undamaged.**

Y **N**

Clean or repair the cable connectors. Install new components as necessary:

- SBC PWB/Scanner PWB data cable, PL 3.22 Item 20.
- Scanner PWB, PL 60.20 Item 4.

If the fault remains, perform the 303D SBC PWB Diagnostics RAP.

Perform dC301 scanner system NVM initialization, then ADJ 60.5 IIT Registration, Magnification and Calibration. If the fault persists reload the software using the AltBoot Software Loading Procedure, go to GP 4 Machine Software.

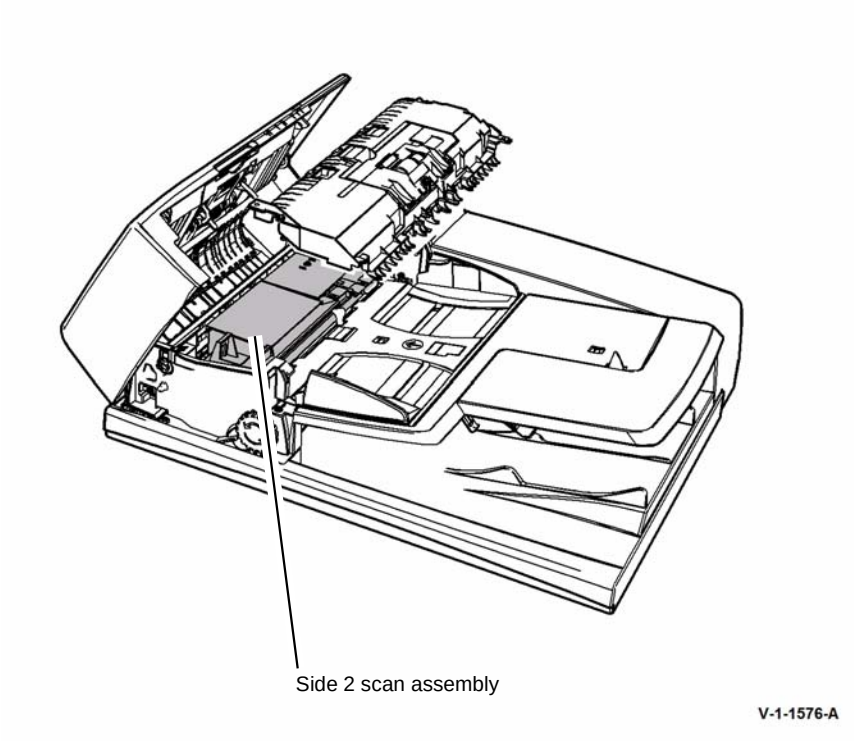


Figure 2 Component location

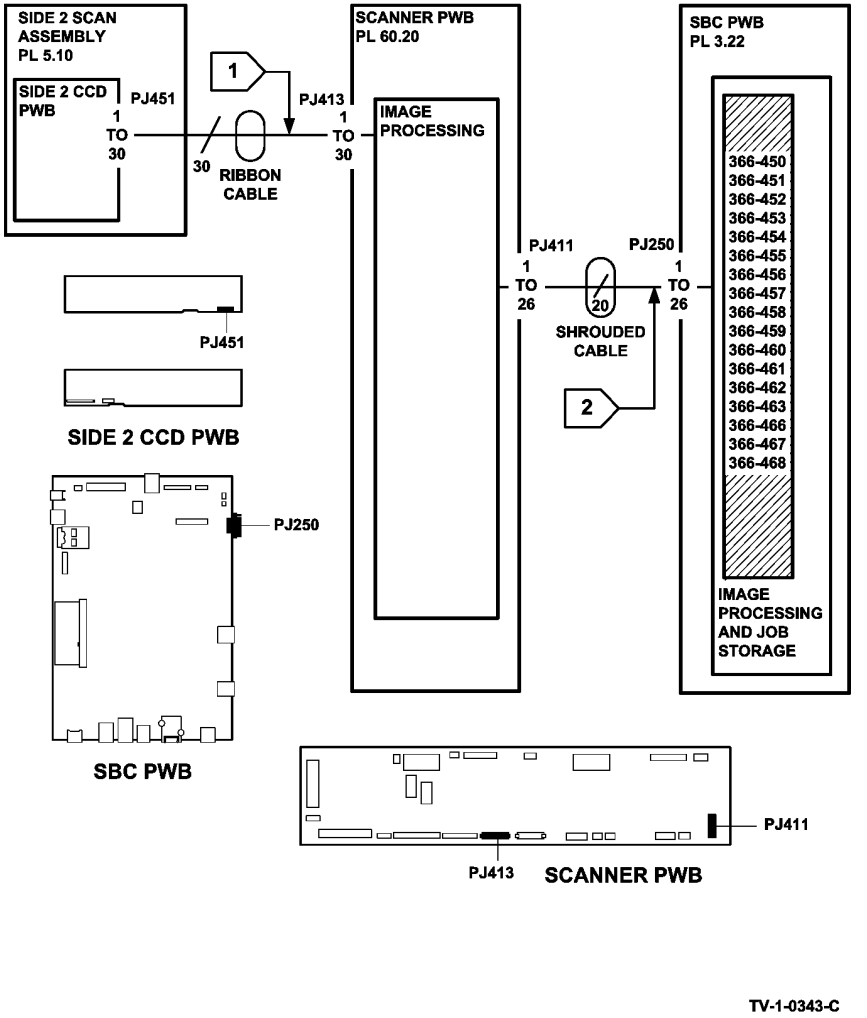


Figure 3 Circuit diagram

366-490-00, 366-491-00 Data Steerer Error RAP

366-490-00 A side 2 data steerer error has been found during the transfer of data between the scanner PWB and the SBC PWB.

366-491-00 A side 2 data steerer TX error has been found during the transfer of data between the scanner PWB and the SBC PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14. **The fault still remains**

Y **N**

The faults returns after less than 1000 copies/prints have been made.

Y **N**

Go to SCP 5 Final actions.

Install a new scanner PWB, PL 60.20 Item 4.

Install a new scanner PWB, PL 60.20 Item 4.

366-779-00, 366-780-00 SPDH Software Upgrade Error RAP

366-779-00 FPGA not loaded (side 2). FPGA has corrupted image or hasn't been loaded.

366-780-00 FPGA CRC error (side 2). FPGA has corrupted image or hasn't been loaded.

Procedure

Perform the 395-020-00, 395-022-00 SPDH Software Upgrade Errors RAP.

370A Tray Out of Service RAP

The IOT has detected a fault in the tray and determines that the tray is out of service. The following messages will be displayed.

- Tray 1 out of service.
- Tray 2 out of service.
- Tray 3 out of service.
- Tray 4 out of service.
- Tray 6 out of service.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Check that the tray elevator cables and mechanisms are located correctly.
- Check that the tray is pushed fully home.
- Check for obstructions behind the tray.
- Check the feed heads.

Procedure

Perform the following:

1. If tray 1 or tray 2 are out of service. Check the following and install new components as necessary:
   - Paper tray 1 assembly, PL 70.10 Item 26
   - Paper tray 2 assembly, PL 70.10 Item 27
   - Tray 1 and 2 paper feed assembly, PL 80.26 Item 1
2. If tray 3 or tray 4 are out of service, go to the 373B Tray 3 or Tray 4 Out of Paper RAP.
3. If tray 6 is out of service, go to the 376A Tray 6 Empty RAP.

371-100-00 Tray 1 Elevator Lift Failure RAP

371-100-00 Tray 1 stack height sensor did not actuate within the correct time after the feed / elevator motor turned on.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.
- Ensure that the tray is pushed fully home.
- Check the stack height mechanism actuator on the back of the tray, Figure 1.
- Check the drive gears and coupling on the tray.
- Check the elevator drive coupling on the feeder assembly.

Procedure

Enter dC330 code 071-330 tray 1 stack height sensor, Q71-330. Press Start. Pull out tray 1 then push fully home. **The display changes.**

Y **N**

Go to Flag 1. Check Q71-330. Refer to:

- GP 11 How to Check a Sensor.
- P/J274, Tray 1 and 2 control PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 1 stack height sensor, PL 80.26 Item 8.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

CAUTION

To prevent damage to the elevator and paper feed mechanism, the paper tray must be pulled out before MOT07-010 is run in service mode.

Enter dC330 code 071-010 tray 1 elevate motor, MOT71-010. Pull out tray 1. Press Start. **The motor runs.**

Y **N**

Go to Flag 2. Check MOT71-010. Refer to:

- GP 10 How to Check a Motor.
- P/J274, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Tray 1 elevator motor, PL 80.26 Item 6.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

A

A

Perform the following:

- Check the elevator motor drive gears, Figure 1.
- Check the tray 1 stack height mechanism on the feeder assembly,

If the fault remains, go to the 371A Tray 1 and Tray 2 Empty RAP.

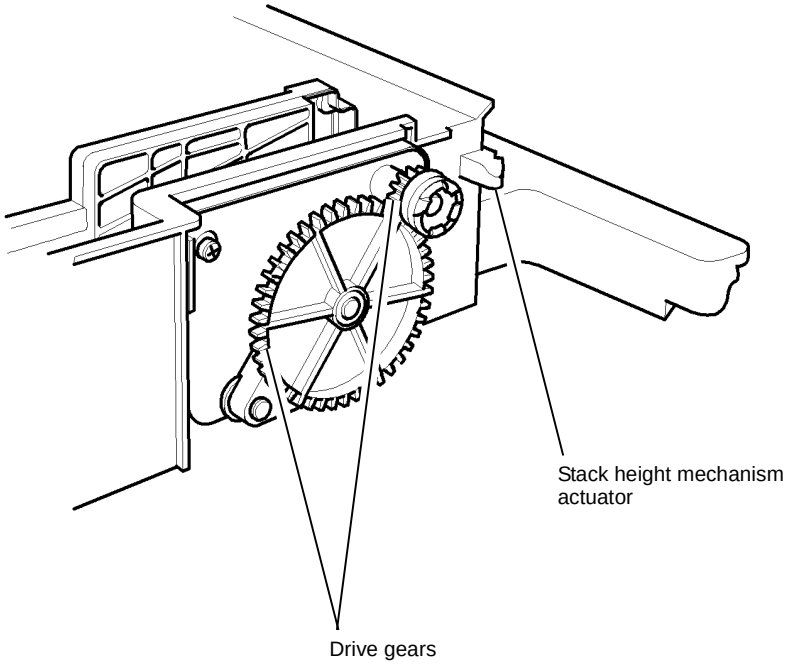


Figure 1 Component location

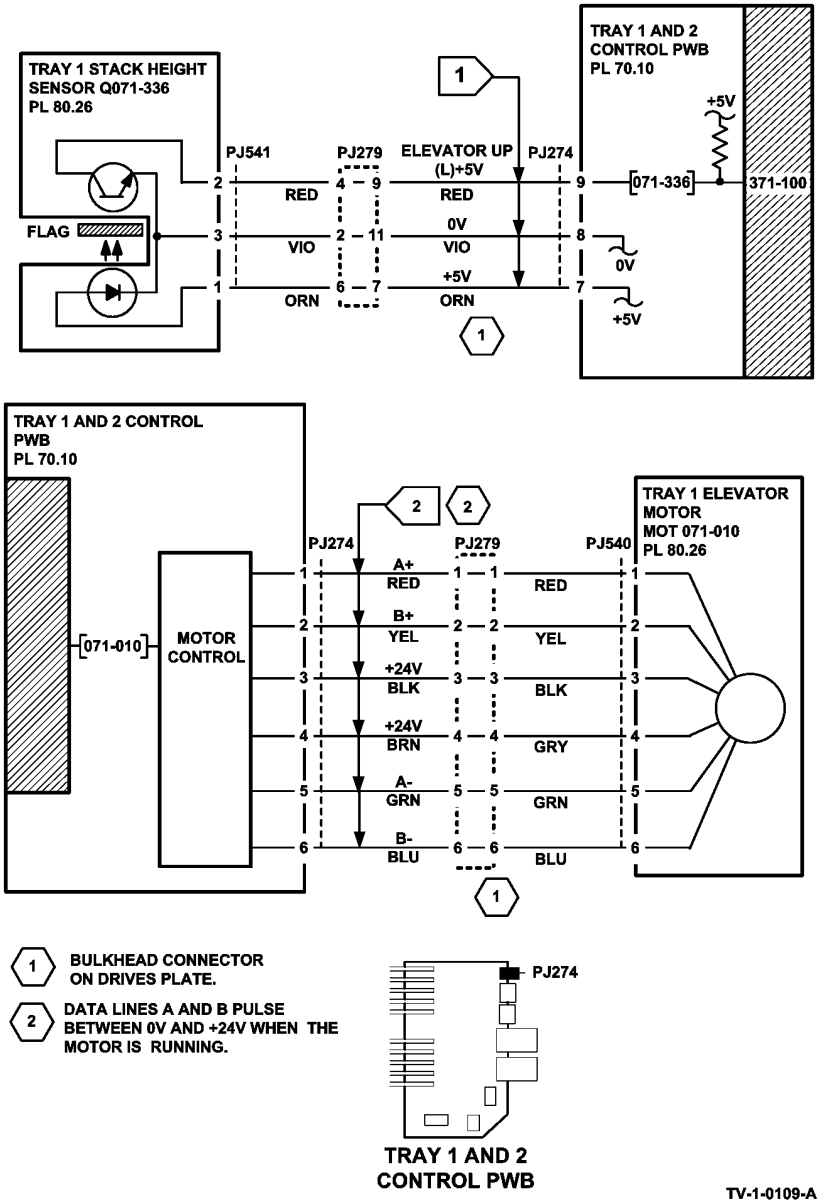


Figure 2 Circuit diagram

371-500-00 Tray 1 Open During Run RAP

371-500-00 Tray 1 was open during run when the paper is fed from tray 1.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure the tray is pushed fully home, Figure 1.
- Check for obstructions behind the tray.

Procedure

Enter dC330 code 071-300 tray 1 home switch, S71-300. Press Start. Open, then fully close the tray. **The display changes.**

Y **N**

Go to Flag 1. Check S71-300. **+5V is measured at the switch terminal on the PWB, Figure 2.**

Y **N**

Check the +5V supply. Refer to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a tray 1 and 2 control PWB, PL 70.10 Item 2.

Install a tray 1 and 2 control PWB, PL 70.10 Item 2.

Perform the following:

- Check that the paper size leaf spring is mounted correctly, PL 70.10 Item 3.
- Check the actuator cam on the paper tray, Figure 1.
- If the fault remains, install a new tray 1 and 2 control PWB, PL 70.10 Item 2.

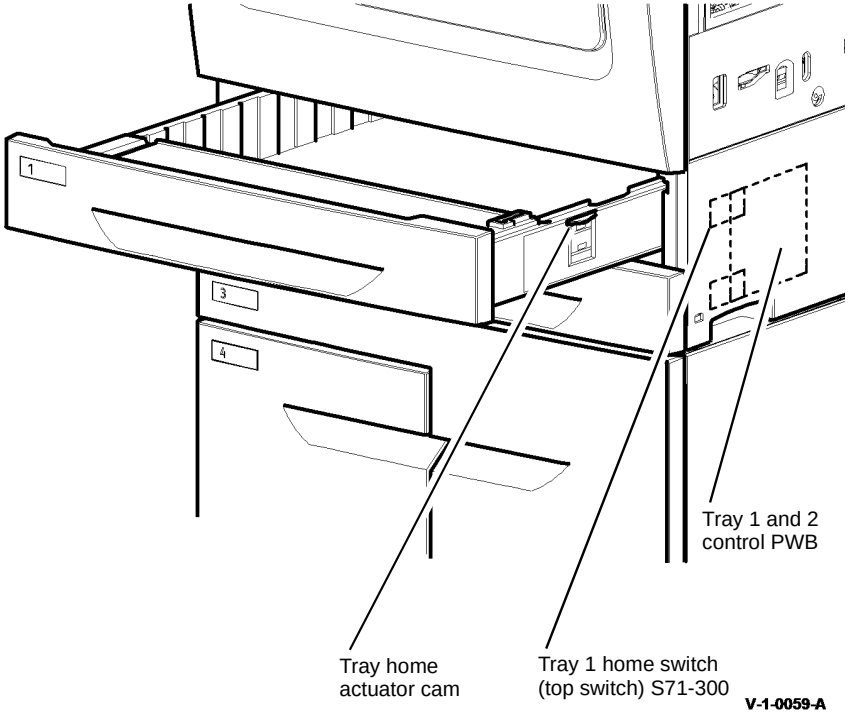
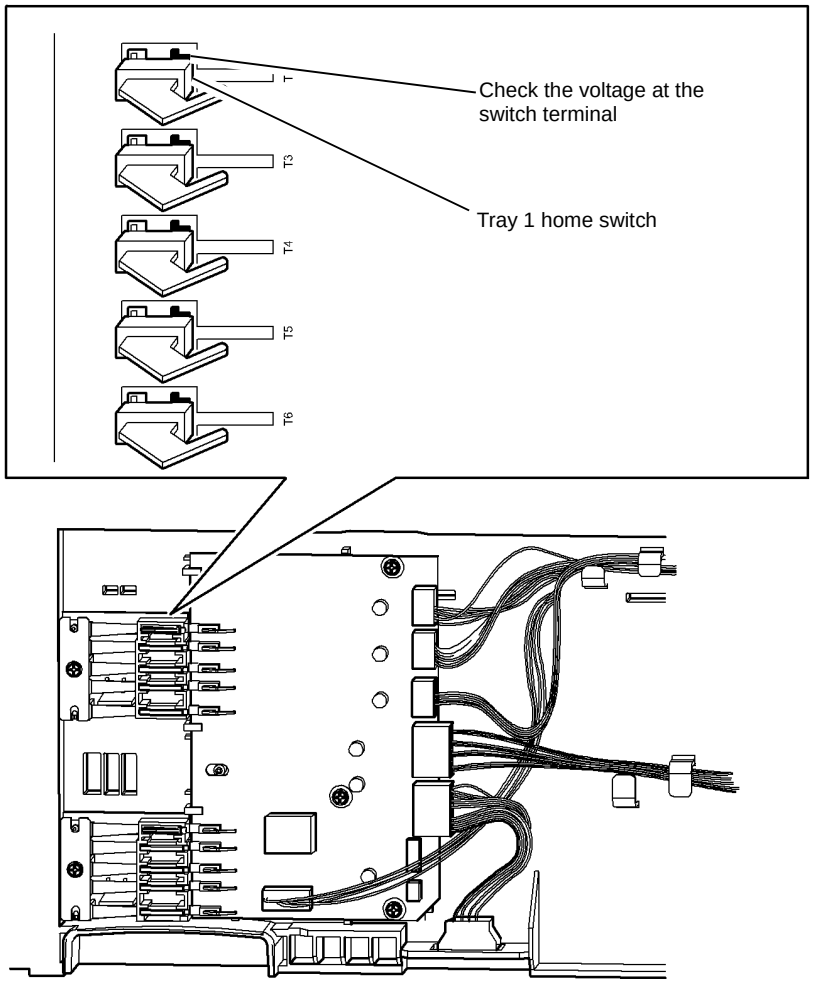
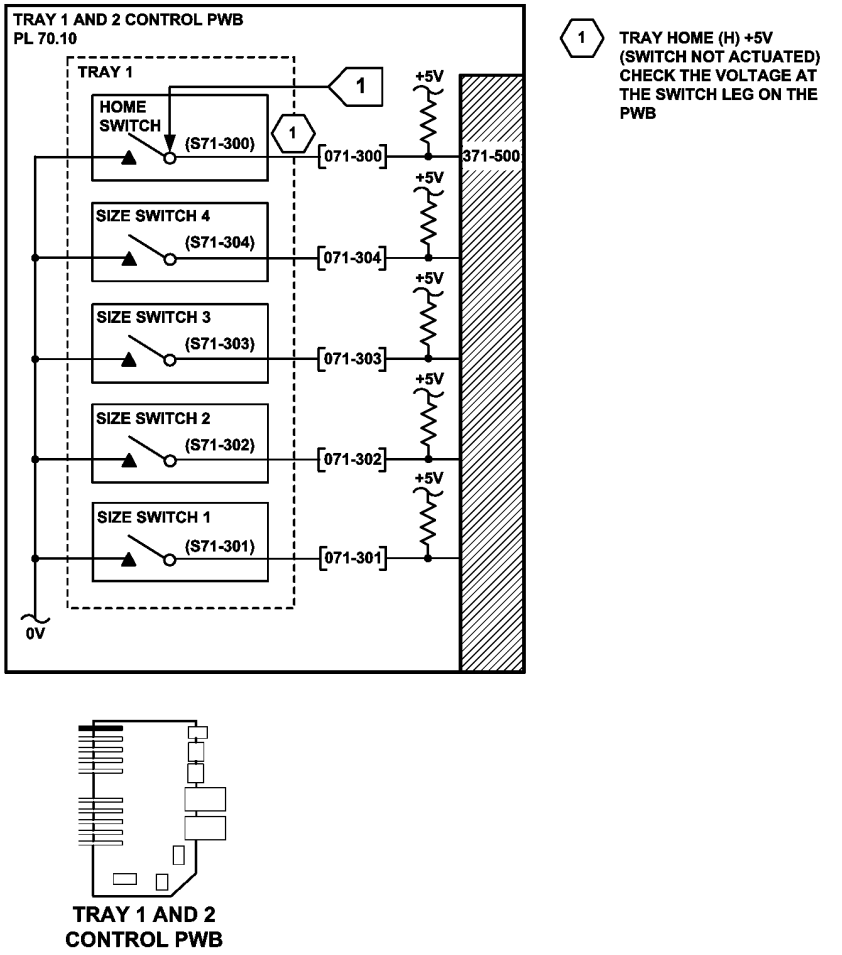


Figure 1 Component location



V-1-0060-A

Figure 2 Tray 1 home switch test point



TV-1-0104-A

Figure 3 Circuit diagram

371A Tray 1 and Tray 2 Empty RAP

Use this RAP when an incorrect tray 1 or tray 2 out of paper message is displayed.

NOTE: *Tray 1 and tray 2 feed mechanisms are identical.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Pull out the relevant tray. Enter dC330, then the relevant code:

- Code 071-320 for the tray 1 empty sensor, Q71-320.
- Code 072-320 for the tray 2 empty sensor, Q72-320.

Press start. Manually actuate the tray empty sensor, Figure 1. **The display changes.**

Y **N**

For tray 1, go to Flag 1. Check Q71-320. For tray 2, go to Flag 2. Check Q72-320. Refer to:

- GP 11 How to Check a Sensor.
- Tray 1 P/J274, Tray 1 and 2 control PWB.
- Tray 2 P/J275, Tray 1 and 2 control PWB
- 301E +5 V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary.

- Tray 1 empty sensor, PL 80.26 Item 7.
- Tray 2 empty sensor, PL 80.26 Item 7.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Perform the following:

- Check that the sensor is free of paper dust.
- Check the paper feed assembly, PL 80.26 Item 1.

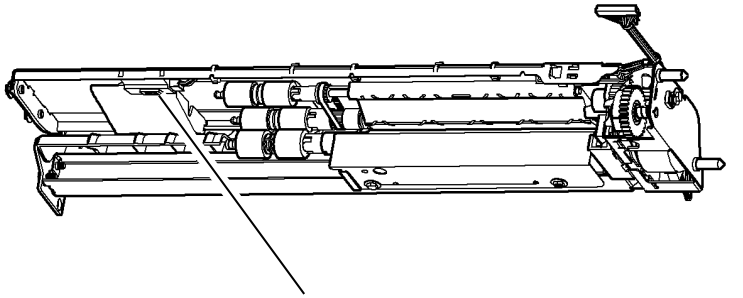


Figure 1 Component location

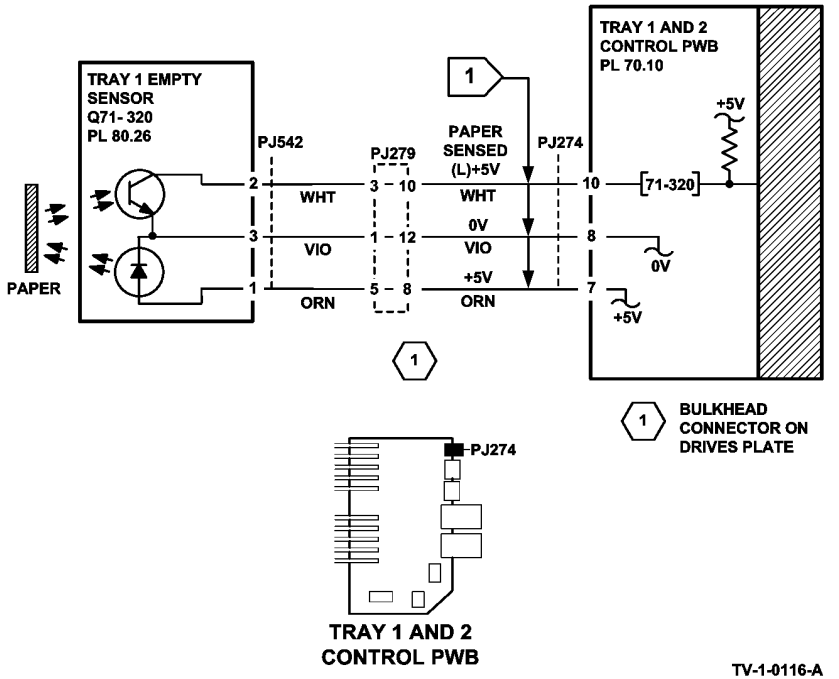


Figure 2 Tray 1 circuit diagram

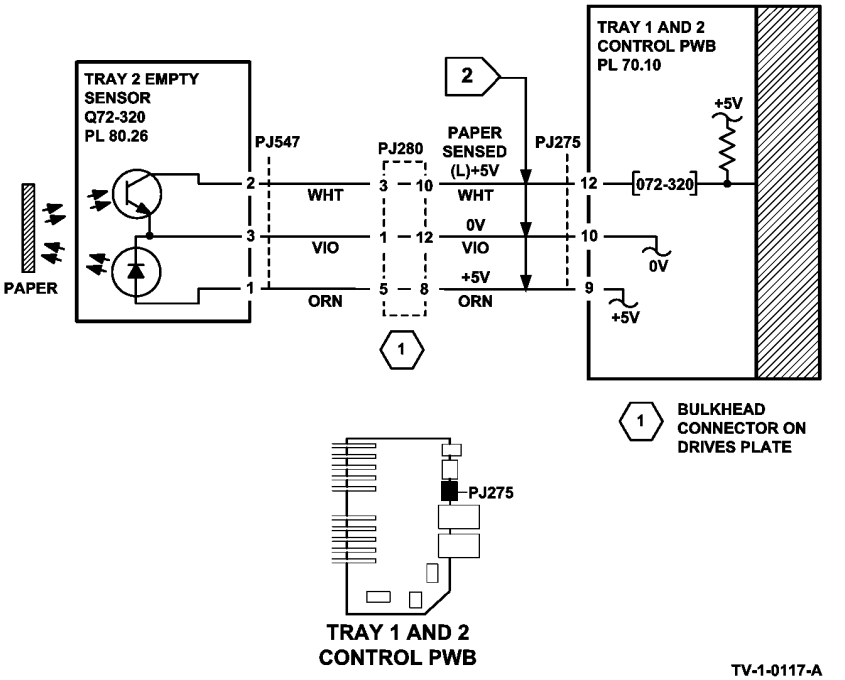


Figure 3 Tray 2 circuit diagram

371B Tray 1 and 2 Wrong Size Paper RAP

Use this RAP when the paper fed from the tray does not match the paper size indicated by the tray paper size switch. Tray 1 and tray 2 feed mechanisms are identical.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the tray paper guides are set up to the edges of the paper.
- The guides are located in the slots in the base of the tray if a standard paper size is used.
- Check the actuator ribbon on the side of the tray, Figure 1.

Procedure

Check the relevant tray:

- For tray 1, refer to Table 1. Compare the paper size in the tray to the size switches actuated.
- For tray 2, refer to Table 2. Compare the paper size in the tray to the size switches actuated.

Enter dC330 and the relevant component control codes as shown in the tables. Press Start. Manually actuate the paper size switches. **The display changes each time the switches are actuated.**

Y N

For tray 1, go to Flag 1. For tray 2, go to Flag 2. Check the relevant size switch. Refer to:

- GP 13 How to Check a Switch.
- Figure 2.
- Figure 4.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new tray 1 and 2 control PWB, PL 70.10 Item 2.

Perform the following:

- Check the relevant paper tray, PL 70.10 Item 26 or PL 70.10 Item 27.
- Check the paper size leaf spring, PL 70.10 Item 3.
- Check the relevant tray cam assembly, PL 70.10 Item 7.
- Go to dC301 NVM Initialization. Perform the copier NVM initialisation.

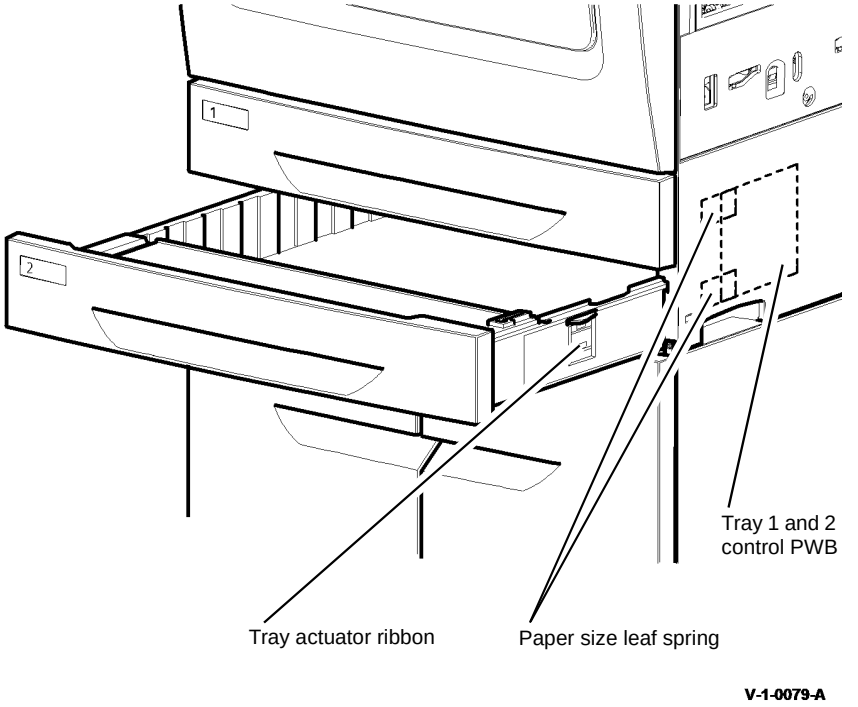
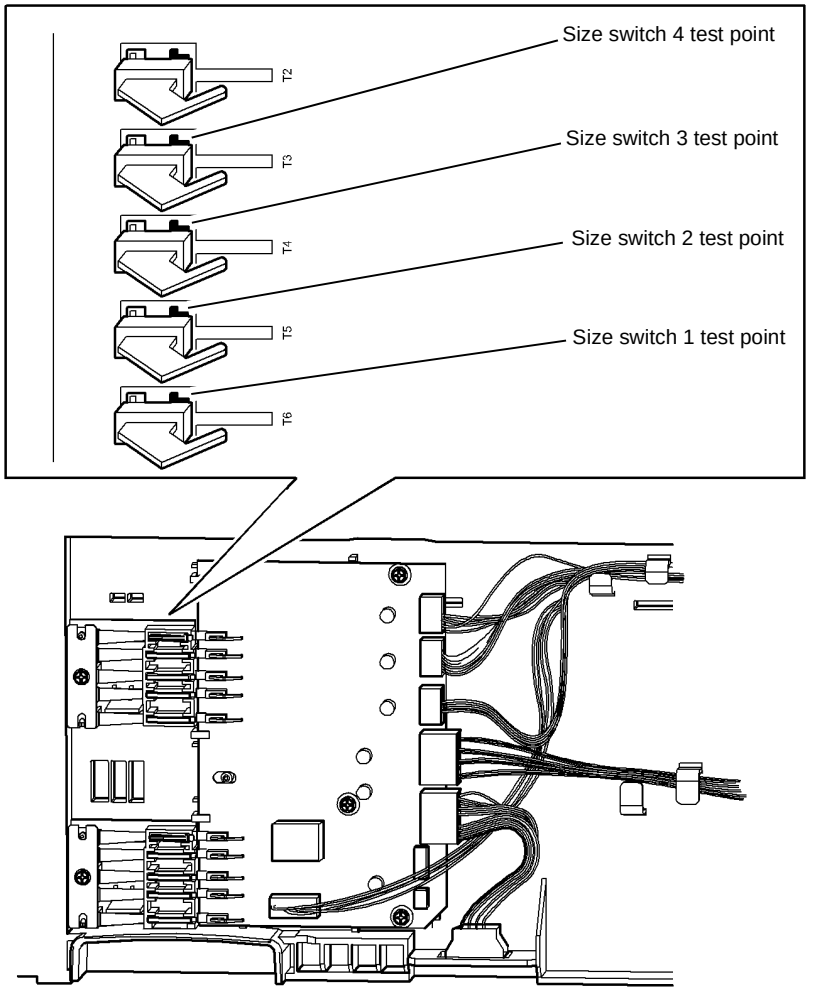


Figure 1 Component location



V-1-0080-A

Figure 2 Tray 1 size switch test points

Table 1 Tray 1 paper size table

Paper	Size switch 4 S71-304. dC330 code 071-304	Size switch 3 S71-303. dC330 code 071-303	Size switch 2 S71-302. dC330 code 071-302	Size switch 1 S71-301. dC330 code 071-301
A4 LEF	+5V	+5V	0V	+5V
A4 SEF	0V	+5V	0V	+5V
A5 LEF	0V	0V	0V	+5V
A3 SEF	+5V	0V	+5V	+5V
216 x 315mm SEF	0V	+5V	+5V	0V
216 x 330mm SEF	0V	0V	+5V	0V
8.5 x 11 LEF	0V	+5V	0V	0V
8.5 x 11 SEF	0V	0V	+5V	+5V
8.5 x 5.5 LEF	0V	+5V	+5V	+5V
11 x 17 SEF	+5V	0V	+5V	0V
8.5 x 14 SEF	+5V	+5V	0V	0V
8.5 x 12.4 SEF	0V	+5V	+5V	0V
8.5 x 13 SEF	0V	0V	+5V	0V

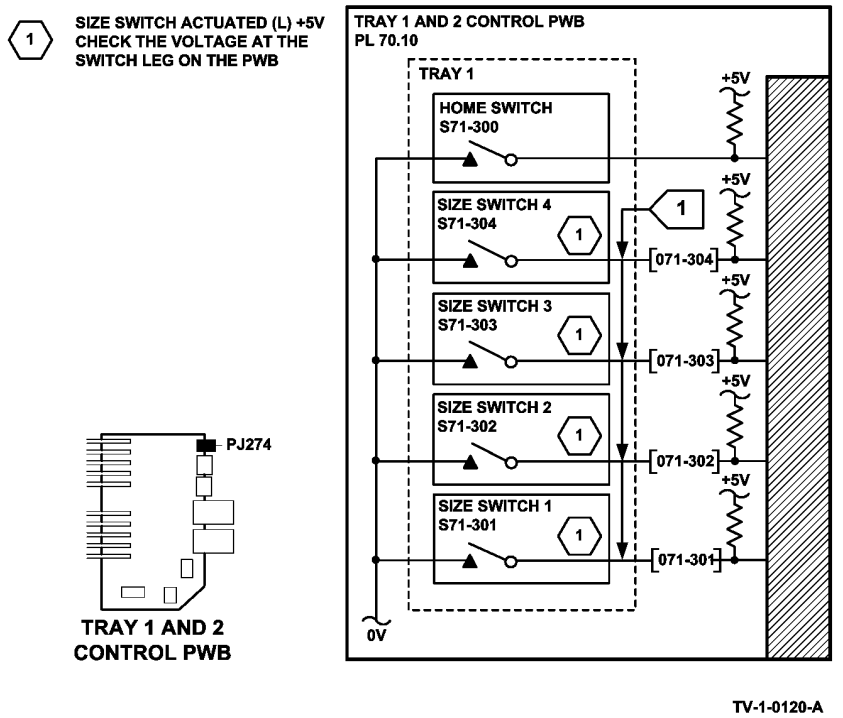


Figure 3 Tray 1 circuit diagram

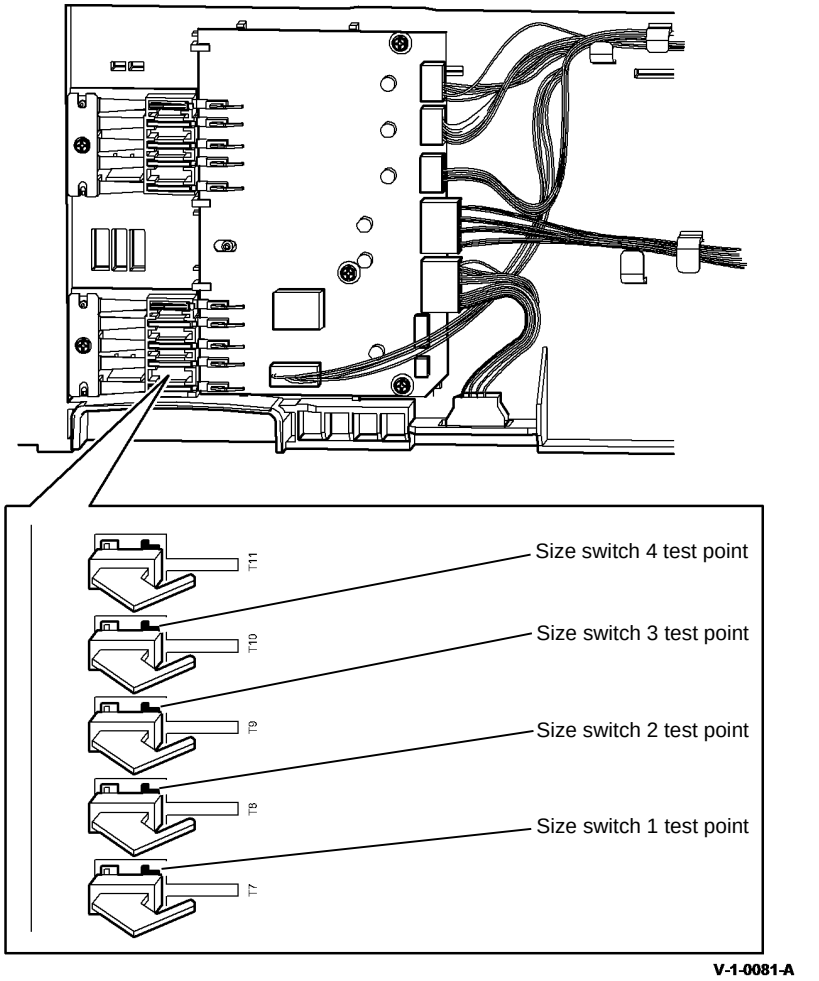


Figure 4 Tray 2 size switch test point

Table 2 Tray 2 paper size table

Paper	Size switch 4 S72-304. dC330 code 072-304	Size switch 3 S72-303. dC330 code 072-303	Size switch 2 S72-302. dC330 code 072-302	Size switch 1 S72-301. dC330 code 072-301
A4 LEF	+5V	+5V	0V	+5V
A4 SEF	0V	+5V	0V	+5V
A5 LEF	0V	0V	0V	+5V

Table 2 Tray 2 paper size table

Paper	Size switch 4 S72-304. dC330 code 072-304	Size switch 3 S72-303. dC330 code 072-303	Size switch 2 S72-302. dC330 code 072-302	Size switch 1 S72-301. dC330 code 072-301
A3 SEF	+5V	0V	+5V	+5V
216 x 315mm SEF	0V	+5V	+5V	0V
216 x 330mm SEF	0V	0V	+5V	0V
8.5 x 11 LEF	0V	+5V	0V	0V
8.5 x 11 SEF	0V	0V	+5V	+5V
8.5 x 5.5 LEF	0V	+5V	+5V	+5V
11 x 17 SEF	+5V	0V	+5V	0V
8.5 x 14 SEF	+5V	+5V	0V	0V
8.5 x 12.4 SEF	0V	+5V	+5V	0V
8.5 x 13 SEF	0V	0V	+5V	0V
Envelope Tray	+5V	0V	0V	+5V

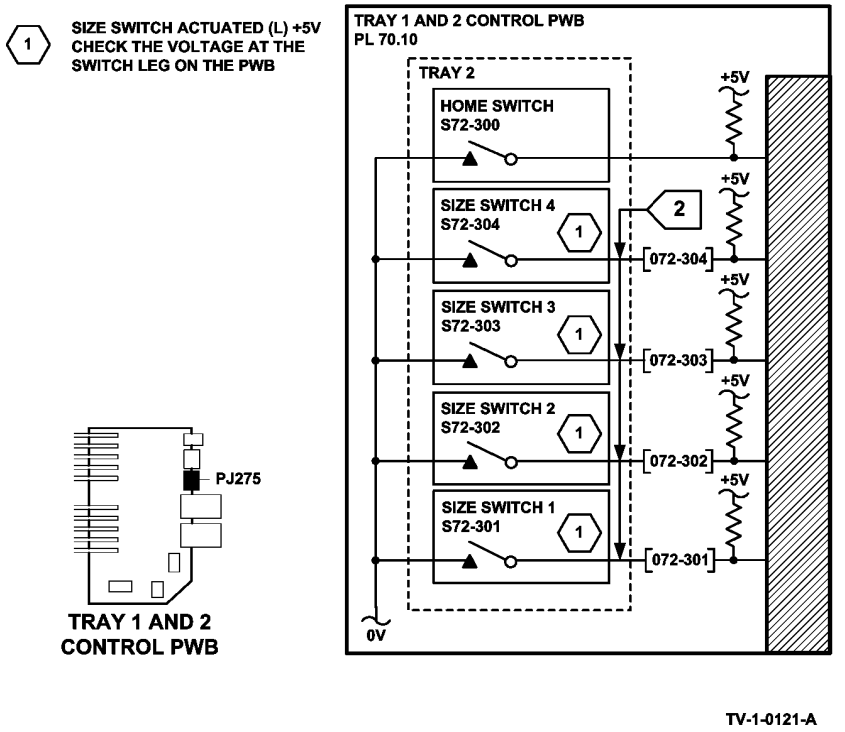


Figure 5 Tray 2 circuit diagram

372-100-00 Tray 2 Elevator Lift Failure RAP

372-100-00 Tray 2 stack height sensor did not actuate within the correct time after the feed/elevator motor turned on.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.
- Ensure that the tray is pushed fully home.

  Check the stack height mechanism actuator on the back of the tray, Figure 1.
- Check the drive gears and coupling on the tray.
- Check the elevator drive coupling on the feeder assembly.

Procedure

Enter dC330 code 072-330 tray 2 stack height sensor, Q72-330. Press Start. Pull out tray 2, then push fully home. **The display changes.**

Y **N**

Go to Flag 1. Check Q72-330. Refer to:

- GP 11 How to Check a Sensor.
- P/J275, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 2 stack height sensor, PL 80.26 Item 8.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

CAUTION

To prevent damage to the elevator and paper feed mechanism, the paper tray must be pulled out before MOT72-010 is run in service mode.

Enter dC330 code 072-010 tray 2 elevator motor, MOT72-010. Pull out tray 2. Press Start. **The motor runs.**

Y **N**

Go to Flag 2. Check MOT72-010. Refer to:

- GP 10 How to Check a Motor.
- P/J275, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Tray 2 elevator motor, PL 80.26 Item 6.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

A

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Perform the following:

- Check the elevator motor drive gears, Figure 1.
- Check the tray 2 stack height mechanism on the feeder assembly,

If the fault remains, go to the 371A Tray 1 and Tray 2 Empty RAP.

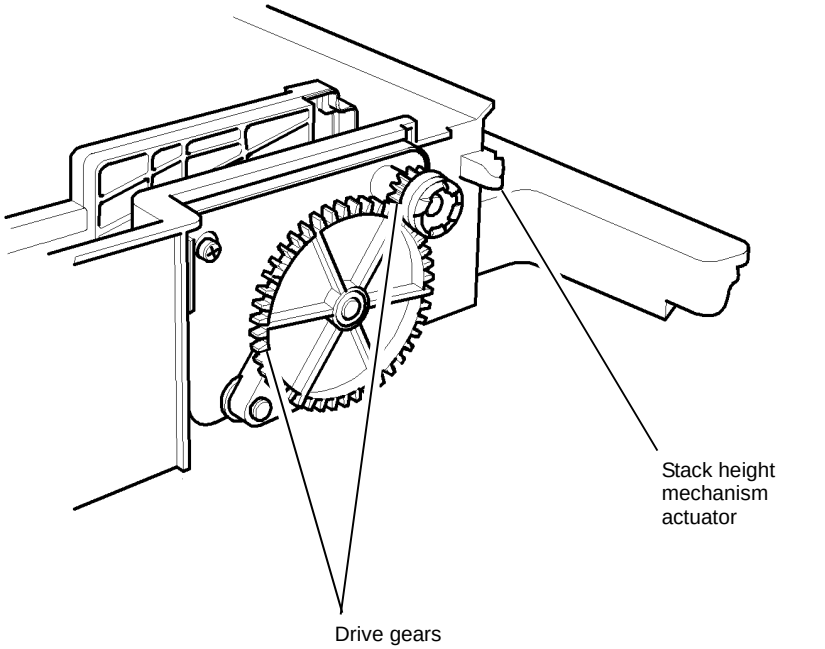


Figure 1 Component location

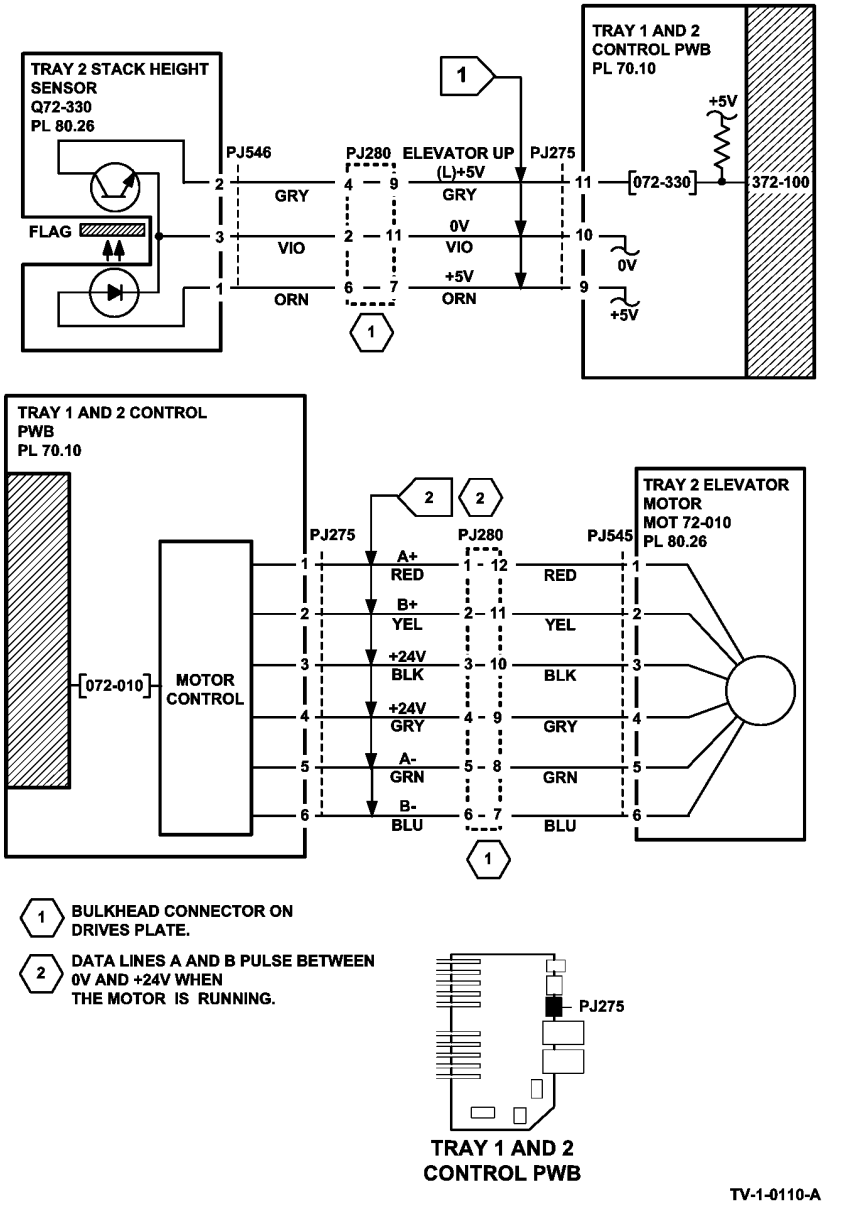


Figure 2 Circuit diagram

372-500-00 Tray 2 Open During Run RAP

372-500-00 Tray 2 was open during run when the paper is fed from tray 2.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure that the tray is pushed fully home, Figure 1.
- Check for obstructions behind the tray.

Procedure

Enter dC330 code 072-300 tray 2 home switch, S72-300. Press Start. Open, then fully close the tray. **The display changes.**

Y N

Go to Flag 1. Check S72-300. **+5V is measured at the switch terminal on the PWB, Figure 2.**

Y N

Check the +5V supply. Refer to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a tray 1 and 2 control PWB, PL 70.10 Item 2.

Install a tray 1 and 2 control PWB, PL 70.10 Item 2.

Perform the following:

- Check that the paper size leaf spring is mounted correctly, PL 70.10 Item 3.
- Check the actuator on the paper tray, Figure 1.
- If the fault remains, install a new tray 1 and 2 control PWB, PL 70.10 Item 2.

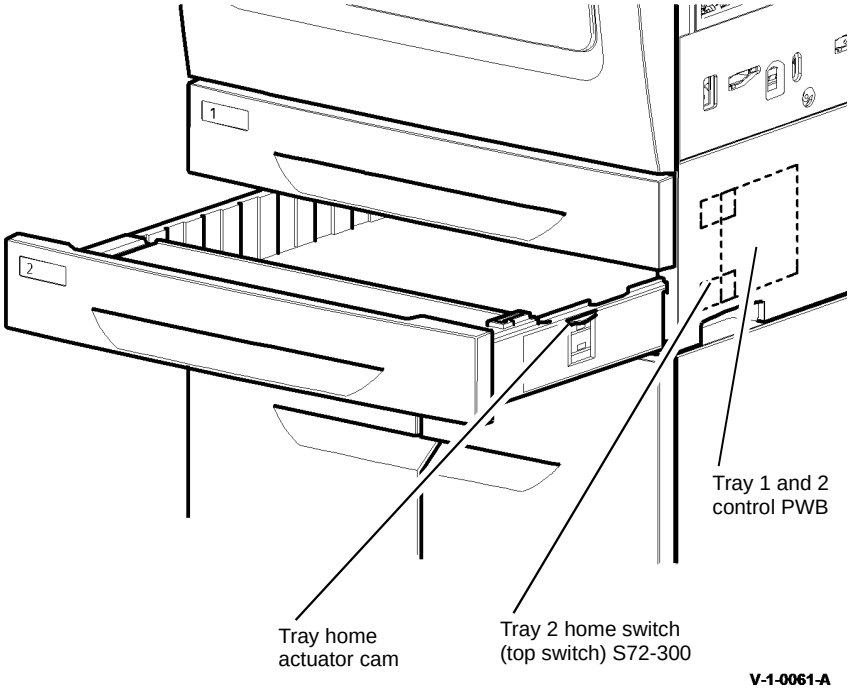


Figure 1 Component location

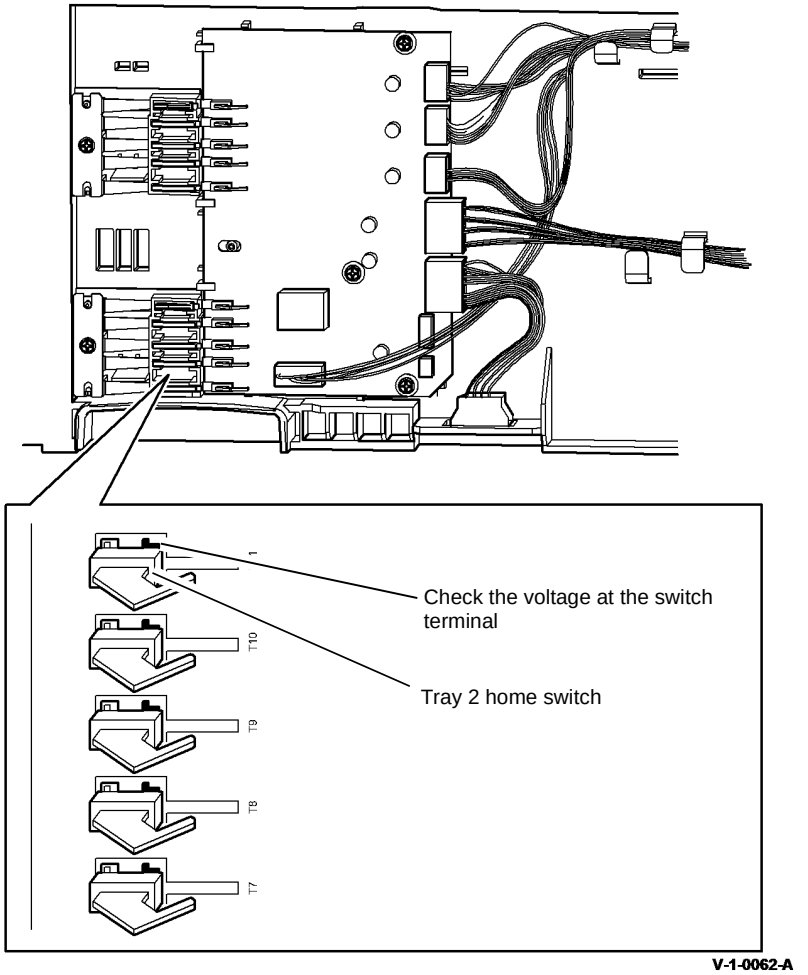


Figure 2 Home switch test point

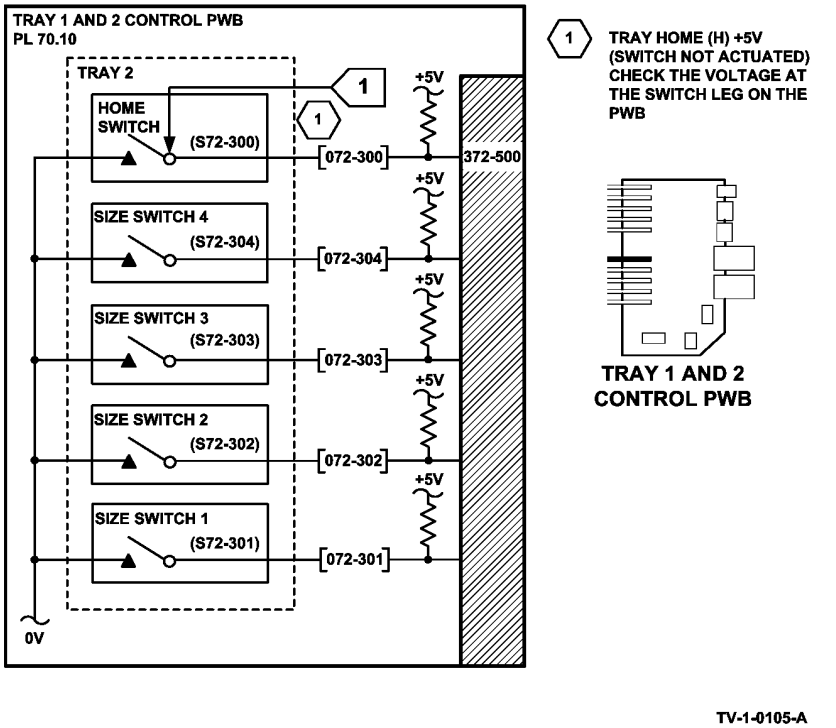


Figure 3 Circuit diagram

373-100-00 Tray 3 Elevator Lift Failure RAP

373-100-00 Tray 3 stack height sensor did not actuate within the correct time after the elevator motor turned on.

NOTE: *Rapid closure of tray 4 when tray 3 is being elevated may cause this fault.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the tray elevator cables and mechanisms are located correctly.
- Check that the harnesses to the tray 3 home sensor, Q73-300, the tray 3 elevator motor, MOT73-010 and the tray 3 elevator motor encoder sensor are correctly located and connected.
- Ensure that the tray is pushed fully home.
- Check for obstructions behind the tray.

Procedure

Enter dC330 code 073-300 tray 3 home sensor, Q73-300. Press Start. Pull out tray 3, then push fully home. **The display changes.**

Y N

Go to Flag 1. Check S73-300. Refer to:

- GP 11 How to Check a Sensor.
- P/J1, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Tray 3 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 073-330 tray 3 stack height sensor, Q73-330. Press Start. Pull out tray 3. Manually activate the stack height sensor on the paper feed assembly, Figure 1. **The display changes**

Y N

Go to Flag 2. Check Q73-330. Refer to:

- GP 11 How to Check a Sensor.
- P/J1, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 stack height sensor, PL 80.32 Item 7.
- HCF control PWB, PL 70.21 Item 2.

A

A

Disconnect P/J10 on the HCF control PWB. Connect a service meter between pin 1 and pin 2 on the wiring side of the connector. **Continuity is measured when the stack limit switch is deactuated and an open circuit is measured when the switch is actuated.**

Y N

Go to Flag 3. Check the tray 3 over elevate switch. Refer to:

- GP 13 How to Check a Switch.
- P/J10, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 over elevate switch, PL 80.32 Item 8.
- HCF control PWB, PL 70.21 Item 2.

CAUTION

To prevent damage to the elevator and paper feed mechanism, the paper tray must be pulled out before MOT07-030 is run in service mode.

Re-connect P/J10. Enter dC330 code 073-010 tray 3 elevator motor, MOT73-010. Pull out tray 3. Press Start. **The motor runs.**

Y N

Go to Flag 4. Check MOT73-010. Refer to:

- GP 10 How to Check a Motor.
- P/J13, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Tray 3 elevator motor, PL 70.21 Item 1.
- HCF control PWB, PL 70.21 Item 2.

Perform the following:

- Check the elevator cables, PL 70.18 Item 4, PL 70.18 Item 6 and PL 70.18 Item 8.
- Check the elevator drives gear coupling, PL 70.19 Item 10.

If the fault remains, go to the 373B Tray 3 or Tray 4 Out of Paper RAP.

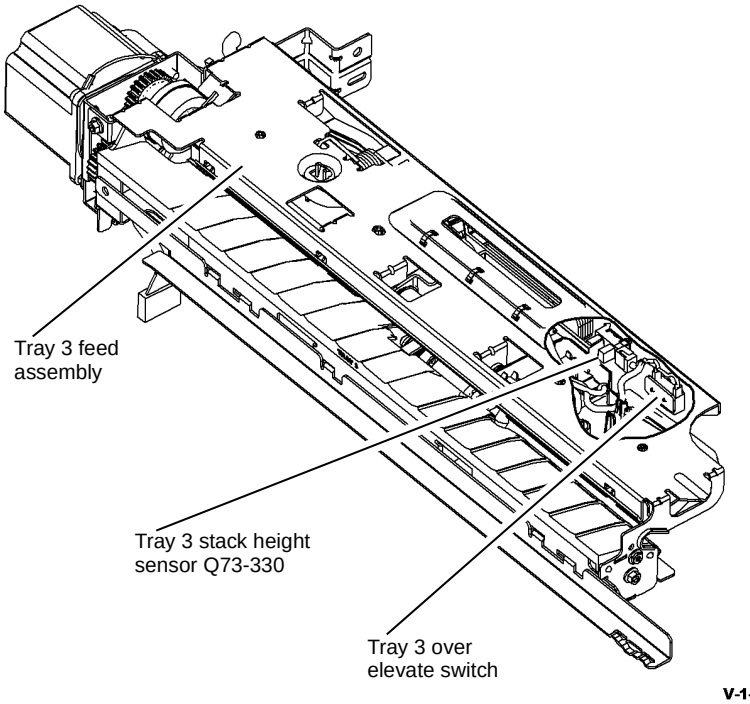


Figure 1 Component location

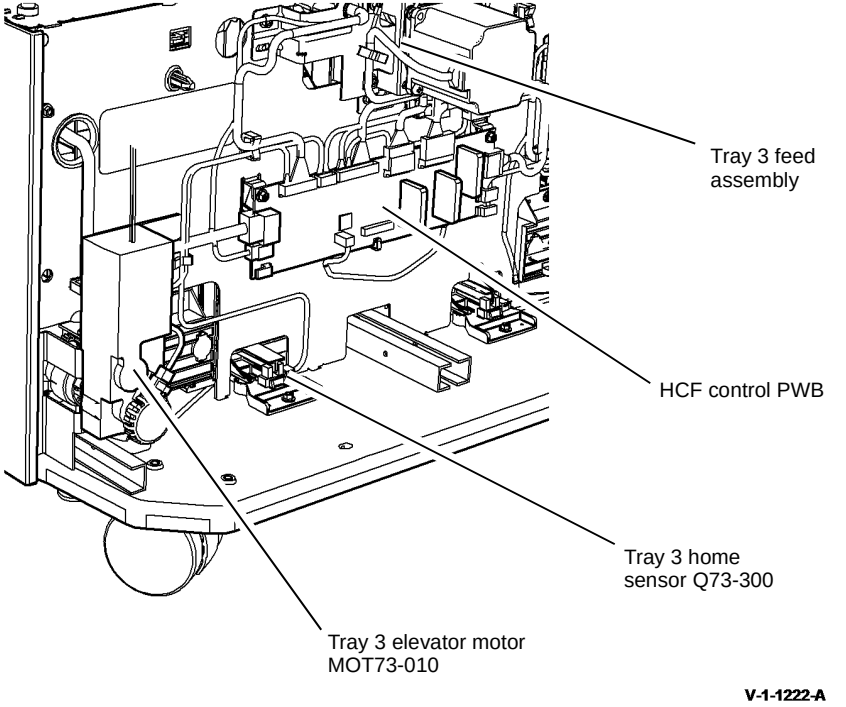


Figure 2 Component location

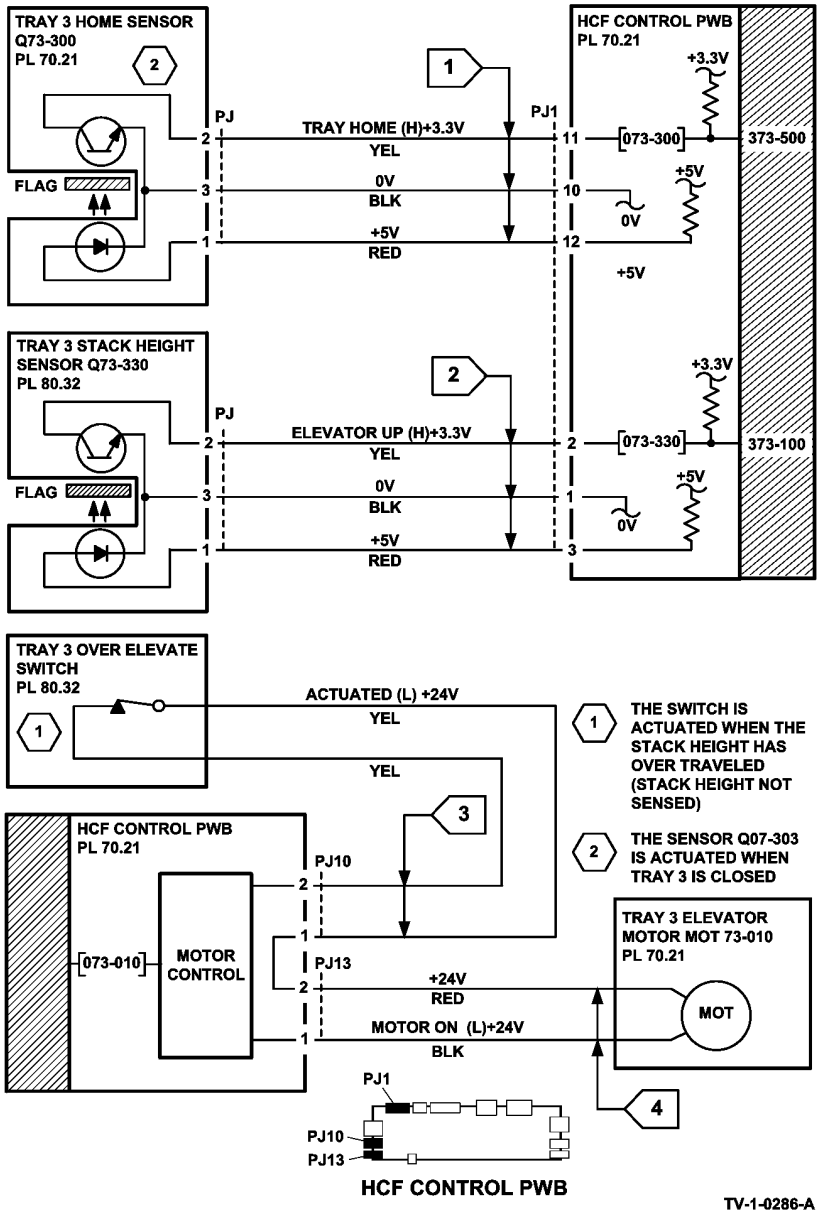


Figure 3 Circuit diagram

373-500-00 Tray 3 Open During Run RAP

373-500-00 Tray 3 was opened during run when the paper is fed from tray 3.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.
- Ensure that the tray is pushed fully home.
- Check the sensor flag, Figure 1.

Procedure

Enter dC330 code 073-300, tray 3 home sensor, Q73-300. Press Start. Open, then fully close the tray. **The display changes.**

Y **N**

Go to Flag 1. Check Q73-300. Refer to:

- GP 11 How to Check a Sensor.
- P/J1, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

Check the sensor holder, PL 70.21 Item 3.
If the fault remains, install new components as necessary:

- Tray 3 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

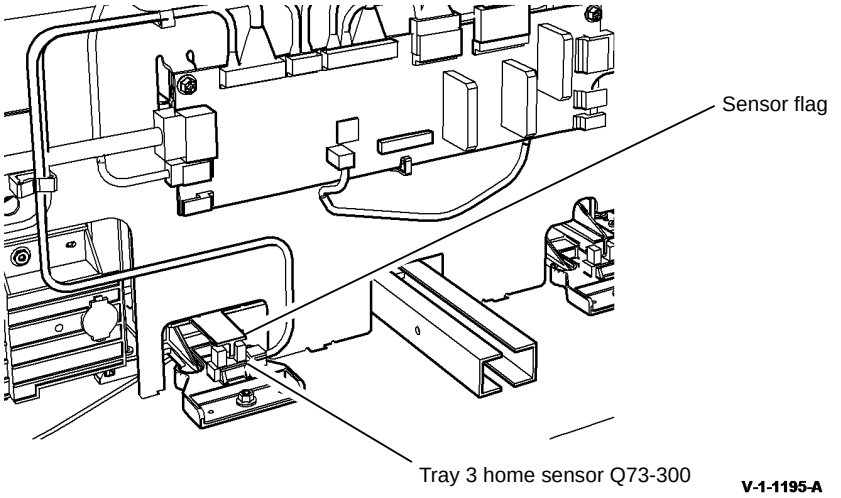


Figure 1 Component location

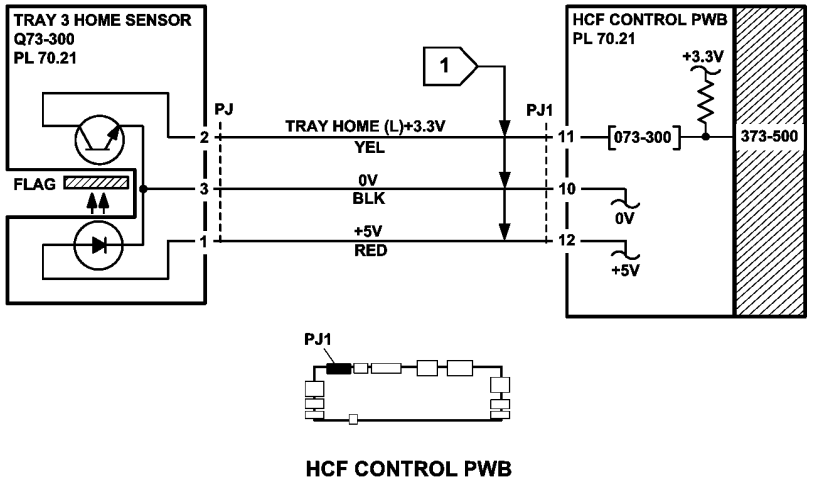


Figure 2 Circuit diagram

373A Tray 3 and Tray 4 False Low Paper Level RAP

Use this RAP when the copier displays tray 3 or tray 4 is low on paper when the tray is full. The tray is low on paper message will appear when the tray capacity is at 10%.

The machine measurers the time taken for the tray to elevate after being closed, to determine the amount of paper remaining in tray 3 or tray 4. This measurement only occurs if the tray has been open for a minimum of 30 seconds. If the tray is closed within 30 seconds the time-out of the last known paper level is used and no new timing is calculated.

NOTE: *A low paper condition will be declared if the stack is below approximately 190 sheets.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Pull out the relevant tray and allow it to move fully down. Close the tray. **The tray moves up.**

Y N

Go to the relevant procedure:

- 373-100-00 Tray 3 Elevator Lift Up Failure RAP.
- 374-100-00 Tray 4 Elevator Lift Up Failure RAP.

Pull out the relevant tray. Load a ream of paper (500 sheets). Wait for 30 seconds before closing the tray. **The message, Tray is low on paper, has changed.**

Y N

For tray 3, go to Flag 1. Check the tray 3 level encoder, Q73-340. For tray 4, go to Flag 2. Check the tray 4 level encoder Q74-340. Refer to:

- GP 11 How to Check a Sensor.

  NOTE: *In this check, place a piece of paper between the sensor. The check is difficult due to the problem in moving the timing disc.*

- Figure 1.
- P/J2, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary.

- Tray 3 elevator motor, PL 70.21 Item 1.
- Tray 4 elevator motor, PL 70.21 Item 1.
- HCF control PWB, PL 70.21 Item 2.

The low paper sensor appears to be working correctly. If the customer is only adding small amounts of paper at a time then the message (Tray is low on paper) will be displayed. If the tray is filled with 190 sheets or more, the message is cancelled.

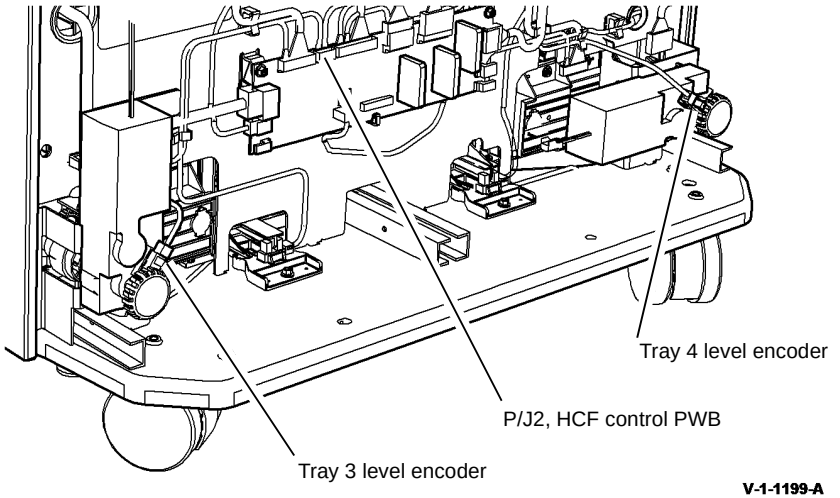


Figure 1 Component location

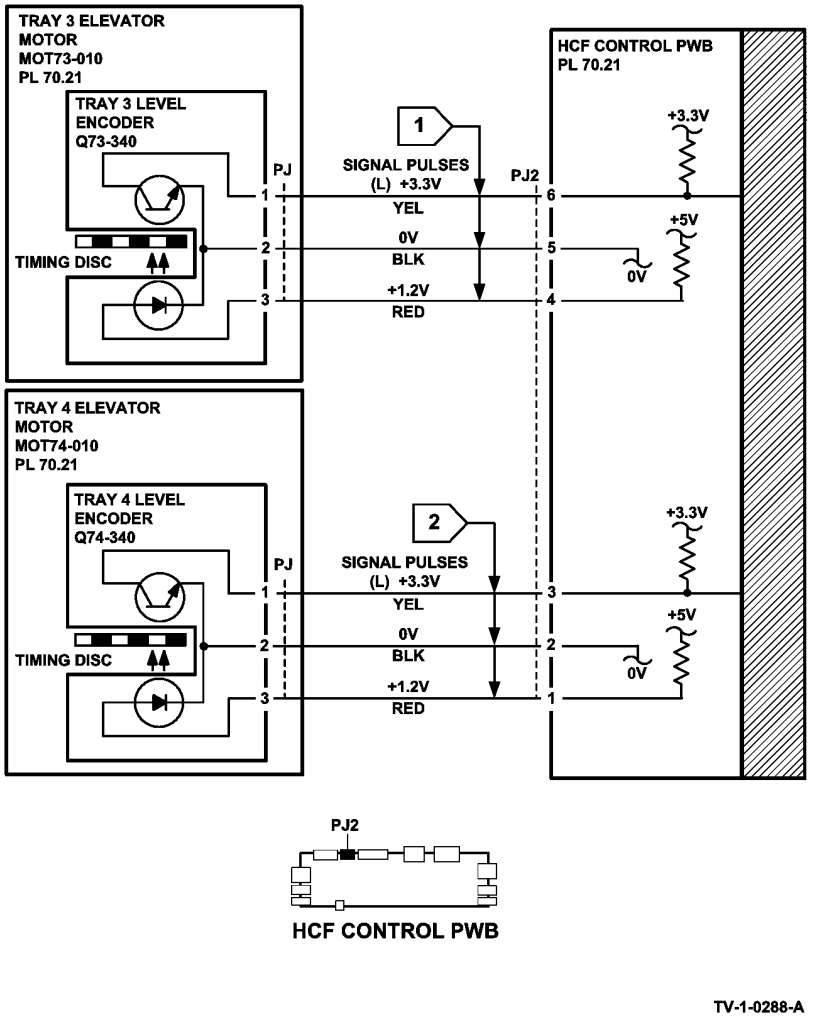


Figure 2 Circuit Diagram

373B Tray 3 or Tray 4 Out of Paper RAP

Use this RAP when an incorrect tray 3 or tray 4 out of paper message is displayed.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Tray 3 and tray 4 paper feed assemblies are almost identical.*

Procedure

Refer Figure 1. Enter the relevant code to monitor the tray empty sensor:

- Tray 3 empty sensor, Q73-320. Enter dC330 code 073-320. Press Start.
- Tray 4 empty sensor, Q74-320. Enter dC330 code 074-320. Press Start.

Actuate the tray empty sensor with a piece of paper. **The display changes.**

Y N

For tray 3, go to Flag 1. Check Q73-320. For tray 4, go to Flag 2. Check Q74-320. Refer to:

- GP 11 How to Check a Sensor.
- Tray 3 P/J1, HCF control PWB.
- Tray 4 P/J3, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 empty sensor, PL 80.32 Item 6.
- Tray 4 empty sensor, PL 80.33 Item 3.
- HCF Control PWB, PL 70.21 Item 2.

Remove the relevant tray front cover, refer to REP 70.14 Tray 3 and Tray 4 Removal. Close the relevant tray. **The feed roll assembly drops when the tray is closed.**

Y N

Remove the relevant paper feed assembly, REP 80.30 Tray 3 Paper Feed Assembly or REP 80.31Tray 4 Paper Feed Assembly. Ensure the lever is undamaged and operates correctly, Figure 2. If necessary, install a new paper feed assembly, PL 80.32 Item 1 (Tray 3) or PL 80.33 Item 1 (Tray 4).

The fault may be intermittent, check the wiring and connectors between the HCF control PWB and the sensor, refer to GP 7.

NOTE: *Figure 1 shows the tray 3 paper feed assembly. The position of the sensor on the tray 4 paper feed assembly is identical.*

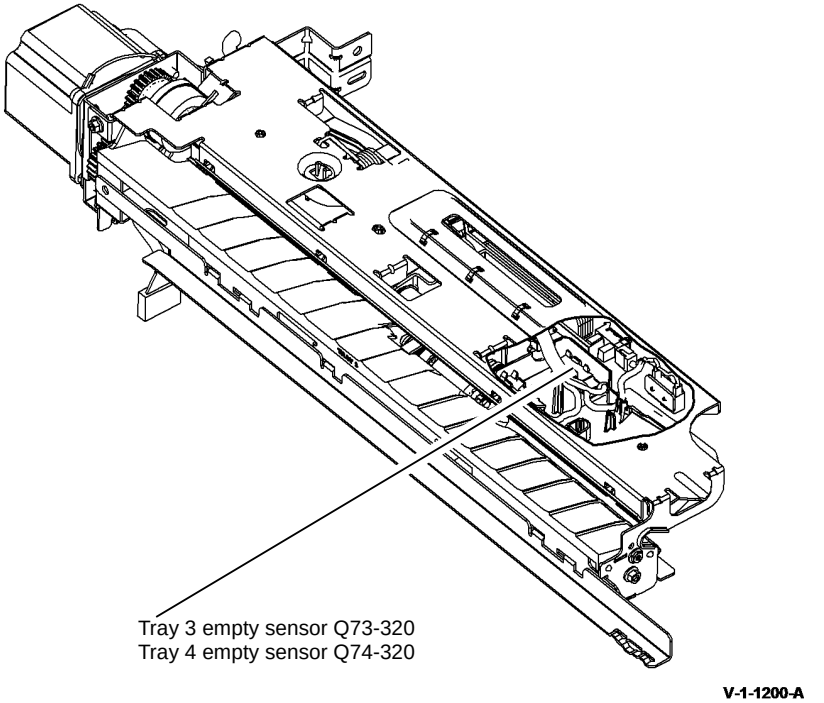
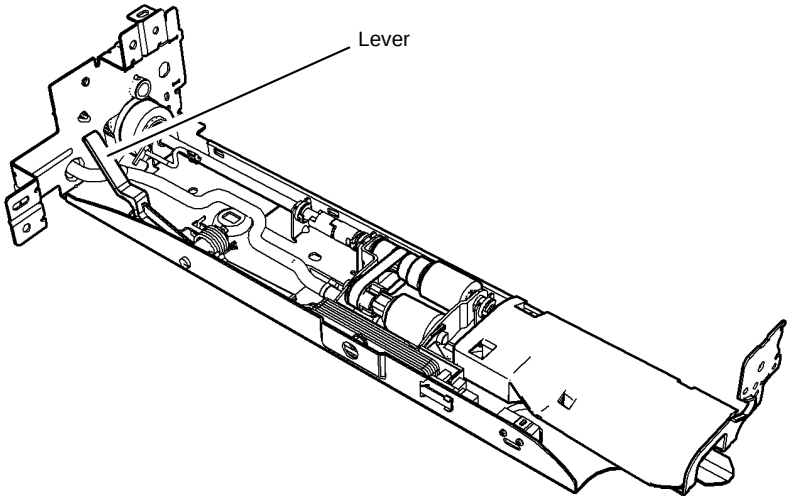
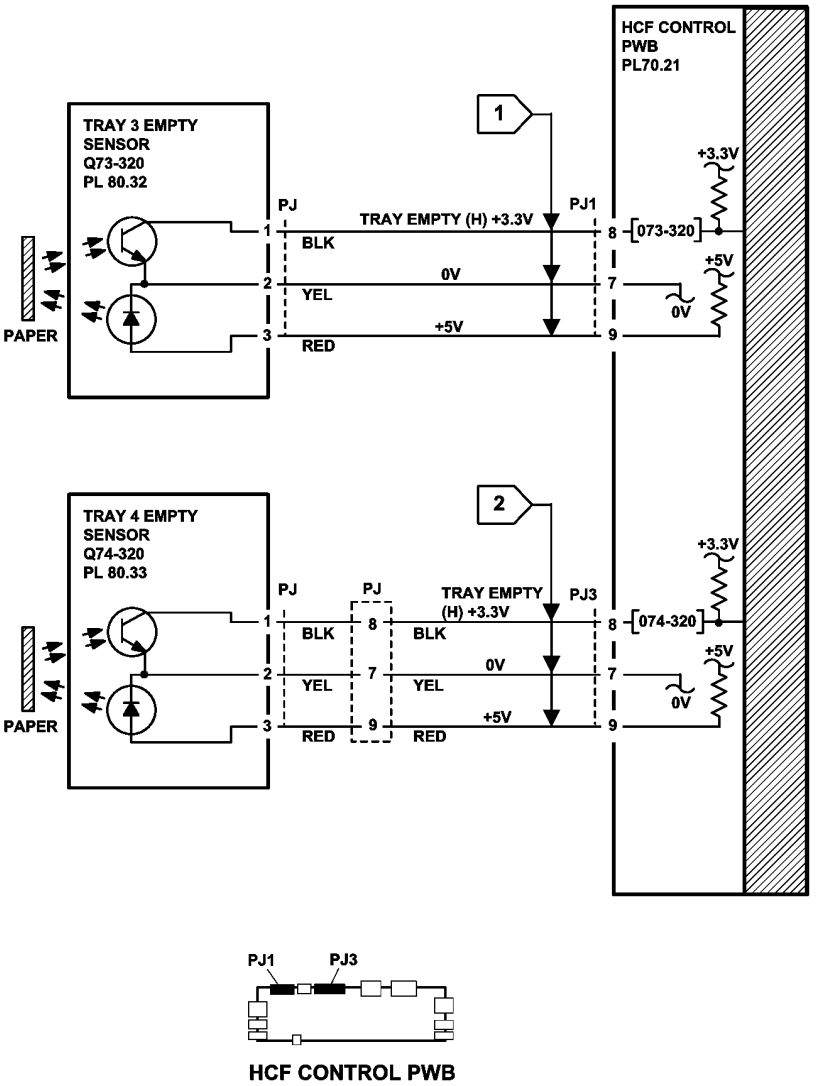


Figure 1 Component location



V-1-1720-A

Figure 2 Component location



TV-1-0289-A

Figure 3 Circuit diagram

374-100-00 Tray 4 Elevator Lift Failure RAP

374-100-00 Tray 4 stack height sensor did not actuate within the correct time after the elevator motor turned on.

NOTE: *Rapid closure of tray 3 when tray 4 is being elevated may cause this fault.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Failure of the tray 4 feed motor, MOT81-040 can cause damage the 24V circuit of the HCF Control PWB. Before replacing a HCF Control PWB ensure the tray 4 feed motor is operational.

- Check the tray 4 feed motor, MOT81-840. Refer to the 381-104-00, 381-114-00 Tray 4 Misfeed RAP.
- Check that the harnesses to the tray 4home sensor, Q74-300, the tray 4elevator motor, MOT74-010 and the tray 4elevator motor encoder sensor are correctly located and connected.
- Check that the tray elevator cables and mechanisms are located correctly.
- Ensure that the tray is pushed fully home.
- Check for obstructions behind the tray.

Procedure

Enter dC330 code 074-300 tray 4 home sensor, Q74-300. Press Start. Pull out tray 4, then push fully home. **The display changes.**

Y N

Go to Flag 1. Check Q74-300. Refer to:

- GP 11 How to Check a Sensor.
- P/J3, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 074-330 tray 4 stack height sensor, Q74-330. Press Start. Pull out tray 4. Manually actuate the stack height sensor on the paper feed assembly, Figure 1. **The display changes.**

Y N

Go to Flag 2. Check Q74-330. Refer to:

- GP 11 How to Check a Sensor.
- P/J3, HCF control PWB.

A

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 stack height sensor, PL 80.33 Item 6.
- HCF control PWB, PL 70.21 Item 2.

Disconnect P/J12 on the HCF control PWB. Connect a service meter between pin 1 and pin 2 on the wiring side of the connector. **Continuity is measured when the stack limit switch is deactuated and open circuit is measured when the switch is actuated.**

Y N

Go to Flag 3. Check the tray 4 over elevate switch. Refer to:

- GP 13 How to Check a Switch.
- P/J12, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 over elevate switch, PL 80.33 Item 9.
- HCF control PWB, PL 70.21 Item 2.

CAUTION

To prevent damage to the elevator and paper feed mechanism, the paper tray must be pulled out before MOT74-010 is run in service mode.

Enter dC330 code 074-010 tray 4 elevator motor, MOT74-010. Pull out tray 4. Press Start. **The motor runs.**

Y N

Go to Flag 4. Check MOT74-010. Refer to:

- GP 10 How to Check a Motor.
- P/J14, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 elevator motor, PL 70.21 Item 1.
- HCF control PWB, PL 70.21 Item 2.

Perform the following:

- Check the elevator cables, PL 70.18 Item 4, PL 70.18 Item 5 and PL 70.18 Item 7.
- Check elevator drives gear coupling, PL 70.19 Item 10.

If the fault remains, go to 373B Tray 3 or Tray 4 Out of Paper RAP.

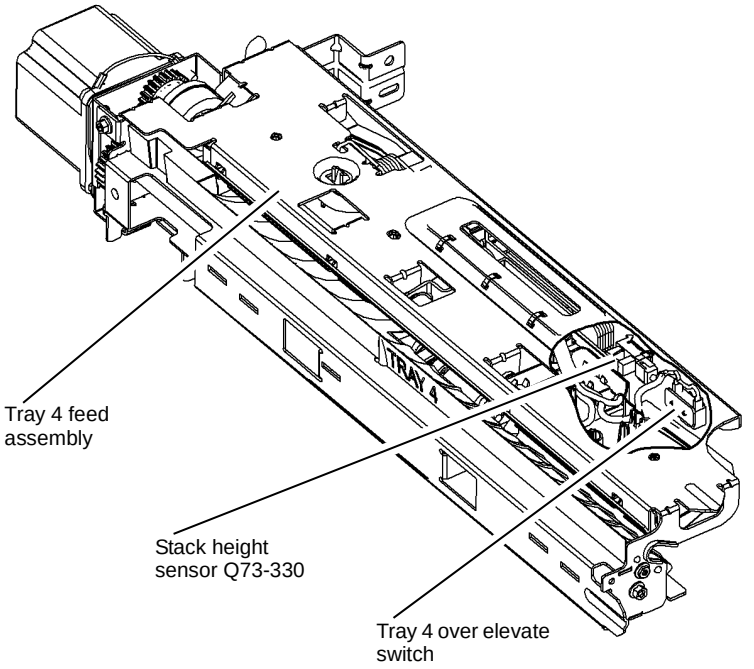


Figure 1 Component location

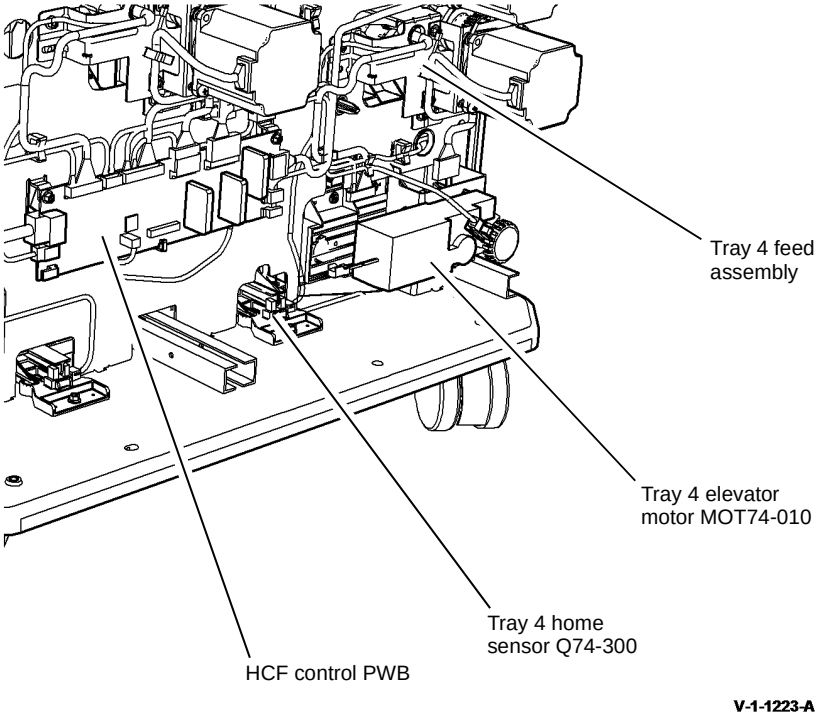


Figure 2 Component location

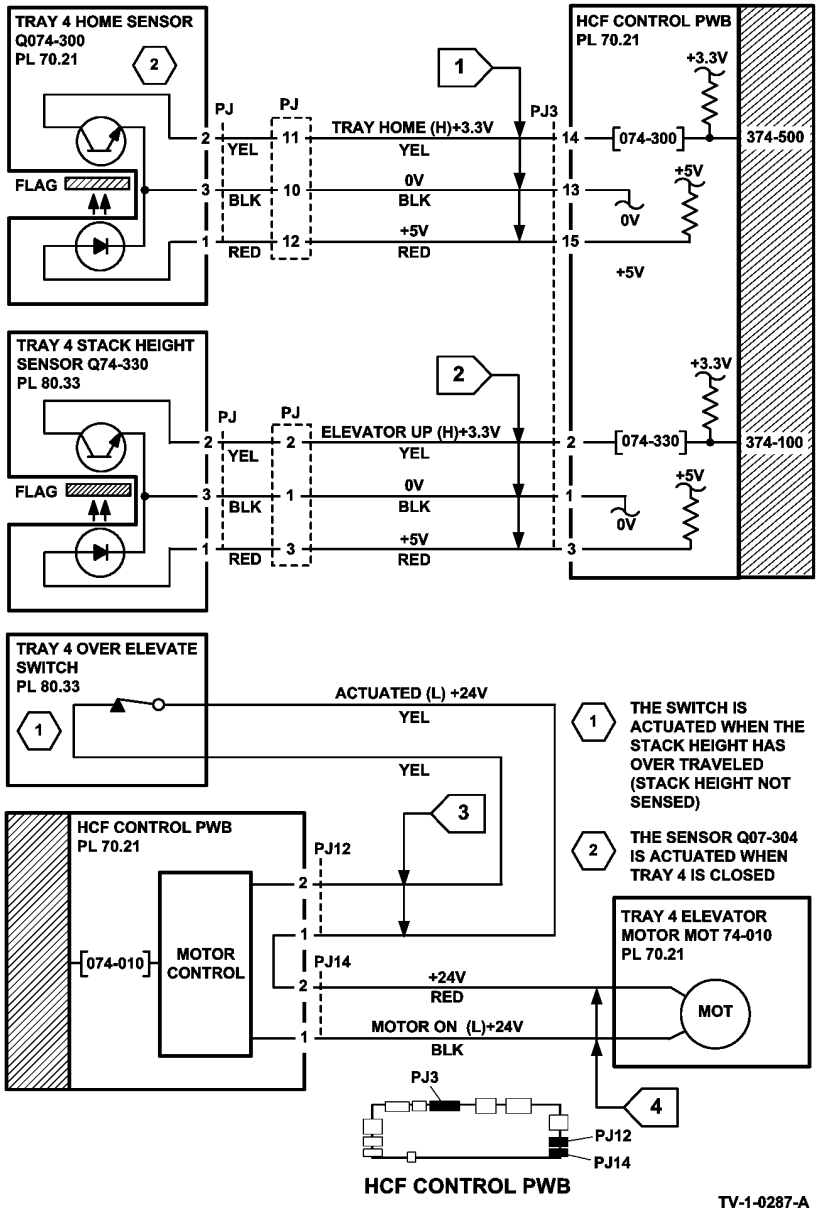


Figure 3 Tray 4 Circuit diagram

374-500-00 Tray 4 Open During Run RAP

374-500-00 Tray 4 was opened during run when the paper is fed from tray 4.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.
- Ensure that the tray is pushed fully home.
- Check the sensor flag, Figure 1.

Procedure

Enter dC330 code 074-300 tray 4 home sensor, Q74-300. Press Start. Open, then fully close the tray. **The display changes.**

Y **N**

Go to Flag 1. Check Q74-300. Refer to:

- GP 11 How to Check a Sensor.
- P/J3 HCF control PWB.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

Check the sensor holder, PL 70.21 Item 3.
If the fault remains, install new components as necessary:

- Tray 4 home sensor, PL 70.21 Item 4.
- HCF control PWB, PL 70.21 Item 2.

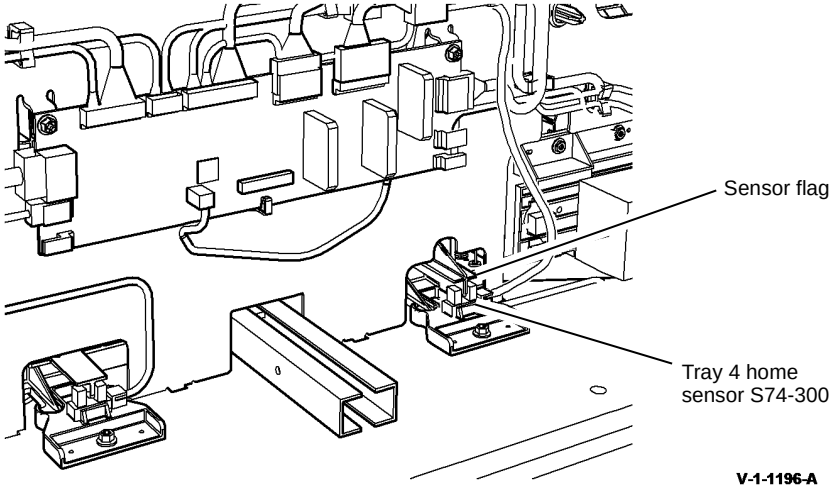


Figure 1 Component location

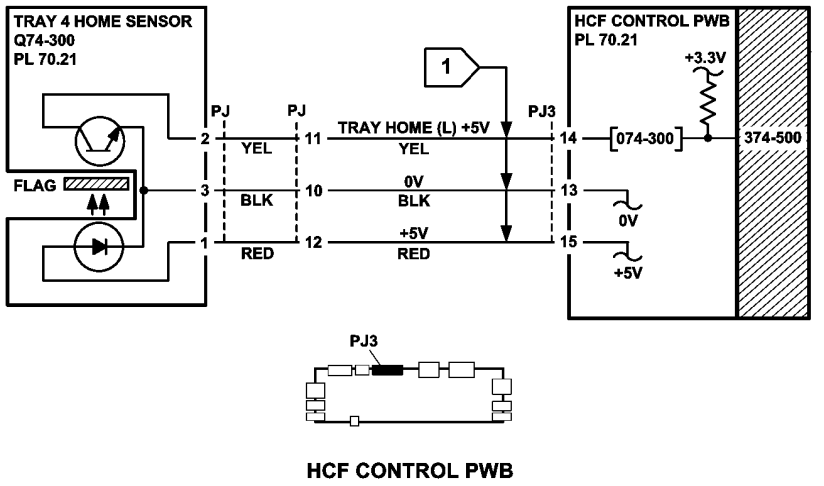


Figure 2 Circuit diagram

375A Bypass Tray RAP

Use this RAP to identify and correct problems when using the bypass tray.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the media used in the bypass tray. Refer to IQ1 and GP 20.
- Ensure that the width guide is touching the edge of the paper, Figure 1.
- If there is a width sensing problem, check that the width sensing potentiometer, part of the input tray assembly, PL 70.30 Item 1, is not damaged. If necessary, use film remover clean the potentiometer
- Clean the bypass tray with a micro fiber wiper, PL 26.10 Item 13 and antistatic fluid, PL 26.10 Item 19.

Procedure

Enter dC330 code 075-320 bypass empty sensor Q75-320. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 2. Check Q75-320. Refer to:

- GP 11 How to Check a Sensor.
- P/J10, IOT PWB.
- 301D +3.3 V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new bypass empty sensor, PL 70.30 Item 7. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC140 code 075-601. Move the bypass tray width guide between wide and narrow settings.

NOTE: *The width sensor is a potentiometer. The arm on the potentiometer is attached to the bypass tray side guide. This gives a variable voltage to indicate the paper width setting.*

The displayed value changes.

Y N

Go to Flag 1. Check Q75-601. Refer to:

- GP 11 How to Check a Sensor.
- P/J10, IOT PWB.
- 301D +3.3 V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new bypass tray and left hand door assembly, PL 70.30 Item 1. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 081-050 bypass feed solenoid, SOL81-050. Press Start. **The solenoid energized.**

Y N

Go to Flag 3. Check SOL81-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J10, IOT PWB.
- 301G +24 V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new bypass feed solenoid, PL 70.30 Item 4. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Perform the following:

- Ensure that the customer is not filling the tray above the max fill line.
- Clean the feed roll and retard pad with a cloth dampened with water.
- If necessary, install a new feed roll and retard pad assembly, PL 70.30 Item 21.

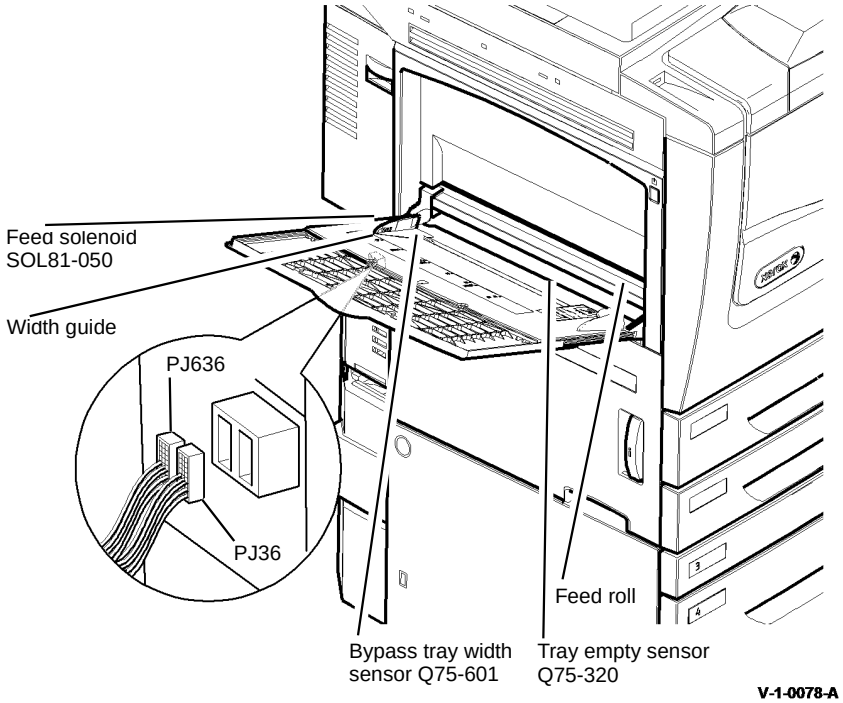


Figure 1 Component location

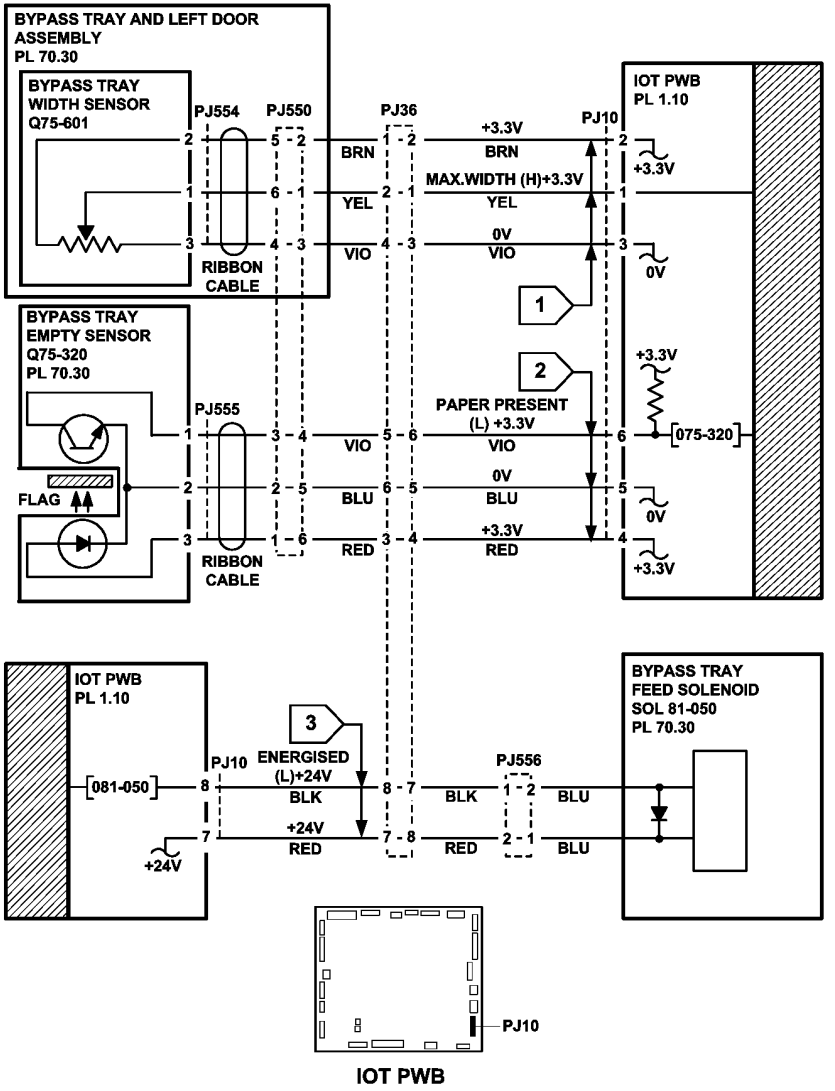


Figure 2 Circuit diagram

376-100-00 Tray 6 Elevator Lift Failure RAP

376-100-00 A signal was not detected by the encoder when the elevator motor was driving up.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.

Procedure

Ensure the cable holder PL 70.68 Item 23 is not trapped behind the elevator motor bracket, Figure 1. **The cable holder is correctly positioned.**

Y **N**

Reposition the cable holder so that it does not become trapped behind the elevator motor bracket.

Open the tray 6 front door, If necessary, remove paper from the stack until there is only about 12mm (0.5 inch) of paper left in the stack. Close the tray 6 door. **The tray moves up.**

Y **N**

Enter dC330 code 076-300 front door interlock switch, S76-300. Press Start. Manually toggle the door interlock switch. **The display changes.**

Y **N**

Go to Flag 1. Check S76-300. Refer to:

- GP 13 How to Check a Switch.
- P/J507, Tray 6 control PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Front door interlock switch, PL 70.60 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 076-330 stack height sensor, Q76-330. Press Start. Manually activate the stack height sensor on the paper feed assembly. **The display changes.**

Y **N**

Go to Flag 2. Check Q76-330. Refer to:

- GP 11 How to Check a Sensor.
- P/J505, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Stack height sensor, PL 80.45 Item 7.
- Tray 6 control PWB, PL 70.68 Item 8.

A B

A B

Check the voltage at PJ504 pin 4, Flag 3. Manually actuate the upper limit switch, S76-412, Figure 1. **The voltage changes.**

Y **N**

Go to Flag 3. Check S76-412. Refer to:

- GP 13 How to Check a Switch.
- P/J504, Tray 6 control PWB
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Upper limit switch, PL 70.68 Item 12.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 076-340 elevator motor encoder sensor, Q76-340. Press Start. Manually lift the motor to activate the sensor. **The display changes.**

Y **N**

Go to Flag 4. Check Q76-340. Refer to:

- GP 11 How to Check a Sensor.
- P/J506, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Elevator motor encoder sensor, PL 70.68 Item 5.
- Tray 6 control PWB, PL 70.68 Item 8

Enter dC330 code 076-010 to energise the elevator motor to drive the tray up, MOT76-010. Press Start. **The motor runs.**

Y **N**

Go to Flag 5. Check MOT76-010. Refer to:

- GP 10 How to Check a Motor.
- P/J504, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Elevator motor, PL 70.68 Item 4.
- Tray 6 control PWB, PL 70.68 Item 8

Enter dC330 code 076-011 to energise the elevator motor to drive the tray down, MOT76-010. Press Start. **The motor runs.**

Y **N**

Go to Flag 5. Check MOT76-010. Refer to:

- GP 10 How to Check a Motor.
- P/J504, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Elevator motor, PL 70.68 Item 4.

A C

A C

- Tray 6 control PWB, PL 70.68 Item 8

The tray 6 elevator motor is operating correctly.

The tray moves up until the top of the paper stack is in the feed position without binding or excessive noise.

Y N

Remove the tray 6 covers, PL 70.60. Check for the following:

- Parts of the lift assembly, PL 70.68 and PL 70.70 that are worn or broken.
- Paper or other debris that is impeding free movement of the lift mechanism.
- There is sufficient slack in the elevator harness to allow full travel of the lift assembly.
- The tray 6 paper tray guide are correctly set, refer to ADJ 70.2 Tray 6 Paper Tray Guide Setting.

If necessary clean, repair or install new parts, PL 70.64, PL 70.68 and PL 70.70.

Open the tray 6 front door. **The tray moves down until the tray assembly is in the lowest position without binding or excessive noise.**

Y N

Remove the tray 6 covers, PL 70.60. Check for the following:

- Parts of the lift assembly, PL 70.68 and PL 70.70 that are worn or broken.
- Paper or other debris that is impeding free movement of the lift mechanism.
- There is sufficient slack in the elevator harness to allow full travel of the lift assembly.
- The tray 6 paper tray guide are correctly set, refer to ADJ 70.2 Tray 6 Paper Tray Guide Setting.

D

D

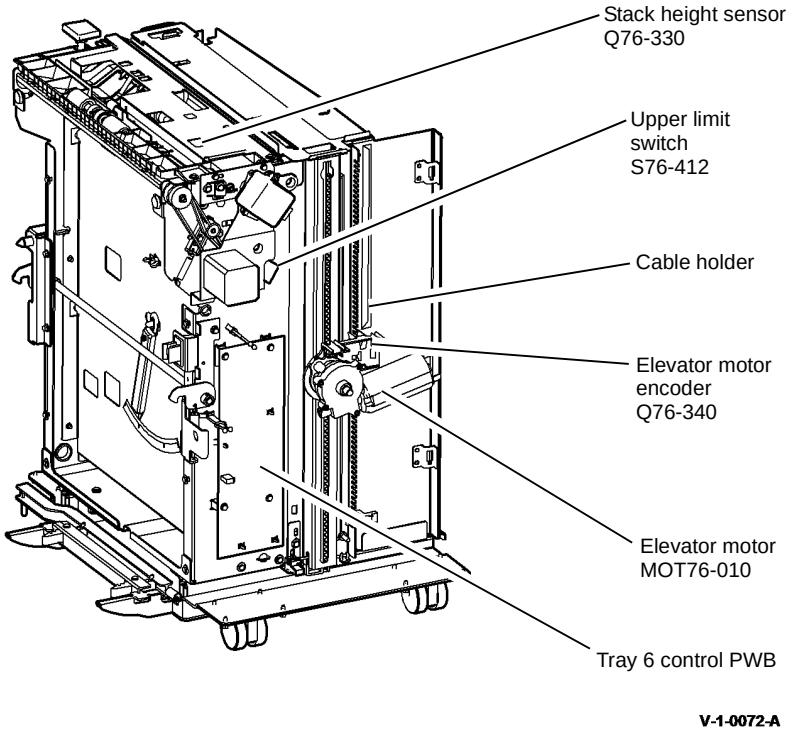


Figure 1 Component location

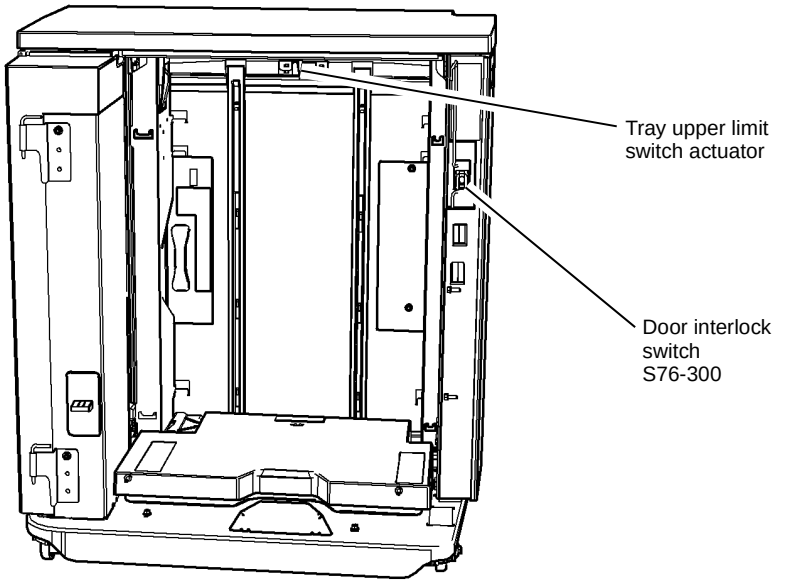


Figure 2 Component location

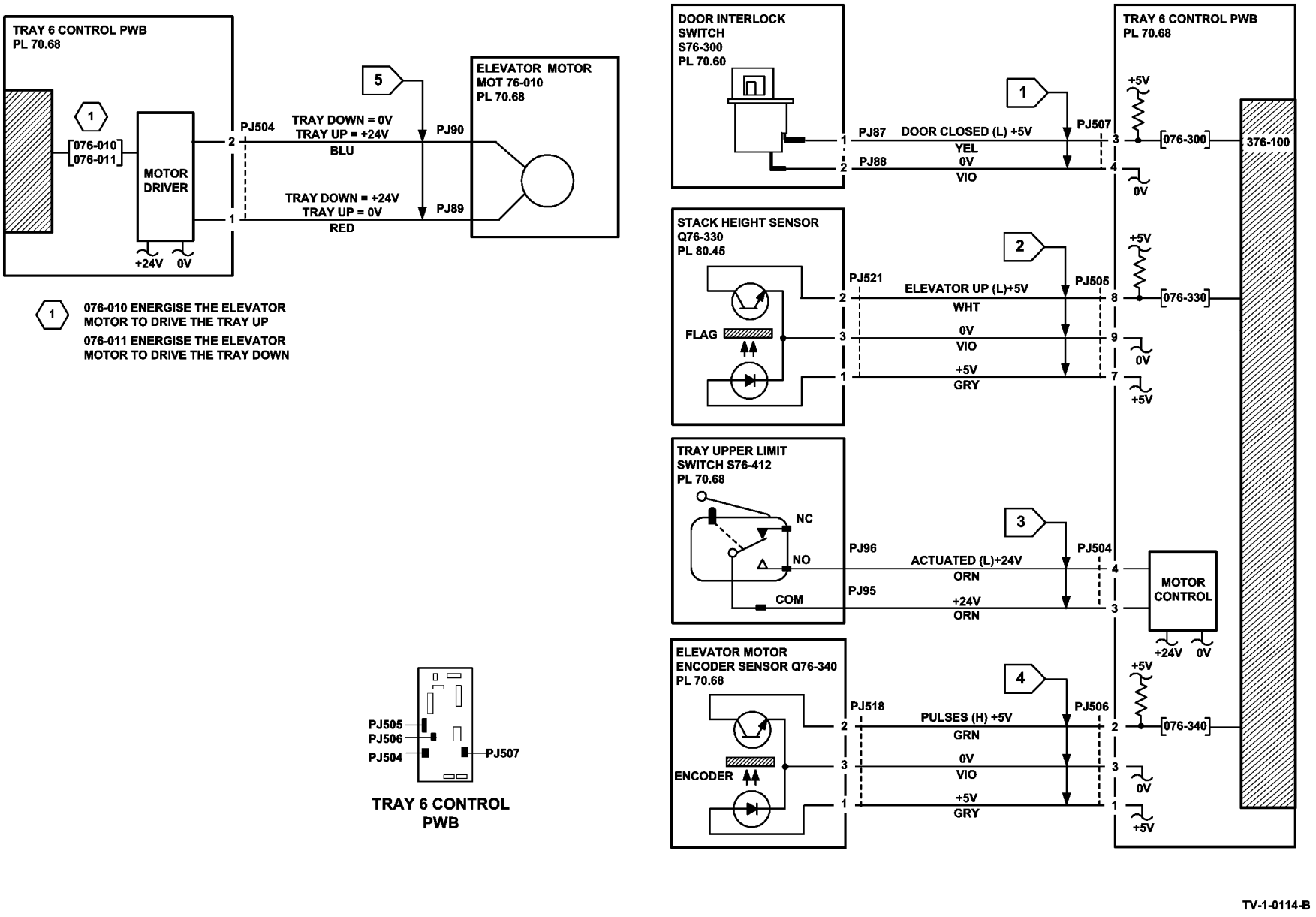


Figure 3 Circuit diagram

376-101-00 Tray 6 Elevator Lower Failure RAP

376-101-00 A signal was not detected by the encoder when the elevator motor was driving down.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions behind the tray.

Procedure

Ensure the cable holder is not trapped behind the elevator motor bracket, Figure 1. **The cable holder is correctly positioned.**

Y N

Reposition the cable holder so that it does not become trapped behind the elevator motor bracket.

Open, then close the tray 6 door. **The tray moves down.**

Y N

Enter dC330 code 076-300 front door interlock switch, S76-300. Press Start. Manually toggle the door interlock switch. **The display changes.**

Y N

Go to Flag 1. Check S76-300. Refer to:

- GP 13 How to Check a Switch.
- P/J507, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Front door interlock switch, PL 70.60 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 076-335 stack down sensor, Q76-335. Press Start. Manually activate the stack down sensor. **The display changes**

Y N

Go to Flag 2. Check Q76-335. Refer to:

- GP 11 How to Check a Sensor.
- P/J505, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Stack down sensor, PL 70.68 Item 9.
- Tray 6 control PWB, PL 70.68 Item 8.

A B

A B

Check the voltage at PJ504 pin 6, Flag 3. Manually actuate the tray down limit switch, S76-415, by pressing the plate under the paper tray, Figure 2. **The voltage changes.**

Y N

Go to Flag 3. Check S76-415. Refer to:

- GP 13 How to Check a Switch.
- P/J504, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray down limit switch, PL 70.70 Item 2.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 076-340 elevator motor encoder sensor, Q76-340. Press Start. Manually lift the elevator motor to activate the sensor. **The display changes**

Y N

Go to Flag 4. Check Q76-340. Refer to:

- GP 11 How to Check a Sensor.
- P/J506, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Elevator motor encoder sensor, PL 70.68 Item 5.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 076-011 to lower the elevator motor, MOT76-010. Press Start. **The motor runs**

Y N

Go to Flag 5. Check MOT76-010. Refer to:

- GP 10 How to Check a Motor.
- P/J504, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP

Install new components as necessary:

- Elevator motor, PL 70.68 Item 4.
- Tray 6 control PWB, PL 70.68 Item 8.

The elevator motor is operating correctly. Perform ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield, then perform SCP 5 Final Actions.

The elevator motor is operating correctly. Perform ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield, then perform SCP 5 Final Actions.

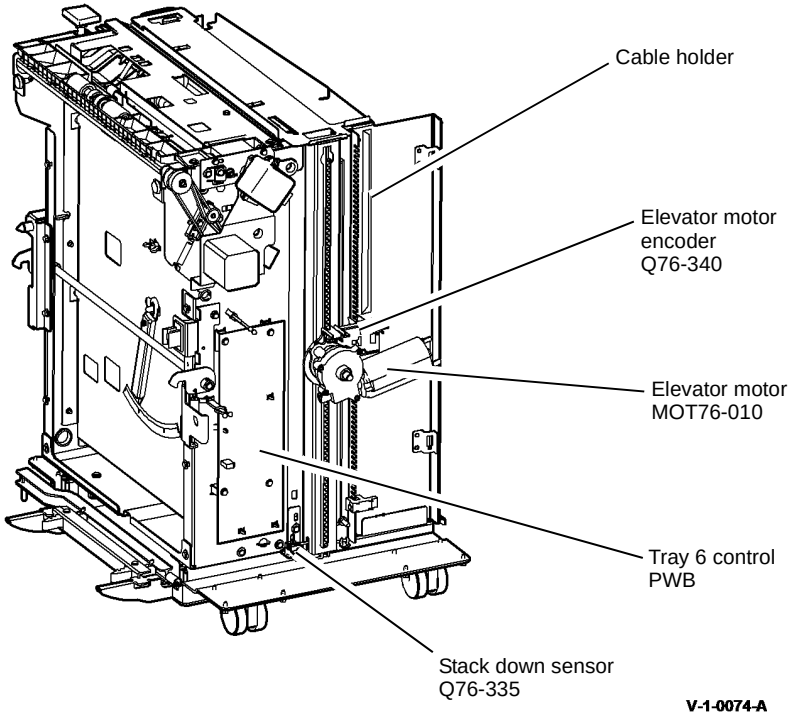


Figure 1 Component location

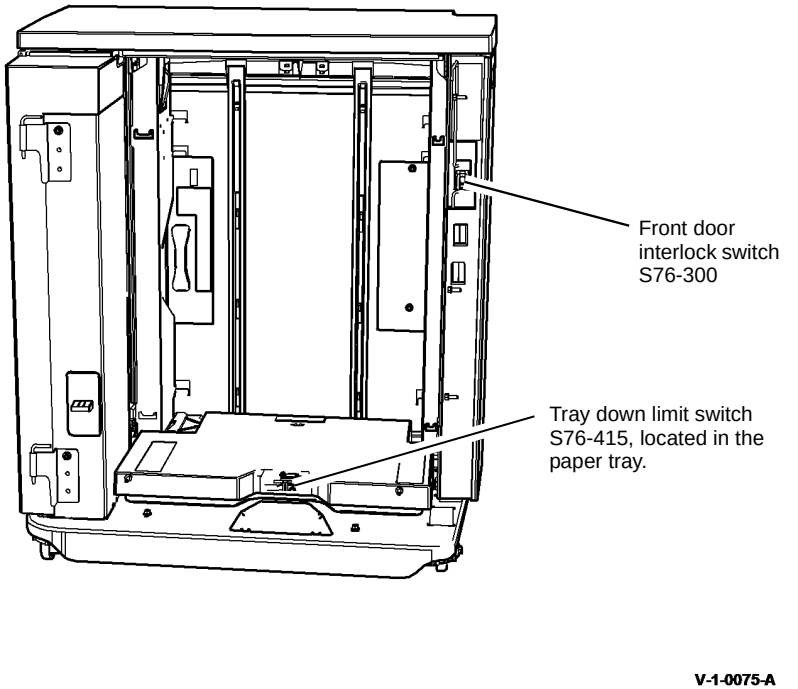


Figure 2 Component location

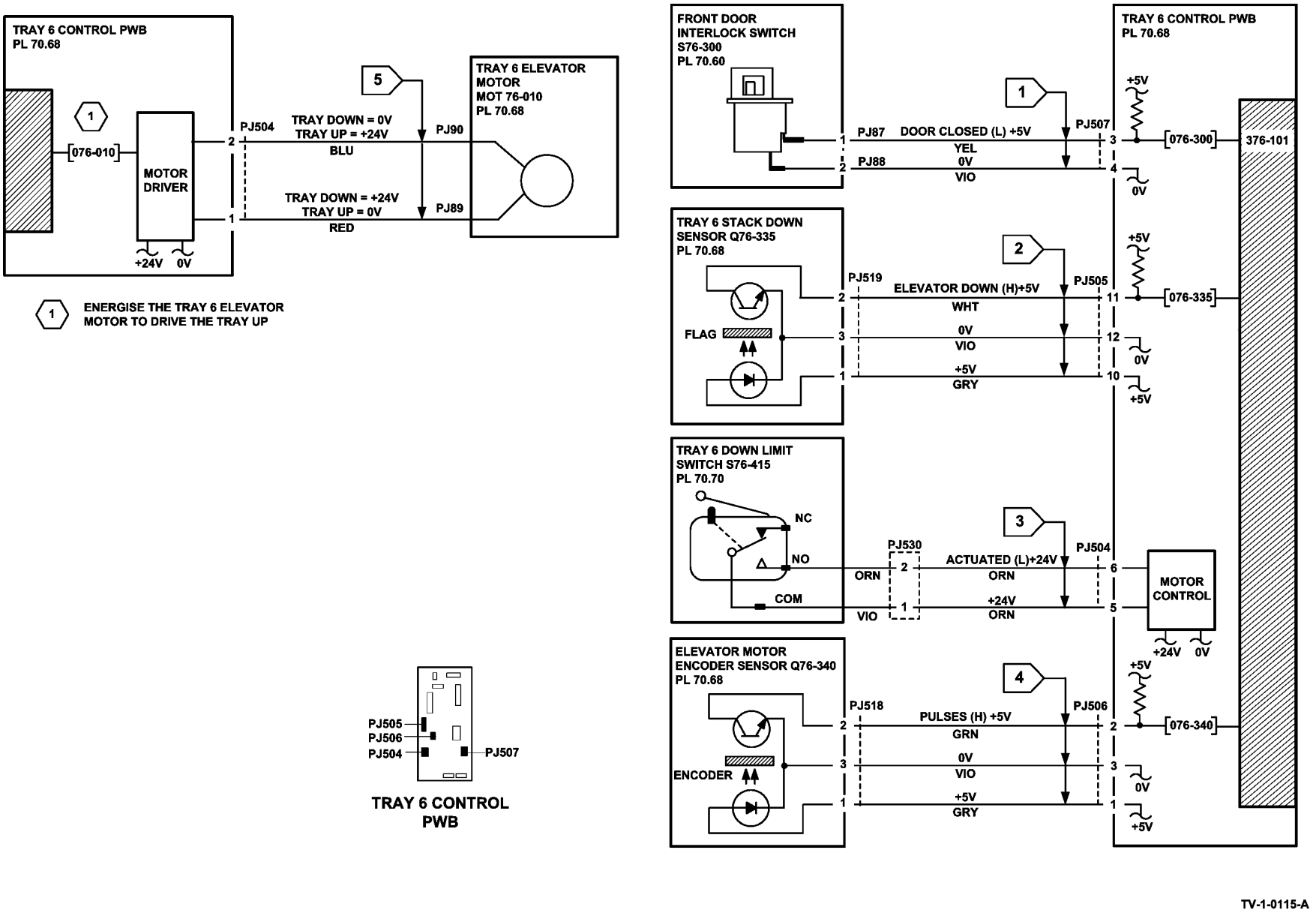


Figure 3 Circuit diagram

376-500-00 Tray 6 Door Open During Run RAP

376-500-00 Tray 6 door open during run when the paper is fed from tray 6.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure that the door is correctly aligned and closes correctly.
- Check the switch actuator, Figure 1.

Procedure

Enter dC330 code 076-300 front door interlock switch, S76-300. Press Start. Open, then fully close the door. **The display changes.**

Y **N**

Go to Flag 1. Check S76-300. Refer to:

- GP 13 How to Check a Switch.
- 301E +5V Distribution RAP
- P/J507, Tray 6 control PWB.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Front door interlock switch, PL 70.60 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

If the fault remains, install new components as necessary:

- Front door interlock switch, PL 70.60 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

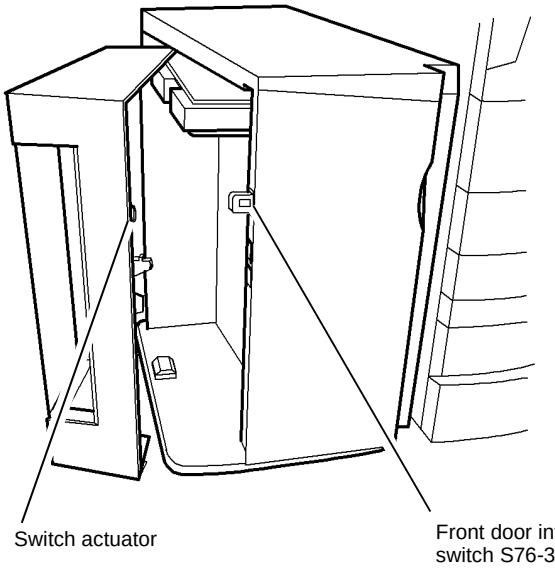


Figure 1 Component location

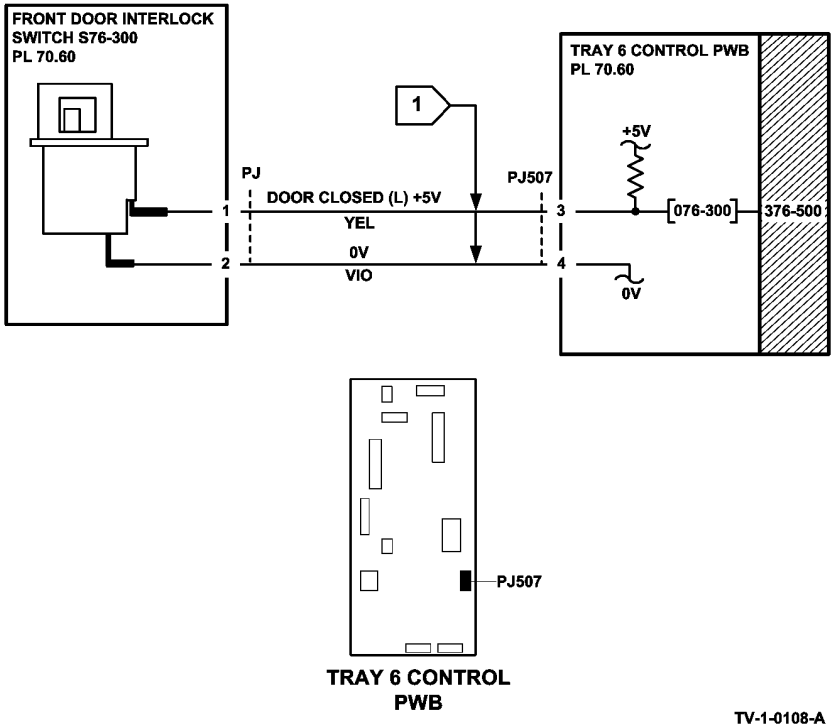


Figure 2 Circuit diagram

376-510-00 Tray 6 Undocked During Run RAP

376-510-00 Tray 6 was undocked during run when the paper is fed from tray 6.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure tray 6 is fully docked to the machine.
- Check for obstructions between tray 6 and the machine.
- Make sure that tray 6 is correctly aligned to the machine, ADJ 70.3.

Procedure

Enter dC330 code 076-310 docking interlock switch, S76-310. Press Start. Undock, then dock tray 6, refer to REP 70.11. **The display changes.**

Y **N**

Go to Flag 1. Check S76-310. Refer to:

- GP 13 How to Check a Switch.
- P/J507, Tray 6 control PWB.
- Figure 1.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Docking interlock switch, PL 70.64 Item 1.
- Tray 6 control PWB, PL 70.68 Item 8.

Perform the following:

- Check that the docking latch on tray 6 is latched onto the machine, Figure 2.
- Check the that the rail assembly is located correctly to the machine.

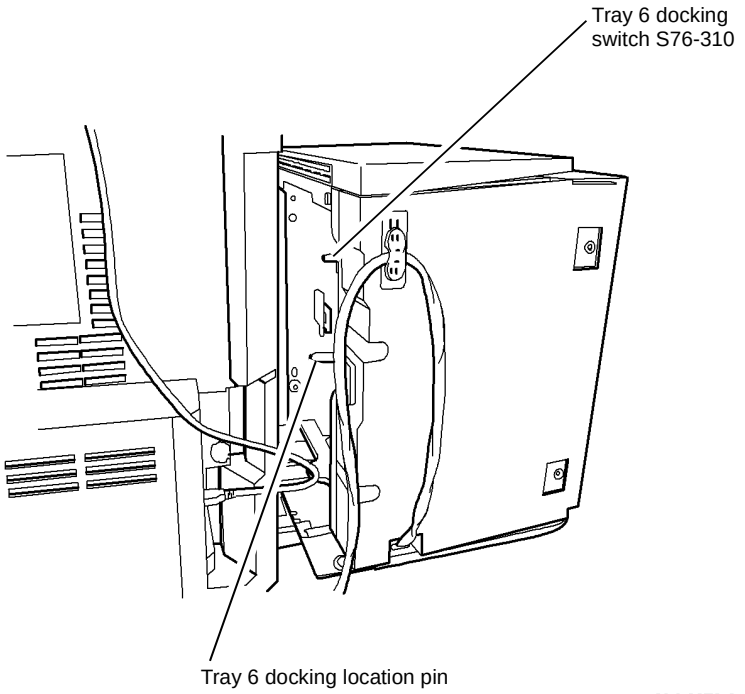


Figure 1 Component location

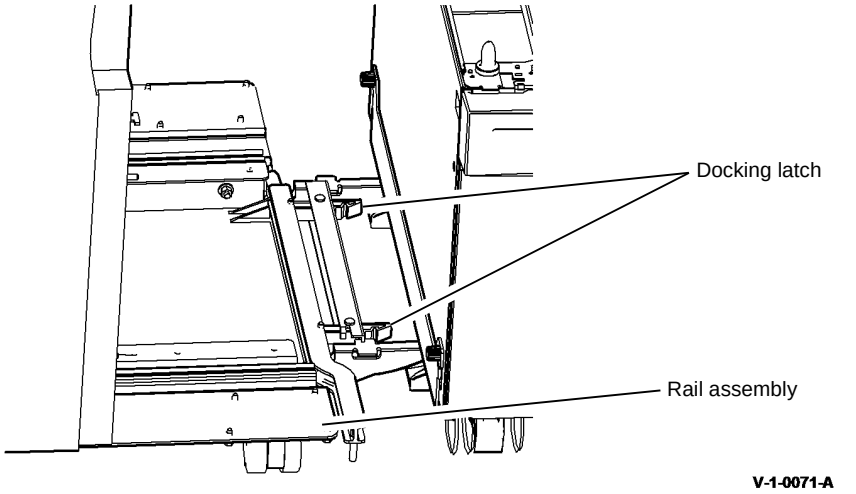


Figure 2 Component location

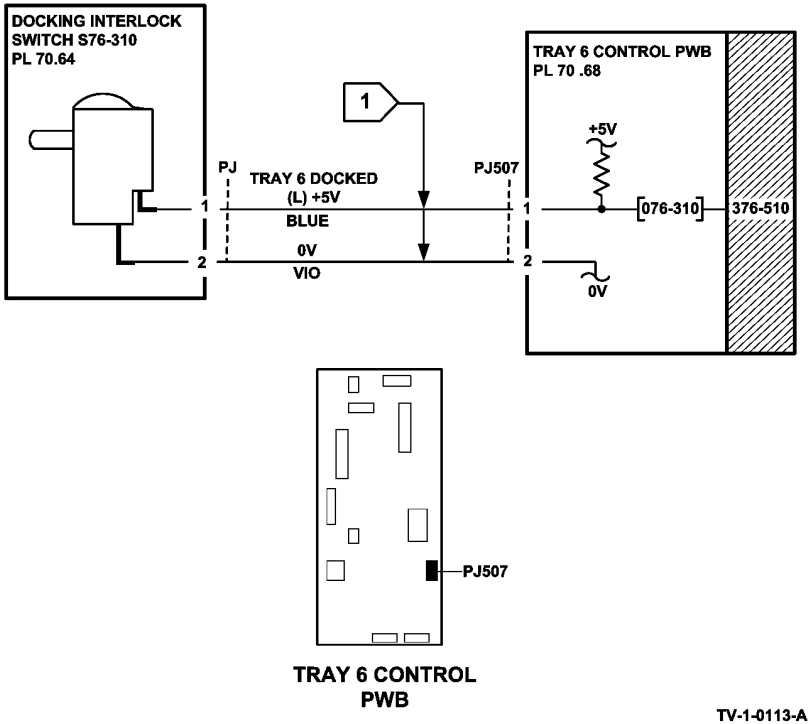


Figure 3 Tray 1 circuit diagram

376A Tray 6 Empty RAP

Use this RAP to solve problems associated with the tray 6 empty sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the hole in the tray, directly under the sensor is clear and empty, Figure 1.
- Check the sensor for contamination.

Procedure

Enter dC330 code 076-320 empty sensor, Q76-320. Press Start. Manually actuate the tray empty sensor. **The display changes.**

Y N

Go to Flag 1. Check Q76-320. Refer to:

- GP 11 How to Check a Sensor.
- P/J505, Tray 6 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Empty sensor, PL 80.45 Item 6
- Tray 6 control PWB, PL 70.68 Item 8.

The fault may be intermittent. Perform the steps that follow:

- Check the wiring harness for damage, GP 7.
- Check that the empty sensor is located correctly.

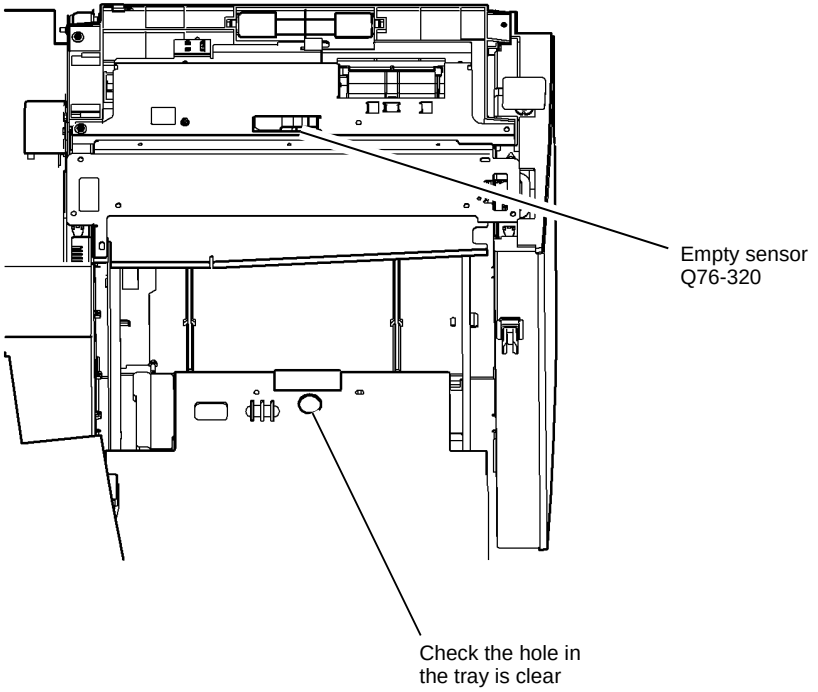


Figure 1 Component location

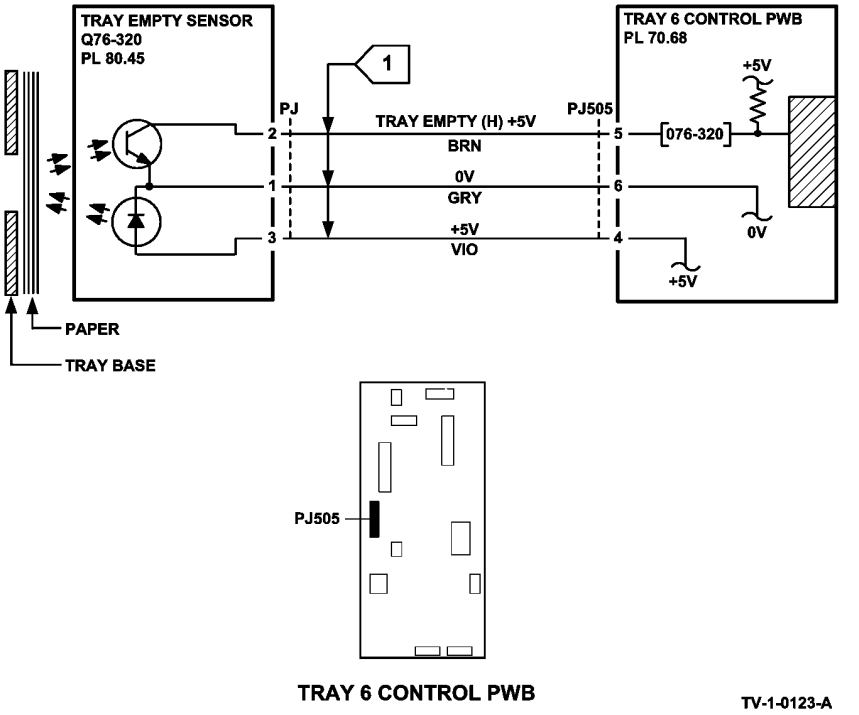


Figure 2 Circuit diagram

381-100-00 Wait Sensor Jam Entry RAP

381-100-00 The lead edge of the paper failed to actuate the wait sensor within the correct time from feed sensor 1.

Procedure

Identify the speed of the machine, refer to SCP 6 Machine features. Perform one of the steps that follow:

- If the speed of the machine is 45-55 ppm, go to 381-100-00A Wait Sensor RAP (45-55 ppm)
- If the speed of the machine is 65-90 ppm, go to 381-100-00B Wait Sensor RAP (65-90 ppm).

381-100-00A Wait Sensor Jam RAP (45-55 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-100-00 Wait Sensor Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check the wait sensor actuator, Figure 1.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose. PL 70.30 Item 23. Bias the cover to the right and tighten the two screws.
- Make sure the correct paper size is displayed for the size of paper in the tray.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-100 wait sensor, Q81-100. Press Start.
Manually actuate the wait sensor. **The display changes.**

Y **N**

Go to Flag 1. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new wait sensor, PL 80.15 Item 3. If the problem persists, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 081-101 tray 1 feed sensor, Q81-101. Press Start. Open the bypass tray and left door assembly. Manually actuate the sensor. **The display changes.**

Y **N**

Go to Flag 2. Check Q81-101. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 1 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-025 transport roll drives motor, MOT81-025. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-025. Refer to:

- GP 10 How to Check a Motor.
- P/J273, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Transport roll drives motor, PL 80.25 Item 5.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The transport rolls rotate.

Y N

Refer to GP 7. Check the drive belt and gears, PL 80.25 Item 2 and PL 80.25 Item 3.

Refer to GP 7. Check the following, install new components as necessary:

- The bearing, shaft and rolls on the transport roll assembly, PL 80.25 Item 8.
- The idler rolls in the left door, PL 70.30 Item 2.
- The transport drive belt, PL 80.25 Item 2.
- The transport rolls for wear, PL 80.25 Item 8.

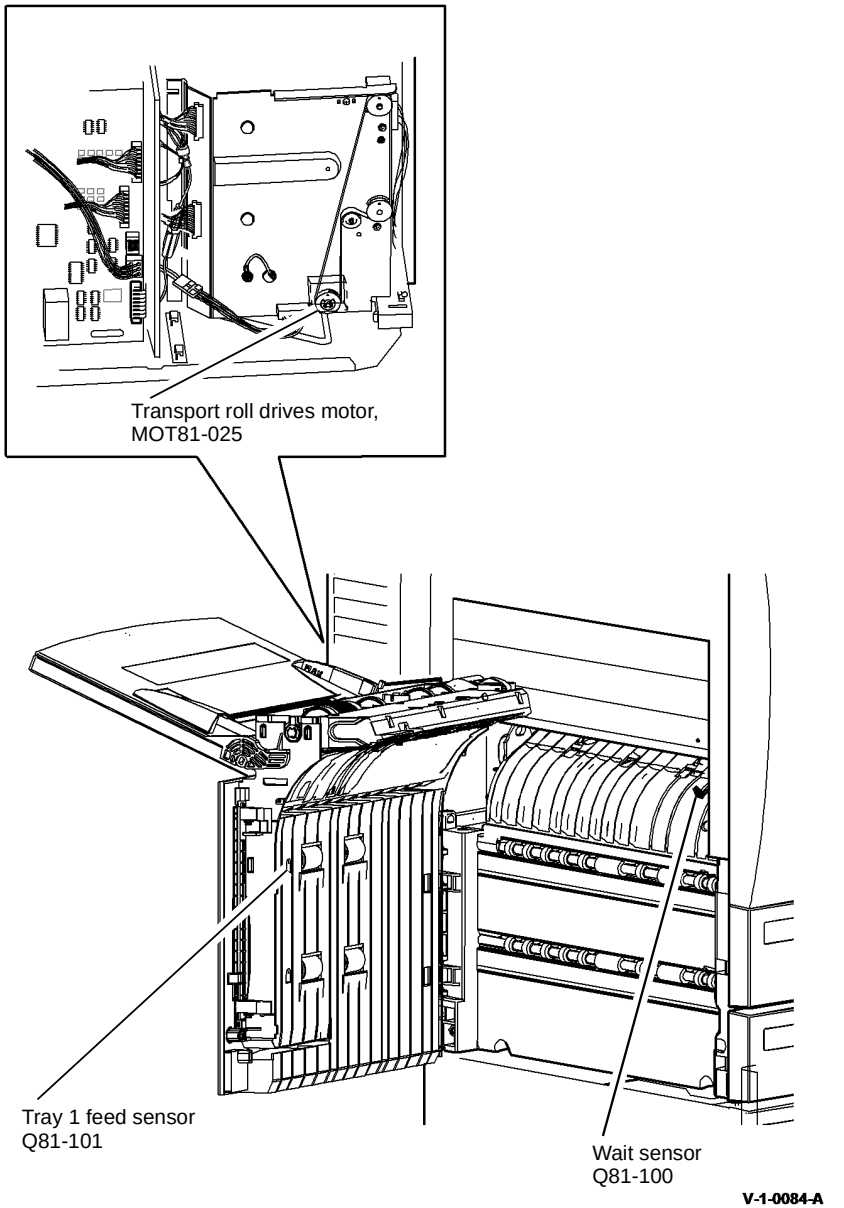


Figure 1 Component location

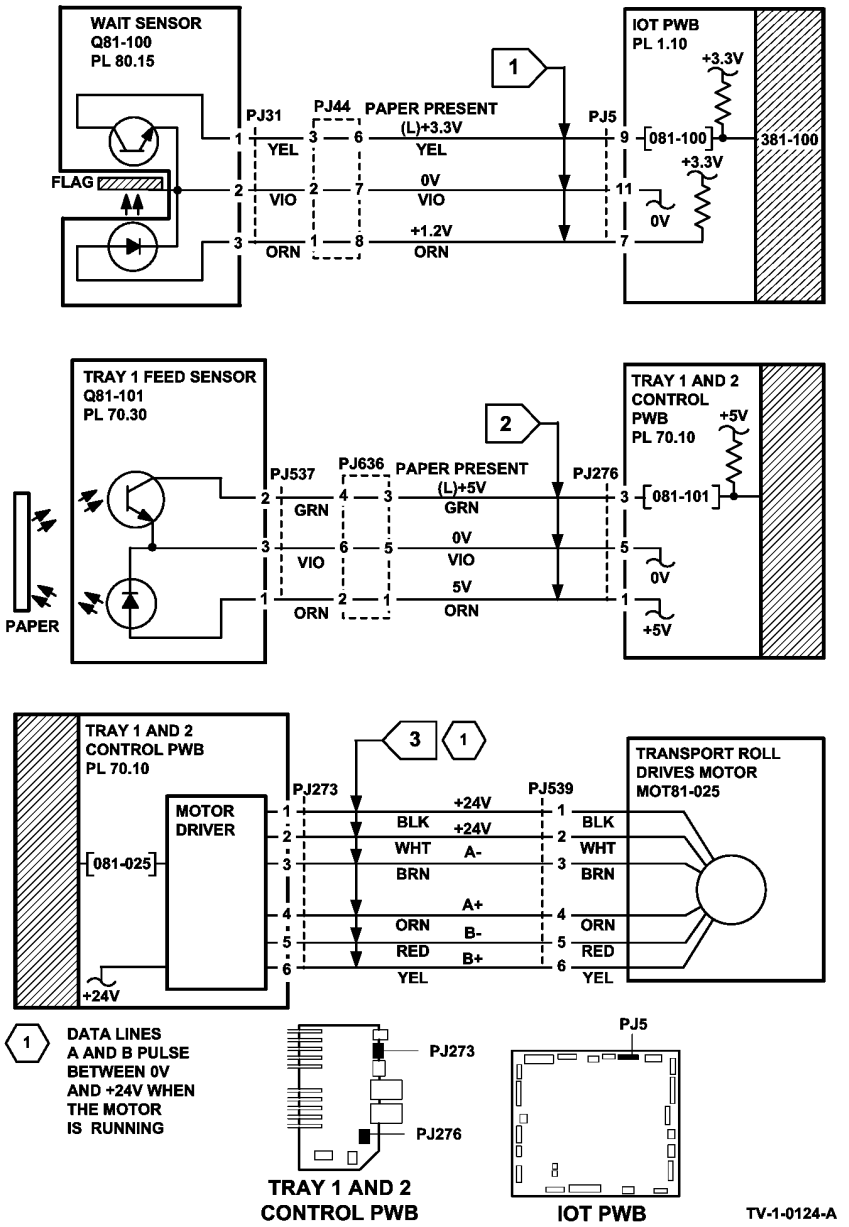


Figure 2 Circuit diagram

381-100-00B Wait Sensor Jam RAP (65-90 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-100-00 Wait Sensor Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose. PL 70.30 Item 23. Bias the cover to the right and tighten the two screws.
- Make sure the correct paper size is displayed for the size of paper in the tray.

Procedure

***NOTE:** The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-100 wait sensor, Q81-100. Press Start.
Manually actuate the wait sensor. **The display changes.**

Y N

Go to Flag 1. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary, install a new wait sensor, PL 70.30 Item 25. If the problem persists, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 081-101 tray 1 feed sensor, Q81-101. Press Start. Open left door and manually actuate the sensor. **The display changes.**

Y N

Go to Flag 2. Check Q81-101. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 1 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-025 transport roll drives motor, MOT81-025. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-025. Refer to:

- GP 10 How to Check a Motor.
- P/J276, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Transport roll drives motor, PL 80.25 Item 5.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The transport rolls rotate.

Y N

Refer to GP 7. Check the drive belt and gears, PL 80.25.

Refer to GP 7. Check the following, install new components as necessary:

- The bearing, shaft and rolls on the transport roll assembly, PL 80.25 Item 8.
- The idler rolls in the left door, PL 70.30 Item 2.
- The transport drive belt, PL 80.25 Item 2.
- The transport rolls for wear, PL 80.25 Item 8.

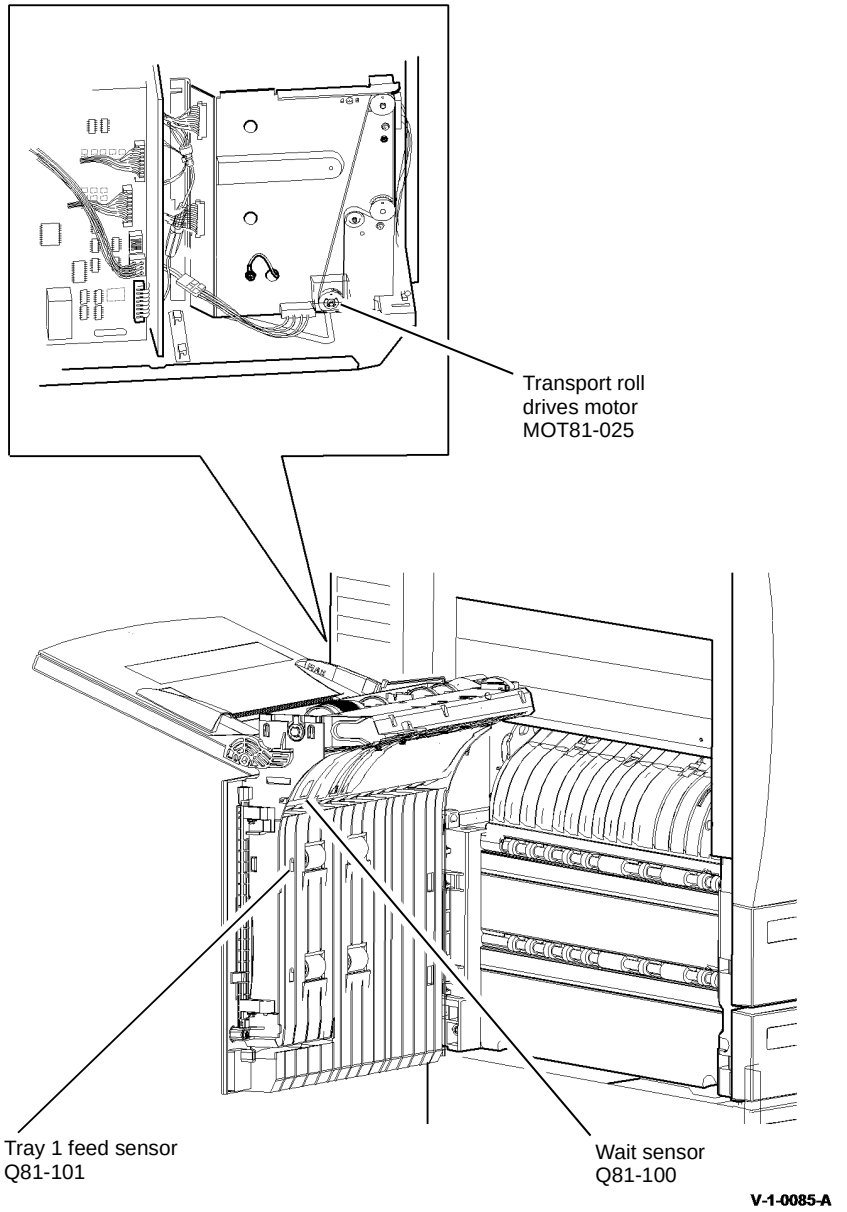
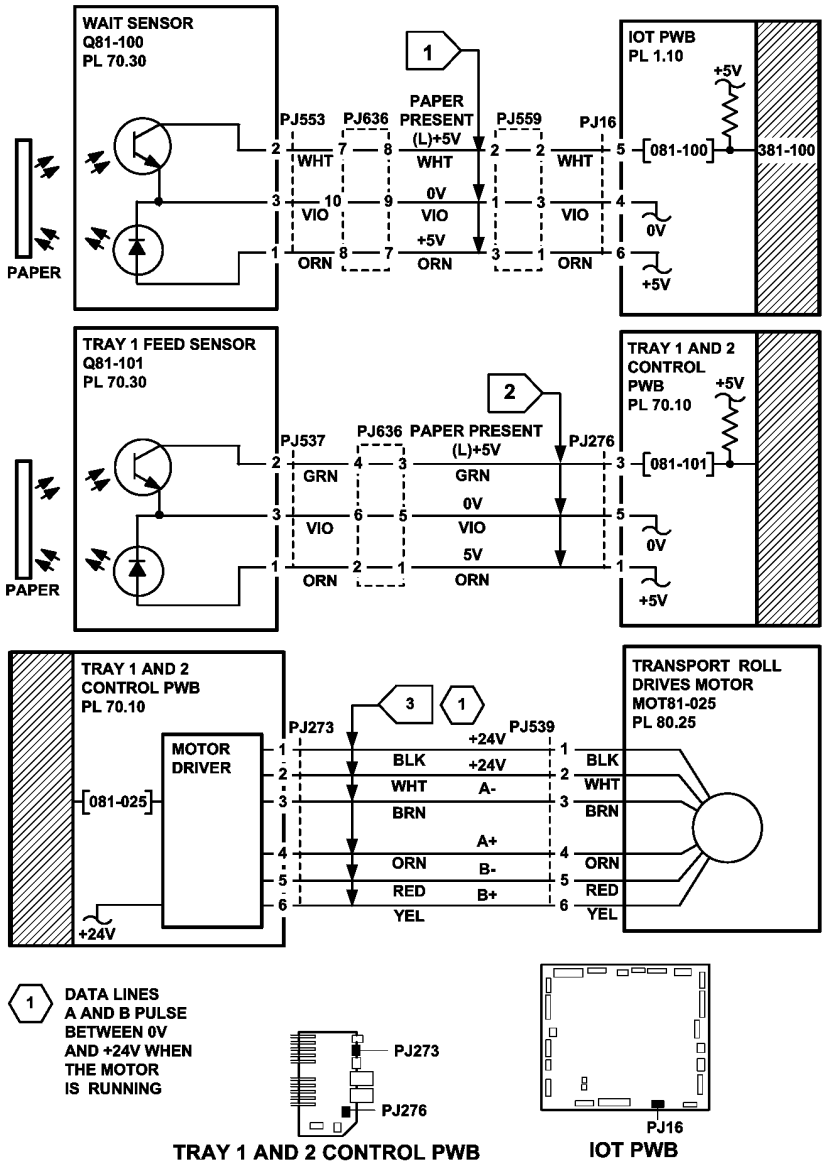


Figure 1 Component location



TV-1-0125-A

Figure 2 Circuit diagram

381-101-00, 381-111-00 Tray 1 Misfeed RAP

381-101-00 The lead edge of the paper failed to actuate the tray 1 feed sensor within the correct time after feeding paper from tray 1.

381-111-00 The trail edge of the paper failed to deactuate the tray 1 feed sensor within the correct time after the sensor was made.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 1. Refer to IQ1 and GP 20.
- Check that the paper guides are set correctly.
- Observe the feeder and check for obstructions.
- Turn and change the paper in the tray.
- Check that the tray elevates to the feed position. Refer to 371-100-00 Tray 1 Elevator Lift Failure RAP.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Check for damage to the chamfered edge on the left side of the tray. Repair the damaged edge or install a new paper tray, PL 70.10 Item 1.
- If the paper has excessive curl and is causing the paper to be skewed when fed from the tray. Install TAG 002 on the paper tray to constrain the effect of the curl.
- Check the paper feeder PL 80.26 Item 2 fully descends. If the paper feeder shaft is binding with the edge of the housing slot, apply plastislip grease to the contact areas.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

NOTE: *To help fault diagnosis, install the tray 1 paper feed assembly in the tray 2 paper feed assembly position. With tray 1 removed, the operation of the feed assembly can be observed. Refer to REP 80.1.*

Enter dC330 code 081-101 tray 1 feed sensor, Q81-101. Figure 1. Press Start. Open the bypass tray and left door assembly. Manually actuate the sensor. **The display changes.**

Y **N**

Go to Flag 1. Check Q81-101. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 1 feed sensor, PL 70.30 Item 25.

A

A

- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-025 transport roll drives motor, MOT81-025. Press Start. **The motor runs.**

Y N

Go to Flag 2. Check MOT81-025. Refer to:

- GP 10 How to Check a Motor.
- P/J273, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Transport roll drives motor, PL 80.25 Item 5.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The transport rolls rotate.

Y N

Check the drive belt, PL 80.25 Item 2, pulley, PL 80.25 Item 3 and pulley idler, PL 80.25 Item 4.

CAUTION

To prevent damage to the feed mechanism, the paper tray must be pulled out before MOT81-010 is run in service mode.

Enter dC330 code 081-010 tray 1 feed/elevator motor, MOT81-010. Pull out the tray. Press **Start**. **The feed rolls rotate.**

Y N

Remove the feed assembly from the machine. Manually rotate the feed roll shaft. **The drive gears rotate.**

Y N

Check the drive gears for damage. If necessary install new components, PL 80.26.

Install the tray 1 feed assembly. Go to Flag 3. Check MOT81-010. Refer to:

- GP 10 How to Check a Motor.
- P/J274, Tray 1 and 2 control PWB.
- 301D +3.3V Distribution RAP.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Instal new components as necessary:

- Tray 1 elevator motor, PL 80.26 Item 6.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The nudger roll rotates.

Y N

Check the nudger roll drive belt and drive coupling for damage. If necessary install new components, PL 80.26.

Remove the paper tray. Manually activate the retard nip split mechanism. **The retard roll moves against the feed roll.**

Y N

Check the retard roll drive coupling and mechanism for damage. If necessary install new components, PL 80.26.

Perform the following:

- Clean the feed roll using a cloth dampened with water.
- Check the roll assembly, PL 80.26 Item 3.
- Check the paper feed assembly, PL 80.26 Item 1.

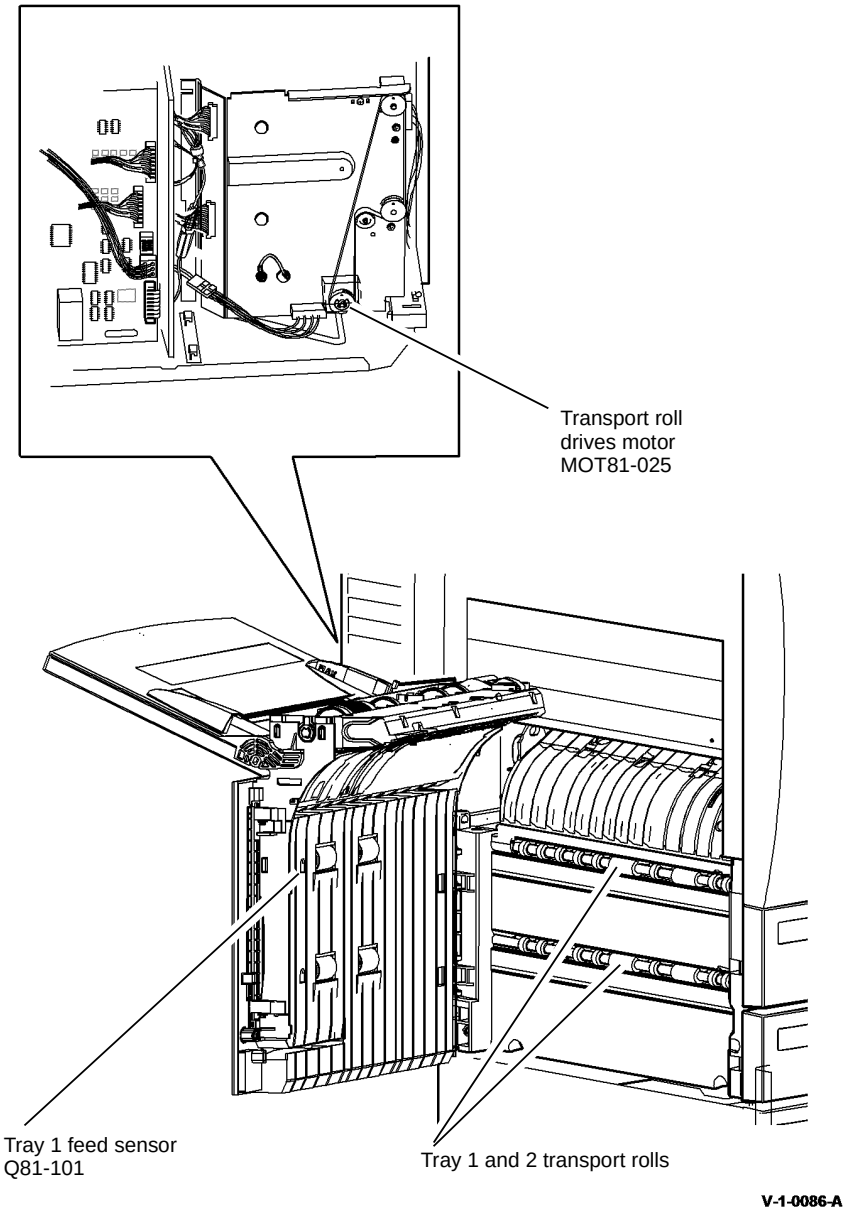


Figure 1 Component location

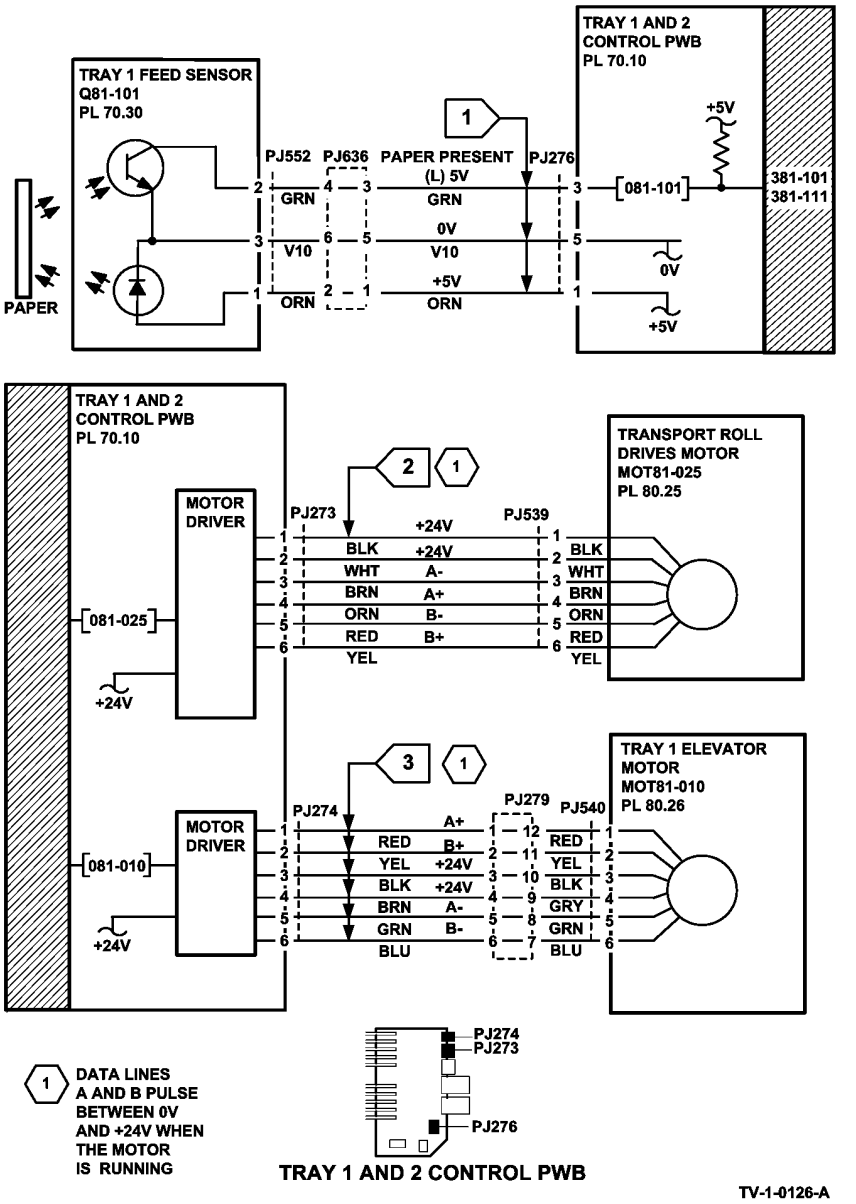


Figure 2 Circuit diagram

381-102-00, 381-112-00 Tray 2 Misfeed RAP

381-102-00 The lead edge of the paper failed to actuate the tray 2 feed sensor within the correct time after feeding paper from tray 2.

381-112-00 The trail edge of the paper failed to deactuate the tray 2 feed sensor within the correct time after the sensor was made.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 2. Refer to IQ1 and GP 20.
- Check that the paper guides are set correctly.
- Observe the feeder and check for obstructions.
- Turn and change the paper in the tray.
- Check that the tray elevates to the feed position. Refer to 372-100-00 Tray 2 Elevator Lift Failure RAP.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Check for damage to the chamfered edge on the left side of the tray. Repair the damaged edge or install a new paper tray, PL 70.10 Item 1.
- If the paper has excessive curl and is causing the paper to be skewed when fed from the tray. Install TAG 002 on the paper tray to constrain the effect of the curl.
- Check the paper feeder PL 80.26 Item 1 fully descends. If the paper feeder shaft is binding with the edge of the housing slot, apply plastislip grease to the contact areas.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-102 tray 2 feed sensor, Q81-102. Figure 1. Press Start. Open the bypass tray and left door assembly. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1.Check Q81-102. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 2 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-025 transport roll drives motor, MOT81-025. Press Start.**The motor runs.**

Y N

Go to Flag 2. Check MOT81-025. Refer to:

- GP 10 How to Check a Motor.
- P/J273, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Transport roll drives motor, PL 80.25 Item 5.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The transport rolls rotate.

Y N

Refer to GP 7. Check the drive belt and gears, PL 80.25 Item 2.

CAUTION

To prevent damage to the feed mechanism, the paper tray must be pulled out before MOT81-020 is run in service mode.

Enter dC330 code 081-020 tray 2 feed/elevator motor, MOT81-020. Pull out the tray. Press Start. **The motor runs.**

Y N

Remove the feed assembly from the machine. Manually rotate the feed roll shaft. **The feed rolls rotate.**

Y N

Check the drive gears for damage. If necessary install new components, PL 80.26.

Install the tray 2 feed assembly. Go to Flag 3. Check MOT81-020. Refer to:

- GP 10 How to Check a Motor.
- P/J275, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Instal new components as necessary:

- Tray 2 feed/elevator motor, PL 80.26 Item 6.
- Tray 1 and 2 control PWB PL 70.10 Item 2.

The nudger roll rotates.

Y N

Check the nudger roll drive belt and drive coupling for damage. If necessary install new components, PL 80.26.

Remove the paper tray. Manually activate the retard nip split mechanism. **The retard roll moves against the feed roll.**

Y N

Check the retard roll drive coupling and mechanism for damage. If necessary install new components, PL 80.26.

Perform the following:

- Clean the feed roll using a cloth dampened with water.

- Check the feed roll assembly, PL 80.26 Item 3.
- Check the feed assembly, PL 80.26 Item 1.

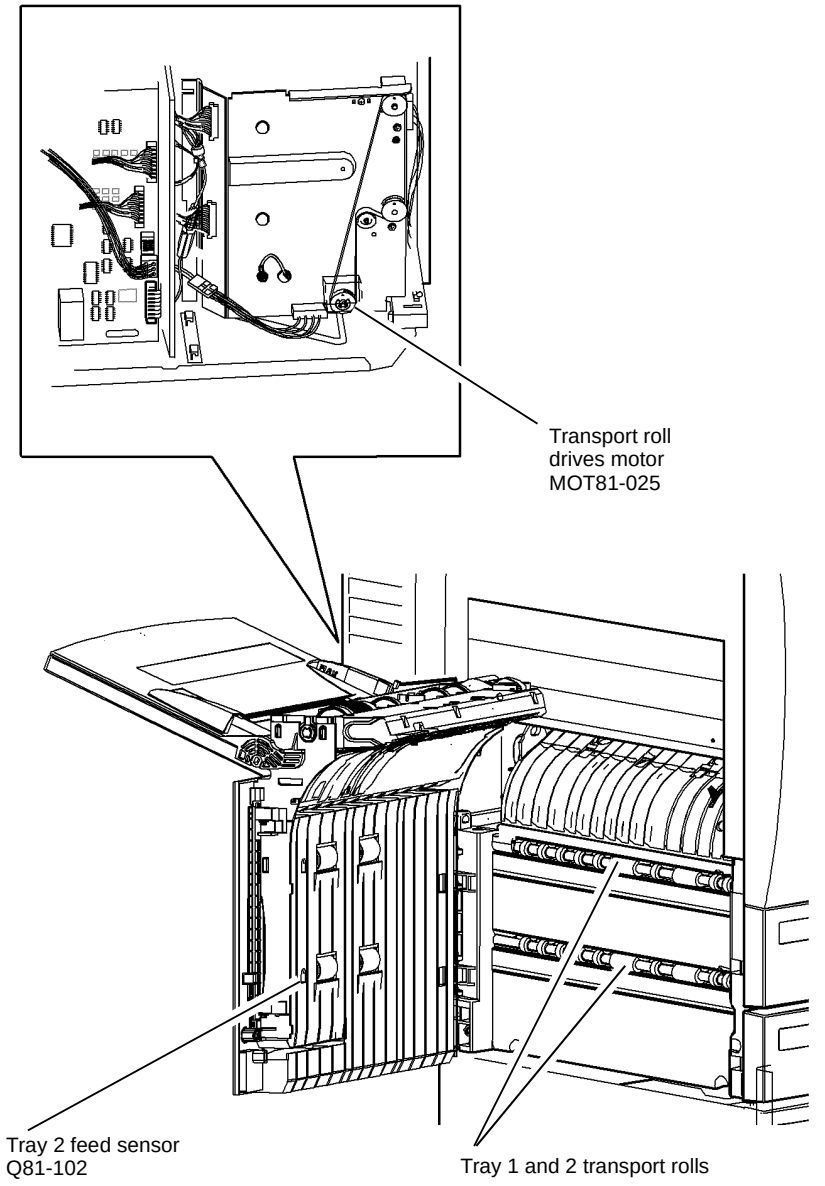


Figure 1 Component location

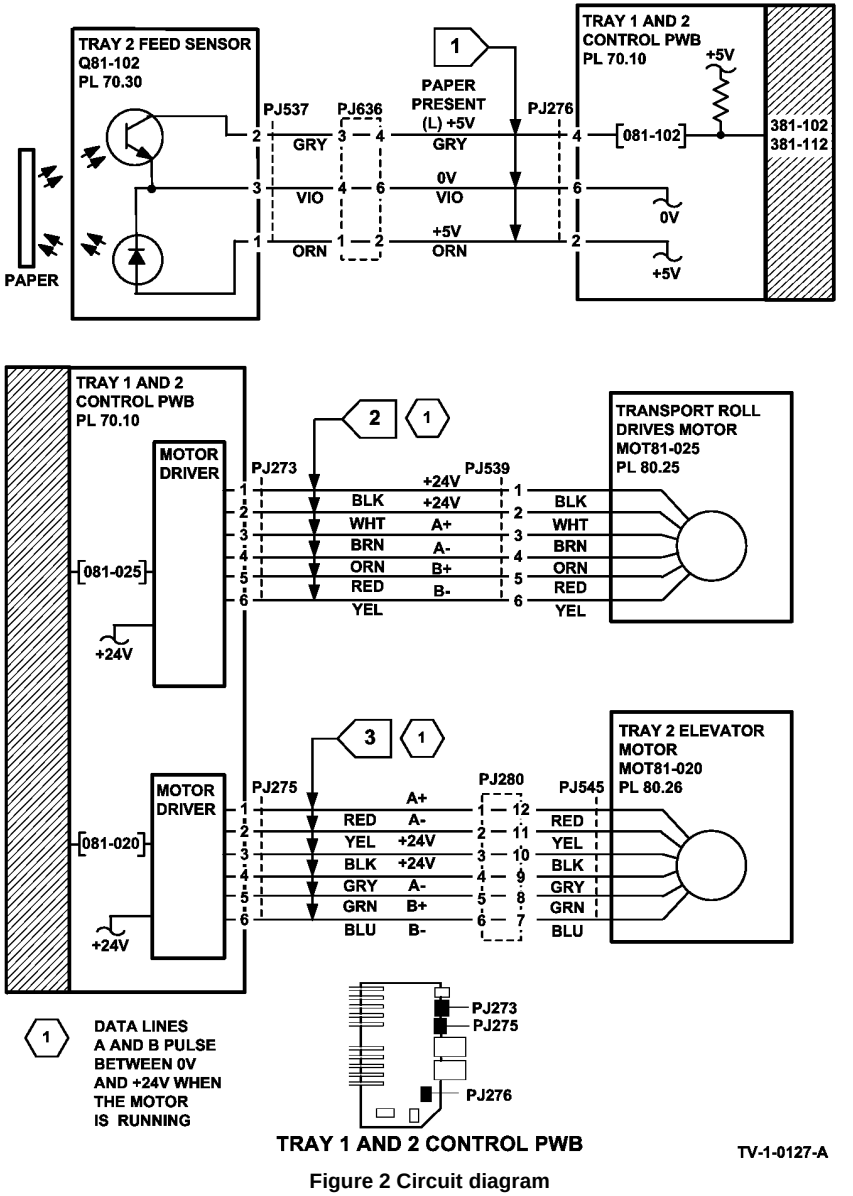


Figure 2 Circuit diagram

381-103-00, 381-113-00 Tray 3 Misfeed RAP

381-103-00 The lead edge of the paper failed to actuate the tray 3 feed sensor within the correct time after feeding paper from tray 3.

381-113-00 Tray 3 sensor did not de-actuate within the correct time after the sensor was actuated.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 3. Refer to IQ1 and GP 20.
- Ensure that the tray is pushed fully home.
- If the misfeed occurs between 15 and 20 paper feeds, then go to 373-100-00 Tray 3 Elevator Lift Failure RAP.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Locate the tray 3 feed sensor, Figure 2. Enter dC330 code 081-103 tray 3 feed sensor, Q81-103. Press Start. Manually actuate the sensor using white paper. **The display changes.**

Y N

Go to Flag 1. Check Q81-103. Refer to:

- GP 11 How to Check a Sensor.
- P/J4, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 feed sensor, PL 80.32 Item 6.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 081-045 HCF transport motor, MOT81-045. Press Start. **The motor runs.**

Y N

Go to Flag 2. Check MOT81-045. Refer to:

- Figure 1.
- GP 10 How to Check a Motor.
- P/J6, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF transport motor, PL 80.36 Item 13.
- HCF control PWB, PL 70.21 Item 2.

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Observe the tray 3 and 4 transport roll, PL 80.32 Item 4 and the takeaway roll assembly, PL 80.36 Item 2. **The transport roll and takeaway roll rotate.**

Y N

Check the following:

- Drive coupling, PL 80.36 Item 7.
- Drive belt, PL 80.36 Item 6.
- Transport gear pulley, PL 80.36 Item 12.

CAUTION

To prevent damage to the feed mechanism, the paper tray must be pulled out before MOT81-030 is run in service mode.

Enter dC330 code 081-030 tray 3 feed motor, MOT81-030. Pull out the tray. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-030. Refer to:

- Figure 1.
- GP 10 How to Check a Motor.
- P/J1, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 feed motor, PL 80.32 Item 11.
- HCF control PWB, PL 70.21 Item 2.

Locate the tray 3 feed clutch, Figure 2. Enter dC330 code 081-030 tray 3 feed motor, MOT81-030, stack the code 081-033 tray 3 feed clutch, CL81-033. Pull out tray 3. Observe the tray 3 feed and nudger rolls. Press Start. **The rolls rotate.**

Y N

Go to Flag 4. Check CL81-033. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J4, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 feed clutch, PL 80.32 Item 21.
- HCF control PWB, PL 70.21 Item 2.

Perform the following:

- Clean the feed roll, nudger roll and retard roll using a cloth dampened with water.
- Check the feed roll, nudger roll and retard roll for wear. If necessary install a new feed/nudger/retard roll spares kit, PL 31.13 Item 14.
- Perform the following adjustments:
  - ADJ 80.3 Tray 3 and Tray 4 Retard Roll Pressure.
  - ADJ 80.4 Tray 3 and Tray 4 Nudger Roll Pressure.
- Check the tray 3 stack height sensor actuator on the feed assembly, PL 80.32 Item 7.

- Check the tray is level.
  1. Pull out tray 3. Remove all the paper from the tray.
  2. Remove the tray 3 front cover.
  3. Manually elevate the tray to the top of its travel by rotating the elevator cable drum at the front of the tray.
  4. At the three locations where the metal paper tray protrudes through the outer plastic frame of tray 3, check that the top surface of the metal paper tray is the same distance from the inside top of the slots
  5. If the tray is not level, install new elevator cables, PL 70.18.
- Check the tray 3 paper tray guide, PL 70.19 Item 7 for paper cut damage.
- If the fault still occurs, refer to GP 7 and check the following:
  – The takeaway roll assembly, PL 80.36 Item 2.
  – The idler roll assembly, PL 80.36 Item 8.
  – The tray 3 and 4 transport roll, PL 80.32 Item 4.
  – The idler roll assembly, PL 80.33 Item 2.

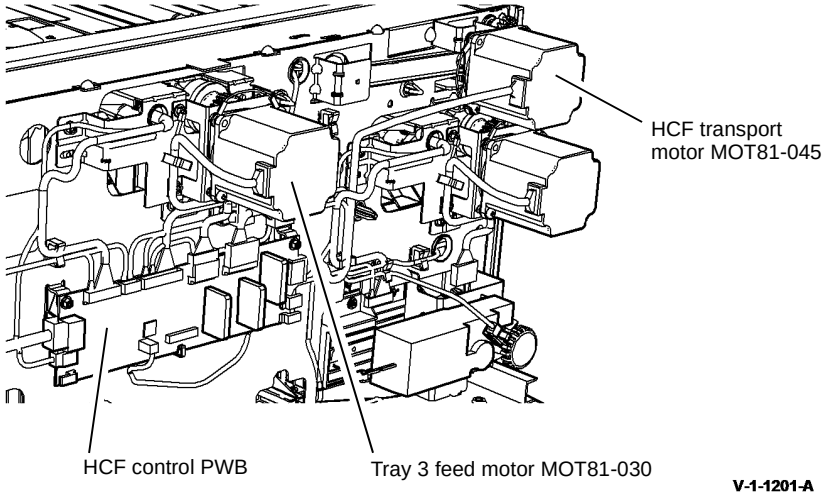

Figure 1 Component location

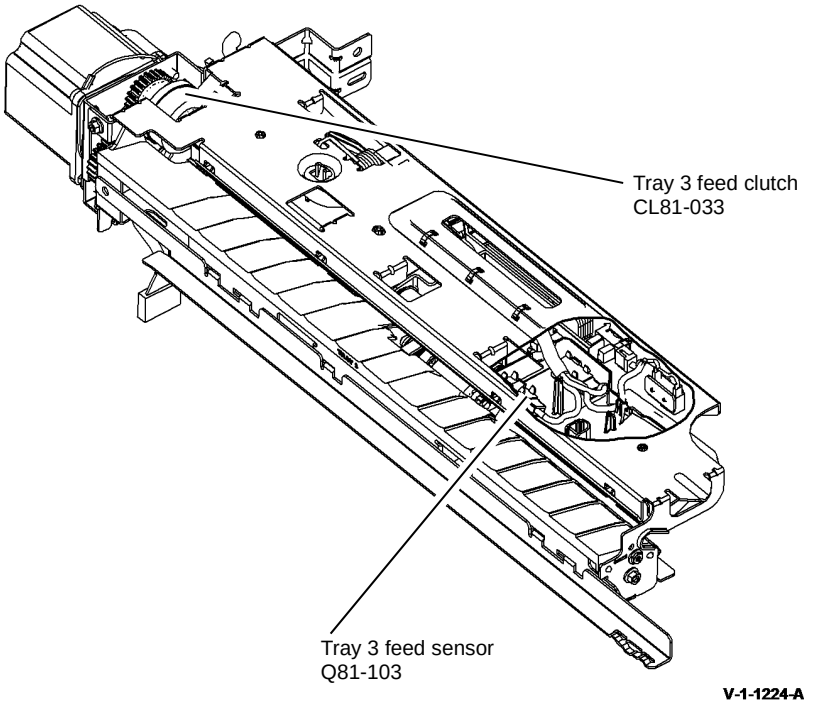

Figure 2 Component location

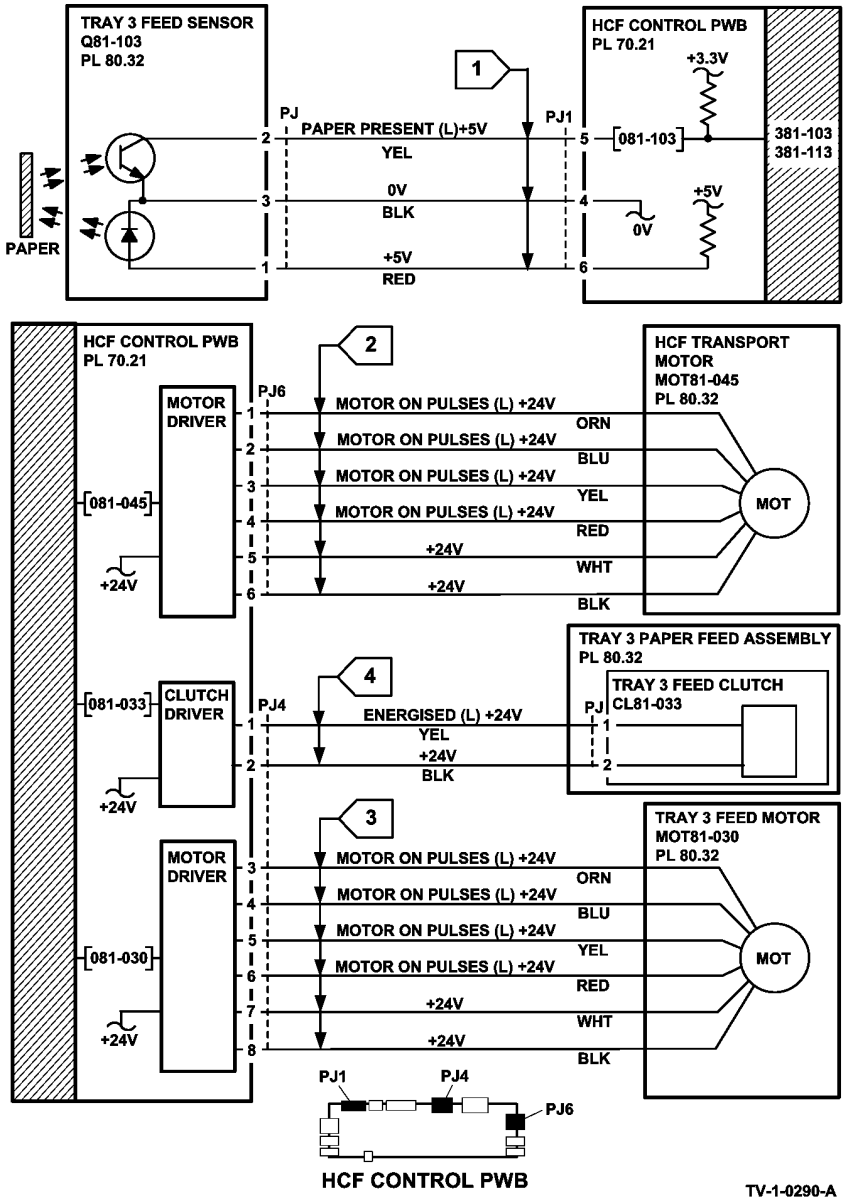

Figure 3 Circuit diagram

381-104-00, 381-114-00 Tray 4 Misfeed RAP

381-104-00 The lead edge of the paper failed to actuate the tray 4 feed sensor within the correct time after feeding paper from tray 4.

381-114-00 The tray 4 feed sensor did not de-actuate within the correct time after the sensor was actuated.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 4. Refer to IQ1 and GP 20.
- Ensure that the tray is pushed fully home.
- If the misfeed occurs between 15 and 20 paper feeds, then go to 374-100-00 Tray 4 Elevator Lift Failure RAP.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws

Procedure

***NOTE:** The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-104 tray 4 feed sensor, Q81-104, Figure 2. Press Start. Manually actuate the sensor. **The display changes.**

Y **N**

Go to Flag 1. Check Q81-104. Refer to:

- GP 11 How to Check a Sensor.
- P/J3, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 feed sensor, PL 80.33 Item 3.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 081-045 HCF transport motor, MOT81-045. Press Start. **The motor runs.**

Y **N**

Go to Flag 2. Check MOT81-045. Refer to:

- GP 10 How to Check a Motor.
- P/J6, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF transport motor, PL 80.36 Item 13.

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- HCF control PWB, PL 70.21 Item 2.

Observe the tray 3 and 4 transport roll, PL 80.32 Item 4 and the takeaway roll assembly, PL 80.36 Item 2. **The transport roll and takeaway roll rotate.**

Y N

Check the following:

- Drive coupling, PL 80.36 Item 7.
- Drive belt, PL 80.36 Item 6.
- Transport gear pulley, PL 80.36 Item 12.
- Check the idler shaft of the transport gear pulley. If the weld of the idler shaft on the HCF frame has broken, install an idle gear shaft spare kit, PL 31.14 Item 7/

CAUTION

To prevent damage to the feed mechanism, the paper tray must be pulled out before MOT81-040 is run in service mode.

Enter dC330 code 081-040 tray 4 feed motor, MOT81-040. Pull out the tray. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-040. Refer to:

- GP 10 How to Check a motor.
- P/J5, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 feed motor, PL 80.33 Item 10.
- HCF control PWB, PL 70.21 Item 2.

Locate the tray 4 feed clutch, Figure 1. Enter dC330 code 081-040 tray 4 feed motor, MOT81-040, stack the code 081-034 tray 4 feed clutch, CL81-034. Pull out tray 4. Observe the tray 4 feed and nudger rolls. Press Start. **The rolls rotate.**

Y N

Go to Flag 4. Check CL81-034. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 4 feed clutch, PL 80.33 Item 19.
- HCF control PWB, PL 70.21 Item 2.

Perform the following:

- Clean the feed roll, nudger roll and retard roll using a cloth dampened with water.
- Check the feed roll, retard roll and nudger roll for wear. If necessary install a new feed/nudger/retard roll spares kit, PL 31.13 Item 14.
- Perform the following adjustments:
  - ADJ 80.3 Tray 3 and Tray 4 Retard Roll Pressure.
  - ADJ 80.4 Tray 3 and Tray 4 Nudger Roll Pressure.
- Check the tray 4 stack height sensor actuator on the feed assembly, PL 80.33.
- Check the tray is level.
  1. Pull out tray 4 and remove all of the paper from the tray.
  2. Remove the tray 4 front cover.
  3. Manually elevate the tray to the top of its travel by rotating the elevator cable drum at the front of the tray.
  4. At the three locations where the metal paper tray protrude through the plastic outer frame of tray 4, check that the top surface of the metal paper tray is the same distance from the inside top of the slots.
  5. If the tray is not level then install new elevator cables, PL 70.18.
- Check the tray 4 paper tray guide for paper cut damage. If necessary, install new components, PL 70.19 Item 6.

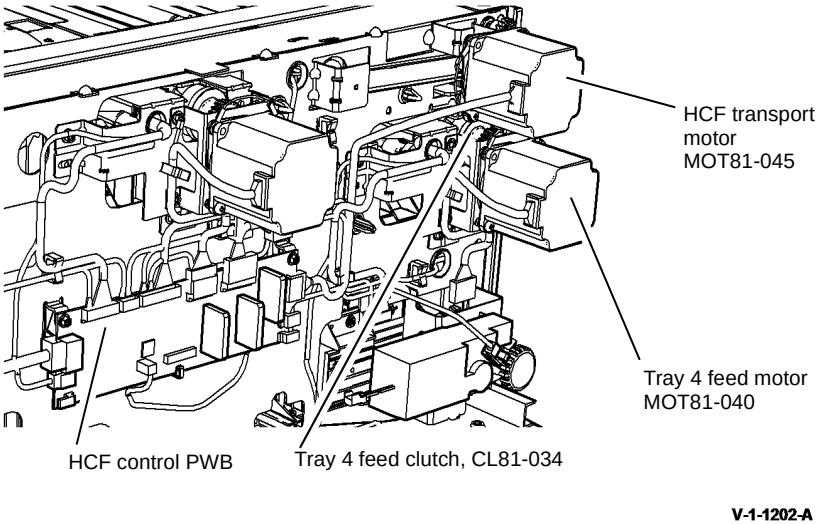

Figure 1 Component location

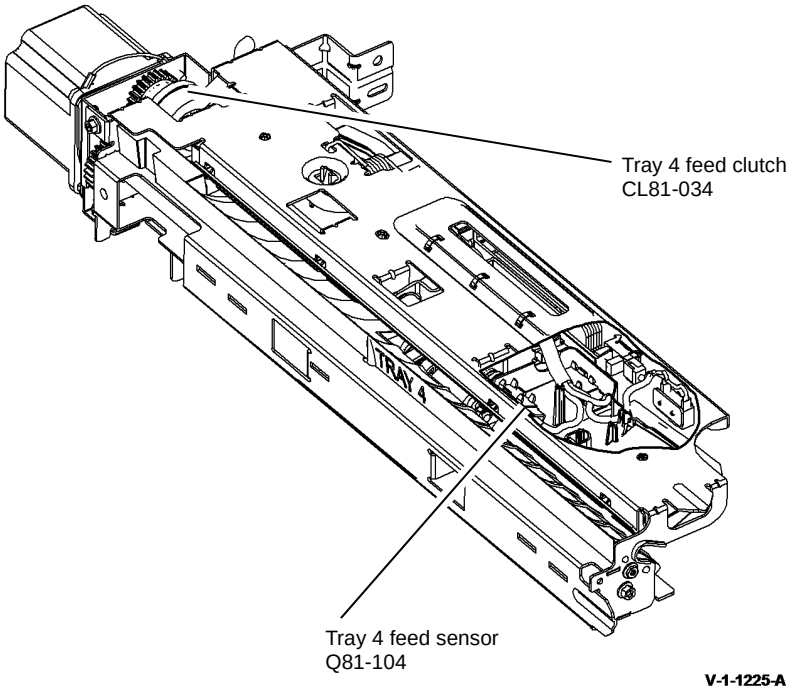

Figure 2 Component location

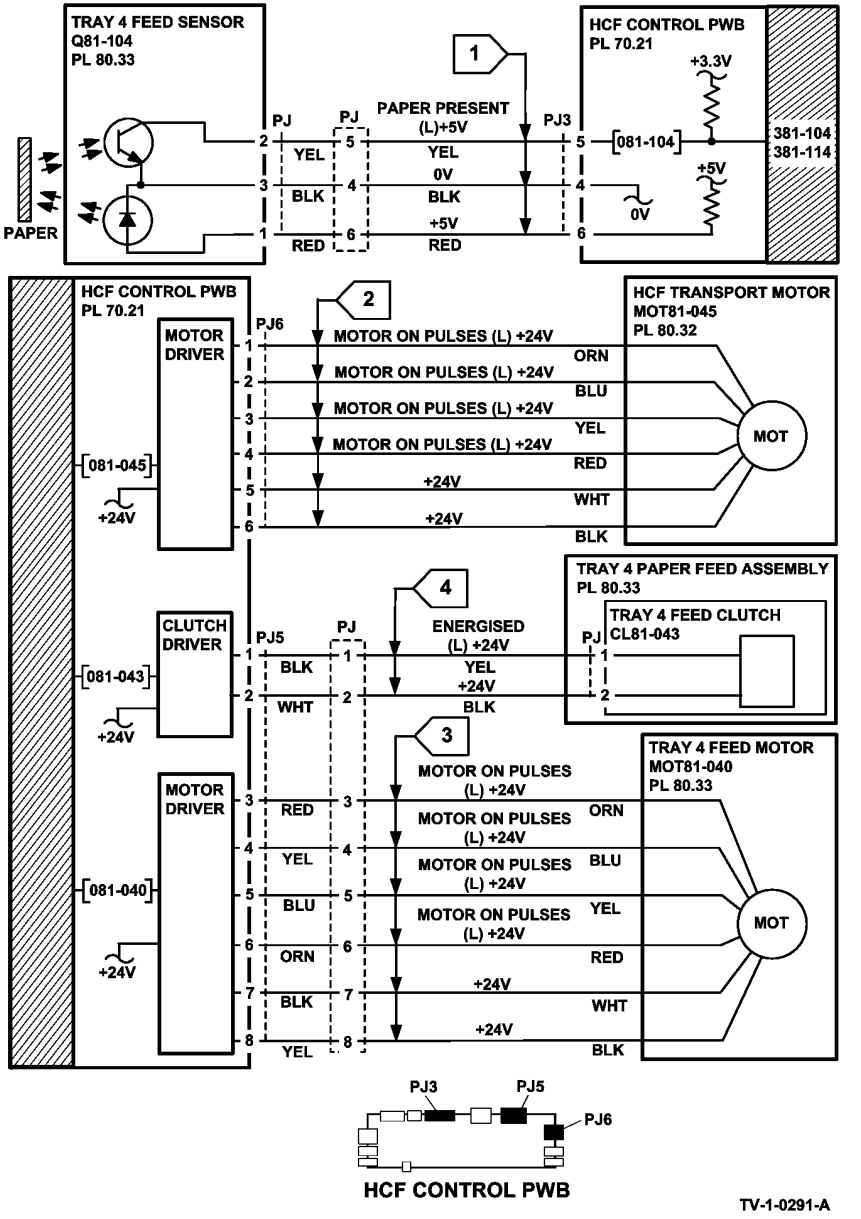

Figure 3 Circuit diagram

381-106-00 Lead Edge Late to Tray 1 Feed Sensor RAP

381-106-00 The lead edge of the paper was late to tray 1 feed sensor when feeding from tray 2. The fault will also occur when feeding from tray 3 or tray 4 providing the trail edge of the sheet has cleared the tray 4 feed sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 2. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Ensure that the tray is pushed fully home.
- Ensure that the correct size of paper is displayed.
- If the jam occurs when feeding from tray 2. Check if the paper has excessive curl and is causing the paper to be skewed when fed from the tray. Install TAG 002 on the paper tray to constrain the effect of the curl.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-101 tray 1 feed sensor, Q81-101. Press Start. Open the bypass tray and left door assembly. Manually actuate the sensor, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check Q81-101. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 1 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-102 tray 2 feed sensor, Q81-102. Press Start. Manually actuate the sensor, Figure 1. **The display changes.**

Y N

Go to Flag 2. Check Q81-102. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

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Install new components as necessary:

- Tray 2 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-025 transport roll drives motor, MOT81-025. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-025. Refer to:

- GP 10 How to Check a Motor.
- P/J273, Tray 1 and 2 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Transport roll drives motor, PL 80.25 Item 5.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

The transport rolls rotate.

Y N

Check the drive belt and pulleys, PL 80.25 Item 2 and PL 80.25 Item 3.

Refer to GP 7. Check the following, install new components as necessary:

- The bearing, shaft and rolls on the transport roll assembly, PL 80.25 Item 8.
- The idler rolls in the left door, PL 70.30 Item 2.
- The transport drive belt, PL 80.25 Item 2.

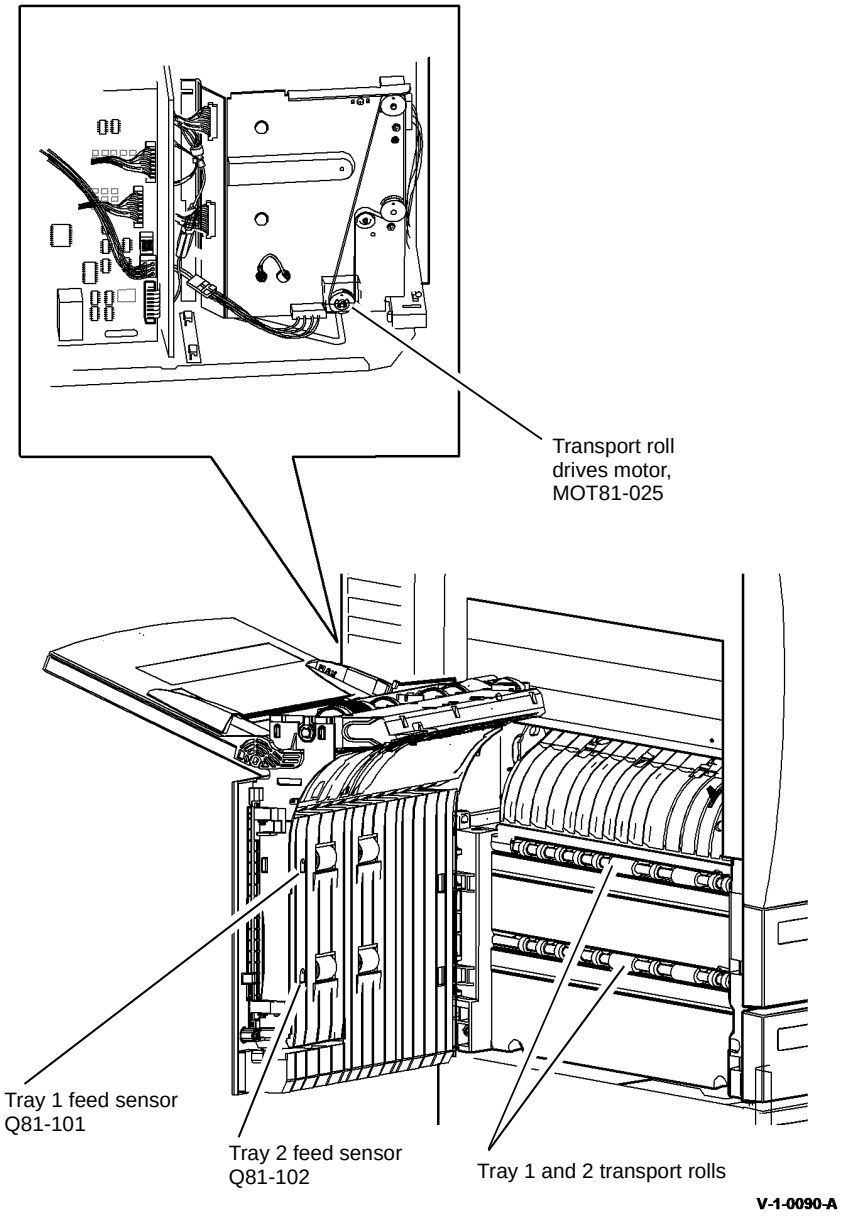

Figure 1 Component location

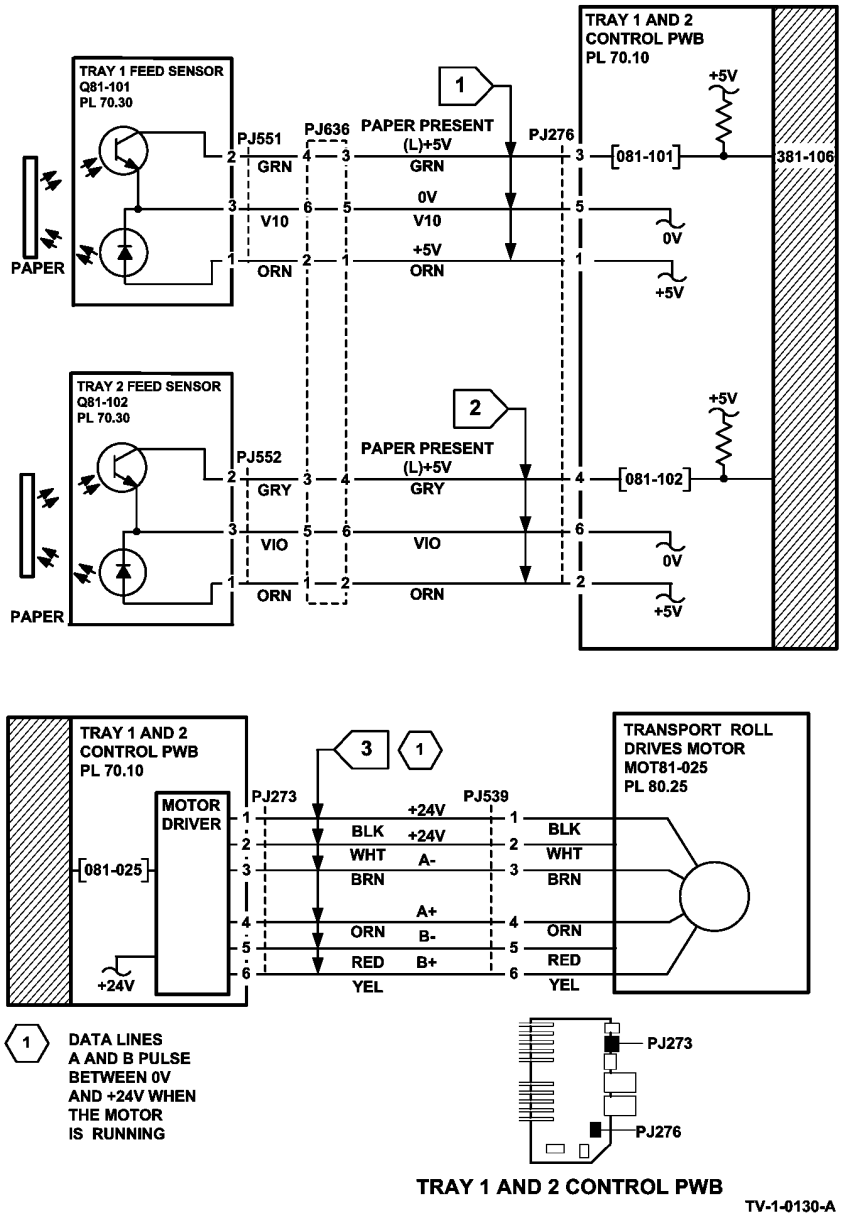

Figure 2 Circuit diagram

381-108-00 Tray 3 or Tray 4 Paper Feed Jam RAP

381-108-00 The lead edge of the paper was late to tray 2 feed sensor when feeding from tray 3 or tray 4.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 3 and tray 4. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Ensure that the left door assembly is pushed fully home.
- Make prints or copies to reproduce the paper jam. If a noise is heard when the jam occurs, check the gear PL 80.32 Item 2 for damage. If necessary install a new gear.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-102 tray 2 feed sensor, Q81-102, Figure 1. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1. Check Q81-102. Refer to:

- GP 11 How to Check a Sensor.
- P/J276, Tray 1 and 2 control PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 2 feed sensor, PL 70.30 Item 24.
- Tray 1 and 2 control PWB, PL 70.10 Item 2.

Enter dC330 code 081-045 HCF transport motor, MOT81-045, Figure 1. Press Start. **The motor runs.**

Y N

Go to Flag 2. Check MOT81-045. Refer to:

- GP 10 How to Check a Motor.
- P/J6, HCF control PWB
- 301G +24V Distribution RAP.
- 301E 0V Distribution RAP.

Install new components as necessary:

- HCF transport motor, PL 80.36 Item 13.
- HCF control PWB, PL 70.21 Item 2.

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The transport rolls rotate.

Y N

Refer to Figure 2. Check the following:

- Drive belt, PL 80.36 Item 6.
- Drive coupling, PL 80.36 Item 7.
- Idler roll assembly, PL 80.36 Item 8.
- Tray 3 and 4 transport roll, PL 80.32 Item 4

Perform the following:

- If the fault occurs when feeding from tray 3, go to 381-107-00, 381-132-00 Tray 3 Paper Feed Jam RAP.
- If the fault occurs when feeding from tray 4, go to 381-133-00 Tray 4 Paper Feed Jam RAP.

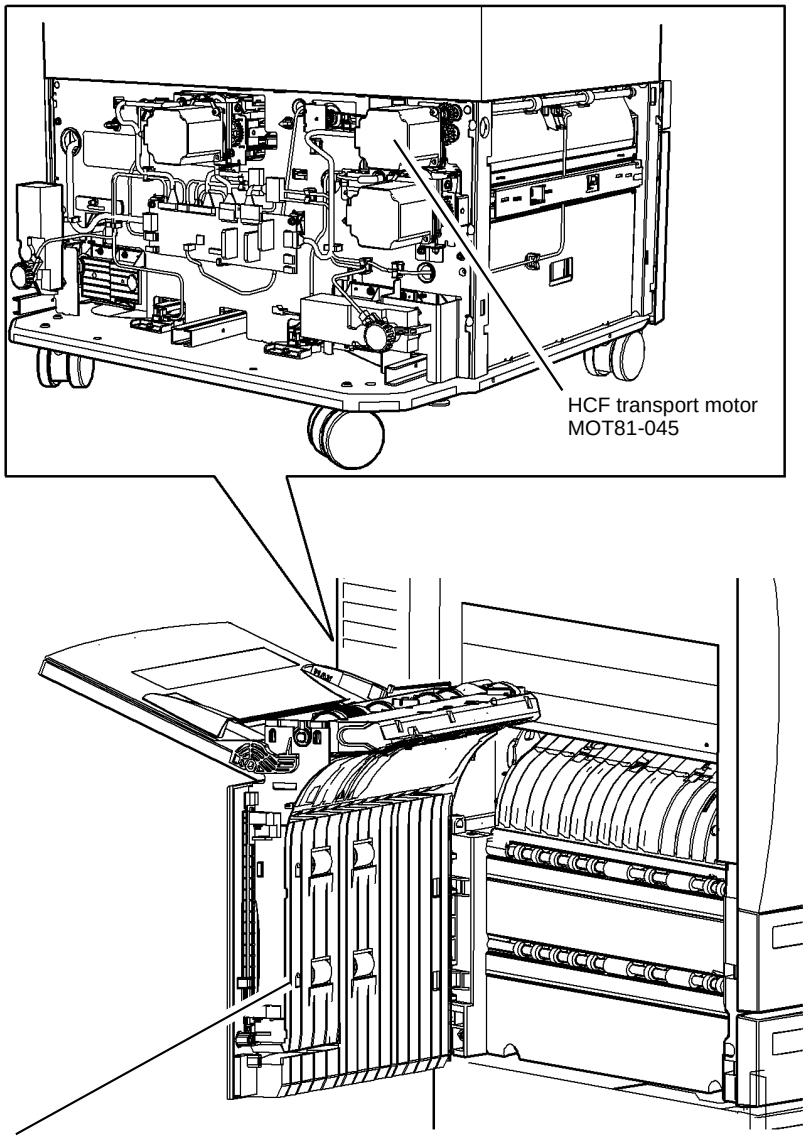

Figure 1 Component location

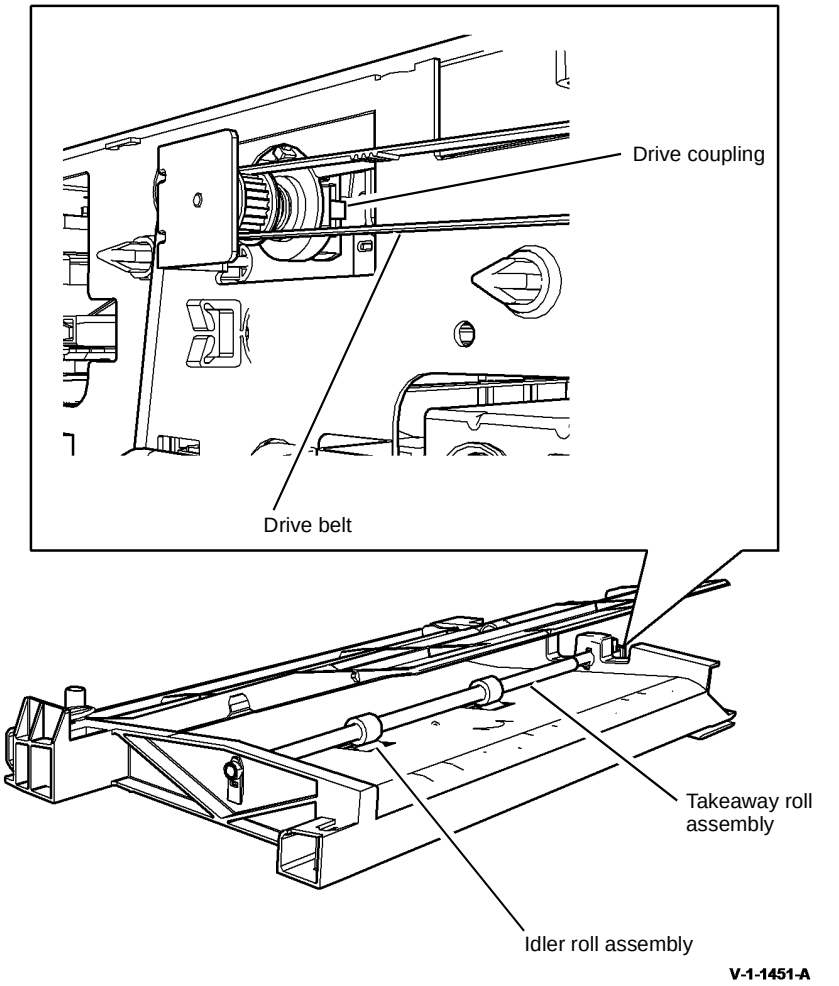

Figure 2 Component location

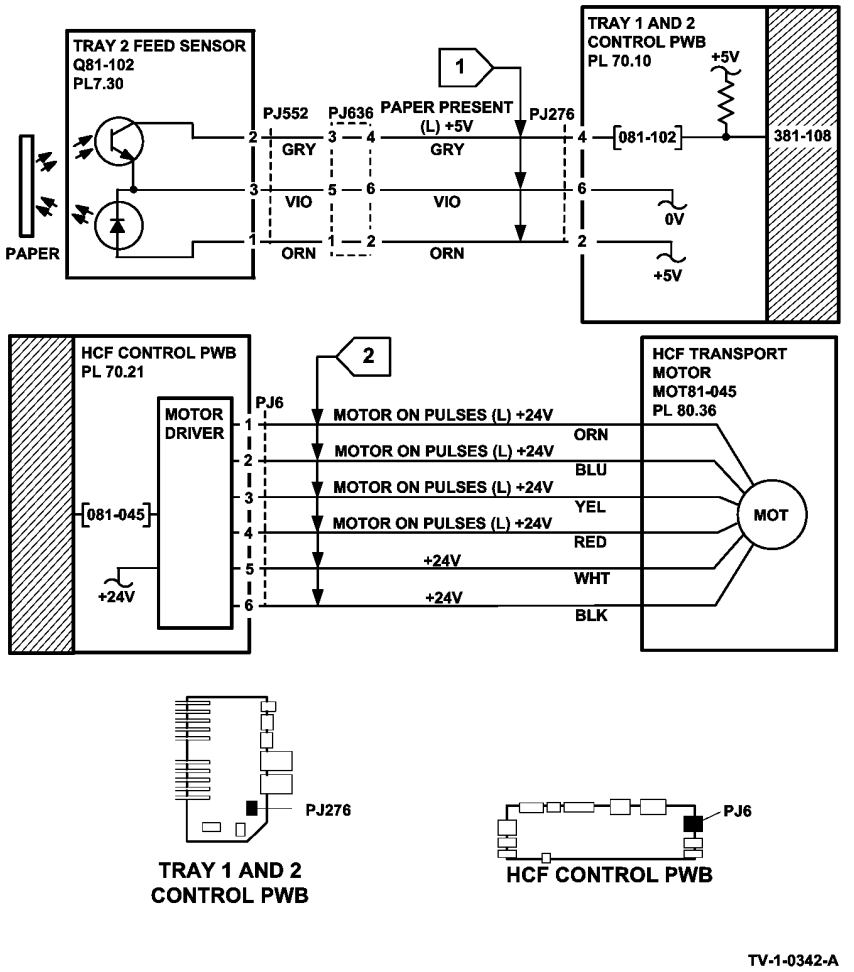

Figure 3 Circuit diagram

381-115-00, 381-117-00 Tray 6 Misfeed Entry RAP

381-115-00 The lead edge of the paper was late to the wait point sensor.

381-117-00 The lead edge of the paper failed to reach the feed sensor within the correct time after paper feed.

Procedure

Identify the speed of the machine, refer to SCP 6 Machine features. Perform one of the steps that follow:

- If the speed of the machine is 45-55 ppm, go to 381-115-00A, 381-117-00A Tray 6 Misfeed RAP (45-55 ppm)
- If the speed of the machine is 65-90 ppm, go to 381-115-00B, 381-117-00B Tray 6 Misfeed RAP (65-90 ppm).

381-115-00A, 381-117-00A Tray 6 Misfeed RAP (45-55 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-115-00, 381-117-00 Tray 6 Misfeed RAP.
- Check the condition of the paper in tray 6. Refer to IQ1 and GP 20.
- Check that the left door is correctly latched, Figure 2.
- Check that the paper tray is set to the correct paper size.
- Check that tray 6 is set to the correct paper configuration. Enter dC131 NVM, check value 604-001.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-106 PFP feed sensor, Q81-106, Figure 1. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1. Check Q81-106. Refer to:

- GP 11 How to Check a Sensor.
- P/J505, Tray 6 control PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 feed sensor, PL 80.45 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 081-060 PFP feed motor, MOT81-060. Open the door. Press Start. **The motor runs.**

Y N

Go to Flag 4. Check MOT81-060. Refer to:

- GP 10 How to Check a motor.
- P/J511, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 feed motor, PL 80.40 Item 3.
- Tray 6 control PWB, PL 70.68 Item 8.

The feed shaft rotates.

Y N

Check the drive gears between the motor and the feed shaft. Install new components as necessary:

- Motor drive gear, PL 80.40 Item 5.
- Gear 30T bearing, PL 80.40 Item 21.
- Gear, PL 80.45 Item 14.

The feed roll rotates

Y N

Check the one way coupling, feed roll and clutch. Install new components as necessary:

- One way coupling, PL 80.45 Item 4.
- Clutch, PL 80.45 Item 13.
- Feed roll, PL 80.45 Item 12.

The nudger roll rotates

Y N

Check the nudger roll and the one way gear. Check the drive belt between the feed roll and the nudger roll. Install new components as necessary:

- One way gear, PL 80.45 Item 3.
- Drive belt, PL 80.40 Item 7.
- Nudger roll, PL 80.45 Item 10.

The retard roll rotates

Y N

Check the retard roll, retard clutch and clutch. Install new components as necessary:

- Retard clutch, PL 80.47 Item 11.
- Clutch, PL 80.47 Item 7.
- Retard roll, PL 80.47 Item 2.

Enter dC330 code 081-065 PFP transport motor, MOT81-065. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-065. Refer to:

- GP 10 How to Check a Motor.
- P/J503, Tray 6 control PWB
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 transport motor, PL 80.40 Item 2.
- Tray 6 control PWB, PL 70.68 Item 8.

Run the motor for 30 seconds. **The motor runs at a constant speed, without slowing.**

Y N

Install a new tray 6 transport motor, PL 80.40 Item 2.

The take away roller rotates.

Y N

Check the drive belt and the one way pulley clutch for damage, GP 7. Check the belt tensioner. Install new components as necessary:

- Drive belt, PL 80.40 Item 7.

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- One way pulley clutch, PL 80.47 Item 4.
- Take away roller, PL 80.47 Item 5.

Enter dC330 code 081-110 PFP wait point sensor, Q81-110. Press Start.

NOTE: *For trays 1 to 6, the input code 081-100 wait sensor is used to check the operation of the wait sensor. In addition tray 6 uses the input code 081-110 PFP wait point sensor, to check the paper present signal from the IOT PWB to the tray 6 control PWB.*

Open the bypass tray and left door assembly. Manually actuate the wait sensor, Figure 2. **The display changes.**

Y N

Enter dC330 code 081-100 wait sensor, Q81-100. Press Start. Manually actuate the wait sensor, Figure 2. **The display changes.**

Y N

Go to Flag 2. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new wait sensor, PL 80.15 Item 3.
If the problem persists, perform the OF7 IOT PWB Diagnostics RAP.

Go to Flag 5. Manually actuate Q81-100. Check for a signal change on the IOT PWB at P/J12 pin 10 and on the tray 6 control PWB at P/J512 pin 5.
Check the wiring between the IOT PWB and the tray 6 control PWB.
If necessary install a new tray 6 control PWB, PL 70.68 Item 8.
If the problem persists, perform the OF7 IOT PWB Diagnostics RAP.

Perform the steps that follow:

- ADJ 70.5, Tray 6 Stack Height Sensor and Retard Shield.
- Clean the feed roll using a cloth dampened with water.
- Install a new feed, nudger and retard roll, PL 80.45 Item 21.

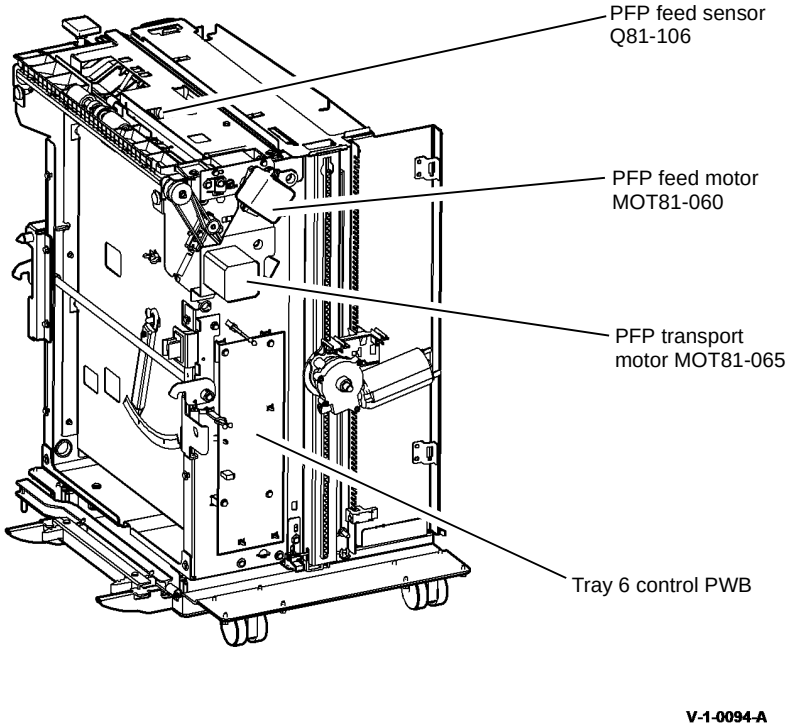

Figure 1 Component location

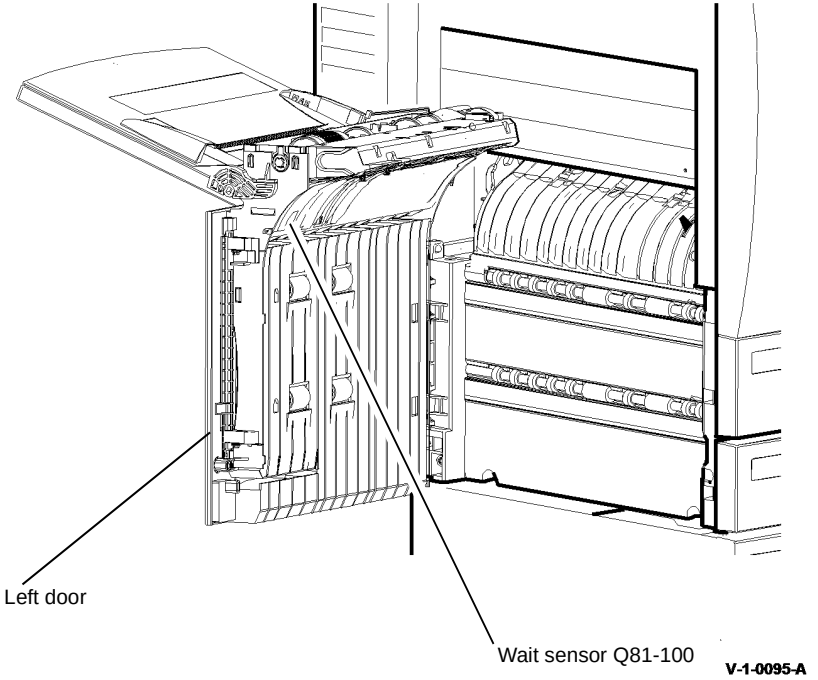

Figure 2 Component location

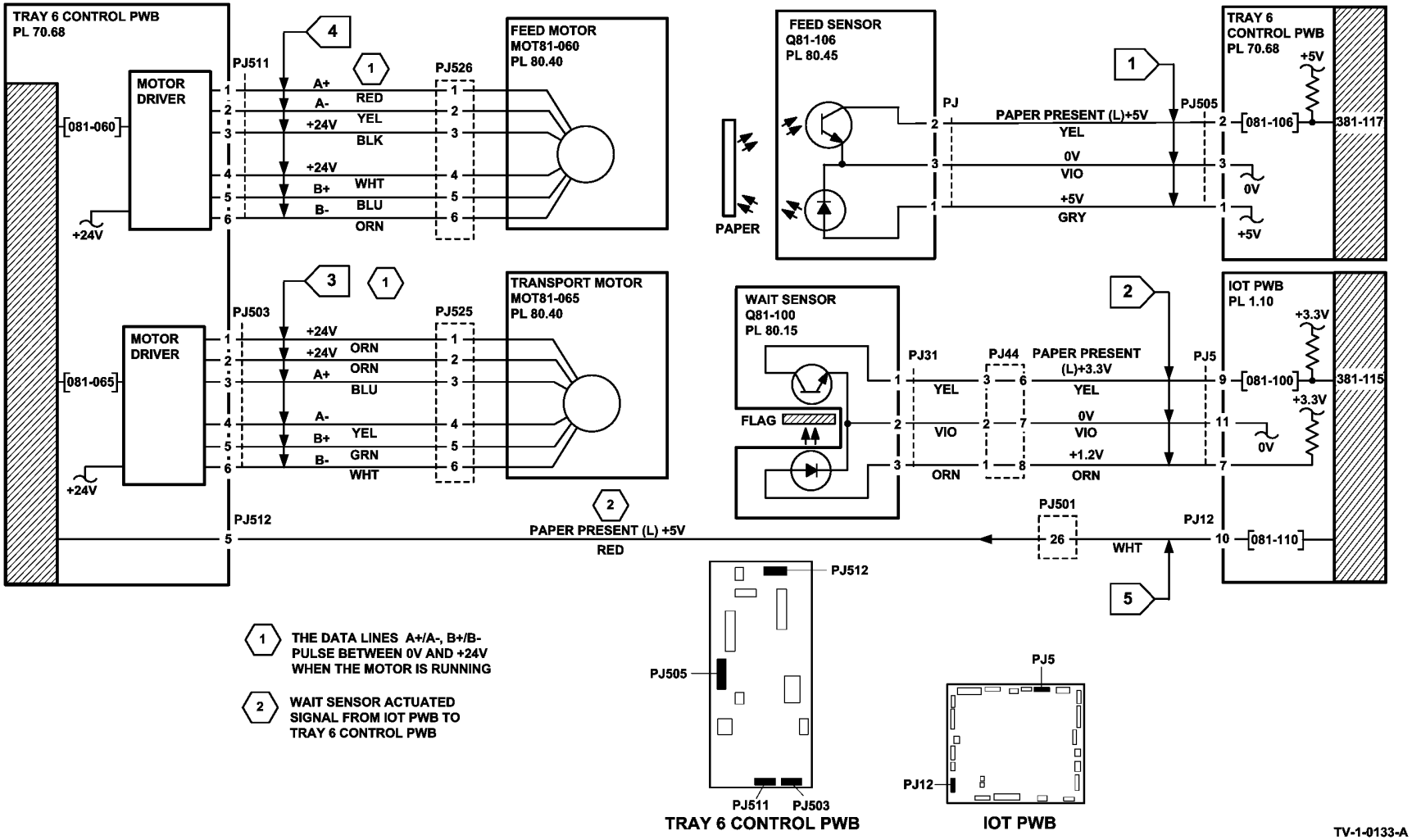

Figure 3 Circuit diagram

381-115-00B, 381-117-00B Tray 6 Misfeed RAP (65-90 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-115-00, 381-117-00 Tray 6 Misfeed Entry RAP.
- Check the condition of the paper in tray 6. Refer to IQ1 and GP 20.
- Check that the left door is correctly latched, Figure 2.
- Check that the paper tray is set to the correct paper size.
- Check that tray 6 is set to the correct paper configuration. Enter dC131 NVM, check value 604-001.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-106 PFP feed sensor, Q81-106, Figure 1. Press Start. Manually actuate the sensor. **The display changes.**

Y N

Go to Flag 1. Check Q81-106. Refer to:

- GP 11 How to Check a Sensor.
- P/J505, Tray 6 control PWB
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 feed sensor, PL 80.45 Item 6.
- Tray 6 control PWB, PL 70.68 Item 8.

Enter dC330 code 081-060 PFP feed motor, MOT81-060. Open the door. Press Start. **The motor runs.**

Y N

Go to Flag 4. Check MOT81-060. Refer to:

- GP 10 How to Check a motor.
- P/J511, Tray 6 control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 feed motor, PL 80.40 Item 3.
- Tray 6 control PWB, PL 70.68 Item 8.

The feed shaft rotates.

Y N

Check the drive gears between the motor and the feed shaft. Install new components as necessary:

- Motor drive gear, PL 80.40 Item 5.
- Gear 30T bearing, PL 80.40 Item 21.
- Gear, PL 80.45 Item 14.

The feed roll rotates

Y N

Check the one way coupling, feed roll and clutch. Install new components as necessary:

- One way coupling, PL 80.45 Item 4.
- Clutch, PL 80.45 Item 13.
- Feed roll, PL 80.45 Item 12.

The nudger roll rotates

Y N

Check the nudger roll and the one way gear. Check the drive belt between the feed roll and the nudger roll. Install new components as necessary:

- One way gear, PL 80.45 Item 3.
- Drive belt, PL 80.40 Item 7.
- Nudger roll, PL 80.45 Item 10.

The retard roll rotates

Y N

Check the retard roll, retard clutch and clutch. Install new components as necessary:

- Retard clutch, PL 80.47 Item 11.
- Idler roll, PL 80.47 Item 7.
- Retard roll, PL 80.47 Item 2.

Enter dC330 code 081-065 PFP transport motor, MOT81-065. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-065. Refer to:

- GP 10 How to Check a Motor.
- P/J503, Tray 6 control PWB
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 6 transport motor, PL 80.40 Item 2.
- Tray 6 control PWB, PL 70.68 Item 8.

Run the motor for 30 seconds. **The motor runs at a constant speed, without slowing.**

Y N

Install a new tray 6 transport motor, PL 80.40 Item 2.

The take away roller rotates.

Y N

Check the drive belt and the one way pulley clutch for damage, GP 7. Check the belt tensioner. Install new components as necessary:

- Drive belt, PL 80.40 Item 7.

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- One way pulley clutch, PL 80.47 Item 4.
- Take away roller, PL 80.47 Item 5.

Enter dC330 code 081-100 PFP wait point sensor, Q81-100. Press Start.

NOTE: *For trays 1 to 6, the input code 081-100 wait sensor is used to check the operation of the wait sensor. In addition tray 6 uses the input code 081-110 PFP wait point sensor, to check the paper present signal from the IOT PWB to the tray 6 control PWB.*

Open the bypass tray and left door assembly. Manually actuate the wait sensor, Figure 2. **The display changes.**

Y N

Enter dC330 code 081-100 wait sensor, Q81-100. Press Start.
Manually actuate Q81-100, Figure 2. **The display changes.**

Y N

Go to Flag 2. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new wait sensor, PL 70.30 Item 24.
If the problem persists, perform the OF7 IOT PWB Diagnostics RAP.

Go to Flag 5. Manually actuate the wait sensor. Check for a signal change on the IOT PWB at P/J12 pin 10 and on the Tray 6 control PWB at P/J512 pin 5.
Check the wiring between the IOT PWB and the tray 6 control PWB.
If necessary install a new tray 6 control PWB, PL 70.68 Item 8.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Perform the steps that follow:

- ADJ 70.5, Tray 6 Stack Height Sensor and Retard Shield.
- Clean the feed roll using a cloth dampened with water.
- Install a new feed, nudger and retard roll, PL 80.45 Item 21.

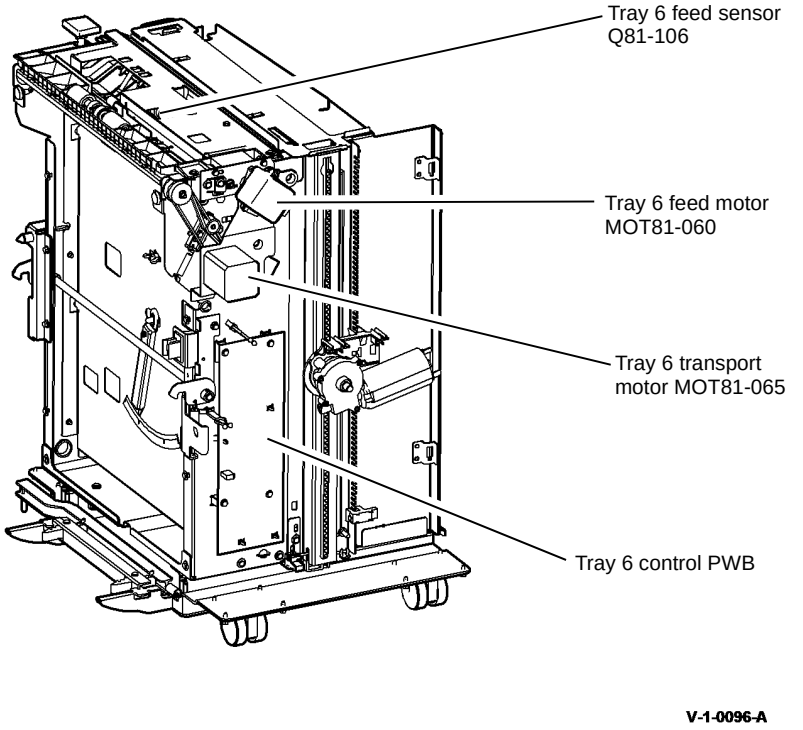

Figure 1 Component location

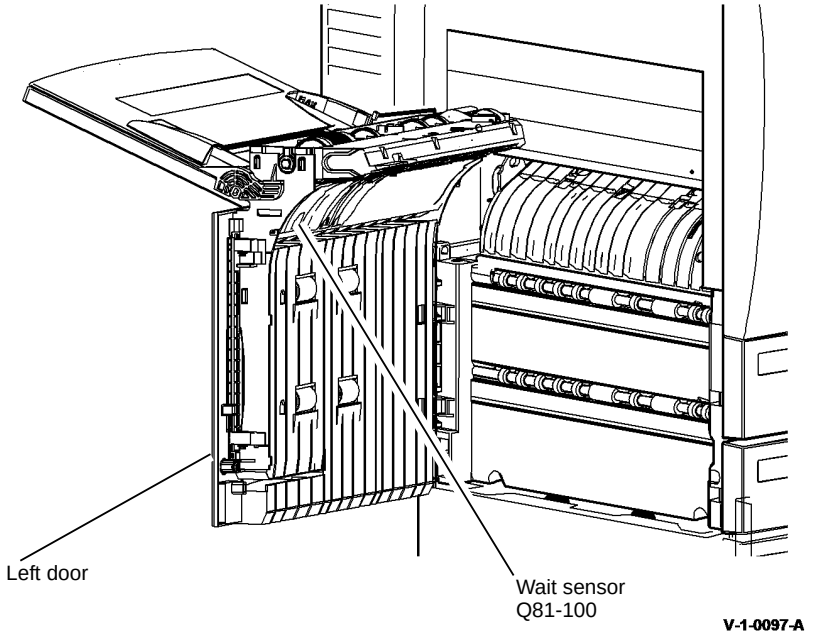

Figure 2 Component location

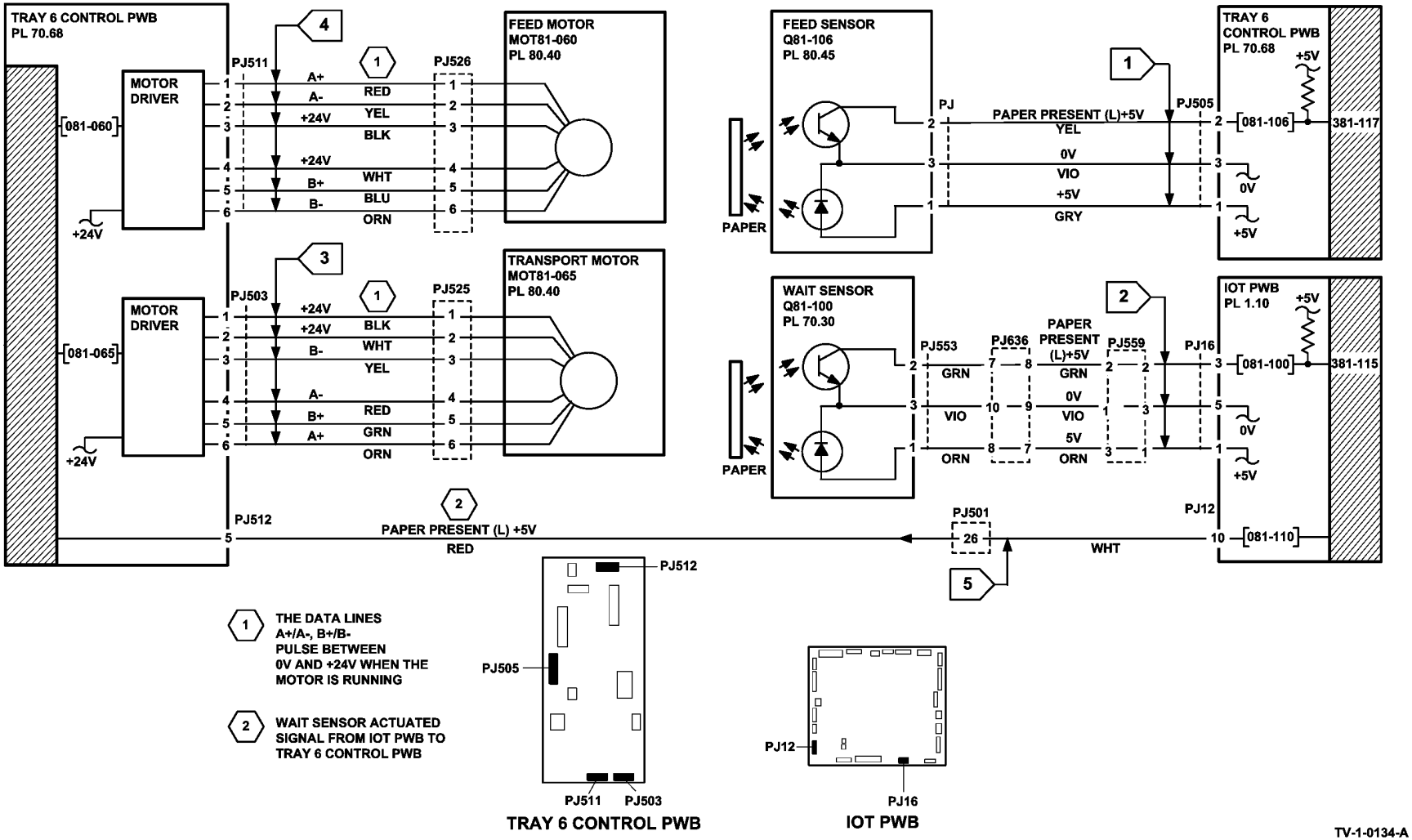

Figure 3 Circuit diagram

381-107-00, 381-132-00 Tray 3 Paper Feed Jam RAP

381-107-00 The lead edge of the paper was late to the HCF exit sensor sensor when feeding from tray 3.

381-132-00 The lead edge of the paper was late to the HCF exit sensor when feeding from tray 3.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 3. Refer to IQ1 and GP 20.
- Check for obstructions in tray 3 paper path, Figure 2.
- Check the HCF exit sensor, Figure 1.
- Ensure that the tray is pushed fully home.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-108 HCF exit sensor, Q81-108. Press Start. Manually actuate the HCF exit sensor. **The display changes.**

Y N

Go to Flag 1. Check Q81-108. Refer to:

- GP 11 How to Check a Sensor.
- P/J3, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF exit sensor, PL 80.33 Item 3.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 081-045 HCF transport motor, MOT81-045. Press Start. **The motor runs.**

Y N

Go to Flag 2. Check MOT81-045. Refer to:

- GP 10 How to Check a Motor.
- P/J6, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF transport motor, PL 80.36 Item 13.
- HCF control PWB, PL 70.21 Item 2.

The transport rolls rotate.

Y N

Check the following:

- Drive belt, PL 80.36 Item 6.
- Drive coupling, PL 80.36 Item 7.
- Idler roll assembly, PL 80.36 Item 8.
- Tray 3 and 4 transport roll, PL 80.32 Item 4.

Perform the 381-103-00, 381-113-00 Tray 3 Misfeed RAP.

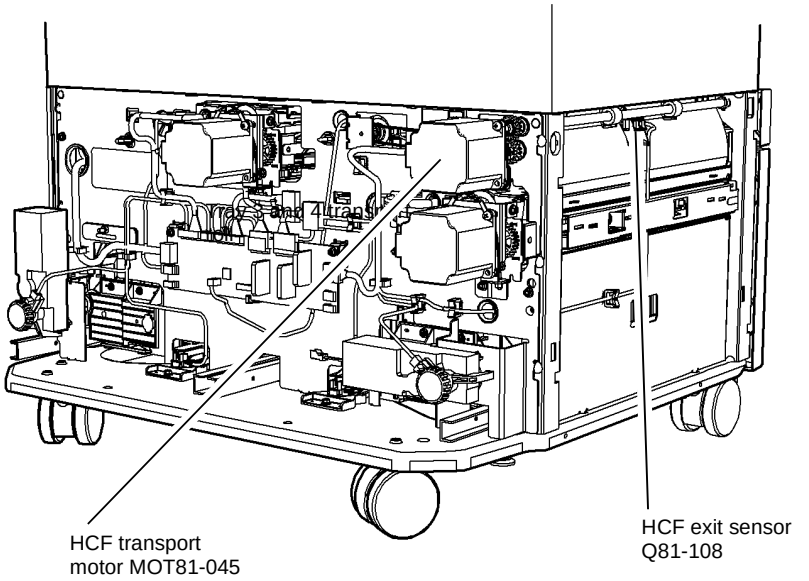

Figure 1 Component location

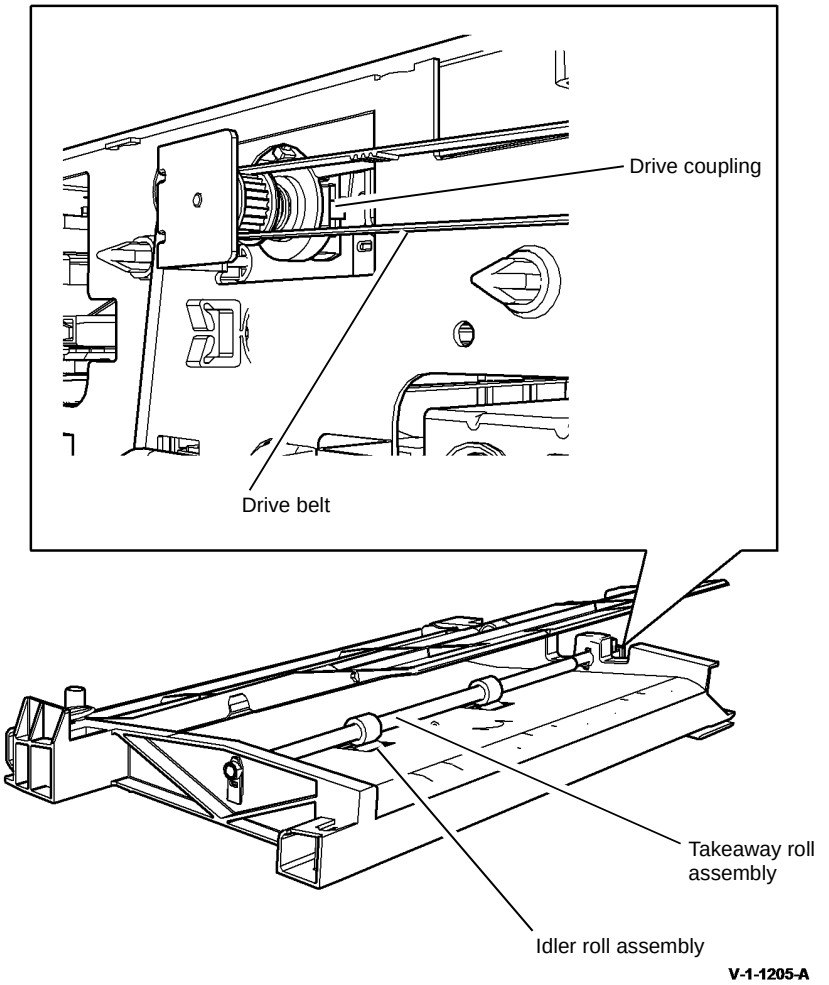

Figure 2 Component location

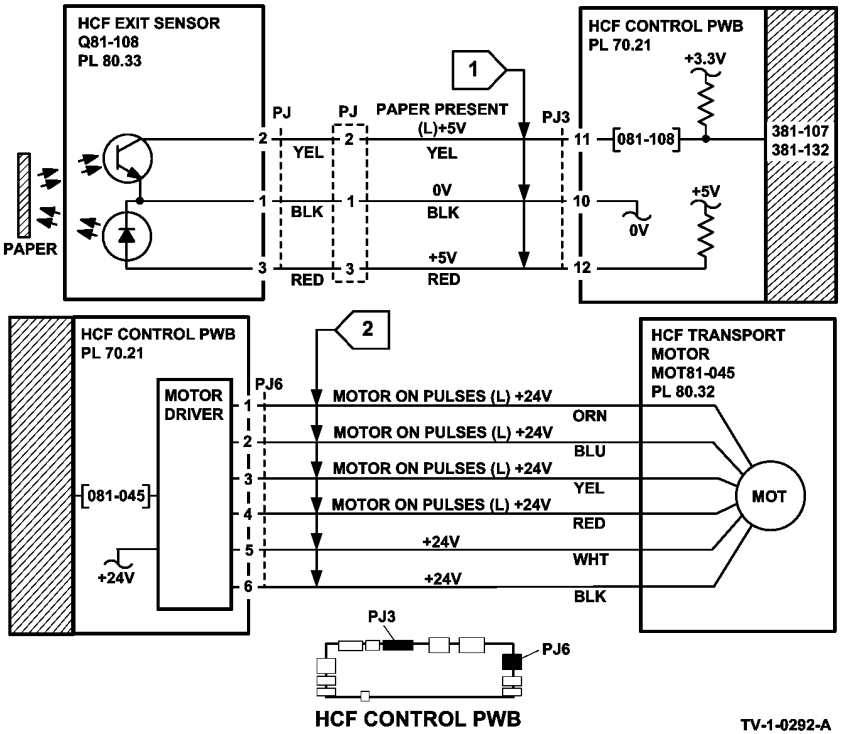

Figure 3 Circuit diagram

381-131-00 Lead Edge Late to Tray 3 Exit Sensor RAP

381-131-00 The lead edge of the paper is late to the tray 3 exit sensor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 3. Refer to IQ1 and GP 20.
- Ensure that the tray is pushed fully home.
- If a misfeed occurs between 15 and 20 paper feeds, then go to 373-100-00 Tray 3 Elevator Lift Failure RAP.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-109 tray 3 exit sensor, Q81-109, Figure 2. Press Start. Manually actuate the sensor using white paper. **The display changes.**

Y N

Go to Flag 1. Check Q81-109. Refer to:

- GP 11 How to Check a Sensor.
- P/J19, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 exit sensor, PL 80.32 Item 6.
- HCF control PWB, PL 70.21 Item 2.

CAUTION

To prevent damage to the feed mechanism, the paper tray must be pulled out before MOT81-030 is run in service mode.

Enter dC330 code 081-030 tray 3 feed motor, MOT81-030. Pull out the tray. Press Start. **The motor runs.**

Y N

Go to Flag 3. Check MOT81-030. Refer to:

- GP 10 How to Check a Motor.
- P/J4, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 feed motor, PL 80.32 Item 11.
- HCF control PWB, PL 70.21 Item 2.

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Locate the tray 3 feed clutch, CL81-033. Figure 1. Enter dC330 code 081-030 tray 3 feed motor, MOT81-030, stack the code 081-033 tray 3 feed clutch, CL81-033. Pull out tray 3. Observe the tray 3 feed and nudger rolls. Press Start. **The rolls rotate.**

Y N

Go to Flag 3. Check CL81-033. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J4, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Tray 3 feed clutch, PL 80.32 Item 21.
- HCF control PWB, PL 70.21 Item 2.

Perform the following:

- Clean the feed roll, nudger roll and retard roll using a cloth dampened with water.
- Check the feed roll, nudger roll and retard roll for wear. If necessary install a new feed roll kit, PL 31.13 Item 14.

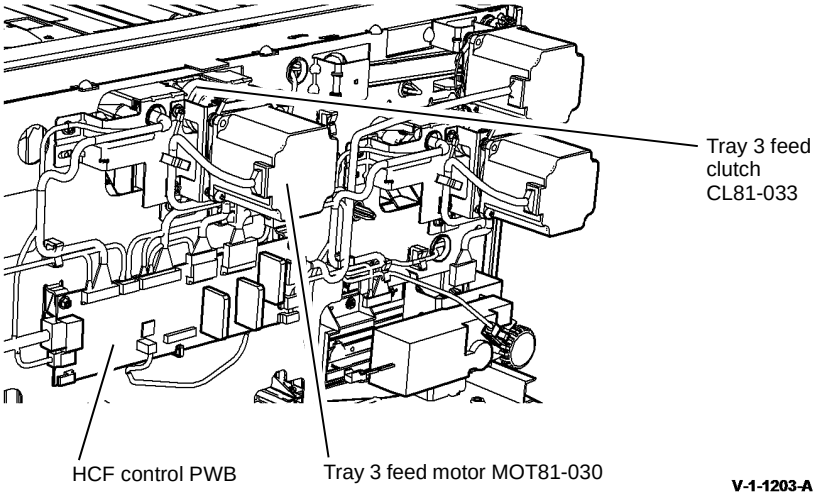
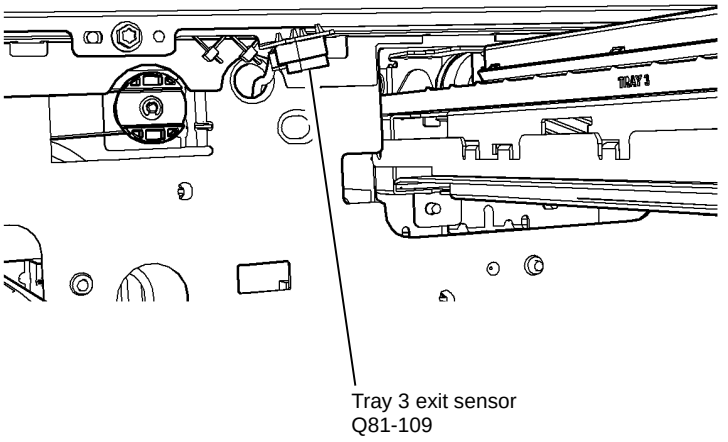
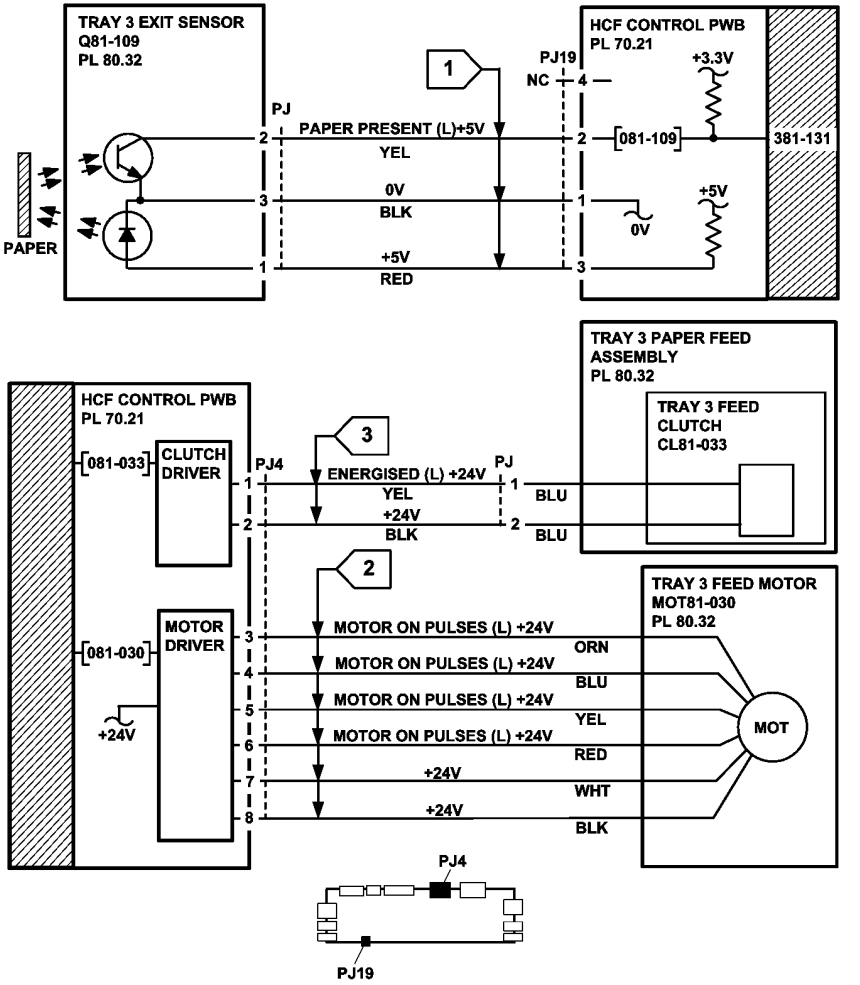


Figure 1 Component location



V-1-1226-A

Figure 2 Component location



TV-1-0296-A

Figure 3 Circuit diagram

381-133-00 Tray 4 Paper Feed Jam RAP

381-133-00 The lead edge of the paper was late to the HCF exit sensor when feeding from tray 4.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in tray 4. Refer to IQ1 and GP 20.
- Check the HCF exit sensor, Figure 1.
- Ensure that the tray is pushed fully home.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 081-108 HCF exit sensor, Q81-108. Press Start. Manually actuate the HCF exit sensor. **The display changes.**

Y N

Go to Flag 1. Check Q08-108. Refer to:

- GP 11 How to Check a Sensor.
- P/J3, HCF control PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF exit sensor, PL 80.33 Item 3.
- HCF control PWB, PL 70.21 Item 2.

Enter dC330 code 081-045 HCF transport motor, MOT81-045. Press Start. **The motor runs.**

Y N

Go to Flag 2. Check MOT81-045. Refer to:

- GP 10 How to Check a Motor.
- P/J6, HCF control PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- HCF transport motor, PL 80.36 Item 13.
- HCF control PWB, PL 70.21 Item 2.

The transport rolls rotate.

Y N

Check the tray 3 and 4 transport roll, PL 80.32 Item 4.

Perform the 381-104-00, 381-114-00 Tray 4 Misfeed RAP.

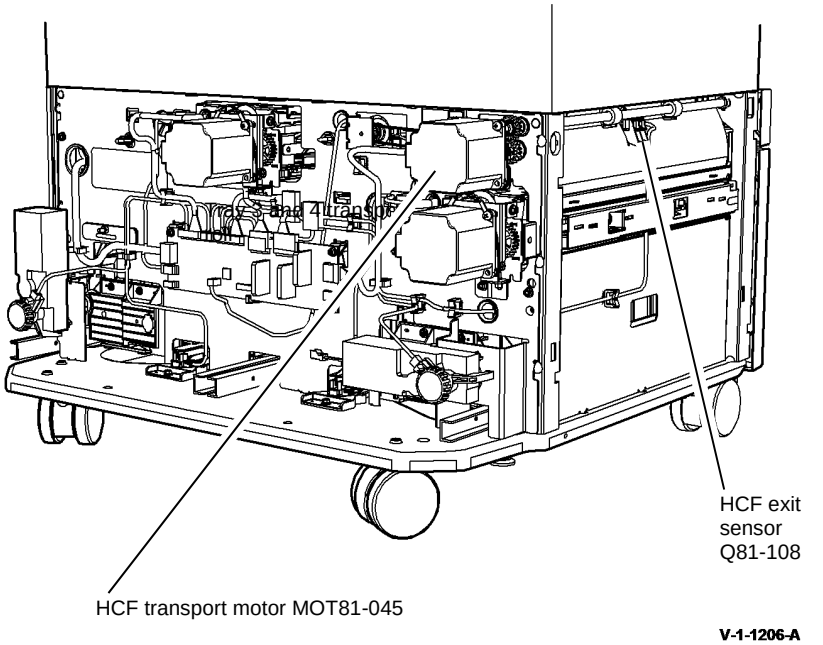


Figure 1 Component location

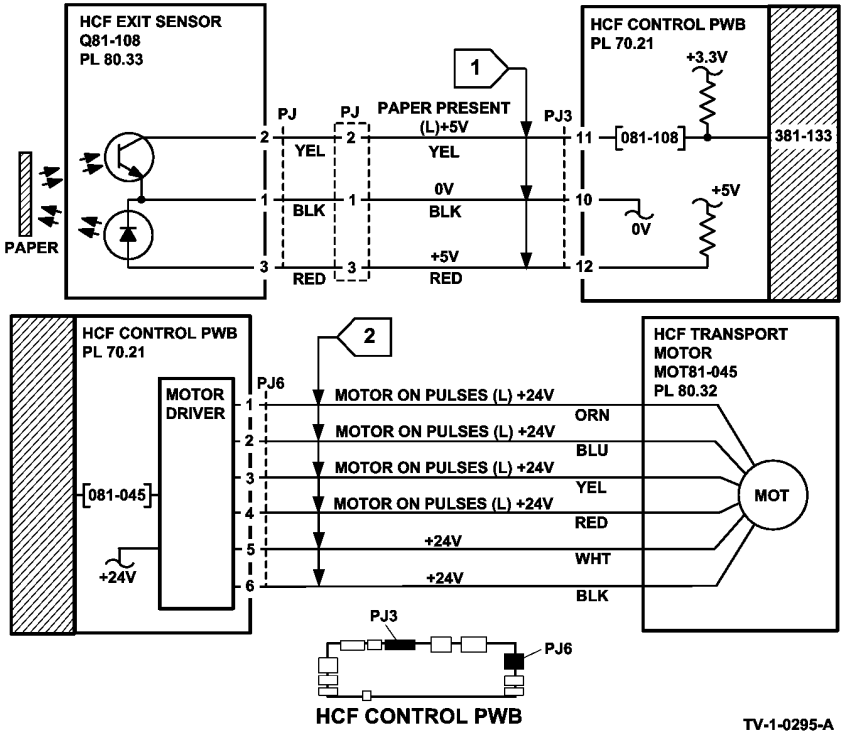


Figure 2 Circuit diagram

381-150-00, 381-151-00, 381-190-00 to 381-193-00 Registration Jam Entry RAP

381-150-00 The lead edge of the paper failed to actuate the registration sensor within the correct time after the paper was released from the wait point.

381-151-00 The trail edge of the paper was late to the registration sensor after the registration clutch, CL82-070 on.

381-190-00 The lead edge of the paper is late to the registration sensor from tray 1.

381-191-00 The lead edge of the paper is late to the registration sensor from tray 2.

381-192-00 The lead edge of the paper is late to the registration sensor from tray 3.

381-193-00 The lead edge of the paper is late to the registration sensor from tray 4.

Procedure

Identify the speed of the machine, refer to SCP 6 Machine features. Perform one of the steps that follow:

- If the speed of the machine is 45-55 ppm, go to 381-150-00A, 381-151-00A, 381-190-00A to 381-193-00A Registration Jam RAP (45-55 ppm)
- If the speed of the machine is 65-90 ppm, go to 381-150-00B, 381-151-00B, 381-190-00B to 381-193-00B Registration Jam RAP (65-90 ppm).

381-150-00A, 381-151-00A, 381-190-00A to 381-193-00A Registration Jam RAP (45-55 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-150-00, 381-151-00, 381-190-00 to 381- Registration Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check the registration sensor actuator and the wait sensor actuator, Figure 1.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Push the cover to the right and tighten the screws
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Refer to REP 10.1, check the latch mechanism.
- If the fault is 81-151-00 and two sheets of paper are jammed at the registration rolls. Go to the OF8 Multifeed RAP.
- If fault 81-151-00 occurs from the bypass tray. Go to the 375A Bypass Tray RAP.
- If the power and control assembly has been moved prior to a 81-150-00. Check that PJ148 is pushed fully home on the Main Drives PWB.
- Check the transport drive belt.
- Ensure that all connectors on the Tray 1 and 2 Control PWB and the IOT PWB are correctly and securely seated.
- If the fault is 81-150-00 and the paper is fed from tray 1 or tray 2. Check if the paper has excessive curl and is causing the paper to be skewed when fed from the tray. Install TAG 002 on the paper tray to constrain the effect of the curl.
- Check for skew, refer to IQ8.
- If the fault occurs when feeding from tray 6, perform ADJ 70.5 Tray 6 stack Height Sensor and Retard Shield.

Procedure

NOTE: *Ensure that the front door interlock is cheated when checking +24V components.*

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Open the bypass tray and left door assembly. Manually actuate Q82-150. **The display changes.**

Y **N**

Go to Flag 1. Check Q82-150. Refer to:

- GP 11 How to check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

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If necessary install a new registration sensor, (45-55 ppm) PL 80.15 Item 3.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 081-100 wait sensor, Q81-100. Press Start. Open the bypass tray and left door assembly. Manually actuate Q81-100 **The display changes.**

Y **N**

Go to Flag 2. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new wait sensor, (45-55 ppm) PL 80.15 Item 3.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main drive motor, MOT42-010. Press Start. **The motor runs.**

Y **N**

Go to the 340A Main Drive Motor and Photoreceptor Motor RAP.

While the motor is running, add code 082-070 registration clutch, CL82-070. Press Start.

NOTE: *The registration clutch will de-energize after 5 seconds.*

Energize the registration clutch up to 10 times. **The jam clearance knob 4c, PL 80.15 Item 10, rotates when the registration clutch is energized.**

Y **N**

Go to Flag 3. Check CL82-070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new registration clutch, (45-55 ppm) PL 80.15 Item 7.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Perform the following:

- Refer to GP 7. Check the registration transport rolls and registration rolls, (45-55 ppm) PL 80.15 Item 1.
- Check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3. If necessary, install a new registration clutch, PL 80.15 Item 7.
- Check the tray 1 and 2 transport motor, PL 80.25 Item 5. Ensure that the motor runs correctly.
- Refer to GP 7. Check the tray 1 and 2 transport roll assemblies, transport drive belt and pulleys, PL 80.25 Item 2 and PL 80.25 Item 3. Install new components as necessary.
- Install a new tray 1 and 2 control PWB, PL 70.10 Item 2.
- Refer to Figure 2. Make sure PJ44 is securely connected.
- Check the fuser drive gear, PL 40.17 Item 10 for wear. If necessary, install a new fuser drive gear.

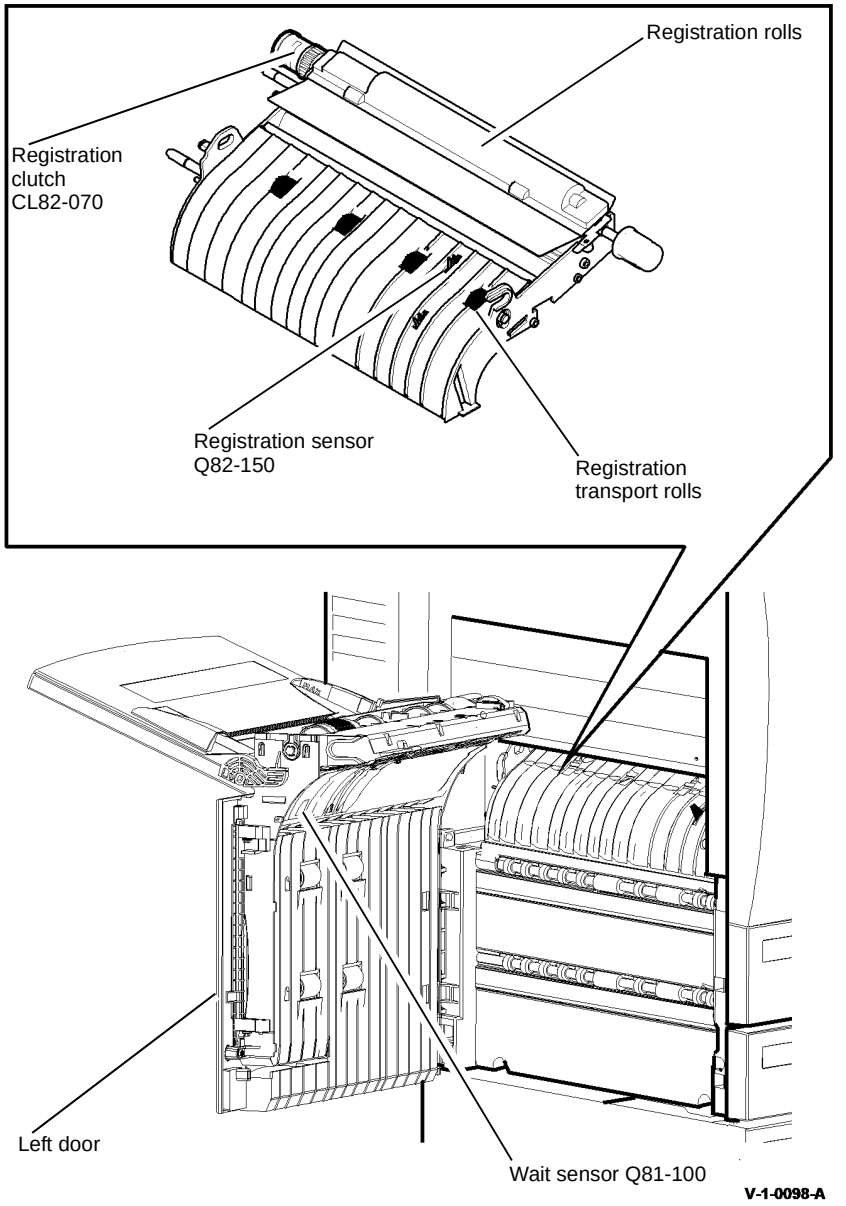

Figure 1 Component location

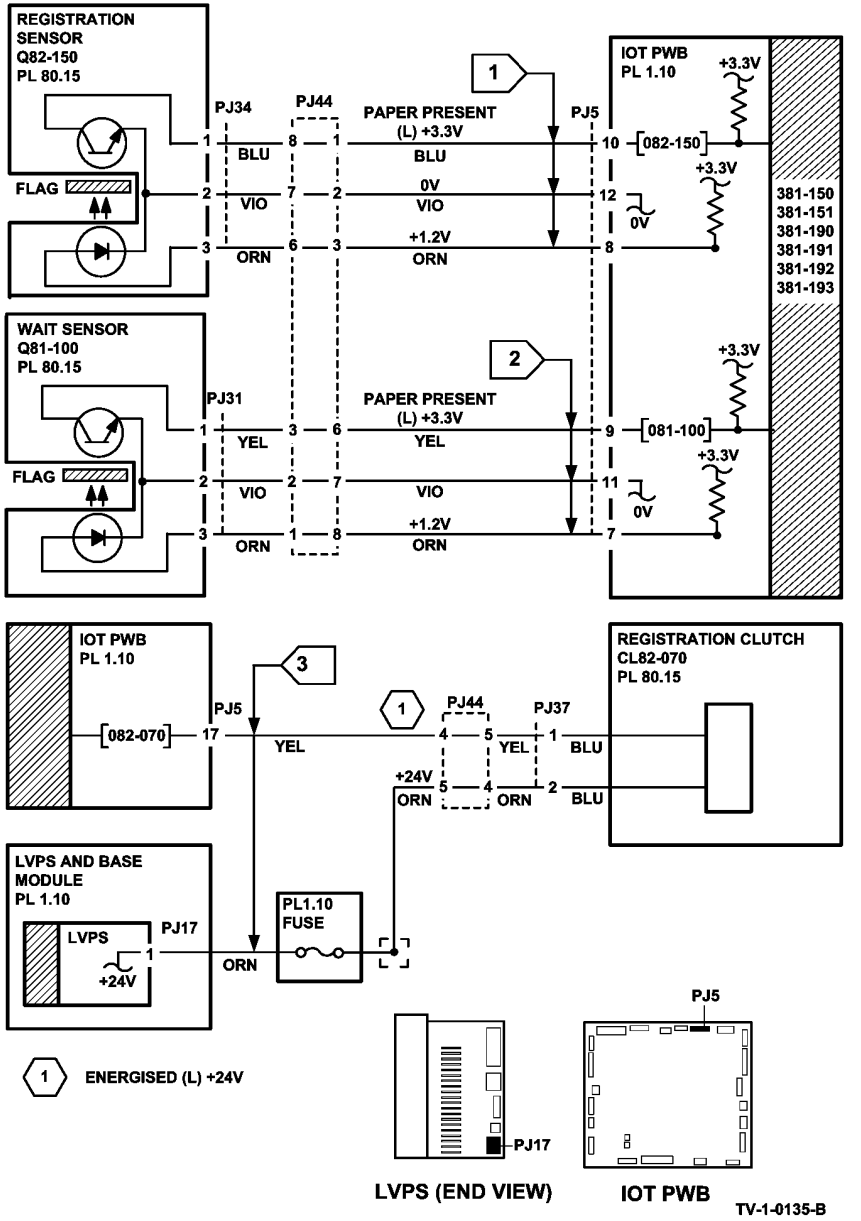

Figure 2 Circuit diagram

381-150-00B, 381-151-00B, 381-190-00B to 381-193-00B Registration Jam RAP (65-90 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-150-00, 381-151-00, 381-190-00 to 381- Registration Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the left door is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Go to REP 10.1. In Replacement Step 5, check the latch mechanism.
- If the fault is 81-151-00 and two sheets of paper are jammed at the registration rolls. Go to the OF8 Multifeed RAP.
- If fault 81-151-00 occurs from the bypass tray. Go to the 375A Bypass Tray RAP.
- If the power and control assembly has been moved prior to a 81-150-00. Check that PJ148 is pushed fully home on the Main Drives PWB.
- Check the transport drive belt.
- Ensure that all connectors on the Tray 1 and 2 Control PWB and the IOT PWB are correctly and securely seated.
- If the fault is 81-150-00 and the paper is fed from tray 1 or tray 2. Check if the paper has excessive curl and is causing the paper to be skewed when fed from the tray. Install TAG 002 on the paper tray to constrain the effect of the curl.
- Check for skew, refer to IQ8.
- If the fault occurs when feeding from tray 6, perform ADJ 70.5 Tray 6 stack Height Sensor and Retard Shield

Procedure

NOTE: *Ensure that the front door interlock is cheated when checking +24V components.*

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Figure 1. Open the bypass tray and left door assembly. Activate the registration sensor. **The display changes.**

Y **N**

Go to Flag 1. Check Q82-150. Refer to:

- GP 11 How to check a Sensor.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new registration sensor, (65-90 ppm) PL 80.17 Item 3.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

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Enter dC330 code 081-100 wait sensor, Q81-100. Press Start. Open the bypass tray and left door assembly. Activate the wait sensor. **The display changes.**

Y **N**

Go to Flag 2. Check Q81-100. Refer to:

- GP 11 How to Check a Sensor.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new wait sensor, PL 70.30 Item 25.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main drive motor, MOT42-010. Press Start. **The motor runs.**

Y **N**

Go to the 340A Main Drive Motor and Photoreceptor Motor RAP.

While the motor is running, add code 082-070 registration clutch, CL82-070. Press Start.

NOTE: *The registration clutch will de-energize after 5 seconds.*

Energize the registration clutch up to 10 times. **The jam clearance knob 4c, PL 80.17 Item 10, rotates when the registration clutch is energized.**

Y **N**

Go to Flag 3. Check CL82--070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new registration clutch, (65-90 ppm) PL 80.17 Item 7.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Perform the following:

- Refer to GP 7. Check the registration transport rolls and registration rolls, (65-90 ppm) PL 80.17 Item 1.
- Check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3. If necessary, install a new registration clutch, PL 80.17 Item 7.
- Check the tray 1 and 2 transport motor, PL 80.25 Item 5. Ensure that the motor runs correctly.
- Refer to GP 7. Check the tray 1 and 2 transport roll assemblies, transport drive belt and pulleys, PL 80.26 Item 1. Install new components as necessary.
- Install a new tray 1 and 2 control PWB, PL 70.10 Item 2.
- Refer to Figure 2. Make sure PJ44 is securely connected.

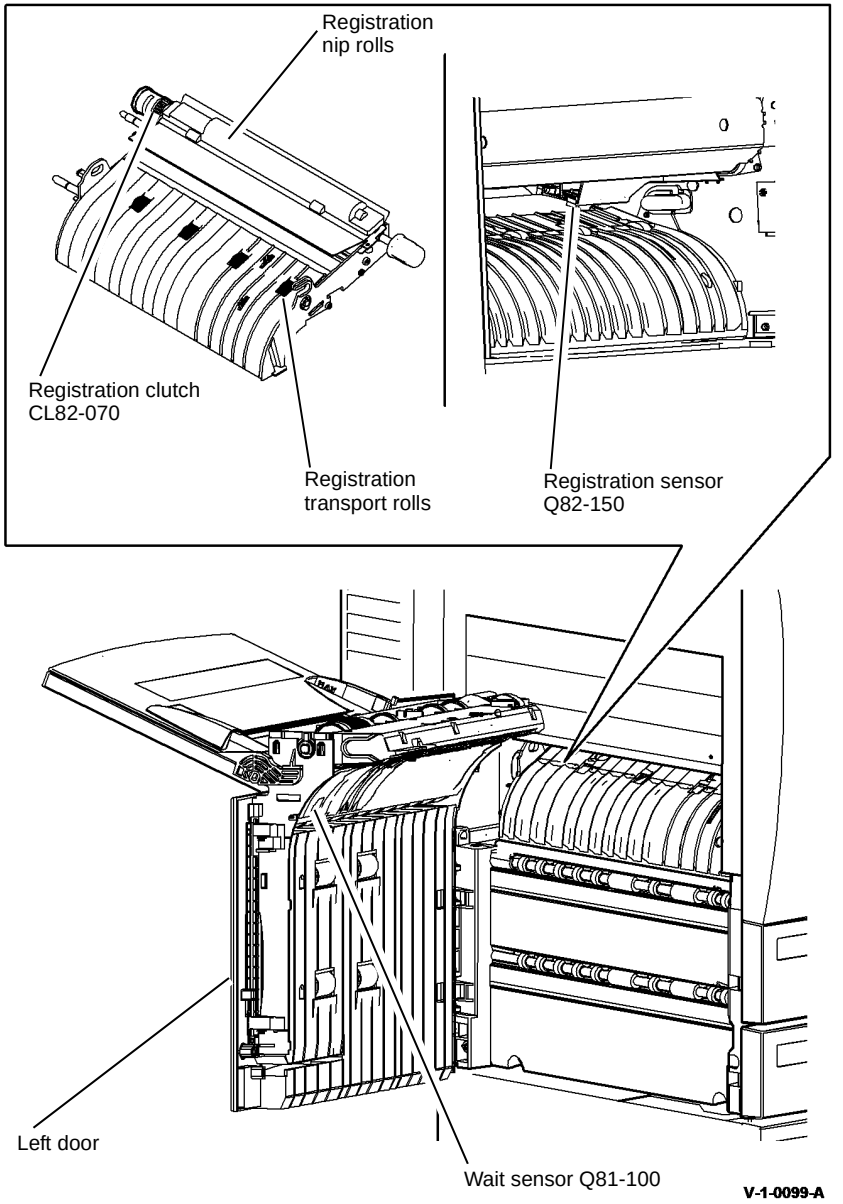


Figure 1 Component location

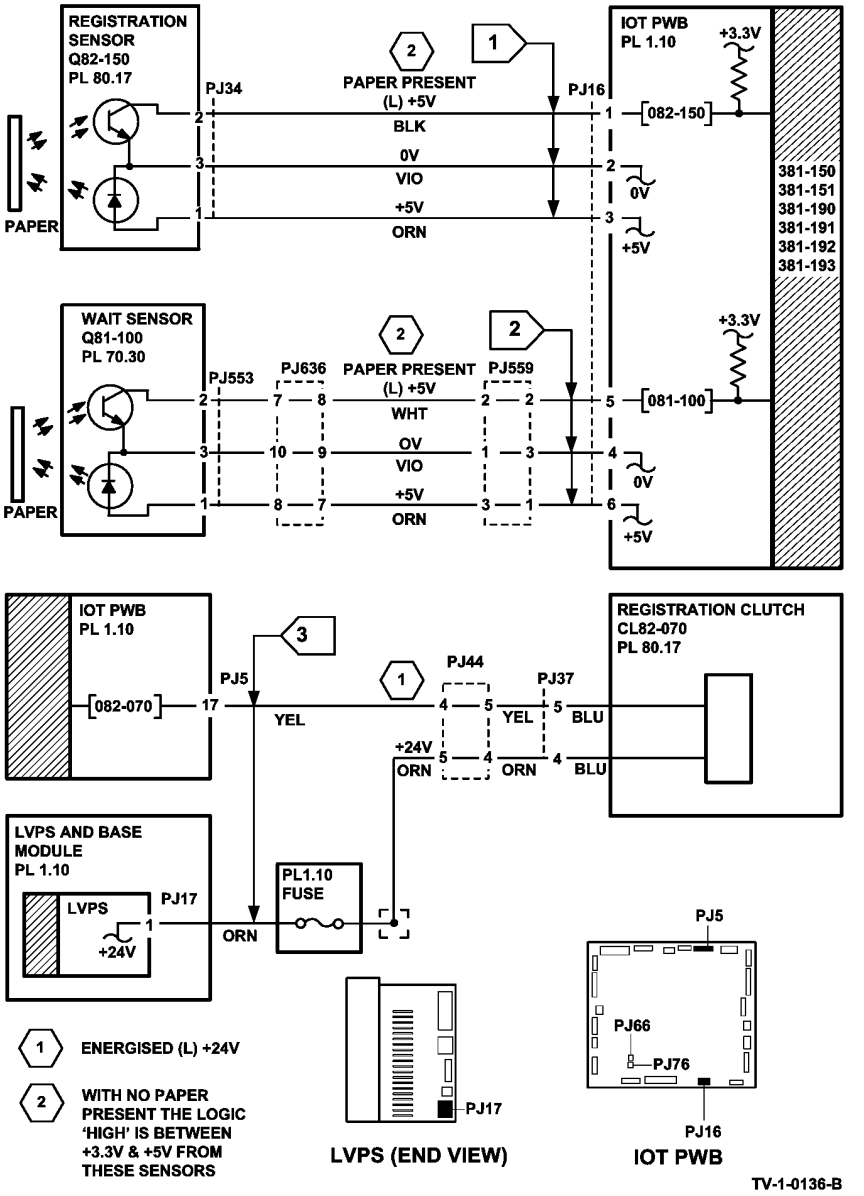


Figure 2 Circuit diagram

381-155-00, 381-156-00 Bypass Tray Registration Jam Entry RAP

381-155-00 The lead edge of the paper failed to actuate the registration sensor within the correct time after start of feed from the bypass tray.

381-156-00 The IOT detects that a sheet fed from the bypass tray has arrived too early at the registration sensor.

Procedure

Identify the speed of the machine, refer to SCP 6 Machine features. Perform one of the steps that follow:

- If the speed of the machine is 45-55 ppm, go to 381-155-00A, 381-156-00A Registration Jam RAP (45-55 ppm)
- If the speed of the machine is 65-90 ppm, go to 381-155-00B, 381-156-00B Registration Jam RAP (65-90 ppm).

381-155-00A, 381-156-00A Bypass Tray Registration Jam RAP (45-55 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-155-00, 381-156-00 Bypass Tray Registration Jam Entry RAP.
- Check the condition of the paper in the bypass tray. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the bypass tray and left door assembly is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Go to REP 10.1. In replacement step 5, check the latch mechanism.
- If the fault is 81-155-00, check the bypass tray empty actuator, refer to the 375A RAP.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Figure 2. Manually actuate Q82-150. **The display changes.**

Y **N**

Go to Flag 1. Check Q82-150. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new registration sensor, PL 80.15 Item 3.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main motor, MOT42-010. Add code 082-070 registration clutch, CL82-070. Press Start. **The jam clearance knob, 4c, PL 80.15 Item 10, rotates.**

Y **N**

Go to Flag 3. Check CL82-070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17 LVPS.
- Fuse, PL 1.10 Item 9, GP 7.

If necessary install a new registration clutch, (45-55 ppm) PL 80.15 Item 7.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

A

A

Enter dC330 code 081-050, bypass feed solenoid, SOL81-050. Press Start. **The solenoid energizes.**

Y N

Go to Flag 2. Check SOL81-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- Figure 1.
- P/J10, IOT PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new feed solenoid, PL 70.30 Item 4.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Perform the following:

- Check the registration transport rolls and registration nip rolls, Figure 2, PL 80.15 Item 1.
- If the fault still occurs, check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.
- Check the idler roll and upper guide on the feed head, Figure 1.
- Clean the feed roll and retard pad using a cloth dampened with water.
- If necessary install a new feed and retard pad, PL 70.30 Item 21.

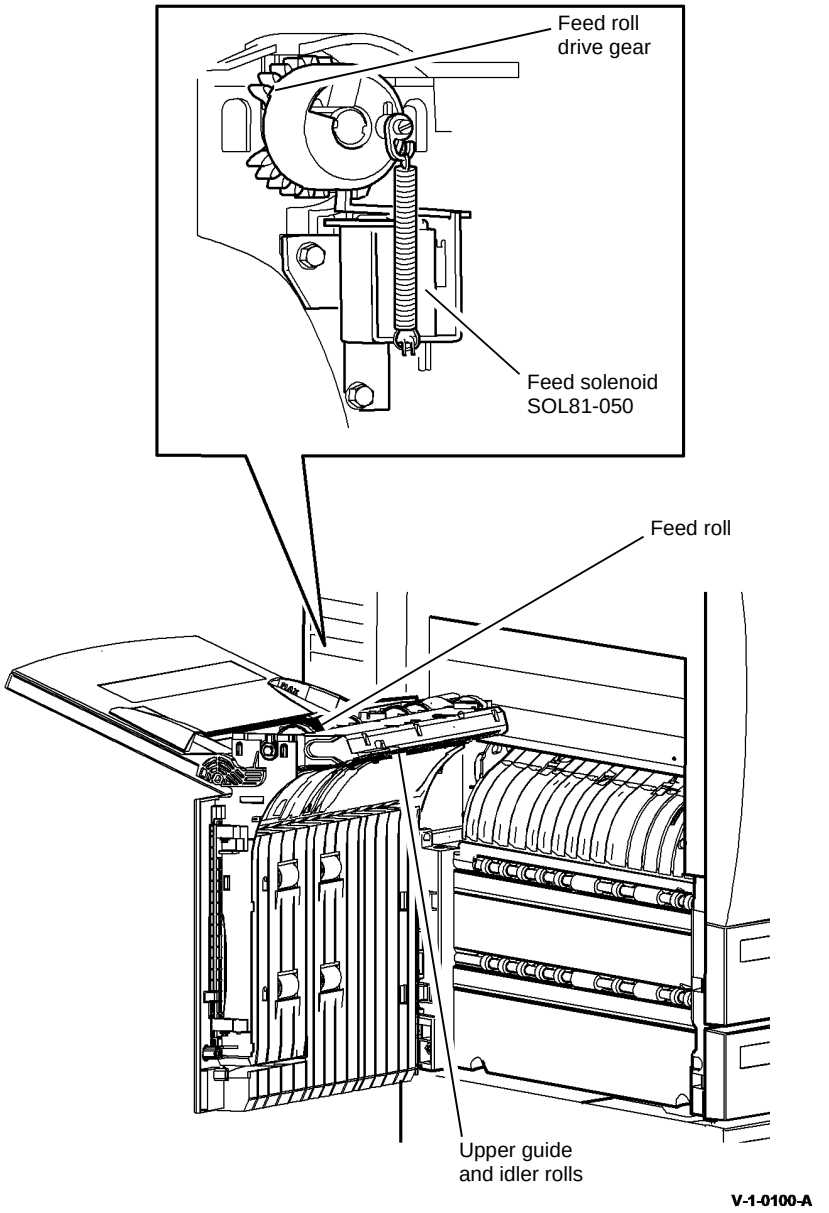


Figure 1 Component location

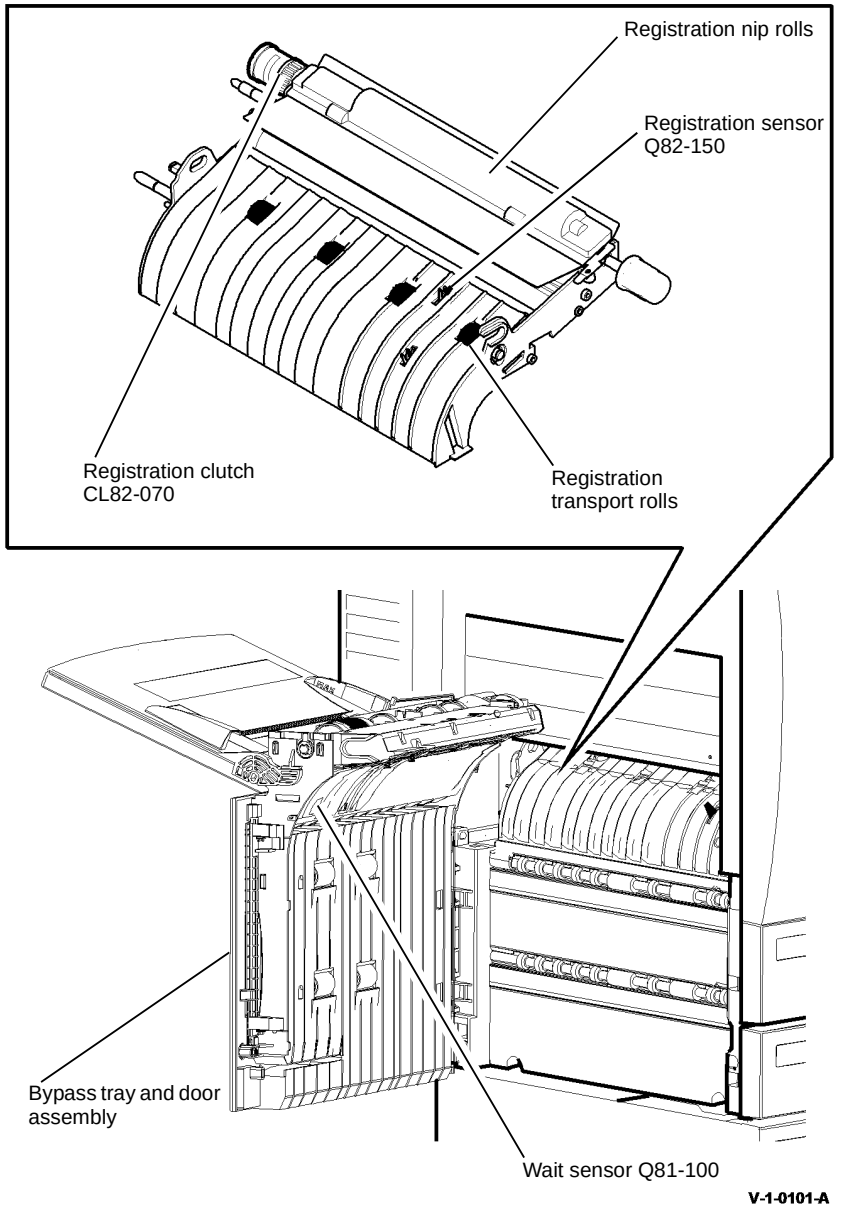


Figure 2 Component location

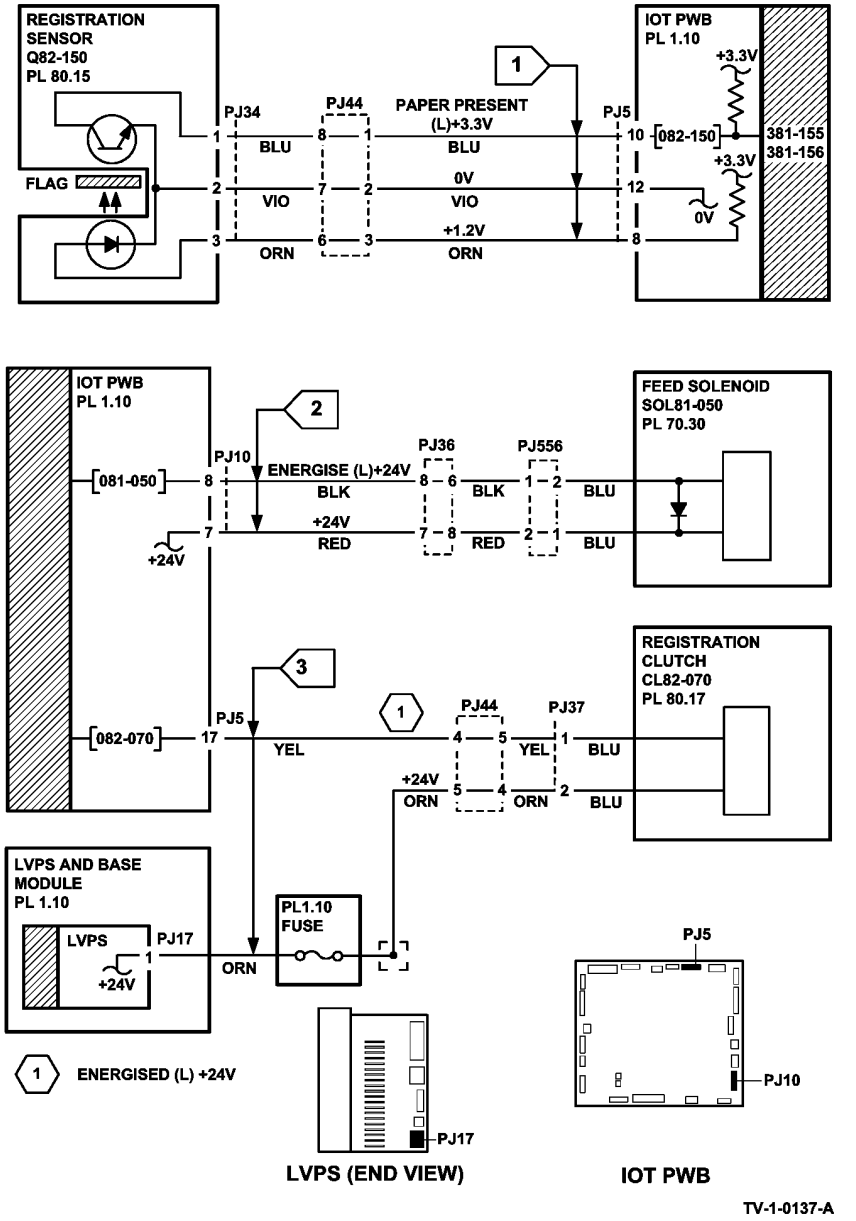


Figure 3 Circuit diagram

381-155-00B, 381-156-00B Bypass Tray Registration Jam RAP (65-90 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 381-155-00, 381-156-00 Bypass Tray Registration Jam Entry RAP.
- Check the condition of the paper in the bypass tray. Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Check that the bypass tray and left door assembly is latched correctly.
- Check that the interlock cover has not come loose, PL 70.30 Item 23. Bias the cover to the right and tighten the two screws
- Check that the short paper path assembly latches without excessive force, PL 10.25 Item 1. Go to REP 10.1. In replacement step 5, check the latch mechanism.
- If the fault is 381-155-00, check the bypass tray empty actuator, 375A RAP.

Procedure

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 082-150 registration sensor, Q82-150. Press Start. Figure 2. Activate Q82-150. **The display changes.**

Y N

Go to Flag 1. Check Q82-150. Refer to:

- GP 11 How to Check a Sensor.
- P/J16, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new registration sensor, (65-90 ppm) PL 80.17 Item 3.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 042-010 main motor, MOT42-010. Add code 082-070 registration clutch, CL82-070. Press Start. **The jam clearance knob, 4c, PL 80.17 Item 10, rotates.**

Y N

Go to Flag 3. Check CL82-070. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17 LVPS.
- Fuse, PL 1.10 Item 9, GP 7.

If necessary install a new registration clutch, (65-90 ppm) PL 80.17 Item 7.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

A

A

Enter dC330 code 081-050 bypass feed solenoid, SOL81-050. Press Start. **The solenoid energizes.**

Y N

Go to Flag 2. Check SOL81-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- Figure 1.
- P/J10, IOT PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new feed solenoid, PL 70.30 Item 4.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Perform the following:

- Check the registration transport rolls and registration nip rolls, Figure 2, PL 80.17 Item 1.
- If the fault still occurs, check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.
- Check the idler roll and upper guide on the feed head, Figure 1.
- Clean the feed roll and retard pad using a cloth dampened with water.
- If necessary install a new feed and retard pad, PL 70.30 Item 21.

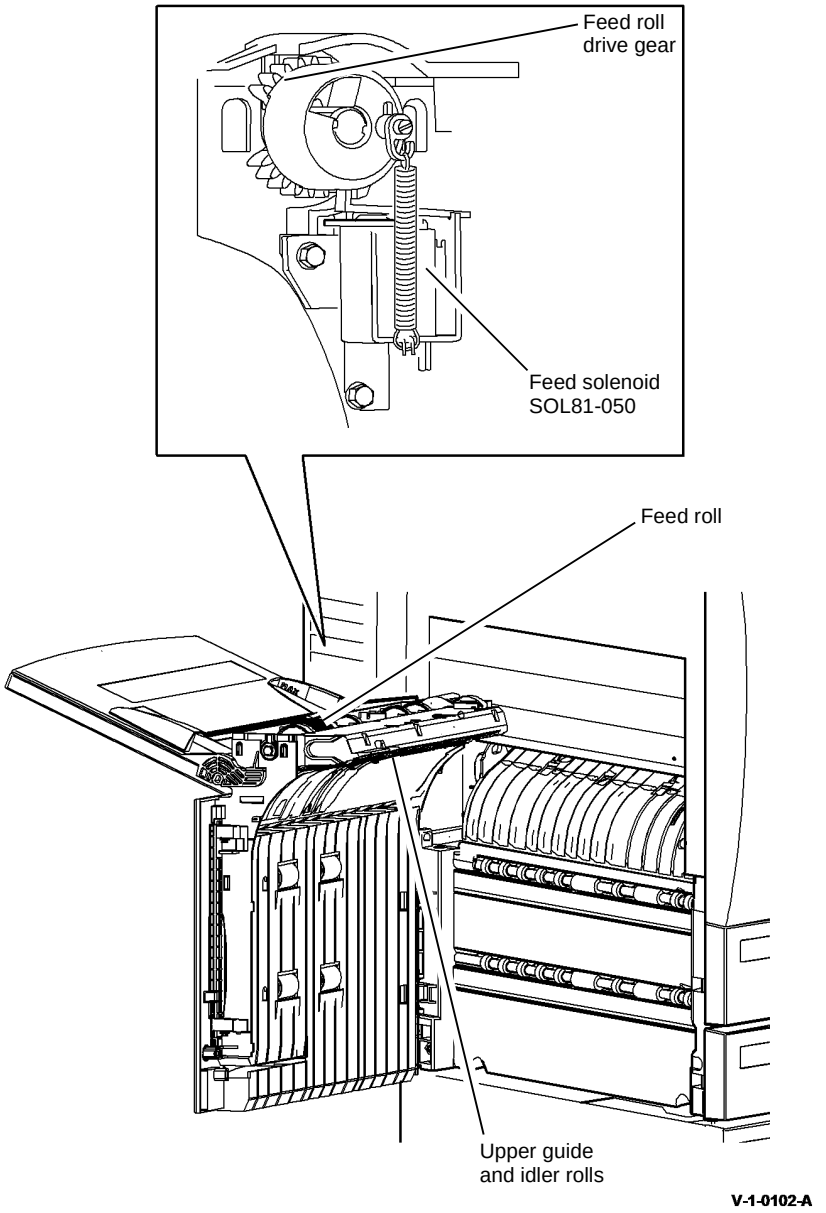


Figure 1 Component location

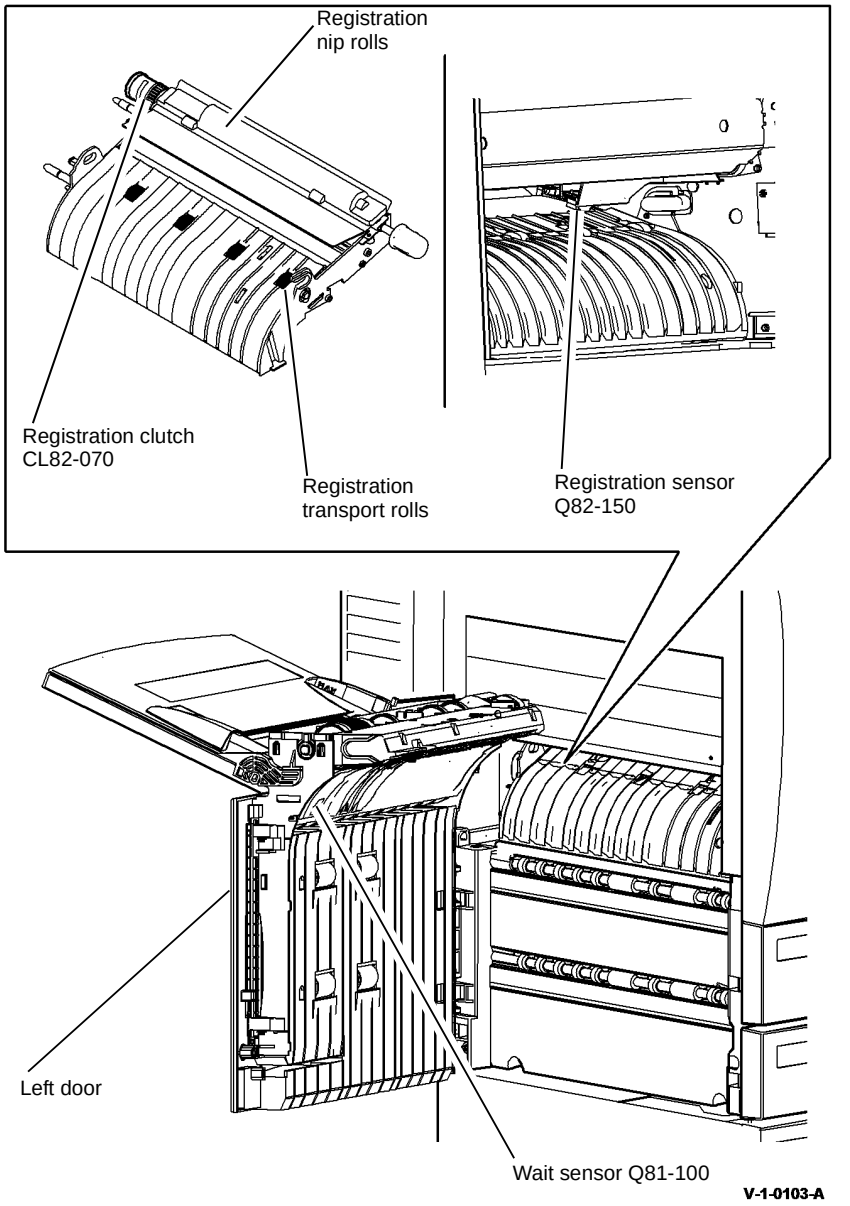


Figure 2 Component location

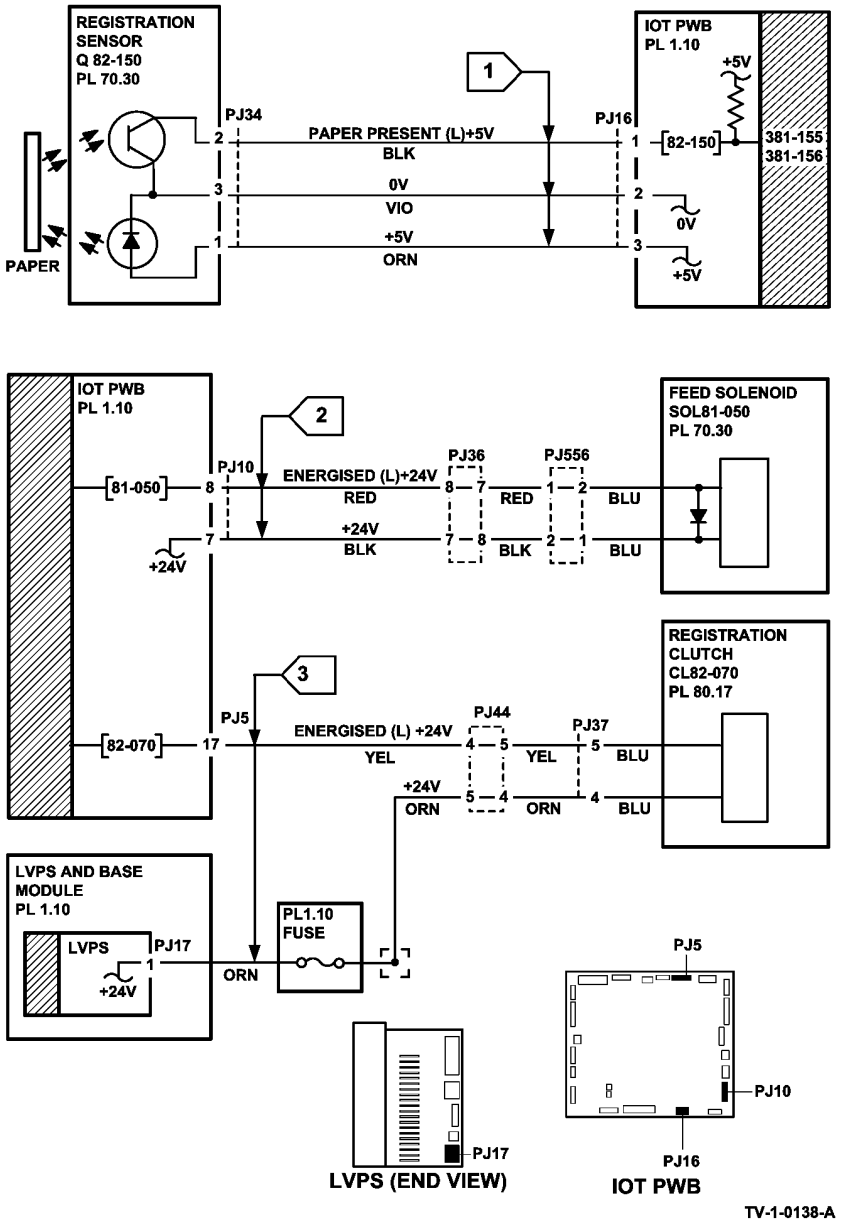


Figure 3 Circuit diagram

381-171-00 Unexpected Time Out RAP

381-171-00 The IOT detects an unexpected event for a known sheet. A sheet left in the machine after jam clearance.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Enter the machine status mode and check for the active messages. Refer to OF4 Status Codes and Message RAP for the jam clearance procedure.
- Check the condition of the paper in all trays, Refer to IQ1 and GP 20.
- Check for obstructions in the paper path.
- Make sure that all covers and paper guides are closed, and latch correctly.
- Check for paper in the output device.

Procedure

If the initial actions did not resolve the problem. Switch off the machine, then switch on the machine, GP 14. If a fault code is then displayed, go to the appropriate RAP.

381-174-00 Missing Pre-release Sheet RAP

381-174-00 The IOT detected a missing pre-release sheet.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Enter the machine status mode and check for the active messages. Refer to OF4 Status Codes and Message RAP for the jam clearance procedure.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the registration paper path.
- Make sure that all covers and paper guides are closed, and latch correctly.

Procedure

If the initial actions did not resolve the problem. Switch off the machine, then switch on the machine, GP 14. If a fault code is then displayed, go to the appropriate RAP.

381-180-00 Unable to Feed Next Sheet RAP

381-180-00 The machine has detected that the previous sheet has not correctly fed through the paper path.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Clear the paper path.

Procedure

45-55 ppm. Perform the following:

- Check the tray 1 feed sensor, Q81-101. Refer to the 381-101-00, 381-111-00 Tray 1 Misfeed RAP. Install new components as necessary.
- Check the tray 2 feed sensor, Q81-102. Refer to the 381-102-00, 381-112-00 Tray 2 Misfeed RAP. Install new components as necessary.
- Check the registration sensor, Q82-150 and the wait sensor, Q81-100. Refer to the 381-150-00A, 381-151-00A, 381-190-00A to 381-193-00A Registration Jam RAP (45-55 ppm). Install new components as necessary.

65-90 ppm. Perform the following:

- Check the tray 1 feed sensor, Q81-101. Refer to the 381-101-00, 381-111-00 Tray 1 Misfeed RAP. Install new components as necessary.
- Check the tray 2 feed sensor, Q81-102. Refer to the 381-102-00, 381-112-00 Tray 2 Misfeed RAP. Install new components as necessary.
- Check the registration sensor, Q82-150 and the wait sensor, Q81-100. Refer to the 381-150-00B, 381-151-00B, 381-190-00B to 381-193-00B Registration Jam RAP (65-90 ppm). Install new components as necessary.

383-160-00, 383-161-00 Duplex Paper Path Jam Entry RAP

383-160-00 The lead edge of the first sheet of a job fed into the duplex path failed to actuate the Duplex sensor in the correct time.

383-161-00 The trail edge is late to the duplex sensor after of the first sheet of a job fed into the duplex path failed to actuate the duplex sensor in the correct time.

Procedure

Identify the speed of the machine, refer to SCP 6 Machine features. Perform one of the steps that follow:

- If the speed of the machine is 45-55 ppm, go to 383-160-00A, 383-161-00A Duplex Paper Path Jam RAP (45-55 ppm)
- If the speed of the machine is 65-90 ppm, go to 383-160-00B, 383-161-00B Duplex paper path Jam RAP (65-90 ppm).

383-160-00A, 383-161-00A Duplex Paper Path Jam RAP (45-55 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 383-160-00, 383-161-00 Duplex Paper Path Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for paper in the inverter and duplex transport.
- Check for obstructions in the paper path.
- If skew occurs when A5 paper is duplexed. Check for contact between the drive rolls and the nip rolls, (45-55 ppm) PL 80.22 Item 5.

Procedure

WARNING

Take care during this procedure. Motors will become hot during normal operation.

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 083-160 duplex sensor, Q83-160. Press Start. Manually actuate Q83-160, Figure 1. **The display changes.**

Y **N**

Go to Flag 1. Check Q83-160. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new duplex sensor, (45-55 ppm) PL 80.22 Item 4.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 083-060 duplex motor slow, MOT83-060, Figure 1. Press Start. **MOT83-060 runs.**

Y **N**

Go to Flag 2. Check MOT83-060. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB.
- P/J50, P/J91, duplex motor driver PWB.
- 301G +24V Distribution RAP.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

A

A

Install new components as necessary:

- Duplex motor, (45-55 ppm) PL 80.22 Item 8.
- Duplex motor driver PWB, (45-55 ppm) PL 80.22 Item 9.

If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

The transport rolls rotate.

Y N

Check the drive belt and pulleys, (45-55 ppm) PL 80.22 Item 2 and PL 80.22 Item 10.

Enter dC330 10-030 inverter motor forward slow, 10-030, Figure 1. Press Start. **MOT10-030 runs.**

Y N

Go to Flag 3. Check MOT10-030. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB.
- P/J45, P/J55.
- 301G +24V Distribution RAP.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Inverter motor, PL 10.14 Item 13.
- Inverter motor driver PWB, PL 10.11 Item 22.

If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

The transport rolls rotate.

Y N

Refer to GP 7. Check the drive gears, PL 10.15.

Enter dC330 code 010-050 inverter nip solenoid, SOL10-050, Figure 1. Press Start. **SOL10-050 energizes.**

Y N

Go to Flag 4. Check SOL10-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new inverter Nip Solenoid, PL 10.11 Item 6.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-045 inverter path solenoid, SOL10-045, Figure 1. Press Start. **SOL10-045 energizes.**

Y N

Go to Flag 5. Check SOL10-045. Refer to:

- GP 12 How to check a Solenoid or Clutch.
- P/J5, IOT PWB.

B

B

- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new inverter path solenoid, PL 10.11 Item 14.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Refer to GP 7. Check the following:

- Duplex nip rolls, (45-55 ppm) PL 80.22 Item 7.
- Nip split shaft assembly, PL 10.11 Item 4.
- Idler rolls, PL 10.12 Item 15.
- If the fault still occurs, check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.

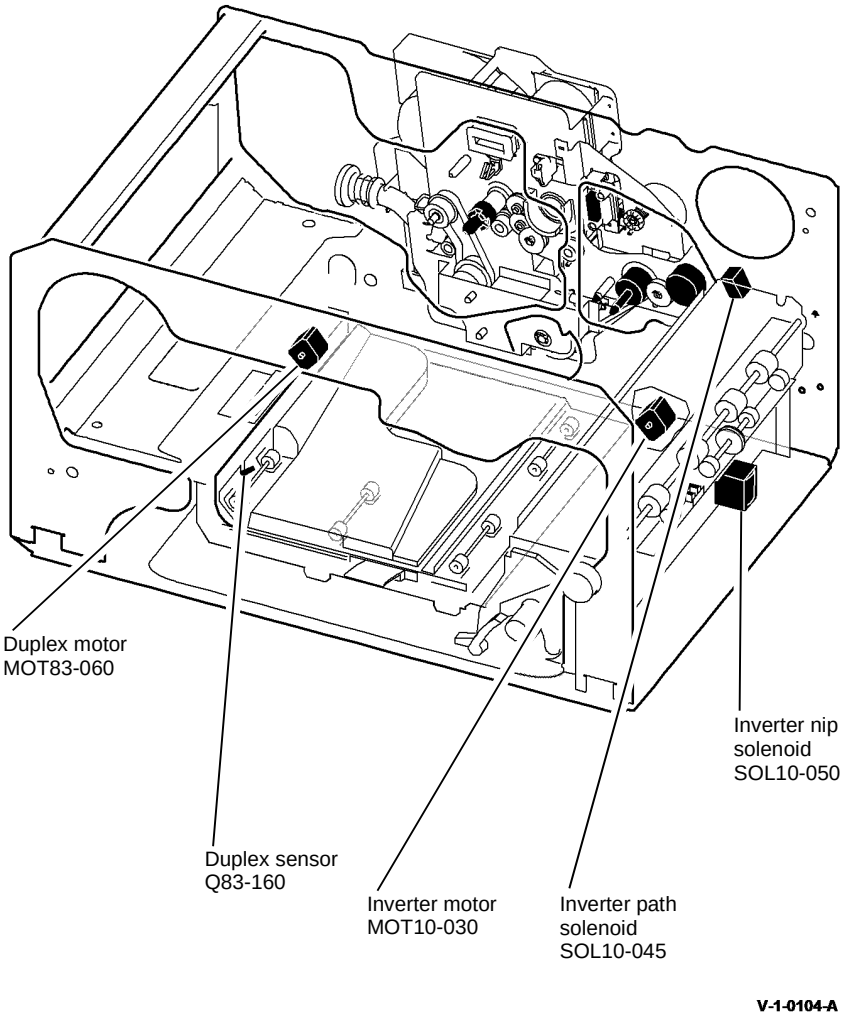


Figure 1 Component location

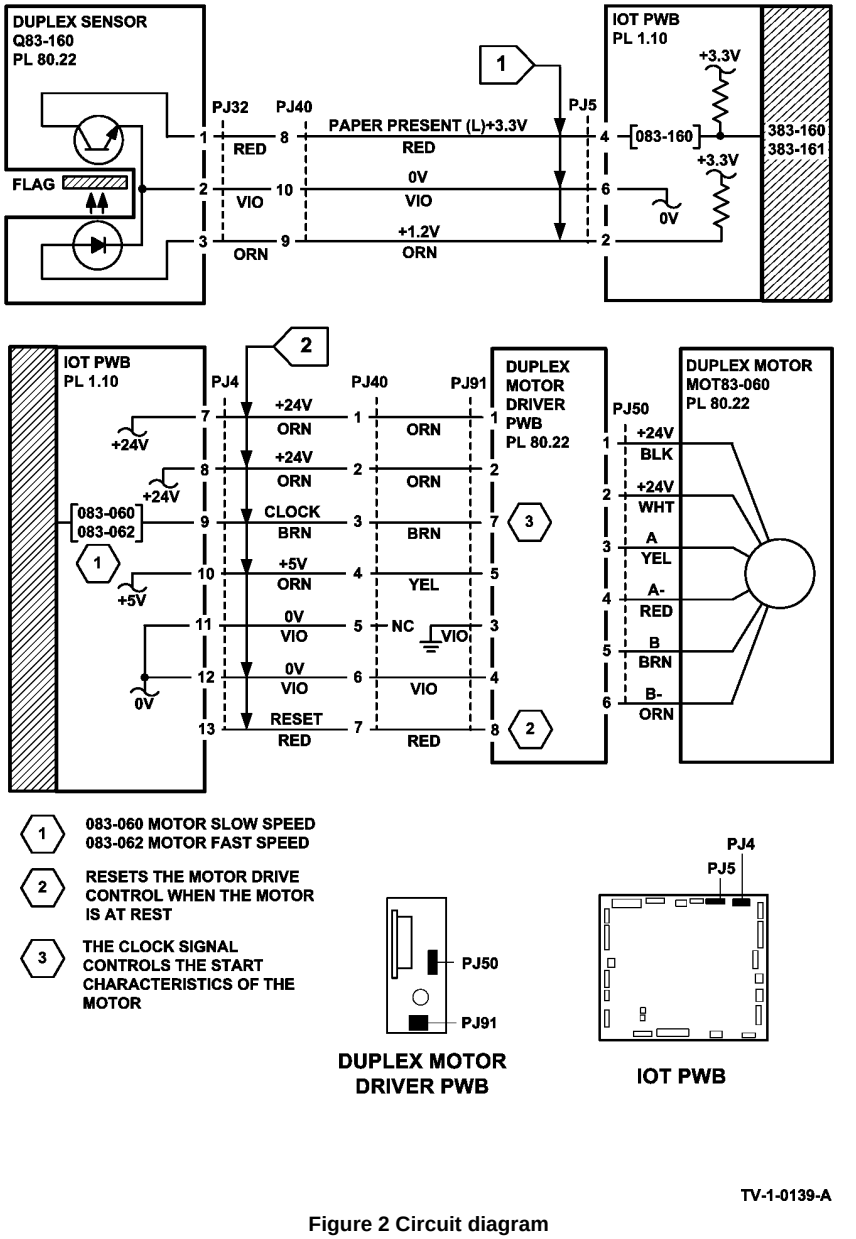


Figure 2 Circuit diagram

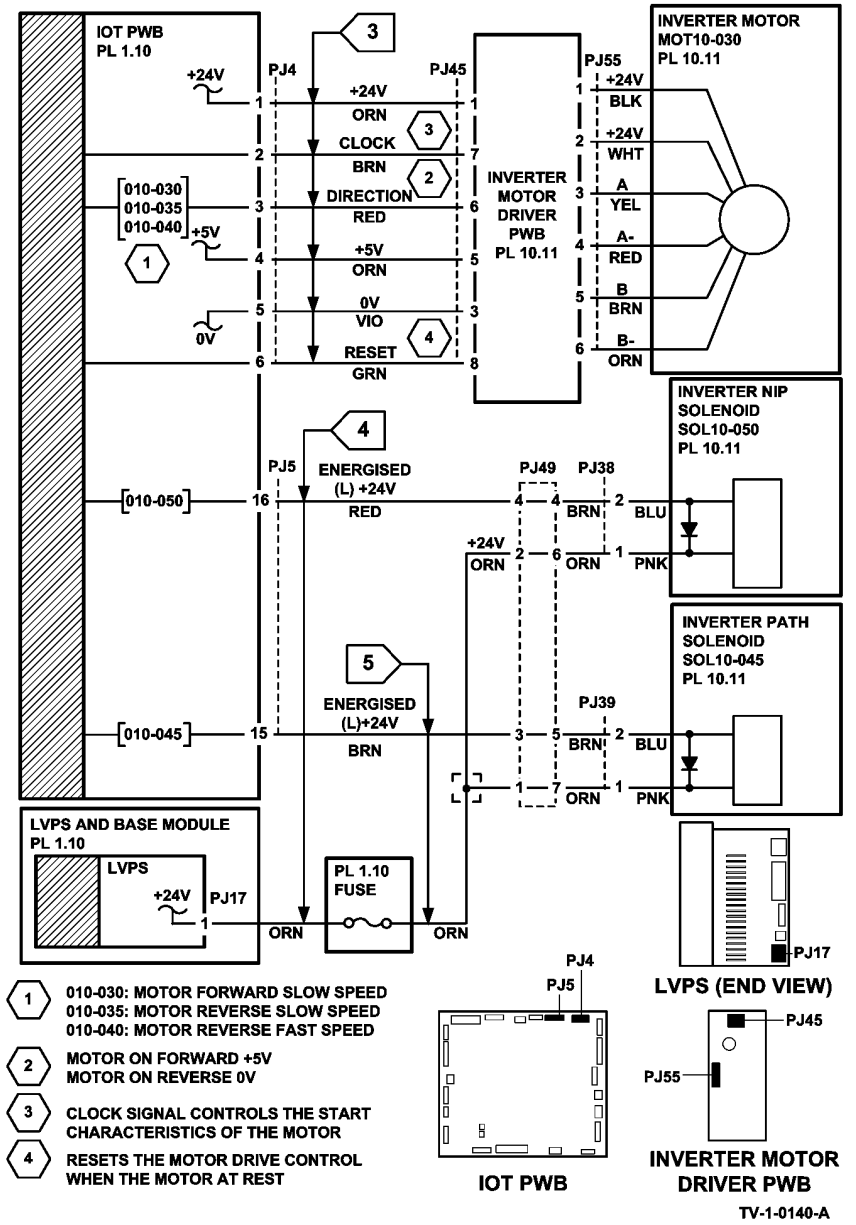


Figure 3 Circuit diagram

383-160-00B, 383-161-00B Duplex Paper Path Jam RAP (65-90 ppm)

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Make sure that the correct RAP is used. To identify the correct RAP to use, go to the 383-160-00, 383-161-00 Duplex Paper Path Jam Entry RAP.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for paper in the inverter and duplex transport.
- Check for obstructions in the paper path.
- If skew occurs when A5 paper is duplexed. Check for contact between the drive rolls and the nip rolls, (65-90 ppm) PL 80.20 Item 14.

Procedure

WARNING

Take care during this procedure. Motors will become hot during normal operation.

NOTE: *The front door interlock must be cheated when checking +24V components.*

Enter dC330 code 083-160 duplex sensor, Q83-160. Press Start. Activate Q83-160, Figure 1. **The display changes.**

Y N

Go to Flag 1. Check Q83-160. Refer to:

- GP 11 How to Check a Sensor.
- P/J5, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new duplex sensor, (65-90 ppm) PL 80.20 Item 4.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 083-060 duplex motor slow, MOT83-060, Figure 1. Press Start. **MOT83-060 runs.**

Y N

Go to Flag 2. Check MOT83-060. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB.
- P/J50, P/J91, duplex motor driver PWB.
- 301G +24V Distribution RAP.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

A

A

Install new components as necessary:

- Duplex motor, (65-90 ppm) PL 80.20 Item 8.
- Duplex motor driver PWB, (65-90 ppm) PL 80.20 Item 9.

If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

The transport rolls rotate.

Y N

Check the drive belt and pulleys, (65-90 ppm) PL 80.20 Item 2 and PL 80.20 Item 10.

Enter dC330 code 010-030 inverter motor slow, 10-030, Figure 1. Press Start. **MOT10-030 runs.**

Y N

Go to Flag 3. Check MOT10-030. Refer to:

- GP 10 How to Check a Motor.
- P/J4, IOT PWB.
- P/J45, P/J55.
- 301G +24V Distribution RAP.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Inverter motor, PL 10.14 Item 13.
- Inverter motor driver PWB, PL 10.11 Item 22.

If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

The transport rolls rotate.

Y N

Refer to GP 7. Check drive gears, PL 10.15.

Enter dC330 code 010-050 inverter nip solenoid, SOL10-050, Figure 1. Press Start. **10-050 energizes.**

Y N

Go to Flag 4. Check SOL10-050. Refer to:

- GP 12 How to Check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new inverter nip solenoid, PL 10.11 Item 6.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 010-045 inverter path solenoid, SOL10-045, Figure 1. Press Start. **SOL10-045 energizes.**

Y N

Go to Flag 5. Check SOL10-045. Refer to:

- GP 12 How to check a Solenoid or Clutch.
- P/J5, IOT PWB.
- P/J17, LVPS.
- Fuse, PL 1.10 Item 9, GP 7.

B

B

- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

If necessary install a new inverter path solenoid, PL 10.11 Item 14.
If the problem persists, perform OF7 IOT PWB Diagnostics RAP.

Check the following, refer to GP 7:

- Duplex nip rolls, (65-90 ppm) PL 80.20 Item 7.
- Nip split shaft assembly, PL 10.11 Item 4.
- Idler rolls, PL 10.12 Item 15.
- If the fault still occurs, check the drives plate on the registration clutch for damage and contamination. Refer to the replacement procedure in REP 80.3.

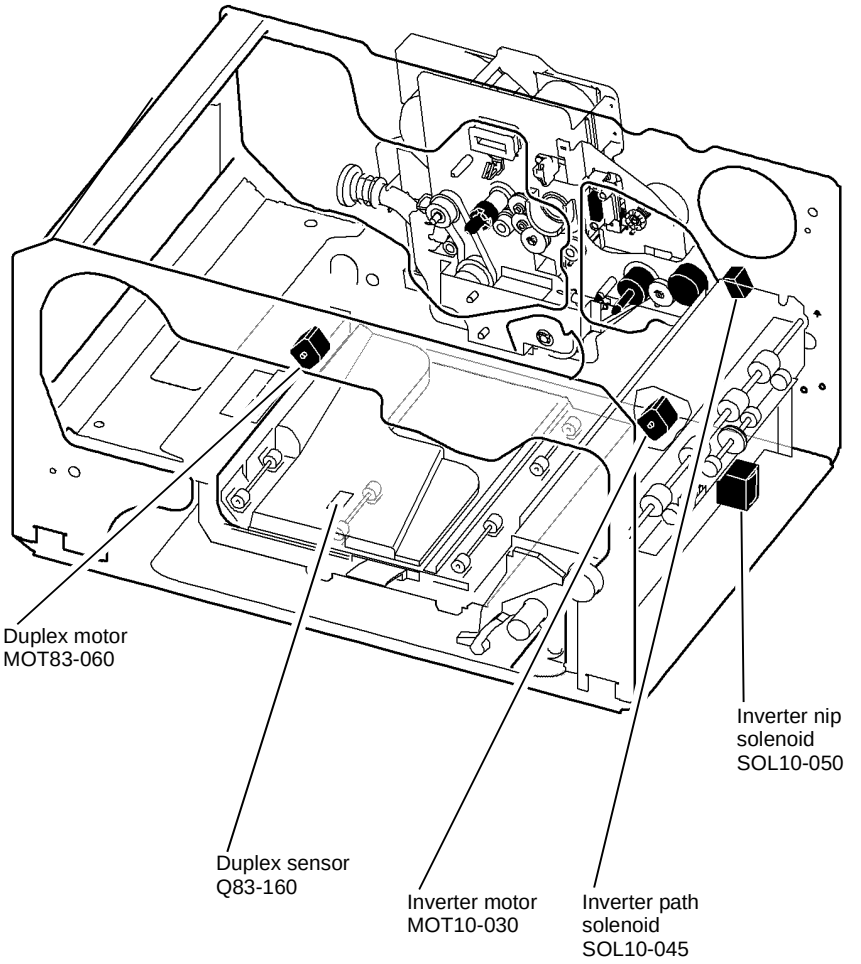


Figure 1 Component location

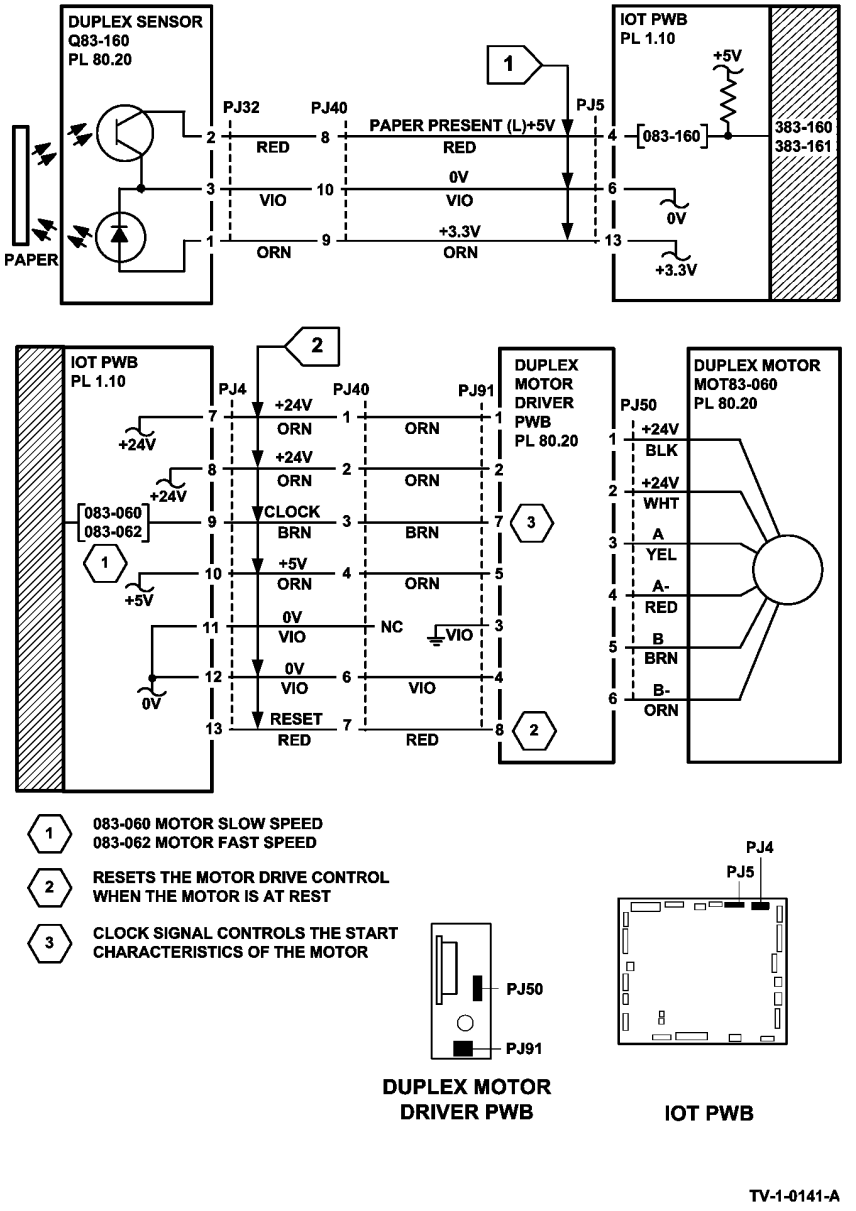


Figure 2 Circuit diagram

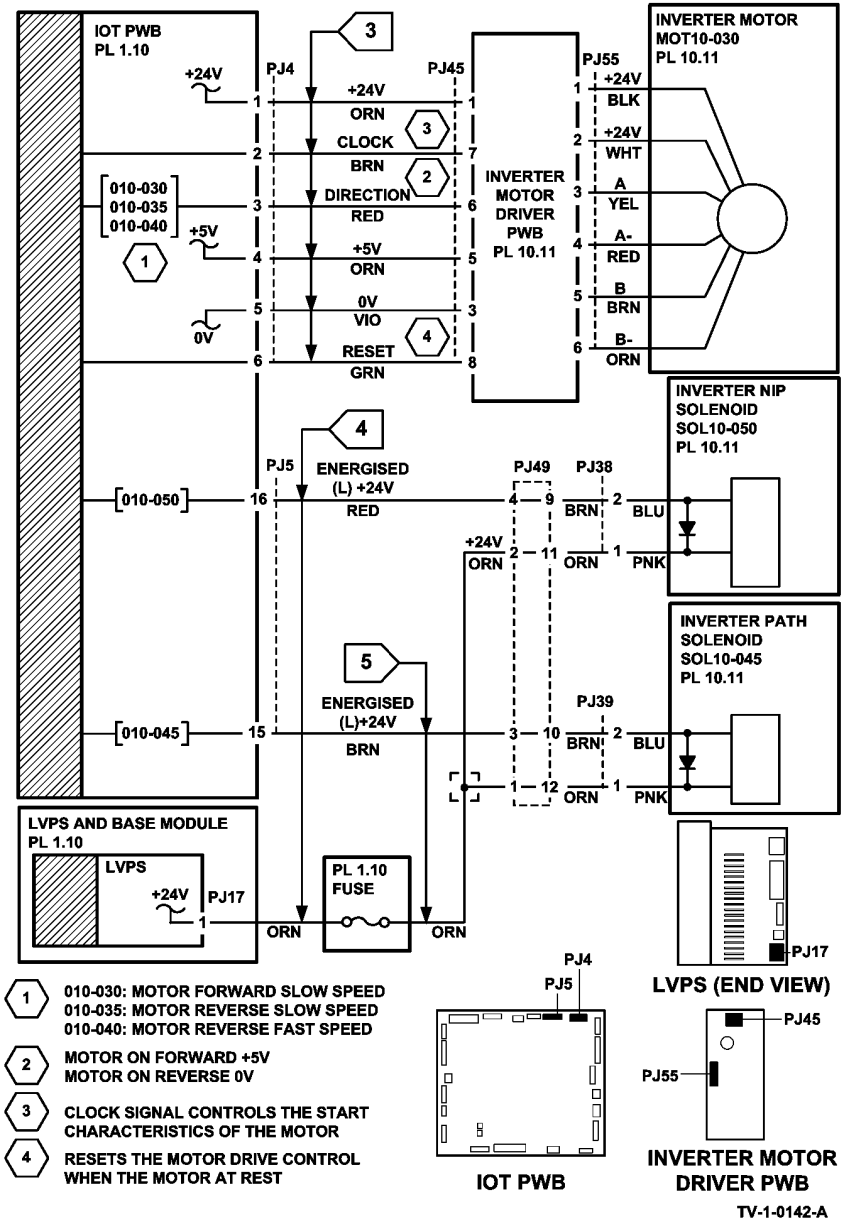


Figure 3 Circuit diagram

383-181-00 Unexpected Time Out in Simplex Inverted Mode RAP

383-181-00 The IOT detected an unexpected time out for a known simplex inverted sheet of paper.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Enter the machine status mode and check for the active messages. Refer to OF4 Status Codes and Message RAP for the jam clearance procedure.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the simplex and inverted paper path.
- Make sure that all covers and paper guides are closed, and latch correctly.

Procedure

If the initial actions did not correct the problem, perform the following:

- Switch off the machine, then switch on the machine, GP 14.
- If a fault code is then displayed, go to the appropriate RAP.
- Enter dC330, code 010-045 inverter path solenoid, SOL10-045. Check the operation of the inverter gate, PL 10.12 Item 7. It should move freely without binding.

383-182-00 Unexpected Time Out in Duplex Mode RAP

383-182-00 The IOT detected an unexpected time out for a known duplex sheet of paper.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Enter the machine status mode and check for the active messages. Refer to OF4 Status Codes and Message RAP for the jam clearance procedure.
- Check the condition of the paper in all trays. Refer to IQ1 and GP 20.
- Check for obstructions in the duplex paper path.

Procedure

If the initial actions did not resolve the problem. Switch off the machine, then switch on the machine, GP 14. If a fault code is then displayed, go to the appropriate RAP.

383-190-00 Post Jam Clearance Initialization RAP

383-190-00 A stray sheet has been detected in either the IOT or finisher device during the post jam clearance initialization routine.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Enter the machine status mode and check for the active messages. Refer to OF4 Status Codes and Message RAP for the jam clearance procedure.
- Check for paper in the machine paper path at all the sensor locations.
- Check for paper in the finisher paper path at all the sensor locations. Use a flashlight to check that the hole punch sensor is clear:
  - 2K LCSS punch sensor, PL 11.6 Item 7.
  - LVF BM punch sensor, PL 11.54 Item 7.
  - HVF paper edge sensor, PL 11.153 Item 17.
- Make sure that all the covers and paper guides are closed, and latched correctly.

Procedure

If the initial actions did not correct the problem. Switch off the machine, then switch on the machine, GP 14. If a fault code is then displayed, go to the appropriate RAP.

390A Photoreceptor Motor RAP

Procedure

Go to the 340A Main Drive Motor and Photoreceptor Motor RAP.

390B Waste Toner Full Sensor RAP

Use this RAP if the message 'waste toner bottle nearly full' appears, when the waste toner bottle is empty.

The waste toner bottle has the capacity to hold the waste toner from over 100K prints at 6% average area coverage.

The waste toner sensor is an infrared transmission sensor. The sensor consists of an infrared emitter on one side of the bottle and an infrared detector on the other side of the bottle.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check if the waste toner bottle is full, PL 90.10 Item 1.
- Check for toner contamination around the waste toner full sensor, Figure 1.

Procedure

Use thick black card to manually actuate the sensor. Enter dC330 code 093-350 waste toner full sensor, Q93-350. Pass the black card between the sensor transmitter and receiver. **The display changes.**

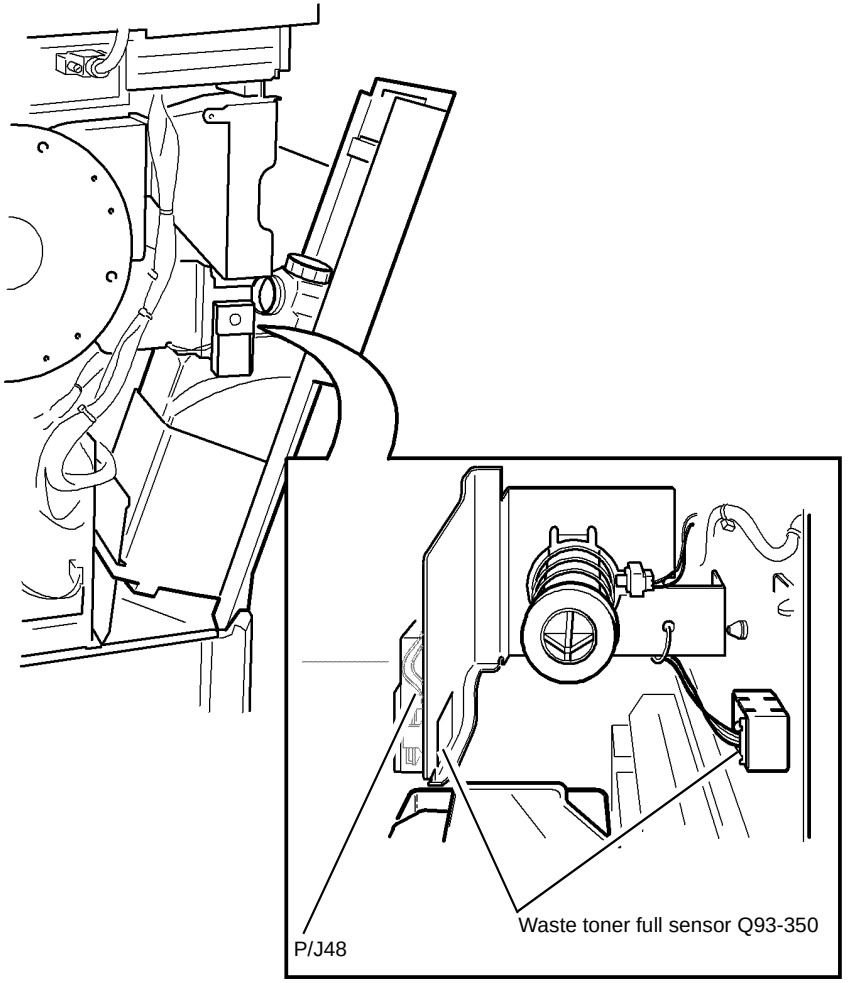
Y N

Go to Flag 1. Check Q93-350. Refer to:

- GP 11 How to Check a Sensor.
- Figure 1.
- P/J7, IOT PWB.
- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

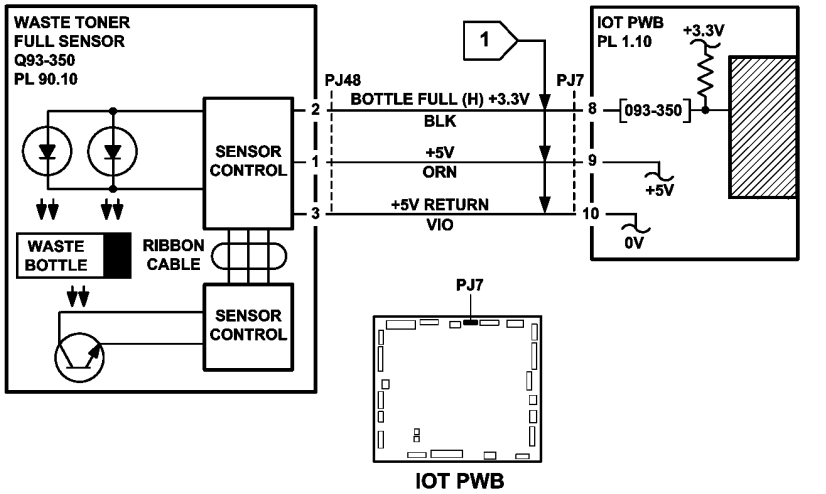
If necessary, install a new waste toner full sensor, PL 90.20 Item 2. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The fault may be intermittent. Check that the sensor is located correctly on the support bracket and on the machine frame. Check for damaged components on the sensor, PL 90.10 Item 2.



V-1-0120-A

Figure 1 Component location



TV-1-0152-B

Figure 2 Circuit diagram

390C Photoreceptor Fan RAP

Use this RAP to check the photoreceptor fan.

NOTE: *A faulty photoreceptor fan can cause image quality problems and xerographic module failure.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure that the machine is switched on, GP 14. Check the airflow by holding a piece of paper over the fan intake, PL 90.25 Item 7. **The fan is working.**

Y N

Go to Flag 1. Check the photoreceptor fan motor. Refer to GP 10, How to Check a Motor. Check the following:

- +11V to+15V is available at PJ42 pin 1 (red wire).
- 0V is available at PJ42 pin 2 (black wire).
- +11V to+15V is available at P/J17 (red wire).
- Continuity between PJ42 and P/J17. If necessary repair the harness, REP 1.2.

Perform the following as necessary.

- Install a new photoreceptor fan assembly, PL 90.25 Item 6.
- 301L LVPS Checkout RAP.

Ensure that the fan is installed correctly. If the fan is installed correctly air will be drawn into the air intake. Refer to the OF6 Ozone and Air Systems RAP.

The fault may be intermittent. Go to Flag 1. Check the harness and the connectors, GP 7.

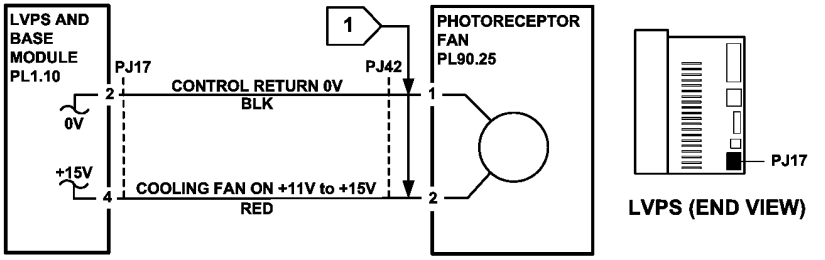


Figure 1 Circuit diagram

391-060-00 HVPS Fault RAP

391-060-00 The HVPS fault sensor has detected a high voltage fault.

The HVPS fault will occur when:

- The (C) charge high voltage supply has a short or open circuit.
- The (J1) charge grid high voltage supply has a short or open circuit.
- The (T) transfer high voltage supply has a short circuit.
- The (DT) detack high voltage supply has a short circuit.
- The (DB) developer bias high voltage supply has a short circuit.
- The +24V supply to the HVPS has a short or open circuit.
- The 24 volt supply is momentarily overloaded.

The HVPS fault will deactivate within 100 milliseconds after the removal of the fault.

NOTE: *The following defects will NOT cause a 91-060 fault:*

- *An open circuit or short circuit in the registration chute bias circuit (CB).*
- *A poor contact of the registration/halo guide bias.*
- *An open circuit in the developer bias circuit.*
- *An open circuit in the transfer corotron circuit.*
- *An open circuit in the detack corotron circuit.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Clean the charge scorotron, ADJ 90.1.
- Clean the transfer / detack corotron and check the corotron wire, ADJ 90.1.
- Reseat the high voltage connections on the HVPS, Figure 1.
- Check the registration transport bias contact, Figure 3.
- Check the bias connection, Figure 4.
- Reseat the developer bias connection, Figure 4.
- If the machine is above 750 metres above sea level, check the transfer/detack assembly for arcing. If necessary go to dC131 NVM Read / Write location 791-028, Altitude adjustment and select the appropriate altitude.
- Check for any cause of an overload to the 24V supply. For example, very thick multi-feeds causing the main drive motor to stall, or a possible short circuit.

Procedure

If you were directed from the IQ8 Defect RAP, continue below. If the following checks do not resolve the image quality problem, return to the IQ3 Xerographic RAP.

NOTE: *The following are the only values that can be measured from the HVPS.*

- *Charge scorotron grid, -425V +/- 21V (the terminal identified as J1, Figure 1).*
- *Registration chute bias, -490V +/- 25V (the two terminals identified as CB are the same output).*
- *Developer bias, -370V +20V / -50V.*

NOTE: *The charge, transfer and detack corotron have 47k Ohms arc suppression resistors within their harnesses.*

NOTE: *Excluding 91-060, all component control codes will time out after 3 seconds.*

Check that the surface mounted Fuse F1 on the IOT PWB is good. **F1 is good.**

Y **N**

Perform the procedures that follow:

- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.
- 301H Short Circuit and Overload RAP.

Run the xerographic module cleaning routine from the UI tools menu.
Enter dC330. Select component code 091-060 HVPS fault and press save. Press start. A. **The display for code 091-060 is Low.**

Y **N**

+24V is available at the bottom cap of Fuse F1.

Y **N**

Perform the 301G +24V Distribution RAP.

Install a new HVPS, PL 1.10 Item 5.

Add component code 091-061 charge scorotron. Press start. **The display for code 091-060 is Low.**

Y **N**

Go to Flag 1. Check the charge scorotron harness for open circuit or short circuit to ground, GP 7. **The harness and connectors are good.**

Y **N**

Install a new main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Install new components as necessary:

- Xerographic module, PL 90.20 Item 2.
- HVPS, PL 1.10 Item 5.
- Main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Add component code 091-062 charge grid. Press start. **The display for code 091-060 is Low.**

Y **N**

Go to Flag 1. Check the charge grid harness for open circuit or short circuit to ground, GP 7. **The harness and connectors are good.**

Y **N**

Install a new main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

A B

A B

Install new components as necessary:

- Xerographic module, PL 90.20 Item 2.
- HVPS, PL 1.10 Item 5.
- Main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Add component code 091-063 transfer corotron. Press start. **The display for code 091-060 is Low.**

Y N

Go to Flag 2. Check the transfer corotron harness for short circuit to ground, GP 7. **The transfer corotron harness and connectors are good.**

Y N

Install a new transfer/detack harness, PL 90.20 Item 9.

Install new components as necessary:

- Transfer/detack corotron, PL 90.20 Item 8.
- HVPS, PL 1.10 Item 5.
- Main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Add component code 091-064 detack corotron. Press start. **The display for code 091-060 is low.**

Y N

Go to Flag 2. Check the detack corotron harness for short circuit to ground, GP 7. **The detack corotron harness and connectors are good.**

Y N

Install a new transfer/detack harness, PL 90.20 Item 9.

Install new components as necessary:

- Transfer/detack corotron, PL 90.20 Item 8.
- HVPS, PL 1.10 Item 5.
- Main drive module (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Add component code 091-065 registration chute bias. Press start. **The display for code 091-060 is low.**

Y N

Install a new HVPS, PL 1.10 Item 5.

Add component code 091-066 developer bias. Press start. **The display for code 091-060 is low.**

Y N

The developer bias harness is shorted to ground. Confirm this diagnosis by disconnecting the developer bias harness from the HVPS and make no more than ten copies. If copies can be made without the 46-060 fault occurring, the developer bias harness is shorted to ground.

Switch off the machine, GP 14. Remove the scanner module, REP 60.2. Go to Flag 3. Check the developer bias harness for short circuit to ground, GP 7. **The developer harness and connectors are good.**

Y N

Repair the harness or install a new developer bias harness, (45-55 ppm) PL 90.17 Item 6 or (65-90 ppm) PL 90.15 Item 6. Secure the harness in position with adhesive tape to prevent re-occurrence of the fault.

C D

C D

Install a new HVPS, PL 1.10 Item 5.

Make 10 copies. **The 46-060 fault code occurs when making copies.**

Y N

Perform SCP 5 Final Actions.

The problem may be caused by a +24V component pulling the +24V supply down below the lower limit of tolerance. Switch off, then switch on the machine, GP 14. Monitor the +24V interlocked supply at PJ27 pin 1 while copies are being made. **The voltage drops below +23.28V.**

Y N

Perform SCP 5 Final Actions.

Perform the 301H Short Circuit and Overload RAP, check the +24V circuits to find the component causing the voltage drop. Repair the fault or install a new component as necessary.

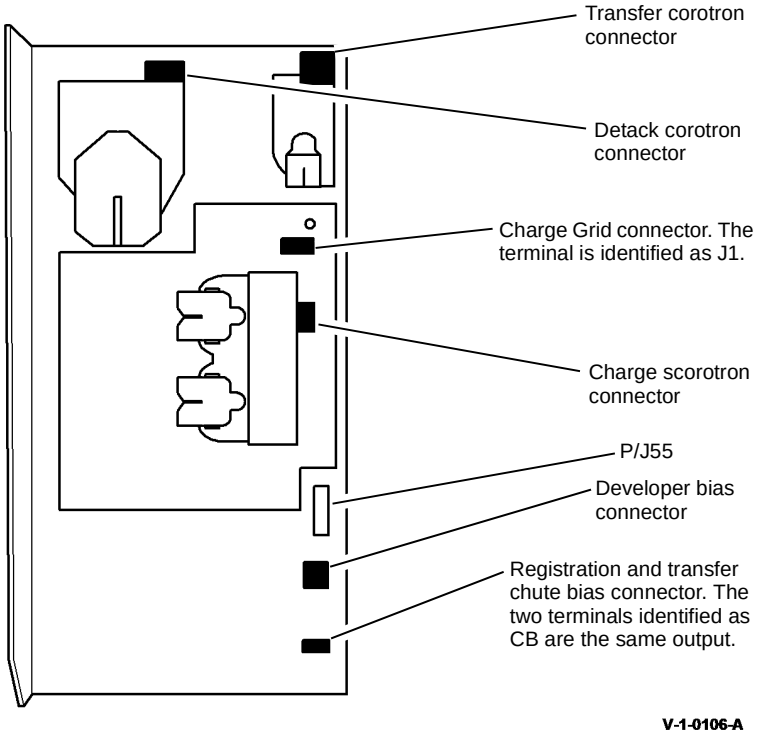


Figure 1 Component location

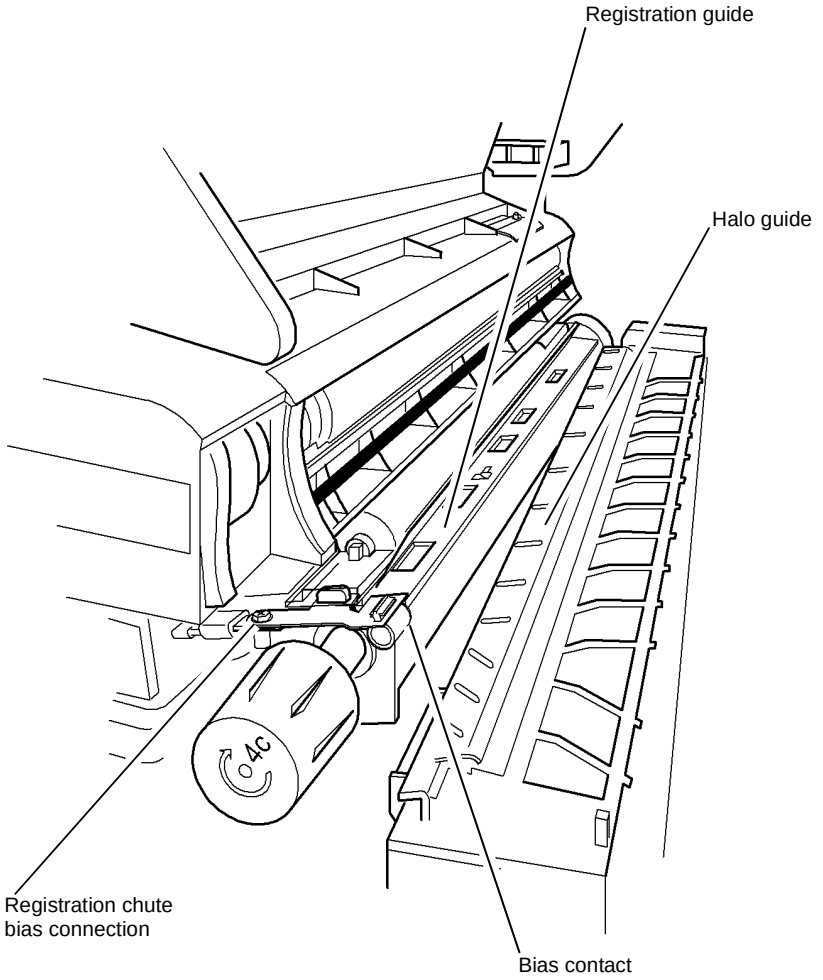


Figure 2 Component location

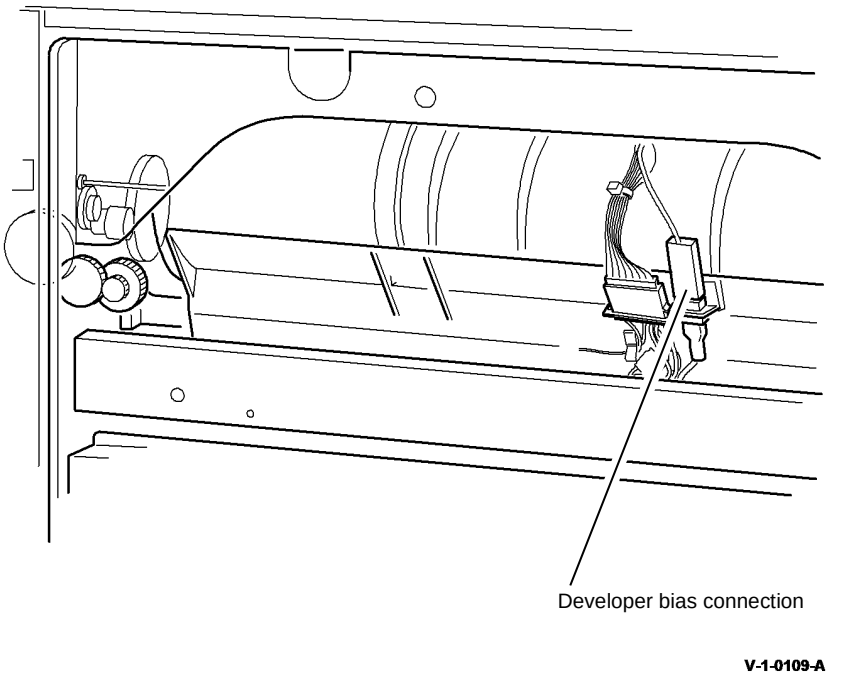


Figure 3 Component location

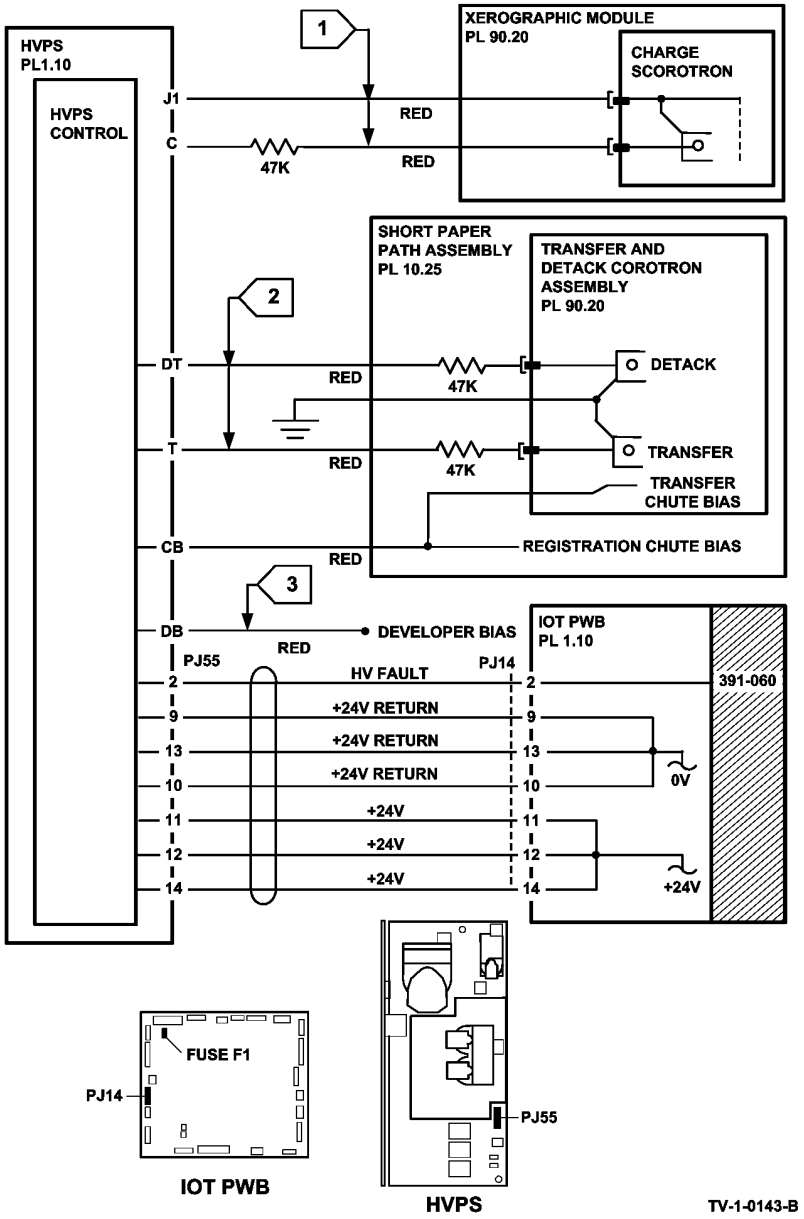


Figure 4 Circuit diagram

391-365-00 Humidity Sensor Failure RAP

391-365-00 Average humidity reading is out of limits.

Also use this RAP if the humidity sensor is suspected of working incorrectly. A faulty relative humidity sensor can cause image quality problems.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

Procedure

Enter dC140 code 091-601, humidity sensor, Q91-601. Press start. Observe the displayed state of Q91-601. Figure 1. Open the bypass tray and left door assembly, PL 70.30 Item 1. Gently blow on the humidity sensor PWB. Observe again the displayed state of Q91-601. **The displayed state has changed.**

Y **N**

Go to Flag 1. Check for +5V at P/J7 pin 3 on the IOT PWB. **+5V is present.**

Y **N**

Go to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 1. Check for +5V at P/J46 pin 1. **+5V is present.**

Y **N**

Check the wiring between P/J7 on the IOT PWB and P/J46, GP 7. Repair the wiring as necessary, REP 1.2.

Install a new humidity sensor/ambient temperature sensor, PL 90.20 Item 4. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

If possible, check the humidity of the external environment using a hygrometer. Compare with a reading from sensor Q91-601. Refer to the NOTE above Table 1. If a hygrometer is not available refer to Table 1 for the approximate expected humidity value. Compare the expected values with Q91-601. If the value of Q91-601 is very different from the expected reading install a new humidity sensor/ambient temperature sensor, PL 90.20 Item 4.
If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.
If the fault is intermittent, perform the steps that follow:

- Check the wiring, GP 7. Repair as necessary, REP 1.2.
- Make sure that the P/Js are correctly and securely connected.

NOTE: *The actual value is not critical. If the reading from Q91-601 is approximately within the range indicated in column 4, Table 1, the sensor is good.*

Table 1 Relative humidity values

External environment	Average relative humidity	Cold machine relative humidity	Warm machine relative humidity
Wet	80%	80%	40% to 50%
Ambient	50%	50%	15% to 30%
Dry	10%	10%	1% to 7%

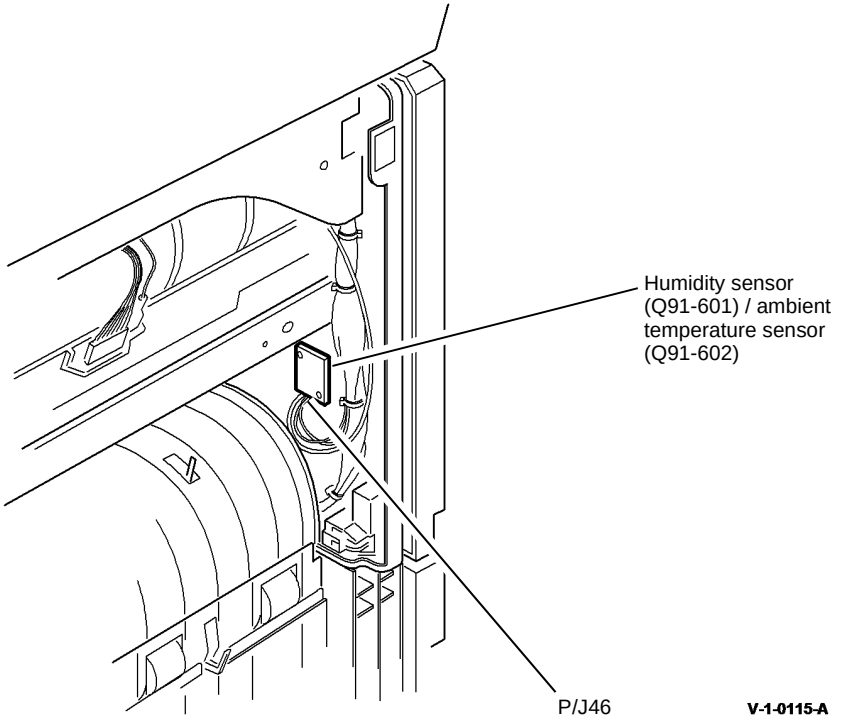


Figure 1 Component location

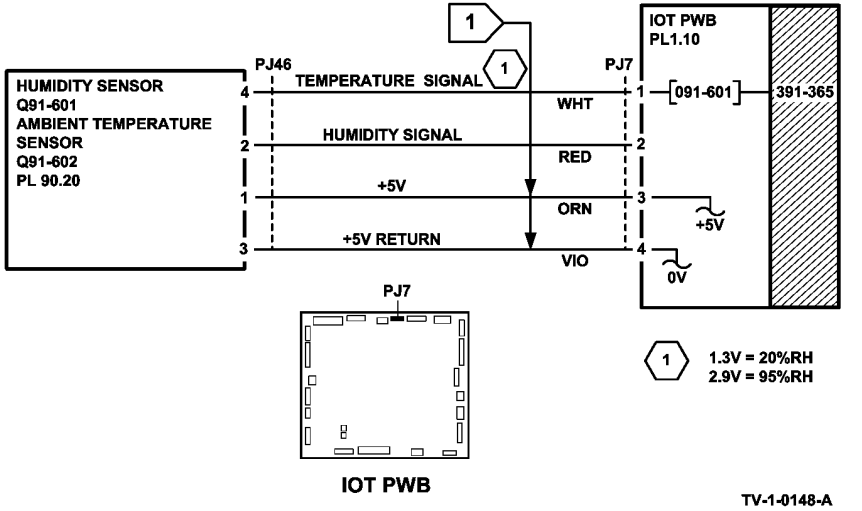


Figure 2 Circuit diagram

391-375-00 Ambient Temperature Sensor Failure RAP

391-375-00 The average ambient temperature is out of limits.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off the machine, then switch on the machine, GP 14.
- Reposition P/J46 on the humidity sensor/ambient temperature sensor and P/J7 on the IOT PWB.

Procedure

Enter dC330 code 042-602, ambient temperature sensor, Q42-602. Press start. Observe the displayed state of Q42-602. Figure 1. Open the bypass tray and left door assembly, PL 70.30 Item 1, gently blow on the temperature sensor PWB. Observe again the displayed state of Q42-602. **The displayed state has changed.**

Y N

Go to Flag 1. Check for +5V at P/J7 pin 3 on the IOT PWB. **+5V is present.**

Y N

Go to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 1. Disconnect P/J46. Check for +5V at P/J46, pin 1. **+5V is present.**

Y N

Check the wiring between P/J7 on the IOT PWB and P/J46. Repair the wiring as necessary, REP 1.2.

Install a new humidity sensor/ambient temperature sensor, PL 90.20 Item 4. If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The ambient temperature sensor is working correctly. If the fault is intermittent, perform the steps that follow:

- Check the wiring, GP 7. Repair as necessary, REP 1.2.
- Make sure that the P/Js are correctly and securely connected, GP 11.

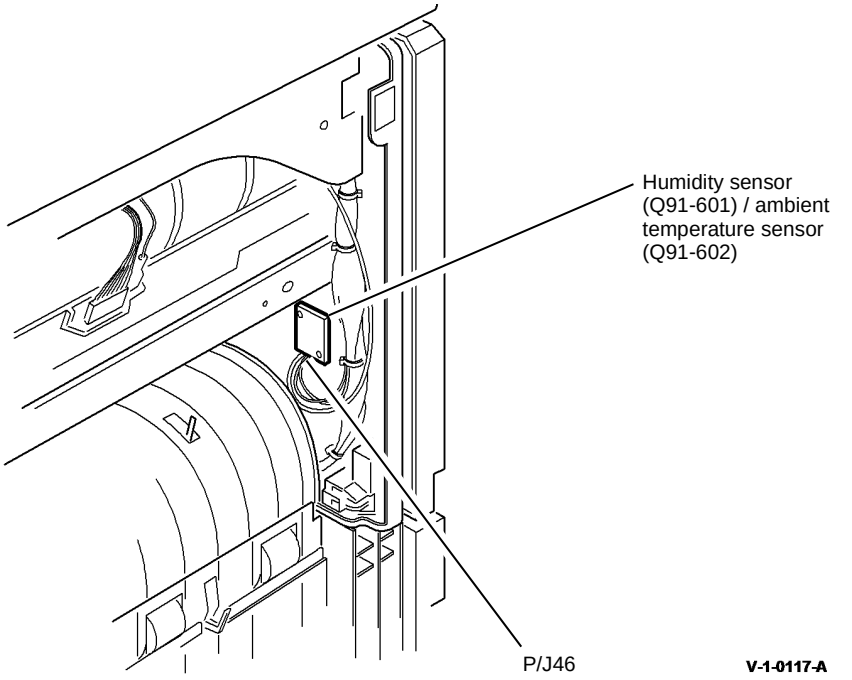


Figure 1 Component location

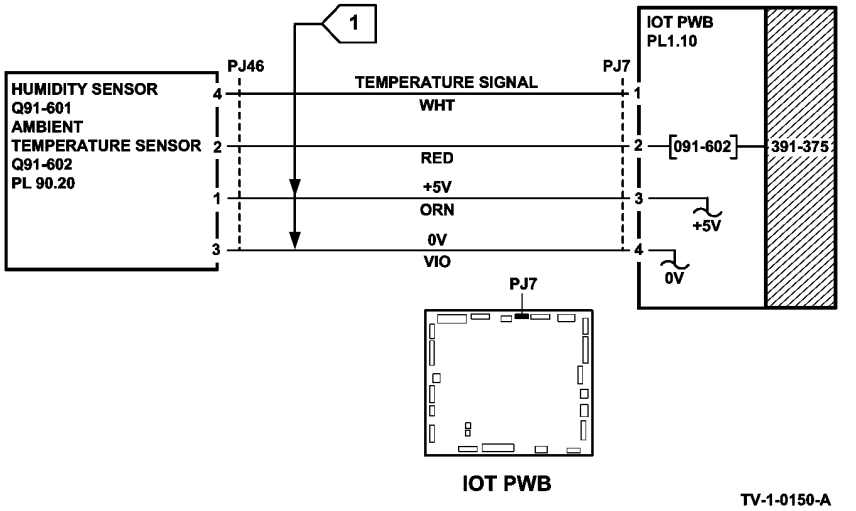


Figure 2 Circuit diagram

392-399-00 Incompatible Xerographic Module RAP

392-399-00 The xerographic module CRUM failed the authorization check.

The authorization check is performed to ensure that the xerographic module installed in the system is compatible with the current machine configuration and the customer service plan.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not install a new sold xerographic module into a meter service plan machine. This will convert the machine to a sold service plan. But this may not be noticed until the sold xerographic module has failed and is renewed with a meter xerographic module.

- Check that the xerographic module matches the customer service plan.
- Install a new xerographic module, PL 90.20 Item 2 that matches the machine configuration and the customer service plan.

How to Check the Service Plan

To check the chosen service plan:

1. Enter Customer Administration Tools, GP 24.
2. Select **Service Settings.**
3. Scroll down then select **Service Plan.**
4. The current service plan is displayed. Refer to Table 1 for details.

NOTE: *All new machines are configured to metered. A customer with an unmetered plan should only have new sold xerographic module.*

Table 1 Service plan

Service plan type	Service plan description
Sold	Xerox service agreement does not include the cost of the xerographic module.
Meter	Xerox service agreement does include the cost of the xerographic module.
Aftermarket	System will accept non-Xerox and OEM supplied xerographic module with no CRUM.

NOTE: *There is no communication with the CRUM when the system is configured to aftermarket (3rd party).*

To Change the Service Plan Type

1. Contact the market region technical specialist for a service plan authorisation number.
2. Select the **Service Plan Authorisation Number** entry field on the UI screen. Enter the authorization number.
3. Select **Change Service Plan**.
4. Select **Close**.
5. Exit Customer Administration Tools, GP 24.
6. Check that the service plan is correct.

OpCo ID (Market Region) Validation Criteria

The xerographic module will be sold in the following market regions.

- USSG-N - North american solutions group.
- USSG-S - North american solutions group.
- ESG - European solutions group.
- DMO-E - Developing markets east.
- DMO-W - Developing markets west.

For each market region the system will support the xerographic modules configured as indicated by ‘Yes’ in Table 2. e.g. a xerographic module configured as USSG-S will function in the following machine / market regions: USSG-N, USSG-S and DMO-W.

Xerographic modules configured to ‘world wide’ are for all markets.

The system will not accept a xerographic module that does not match the OpCo ID (market region) of the system. If there is a mismatch between the system configuration and the OpCo ID then an incompatible xerographic module message will be displayed on the GUI.

Table 2 OpCo ID (Market region)

Xerographic module	System configuration (Xerox OpCo ID)				
	USSG-N	USSG-S	DMO-W	DMO-E	ESG
USSG-N	Yes	Yes	Yes	No	No
USSG-S	Yes	Yes	Yes	No	No
DMO-W	Yes	Yes	Yes	No	No
DMO-E	No	No	No	Yes	Yes
ESG	No	No	No	Yes	Yes
World wide	Yes	Yes	Yes	Yes	Yes

393-310-00, 393-390-00 Low Toner Sensor Failure RAP

393-310-00 The toner cartridge motor continues to dispense toner for a period greater than 12 seconds after the low toner sensor detects that the toner dispense module is full.

393-390-00 The low toner sensor detects that the toner level is low for a period greater than 70 seconds after toner cartridge motor start.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Figure 1. Ensure the toner cartridge is not empty. If the toner cartridge is empty, install a new toner cartridge, (45-55 ppm) PL 90.17 Item 4 or (65-90 ppm) PL 90.15 Item 4.
- Ensure the retaining bracket, PL 90.15 Item 3 65-90 ppm or PL 90.17 Item 3 45- 55 ppm is not bent. A distorted retaining bracket can cause dislodgement of the toner cartridge.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

NOTE: *The toner cartridge motor will time out after 5 seconds.*

Cheat the door interlock switch. Enter dC330 code 093-045 toner cartridge motor, MOT93-045. Press start. Observe the toner cartridge. **The toner cartridge rotates.**

Y N

The motor runs.

Y N

Go to Flag 1. Check MOT93-045. Refer to:

- GP 10 How to Check a Motor.
- Figure 2.
- P/J6, IOT PWB.
- 301G +24V Distribution RAP
- 301B 0V Distribution RAP.

Install new components as necessary:

- Toner dispense module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.
- Developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Check the toner dispense drive gears, Figure 1 and Figure 2.
If necessary install a new toner dispense module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.

Perform the following:

1. Remove the developer module, REP 90.2.
2. Remove the toner cartridge motor MOT93-045 (2 screws), Figure 2.
3. Remove the lid of the toner hopper using a small flat bladed screwdriver.
4. Remove the toner from the hopper and clean all toner from the face of the low toner sensor Q93-310 using a toner vacuum and a brush.
5. Re-assemble and install the developer assembly.
6. Keep the front door open to prevent the toner cartridge motor from being energised.
7. Switch on the machine, GP 14.

The voltage at PJ93 pin 7 is 0V.

Y N

Go to Flag 2. Check Q93-310. Refer to:

- GP 11 How to check a sensor
- Figure 2, P/J6, IOT PWB
- 301B 0V Distribution RAP
- 301E +5V Distribution RAP

Install new components as necessary:

- Low toner sensor, (45-55 ppm) PL 90.17 Item 5 or (65-90 ppm) PL 90.15 Item 5
- Developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The voltage at P/J6 pin 7 is 0V.

Y N

Go to Flag 2, Check the wiring and connectors, Refer to REP 1.2.

Cheat the front door interlock switch. The toner cartridge will now rotate as toner is dispensed into the toner hopper. **The voltage at PJ93 pin 7 is changes to +3.3V and the toner cartridge stops rotating.**

Y N

Go to Flag 2. Check Q93-310. Refer to:

- GP 11 How to check a sensor
- Figure 2, P/J6, IOT PWB
- 301B 0V Distribution RAP
- 301E +5V Distribution RAP

Install new components as necessary:

- Low toner sensor, (45-55 ppm) PL 90.17 Item 5 or (65-90 ppm) PL 90.15 Item 5
- Developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The fault may be intermittent, due to toner bridging inside the toner cartridge. Install a new toner cartridge, (45-55 ppm) PL 90.17 Item 4 or (65-90 ppm) PL 90.15 Item 4.
Check the image quality then perform SCP 5 Final Actions.

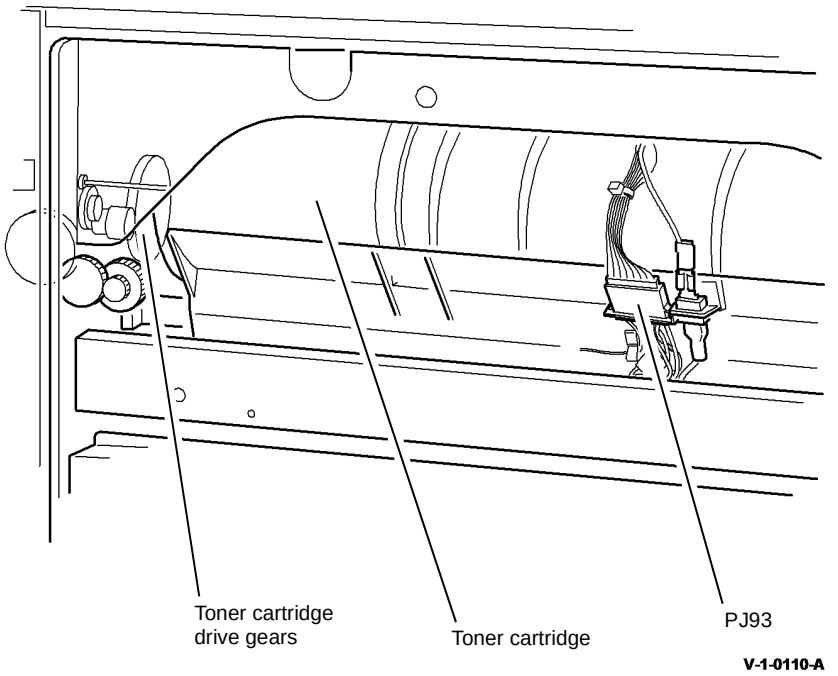


Figure 1 Component location

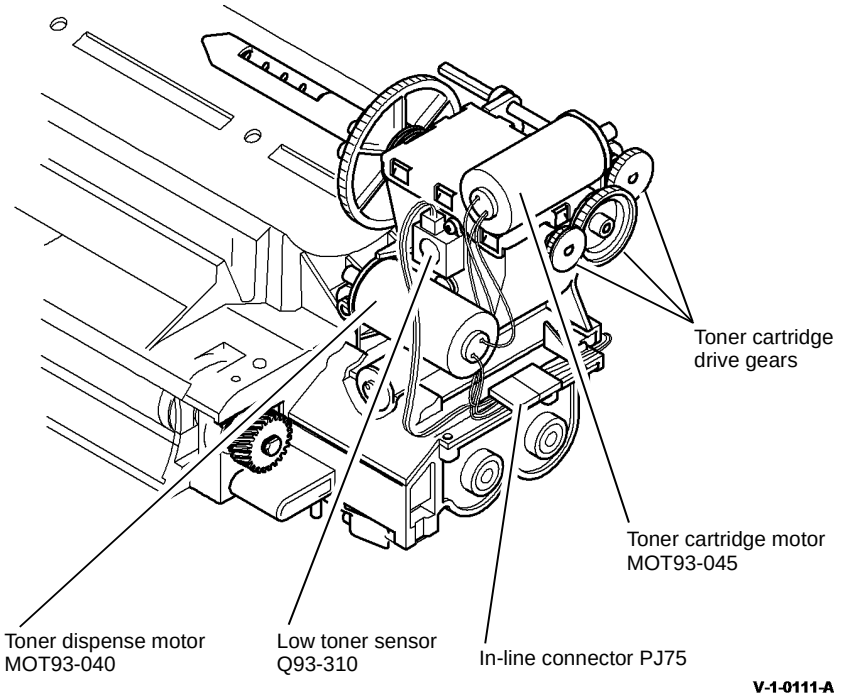


Figure 2 Component Location

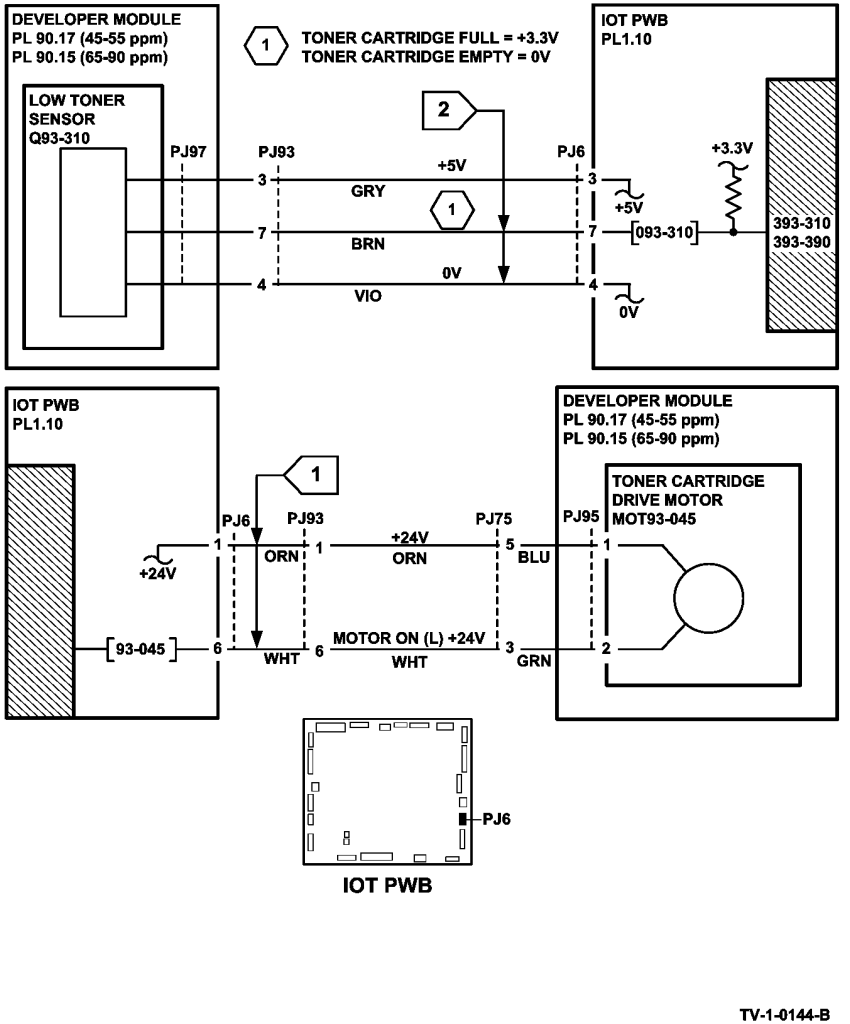


Figure 3 Circuit diagram

393-360-00 to 393-363-00 Toner Concentration Sensor Failure RAP

393-360-00 The toner concentration sensor has registered a reading outside the range, +0.75V to +4.55V for three consecutive sheets.

393-361-00 The toner concentration sensor is reading high. This indicates that the toner concentration (TC) is low.

393-362-00 The toner concentration sensor is reading low. This indicates that the toner concentration (TC) is high.

393-363-00 This code is generated by the following factors:

- The developer is not positioned correctly against the xerographic module.
- The toner concentration is low.
- The machine is being installed.
- On the fifth consecutive occurrence.

GUI message - TONER CONTROL FAILURE

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check developer roll area for toner and bead contamination. If necessary, go to IQ1 Image Quality Entry RAP.
- Check that when the xerographic module latch is in the locked position, the developer module is correctly installed, REP 90.2.
- Enter dC131 location 793-043 TC lockout low. Check that it is set to '0'. If set at '1' the toner dispense motor will not run.
- Enter dC131 location 793-044 TC lockout high. Check that it is set to '0'. If set at '1' the toner dispense motor will not run.
- Switch off the machine, then switch on the machine, GP 14.

Initial Procedure

Make 20 prints. If the following three conditions apply, go to the 393-310-00, 393-390-00 Low Toner Sensor Failure RAP. If not, continue at the Procedure.

NOTE: *If the machine is unable to make 20 prints, perform the TC increase adjustment.*

1. The prints or copies are faint.
2. The toner cartridge is not rotating.
3. The low toner sensor, 93-310, reading is high.

Procedure

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Enter dC330 42-010, to run the main drive motor. Go to Flag 1. Read the voltage at P/J93 pin 8 while the main drive motor is running. **The voltage is outside the range of +0.7V to +4.5V.**

Y N

Check the steps that follow:

- Refer to GP 7. Check the wiring between P/J93 and P/J6 on the IOT PWB.
- Refer to the 301B 0V Distribution RAP.
- Ensure the developer module is correctly installed.

The voltage at P/J93, pin 8, is less than +0.75V.

Y N

The voltage is greater than +4.5V. Check the wiring, GP 7. Go to Flag 3. **+24V is present at P/J93, pin 2.**

Y N

Disconnect P/J93, Figure 1. **+24V is present at the harness end of P/J93, pin 2.**

Y N

Go to:

- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2. Perform dC905 TC Sensor Calibration.

Go to Flag 5. **0V is available at P/J93, pin 10.**

Y N

Go to the 301B 0V Distribution RAP.

Enter dC131, 793-010, TC sensor control voltage. Record the displayed value (100 displayed equals 1 volt). Go to Flag 4. Check the voltage at P/J93, pin 9. **The displayed value is within 0.2V of the voltage checked at P/J93, pin 9.**

Y N

Disconnect P/J93. Check the voltage at pin 9. **The recorded value is within 0.2V of the voltage checked at P/J93, pin 9.**

Y N

Check the wiring, GP 7, between P/J93 and P/J6 on the IOT PWB. **The wiring is good.**

Y N

Repair the wiring, REP 1.2. Perform the TC increase adjustment.

Perform the OF7 IOT PWB Diagnostics RAP. Perform the TC increase adjustment.

Install a new developer assembly, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2. Perform dC905 TC Sensor Calibration.

Enter dC330. Enter the code 042-010, main drive motor. Press start. Add the code 093-040, toner dispense motor. Press Start.

A

NOTE: *The routine 93-040 times out after 5 seconds.*

The toner dispense motor runs.

Y N

Go to Flag 2. Check MOT93-040. Refer to:

- GP 10 How to Check a Motor.
- P/J6, IOT PWB.
- Go to 301G +24V Distribution RAP.
- Go to 301B 0V Distribution RAP.

If necessary, install a toner dispense module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.

Check the toner dispense drive gears, Figure 1. **The gears rotate.**

Y N

Install a new toner dispense module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.

Add the code 093-310, low toner sensor. Energize the components in the following order:

- 42-010, main drive motor.
- 91-010, photoreceptor motor.
- 93-040, toner dispense motor.

When the toner dispense motor stops, the toner level sensor display value is low.

Y N

Go to the 393-310-00, 393-390-00 Low Toner Sensor Failure RAP.

Perform the TC increase adjustment.

Check the wiring, GP 7, between P/J6 on the IOT PWB and P/J93 on the developer module, Figure 1. **The wiring is good.**

Y N

Repair the wiring, REP 1.2.

Go to Flag 3. **+24V is present at P/J93, pin 2.**

Y N

Disconnect P/J93, Figure 1. **+24V is present at the harness end of P/J93, pin 2.**

Y N

Go to:

- 301G +24V Distribution.
- 301B 0V Distribution RAP.

Install a new developer module, PL 90.15 Item 2. Perform dC905 TC Sensor Calibration.

Go to Flag 5. **0V is available at P/J93 pin 10.**

Y N

Go to the 301B 0V Distribution RAP.

Enter dC131, 793-010, TC sensor control voltage. Record the displayed value (100 displayed equals 1 volt). Go to Flag 4. Check the voltage at P/J93, pin 9. **The displayed value is within 0.2V of the voltage checked at P/J93 pin 9.**

A

Y N

Disconnect P/J93. Check the voltage at pin 9. **The displayed value is within 0.2V of the voltage checked at P/J93 pin 9.**

Y N

Check the wiring, GP 7, between P/J93 and P/J6 on the IOT PWB. **The wiring is good.**

Y N

Repair the wiring, REP 1.2. Perform the TC increase adjustment

Perform the OF7 IOT PWB Diagnostics RAP. Perform the TC increase adjustment

Install a new developer assembly, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2. Perform dC905 TC Sensor Calibration.

Perform the TC reduction adjustment.

If fault 93-360 is intermittent and causes the message Machine unavailable, perform the OF7 IOT PWB Diagnostics RAP then the TC reduction adjustment.

TC reduction adjustment

Perform the following:

1. Enter dC330, code 042-010, main drive motor; code 091-010, photoreceptor motor; 91-066, developer bias.
2. Start the routine. The start will have to be pressed every 5 seconds to restart the developer bias routine.
3. Monitor the voltage output, Flag 1, at P/J6 pin 8 on the IOT PWB.

   NOTE: *The toner concentration cannot be adjusted and maintained by making high area coverage prints.*

4. Run the routine until the monitored voltage is greater than 0.9 volts.
5. Check the image quality.

TC increase adjustment

Perform the following:

1. Enter dC330, code 042-010, main drive motor; 93-040, toner dispense motor; 93-045, toner cartridge motor.
2. Start the routine. The start will have to be pressed every 5 seconds to restart the toner dispense motor and the toner cartridge routines.
3. Monitor the voltage output, Flag 1, at P/J6 pin 8 on the IOT PWB.
4. Run the routine until the monitored voltage is between 2.2 and 2.8 volts
5. Check the image quality.

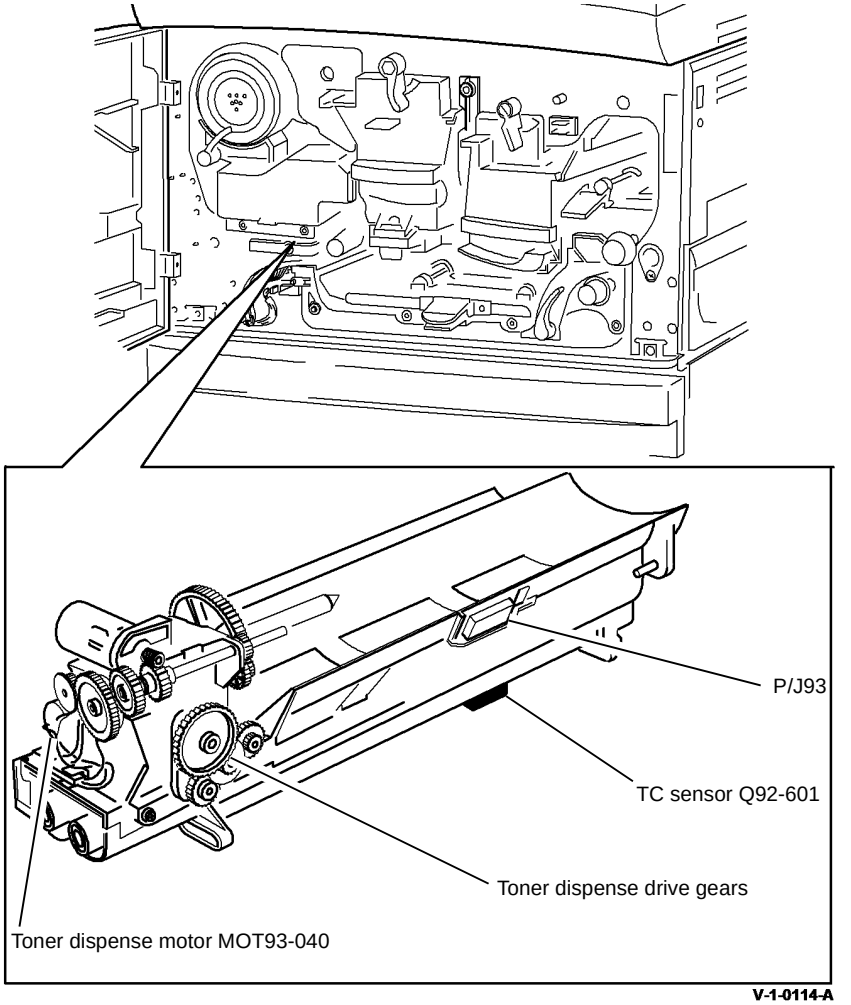


Figure 1 Component location

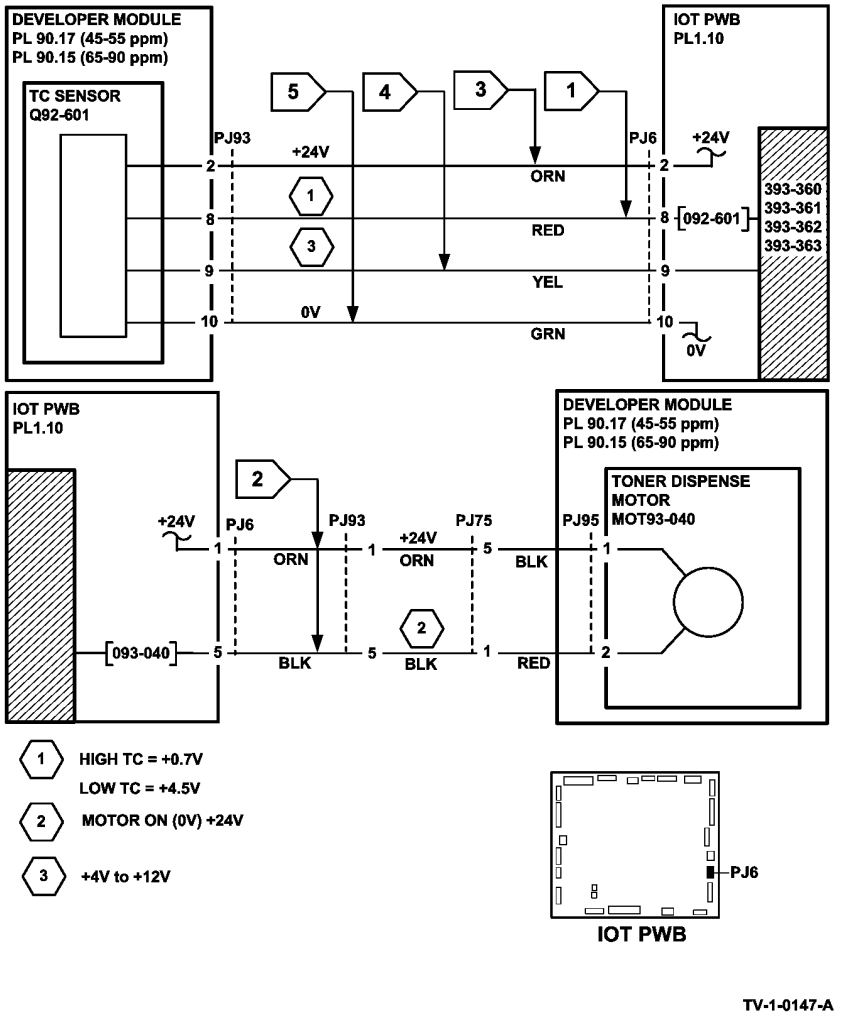


Figure 2 Circuit diagram

393-380-00 Waste Toner Door Switch Failure RAP

393-380-00 The waste toner door switch has detected that the waste toner bottle is missing or the door is open during run.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1. Ensure that the waste toner door is fully closed.

Procedure

Enter dC330 code 093-380 waste toner door switch, S93-380. Press start. Open and close the waste toner door. **The display changes.**

Y N

Go to Flag 1. Check S93-380. Refer to:

- GP 13 How to Check a Switch.
- P/J7, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Waste toner door switch, (45-55 ppm) PL 40.15 Item 8 or (65-90 ppm) PL 40.10 Item 8.
- Main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Make sure that S93-380 is mounted correctly. Install new components as necessary.

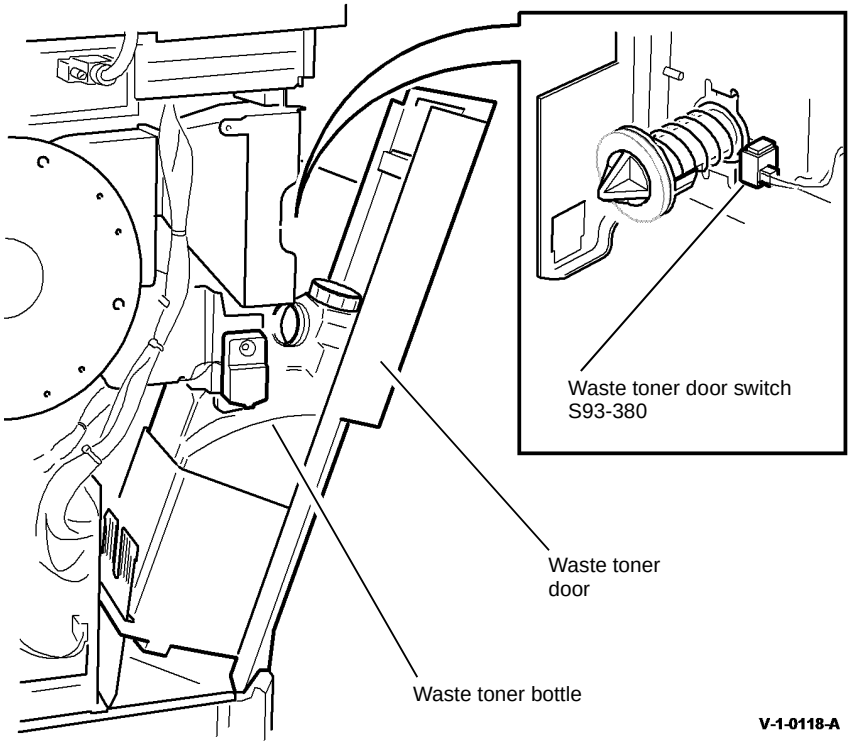


Figure 1 Component location

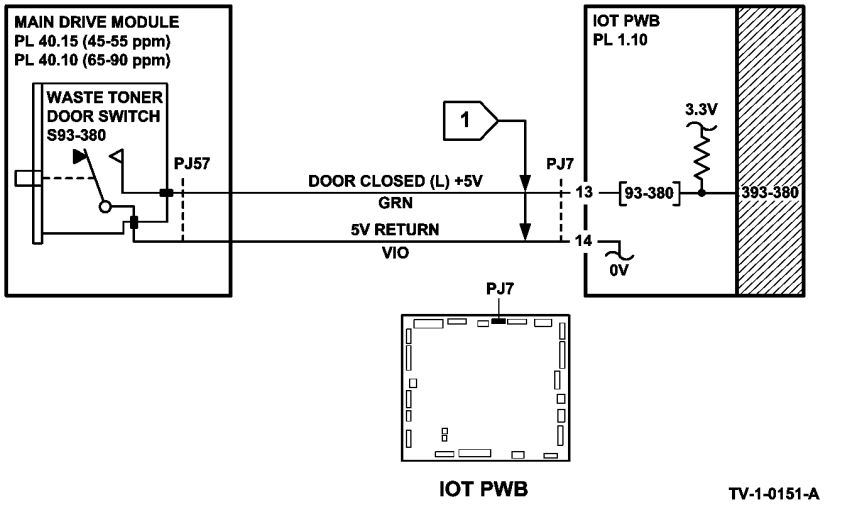


Figure 2 Circuit diagram

394-341-00, 394-342-00 Scorotron Cleaning Failure RAP

394-341-00 The scorotron cleaning routine has failed to complete.

394-342-00 A scorotron cleaning warning detected.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the xerographic module is correctly installed.
- Check the scorotron cleaner drive coupling, Figure 1.
- Make sure that the scorotron cleaner home sensor bracket is correctly aligned.

Procedure

Enter dC330 code 091-071 or 091-072 scorotron cleaner motor. **A clicking sound is heard.**

Y N

Go to Flag 2. Check MOT91-071. Refer to:

- GP 10 How to Check a motor.
- P/J64, IOT PWB.
- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Enter dC330 code 091-070 scorotron cleaner home sensor, Q91-070. Press Start. Enter dC330 code 091-071 or 091-072 scorotron motor. Actuate the sensor by entering the appropriate code.

***NOTE:** When the scorotron cleaner reaches the limit of travel, a clutch in the xerographic module will slip. A clicking sound will be audible.*

The display changes.

Y N

Go to Flag 1. Check Q91-070. Refer to:

- GP 13 How to Check a Switch.

  ***NOTE:** The scorotron cleaner home sensor is a magnetic reed switch.*

- P/J64, IOT PWB.
- 301D +3.3V Distribution RAP.
- 301B 0V Distribution RAP.

Install new components as necessary:

- Scorotron cleaner home sensor, (45-55 ppm) PL 40.17 Item 16 or (65-90 ppm) PL 40.12 Item 19.

A

A

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

The fault may be intermittent, perform the following:

- Check the wiring, GP 7. Repair if necessary, REP 1.2.
- Ensure that P/J64 is correctly and securely connected.
- Install a new xerographic module, PL 90.20 Item 2.

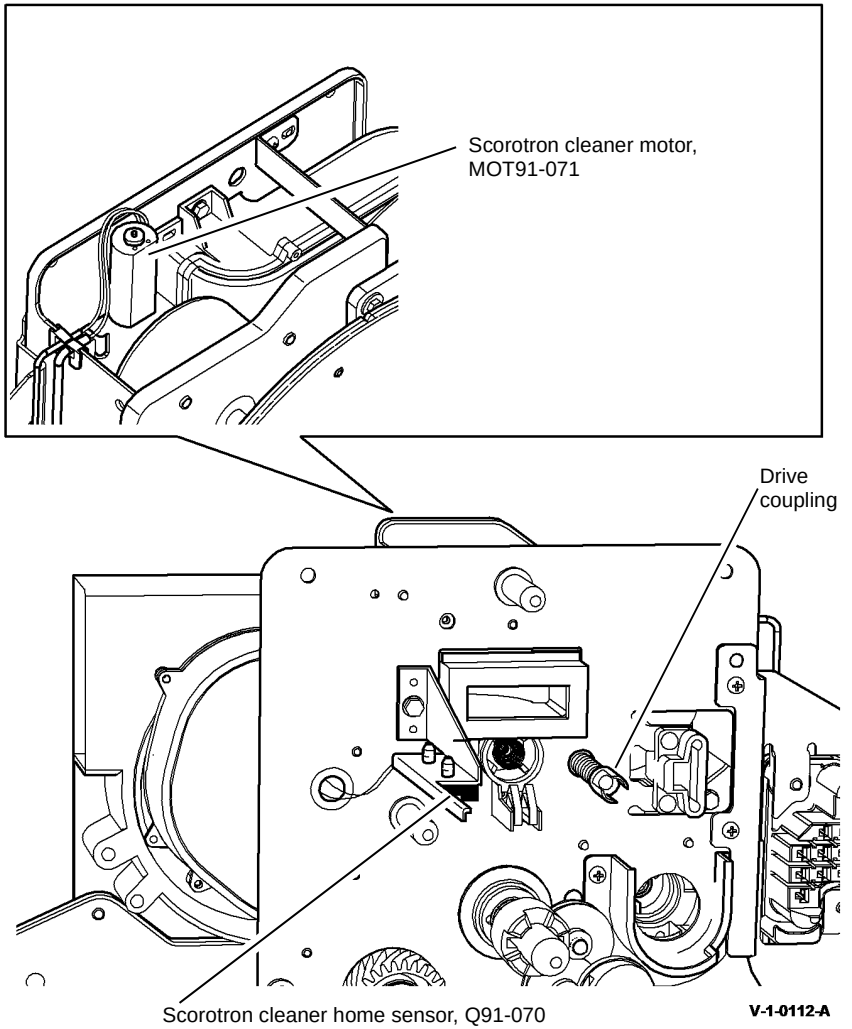


Figure 1 Component location

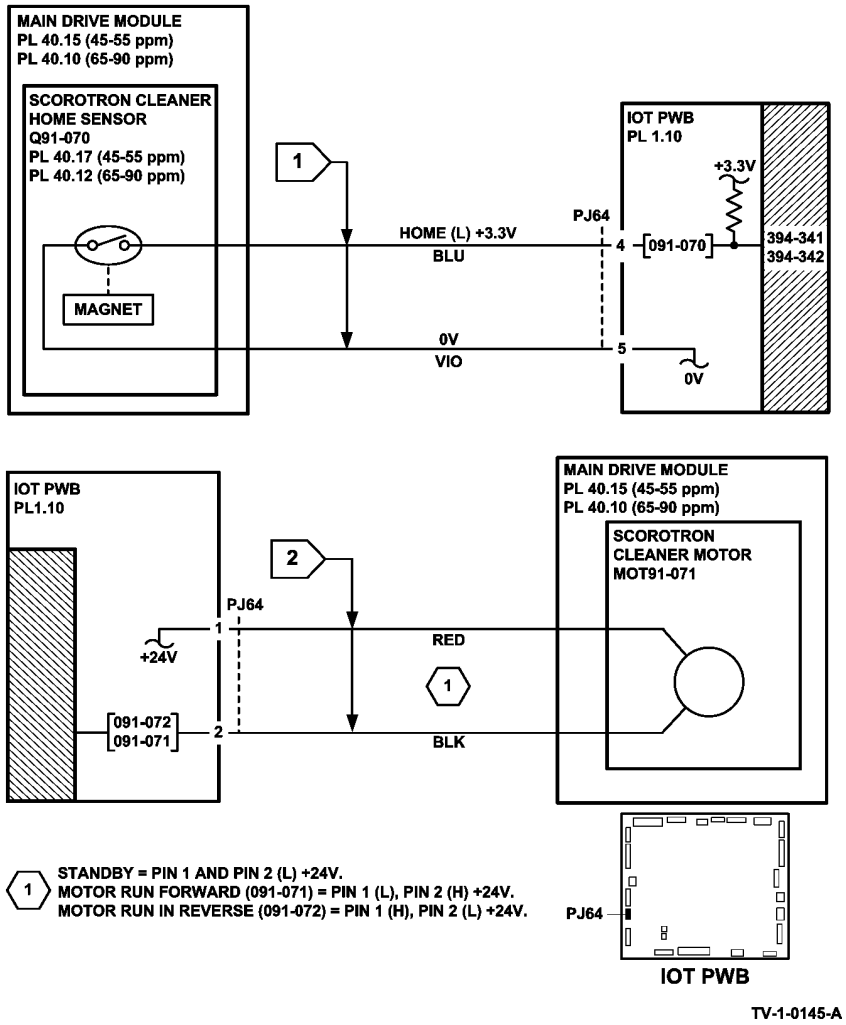


Figure 2 Circuit diagram

394-350-00 Erase Lamp Failure RAP

394-350-00 The photoreceptor erase lamp has failed.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The xerographic module must be installed for the lamp to illuminate.*

CAUTION

Do not illuminate the erase lamp for an extended length of time as this may cause damage to the xerographic drum.

NOTE: *The door interlock switch must be cheated when checking +24V components.*

Cheat the door interlock switch. Enter dC330 code 091-022, photoreceptor erase lamp. Press start. Observe the erase lamp, Figure 1. **All the LEDs of the erase lamp are lit.**

Y **N**

Some of the LEDs of the erase lamp are lit.

Y **N**

Go to Flag 1. **+24V is available at P/J17 pin 1 on the LVPS.**

Y **N**

Perform the 301L LVPS Checkout RAP.

Go to Flag 2. **+24V is available at P/J41 pin 1.**

Y **N**

Go to Flag 1. Check the inline fuse. **The fuse is good.**

Y **N**

Install a new fuse, PL 1.10 Item 9.

If the fuse blows again, perform the 301G +24V Distribution RAP.

Perform the relevant procedure:

- Go to 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 3. **+13V is available at P/J5 pin 14.**

Y **N**

NOTE: *To gain access to the erase lamp wiring, remove the main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.*

Check the wiring from the in-line fuse to P/J41, pin 2. **The wiring is good.**

Y **N**

Repair the wiring.

A B C D

A B C D

Perform the steps that follow:

- Check that the connector PJ41 is located correctly in the IOT frame, Figure 1.
- Install a new erase lamp, PL 90.20 Item 1.

If the fault remains, perform the OF7 IOT PWB Diagnostics RAP.

Install a new erase lamp, PL 90.20 Item 1.

The fault may be intermittent. Perform the steps that follow:

- Check the wiring, GP 7 between P/J41 and P/J17 on the LVPS.
- Ensure that the P/Js are correctly and securely connected.
- Malfunction of the following associated circuits can cause 09-350 faults.
  - The inverter paper path and Inverter nip solenoid, go to the 310-120-00, 310-121-00, 310-126-00 IOT Exit Sensor RAP.
  - The vacuum transport fan and registration clutch, go to the 310-101-00A, 310-102-00A, 310-103-00A Lead Edge Late to Fuser Exit Sensor RAP.

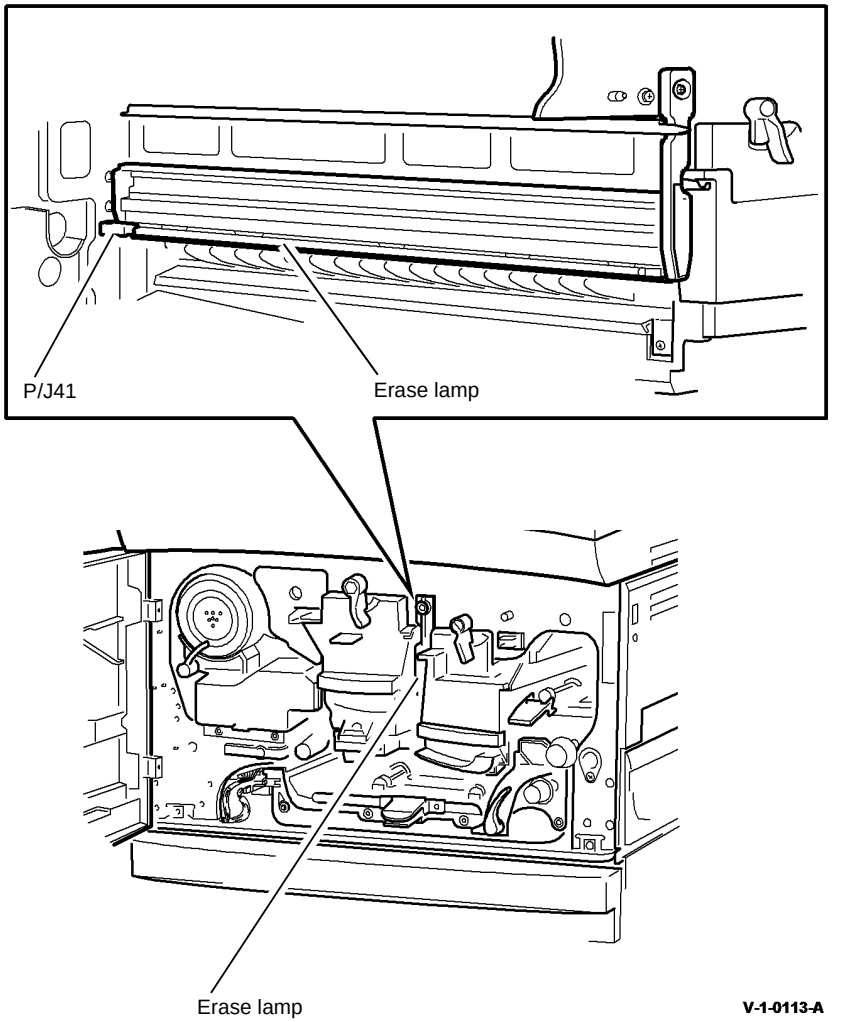


Figure 1 Component location

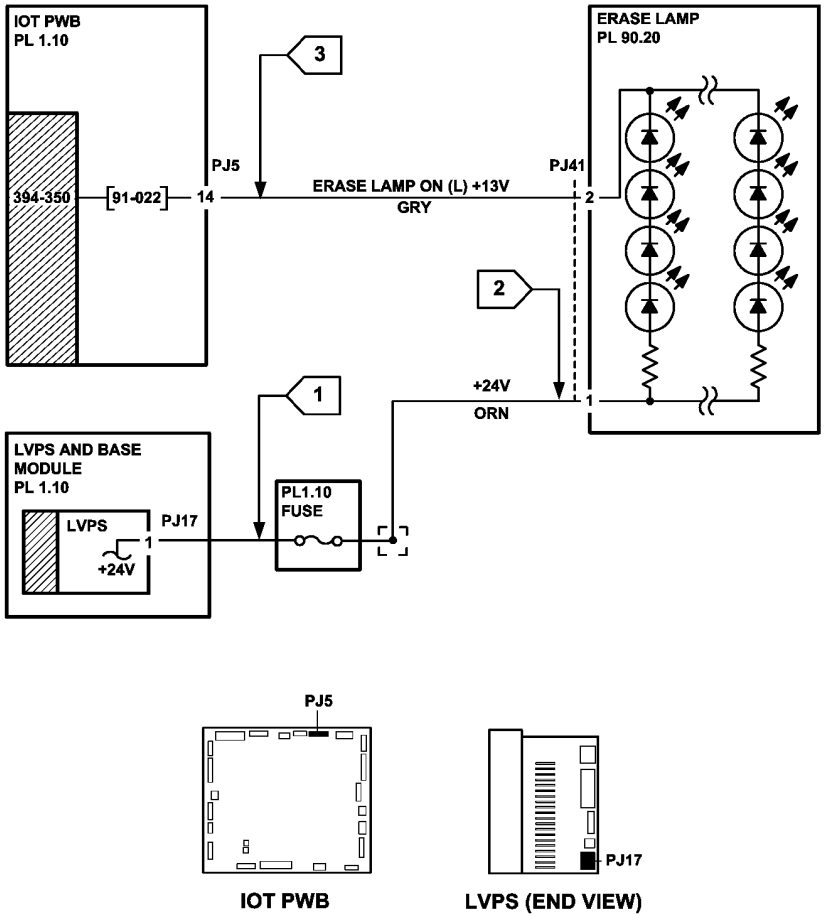


Figure 2 Circuit diagram

394-370-00 Developer Temperature Sensor Failure RAP

394-370-00 The average developer temperature reading is out of limits.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off the machine, then switch on the machine, GP 14.

Procedure

Enter dC140 code 092-602, developer temperature sensor Q92-602. Press start. Observe the displayed state of Q92-602. Remove the xerographic module. Disconnect P/J47, Figure 1. Cheat the front door interlock. Observe again the displayed state of Q92-602. **The displayed state has changed.**

Y N

Go to Flag 1. Check for +5V at P/J7 pin 5 on the IOT PWB. **+5V is present.**

Y N

Go to:

- 301E +5V Distribution RAP.
- 301B 0V Distribution RAP.

Go to Flag 1. Check for +5V at P/J47 pin 3. **+5V is present.**

Y N

NOTE: *To gain access to the wiring, remove the main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1 and the left cover, PL 28.10 Item 3.*

Check the wiring between P/J7 on the IOT PWB and P/J47. Repair the wiring as necessary, REP 1.2.

Install a new developer temperature sensor, PL 90.20 Item 5. If the fault remains perform the OF7 IOT PWB Diagnostics RAP.

Q92-602 is working correctly. Reconnect P/J47.

If the fault is intermittent, perform the steps that follow:

- Check the wiring, GP 7. Repair if necessary, REP 1.2.
- Make sure that the P/Js are correctly and securely connected.

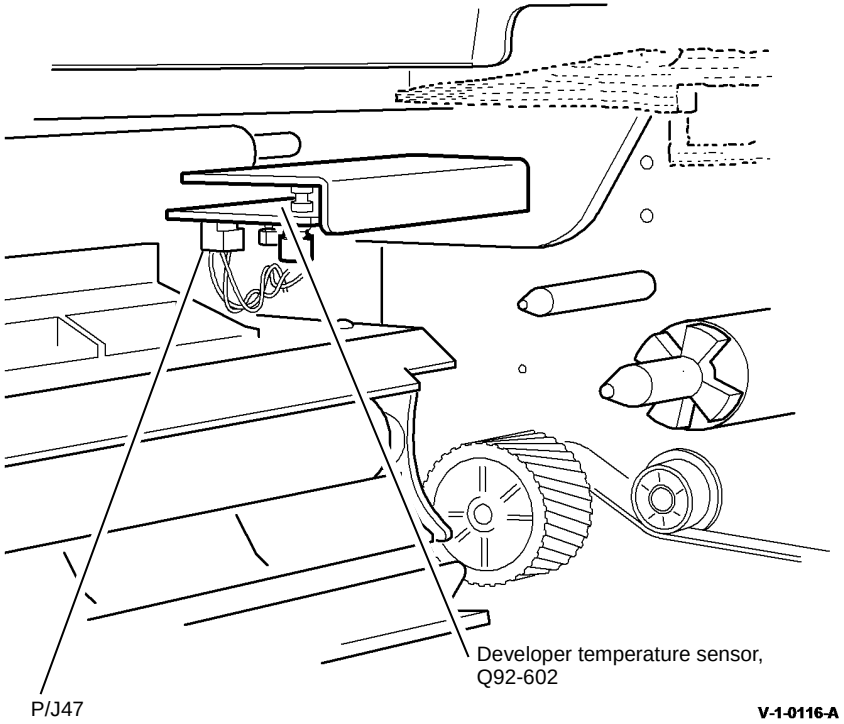


Figure 1 Component Location

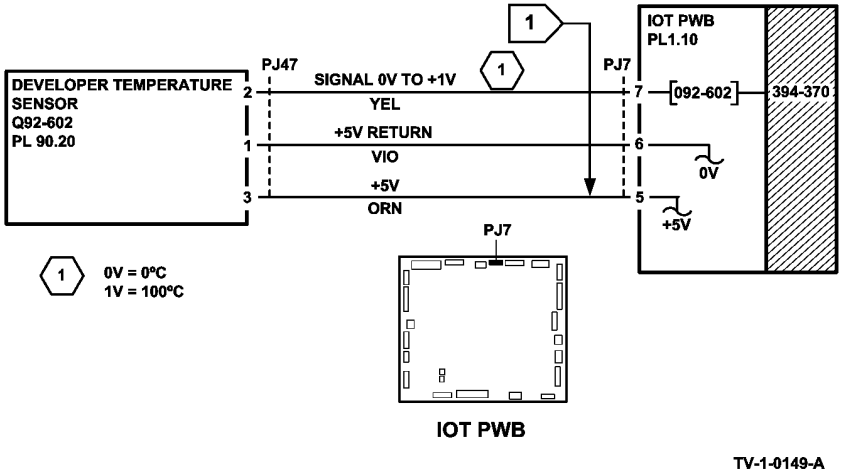


Figure 2 Circuit diagram

395-000-00 to 395-009-00 SBC Software Upgrade Errors 1 RAP

395-000-00 Failed to upgrade the DC (SBC) boot code.

395-001-00 Failed to upgrade the DC (SBC) software upgrade code.

395-002-00 Failed to upgrade the DC (SBC) application.

395-008-00 Failed to upgrade the DC (SBC) operating system.

395-009-00 Failed to upgrade the DC (SBC) CIPS.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Re-load the software using the forced Altboot procedure, GP 4.
2. If the fault remains, install a new SBC PWB, PL 3.22 Item 3, then re-install the software, GP 4.

395-016-00, 395-019-00 UI Software Upgrade Errors RAP

395-016-00 Failed to upgrade the UI application code.

395-019-00 Failed to upgrade the UI H8.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 4. Check the wiring between PJ104 on the SBC PWB and PJ130 on the UI Control PWB. Repair as necessary, GP 7. If necessary, install a new SBC PWB/UI harness, PL 3.22 Item 23.
2. Re-load the software using the forced Altboot procedure, GP 4.
3. If the fault remains, install a new UI control PWB, PL 2.10 Item 6, then re-install the software, GP 4.

395-020-00, 395-022-00 SPDH Software Upgrade Errors RAP

395-020-00 Failed to upgrade the SPDH application.

395-022-00 Failed to upgrade the SPDH kernal.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 3. Check the wiring between PJ266 on the SBC PWB and PJ141 on the Power Distribution PWB. Repair as necessary, GP 7. If necessary, install a new SBC/PDB harness, PL 3.22 Item 13.
2. Refer to Wiring Diagram 3. Check the wiring between PJ140 on the Power Distribution PWB and PJ410 on the Scanner PWB. Repair as necessary, GP 7. If necessary, install a new SBC PWB/scanner comms/power harness, PL 60.20 Item 22.
3. Refer to Wiring Diagram 12. Check the wiring between PJ417 on the Scanner PWB and PJ460 on the SPDH PWB. Repair as necessary, GP 7.
4. Re-load the software using the forced Altboot procedure, GP 4.
5. If the fault remains, install a new SPDH PWB, PL 5.10 Item 5, then re-install the software, GP 4.

395-021-00 External Memory Error RAP

395-021-00 External memory error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Remove, then re-install the SD card, PL 3.22 Item 16.
2. Re-load the software using the forced Altboot procedure, GP 4.
3. If the fault remains, install a new SD card, PL 3.22 Item 16, then re-install the software, GP 4.

395-030-00 to 395-038-00, 395-151-00 Fax Software Upgrade Errors RAP

395-030-00 Failed to upgrade the fax application.

395-031-00 Failed to upgrade the fax FPGA.

395-035-00 Failed to upgrade the fax bootcode.

395-038-00 Failed to upgrade the embedded fax LCF application.

395-151-00 Failed to upgrade the embedded fax FPGA.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Remove, then re-install the fax module, PL 20.05 Item 1.
2. Refer to Wiring Diagram 11. Check the ribbon cable between PJ212 on the SBC PWB and PJ1 on the Fax Connector PWB. If necessary, install a new fax communication ribbon cable, PL 3.22 Item 10.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new fax PWB, PL 20.05 Item 7, then re-install the software, GP 4.

395-040-00 to 395-042-00 IOT Software Upgrade Errors RAP

395-040-00 Failed to upgrade the IOT bootstrap code.

395-041-00 Failed to upgrade the IOT bootloader code.

395-042-00 Failed to upgrade the IOT application.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Re-load the software using the forced Altboot procedure, GP 4.
3. If the fault remains, install a new IOT PWB, PL 1.10 Item 2, then re-install the software, GP 4.

395-050-00 1K LCSS Software Upgrade Error RAP

395-050-00 Failed to upgrade the 1K LCSS application.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 15. Check the wiring between PJ11 on the IOT PWB and PJ3 on the 1K LCSS PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new 1K LCSS, PL 11.124 Item 1, then re-install the software, GP 4.

395-060-00, 395-065-00 2K LCSS Software Upgrade Errors RAP

395-060-00 Failed to upgrade the 2K LCSS application.

395-065-00 Failed to upgrade the 2K LCSS bootcode.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 18. Check the wiring between PJ11 on the IOT PWB and PJ301 on the 2K LCSS PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new 2K LCSS, PL 11.26 Item 1, then re-install the software, GP 4.

395-140-00, 91-141-00 SBC Software Upgrade Errors 2 RAP

395-140-00 Failed to upgrade the DC (SBC) NC applications.

395-141-00 Failed to upgrade the DC (SBC) NC operating system.

Procedure

Go to the 395-000-00 to 395-009-00 SBC Software Upgrade Errors 1 RAP.

395-150-00 to 395-156-00, 395-170-00 Scanner Software Upgrade Errors RAP

395-150-00 Failed to upgrade the IIT application.

95-153-00 Failed to upgrade the IIT kernal.

395-155-00 Failed to upgrade the IIT CCD module.

395-156-00 Failed to upgrade the IIT FWA TES module.

395-170-00 Failed to upgrade the scanner firmware module.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 3. Check the wiring between PJ266 on the SBC PWB and PJ141 on the Power Distribution PWB. Repair as necessary, GP 7. If necessary, install a new SBC/PDB harness, PL 3.22 Item 13.
2. Refer to Wiring Diagram 3. Check the wiring between PJ140 on the Power Distribution PWB and PJ410 on the Scanner PWB. Repair as necessary, GP 7. If necessary, install a new SBC PWB/scanner PWB data cable, PL 60.20 Item 22.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new scanner PWB, PL 60.20 Item 4, then re-install the software, GP 4.

395-180-00 HCF Software Upgrade Errors RAP

395-180-00 Failed to upgrade the HCF (tray 3 and 4) firmware module.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 8. Check the wiring between PJ9 on the IOT PWB and PJ221 on the Tray 1 and 2 Control PWB. Repair as necessary, GP 7.
3. Refer to Wiring Diagram 46. Check the wiring between PJ272 on the Tray 1 and 2 Control PWB and PJ7 on the HCF Control PWB. Repair as necessary, GP 7.
4. Re-load the software using the forced Altboot procedure, GP 4.
5. If the fault remains, install a new HCF control PWB, PL 70.21 Item 2, then re-install the software, GP 4.

395-190-00 PFM Software Upgrade Errors RAP

395-190-00 Failed to upgrade the PFM (tray 1 and 2) firmware module.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 8. Check the wiring between PJ9 on the IOT PWB and PJ221 on the Tray 1 and 2 Control PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new tray 1 and 2 control PWB, PL 70.10 Item 2, then re-install the software, GP 4.

395-191-00, 395-196-00 PFP Software Upgrade Errors RAP

395-191-00 Failed to upgrade the PFP (tray 6) firmware module.

395-196-00 Failed to upgrade the PFP (tray 6) bootloader.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 48. Check the wiring between PJ12 on the IOT PWB and PJ502 on the Tray 6 control PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new tray 6 control PWB, PL 70.68 Item 8, then re-install the software, GP 4.

395-192-00, 395-194-00 HVF Software Upgrade Errors RAP

395-192-00 Failed to upgrade the HVF application.

395-194-00 Failed to upgrade the HVF bootcode.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 23. Check the wiring between PJ11 on the IOT PWB and PJ121 on the HVF Control PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new HVF control PWB, PL 11.157 Item 2, then re-install the software, GP 4.

395-193-00, 395-195-00 HVF BM Software Upgrade Errors RAP

395-193-00 Failed to upgrade the HVF BM application.

395-195-00 Failed to upgrade the HVF BM bootcode application.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 23. Check the wiring between PJ11 on the IOT PWB and PJ121 on the HVF Control PWB. Repair as necessary, GP 7.
3. Refer to Wiring Diagram 23. Check the wiring between PJ133 on the HVF Control PWB and PJ562 on the BM PWB. Repair as necessary, GP 7.
4. Re-load the software using the forced Altboot procedure, GP 4.
5. If the fault remains, install a new HVF control PWB, PL 11.157 Item 2, then re-install the software, GP 4.

395-212-00 to 395-217-00 SBC Software Upgrade Errors 3 RAP

395-212-00 Failed to upgrade the DC (SBC) IOT proxy.

395-213-00 Failed to upgrade the DC (SBC) IIT proxy.

395-214-00 Failed to upgrade the DC (SBC) ACD.

395-216-00 Failed to upgrade the DC (SBC) glue application.

395-217-00 Failed to upgrade the DC (SBC) PWS proxy.

Procedure

Go to the 395-000-00 to 395-009-00 SBC Software Upgrade Errors 1 RAP.

395-221-00, 395-222-00 LVF Software Upgrade Errors RAP

395-221-00 Failed to upgrade the LVF bootcode.

395-222-00 Failed to upgrade the LVF application.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 36. Check the wiring between PJ11 on the IOT PWB and PJ301 on the LVF PWB. Repair as necessary, GP 7.
3. Re-load the software using the forced Altboot procedure, GP 4.
4. If the fault remains, install a new LVF PWB, PL 11.90 Item 8, then re-install the software, GP 4.

395-223-00, 395-224-00 LVF BM Software Upgrade Errors RAP

395-223-00 Failed to upgrade the LVF BM bootcode.

395-224-00 Failed to upgrade the LVF BM application.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring between PJ105 on the SBC PWB and PJ1 on the IOT PWB. Repair as necessary, GP 7.
2. Refer to Wiring Diagram 9 and Wiring Diagram 36. Check the wiring between PJ11 on the IOT PWB and PJ301 on the LVF PWB. Repair as necessary, GP 7.
3. Refer to Wiring Diagram 39. Check the wiring between PJ401 on the LVF PWB and PJ101 on the LVF BM PWB. Repair as necessary, GP 7.
4. Re-load the software using the forced Altboot procedure, GP 4.
5. If the fault remains, install a new LVF BM PWB, PL 11.90 Item 1, then re-install the software, GP 4.

395-251-00 to 395-255-00 SBC Software Upgrade Errors 4 RAP

395-251-00 Failed to upgrade the DC (SBC) nomad proxy.

395-254-00 Failed to upgrade the DC (SBC) glue application.

395-255-00 Failed to upgrade the DC (SBC) SCD.

Procedure

Go to the 395-000-00 to 395-009-00 SBC Software Upgrade Errors 1 RAP.

395-300-00 Software Upgrade Product Error RAP

395-300-00 Software upgrade has detected an incompatible DLM file.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The software upgrade DLM file is not compatible with the machine. Source the correct DLM file.

395-301-00, 395-302-00 Software Upgrade Hardware Error RAP

395-301-00 Software upgrade has detected incompatible hardware.

395-302-00 Software upgrade has detected incompatible firmware.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The machine has attempted to upgrade incompatible hardware or firmware. Check all recently installed components. Install the correct components.

395-303-00 Software DLM Downgrade Error RAP

395-303-00 Software DLM file downgrade error. An attempt has been made to load a lower level of software.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform a forced Altboot, GP 4.

395-304-00 Software DLM Sidegrade Error RAP

395-304-00 Software DLM file sidegrade error. An attempt has been made to load the same level of software.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform a forced Altboot, GP 4.

395-305-00 Software Upgrade Synchronization Error RAP

395-305-00 Software upgrade synchronization error.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC122 Fault History. Check for other chain 95 fault codes. Perform the relevant RAPs.

OF1 Unusual Noise RAP

Use this RAP to isolate unusual noises in the machine.

NOTE: *Due to the intermittent nature of unusual noises, this RAP can only give guidance on how to isolate noises. This RAP will not find all possible causes. When machines become old and worn, unusual noises may arise that are not covered in this RAP.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Ask the customer if there are any specific machine functions that are noisy.
2. Ask the customer to demonstrate the function of the machine that generates the unusual noise.
3. Check the Fault and Error logs.
4. Switch off the machine, GP 14. Wait for two minutes, switch on the machine. Allow the machine to perform a normal initialization and warm-up.
5. Run the machine in all modes. Also use service mode to run individual components. Go to the relevant subsection:

- Main Drives and Paper Transport
- SPDH
- ROS
- Tray 1 and 2 Assembly
- Tray 3 and 4 Assembly
- Tray 6 Assembly
- Xerographics
- Fuser
- 1K LCSS
- 2K LCSS
- LVF BM
- HVF and HVF BM
- Scanner

Main Drives and Paper Transport

- Enter dC330 code 042-010 main drive motor, to run the main drives.

  The following components will be run:

  – Registration transport (45-55 ppm), PL 80.15 Item 1 or (65-90 ppm), PL 80.17 Item 1.
  – Developer module (45-55 ppm), PL 90.17 Item 2 or (65-90 ppm), PL 90.15 Item 2.
  – Short paper path assembly, PL 10.25 Item 1.
  – Fuser module (45-55 ppm), PL 10.8 Item 1 or (65-90 ppm), PL 10.10 Item 1.
  – Inverter post fuser and exit rolls and the jam clearance knob 3C rotate.
  – To isolate the developer module:

    Unlatch the xerographic module to separate the developer from the main drives. If the source of the noise is the developer assembly, check the developer main drive gear, PL 90.15 Item 6.
  – To isolate the fuser module:

    Release the jam clearance latch 3b4a on the fuser module, to separate the pressure roll from the fuser roll.
  – Remove the fuser module to eliminate the noise caused by the fuser. If the source of the noise is the fuser, go to the Fuser check out.
- Enter dC330 code 042-010 and add code 082-070 to energize the registration clutch. The registration rolls and the jam clearance knob 4c rotate.
- Enter dC330 code 010-065 Vac. transport fan, to run the vacuum transport fan, PL 10.25.
- Enter dC330 code 083-060 motor slow or code 083-062 motor fast, to run the duplex transport motor. The duplex transport rolls rotate, (45-55 ppm), PL 80.22 or (65-90 ppm), PL 80.20.
- Enter dC330 code 010-030 Invert Mot Fwd Slow, to rotate the nip split shaft, PL 10.11 Item 4.
- Enter dC330 code 010-035 Invert Mot Rev Slow, to rotate the nip split shaft and the jam clearance knob 2b rotates, PL 10.11 Item 4.
- Enter dC330 code 010-040 Invert Mot Rev Duplex, to rotate the nip split shaft and the jam clearance knob 2b rotates fast, PL 10.11 Item 4.
- Enter dC330 code 010-045 Invert Path solenoid, energizes the solenoid and moves the inverter gate, PL 10.11 Item 14.
- Enter dC330 code 010-050 Invert Nip solenoid, energizes the solenoid and moves the nip split shaft, PL 10.11 Item 4.

Possible causes and potential solutions are:

- **Squeaks**.

  Possible causes are:

  – Contamination of the drive shafts and the bearings.
  – Bearings in cooling fans.
  – Incorrectly adjusted or worn drive belts.
  – Incorrectly aligned or damaged parts.

  Solution:

  – Clean the components.
  – Remove and clean the drive shafts, bearings and then lubricate. Refer to ADJ 40.1 Machine Lubrication.
  – Adjust the components if necessary.
  – Check for parts that are damaged or out of position.
  – Install new parts as necessary.
- **Squeaks from the duplex tray (65-90 ppm)**

  Possible causes are:

  – The metal stiffener bracket on the bottom of the duplex tray vibrates against the plastic frame moulding.

  Solution:

  – Remove the duplex transport, REP 80.5.

- Remove the metal stiffener bracket and reform the securing edge with the two location holes by 5 degrees. Refit the metal stiffener bracket and ensure that the metal bracket is tight against the plastic frame moulding.

- **Clicking**.

  Possible causes are:

  - The waste toner auger clutch slipping. This clutch is designed to slip to prevent damage to the auger gear box if toner backs up in the waste pipe.
  - Drive belt slipping on gear/pulley of the short paper path, W/TAG 001.

  Solution:

  - Remove the waste toner bottle and clean the toner from the waste pipe and the auger system. Refer to REP 90.10 Auger Damper.
  - Install a new drives module, (45-55 ppm), PL 40.15 Item 1 or (65-90 ppm), PL 40.10 Item 1.
  - Install a new intermediate drive belt, PL 10.25 Item 10.

SPDH

Run the following components:

- Enter dC330 code 005-020 SPDH feed motor and add the code 005-025 feed clutch to rotate the feed roll and nudger roll, PL 5.20 and the retard roll, PL 5.25 Item 3.
- Enter dC330 code 005-020 SPDH feed motor and add the code 005-425 SPDH takeaway clutch to rotate the takeaway roll assembly, PL 5.17 Item 1.
- Enter dC330 code 005-030 read motor, to run the exit, mid scan and pre scan roll assemblies, PL 5.17.
- Enter dC330 code 005-390 tray elevator motor to run the input tray lift mechanism, PL 5.30.

Possible causes and potential solutions are:

- **Squeaks.**

  Possible causes are:

  - Contamination of the drive shafts and bearings.
  - Incorrectly adjusted or worn drive belts.
  - Incorrectly aligned or damaged parts.

  Solution:

  - Remove and clean the drive shafts, bearings and then lubricate. Refer to ADJ 40.1 Machine Lubrication.
  - Check for parts that are damaged or out of position.
  - Adjust the components if necessary.
  - Install new parts as necessary.

ROS

Run the following components:

- Enter dC330 code 006-020 ROS motor, to drive the ROS motor at normal run speed, PL 60.10.
- Enter dC330 code 006-025 ROS motor, to drive the ROS motor at standby speed, PL 60.10.

The ROS gives out a whining noise of a ascending frequency, for a duration between 5 and 6 seconds. The whining noise is the normal sound of the ROS motor accelerating.

Tray 1 and 2 Assembly

Remove tray 1 and tray 2 and run the following components:

- Enter dC330 code 081-010 T1 Feed Motor, to run the tray 1 feed motor, PL 80.26 Item 6.
- Enter dC330 code 081-020 T2 Feed Motor, to run the tray 2 feed motor, PL 80.26 Item 6.
- Open left hand door.

  Enter dC330 code 081-025 Tray 1 and 2 Transport Motor, to run tray 1 and tray 2 transport rolls, PL 80.25 Item 8.

Possible causes and potential solutions are:

- **Squeaks.**

  Possible causes are:

  - Contamination of the drive shafts and bearings.
  - Incorrectly adjusted or worn drive belts.
  - Incorrectly aligned or damaged parts.

  Solution:

  - Remove and clean the drive shafts, bearings and then lubricate. Refer to ADJ 40.1 Machine Lubrication.
  - Check for parts that are damaged or out of position.
  - Adjust the components if necessary.
  - Install new parts as necessary.

Tray 3 and 4 Assembly

Run the following components:

- Open the left hand door. Enter dC330 code 081-045 HCF transport motor, to run the tray 3 and 4 transport roll and tray 3 transport drives, PL 80.36 and PL 80.32 Item 4.
- Pull out tray 3 and let the tray drop, then push the tray back in. Enter dC330 code 073-010 Tray 3 elevator motor, to elevate tray 3, PL 70.21 Item 1.
- Pull out tray 4 and let the tray drop, then push the tray back in. Enter dC330 code 074-010 Tray 4 elevator motor to elevate tray 4, PL 70.21 Item 1.

Possible causes and potential solutions are:

- **Knocking noise, no drive or a knocking noise from the HCF transport motor.**

  Possible causes are:

  - The HCF transport motor.
  - Tray 3 transport drives.
  - Worn or stretched tray 3 elevator cables.
  - Worn or stretched tray 4 elevator cables.

  Solution:

  - Check the tray 3 transport drives, PL 80.36.
  - Adjust and install new components as necessary, PL 70.18.
  - Check that the paper trays are correctly positioned and that the tray moves freely inside the tray assembly.
  - Install new components as necessary, PL 70.18.

Tray 6 Assembly

Run the components as follows:

- Open the tray 6 door to lower the elevator.
- Close the door or actuate the interlock.

- Enter dC330 code 076-010 to drive the tray up.
- Enter dC330 code 076-011 to drive the tray down.
- Enter dC330 code 081-065 to operate the tray 6 transport motor, PL 80.40 Item 2.
- Enter dC330 code 081-060 to operate the tray 6 feed motor, PL 80.40 Item 3.

Check the associated belts, rollers, bearings, sensors and encoders for possible noise sources.

Xerographics

Run the following components:

- Enter dC330 code 091-010 P/R motor, to run the photoreceptor drive motor, (45-55 ppm) PL 40.15 Item 17 or (65-90 ppm) PL 40.10 Item 17.
- Enter dC330 code 091-071 Scorotron Cleaner Motor Forward or 91-072 scorotron cleaner motor Reverse, to run the scorotron cleaner motor.

Possible causes and potential solutions are:

- **A high pitched noise when the corotron is switched on.**

  Possible causes are:

  – The detack corotron.

  Solution:

  – None, this is normal behavior.

- **A clicking noise from the Xerographic module.**

  Possible causes are:

  – The scorotron cleaning mechanism. A clicking noise is made when the scorotron cleaning brush reaches the end of its travel.

  Solution:

  – None, this is normal behavior. If the scorotron cleaning mechanism is the cause of the noise, inform the customer.

- **Knocking or clicking noise.**

  Possible causes are:

  – Xerographic module drive gear is not correctly engaged, PL 90.20 Item 2.

  – Developer module drive gear is not correctly engaged, PL 90.15 Item 2.

  – Cooling fan blades catching on a harness, component or cover.

  Solution:

  – Remove the xerographic module. Re-install the module.

  – Remove and lubricate the developer module support pins, REP 90.2. Refer to ADJ 40.1 Machine Lubrication.

  – Ensure that the fan is secured correctly and the area around the fan is clear.

  – Install a new fan:

    Ozone fan, PL 90.25 Item 1.

    Photoreceptor fan assembly, PL 90.25 Item 6.

- **A mooing, grunting or moaning noise at the machine cycle down/end of run cycle.**

  Cause:

  – The noise occurs when the drum moves slowly under the cleaning blade as the drives come to a stop.

  – The environment (temperature, humidity, type of media, print density, etc.) will also effect the coefficient of friction between the cleaning blade and the drum, directly effecting the noise.

  Solution:

  – Dusting the drum with Kynar or zinc stearate will quiet the noise temporarily, but as these lubricants wear off the noise will return.

  – A new xerographic module, PL 90.20 Item 2 may be less noisy than the xerographic module currently in the machine, at a noise sensitive customer's site this may provide a solution, but the old xerographic module should be kept for use in a more noise tolerant environment.

Fuser

Possible causes and potential solutions are:

- **Grinding noise.**

  Possible causes are:

  – The fuser web motor not turning the fuser web, causing excessive loading on the fuser drives. This will also cause toner contamination on the stripper fingers and paper jams in the inverter.

  – The fuser web drive dog, (45-55 ppm) PL 10.8 Item 2 or (65-90) ppm PL 10.10 Item 2.

  Solution:

  – Go to 310A Fuser Web Motor RAP.

  NOTE: *Do not change the fuser module, because of the appearance of wrinkles on the pressure roll. This is normal for the pressure roll, caused by the conductive sleeve that stretches as the silicon rubber base of the roll expands. The pressure rolls are more wrinkled due to the higher run temperatures on the 65-90 ppm machines.*

1K LCSS

Run the following components:

- Enter dC330 code 011-000 Transport Motor 1, to run the entry transport rolls, PL 11.110 Item 2, PL 11.110 Item 9 and PL 11.110 Item 6.
- Enter dC330 code 011-001 Transport Motor 2, to run the entry rolls, PL 11.120 Item 13.
- Enter dC330 code 011-024 Paddle Wheel Motor Run, rotates the paddle wheel, PL 11.104 Item 4.
- Enter dC330 code 011-009 Tamp Mot Cycle, cycles the front and rear tampers, PL 11.112 Item 1.
- Enter dC330 code 011-023 Eject Mot Cycle, cycles the eject assembly, PL 11.114 Item 1.
- Enter dC330 code 011-033 Bin 1 Elevator Motor Cycle, to move bin 1 up and down, PL 11.106 Item 8.

NOTE: *The bin will move down and then move up to the home position.*

Possible causes and potential solutions are:

- **2 knocks for each stapled set.**

  Possible causes are:

  – 1K LCSS set ejector.

Solution:

– Go to the 311-320-00-120, 311-322-00-120 Ejector Movement Failure RAP.

- **Clicking Noise from the 1K LCSS**.

  Possible causes are:

  – The staple head continually operating for approximately 15 seconds. This occurs every time the 1K LCSS top cover or front door is opened then closed, because the stapler is attempting to prime the staple head, by indexing the staple stick forward and pre-forming two staples.

  Solution:

  – Check the staple cartridge for jammed staples and remove any that are found.
  – Ensure the staple cartridge is fully seated.
  – Ensure that the correct staple cartridge is installed.
  – Perform 311-364-00-120 Stapling Failure RAP.

2K LCSS

Run the following components:

- Enter dC330 code 011-000 Transport Motor 1, to run the feed rolls, PL 11.14.
- Enter dC330 code 011-001 Transport Motor 2, to run the entry rolls, PL 11.22.
- Enter dC330 code 011-024 Paddle wheel Motor run, rotates the paddle wheel shaft assembly, PL 11.8 Item 4.
- Enter dC330 code 011-009 Tamp Mot Cycle, cycles the front and rear tampers, PL 11.16 Item 1.
- Enter dC330 code 011-023 Eject Mot Cycle, cycles the eject assembly, PL 11.18 Item 1.
- Enter dC330 code 011-033 Bin 1 Elevator Motor Cycle, to move bin 1 up and down, PL 11.2 Item 10.

  NOTE: *The bin will move down and then move up to the home position.*

- Enter dC330 code 011-043 Punch Head run, rotates the punch head, PL 11.6 Item 3.
- Enter dC330 code 011-055 SU1 index Mot Cycle, cycles the stapler from the front to the rear, PL 11.20 Item 5.

Possible causes and potential solutions are:

- **2 knocks for each stapled set.**

  Solution:

  – Go to the 311-320-00-110, 311-322-00-110 Ejector Movement Failure RAP.

- **Noise from the right hand side of the machine.**

  Possible causes are:

  – The 2K LCSS is not aligned correctly.

  Solution:

  – Check the machine to 2K LCSS alignment, ADJ 11.2-110.
  – Adjust the components if appropriate.
  – Install new parts as necessary.

- **Clicking Noise from the 2K LCSS**

  Possible causes are:

  – The staple head continually operating for approximately 15 seconds. This occurs every time the 2K LCSS top cover or front door is opened then closed, because the stapler is attempting to prime the staple head, by indexing the staple stick forward and pre-forming two staples.

  Solution:

  – Check the staple cartridge for jammed staples and remove any that are found.
  – Ensure the staple cartridge is fully seated.
  – Ensure that the correct staple cartridge is installed.
  – Perform 311-364-00-110 Stapling Failure RAP.

LVF BM

Run the following components:

- Enter dC330 code 011-000 Transport Motor 1, to run the feed rolls, PL 11.75.

  NOTE: *During normal operation, transport motor 1 also runs in reverse to drive the upper and lower feed rolls, PL 11.62. There is not a component control code to run transport motor 1 in reverse.*

- Enter dC330 code 011-001 Transport Motor 2, to run the entry rolls, PL 11.70.
- Enter dC330 code 011-024 Paddle wheel Motor run, rotates the paddle shaft, PL 11.56 Item 2.
- Enter dC330 code 011-009 Tamp Mot Cycle, cycles the front and rear tampers, PL 11.16 Item 1.
- Enter dC330 code 011-023 Eject Mot Cycle, cycles the eject assembly, PL 11.66 Item 1.
- Enter dC330 code 011-033 Bin 1 Elevator Motor Cycle, to move bin 1 up and down, PL 11.50 Item 10.

  NOTE: *The bin will move down and then move up to the home position.*

- Enter dC330 code 011-043 Punch Head run, rotates the punch head, PL 11.54 Item 3.
- Enter dC330 code 011-055 SU1 index Mot Cycle, cycles the stapler from the front to the rear, PL 11.68 Item 5.
- Enter dC330 code 011-066 BM Tamper Motor 1, to move the booklet maker tamper arms, PL 11.74 Item 2.
- Enter dC330 code 011-390 BM Flapper Motor, to run the BM compiler flappers, PL 11.76 Item 10.
- Enter dC330 code 011-435 BM Stapler Unit Move Motor Move Home, then 11-436 BM Stapler Unit Move Motor Move Home, to run the BM staple head, PL 11.78 Item 5.
- Enter dC330 code 011-065 BM Back Stop Motor, to run move the BM back stop between the A4 receive, staple and crease positions.
- Enter dC330 code 011-061 BM Crease Motor, to cycle the crease blade, PL 11.82 Item 5.
- Enter dC330 code 011-062 BM Crease Motor, to run the crease rolls, PL 11.84.

Possible causes and potential solutions are:

- **2 knocks for each stapled set.**

  Solution:

  – Go to the 311-320-00-150, 311-322-00-150 Ejector Movement Failure RAP.

- **Noise from the right hand side of the machine.**

Possible causes are:

– The LVF BM is not aligned correctly.

Solution:

– Check the machine to LVF BM alignment, ADJ 11.2-150.
– Adjust the components if appropriate.
– Install new parts as necessary.

- **Clicking Noise from the LVF BM**

  Possible causes are:

  – The staple head continually operating for approximately 15 seconds. This occurs every time the LVF BM top cover or front door is opened then closed, because the stapler is attempting to prime the staple head, by indexing the staple stick forward and pre-forming two staples.

  Solution:

  – Check the staple cartridge for jammed staples and remove any that are found.
  – Ensure the staple cartridge is fully seated.
  – Ensure that the correct staple cartridge is installed.
  – Perform 311-377-00-150 Stapling Failure RAP.

HVF and HVF BM

Run the following components:

CAUTION

Make sure that the first tamper in the compiler carriage is returned to the home position before the second tamper is checked in service mode.

- Enter dC330 code 011-000 Transport Motor 1, to run the input transport roll, PL 11.150 Item 2.
- Enter dC330 code 011-001 Transport Motor 2, to run the exit drive shafts to feed paper to the top tray or to the stacker tray, PL 11.150 Item 1.
- Enter dC330 code 011-003 Tamp. Mot. Front Home, to move the front tamper to the home position PL 11.153 Item 6.
- Enter dC330 code 011-004 Tamp. Mot. Rear Home, to move the rear tamper to the home position, PL 11.153 Item 6.
- Enter dC330 code 011-005 Tamp. Mot. Front Move, to move the front tamper to the centre of the compiler, PL 11.153 Item 6.
- Enter dC330 code 011-006 Tamp. Mot. Rear Move, to move the rear tamper to the centre of the compiler tray, PL 11.153 Item 6.
- Enter dC330 code 011-025 Paddle Roll Motor Run, to lift the paddle unit and rotate the paddle rolls, PL 11.145 Item 2.
- Enter dC330 code 011-027 Paddle Unit Mot. Home, to lift the paddle unit to the up position, PL 11.145 Item 2.
- Enter dC330 code 011-030 Bin 1 Elevator Motor Home, to move Bin 1 up to the home position, PL 11.135 Item 10.
- Enter dC330 code 011-031 Bin 1 Elevator Motor Up, to move Bin 1 down, PL 11.135 Item 10.

  NOTE: *The tray moves up for 15 seconds and then stops.*

- Enter dC330 code 011-032 Bin 1 Elevator Motor Down, to move Bin 1 down, PL 11.135 Item 10.

  NOTE: *The tray moves down for 15 seconds and then stops.*

- Enter dC330 code 011-034 Bin 1 Offset Motor, to offset sets and fed to Bin 1, PL 11.140 Item 19.
- Enter dC330 code 011-053 SU1 Motor Forward, to move the stapler unit to the rear, PL 11.140 Item 12.
- Enter dC330 code 011-054 SU1 Motor Reverse, to move the stapler unit to the rear, PL 11.140 Item 12.
- Enter dC330 code 011-060 BM Compiler Motor, runs the compiler BM entry roll, PL 11.161 Item 15.

  NOTE: *The tray moves down for 15 seconds and then stops.*

- Enter dC330 code 011-061 BM Blade motor, to move the crease blade assembly, PL 11.165 and the crease roll gate, PL 11.167.
- Enter dC330 code 011-062 BM Crease Motor, to rotate the two crease rolls, PL 11.167 Item 7.
- Enter dC330 code 011-065 BM Back Stop Motor, to move the back stop assembly, PL 11.164 Item 17.
- Enter dC330 code 011-066 BM Tamper 1 Motor, to move the tamper rack and fingers, PL 11.162 Item 3.
- Enter dC330 code 011-402 BM conveyor drive motor, to run the output tray conveyor belts, PL 11.169 Item 1.
- Enter dC330 code 011-390 BM flapper Motor, to run the BM flapper, PL 11.161 Item 23.
- Enter dC330 code 011-401 BM Crease roll, to move the crease roll gate up and down, PL 11.166 Item 8.
- Enter dC330 code 011-078 Inserter unit motor, to run inserter main drives, PL 11.181 Item 1
- Enter dC330 code 011-062 BM crease roll motor, to run the tri-roller drives, PL 11.166 Item 12.

Possible causes and potential solutions are:

- **Noise from the right hand side of the machine.**

  Possible causes are:

  – The HVF/HVF BM is not aligned correctly.
  – Bin 1 not aligned correctly on the main drive belts, PL 11.135 Item 6.

  Solution:

  – Check the machine to HVF or HVF BM alignment, ADJ 11.1-171
  – Check that the Bin 1 is level, refer to REP 11.38-171 HVF Stacker Drive Belts.
  – Adjust the components if appropriate.
  – Install new parts as necessary.

- **Knocking**.

  Possible causes are:

  – Mis-adjusted or worn drive belts.
  – The support fingers on the ejector hit bin1 each time they are moved out.

Solution:

– Adjust the belt tension as required.
– Pre-load bin 1 with 30 sheets of paper this acts a a damper and will stop the noise.
– Install new parts as necessary.

- **Squeak**.

  Possible causes are:

  – The transport drive shaft or bearings, PL 11.150.
  – Check that the paper guides are closed and located correctly.

  Solution:

  – Install new parts as necessary.

- **Clicking Noise from the HVF/HVF BM**.

  Possible causes are:

  – The noise is caused by the transport motor 2, dC330 code 011-001, continually operating for approximately 15 seconds. This occurs every time the top tray, PL 11.130 Item 9, or the front door, PL 11.130 Item 3, is opened then closed.

  Solution:

  – Ensure the staple cartridge is fully seated and that the correct cartridge is installed.

    NOTE: *When a new staple cartridge is installed the stapler makes a repeating noise. This is normal it is the stapler performing a priming cycle.*

  – Perform 311-371-00-171 to 311-377-00-171 HVF Stapler Position and Priming RAP.

Scanner

Possible causes and potential solutions are:

- **Loud clicking noise**

  Possible causes are:

  – The scanner transit lock is engaged.

  Solution.

  – Release the transit lock.

OF2 POST Error RAP

Power on Self Test (POST) occurs each time the machine is powered on. POST verifies the functionality of key subsystems.

- Use this RAP when the UI has stalled and shows the splash-logo screen, or the system appears to have power but the UI is blank.
- POST begins when power is switched on before higher level machine functions (such as the user interface) are operational.
- POST is performed by the IOT controller PWB and the single board controller PWB.
- The fault is communicated via a 7-Segment LED display unit on the rear of the machine attached to the SBC PWB, Figure 1. This is to help diagnose common faults which prevent the machine from powering up correctly to the point where faults are displayed and service mode can be entered. The LED display should show just a pulsing decimal point when the machine boots correctly, The main codes are displayed for short periods of time during power up depending on how long each test takes, if any code is left displayed during power up and the machine appears not to have powered on correctly then this should point to the problem component. Refer to Table 1.

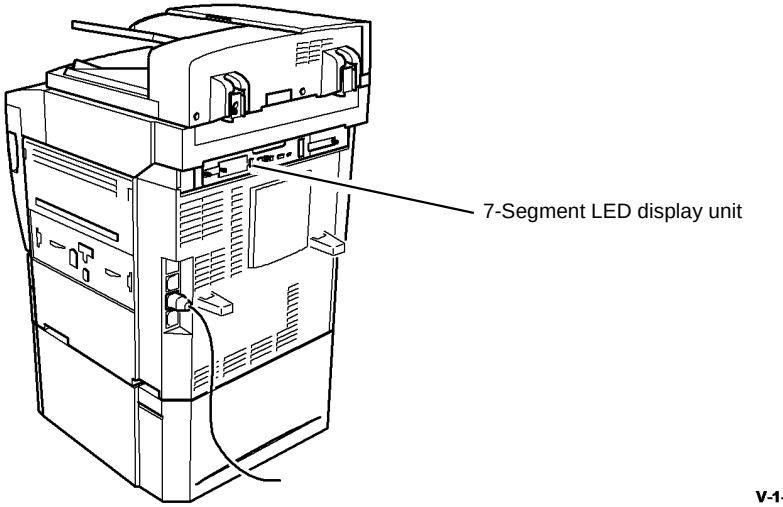


Figure 1 SBC LED display unit

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

To check for the system power up error.

1. Switch off, then switch on the machine, GP 14.
2. If the system has powered up correctly then there will be a pulsing decimal point on the 7-segment display, Figure 1.
3. If the system power up sequence has failed then check the code on the LED display. Refer to Table 1 for the actions required for each code.
4. If the fault remains, go to the OF3 Dead Machine RAP.

Table 1 7-Segment LED display

Fault code	POST code name	Decimal point status	Code Description	Service action
Blank	Machine in ready mode	Flashing	None, no fault detected	No action, no fault detected.
0	Initial entry to kernel code	Flashing	In U boot, no POST fault.	Install a new SD card, PL 3.22 Item 16.
1	PWBA	Off	Failed explorer controller	Install a new SBC PWB, PL 3.22 Item 3.
2	System memory	Flashing	Failed system memory	Install a new memory module, PL 3.22 Item 11.
3	EPC memory	Flashing	Failed EPC memory	Install a new SBC PWB, PL 3.22 Item 3.
4	NVM	Flashing	Failed NVM memory	Install a new SD card, PL 3.22 Item 16.
5	SD card	Flashing	Failed flash memory	See NOTE 2.
6	External hard drive	Flashing	Failed hard drive	Go to the 303C Hard Disk Failure RAP.
7	RTC module	Flashing	Failed RTC	Install a new SBC PWB, PL 3.22 Item 3.
8	Display Test	On	Initial 7 segment display test	Remove, then re-install the SD card, PL 3.22 Item 16. If the fault persists, see NOTE 2.
9	U-boot complete	Flashing	U-boot hand over control to kernel	Reload the software, GP 4.
A	UI platform available	Flashing	UI platform available	See NOTE 1. Reload the software, GP 4.

Table 1 7-Segment LED display

Fault code	POST code name	Decimal point status	Code Description	Service action
b	IIT comms established	Flashing	IIT comms established	See NOTE 1. Reload the software, GP 4. If the fault remains, perform the 362-310-00 Scanner to SBC Communications Failure RAP.
C	NC platform available	Flashing	NC platform available	See NOTE 1. Reload the software, GP 4.
d	DC platform available	Flashing	DC platform available	See NOTE 1. Reload the software, GP 4.
E	IOT comms established	Flashing	IOT comms established	See NOTE 1. Reload the software, GP 4. If the fault remains, perform the 303-316-00 CCM Cannot Communicate with IOT RAP.
F	Fax comms established	Flashing	Fax comms established Only if Fax installed	See NOTE 1. Reload the software, GP 4. If the fault remains, perform the 303-401-00, 303-403-00 Fax Not Detected RAP.
H	Machine attempting sleep wake-up	Flashing	OS resuming drivers	Reload the software, GP 4. If the fault remains, install a new SBC PWB, PL 3.22 Item 3.
L	Machine attempting sleep entry	Flashing or off	OS suspending drivers, entering sleep	Reload the software, GP 4. If the fault remains, install a new SBC PWB, PL 3.22 Item 3.
r	Machine in sleep state	Off	Resting in sleep	None, for diagnostic information only.
t	Machine in semi-conscious state	Flashing	Running in semi-conscious mode	Reload the software, GP 4. If the fault remains, install a new SBC PWB, PL 3.22 Item 3.
u	Kernel starting user space	Flashing	Kernel starting user space	Go to the 303C Hard Disk Failure RAP.

NOTE:

1. During power up, the 7-segment display cycles, displaying these codes until the relevant platform has fully synchronized with the system. A code displayed after power up indicates this event has not been detected in software.

2. Install a new SD card, PL 3.22 Item 16. If the fault persists, install a new SBC PWB, PL 3.22 Item 3. The software level on the SD and SBC PWB card MUST be the same as the software level on the hard disk drive. If necessary use a good working machine to re-load software on the SD card and SBC PWB by use of altboot, GP 4, before they are installed in the faulted machine.

OF3 Dead Machine RAP

Use the following procedure if the copier fails to reach an operational state when switched on.

Initial Actions

- Check the 7 segment LED display on the rear of the SBC module. If a code is displayed, go to the OF2 POST Error RAP.
- Check that the power cord is connected to the machine.
- Remove the power cord from the customer power socket. Wait 2 minutes, then reconnect the plug into the socket. Switch on the machine, GP 14. If the fault still occurs then follow the procedure.
- If the problem occurs while entering or exiting sleep mode, go to the 301K Sleep Mode RAP.
- If the printed date on the customer's banner sheets or the configuration report are incorrect, go the 303G SBC PWB Battery RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Only use the correct plug to connect a power lead to a power outlet.

CAUTION

Incorrect voltage may damage the machine. The machine must only be connected to the power outlet of the correct voltage.

Switch on the machine, GP 14. Listen at the rear of the machine for the cooling fans to operate. **The fans are running.**

Y **N**

Remove the rear cover. **CR36 at the top left of the IOT PWB is the only illuminated LED.**

Y **N**

Go to the 301C AC Power RAP

Go to the 301J Power On and LVPS Control Signal RAP.

Perform the 301L LVPS Checkout RAP. **The fault remains.**

Y **N**

Perform SCP 5 Final Actions.

Check that the following events occur in sequence:

- The UI touch screen illuminates.
- The output module resets.

- The SPDH resets.
- The exposure lamp switches on.

The sequence completed correctly.

Y N

Perform the relevant action:

- The UI touch screen illuminates, then the machine powers off. Go to 301H Short Circuit RAP.
- If the UI is illuminated but there is no image displayed, Go to the 302A UI Touch Screen Failure RAP.
- If the UI is not illuminated. Go to the 302A UI Touch Screen Failure RAP.
- The UI touch screen is illuminated, but the printer fails to reach an operational state. Go to the 303C Hard Disk Failure RAP.
- The output module did not reset. Go to the 341-360-00 IOT to Output Device Error RAP.
- The SPDH did not reset. Go to the 362-399-00 SPDH to Scanner Data Cable Failure RAP.
- The exposure lamp is off. Go to Scanner to 362-310-00 SBC Communications Failure RAP.

If the UI displays the message “not ready to copy” or the machine continues to reboot without reaching an operational state, go to OF5 Boot Up Failure RAP.

OF4 Status Codes and Messages RAP

Use this RAP for faults and messages without fault codes.

The status code numbers are in the series XX-XXX-XX. The first and second digits identify the relevant functional chain link number. The status code numbers are in the series XX-**5**XX-XX. However a shortage of 500 series numbers means that occasionally other numbers must be used. For example; XX-**6**XX-X and XX-**9**XX.-X Refer to GP 2 Fault Codes and History Files.

Status codes are used to call up UI status messages. The UI status messages are displayed in the Active Messages Log. The UI status messages can be displayed on the UI by pressing the Machine Status button on the keypad, selecting the Active Messages tab on the UI then selecting as appropriate:

- Faults and Alerts.
- Faults.
- Alerts.
- Fault History.

NOTE: *The status codes are only displayed on the Web UI.*

The tables in this procedure bring together the status codes, the relevant RAP or procedure references, and some of the UI messages.

Procedure

Enter the Fault Codes and History Files, GP 2. Identify and clear any active faults. Perform the RAPs that follows to identify a status code or message:

- OF4a Status Codes in Numerical Order
- OF4b Status Messages in Alphabetical Order

OF4a Status Codes in Numerical Order

Status Message Tables

Table 1 01-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
01-510-00	The Front Door is open	The front door is open.	Copying and printing services are disabled. Perform the 301-300-00 RAP.
01-512-00	The Toner Waste Container Door is open	The waste toner door is open.	Copying and printing services are disabled. Perform the 393-380-00 RAP
01-514-00	The Left Side Door is open	The bypass tray and left door assembly is open	Copying and printing services are disabled. Perform the 301-305-00 RAP
01-540-01	Check the settings for tray 1	Paper removed or added to tray 1	Confirm the tray 1 settings.
01-540-02	Check the settings for tray 2	Paper removed or added to tray 2	Confirm the tray 2 settings.
01-540-05	Check the settings for tray 5	Paper removed or added to the bypass tray	Confirm the bypass tray settings
01-540-06	Check the settings for tray 6	Paper removed or added to tray 6	Confirm the tray 6 settings
01-540-07	Check the settings for tray 7	Paper removed or added to the inserter	Confirm the inserter tray settings

Table 1 01-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
01-545-01	Tray 1 guides are not set properly	Dedicated tray 1 closed with media size other than what was set	Copying and printing services are available if the correct the paper size is correct in other trays. Perform the 371B RAP.
01-545-02	Tray 2 guides are not set properly	Dedicated tray 2 closed with media size other than what was set	Copying and printing services are available if the correct the paper size is correct in other trays. Perform the 371B RAP.
01-550-00	-	NC status code - system is in power save mode	Printing will start when a job is received or a user initiates a job at the machine
01-551-00	-	ESS status code - system is in sleep mode	Printing will start when a job is received or a user initiates a job at the machine

Table 2 02-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
02-517-00	Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	The CCS is counting down grace prints until a valid authorisation PIN is entered at the UI	User intervention is required to enter a valid activation code. All services are available until all courtesy prints are used.
02-518-00	Obtain a Supplies Plan Activation Code from yours Xerox equipment supplier.	The grace prints period has expired.	User intervention is required to enter a valid activation code. Print services are disabled.
02-520-00	The machine is not available	Software error has occurred.	Switch the machine off then on, GP 14
02-521-00	Extensible Services not available Power Off then On and Notify System Administrator	XEIP browser is dead.	Perform the 302-321-00 RAP
02-590-00	Machine power on failed. Power Off then On and Notify System Administrator	Configurable services are not stable at power on	Switch the machine off then on, GP 14. If the fault persists, perform the 302-390-00 RAP

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-500-00	24 V supply failure	+24V supply failure	Perform the 301G +24V Distribution RAP.
03-504-00	The machine is offline	NC status code	Switch the machine off then on, GP 14
03-504-01	The machine is offline	NC status code	Switch the machine off then on, GP 14
03-505-00	System error. Power Off then On and Notify System Administrator	The digital copier is not available	Perform 303-325-00 RAP and 303-355-00 RAP
03-518-00	Network Controller not available. Power Off then On and Notify System Administrator	The network controller is not available.	Switch the machine off then on, GP 14. If the fault remains, reinstall software, GP 4. If the fault persists, perform the 303-331-00, 303-332-00 RAP
03-520-00	-	CCM to UI communication not established in 30 sec.	Switch the machine off then on, GP 14. If the fault persists, perform 303-331-00, 303-332-00 RAP.
03-521-00	-	CCM to UI communication are lost	Switch the machine off then on, GP 14. If the fault persists, perform 303-331-00, 303-332-00 RAP.
03-535-00	-	The machine is in non intrusive diagnostic mode	Diagnostics are active. No user intervention is required; please wait. The machine is available.
03-536-00	-	The machine has entered intrusive diagnostic mode	The machine is running diagnostics. No user intervention is required, the machine is not available for safety reasons, but will be available when testing is completed. All machine services are disabled.
03-546-00	Incompatible Fax software detected (upgrade required)	Incompatible Fax software detected at power on	The embedded Fax software version is incompatible with the system. A software upgrade should be performed, GP 4. Refer to 303-417-00 RAP.
03-547-00	A Fax Service error has occurred. Power Off then On	Basic Fax not detected or confirmed	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-548-00	Fax line 2 is unavailable. Notify your System Administrator.	Extended Fax not detected or confirmed	Check the Fax line connection. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
03-549-00	Fax memory error. Power Off then On and Notify System Administrator	Fax POST failure status	Switch the machine off, then on GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
03-550-00	A Fax service error has occurred. Power Off then On	Fax card is unavailable	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
03-551-00	A Fax service error has occurred. Power Off then On	The Fax service is unavailable	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
03-555-00	Please wait... Maintenance in progress. Scan, Copy and Print services not available	The machine has entered intrusive customer tools mode.	Go to dC301. Perform a copier NVM initialization and NVM data select all.
03-556-00	Please wait… The scanner is initializing.	Power on while the IIT is being initialized	-
03-558-00	Please complete all steps required by the external accounting device to access this service	-	-
03-558-01	Please insert card into the external accounting device to access this service	-	-
03-558-02	Please enter access code into external accounting device to access this service	-	-

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-558-03	Please insert money into the external accounting device to access this service	-	-
03-558-04	Please insert key counter into the external accounting device to access this service	-	-
03-559-00	Provide payment or the current job may be deleted.	Generic FDI. Unable to complete the current job.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
03-559-01	Provide payment.	Walk Up FDI. Unable to complete the current job.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
03-559-02	Enter your access code or the current job may be deleted.	Walk up code entered FDI. Not defined	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
03-559-03	Provide payment.	Walk up coin entered FDI. Not defined - FDI Inactivity timer disabled.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job. To cancel this job, press the hard-panel Job Status button, select the job and then the Delete button
03-559-04	Provide payment or the current job may be deleted.	Walk up key entered FDI. Not defined	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
03-559-05	Provide payment or the current job may be deleted.	Walk up FDI. Unable to complete the current job - FDI inactivity timer enabled	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job, select the Close button, then the Job Status button located on the control panel and then your job.If no action is taken, the job will be deleted

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-559-06	Provide payment or the current job may be deleted.	Walk up coin entered FDI. Not defined - FDI inactivity timer disabled	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job. To immediately delete this job, select the Close button, then the Job Status button located on the control panel and then your job. If no action is taken, the job will be deleted
03-560-00	Laser on without printing fault.	Laser on without printing.	Perform the 361-350-00 ROS Laser Not Under Control RAP
03-561-00	Please wait... the system is attempting to recover	The system is recovering	Wait until the system recovers
03-562-00	Some jobs may have been deleted	When some jobs may have been deleted	Removed upon user intervention
03-563-00	The Network Controller is initializing. Copy and Print jobs may be delayed	Network service are being established.	Please wait, the Network Controller is initializing. No user intervention is required. Printing is currently unavailable. If the fault persists, perform the 303-331-00, 303-332-00 RAP
03-564-00	Image Rotation is not available. Power off then on and notify system administrator	Image rotation is not available.	Switch the machine off then on, GP 14.
03-565-00	System Error. Power Off then On and Notify System Administrator	System fault.	Switch the machine off then on, GP 14.
03-575-00	Main motor not controlled	Main motor not being controlled.	Perform the 341-397-00 RAP
03-576-00	IOT cycled in without printing	IOT cycled in without printing. Fault 03-395 raised	Perform the 341-395-00, 341-396-00, 341-852-00 RAP
03-578-00	System error. Power Off them On and Notify System Administrator	Paper tray error.	Switch the machine off then on, GP 14.

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-581-00	System Error. Power Off them On and Notify System Administrator	Paper tray error.	Switch the machine off then on, GP 14.
03-587-00	Tray 1 is not available. Notify System Administrator	Mechanical failure for tray 1	Switch the machine off then on, GP 14.
03-588-00	Tray 2 is not available. Notify System Administrator	Mechanical failure for tray 2	Switch the machine off then on, GP 14.
03-589-00	Tray 3 is not available. Notify System Administrator	Mechanical failure for Tray 3	Switch the machine off then on, GP 14.
03-590-00	Tray 4 is not available. Notify System Administrator	Mechanical failure for tray 4	Switch the machine off then on, GP 14.
03-591-00	Tray 5 (Bypass) is not available. Notify System Administrator	Mechanical failure for Bypass tray	Switch the machine off then on, GP 14.
03-592-00	Tray 6 is not available. Notify System Administrator	Mechanical failure for tray 6	Switch the machine off then on, GP 14.
03-593-00	Tray 7 is not available. Notify System Administrator	Mechanical failure for Tray 7	Switch the machine off then on, GP 14.
03-597-00	The Document Feeder is not available. The Document Glass is still available	The document feeder is not available. Use the document glass	Switch the machine off then on, GP 14.
03-598-00	System Error. Power Off then On and Notify System Administrator	Unable to set ready mode. Printing and copying services are not available	Perform the 303-788-00 RAP

Table 3 03-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
03-600-00	Ready to Install	Displayed at install when the machine is in the correct state to allow machine speed to be set from a blank SIM.	No service action.
03-601-00	Machine configuration locked.	Displayed when the machine speed is invalid.	Switch the machine off then on, GP 14. If the fault persists, perform the 303-405-00, 303-406-00 RAP

Table 4 04-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
04-565-00	System Error. Power Off then On and Notify System Administrator	IOT Controller communication failure	System fault. Switch the machine off then on, GP 14.
04-568-00	The Output Tray is full. Empty the Output Tray	The OCT is full.	Empty the tray.
04-569-00	The Output tray is almost full	The OCT detects that it is 90% full	The tray is almost full. The tray may be emptied now or when it is full. Printing and other machine services are unaffected

Table 5 05-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
05-310-00	-	Document detected in the document feeder.	Perform the 305C RAP
05-326-00	Misfeed in the Document Feeder.	Document in the SPDH at power on or exit from power save.	Remove all documents from the SPDH. If the fault persists, perform the 305-960-00 RAP.
05-330-00	Misfeed in the Document Feeder	Jam in document Feeder, feed sensor covered.	Perform the 305-962-00 RAP

Table 5 05-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
05-335-00	Misfeed in the Document Feeder	Jam in document Feeder, takeaway sensor covered.	Perform the 305-335-00, 305-336-00 RAP
05-340-00	Misfeed in the Document Feeder	Jam in document Feeder, reg sensor covered.	Perform the 305-340-00, 305-341-00 RAP
05-343-00	Misfeed in the Document Feeder	Jam in document Feeder, side 2 reg sensor covered.	Perform the 305-342-00, 305-343-00 RAP
05-344-00	Misfeed in the Document Feeder	Jam in document Feeder, Calibration Home sensor covered.	Perform the 305-959-00 RAP
05-361-00	Misfeed in the Document Feeder	Jam in document Feeder, feed sensor and takeaway sensor covered.	Open the top cover, remove any documents. As necessary, perform the 305-962-00 and 305-335-00, 305-336-00 RAPs.
05-362-00	Misfeed in the Document Feeder	Jam in document Feeder, feed, takeaway, reg or side 2 reg sensor covered.	Open the top cover, remove any documents. As necessary, perform the 305-962-00, 305-335-00, 305-336-00, 305-340-00, 305-341-00 or 305-342-00, 305-343-00 RAP.
05-363-00	Misfeed in the Document Feeder	Jam in document Feeder, reg sensor and side 2 reg sensor covered.	Remove any documents. As necessary, perform the 305-340-00, 305-341-00 and 305-342-00, 305-343-00 RAP.
05-501-00	Scan and Copy Service not available. Print Service is available.	Document Feeder is Raised.	Close the Document Feeder.
05-502-00	The Document Feeder Top Cover is open	The document feeder top cover is open.	Close the document feeder top cover. If the fault remains, perform the 305-305-00 RAP.
05-525-00	-	The document feeder tray is empty	Perform the 305B RAP
05-535-00	-	Document feeder tray loaded	-
05-538-00	The Document Feeder is not available. The Document Glass is still available.	The document handler not available.	A document feeder fault has occurred, copy jobs can only be made from the document glass. Printing can continue.

Table 5 05-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
05-542-00	The Document Feeder is not available. The Document Glass is still available.	Document transport indicates service is required.	Check the fault history, dC122 for any Chain 5 faults. Perform the relevant RAPs.
05-546-00	The document size was different than expected. The job has been deleted	On pre-feed the SPDH fails to recognize the size of the document	Reload the originals or select the document size. If the fault persists, perform the 305A RAP
05-560-00	Remove the document. It is too short to be fed by Document Feeder.	The document is too short.	Remove the short document. Inform the customer that the document is too short to be fed by the SPDH.
05-570-00	Scan and copy services not available. Print service is available	SPDH jam	Remove, then re-load all document in the SPDH
05-571-00	Original not fully inserted.	Document not fully inserted in the document feeder.	Remove any sheets from the document feeder to allow the device to initialize. As necessary, perform the 305-940-00, 305-966-00 RAP.
05-585-00	Select Confirm if the Document Feeder - Feed Roller was replaced.	User confirmation required to reset SPDH feed roller replacement.	Select confirm if the document feeder - feed roller was replaced

Table 6 06-5XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
06-520-00	The ROS motor has failure. Switch the machine off, wait 3 minutes, then switch on the machine again. If the fault persists call for assistance or press Close to use other services.	ROS motor failed.	Perform the 361-020-00 RAP
06-530-00	ROS system failure. Printing is unavailable. If fault persists, call for assistance. Touch Ignore Error to use other services	ROS system failed.	Perform the 361-340-00 RAP
06-540-00	ROS laser not being controlled	ROS laser not being controlled.	Perform the 361-350-00 RAP

Table 7 07-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
07-501-00	Misfeed in Tray 1	Misfeed in tray 1	Clear paper jam in Tray 1. If fault persists perform 381-101-00, 381-111-00 RAP
07-502-00	Misfeed in Tray 2	Misfeed in tray 2	Clear paper jam in Tray 2. If fault persists perform 381-102-00, 381-112-00 RAP
07-502-01	Misfeed in Tray 2	Misfeed in tray 2	Clear paper jam in Tray 2. If fault persists perform 381-102-00, 381-112-00 RAP
07-503-00	Misfeed in Tray 3	Misfeed in tray 3	Clear paper jam in Tray 3. If fault persists perform 381-103-00, 381-113-00 RAP
07-504-00	Misfeed in Tray 4	Misfeed in tray 4	Clear paper jam in Tray 4. If fault persists perform 381-104-00, 381-114-00 RAP

Table 7 07-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
07-505-00	Misfeed in Tray 5 (Bypass)	Misfeed in bypass tray	Clear paper jam in bypass tray. If fault persists perform 375A RAP
07-506-00	Misfeed in Tray 6	Misfeed in tray 6	Clear paper jam in Tray 6. If fault persists perform 381-115-00, 381-117-00 RAP
07-506-01	Misfeed in Tray 6	Misfeed in tray 6	Clear paper jam in Tray 6. If fault persists perform 381-115-00, 381-117-00 RAP
07-507-00	Misfeed in Tray 7	Misfeed in tray 7	Clear paper jam in Tray 7. If fault persists perform 311-191-00-171, 311-193-00-171, 311-194-00-171, 311-196-00-171 RAP
07-513-01	Tray 1 is open	Tray 1 is open	Close tray 1. If fault persists perform 371-500-00 RAP
07-513-02	Tray 2 is open	Tray 2 is open	Close tray 2. If fault persists perform 372-500-00 RAP
07-513-03	Tray 3 is open	Tray 3 is open	Close tray 3. If fault persists perform 372-500-00 RAP
07-513-04	Tray 4 is open	Tray 4 is open	Close tray 4. If fault persists perform 374-500-00 RAP
07-513-06	Tray 6 is open	PFP tray is open	Close PFP tray. If fault persists perform 376-500-00 RAP
07-514-01	Tray 1 is open	Adjustable tray 1 is open	Close tray 1. If fault persists perform 371-500-00 RAP
07-514-02	Tray 2 is open	Adjustable tray 2 is open	Close tray 2. If fault persists perform 372-500-00 RAP
07-514-06	Tray 6 is open	PFP tray loading door is open or the elevate switch is flipped down.	Close PFP tray. If fault persists perform 376-500-00 RAP
07-514-07	Tray 7 is open	Tray 7 is open	Close tray 7. If fault persists perform 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
07-533-00	Tray 3 is empty. Add paper	Tray 3 is out of paper	Add paper. If fault persists perform 373B RAP
07-534-00	Tray 4 is empty. Add paper	Tray 4 is out of paper	Add paper. If fault persists perform 373B RAP
07-535-00	Tray 5 (Bypass) is empty. Add paper	Bypass tray is out of paper	Add paper. If necessary, perform 375A RAP
07-536-00	Tray 6 is empty. Add paper	PFP Tray is out of paper	Add paper. If fault persists perform 376A RAP
07-537-00	Tray 7 is empty. Add paper	Tray 7 is out of paper	Add paper. If fault persists perform 311J-171 RAP

Table 7 07-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
07-544-00	Tray 1 is empty. Add paper	Tray 1 is out of paper	Add paper. If fault persists perform 371A RAP.
07-545-00	Tray 2 is empty. Add paper	Tray 1 is out of paper	Add paper. If fault persists perform 371A RAP.
07-546-01	Unexpected paper size or type detected from Tray 1	Tray 1 media or type mismatch detected	Check media. If fault persists perform 371B RAP.
07-546-02	Unexpected paper size or type detected from Tray 2	Tray 2 media or type mismatch detected	Check media. If fault persists perform 371B RAP.
07-546-03	Unexpected paper size or type detected from Tray 3	Tray 3 media or type mismatch detected	Check media. If fault persists perform ADJ 70.1 adjustment.
07-546-04	Unexpected paper size or type detected from Tray 4	Tray 4 media or type mismatch detected	Check media. If fault persists perform ADJ 70.1 adjustment.
07-546-05	Unexpected paper size or type detected from Tray 5 (Bypass)	Bypass tray media or type mismatch detected	Check media. If fault persists perform 375A RAP.
07-546-06	Unexpected paper size or type detected from Tray 6	Tray 6 media or type mismatch detected	Check media. If fault persists perform ADJ 70.2 adjustment.
07-546-07	Unexpected paper size or type detected from Tray 7	Tray 7 media or type mismatch detected	Check media. If fault persists perform 311-479-00-171 RAP.

Table 8 09-XXX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
09-508-00	Toner Waste Container (R4) is nearly full. Make sure you have a replacement.	Waste toner bottle is nearly full	Perform 390B RAP.

Table 8 09-XXX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
09-509-00	-	Waste toner bottle is nearly full	Perform 390B RAP.
09-521-00	Replace Xerographic Module (R2).	IOT detects an xerographic module failure.	Switch the machine off and on, GP 14. Install a new xerographic module. If necessary, perform the 341-371-00, 41-372-00 RAP.
09-541-00	Scorotron cleaning failed	Scorotron cleaning failed	Perform the 394-341-00, 394-342-00 RAP.
09-550-00	Photoreceptor erase lamp failure	Photoreceptor erase lamp failure	Perform the 394-350-00 RAP
09-560-00	Xerographic Module (R2) maintenance is required	Xerographic module maintenance is required	Use the manual cleaner to clean the charge scorotron. If the fault remains, perform the 391-060-00 RAP.
09-568-00	Toner Cartridge (R1) is nearly empty. Make sure you have a replacement.	Reorder toner cartridge (R1) but do not replace until prompted.	Order a new toner cartridge, PL 26.11 Item 3.
09-588-00	Replace Toner Cartridge (R1).	Replace toner cartridge (R1)	Install new toner cartridge. If the fault persist perform 393-310-00, 393-390-00 RAP.
09-589-00	Replace Toner Waste Container (R4).	The toner waste container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
09-589-01	Replace Toner Waste Container (R4).	The toner waste container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
09-589-02	Replace Toner Waste Container (R4).	The Toner Waste Container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
09-590-00	Toner Waste Container (R4) is missing or not seated properly.	Insert Waste Container	Reinsert the toner cartridge. If the fault persists perform 390B RAP.
09-590-01	Toner Waste Container (R4) is missing or not seated properly.	The waste toner container is missing	Perform 390B RAP.
09-590-02	Toner Waste Container (R4) is missing or not seated properly.	The waste toner container is missing	Perform 390B RAP.

Table 8 09-XXX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
09-594-00	Reorder Xerographic Module (R2) but do not replace until prompted.	Reorder Xerographic unit but do not replace yet.	Reorder a xerographic module PL 90.20 Item 2.
09-596-00	Toner control system failure	Toner control system fault	Switch off, then switch on the machine, GP 14. If the fault remains, perform the 393-360-00 to 393-363-00 RAP.
09-597-00	Toner control system failure	Toner control system fault	Perform the 393-360-00 to 393-363-00 RAP.
09-598-00	Reorder Xerographic unit but do not replace yet.	.	Reorder a xerographic module PL 90.20 Item 2.
09-676-00	-	Reorder Toner Cartridge (R1) but DO NOT replace until prompted.	Reorder a toner cartridge, PL 90.17 Item 4 (45-55 ppm) of PL 90.15 Item 4 (65-90 ppm)
09-677-00	Incompatible Xerographic Module. Contact your System Administrator.	The Xerographic Module in the machine is metered. The machine is sold. This is an incompatible combination that results in revenue loss.	Install correct xerographic module. Check the market region of the machine, dC134.
09-678-00	Replace Ozone Filter (R5).	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
09-678-01	Replace Ozone Filter (R5).	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
09-678-02	Replace Ozone Filter (R5).	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
09-679-00	-	Ozone filter replacment confirmation	Confirm that a new ozone filter has been installed.
09-681-00	-	Toner cartridge replacement confirmation.	Confirm that a new toner cartridge has been installed.

Table 9 10-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
10-350-00	Fuser over temp / short circuit failure	Fuser over temperature or short circuit.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP.
10-505-00	Please wait... Fuser is warming up	Fuser is not at run temperature	Perform the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.
10-523-00	Replace Fuser Module (R3).	The Fuser needs replacing	Install a new fuser, PL 10.8 Item 1 (45-55 ppm) or PL 10.10 Item 1 (65-90 ppm)
10-524-00	Reorder Fuser Module (R3) but do not replace until prompted.	The fuser low supply warning, threshold has been reached.	Reorder a fuser but do not replace.
10-525-00	-	The low supply warning “Reorder Fuser Module (R3)” has been cleared.	Reorder a fuser but do not replace.
10-537-00	Incompatible Fuser Module. Contact your system Administrator.	Fuser module is not compatible with the device.	Check the market region of the machine, dC134. Install the correct fuser, PL 10.8 Item 1 (45-55 ppm) or PL 10.10 Item 1 (65-90 ppm)
10-540-00	Fuser temperature control failure.	Fuser temperature control failure.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP and the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.
10-547-00	Pull out the fuser, then firmly push it back in.	IOT is unable to read from the fuser CRUM.	Perform the 341-371-00, 41-372-00 RAP.
10-548-00	Pull out the Xerographic module, then firmly push it back in.	IOT is unable to read from the xerographic module CRUM.	Perform the 341-371-00, 41-372-00 RAP.
10-550-00	Hardware detected Fuser failure	Fuser warmup failure.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP
10-555-00	Fuser control software failure	Fuser control software failure	Perform the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-410-00	-	PTU selected whilst marking job is running	Pressing Pause to Unload button will cancel this request.
12-411-00	The current job exceeds the tray capacity, you will be prompted to empty the tray	Copy Job will exceed the output destination's capacity	Empty the tray
12-564-00	The finisher front door is open	The finisher front door is open (2K LCSS)	Close the finisher front door. If the fault persists perform 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP.
12-564-01	The finisher front door is open	The finisher front door is open (HVF - all variants)	Close the finisher front door. If fault persists perform the Front Door Interlock Checkout RAP in the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
12-564-03	The finisher front door is open	The finisher front door is open (LVF BM)	Close the finisher front door. If the fault persists perform 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP.
12-564-04	The finisher front door is open	The finisher front door is open (1K LCSS)	Close the finisher front door. If the fault persists perform 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP.
12-579-00	Hole punching not available. Power Off then On and Notify System Administrator	Hole punching is not available	Check that the hole punch unit is correctly installed. Switch the machine off then on, GP 14. If the fault persists, perform the 311-043-00-150, 311-046-00-150 RAP for the LVF, 311N-171 for the HVF or 311-043-00-110, 311-350-00-110 for the 2K LCSS
12-600-00	Finisher is not docked. Re-dock finisher now	The finisher unit (2K LCSS) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP
12-600-01	Finisher is not docked. Re-dock finisher now	The finisher unit (HVF without tri-folder) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
12-600-02	Finisher is not docked. Re-dock finisher now	The finisher unit (HVF with tri-folder) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
12-600-03	Finisher is not docked. Re-dock finisher now	The finisher unit (LVB BM) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP
12-600-04	Finisher is not docked. Re-dock finisher now	The finisher unit (1K LCSS) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP
12-601-01	Close the finisher top tray	HVF finisher top cover is open (cover over output tray)	Close the top cover. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
12-602-00	Close finisher top cover	The 2K LCSS finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP
12-602-03	Close finisher top cover	The LVF finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP
12-602-04	Close finisher top cover	The 1K LCSS finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP
12-606-00	Close finisher top cover	The inserter top cover is open	Close the inserter top cover. If the fault persists, perform the 311-306-00-171, 311-309-00-171 RAP
12-607-00	Close the finisher folder top cover	The tri-folder top cover is open (HVF with tri-folder)	Close the tri-folder top cover. If the fault persists, perform the 311-307-00-171, 311-308-00-171 RAP
12-608-00	Close the finisher folder front door	The tri-folder unit front door is open (HVF with tri-folder)	Close the tri-folder front door. If the fault persists, perform the 311-307-00-171, 311-308-00-171 RAP
12-609-00	Close finisher inserter left side door	The inserter left cover is open	Close the inserter left cover. If the fault persists, perform the 311-306-00-171, 311-309-00-171 RAP
12-610-00	Paper jam in the finisher	Paper is detected over the entry sensor (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-100-00-110 RAP
12-610-01	Paper jam in the finisher	Paper is detected over the entry sensor (HVF with trifolder)	Clear the paper jam. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP

Table 10 12-XXX-XX Status codes

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-610-03	Paper jam in the finisher	Paper is detected over the entry sensor (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-100-00-150, 311-101-00-150, 311-158-00-150, 311-163-00-150 RAP
12-610-04	Paper jam in the finisher	Paper is detected over the entry sensor (1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-100-00-120 RAP
12-612-00	Paper jam in the finisher	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311H-110 or 311-043-00-110, 311-350-00-110 RAP
12-612-03	Paper jam in the finisher	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311H-150 or 311-043-00-150, 311-046-00-150 RAP
12-612-04	Paper jam in the finisher	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (1K LCSS)	Code shown for information only. 1K LCSS does not have hole punch.
12-618-00	Paper jam in the finisher	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-130-00-110, 311-132-00-110 RAP
12-618-01	Paper jam in the finisher	Paper is detected over the top tray exit sensor (HVF)	Clear the paper jam. If the fault persists, perform the 311-130-00-171, 311-132-00-171 RAP
12-618-03	Paper jam in the finisher	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-130-00-150, 311-132-00-150 RAP
12-618-04	Paper jam in the finisher	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown.(1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-130-00-120, 311-132-00-120 RAP

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-620-00	Paper jam in the finisher	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-140-00-110, 311-142-00-110 RAP
12-620-01	Paper jam in the finisher	Paper jam near the output to the stacker tray. Sheet over 2nd top exit sensor (HVF)	Clear the paper jam. If the fault persists, perform the 311-140-00-171, 311-142-00-171 RAP
12-620-03	Paper jam in the finisher	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-140-00-150, 311-142-00-150 RAP
12-620-04	Paper jam in the finisher	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-140-00-120, 311-142-00-120 RAP
12-624-00	Paper jam in the finisher	Page over PPI pickup sensor	Clear the area or If the fault persists, perform the 311-056-00-171, 311-057-00-171 RAP
12-625-00	Paper jam in the finisher	Page over PPI tab standby sensor	Clear the area. If the fault persists, perform the 311-191-00-171, 311-193-00-171, 311-194-00-171, 311-196-00-171 RAP
12-626-00	Paper jam in the finisher	Page over buffer position sensor.	Clear the area. If the fault persists, perform the 311-157-00-171, 311-161-00-171 RAP
12-627-01	Paper jam in the finisher	Page over the exit HVF into BM sensor (sensor in area 6a) cleared via area 6a	Clear the paper jam. If the fault persists, perform 311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 RAP
12-627-02	Paper jam in the finisher	Page over the exit HVF into BM sensor (sensor in area 6a) cleared via area 6a	Clear the paper jam. If the fault persists, perform 311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 RAP
12-628-00	Paper jam in the finisher	Page over stacker bin exit sensor	Clear the area. If the fault persists, perform the 311-130-00-171, 311-132-00-171 RAP
12-629-00	Paper jam in the finisher	Page over TF entry sensor	Clear the area. If the fault persists, perform the 311-183-00-171, 311-184-00-171 RAP

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-630-01	Paper jam in the finisher	Sheet over the booklet maker entry sensor (without tri-folder)	Clear the area. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP
12-630-02	Paper jam in the finisher	Sheet over the booklet maker entry sensor (with tri-folder)	Clear the area. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP
12-630-03	Paper jam in the finisher	Sheet over the booklet maker entry sensor (LVF BM)	Clear the area. If the fault persists, perform the 311-160-00-150, 311-162-00-150 RAP
12-636-01	Paper jam in the finisher	Sheet over the booklet maker exit sensor (without tri-folder)	Clear the jam from the output bin. If the fault persists, perform the 311-172-00-171 RAP
12-636-02	Paper jam in the finisher	Sheet over the booklet maker exit sensor (with tri-folder)	Clear the jam from the output bin. If the fault persists, perform the 311-172-00-171 RAP
12-636-03	Paper jam in the finisher	Sheet over the booklet maker exit sensor (LVF BM)	Clear the jam from the output bin. If the fault persists, perform the 311-130-00-150, 311-132-00-150 RAP
12-640-00	Hole punch not detected (Missing). Please insert the hole punch.	The finisher punch unit is missing or incorrectly installed.	Make sure that the punch unit is correctly installed. If the fault persists, perform the 311-043-00-110, 311-350-00-110 for the 2K LCSS, 311-044-00-171 to 311-047-00-171 for the HVF or 311-043-00-150, 311-046-00-150 RAP for the LVF BM
12-642-00	Booklet Maker Staple Cartridges (R8) are nearly empty. Make sure you have replacements.	Booklet Maker Staple Cartridges (R8) are nearly empty. Make sure you have replacements.	The booklet maker staple cartridge supplies are low. Re-order staple cartridge, PL 11.168 Item 8 for the HVF BM or PL 11.78 Item 6 for the LVF BM
12-643-00	Replace Booklet Maker Staple Cartridges (R8).	The booklet maker staple cartridge is empty	The booklet maker staple cartridge is empty. Follow the instructions at the printer to load a new staple cartridge, PL 11.168 Item 8 for the HVF BM or PL 11.78 Item 6 for the LVF BM. Printing can continue, but stapled booklet making is unavailable
12-644-02	Replace Booklet Maker Staple Cartridges (R8).	The HVF booklet maker staple cartridge is empty and HVF finisher front door open	Install a new booklet maker staple cartridge, PL 11.168 Item 8.

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-644-03	Replace Booklet Maker Staple Cartridges (R8).	The LVF booklet maker staple cartridge is empty and HVF finisher front door open	Install a new booklet maker staple cartridge, PL 11.78 Item 6.
12-649-00	Empty the Hole Punch Waste Container.	The hole punch chad bin is full and needs emptying.	Hole punch waste container is full, jobs requesting hole punching will be held. Empty the chad bin
12-649-01	Empty the Hole Punch Waste Container.	The hole punch chad bin is full and needs emptying.	Hole punch waste container is full, jobs requesting hole punching will be held. Empty the chad bin
12-653-00	Stapling fault. Power Off then On and Notify System Administrator.	Stapling disabled, out of service. (LCSS)	Perform the 311-371-00-110 RAP
12-665-00	Finisher Main Tray is out of service. Power Off then On and Notify System Administrator.	Bin 1 out of service status (2K LCSS, 1K LCSS and LVF BM)	Perform the 311-140-00-110, 311-142-00-110 for the 2K LCSS, 311-140-00-120, 311-142-00-120 for the 1K LCSS or 311-140-00-150, 311-142-00-150 RAP for the LVF.
12-692-00	Finisher Top Tray is full. Empty Top Tray.	The finisher top tray is full	Empty the top tray
12-701-00	Output tray offsetting is not available. Power Off then On and Notify System Administrator.	OCT offset has failed.	Perform the 312-301-00 RAP.
12-714-00	Replace Staple Cartridge (R7).	1K LCSS main staple cartridge is empty.	Install a new staple cartridge, PL 11.116 Item 8.
12-714-01	Replace Staple Cartridge (R7).	2K LCSS main staple cartridge is empty.	Install a new staple cartridge,PL 11.20 Item 7.
12-714-02	Replace Staple Cartridge (R7).	HVF main staple cartridge is empty.	Install a new staple cartridge, PL 11.140 Item 33.
12-714-03	Replace Staple Cartridge (R7).	LVF main staple cartridge is empty.	Install a new staple cartridge, PL 11.68 Item 7.

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-715-00	Replace Staple Cartridge (R7).	The finisher's main staple cartridge is empty. Follow the instructions at the printer to load a new staple cartridge. Non staple printing can continue. (LCSS)	Install new staple cartridge, PL 11.20 Item 7 for the 2K LCSS, PL 11.68 Item 7 for the LVF, PL 11.116 Item 8 for the 1K LCSS or PL 11.20 Item 7 for HVF.
12-716-00	Staple Cartridge (R7) is nearly empty. Make sure you have a replacement.	Finisher staples are low	The finisher's main staple cartridge supplies are low. Re-order staple cartridge. Printing can continue. PL 11.20 Item 7 for the 2K LCSS, PL 11.68 Item 7 for the LVF, PL 11.116 Item 8 for the 1K LCSS or PL 11.20 Item 7 for HVF.
12-717-01	Paper Jam in the Finisher.	Sheet over the HVF BM compiler paper present sensor (without tri-folder)	Clear the HFV BM paper present sensor area 6e. If the fault persists, perform the 311-172-00-171 RAP
12-717-02	Paper Jam in the Finisher.	Sheet over the HVF BM compiler paper present sensor (with tri-folder)	Clear the HFV BM paper present sensor area 6e. If the fault persists, perform the 311-172-00-171 RAP
12-717-03	Paper Jam in the Finisher.	Sheet over the LVF BM compiler paper present sensor (with tri-folder)	Clear the LFV BM paper present sensor area 6e. If the fault persists, perform the 311-184-00-150, 311-494-00-150, 311-496-00-150 RAP
12-718-00	Paper Jam in Finisher Folder Unit.	Sheet over the tri-folder assist sensor	Clear the paper jam. If the fault persists, perform the 311-185-00-171 to 311-187-00-171 RAP
12-719-00	Paper Jam in Finisher Folder Unit.	Sheet over the tri-folder exit sensor	Clear the paper jam. If the fault persists, perform the 311-185-00-171 to 311-187-00-171 RAP
12-720-00	Booklet Stapler not available. Power Off then On and Notify System Administrator.	Failure of any BM or TF function. The booklet maker and tri-folder are currently unavailable	Check for obstructions in the HVF BM and the tri-folder. Check that the HVF BM and tri-folder interlocks are made. Switch the machine off then on, GP 14. Check the current fault codes list. Perform the appropriate RAP
12-721-00	Stapling fault. Power Off then On and Notify System Administrator.	Stapler is not in position	The stapler module is open, close the stapler module

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-726-00	Booklet Stapler not available. Power Off then On and Notify System Administrator.	Failure of the booklet maker stapling functions	For the HVF, perform 311-063-00-171, 311-411-00-171 RAP for staple unit 1, and 311-403-00-171, 311-413-00-171, 311-414-00-171 RAP for staple unit 2. For the LVF, perform the 311-063-00-150, 311-488-00-150, 311-490-00-150, 311-492-00-150 RAP.
12-727-00	The Booklet Maker Tray in the Finisher is nearly full.	The booklet maker output tray is nearly full	The booklet maker tray is near full. User intervention will be required soon to empty the tray to allow continued booklet making. Print and copy services can continue; other machine services are unaffected.
12-728-00	The Booklet Maker Tray in the Finisher is full. Empty the Tray.	The booklet maker output tray is full	Empty the tray. If the fault persists, perform the 311C-171 RAP for the HVF.
12-729-00	Finisher Top Tray is nearly full.	The finisher top output bin is nearly full	The top output bin is nearly full. This output bin may need to be unloaded soon. Printing can continue.
12-730-00	Finisher Main Tray is full.	The stacker tray is full (HVF, LVF, 2K LCSS and 1K LCSS)	The middle output bin is full. This output bin needs to be unloaded. Printing to this output bin is disabled. If the fault persists, perform the 311-460-00-171 to 311-462-00-171 RAP for the HVF, 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 RAP for the LVF, 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 RAP for the 2K LCSS or 311-030-00-120 RAP for the 1K LCSS
12-730-01	Finisher Main Tray is full.	The stacker tray is full (HVF)	The middle output bin is full. This output bin needs to be unloaded. Printing to this output bin is disabled. If the fault persists, perform the 311-460-00-171 to 311-462-00-171 RAP
12-734-00	Finisher Main Tray is nearly full.	Stacker tray bin is nearly full	No action necessary

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-740-00	Tray is ready for unloading. Press the button on Finisher to return tray to ready position.	Finisher tray is ready for unloading	Follow the instructions to unload the tray.
12-741-00	Please wait... The output tray is lowering	Finisher is about to go back on-line	No action
12-752-00	Paper Jam in the Finisher.	A page is over the buffer path sensor	Clear the area. If the fault persists, perform the 311-198-00-171, 311-199-00-171 RAP
12-762-00	Finisher Communications Error. Check Cabling. Power Off then On.	Communication failure between the machine and finisher	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF.
12-764-00	Finisher Communications Error. Check Cabling. Power Off then On.	The machine cannot detect a finisher plugged in (including catch tray)	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF
12-765-00	Incompatible Finisher. Contact your System Administrator.	The machine interface indicates that the finisher is incompatible / unknown.	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF.
12-901-00	Unable to staple. Check for obstructions in the output trays.	The finisher is in degraded mode, unable to staple	Switch the machine off then on, GP 14. If the fault persists, perform 311F-171 RAP
12-902-00	Finisher Main Tray out of service. Check for obstructions in the Main Tray.	The finisher is in degraded mode, stacker tray is out of service.	Switch the machine off then on, GP 14. Check for obstructions in the tray. If the fault persists, perform311-320-00-110, 311-322-00-110 RAP for the 2K LCSS, 311-320-00-120, 311-322-00-120 RAP for the 1K LCSS or 311-320-00-150, 311-322-00-150 for the LVF.

Table 10 12-XXX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
12-906-00	Finisher Main Tray out of service. Check for obstructions in the Main Tray.	The finisher main tray is out of service, tray home fault	Switch the machine off then on, GP 14. Check for obstructions in the tray. If the fault persists, perform311-320-00-110, 311-322-00-110 RAP for the 2K LCSS, 311-320-00-120, 311-322-00-120 RAP for the 1K LCSS or 311-320-00-150, 311-322-00-150 for the LVF.
12-908-00	Hole Punching is unavailable. Check for obstructions in the hole puncher.	The finisher hole punch head motor has failed	Clear the paper jam. Switch the machine off then on, GP 14. If the fault persists, perform the 311-043-00-110, 311-350-00-110 RAP for the 2K LCSS, 311-044-00-171 to 311-047-00-171 RAP for the HVF or 311-043-00-150, 311-046-00-150 RAP for the LVF
12-913-00	Booklet Making is unavailable. Check for obstructions in the booklet maker.	Back stop motor fails to move or not home	Clear the paper jam. Switch the machine off then on, GP 14. If the fault persists, perform the 311-065-00-171, 311-383-00-171 RAP
12-943-00	Booklet Making and Tri-folding are unavailable. Check for obstructions.	Booklet making or tri-folding capability degraded	Check for obstructions in the HVF BM and the tri-folder. Check that the HVF BM and tri-folder interlocks are made. Switch the machine off then on, GP 14. Check the current fault codes list for HVF BM or tri-folder faults and perform the appropriate RAP

Table 11 14-5XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
14-517-00	Scanner Fault.	Scanner fault.	Switch the machine off then on GP 14. Check the current fault codes list for faults in the scanner and perform the appropriate RAP.

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-501-00	Network Services with Job Based Accounting not available. Notify your System Administrator.	Job based accounting not enough DC memory. Some Network Controller services are not available	Not enough CCM memory to run the network accounting feature. Switch the machine off then on, GP 14. If the problem persists, perform the 316-930-19 to 316-939-19 RAP
16-502-00	The Network Controller connection is about to be reset.	Status active when ever the network controller detects that a platform reset is about to occur	Cleared when the network controller reset is initiated
16-503-00	System Error. Power Off then On and Notify System Administrator.	Incomplete system information	Switch the machine off then on, GP 14. All machine services are disabled
16-504-00	Some Network Services involving DDNS are not available. Notify your System Administrator.	DDNS error. Some network controller services are not available	The DDNS address resolution process has failed. Switch the machine off then on, GP 14. If the problem persists check the DDNS server's network connections
16-505-00	Network Services involving Scan to E-mail are not available. Notify System Administrator.	Insufficient memory for E-mail	Switch the machine off then on, GP 14. If the problem persists check the network connections
16-506-00	Your Administrator is reconfiguring the system. Services will not be available.	Your administrator is reconfiguring the system	The system administrator is saving the machine configuration to a remote station.
16-507-00	Some Network Services involving SLP are not available. Notify your System Administrator.	SLP process stopped. Some network controller services are not available	Switch the machine off then on, GP 14.

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-508-00	Autonet functions are not available. Notify your System Administrator.	Autonet is not available	Switch the machine off then on, GP 14. Printing can continue if other network protocols are used
16-509-00	Some Network Services involving Internet Fax are not available. Notify System Administrator.	Insufficient memory for internet Fax	Switch the machine off then on, GP 14. Printing can continue if other network protocols are used
16-510-00	Network Services involving Scan to E-mail are not available. Notify System Administrator.	Scan to E-mail process failed	Switch the machine off then on, GP 14. If the problem persists check network connections
16-511-00	Network Services related to Internet Fax are not available. Notify System Administrator.	Internet Fax process failed	Switch the machine off then on, GP 14. If the problem persists check network connections
16-513-00	Some Network Services involving SSDP are not available. Notify your System Administrator.	Simple service discovery protocol (SSDP) failed	Switch the machine off then on, GP 14.
16-514-00	Network Services involving Scan to E-mail are not available. Notify System Administrator.	Post office protocol (POP3) (for inbound IFAX messages) process failed	Switch the machine off then on, GP 14.
16-517-00	Network Services involving Scan to E-mail are not available. Notify System Administrator.	SMTP process failed	Switch the machine off then on, GP 14.

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-518-00	Network Services using WS Edge Client are not available. Notify your System Administrator.	Web services edge client interface does not work	Switch the machine off then on, GP 14. If the problem persists check network connections
16-519-00	Network Services using WS Edge Client are not available. Notify your System Administrator.	Web services client controller does not work	Switch the machine off then on, GP 14. If the problem persists check network connections
16-520-00	Network Services using WS Edge Client are not available. Notify your System Administrator.	Web services server controller interface does not work.	Switch the machine off then on, GP 14. If the problem persists check network connections
16-521-00	The Network Controller connection is about to be reset.	The network controller's CPI service process has stopped	Machine services are temporarily disabled. The network controller connection is about to be reset
16-522-00	The Network Controller connection is about to be reset.	The network controller's job log service process has stopped	Some network services are not available. The network controller connection is about to be reset
16-523-00	The Network Controller connection is about to be reset.	The network controller's job tracker service process has stopped	Some network services are not available. The network controller connection is about to be reset
16-524-00	The Network Controller connection is about to be reset.	The network controller's Kerberos service process has stopped	Some network services are not available. The Network Controller connection is about to be reset
16-525-00	The Network Controller connection is about to be reset.	The network controller's scan to distribution service process has stopped	Some network services are not available. The network controller connection is about to be reset
16-526-00	The Network Controller connection is about to be reset.	The network controller's SMB service process has stopped.	Some network service are not available. The network controller connection is about to be reset

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-527-00	The Network Controller connection is about to be reset.	The network controller's TCP/IP service process has stopped.	Some network service are not available. The network controller connection is about to be reset
16-528-00	The Network Controller connection is about to be reset.	The network controller's WS scan temp service process has stopped.	Some network service are not available. The network controller connection is about to be reset
16-529-00	Network Services with Scan Compressor are not available. Notify your System Administrator.	The network controller's Scan compressor service process has stopped.	Some network service are not available. The network controller connection is about to be reset
16-533-00	Service Limit exceeded. New services will not be available until some services are removed.	Controller software service limit exceeded	Remove some existing services to enable new services to be added. Machine services are available but may be degraded
16-535-00	Immediate Job Overwrite Failed. Perform an On Demand Overwrite immediately.	Immediate job overwrite failed	Immediate job overwrite failed. Administrator intervention is required to perform an on demand overwrite immediately
16-536-00	Network Controller error. Some Network Services not available. Notify System Administrator.	The XSA service is unavailable. Network controller error	Switch the machine off then on, GP 14.
16-540-00	Ensure the USB Wireless Network Interface is properly connected.	USB wireless network not connected	Perform the 316D RAP
16-544-00	Ensure network cables are properly connected.	An Ethernet cable is unplugged	Ensure cables are properly connected

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-550-00	Machine entering SW upgrade mode. ALL jobs will be cancelled.	Machine entering SW upgrade mode - all jobs will be canceled.	The machine entered a software upgrade mode (all jobs will be deleted). No user intervention is required. Machine services are unavailable until the software upgrade process has completed.
16-551-00	Accounting out of memory. Notify your System Administrator.	Network controller - accounting log is full or a hard disk full state exists	Accounting administrator needs to retrieve accounting data log from the system
16-553-00	Additional memory is required to support Scan to File. Notify your System Administrator.	Network controller - not enough physical memory is configured on the platform to support scan to file	Switch the machine off then on, GP 14. Hardware must be added or replaced.
16-554-00	Workflow Scanning hardware must be added or replaced. Notify your System Administrator.	Network controller - hardware must be added or replaced	Hardware must be added or replaced.
16-555-00	Insufficient memory for Fax job. Notify your System Administrator.	Network controller - not enough physical memory is configured on the platform to support LAN Fax	Additional memory required to support Fax. The Fax service is not available
16-556-00	-	There is an authentication problem between the 802.1x device and the 802.1x server	User intervention is required to check the settings on the 802.1x device to ensure they match the 802.1x server, then switch the machine off then on, GP 14.
16-557-00	Network Services using DC Platform recovery not available. Notify System Administrator.	Network controller DC platform recovery failed	Switch the machine off then on, GP 14

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-558-00	Network Services using DC Platform recovery not available. Notify System Administrator.	Network controller DC communications failed	Switch the machine off then on, GP 14
16-559-00	Network Services using BOOTP Initialization not available. Notify System Administrator.	Network controller BOOTP initialization failure	Check the BOOTP Server and its network connection. Switch the machine off then on GP 14
16-560-00	Some Network Services are not available due to a process error. Notify System Administrator.	Some processes on the network controller have failed	Switch the machine off then on, GP 14
16-561-00	Scan to File not available. Power Off then On and Notify System Administrator.	Network controller - scan to file processes have failed	Switch the machine off then on, GP 14
16-562-00	Some Network Services involving LPD are not available. Notify your System Administrator.	Network controller - the line printer daemon (LPD) process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
16-563-00	Some Network Services involving Novell are not available. Notify your System Administrator.	Network controller - the Novell netware connectivity process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
16-564-00	Some Network Services involving NetBios are not available. Notify System Administrator.	Network controller - the NetBIOS connectivity process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-565-00	Network Services involving AppleTalk are not available. Notify your System Administrator.	Apple Talk printing error. Printing can continue using other submission methods	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
16-567-00	Network Services involving PostScript are not available. Notify your System Administrator.	Network controller - a PostScript interpreter error has occur, causing the process to fail	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
16-568-00	Some Network Services involving PCL are not available. Notify your System Administrator.	Network controller - a PCL interpreter error has occurred, causing the process to fail	Switch the machine off then on, GP 14, to enable PCL printing. Printing can continue if other job format methods are used
16-569-00	Network Services involving a Parallel Port are not available. Notify System Administrator.	Network controller - parallel ports are not available	Switch the machine off then on, GP 14. If the problem persists, perform the 316-761-47 to 316-769-95 RAP
16-570-00	Some Network Services involving HTTP are not available. Notify your System Administrator.	Network controller - an HTTP interpreter error has occurred, causing the process to fail	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used. If the problem persists, perform the 316-761-47 to 316-769-95 RAP
16-571-00	Network Printing disabled. Notify your System Administrator.	Network controller - print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
16-572-00	Network Printing disabled. Notify your System Administrator.	Network controller - print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
16-573-00	Network Printing disabled. Notify your System Administrator.	Network controller - ESS print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-574-00	Job queue error. Power Off then On and Notify System Administrator.	ESS queue utility has failed. Only a partial list is available for display at this time	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
16-575-00	The Network Controller connection is about to be reset.	The network controller ESS registration service process has stopped	Automatic network controller reset. If the problem persists, perform the 316-160-09 RAP
16-576-00	The Network Controller connection is about to be reset.	The network controller ESS event notification service process has stopped	Automatic network controller reset. Switch the machine off then on, GP 14. If the problem persists, perform the 316-161-09, 316-164-09 RAP
16-577-00	The Network Controller connection is about to be reset.	The network controller ESS platform manager service process has stopped	Automatic network controller reset. Machine is unavailable. If the problem persists, perform the 316-162-09, 316-163-09 RAP
16-578-00	Incomplete system information. Power Off then On and Notify System Administrator.	The network controller ESS fault log service process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP
16-579-00	Job Status not available. Power Off then On and Notify System Administrator.	The network controller ESS completed job log service has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP
16-580-00	Incomplete system information. Power Off then On and Notify System Administrator.	The network controller ESS configuration utility process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
16-581-00	Some Network Diagnostic Services are not available. Notify your System Administrator.	The network controller ESS diagnostic service process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP and the 316-780-00 to 316-789-47 RAP
16-582-00	Some Network Authentication Services are not available. Notify your System Administrator.	The network controller ESS authentication SPI process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-583-00	Incomplete system information. Power Off then On and Notify System Administrator.	The network controller ESS counters utility process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue
16-584-00	The Network Controller connection is about to be reset.	The network controller document manager agent process has stopped	Automatic network controller reset. Machine is unavailable
16-585-00	Incomplete system information. Power Off then On and Notify System Administrator.	The network controller ESS configuration synchronization process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
16-586-00	Incomplete system information. Power Off then On and Notify System Administrator.	The network controller agent process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
16-589-00	Network Services involving a Serial Port are not available. Notify System Administrator.	The network controller serial port connectivity has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
16-590-00	Network Connectivity Configuration Server not available. Notify your System Administrator.	The network controller CCS process has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-800-09 to 316-809-47 RAP
16-591-00	Some Network Services involving Ethernet are not available. Notify System Administrator.	Network controller Ethernet process has failed	Check Ethernet connection. Switch the machine off, then switch the machine on GP 14. Local printing can continue. If the problem persists, perform the 316-800-09 to 316-809-47 RAP

Table 12 16-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
16-593-00	Some Network Services involving DHCP are not available. Notify your System Administrator.	Network controller - DHCP address resolution has failed	Check DHCP server network connection. Switch the machine off then on GP 14. Copying and printing with local connections can continue. If the problem persists, perform the 316-800-09 to 316-809-47 RAP
16-594-00	Some Network Services involving RARP are not available. Notify your System Administrator.	Network controller - RARP address resolution has failed	Check RARP server network connection. Switch the machine off then on GP 14. Printing can continue with other submission methods. If the problem persists, perform the 316-800-09 to 316-809-47 RAP
16-595-00	Lan Fax Service error. Power Off then On and Notify System Administrator.	The network controller LAN Fax service has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
16-596-00	Some Network Accounting Services are not available. Notify your System Administrator.	Some network controller services are not available	Network accounting error. User intervention is required to switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
16-597-00	Some Network Services involving TIFF are not available. Notify your System Administrator.	The network controller TIFF interpreter has failed	Switch the machine off then on, GP 14. Printing can continue with other job formats. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
16-598-00	Some Network Services involving TCP/IP are not available. Notify your System Administrator.	Network controller - TCP/IP address is already in use on the network	Another IP address needs to be used. Switch the machine off then on, GP 14. Copy and Fax services (if installed) can continue. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
16-599-00	Network Services with Port 9100 Process are not available. Notify System Administrator.	Raw TCP/IP printing (port 9100) process has failed	Switch the machine off then on, GP 14. Printing can continue with other submission methods. If the problem persists, perform the 316-790-09 to 316-799-47 RAP

Table 13 17-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
17-510-00	Duplicate IPv6 address detected. Reconfigure with a unique address.	Duplicate IPv6 address detected	Reconfigure with a unique address. Switch the machine off then on, GP 14. Copy and Fax services (if installed) can continue
17-512-00	DHCPv6 services are not available. Notify your System Administrator.	DHCPv6 Failure status	Switch the machine off then on, GP 14. Printing can continue with other submission methods.
17-513-00	Duplicate IPv4 address detected. Reconfigure with a unique address.	Duplicate IPv4 address detected.	Reconfigure with a unique address. Switch the machine off then on, GP 14.
17-514-00	Unable to communicate to the attached accounting device.	External accounting device communication failure	Administrator intervention required to check the connection to the external accounting device
17-551-00	Server Fax Service cannot Register. Power Off then On and Notify System Administrator.	Server Fax service cannot register	Switch the machine off then on, GP 14. Server Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-987-19, 316-988-19 RAP
17-553-00	Internet Fax Service cannot Register. Power Off then On and Notify System Administrator.	Internet Fax service cannot register	Switch the machine off then on, GP 14. Internet Fax is disabled, print and other machine services are unaffected. If the problem persists, perform 316-950-19 to 316-959-19 RAP
17-554-00	E-mail Service cannot Register. Power Off then On and Notify System Administrator.	Scan to E-mail service cannot register.	Switch the machine off then on, GP 14. Scan to E-mail is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
17-556-00	The Server Fax Service cannot Un-Register. Notify your System Administrator.	Server Fax service cannot un-register	Switch the machine off then on, GP 14. Server Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-987-19, 316-988-19 RAP

Table 13 17-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
17-557-00	The Internet Fax Service cannot Un-Register. Notify your System Administrator.	Internet Fax service cannot un-register	Switch the machine off then on, GP 14. Internet Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
17-558-00	The E-mail Service cannot Un-Register. Notify your System Administrator.	E-mail service cannot un-register	Switch the machine off then on, GP 14. Scan to E-mail is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
17-559-00	Workflow Scanning Service cannot Register. Power Off then On and Notify System Administrator.	Network scanning service cannot register.	Switch the machine off then on, GP 14. Scan service is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-985-19, 316-986-19 RAP
17-560-00	The Workflow Scanning Service cannot Un-Register. Notify your System Administrator.	Network scanning service cannot un-register.	Switch the machine off then on, GP 14. Scan service is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-985-19, 316-986-19 RAP
17-561-00	The Reprint Saved Jobs Service cannot Un-Register. Notify your System Administrator.	Reprint saved jobs service cannot un-register.	Switch the machine off then on, GP 14. Re-printing of saved jobs in disabled. If the problem persists, perform the 316-752-00, 316-753-00 RAP
17-562-00	No communications with Xerox SMart eSolutions server. Contact System Administrator.	Registration with edge server fails	User intervention is required to review SMart eSolutions settings. Machine services are unaffected. If the problem persists, perform the 316-891-00 to 316-895-47 RAP
17-563-00	No communications with Xerox SMart eSolutions server. Contact System Administrator.	Communication with edge server fails	User intervention is required to review SMart eSolutions settings. Machine services are unaffected. If the problem persists, perform the 316-891-00 to 316-895-47 RAP

Table 13 17-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
17-565-00	Extensible Services are not responding. Power machine Off then On.	EIP service not responding	Switch the machine off then on, GP 14. Machine services are unaffected
17-570-00	-	Communication with NNTP server failed	User intervention is required to verify network time protocol server settings, operability and machine time. Machine services are unaffected
17-580-00	Please wait... Disk Encryption operation in progress.	Disk encryption is in progress	No service action required, please wait for encryption to finish
17-590-00	Image Overwrite is in progress... the machine is Offline.	Image overwrite (ODIO) is in progress	No service action required, please wait for the overwrite to finish
17-591-00	On Demand Overwrite Failed. Perform an On Demand Overwrite immediately.	HDD or FAX On Demand Overwrite Failed.	On Demand Overwrite error. Administrator intervention is required to perform an On Demand Image Overwrite immediately. Printing can continue; other machine services are unaffected.

Table 14 19-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
19-502-00	Please wait... Freeing memory.	Out of memory resources. The machine has run out of image processing memory for the current job	No user intervention required, please wait, printing will resume after memory is freed. Other machine services are unaffected. If the problem persists, perform the 319-401-00, 319-402-00 RAP
19-505-00	Some jobs may have been deleted.	Compressor DVMA time-out. Current job has been deleted	Confirm that UI message has been seen. Re-scan the job. If the problem persists, perform the 319-403-00 RAP
19-506-00	Immediate Job Overwrite Failed. Perform an On Demand Overwrite immediately.	Immediate job overwrite failed	Administrator intervention is required to perform an on demand image overwrite immediately. Printing can continue. Other machine services are unaffected

Table 14 19-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
19-507-00	On Demand Overwrite Failed. Perform an On Demand Overwrite immediately.	HDD or FAX On Demand Overwrite Failed.	On Demand Overwrite error. Administrator intervention is required to perform an On Demand Image Overwrite immediately. Printing can continue; other machine services are unaffected.
19-510-00	Please wait... The system is attempting to recover.	Image disk error	No service action required. Printing and other machine services are unaffected
19-511-00	Image Disk is offline. Job(s) may take longer than normal. Notify System Administrator.	Image disk unavailable. Performance is degraded. Service is required	The system is unable to read from the image disk. Jobs may take longer than normal. Perform the 319-300-00 to 319-310-00 RAP
19-512-00	Image Disk offline. Power Off then On and Notify System Administrator.	The image disk cannot read or write and must be serviced. Power off/power on will temporarily alleviate the problem.	The system is unable to read from the image disk. Printing has stopped. Perform the 319-300-00 to 319-310-00 RAP
19-513-00	Please wait... The Image Disk is full.	The image disk is full	Print jobs may be delayed. The system is attempting to recover. Printing and other machine services are available. If the problem persists ensure Mod/TAG 003 has been installed.
19-514-00	All incomplete jobs have been deleted.	Video job integrity fault detected	Video job integrity error; one or more jobs were deleted. No user intervention is required; the system has recovered. Printing and other machine services can continue. If the problem persists, perform the 319-409-00 RAP
19-550-00	Configuration mismatch.	The single board controller cannot access the EPC memory or the image disk	Switch the machine off then on, GP 14. Install a new memory module, PL 3.22 Item 11. Install a new hard disk drive, PL 3.22 Item 2. Install a new single board control PWB, PL 3.22 Item 3

Table 15 20-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
20-544-00	Please wait... The Fax Service is initializing.	The Fax service is initializing	The Fax service is re-starting. No user intervention is required. Printing and other machine services are available
20-545-00	Fax job could not be sent at this time, please try again.	A Fax job could not be sent	Fax job could not be sent, re-try. Printing and other machine services are available
20-546-00	Fax memory is low. Contact your System Administrator.	Not enough memory to use Fax service	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-323-00, 320-324-00 RAP
20-547-00	Fax memory is low. Contact your System Administrator.	Fax memory is low	User intervention is required to delete unnecessary mailbox files or Fax jobs stored for polling. FAX and LAN Fax services are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-323-00, 320-324-00 RAP
20-550-00	Fax line 2 is unavailable. Notify your System Administrator.	Extended Fax card failure detected	Switch the machine off then on, GP 14. Fax service can continue from line 1. Printing and other machine services are available
20-556-00	Fax system error. Power Off then On and Notify System Administrator.	Fax service error. Reset Fax service	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP
20-558-00	Fax system error. Power Off then On and Notify System Administrator.	Fax memory error	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-322-00 RAP

Table 15 20-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
20-559-00	Fax system error. Power Off then On and Notify System Administrator.	Fax service error	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-320-00 RAP
20-562-00	Fax line 1 is unavailable. Check line connection Or notify your System Administrator.	No communication on Fax line 1	User intervention is required to check the external phone line connection. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP
20-563-00	Fax line 2 is unavailable. Check line connection Or notify your System Administrator.	No communication on Fax line 2	User intervention is required to check the external phone line connection. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-327-00, 320-332-00, 320-340-00 RAP
20-565-00	Fax job limit has been reached. Power Off then On and Notify System Administrator.	All jobs IDs allocated cannot create any more	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled
20-570-00	Fax system error. Power Off then On and Notify System Administrator.	Fax service error	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected
20-571-00	Fax system error. Power Off then On and Notify System Administrator.	Fax service error	Fax line 1 is unavailable. Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP
20-572-00	Fax line 2 is unavailable. Call for assistance.	Fax service error. Fax line 2 is unavailable	Switch the machine off then on, GP 14. Fax and LAN Fax are degraded. Printing and other machine services are unaffected. If the problem persists, perform the 320-327-00, 320-332-00, 320-340-00 RAP

Table 15 20-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
20-580-00	Fax Service is unavailable. Turn machine off, then on.	NVM values supplied by the Fax are invalid. Fax NVM data error	No service action required. Fax and LAN Fax are disabled. Printing and other machine services are unaffected
20-595-00	Fax line 1 is unavailable. Call for assistance.	Fax service Error. Fax line 1 is unavailable	Fax line 1 is unavailable. Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP

Table 16 22-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
22-502-04	Select the Current Messages button in the Machine Status for more information.	An active message has been produced.	Go to the **Status** screen and select the **Faults** tab. Press the **Active Messages** button and perform the action appropriate to the message
22-503-04	All incomplete jobs have been deleted.	System error. Jobs have been lost and must be resubmitted	No user intervention is required. Machine is temporarily unavailable
22-503-05	The number of originals was less than the number originally scanned.	Insufficient originals detected in the SPDH.	Re-sort and reload all originals
22-504-04	No tray is configured with the required paper size.	No paper tray is configured to run the stock size required for this job	Print and copy services are disabled, other machine services are unaffected Job must be deleted. Paper tray must be configured to match the job. If the problem persists, perform the 322-310-04 to 322-318-04 RAP
22-504-05	Invalid original size detected. It will be treated as the next largest standard size.	Invalid mixed size original pair detected	Make sure the originals are not creased or folded If the problem persists, perform the 305A RAP

Table 16 22-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
22-504-16	Auto configuration is disabled.	Non customer mode. Auto configuration is disabled. Wait for machine to exit Diagnostics mode. The machine is unavailable	Enter customer mode. Enter dC131 Read/Write and check that NVM ID 616-014 = 4
22-505-00	Remove documents from the Document Feeder Input Tray or close the Document Feeder.	Documents sensed in the SPDH tray during IIT standby and document handler cover is open.	To scan from the document glass, remove documents in the document feeder input tray. To use the document feeder to scan your documents, lower the document feeder.
22-505-17	Machine is in a non-customer mode.	Machine is in a non-customer mode	Enter customer mode Enter dC131 Read/Write and check that NVM ID 616-014 = 4
22-506-17	Auto configuration is disabled.	Machine is in a non-customer mode	Enter customer mode Enter dC131 Read/Write and check that NVM ID 616-014 = 4
22-507-05	The document size was different than expected. The job has been deleted.	Document is larger than expected	Try one of the following: Select mixed size originals and reload into the document feeder or make sure the originals are not creased or folded and retry from the document glass. If the problem persists, perform the 305A RAP
22-508-04	Scanning will be delayed.	Scan start up delayed whilst awaiting resources	No user intervention is required. Job will begin when system is ready. If the problem persists, perform the 322-330-06 RAP
22-511-04	Paper required for the current job is not available.	Media required for current marking job is not loaded	Load the correct paper to complete the held job or cancel the held job. Other machine services are unaffected
22-512-04	Auto Paper Select is not available.	All trays direct select only	System administrator intervention is required to enable at least one tray for auto select. Printing and copying can continue without auto select, other machine services are unaffected
22-513-04	One or more queued jobs need resources.	One or more queued jobs in the system are being held due to lack of resources	Add paper to the tray being used to clear queued job. Jobs will be held until resources become available. Other machine services are unaffected

Table 16 22-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
22-515-04	One or more queued jobs need resources.	One or more queued jobs in the system is being held.	Add paper to the tray being used to clear queued job.
22-557-00	Configuration Parameter error.	Serial number sync failure, power on failed	Switch the machine off then on, GP 14. Go to dC132, check the serial number is correct. Enter dC131 NVM ID 616-003, check the machine configuration. If the problem persists, perform the 322-350-01, 322-350-02 RAP, 322-351-01 to 322-351-03 RAP, 322-352-00 to 322-353-01 RAP
22-559-00	Inserted SIM is incompatible. Replace with a compatible SIM.	SIM card serial number does not match machine serial number.	Perform the 303-405-00, 303-406-00 RAP
22-563-00	System Error. Power Off then On and Notify System Administrator.	Incomplete system information	Switch the machine off then on, GP 14. All machine services are disabled
22-566-00	The Fax Service cannot Register. Notify your System Administrator.	Fax service cannot register	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Other machine services are unaffected. If the problem persists, perform the 322-371-00, 322-372-00 RAP
22-567-00	The Fax Service cannot Un-Register. Notify your System Administrator.	Fax service cannot unregister	Switch the machine off then on, GP 14. All machine services are disabled. If the problem persists, perform the 322-371-00, 322-372-00 RAP
22-568-00	-	Status requiring POPO detected & auto-reset count less than 2.	The system will try to power off then on twice before asking for assistance
22-572-00	SIM Insertion Required. Notify System Administrator.	Speed not set on IOT. Either the machine has not yet received a SIM, or the settings have been corrupted	Perform the 303-405-00, 303-406-00 RAP
22-580-00	Register for your Supplies Plan.	Service plan registration alert	Perform the 322-360-00 RAP

Table 16 22-5XX-XX Status codes

Status Codes	UI Message	Reason for Message	Reference / Action
22-581-00	Enter an Activation Code for print services to become available.	Service plan is undetermined.	Perform the 322-360-00 RAP
22-582-00	Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	Service plan registration warning	Enter the registration code.
22-583-00	Contact System administrator to enter activation code.	Service plan registration expiration warning	Enter the registration code.
22-584-00	Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	Service plan registration expired	Enter the registration code.
22-585-00	The device is not available	Recovery mechanism has restored a lost parameter	Switch the machine off, then on, GP 14.

Table 17 7X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
70-312-00	Trays 1 and 2 are not available. Notify your System Administrator.	Communications failure for trays 1 to 2	Switch the machine off then on, GP 14. If the problem persists, perform the 341-350-00, 341-351-00, 341-354-00 RAP
70-313-00	Paper Tray communication fault. Please call for assistance.	Communications failure for trays 1 to 2	Copying and printing are not available. Perform the 341-350-00, 341-351-00, 341-354-00 RAP
71-535-00	Tray 1 is nearly empty. Add paper.	Tray 1 media low	Add media. Copying and printing can continue from other trays. Refer to 371A RAP

Table 17 7X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
71-536-00	Tray 1 lifting.	Tray 1 lifting	No service action required. Print and copy services can continue from other rays if the correct media is available
72-535-00	Tray 2 is nearly empty. Add paper.	Tray 2 media low	Add media. Copying and printing can continue from other trays. Refer to 371A RAP
72-536-00	Tray 2 lifting.	Tray 2 lifting	No service action required. Print and copy services can continue from other trays if the correct media is available
73-535-00	Tray 3 is nearly empty. Add paper.	Tray 3 media low	Add media. Print and copy services can continue from other trays if the correct media is available
73-536-00	Tray 3 lifting.	Tray 3 lifting	Print and copy services can continue from other trays if the correct media is available
74-535-00	Tray 4 is nearly empty. Add paper.	Tray 4 media low	Add media. Print and copy services can continue from other trays if the correct media is available
74-536-00	Tray 4 lifting.	Tray 4 lifting	Print and copy services can continue from other trays if the correct media is available
75-110-00	Jam in Tray 6 docking area.	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
75-110-01	Jam in Tray 6 docking area.	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
75-305-00	Tray 6 is undocked.	Tray 6 is undocked	Re-dock the bypass tray to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
75-305-01	Tray 6 is undocked.	Tray 6 is undocked	Re-dock the bypass tray to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
75-537-00	Tray 6 lowering.	Tray 6 lowering	No action required. Print and copy services can continue from other trays if the correct media is available
75-538-00	Tray 6 lowered.	Tray 6 lowering	No action required. Print and copy services can continue from other trays if the correct media is available

Table 17 7X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
76-110-00	Jam in Tray 6 docking area.	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
76-110-01	Jam in Tray 6 docking area.	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
76-305-00	Tray 6 is undocked	Tray 6 is undocked	Re-dock tray 6 to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
76-305-01	Tray 6 is undocked	Tray 6 is undocked	Re-dock tray 6 to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
76-525-00	-	Tray 6 overloaded	Check that the paper guides are set correctly for the size of paper. Refer to ADJ 70.2.
76-535-00	Tray 6 is nearly empty.	Tray 6 media low.	Add media. Print and copy services can continue from other trays if the correct media is available. If the problem persists, perform the 376A RAP.
76-536-00	Tray 6 lifting.	Tray 6 is lifting	No action required. Print and copy services can continue from other trays if the correct media is available

Table 18 8X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
82-001-00	Paper Jam in Areas 3 and 4.	Sheet over either the IOT exit sensor, fuser exit switch or inverter sensor	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP
82-001-09	Paper Jam in Areas 3 and 4.	Sheet over the IOT exit sensor, fuser exit switch and inverter sensor	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP

Table 18 8X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
82-002-00	Paper Jam in Area 2.	IME jam at zone 2	Clear the paper jam. If the problem persists, perform the 383-160-00, 383-161-00 RAP
82-002-09	Paper Jam in Area 2	Machine has shut down for a jam at zone 2	Clear the paper jam. If the problem persists, perform the 383-160-00, 383-161-00 RAP
82-003-00	Paper Jam in Areas 3 and 4	Lead edge late to either the IOT exit sensor, fuser exit switch or inverter sensor	As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP
82-004-00	Paper Jam Area 2	Lead edge late to the duplex sensor	Perform the 383-160-00, 383-161-00 RAP
82-005-00	Paper jam in print engine	Lead edge late to either the IOT exit sensor, fuser exit switch, inverter sensor or duplex sensor	As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
82-006-00	Paper jam in print engine	IME jam	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
82-007-00	Paper jam in print engine	IME jam	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
82-008-00	Paper Jam in Area 3A.	Jam in IOT area 3A.	Perform the 310-120-00, 310-121-00, 310-126-00 RAP.
82-100-00	Paper Jam in Area 1.	IME jam at zone 1A (middle vertical) (bypass tray not installed)	Open middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP
82-100-01	Paper Jam in Area 1.	IME jam at zone 1A (middle vertical) (A4 PFP installed)	Slide tray 6 away from the machine, open the middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP

Table 18 8X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
82-100-02	Paper Jam in Area 1.	Jam at zone 1A (middle vertical) (A3 PFP installed)	Slide tray 6 away from the machine, open the middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP

Table 19 Chain 9X-5XX-XX Status codes

Status Code	UI Message	Reason for Message	Reference / Action
91-657-00	Xerographic Module (R2) manual maintenance required.	New toner cartridge detected. manually clean the corotron.	Clean the corotron.
91-658-00	Cleaning request accepted. Please wait.	Xerographic Module Cleaning routines started.	No service action.
91-660-00	Xerographic Module Cleaning in progress. Please wait.	Xerographic Module Cleaning routines in progress.	No service action.
92-536-00	Tray 6 is not available. Notify your System Administrator.	Tray 6 communication error	Perform the 341-366-00 RAP.
92-573-00	Please wait... Printer is warming up.	Machine is warming up.	No service action.
92-574-00	Please wait... Adjustments are in progress.	Post jam clearance initialization	No service action.
94-341-00	Xerographic Module Cleaning Failure. Contact your System Administrator.	Scorotron cleaning has failed.	Perform the 394-341-00, 394-342-00 RAP.
95-100-00	Software Upgrade Failure.	Software upgrade failure.	Check the fault history, dC122 for Chain 95 faults. Perform the relevant RAPs.

OF4b Status Messages in Alphabetical Order

Status Message Tables

The status message tables contain all the messages to which a status code can be attributed.

- Table 1 Status Messages 1 to 9 and A to F.
- Table 2 Status Messages G to N.
- Table 3 Status Messages O to R.
- Table 4 Status Messages S to X.

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
-	01-550-00	NC status code - system is in power save mode	Printing will start when a job is received or a user initiates a job at the machine
-	01-551-00	ESS status code - system is in sleep mode	Printing will start when a job is received or a user initiates a job at the machine
-	03-520-00	CCM to UI communication not established in 30 sec.	Switch the machine off then on, GP 14. If the fault persists, perform 303-331-00, 303-332-00 RAP.
-	03-521-00	CCM to UI communication are lost	Switch the machine off then on, GP 14. If the fault persists, perform 303-331-00, 303-332-00 RAP.
-	03-535-00	The machine is in non intrusive diagnostic mode	Diagnostics are active. No user intervention is required; please wait. The machine is available.
-	03-536-00	The machine has entered intrusive diagnostic mode	The machine is running diagnostics. No user intervention is required, the machine is not available for safety reasons, but will be available when testing is completed. All machine services are disabled.
-	05-310-00	Document detected in the document feeder.	Perform the 305C RAP
-	05-501-00	The document feeder is raised.	Close the SPDH.
-	05-525-00	The document feeder tray is empty	Perform the 305B RAP
-	05-535-00	Document feeder tray loaded	-
-	09-509-00	Waste toner bottle is nearly full	Perform 390B RAP
-	09-598-00		

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
-	09-598-00	Reorder Xerographic unit but do not replace yet.	Reorder a xerographic module PL 90.20 Item 2.
-	09-676-00	Reorder Toner Cartridge (R1) but DO NOT replace until prompted.	Reorder a toner cartridge, PL 90.17 Item 4 (45-55 ppm) of PL 90.15 Item 4 (65-90 ppm
-	09-679-00	Ozone filter replacment confirmation	Confirm that a new ozone filter has been installed.
-	10-525-00	The low supply warning “Reorder Fuser Module (R3)” has been cleared.	Reorder a fuser but do not replace.
-	12-410-00	PTU selected whilst marking job is running	Pressing Pause to Unload button will cancel this request.
-	16-556-00	There is an authentication problem between the 802.1x device and the 802.1x server	User intervention is required to check the settings on the 802.1x device to ensure they match the 802.1x server, then switch the machine off then on, GP 14.
-	17-570-00	Communication with NNTP server failed	User intervention is required to verify network time protocol server settings, operability and machine time. Machine services are unaffected
-	22-568-00	Status requiring POPO detected & auto-reset count less than 2.	The system will try to power off then on twice before asking for assistance
-	76-525-00	Tray 6 overloaded	Check that the paper guides are set correctly for the size of paper. Refer to ADJ 70.2.
-	09-681-00	Toner cartridge replacement confirmation.	Confirm that a new toner cartridge has been installed.
24 V supply failure	03-500-00	+24V supply failure	Perform the 301G +24V Distribution RAP.
A Fax Service error has occurred. Power Off then On	03-547-00	Basic Fax not detected or confirmed	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
A Fax service error has occurred. Power Off then On	03-550-00	Fax card is unavailable	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
A Fax service error has occurred. Power Off then On	03-551-00	The Fax service is unavailable	Switch the machine off then on, GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
Accounting out of memory. Notify your System Administrator.	16-551-00	Network controller - accounting log is full or a hard disk full state exists	Accounting administrator needs to retrieve accounting data log from the system
Additional memory is required to support Scan to File. Notify your System Administrator.	16-553-00	Network controller - not enough physical memory is configured on the platform to support scan to file	Switch the machine off then on, GP 14. Hardware must be added or replaced.
All incomplete jobs have been deleted.	19-514-00	Video job integrity fault detected	Video job integrity error; one or more jobs were deleted. No user intervention is required; the system has recovered. Printing and other machine services can continue. If the problem persists, perform the 319-409-00 RAP
All incomplete jobs have been deleted.	22-503-04	System error. Jobs have been lost and must be resubmitted	No user intervention is required. Machine is temporarily unavailable
Auto configuration is disabled.	22-504-16	Non customer mode. Auto configuration is disabled. Wait for machine to exit Diagnostics mode. The machine is unavailable	Enter customer mode. Enter dC131 Read/Write and check that NVM ID 616-014 = 4
Auto configuration is disabled.	22-506-17	Machine is in a non-customer mode	Enter customer mode Enter dC131 Read/Write and check that NVM ID 616-014 = 4
Auto Paper Select is not available.	22-512-04	All trays direct select only	System administrator intervention is required to enable at least one tray for auto select. Printing and copying can continue without auto select, other machine services are unaffected
Autonet functions are not available. Notify your System Administrator.	16-508-00	Autonet is not available	Switch the machine off then on, GP 14. Printing can continue if other network protocols are used

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Booklet Maker Staple Cartridges (R8) are nearly empty. Make sure you have replacements.	12-642-00	Booklet Maker Staple Cartridges (R8) are nearly empty. Make sure you have replacements.	The booklet maker staple cartridge supplies are low. Re-order staple cartridge, PL 11.168 Item 8 for the HVF BM or PL 11.78 Item 6 for the LVF BM
Booklet Making and Tri-folding are unavailable. Check for obstructions.	12-943-00	Booklet making or tri-folding capability degraded	Check for obstructions in the HVF BM and the tri-folder. Check that the HVF BM and tri-folder interlocks are made. Switch the machine off then on, GP 14. Check the current fault codes list for HVF BM or tri-folder faults and perform the appropriate RAP
Booklet Making is unavailable. Check for obstructions in the booklet maker.	12-913-00	Back stop motor fails to move or not home	Clear the paper jam. Switch the machine off then on, GP 14. If the fault persists, perform the 311-065-00-171, 311-383-00-171 RAP
Booklet Stapler not available. Power Off then On and Notify System Administrator.	12-720-00	Failure of any BM or TF function. The booklet maker and tri-folder are currently unavailable	Check for obstructions in the HVF BM and the tri-folder. Check that the HVF BM and tri-folder interlocks are made. Switch the machine off then on, GP 14. Check the current fault codes list. Perform the appropriate RAP
Booklet Stapler not available. Power Off then On and Notify System Administrator.	12-726-00	Failure of the booklet maker stapling functions	For the HVF, perform 311-063-00-171, 311-411-00-171 RAP for staple unit 1, and 311-403-00-171, 311-413-00-171, 311-414-00-171 RAP for staple unit 2. For the LVF, perform the 311-063-00-150, 311-488-00-150, 311-490-00-150, 311-492-00-150 RAP.
Check the settings for tray 1	01-540-01	Paper removed or added to tray 1	Confirm the tray 1 settings.
Check the settings for tray 2	01-540-02	Paper removed or added to tray 2	Confirm the tray 2 settings.
Check the settings for tray 5	01-540-05	Paper removed or added to the bypass tray	Confirm the bypass tray settings
Check the settings for tray 6	01-540-06	Paper removed or added to tray 6	Confirm the tray 6 settings
Check the settings for tray 7	01-540-07	Paper removed or added to the inserter	Confirm the inserter tray settings

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Cleaning request accepted. Please wait.	91-658-00	Xerographic Module Cleaning routines started.	No service action.
Close finisher inserter left side door	12-609-00	The inserter left cover is open	Close the inserter left cover. If the fault persists, perform the 311-306-00-171, 311-309-00-171 RAP
Close finisher top cover	12-602-00	The 2K LCSS finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP
Close finisher top cover	12-602-03	The LVF finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP
Close finisher top cover	12-602-04	The 1K LCSS finisher top cover is open	Close the finisher top cover. If the fault persists, perform the 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP
Close finisher top cover	12-606-00	The inserter top cover is open	Close the inserter top cover. If the fault persists, perform the 311-306-00-171, 311-309-00-171 RAP
Close the finisher folder front door	12-608-00	The tri-folder unit front door is open (HVF with tri-folder)	Close the tri-folder front door. If the fault persists, perform the 311-307-00-171, 311-308-00-171 RAP
Close the finisher folder top cover	12-607-00	The tri-folder top cover is open (HVF with tri-folder)	Close the tri-folder top cover. If the fault persists, perform the 311-307-00-171, 311-308-00-171 RAP
Close the finisher top tray	12-601-01	HVF finisher top cover is open (cover over output tray)	Close the top cover. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
Configuration mismatch.	19-550-00	The single board controller cannot access the EPC memory or the image disk	Switch the machine off then on, GP 14. Install a new memory module, PL 3.22 Item 11. Install a new hard disk drive, PL 3.22 Item 2. Install a new single board control PWB, PL 3.22 Item 3

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Configuration Parameter error.	22-557-00	Serial number sync failure, power on failed	Switch the machine off then on, GP 14. Go to dC132, check the serial number is correct. Enter dC131 NVM ID 616-003, check machine configuration. If the problem persists, perform the 322-350-01, 322-350-02 RAP, 322-351-01 to 322-351-03 RAP, 322-352-00 to 322-353-01 RAP
Contact System administrator to enter activation code.	22-583-00	Service plan registration expiration warning	Enter the registration code.
DHCPv6 services are not available. Notify your System Administrator.	17-512-00	DHCPv6 Failure status	Switch the machine off then on, GP 14. Printing can continue with other submission methods.
Duplicate IPv4 address detected. Reconfigure with a unique address.	17-513-00	Duplicate IPv4 address detected.	Reconfigure with a unique address. Switch the machine off then on, GP 14.
Duplicate IPv6 address detected. Reconfigure with a unique address.	17-510-00	Duplicate IPv6 address detected	Reconfigure with a unique address. Switch the machine off then on, GP 14. Copy and Fax services (if installed) can continue
E-mail Service cannot Register. Power Off then On and Notify System Administrator.	17-554-00	Scan to E-mail service cannot register.	Switch the machine off then on, GP 14. Scan to E-mail is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
Empty the Hole Punch Waste Container.	12-649-00	The hole punch chad bin is full and needs emptying.	Hole punch waste container is full, jobs requesting hole punching will be held. Empty the chad bin
Empty the Hole Punch Waste Container.	12-649-01	The hole punch chad bin is full and needs emptying.	Hole punch waste container is full, jobs requesting hole punching will be held. Empty the chad bin
Ensure network cables are properly connected.	16-544-00	An Ethernet cable is unplugged	Ensure cables are properly connected

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Ensure the USB Wireless Network Interface is properly connected.	16-540-00	USB wireless network not connected	Perform the 316D RAP
Enter an Activation Code for print services to become available.	22-581-00	Service plan is undetermined.	Perform the 322-360-00 RAP
Enter your access code or the current job may be deleted.	03-559-02	Walk up code entered FDI. Not defined	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
Extensible Services are not responding. Power machine Off then On.	17-565-00	EIP service not responding	Switch the machine off then on, GP 14. Machine services are unaffected
Extensible Services not available Power Off then On and Notify System Administrator	02-521-00	XEIP browser is dead.	Perform the 302-321-00 RAP
Fax job could not be sent at this time, please try again.	20-545-00	A Fax job could not be sent	Fax job could not be sent, re-try. Printing and other machine services are available
Fax job limit has been reached. Power Off then On and Notify System Administrator.	20-565-00	All jobs IDs allocated cannot create any more	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled
Fax line 1 is unavailable. Call for assistance.	20-595-00	Fax service Error. Fax line 1 is unavailable	Fax line 1 is unavailable. Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Fax line 1 is unavailable. Check line connection Or notify your System Administrator.	20-562-00	No communication on Fax line 1	User intervention is required to check the external phone line connection. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP
Fax line 2 is unavailable. Call for assistance.	20-572-00	Fax service error. Fax line 2 is unavailable	Switch the machine off then on, GP 14. Fax and LAN Fax are degraded. Printing and other machine services are unaffected. If the problem persists, perform the 320-327-00, 320-332-00, 320-340-00 RAP
Fax line 2 is unavailable. Check line connection Or notify your System Administrator.	20-563-00	No communication on Fax line 2	User intervention is required to check the external phone line connection. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-327-00, 320-332-00, 320-340-00 RAP
Fax line 2 is unavailable. Notify your System Administrator.	03-548-00	Extended Fax not detected or confirmed	Check the Fax line connection. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
Fax line 2 is unavailable. Notify your System Administrator.	20-550-00	Extended Fax card failure detected	Switch the machine off then on, GP 14. Fax service can continue from line 1. Printing and other machine services are available
Fax memory error. Power Off then On and Notify System Administrator	03-549-00	Fax POST failure status	Switch the machine off, then on GP 14. If the fault persists, perform the 303-401-00, 303-403-00 RAP.
Fax memory is low. Contact your System Administrator.	20-546-00	Not enough memory to use Fax service	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-323-00, 320-324-00 RAP

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Fax memory is low. Contact your System Administrator.	20-547-00	Fax memory is low	User intervention is required to delete unnecessary mailbox files or Fax jobs stored for polling. FAX and LAN Fax services are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-323-00, 320-324-00 RAP
Fax Service is unavailable. Turn machine off, then on.	20-580-00	NVM values supplied by the Fax are invalid. Fax NVM data error	No service action required. Fax and LAN Fax are disabled. Printing and other machine services are unaffected
Fax system error. Power Off then On and Notify System Administrator.	20-556-00	Fax service error. Reset Fax service	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP
Fax system error. Power Off then On and Notify System Administrator.	20-558-00	Fax memory error	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-322-00 RAP
Fax system error. Power Off then On and Notify System Administrator.	20-559-00	Fax service error	Fax and LAN Fax are disabled. Switch the machine off then on, GP 14. Printing and other machine services are unaffected. If the problem persists, perform the 320-320-00 RAP
Fax system error. Power Off then On and Notify System Administrator.	20-570-00	Fax service error	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected
Fax system error. Power Off then On and Notify System Administrator.	20-571-00	Fax service error	Fax line 1 is unavailable. Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Printing and other machine services are unaffected. If the problem persists, perform the 320-331-00, 320-338-00, 320-339-00, 320-341-00, 320-345-00 RAP

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Finisher Communications Error. Check Cabling. Power Off then On.	12-762-00	Communication failure between the machine and finisher	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF.
Finisher Communications Error. Check Cabling. Power Off then On.	12-764-00	The machine cannot detect a finisher plugged in (including catch tray)	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF
Finisher is not docked. Re-dock finisher now	12-600-00	The finisher unit (2K LCSS) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP
Finisher is not docked. Re-dock finisher now	12-600-01	The finisher unit (HVF without tri-folder) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
Finisher is not docked. Re-dock finisher now	12-600-02	The finisher unit (HVF with tri-folder) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
Finisher is not docked. Re-dock finisher now	12-600-03	The finisher unit (LVB BM) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP
Finisher is not docked. Re-dock finisher now	12-600-04	The finisher unit (1K LCSS) is not correctly docked. Printing has stopped	Dock the output module. If the fault persists, perform the 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP
Finisher Main Tray is full.	12-730-00	The stacker tray is full (HVF, LVF, 2K LCSS and 1K LCSS)	The middle output bin is full. This output bin needs to be unloaded. Printing to this output bin is disabled. If the fault persists, perform the 311-460-00-171 to 311-462-00-171 RAP for the HVF, 311-030-00-150, 311-334-00-150, 311-335-00-150, 311-336-00-150 RAP for the LVF, 311-030-00-110, 311-334-00-110, 311-335-00-110, 311-336-00-110 RAP for the 2K LCSS or 311-030-00-120 RAP for the 1K LCSS

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Finisher Main Tray is full.	12-730-01	The stacker tray is full (HVF)	The middle output bin is full. This output bin needs to be unloaded. Printing to this output bin is disabled. If the fault persists, perform the 311-460-00-171 to 311-462-00-171 RAP
Finisher Main Tray is nearly full.	12-734-00	Stacker tray bin is nearly full	No action necessary
Finisher Main Tray is out of service. Power Off then On and Notify System Administrator.	12-665-00	Bin 1 out of service status (2K LCSS, 1K LCSS and LVF BM)	Perform the 311-140-00-110, 311-142-00-110 for the 2K LCSS, 311-140-00-120, 311-142-00-120 for the 1K LCSS or 311-140-00-150, 311-142-00-150 RAP for the LVF BM
Finisher Main Tray out of service. Check for obstructions in the Main Tray.	12-902-00	The finisher is in degraded mode, stacker tray is out of service.	Switch the machine off then on, GP 14. Check for obstructions in the tray. If the fault persists, perform311-320-00-110, 311-322-00-110 RAP for the 2K LCSS, 311-320-00-120, 311-322-00-120 RAP for the 1K LCSS or 311-320-00-150, 311-322-00-150 for the LVF.
Finisher Main Tray out of service. Check for obstructions in the Main Tray.	12-906-00	The finisher main tray is out of service, tray home fault	Switch the machine off then on, GP 14. Check for obstructions in the tray. If the fault persists, perform311-320-00-110, 311-322-00-110 RAP for the 2K LCSS, 311-320-00-120, 311-322-00-120 RAP for the 1K LCSS or 311-320-00-150, 311-322-00-150 for the LVF.
Finisher Top Tray is full. Empty Top Tray.	12-692-00	The finisher top tray is full	Empty the top tray
Finisher Top Tray is nearly full.	12-729-00	The finisher top output bin is nearly full	The top output bin is nearly full. This output bin may need to be unloaded soon. Printing can continue.
Fuser control software failure	10-555-00	Fuser control software failure	Perform the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.
Fuser over temp / short circuit failure	10-350-00	Fuser over temperature or short circuit.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP

Table 1 Status messages A to F

UI Message	Status Code	Reason for Message	Reference / Action
Fuser temperature control failure.	10-540-00	Fuser temperature control failure.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP and the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Hardware detected Fuser failure.	10-550-00	Fuser warmup failure.	Perform the 310-315-00, 310-320-00, 310-321-00, 310-323-00, 310-340-00, 310-350-00, 310-360-00, 310-365-00, 310-380-00 RAP
Hole punch not detected (Missing). Please insert the hole punch.	12-640-00	The finisher punch unit is missing or incorrectly installed.	Make sure that the punch unit is correctly installed. If the fault persists, perform the 311-043-00-110, 311-350-00-110 for the 2K LCSS, 311-044-00-171 to 311-047-00-171 for the HVF or 311-043-00-150, 311-046-00-150 RAP for the LVF BM
Hole Punching is unavailable. Check for obstructions in the hole puncher.	12-908-00	The finisher hole punch head motor has failed	Clear the paper jam. Switch the machine off then on, GP 14. If the fault persists, perform the 311-043-00-110, 311-350-00-110 RAP for the 2K LCSS, 311-044-00-171 to 311-047-00-171 RAP for the HVF or 311-043-00-150, 311-046-00-150 RAP for the LVF
Hole punching not available. Power Off then On and Notify System Administrator	12-579-00	Hole punching is not available	Check that the hole punch unit is correctly installed. Switch the machine off then on, GP 14. If the fault persists, perform the 311-043-00-150, 311-046-00-150 RAP for the LVF, 311N-171 for the HVF or 311-043-00-110, 311-350-00-110 for the 2K LCSS

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Image Disk is offline. Job(s) may take longer than normal. Notify System Administrator.	19-511-00	Image disk unavailable. Performance is degraded. Service is required	The system is unable to read from the image disk. Jobs may take longer than normal. Perform the 319-300-00 to 319-310-00 RAP
Image Disk offline. Power Off then On and Notify System Administrator.	19-512-00	The image disk cannot read or write and must be serviced. Power off/power on will temporarily alleviate the problem.	The system is unable to read from the image disk. Printing has stopped. Perform the 319-300-00 to 319-310-00 RAP
Image Overwrite is in progress... the machine is Offline.	17-590-00	Image overwrite (ODIO) is in progress	No service action required, please wait for the overwrite to finish
Image Rotation is not available. Power off then on and notify system administrator	03-564-00	Image rotation is not available.	Switch the machine off then on, GP 14.
Immediate Job Overwrite Failed. Perform an On Demand Overwrite immediately.	16-535-00	Immediate job overwrite failed	Immediate job overwrite failed. Administrator intervention is required to perform an on demand overwrite immediately
Immediate Job Overwrite Failed. Perform an On Demand Overwrite immediately.	19-506-00	Immediate job overwrite failed	Administrator intervention is required to perform an on demand image overwrite immediately. Printing can continue. Other machine services are unaffected
Incompatible Fax software detected (upgrade required)	03-546-00	Incompatible Fax software detected at power on	The embedded Fax software version is incompatible with the system. A software upgrade should be performed, GP 4. Refer to 303-417-00 RAP.
Incompatible Finisher. Contact your System Administrator.	12-765-00	The machine interface indicates that the finisher is incompatible / unknown.	Switch the machine off then on, GP 14. Check the finisher communication harness. If the fault persists, perform 311E-110 RAP for the 2K LCSS, 311D-120 for the 1K LCSS, 311B-171 RAP for the HVF or 311E-150 RAP for the LVF.

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Incompatible Fuser Module. Contact your system Administrator.	10-537-00	Fuser module is not compatible with the device.	Check the market region of the machine dC134, Install the correct fuser, PL 10.8 Item 1 (45-55 ppm) or PL 10.10 Item 1 (65-90 ppm)
Incompatible Xerographic Module. Contact your System Administrator.	09-677-00	The Xerographic Module in the machine is metered. The machine is sold. This is an incompatible combination that results in revenue loss.	Install correct xerographic module or modify setting. Check the market region of the machine, dC134,
Incomplete system information. Power Off then On and Notify System Administrator.	16-578-00	The network controller ESS fault log service process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP
Incomplete system information. Power Off then On and Notify System Administrator.	16-580-00	The network controller ESS configuration utility process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
Incomplete system information. Power Off then On and Notify System Administrator.	16-583-00	The network controller ESS counters utility process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue
Incomplete system information. Power Off then On and Notify System Administrator.	16-585-00	The network controller ESS configuration synchronization process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
Incomplete system information. Power Off then On and Notify System Administrator.	16-586-00	The network controller agent process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
Inserted SIM is incompatible. Replace with a compatible SIM.	22-559-00	SIM card serial number does not match machine serial number.	Perform the 303-405-00, 303-406-00 RAP

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Insufficient memory for Fax job. Notify your System Administrator.	16-555-00	Network controller - not enough physical memory is configured on the platform to support LAN Fax	Additional memory required to support Fax. The Fax service is not available
Internet Fax Service cannot Register. Power Off then On and Notify System Administrator.	17-553-00	Internet Fax service cannot register	Switch the machine off then on, GP 14. Internet Fax is disabled, print and other machine services are unaffected. If the problem persists, perform 316-950-19 to 316-959-19 RAP
Invalid original size detected. It will be treated as the next largest standard size.	22-504-05	Invalid mixed size original pair detected	Make sure the originals are not creased or folded If the problem persists, perform the 305A RAP
IOT cycled in without printing	03-576-00	IOT cycled in without printing. Fault 03-395 raised	Perform 341-395-00, 341-396-00, 341-852-00 RAP
Jam in Tray 6 docking area.	75-110-00	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
Jam in Tray 6 docking area.	75-110-01	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
Jam in Tray 6 docking area.	76-110-00	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
Jam in Tray 6 docking area.	76-110-01	Jam in tray 6 docking area	Clear the misfeed. Copying and printing are not available. Refer to 376-101-00 RAP
Job queue error. Power Off then On and Notify System Administrator.	16-574-00	ESS queue utility has failed. Only a partial list is available for display at this time	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
Job Status not available. Power Off then On and Notify System Administrator.	16-579-00	The network controller ESS completed job log service has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP
Lan Fax Service error. Power Off then On and Notify System Administrator.	16-595-00	The network controller LAN Fax service has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-790-09 to 316-799-47 RAP

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Laser on without printing fault.	03-560-00	Laser on without printing.	Perform the 361-350-00 ROS Laser Not Under Control RAP
Machine configuration locked.	03-601-00	Displayed when the machine speed is invalid.	Switch the machine off then on, GP 14. If the fault persists, perform the 303-405-00, 303-406-00 RAP
Machine entering SW upgrade mode. ALL jobs will be cancelled.	16-550-00	Machine entering SW upgrade mode - all jobs will be canceled.	The machine entered a software upgrade mode (all jobs will be deleted). No user intervention is required. Machine services are unavailable until the software upgrade process has completed.
Machine is in a non-customer mode.	22-505-17	Machine is in a non-customer mode	Enter customer mode Enter dC131 Read/Write and check that NVM ID 616-014 = 4
Machine power on failed. Power Off then On and Notify System Administrator	02-590-00	Configurable services are not stable at power on	Switch the machine off then on, GP 14. If the fault persists, perform the 302-390-00 RAP
Main motor not controlled	03-575-00	Main motor not being controlled.	Perform the 341-397-00 RAP
Misfeed in the Document Feeder.	05-326-00	Documents are in the SPDH at power on or exit from power save	Remove all documents from the SPDH. If the fault persists, perform the 305-960-00 RAP.
Misfeed in the Document Feeder	05-330-00	Jam in document Feeder, feed sensor covered.	Perform the 305-962-00 RAP
Misfeed in the Document Feeder	05-335-00	Jam in document Feeder, TAR sensor covered.	Perform the 305-335-00, 305-336-00 RAP
Misfeed in the Document Feeder	05-340-00	Jam in document Feeder, PreScan sensor covered.	Perform the 305-340-00, 305-341-00 RAP
Misfeed in the Document Feeder	05-343-00	Jam in document Feeder, MidScan sensor covered.	Perform the 305-342-00, 305-343-00 RAP
Misfeed in the Document Feeder	05-344-00	Jam in document Feeder, Calibration Home sensor covered.	Perform the 305-959-00 RAP
Misfeed in the Document Feeder	05-361-00	Jam in document Feeder, feed sensor and takeaway sensor covered.	Open the top cover, remove any documents. As necessary, perform the 305-962-00 and 305-335-00, 305-336-00 RAPs.

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Misfeed in the Document Feeder	05-362-00	Jam in document Feeder, feed, take-away, reg or side 2 reg sensor covered.	Open the top cover, remove any documents. As necessary, perform the 305-962-00, 305-335-00, 305-336-00, 305-340-00, 305-341-00 or 305-342-00, 305-343-00 RAP.
Misfeed in the Document Feeder	05-363-00	Jam in document Feeder, reg sensor and side 2 reg sensor covered.	Remove any documents. As necessary, perform the 305-340-00, 305-341-00 and 305-342-00, 305-343-00 RAP.
Misfeed in Tray 1	07-501-00	Misfeed in tray 1	Clear paper jam in Tray 1. If fault persists perform 381-101-00, 381-111-00 RAP
Misfeed in Tray 2	07-502-00	Misfeed in tray 2	Clear paper jam in Tray 2. If fault persists perform 381-102-00, 381-112-00 RAP
Misfeed in Tray 3	07-503-00	Misfeed in tray 3	Clear paper jam in Tray 3. If fault persists perform 381-103-00, 381-113-00 RAP
Misfeed in Tray 4	07-504-00	Misfeed in tray 4	Clear paper jam in Tray 4. If fault persists perform 381-104-00, 381-114-00 RAP
Misfeed in Tray 5 (Bypass)	07-505-00	Misfeed in bypass tray	Clear paper jam in bypass tray. If fault persists perform 375A RAP
Misfeed in Tray 6	07-506-00	Misfeed in tray 6	Clear paper jam in Tray 6. If fault persists perform 381-115-00, 381-117-00 RAP
Misfeed in Tray 6	07-506-01	Misfeed in tray 6	Clear paper jam in Tray 6. If fault persists perform 381-115-00, 381-117-00 RAP
Misfeed in Tray 7	07-507-00	Misfeed in tray 7	Clear paper jam in Tray 7. If fault persists perform 311-191-00-171, 311-193-00-171, 311-194-00-171, 311-196-00-171 RAP
Network Connectivity Configuration Server not available. Notify your System Administrator.	16-590-00	The network controller CCS process has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-800-09 to 316-809-47 RAP

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Network Controller error. Some Network Services not available. Notify System Administrator.	16-536-00	The XSA service is unavailable. Network controller error	Switch the machine off then on, GP 14.
Network Controller not available. Power Off then On and Notify System Administrator	03-518-00	The network controller is not available.	Switch the machine off then on, GP 14. If the fault remains, reinstall software, GP 4. If the fault persists, perform the 303-331-00, 303-332-00 RAP
Network Printing disabled. Notify your System Administrator.	16-571-00	Network controller - print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
Network Printing disabled. Notify your System Administrator.	16-572-00	Network controller - print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
Network Printing disabled. Notify your System Administrator.	16-573-00	Network controller - ESS print service has failed	Switch the machine off then on, GP 14. Printing cannot continue. If the problem persists, perform 316-770-09 to 316-779-95 RAP
Network Services involving a Parallel Port are not available. Notify System Administrator.	16-569-00	Network controller - parallel ports are not available	Switch the machine off then on, GP 14. If the problem persists, perform the 316-761-47 to 316-769-95 RAP
Network Services involving a Serial Port are not available. Notify System Administrator.	16-589-00	The network controller serial port connectivity has failed	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
Network Services involving AppleTalk are not available. Notify your System Administrator.	16-565-00	Apple Talk printing error. Printing can continue using other submission methods	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Network Services involving PostScript are not available. Notify your System Administrator.	16-567-00	Network controller - a PostScript interpreter error has occur, causing the process to fail	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
Network Services involving Scan to E-mail are not available. Notify System Administrator.	16-505-00	Insufficient memory for E-mail	Switch the machine off then on, GP 14. If the problem persists check the network connections
Network Services involving Scan to E-mail are not available. Notify System Administrator.	16-510-00	Scan to E-mail process failed	Switch the machine off then on, GP 14. If the problem persists check network connections
Network Services involving Scan to E-mail are not available. Notify System Administrator.	16-514-00	Post office protocol (POP3) (for inbound IFAX messages) process failed	Switch the machine off then on, GP 14.
Network Services involving Scan to E-mail are not available. Notify System Administrator.	16-517-00	SMTP process failed	Switch the machine off then on, GP 14.
Network Services related to Internet Fax are not available. Notify System Administrator.	16-511-00	Internet Fax process failed	Switch the machine off then on, GP 14. If the problem persists check network connections
Network Services using BOOTP Initialization not available. Notify System Administrator.	16-559-00	Network controller BOOTP initialization failure	Check the BOOTP Server and its network connection. Switch the machine off then on GP 14

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Network Services using DC Platform recovery not available. Notify System Administrator.	16-557-00	Network controller DC platform recovery failed	Switch the machine off then on, GP 14
Network Services using DC Platform recovery not available. Notify System Administrator.	16-558-00	Network controller DC communications failed	Switch the machine off then on, GP 14
Network Services using WS Edge Client are not available. Notify your System Administrator.	16-518-00	Web services edge client interface does not work	Switch the machine off then on, GP 14. If the problem persists check network connections
Network Services using WS Edge Client are not available. Notify your System Administrator.	16-519-00	Web services client controller does not work	Switch the machine off then on, GP 14. If the problem persists check network connections
Network Services using WS Edge Client are not available. Notify your System Administrator.	16-520-00	Web services server controller interface does not work.	Switch the machine off then on, GP 14. If the problem persists check network connections
Network Services with Job Based Accounting not available. Notify your System Administrator.	16-501-00	Job based accounting not enough DC memory. Some Network Controller services are not available	Not enough CCM memory to run the network accounting feature. Switch the machine off then on, GP 14. If the problem persists, perform the 316-930-19 to 316-939-19 RAP

Table 2 Status messages G to N

UI Message	Status Code	Reason for Message	Reference / Action
Network Services with Port 9100 Process are not available. Notify System Administrator.	16-599-00	Raw TCP/IP printing (port 9100) process has failed	Switch the machine off then on, GP 14. Printing can continue with other submission methods. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
Network Services with Scan Compressor are not available. Notify your System Administrator.	16-529-00	The network controller's Scan compressor service process has stopped.	Some network service are not available. The network controller connection is about to be reset
No communications with Xerox SMart eSolutions server. Contact System Administrator.	17-562-00	Registration with edge server fails	User intervention is required to review SMart eSolutions settings. Machine services are unaffected. If the problem persists, perform the 316-891-00 to 316-895-47 RAP
No communications with Xerox SMart eSolutions server. Contact System Administrator.	17-563-00	Communication with edge server fails	User intervention is required to review SMart eSolutions settings. Machine services are unaffected. If the problem persists, perform the 316-891-00 to 316-895-47 RAP
No tray is configured with the required paper size.	22-504-04	No paper tray is configured to run the stock size required for this job	Print and copy services are disabled, other machine services are unaffected Job must be deleted. Paper tray must be configured to match the job. If the problem persists, perform the 322-310-04 to 322-318-04 RAP

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	02-517-00	The CCS is counting down grace prints until a valid authorisation PIN is entered at the UI	User intervention is required to enter a valid activation code. All services are available until all courtesy prints are used.

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	22-582-005	Service plan registration warning	Enter the registration code.
Obtain a Supplies Plan Activation Code from your Xerox equipment supplier.	22-584-00	Service plan registration expired	Enter the registration code.
Obtain a Supplies Plan Activation Code from yours Xerox equipment supplier.	02-518-00	The grace prints period has expired.	User intervention is required to enter a valid activation code. Print services are disabled.
On Demand Overwrite Failed. Perform an On Demand Overwrite immediately.	17-591-00	HDD or FAX On Demand Overwrite Failed.	On Demand Overwrite error. Administrator intervention is required to perform an On Demand Image Overwrite immediately. Printing can continue; other machine services are unaffected.
On Demand Overwrite Failed. Perform an On Demand Overwrite immediately.	19-507-00	HDD or FAX On Demand Overwrite Failed.	On Demand Overwrite error. Administrator intervention is required to perform an On Demand Image Overwrite immediately. Printing can continue; other machine services are unaffected.
One or more queued jobs need resources.	22-513-04	One or more queued jobs in the system are being held due to lack of resources	Add paper to the tray being used to clear queued job. Jobs will be held until resources become available. Other machine services are unaffected
One or more queued jobs need resources.	22-515-04	One or more queued jobs in the system is being held.	Add paper to the tray being used to clear queued job.
Original not fully inserted.	05-571-00	Document not fully inserted in the document feeder.	Remove any sheets from the document feeder to allow the device to initialize. As necessary, perform the 305-940-00, 305-966-00 RAP.

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Output tray off-setting is not available. Power Off then On and Notify System Administrator.	12-701-00	OCT offset has failed.	Perform the 312-301-00 RAP.
Paper Jam in Area 1.	82-100-00	IME jam at zone 1A (middle vertical) (tray 6 not installed)	Open middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP
Paper Jam in Area 1.	82-100-01	IME jam at zone 1A (middle vertical) (A4 PFP installed)	Slide tray 6 away from the machine, open the middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP
Paper Jam in Area 1.	82-100-02	Jam at zone 1A (middle vertical) (A3 PFP installed)	Slide tray 6 away from the machine, open the middle left door, clear the paper jam. If the problem persists, perform the 381-150-00, 381-151-00, 381-190-00 to 381- RAP
Paper Jam in Area 1a.	82-002-00	IME jam at zone 2	Clear the paper jam. If the problem persists, perform the 383-160-00, 383-161-00 RAP
Paper Jam in Area 2.	82-002-09	Machine has shut down for a jam at zone 2	Clear the paper jam. If the problem persists, perform the 383-160-00, 383-161-00 RAP
Paper Jam in Area 2.	82-004-00	Lead edge late to the duplex sensor	Perform the 383-160-00, 383-161-00 RAP
Paper Jam in Area 3A.	82-008-00	Jam in IOT area 3A.	Perform the 310-120-00, 310-121-00, 310-126-00 RAP.
Paper Jam in Areas 3 and 4.	82-001-00	Sheet over either the IOT exit sensor, fuser exit switch or inverter sensor	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP
Paper Jam in Areas 3 and 4.	82-001-09	Sheet over the IOT exit sensor, fuser exit switch and inverter sensor	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Paper Jam in Areas 3 and 4.	82-003-00	Lead edge late to either the IOT exit sensor, fuser exit switch or inverter sensor	As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP or the 310-132-00, 310-133-00, 310-134-00 RAP
Paper Jam in Finisher Folder Unit.	12-718-00	Sheet over the tri-folder assist sensor	Clear the paper jam. If the fault persists, perform the 311-185-00-171 to 311-187-00-171 RAP
Paper Jam in Finisher Folder Unit.	12-719-00	Sheet over the tri-folder exit sensor	Clear the paper jam. If the fault persists, perform the 311-185-00-171 to 311-187-00-171 RAP
Paper jam in print engine	82-005-00	Lead edge late to either the IOT exit sensor, fuser exit switch, inverter sensor or duplex sensor	As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
Paper jam in print engine	82-006-00	IME jam	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
Paper jam in print engine	82-007-00	IME jam	Clear the jam. As necessary, perform the 310-120-00, 310-121-00, 310-126-00 RAP, 310-101-00, 310-102-00, 310-103-00 RAP, 310-132-00, 310-133-00, 310-134-00 RAP or the 383-160-00, 383-161-00 RAP.
Paper jam in the finisher	12-610-00	Paper is detected over the entry sensor (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-100-00-110 RAP
Paper jam in the finisher	12-610-01	Paper is detected over the entry sensor (HVF with trifolder)	Clear the paper jam. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP
Paper jam in the finisher	12-610-03	Paper is detected over the entry sensor (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-100-00-150, 311-101-00-150, 311-158-00-150, 311-163-00-150 RAP
Paper jam in the finisher	12-610-04	Paper is detected over the entry sensor (1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-100-00-120 RAP

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Paper jam in the finisher	12-612-00	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311H-110 or 311-043-00-110, 311-350-00-110 RAP
Paper jam in the finisher	12-612-03	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311H-150 or 311-043-00-150, 311-046-00-150 RAP
Paper jam in the finisher	12-618-00	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-130-00-110, 311-132-00-110 RAP
Paper jam in the finisher	12-618-01	Paper is detected over the top tray exit sensor (HVF)	Clear the paper jam. If the fault persists, perform the 311-130-00-171, 311-132-00-171 RAP
Paper jam in the finisher	12-618-03	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-130-00-150, 311-132-00-150 RAP
Paper jam in the finisher	12-618-04	Paper is detected over the top tray exit sensor at power-up, interlock status change or after shutdown.(1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-130-00-120, 311-132-00-120 RAP
Paper jam in the finisher	12-620-00	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (2K LCSS)	Clear the paper jam. If the fault persists, perform the 311-140-00-110, 311-142-00-110 RAP
Paper jam in the finisher	12-620-01	Paper jam near the output to the stacker tray. Sheet over 2nd top exit sensor (HVF)	Clear the paper jam. If the fault persists, perform the 311-140-00-171, 311-142-00-171 RAP
Paper jam in the finisher	12-620-03	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (LVF BM)	Clear the paper jam. If the fault persists, perform the 311-140-00-150, 311-142-00-150 RAP

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Paper jam in the finisher	12-620-04	Paper is detected over the stacker exit sensor at power-up, interlock status change or after shutdown. (1K LCSS)	Clear the paper jam. If the fault persists, perform the 311-140-00-120, 311-142-00-120 RAP
Paper jam in the finisher	12-624-00	Page over PPI pickup sensor	Clear the area or If the fault persists, perform the 311-056-00-171, 311-057-00-171 RAP
Paper jam in the finisher	12-625-00	Page over PPI tab standby sensor	Clear the area. If the fault persists, perform the 311-191-00-171, 311-193-00-171, 311-194-00-171, 311-196-00-171 RAP
Paper jam in the finisher	12-626-00	Page over buffer position sensor.	Clear the area. If the fault persists, perform the 311-157-00-171, 311-161-00-171 RAP
Paper jam in the finisher	12-627-01	Page over the exit HVF into BM sensor (sensor in area 6a) cleared via area 6a	Clear the paper jam. If the fault persists, perform 311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 RAP
Paper jam in the finisher	12-627-02	Page over the exit HVF into BM sensor (sensor in area 6a) cleared via area 6a	Clear the paper jam. If the fault persists, perform 311-158-00-171, 311-160-00-171, 311-162-00-171, 311-163-00-171 RAP
Paper jam in the finisher	12-628-00	Page over stacker bin exit sensor	Clear the area. If the fault persists, perform the 311-130-00-171, 311-132-00-171 RAP
Paper jam in the finisher	12-629-00	Page over TF entry sensor	Clear the area. If the fault persists, perform the 311-183-00-171, 311-184-00-171 RAP
Paper jam in the finisher	12-630-01	Sheet over the booklet maker entry sensor (without tri-folder)	Clear the area. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP
Paper jam in the finisher	12-630-02	Sheet over the booklet maker entry sensor (with tri-folder)	Clear the area. If the fault persists, perform the 311-100-00-171, 311-101-00-171 RAP
Paper jam in the finisher	12-630-03	Sheet over the booklet maker entry sensor (LVF BM)	Clear the area. If the fault persists, perform the 311-160-00-150, 311-162-00-150 RAP
Paper jam in the finisher	12-636-01	Sheet over the booklet maker exit sensor (without tri-folder)	Clear the jam from the output bin. If the fault persists, perform the 311-172-00-171 RAP
Paper jam in the finisher	12-636-02	Sheet over the booklet maker exit sensor (with tri-folder)	Clear the jam from the output bin. If the fault persists, perform the 311-172-00-171 RAP

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Paper jam in the finisher	12-636-03	Sheet over the booklet maker exit sensor (LVF BM)	Clear the jam from the output bin. If the fault persists, perform the 311-130-00-150, 311-132-00-150 RAP
Paper jam in the finisher	12-612-04	Paper is detected over the hole punch position sensor at power-up, interlock status change or after shutdown. (1K LCSS)	Code shown for information only. 1K LCSS does not have hole punch.
Paper Jam in the Finisher.	12-717-01	Sheet over the HVF BM compiler paper present sensor (without tri-folder)	Clear the HFV BM paper present sensor area 6e. If the fault persists, perform the 311-172-00-171 RAP
Paper Jam in the Finisher.	12-717-02	Sheet over the HVF BM compiler paper present sensor (with tri-folder)	Clear the HFV BM paper present sensor area 6e. If the fault persists, perform the 311-172-00-171 RAP
Paper Jam in the Finisher.	12-717-03	Sheet over the LVF BM compiler paper present sensor (with tri-folder)	Clear the LFV BM paper present sensor area 6e. If the fault persists, perform the 311-184-00-150, 311-494-00-150, 311-496-00-150 RAP
Paper Jam in the Finisher.	12-752-00	A page is over the buffer path sensor	Clear the area. If the fault persists, perform the 311-198-00-171, 311-199-00-171 RAP
Paper required for the current job is not available.	22-511-04	Media required for current marking job is not loaded	Load the correct paper to complete the held job or cancel the held job. Other machine services are unaffected
Paper Tray communication fault. Please call for assistance.	70-313-00	Communications failure for trays 1 to 2	Copying and printing are not available. Perform the 341-350-00, 341-351-00, 341-354-00 RAP
Photoreceptor erase lamp failure	09-550-00	Photoreceptor erase lamp failure	Perform the 394-350-00 RAP
Please complete all steps required by the external accounting device to access this service	03-558-00	-	-
Please enter access code into external accounting device to access this service	03-558-02	-	-

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Please insert card into the external accounting device to access this service	03-558-01	-	-
Please insert key counter into the external accounting device to access this service	03-558-04	-	-
Please insert money into the external accounting device to access this service	03-558-03	-	-
Please wait... Adjustments are in progress.	92-574-00	Post jam clearance initialization	No service action.
Please wait... Disk Encryption operation in progress.	17-580-00	Disk encryption is in progress	No service action required, please wait for encryption to finish
Please wait... Freeing memory.	19-502-00	Out of memory resources. The machine has run out of image processing memory for the current job	No user intervention required, please wait, printing will resume after memory is freed. Other machine services are unaffected. If the problem persists, perform the 319-401-00, 319-402-00 RAP
Please wait... Maintenance in progress. Scan, Copy and Print services not available	03-555-00	The machine has entered intrusive customer tools mode.	Go to dC301. Perform a copier NVM initialization and NVM data select all.
Please wait... Printer is warming up.	92-573-00	Machine is warming up.	No service action.
Please wait... Fuser is warming up.	10-505-00	Fuser is not at run temperature	Perform the 310-322-00, 310-324-00, 310-325-00, 310-330-00, 310-370-00 RAP.

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Please wait... The Fax Service is initializing.	20-544-00	The Fax service is initializing	The Fax service is re-starting. No user intervention is required. Printing and other machine services are available
Please wait... The Image Disk is full.	19-513-00	The image disk is full	Print jobs may be delayed. The system is attempting to recover. Printing and other machine services are available. If the problem persists ensure Mod /TAG 003 has been installed.
Please wait... The output tray is lowering	12-741-00	Finisher is about to go back on-line	No action
Please wait... the system is attempting to recover	03-561-00	The system is recovering	Wait until the system recovers
Please wait... The system is attempting to recover.	19-510-00	System is attempting to recover. Image disk error	No service action required. Printing and other machine services are unaffected
Please wait… The scanner is initializing.	03-556-00	Power on while the IIT is being initialized	-
Provide payment or the current job may be deleted.	03-559-00	Generic FDI. Unable to complete the current job.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
Provide payment or the current job may be deleted.	03-559-04	Walk up key entered FDI. Not defined	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
Provide payment or the current job may be deleted.	03-559-05	Walk up FDI. Unable to complete the current job - FDI inactivity timer enabled	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job, select the Close button, then the Job Status button located on the control panel and then your job.If no action is taken, the job will be deleted

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Provide payment or the current job may be deleted.	03-559-06	Walk up coin entered FDI. Not defined - FDI inactivity timer disabled	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job. To immediately delete this job, select the Close button, then the Job Status button located on the control panel and then your job. If no action is taken, the job will be deleted
Provide payment.	03-559-01	Walk Up FDI. Unable to complete the current job.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job
Provide payment.	03-559-03	Walk up coin entered FDI. Not defined - FDI Inactivity timer disabled.	The Job cannot be completed due to insufficient funds. Complete all steps required by the external accounting device to continue the job. To cancel this job, press the hard-panel Job Status button, select the job and then the Delete button
Pull out the fuser, then firmly push it back in.	10-547-00	IOT is unable to read from the fuser CRUM.	Perform the 341-371-00, 41-372-00 RAP.
Pull out the Xerographic module, then firmly push it back in.	10-548-00	IOT is unable to read from the xerographic module CRUM.	Perform the 341-371-00, 41-372-00 RAP.
Ready to Install	03-600-00	Displayed at install when the machine is in the correct state to allow machine speed to be set from a blank SIM.	No service action.
Register for your Supplies Plan.	22-580-00	Service plan registration alert	Perform the 322-360-00 RAP
Remove documents from the Document Feeder Input Tray or close the Document Feeder.	22-505-00	Documents sensed in the SPDH tray during IIT standby and document handler cover is open.	To scan from the document glass, remove documents in the document feeder input tray. To use the document feeder to scan your documents, lower the document feeder.

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Remove the document. It is too short to be fed by Document Feeder.	05-560-00	The document is too short.	Remove the short document. Inform the customer that the document is too short to be fed by the SPDH.
Reorder Fuser Module (R3) but do not replace until prompted.	10-524-00	The fuser low supply warning, threshold has been reached.	Reorder a fuser but do not replace.
Reorder Xerographic Module (R2) but do not replace until prompted.	09-594-00	Reorder Xerographic unit but do not replace yet.	Reorder a xerographic module PL 90.20 Item 2.
Replace Booklet Maker Staple Cartridges (R8).	12-643-00	The booklet maker staple cartridge is empty	The booklet maker staple cartridge is empty. Follow the instructions at the printer to load a new staple cartridge, PL 11.168 Item 8 for the HVF BM or PL 11.78 Item 6 for the LVF BM. Printing can continue, but stapled booklet making is unavailable
Replace Booklet Maker Staple Cartridges (R8).	12-644-02	The HVF booklet maker staple cartridge is empty and HVF finisher front door open	Install a new booklet maker staple cartridge, PL 11.168 Item 8.
Replace Booklet Maker Staple Cartridges (R8).	12-644-03	The LVF booklet maker staple cartridge is empty and HVF finisher front door open	Install a new booklet maker staple cartridge, PL 11.78 Item 6.
Replace Fuser Module (R3).	10-523-00	The Fuser needs replacing	Install a new fuser, PL 10.8 Item 1 (45-55 ppm) or PL 10.10 Item 1 (65-90 ppm)
Replace Ozone Filter (R5).	09-678-00	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
Replace Ozone Filter (R5).	09-678-01	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
Replace Ozone Filter (R5).	09-678-02	Ozone filter needs replacing	Install a new ozone filter, PL 90.25 Item 3
Replace Staple Cartridge (R7).	12-715-00	The finisher's main staple cartridge is empty. Follow the instructions at the printer to load a new staple cartridge. Non staple printing can continue. (LCSS)	Install new staple cartridge, PL 11.20 Item 7 for the 2K LCSS, PL 11.68 Item 7 for the LVF, PL 11.116 Item 8 for the 1K LCSS or PL 11.20 Item 7 for HVF.

Table 3 Status messages O to R

UI Message	Status Code	Reason for Message	Reference / Action
Replace Staple Cartridge (R7).	12-714-00	1K LCSS main staple cartridge is empty.	Install a new staple cartridge, PL 11.116 Item 8.
Replace Staple Cartridge (R7).	12-714-01	2K LCSS main staple cartridge is empty.	Install a new staple cartridge,PL 11.20 Item 7.
Replace Staple Cartridge (R7).	12-714-02	HVF main staple cartridge is empty.	Install a new staple cartridge, PL 11.140 Item 33.
Replace Staple Cartridge (R7).	12-714-03	LVF main staple cartridge is empty.	Install a new staple cartridge, PL 11.68 Item 7.
Replace Toner Cartridge (R1).	09-588-00	Replace toner cartridge (R1)	Install new toner cartridge. If the fault persist perform 393-310-00, 393-390-00 RAP.
Replace Toner Waste Container (R4).	09-589-00	The toner waste container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
Replace Toner Waste Container (R4).	09-589-01	The toner waste container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
Replace Toner Waste Container (R4).	09-589-02	The Toner Waste Container is full and needs replacing	Install a new toner cartridge. If the fault persists perform 390B RAP.
Replace Xerographic Module (R2).	09-521-00	IOT detects an xerographic module failure.	Switch the machine off and on, GP 14. Install a new xerographic module. If necessary, perform the 341-371-00, 41-372-00 RAP.
ROS laser not being controlled	06-540-00	ROS laser not being controlled.	Perform the 361-350-00 RAP
ROS system failure. Printing is unavailable. If fault persists, call for assistance. Touch Ignore Error to use other services	06-530-00	ROS system failed.	Perform the 361-340-00 RAP

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Scan and copy services not available. Print service is available	05-570-00	SPDH jam or LED cooling fan not working.	Remove, then re-load all document in the SPDH. Perform the 305-960-00 RAP.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Scan to File not available. Power Off then On and Notify System Administrator.	16-561-00	Network controller - scan to file processes have failed	Switch the machine off then on, GP 14
Scanner Fault.	14-517-00	Scanner fault.	Switch the machine off then on GP 14. Check the current fault codes list for faults in the scanner and perform the appropriate RAP.
Scanning will be delayed.	22-508-04	Scan start up delayed whilst awaiting resources	No user intervention is required. Job will begin when system is ready. If the problem persists, perform the 322-330-06 RAP
Scorotron cleaning failed	09-541-00	Scorotron cleaning failed	Perform the 394-341-00, 394-342-00 RAP
Select Confirm if the Document Feeder - Feed Roller was replaced.	05-585-00	User confirmation required to reset SPDH feed roller replacement.	Select confirm if the document feeder - feed roller was replaced
Select the Current Messages button in the Machine Status for more information.	22-502-04	An active message has been produced.	Go to the **Status** screen and select the **Faults** tab. Press the **Active Messages** button and perform the action appropriate to the message
Server Fax Service cannot Register. Power Off then On and Notify System Administrator.	17-551-00	Server Fax service cannot register	Switch the machine off then on, GP 14. Server Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-987-19, 316-988-19 RAP
Service Limit exceeded. New services will not be available until some services are removed.	16-533-00	Controller software service limit exceeded	Remove some existing services to enable new services to be added. Machine services are available but may be degraded
SIM Insertion Required. Notify System Administrator.	22-572-00	Speed not set on IOT. Either the machine has not yet received a SIM, or the settings have been corrupted	Perform the 303-405-00, 303-406-00 RAP
Software Upgrade Failure.	95-100-00	Software upgrade failure.	Check the fault history, dC122 for Chain 95 faults. Perform the relevant RAPs.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Some jobs may have been deleted	03-562-00	When some jobs may have been deleted	Removed upon user intervention
Some jobs may have been deleted.	19-505-00	Compressor DVMA time-out. Current job has been deleted	Confirm that UI message has been seen. Re-scan the job. If the problem persists, perform the 319-403-00 RAP
Some Network Accounting Services are not available. Notify your System Administrator.	16-596-00	Some network controller services are not available	Network accounting error. User intervention is required to switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
Some Network Authentication Services are not available. Notify your System Administrator.	16-582-00	The network controller ESS authentication SPI process has stopped	Switch the machine off then on, GP 14. Print and other machine services are unaffected. If the problem persists, perform the 316-780-00 to 316-789-47 RAP
Some Network Diagnostic Services are not available. Notify your System Administrator.	16-581-00	The network controller ESS diagnostic service process has stopped	Switch the machine off then on, GP 14. Printing and scanning can continue. If the problem persists, perform the 316-770-09 to 316-779-95 RAP and the 316-780-00 to 316-789-47 RAP
Some Network Services are not available due to a process error. Notify System Administrator.	16-560-00	Some processes on the network controller have failed	Switch the machine off then on, GP 14
Some Network Services involving DDNS are not available. Notify your System Administrator.	16-504-00	DDNS error. Some network controller services are not available	The DDNS address resolution process has failed. Switch the machine off then on, GP 14. If the problem persists check the DDNS server's network connections
Some Network Services involving DHCP are not available. Notify your System Administrator.	16-593-00	Network controller - DHCP address resolution has failed	Check DHCP server network connection. Switch the machine off then on GP 14. Copying and printing with local connections can continue. If the problem persists, perform the 316-800-09 to 316-809-47 RAP

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Some Network Services involving Ethernet are not available. Notify System Administrator.	16-591-00	Network controller Ethernet process has failed	Check Ethernet connection. Switch the machine off, then switch the machine on GP 14. Local printing can continue. If the problem persists, perform the 316-800-09 to 316-809-47 RAP
Some Network Services involving HTTP are not available. Notify your System Administrator.	16-570-00	Network controller - an HTTP interpreter error has occurred, causing the process to fail	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used. If the problem persists, perform the 316-761-47 to 316-769-95 RAP
Some Network Services involving Internet Fax are not available. Notify System Administrator.	16-509-00	Insufficient memory for internet Fax	Switch the machine off then on, GP 14. Printing can continue if other network protocols are used
Some Network Services involving LPD are not available. Notify your System Administrator.	16-562-00	Network controller - the line printer daemon (LPD) process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
Some Network Services involving NetBios are not available. Notify System Administrator.	16-564-00	Network controller - the NetBIOS connectivity process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
Some Network Services involving Novell are not available. Notify your System Administrator.	16-563-00	Network controller - the Novell netware connectivity process has failed	Switch the machine off then on, GP 14. Printing can continue if other submission methods are used
Some Network Services involving PCL are not available. Notify your System Administrator.	16-568-00	Network controller - a PCL interpreter error has occurred, causing the process to fail	Switch the machine off then on, GP 14, to enable PCL printing. Printing can continue if other job format methods are used

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Some Network Services involving RARP are not available. Notify your System Administrator.	16-594-00	Network controller - RARP address resolution has failed	Check RARP server network connection. Switch the machine off then on GP 14. Printing can continue with other submission methods. If the problem persists, perform the 316-800-09 to 316-809-47 RAP
Some Network Services involving SLP are not available. Notify your System Administrator.	16-507-00	SLP process stopped. Some network controller services are not available	Switch the machine off then on, GP 14.
Some Network Services involving SSDP are not available. Notify your System Administrator.	16-513-00	Simple service discovery protocol (SSDP) failed	Switch the machine off then on, GP 14.
Some Network Services involving TCP/IP are not available. Notify your System Administrator.	16-598-00	Network controller - TCP/IP address is already in use on the network	Another IP address needs to be used. Switch the machine off then on, GP 14. Copy and Fax services (if installed) can continue. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
Some Network Services involving TIFF are not available. Notify your System Administrator.	16-597-00	The network controller TIFF interpreter has failed	Switch the machine off then on, GP 14. Printing can continue with other job formats. If the problem persists, perform the 316-790-09 to 316-799-47 RAP
Staple Cartridge (R7) is nearly empty. Make sure you have a replacement.	12-716-00	Finisher staples are low	The finisher's main staple cartridge supplies are low. Re-order staple cartridge. Printing can continue. PL 11.20 Item 7 for the 2K LCSS, PL 11.68 Item 7 for the LVF, PL 11.116 Item 8 for the 1K LCSS or PL 11.20 Item 7 for HVF.
Stapling fault. Power Off then On and Notify System Administrator.	12-653-00	Stapling disabled, out of service. (LCSS)	Perform the 311-371-00-110 RAP

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Stapling fault. Power Off then On and Notify System Administrator.	12-721-00	Stapler is not in position	The stapler module is open, close the stapler module
System Error. Power Off then On and Notify System Administrator	03-565-00	System fault.	Switch the machine off then on, GP 14.
System error. Power Off them On and Notify System Administrator	03-578-00	Paper tray error.	Switch the machine off then on, GP 14.
System Error. Power Off them On and Notify System Administrator	03-581-00	Paper tray error.	Switch the machine off then on, GP 14.
System error. Power Off then On and Notify System Administrator	03-505-00	The digital copier is not available	Perform 303-325-00 RAP and 303-355-00 RAP
System Error. Power Off then On and Notify System Administrator	03-598-00	Unable to set ready mode. Printing and copying services are not available	Perform the 303-788-00 RAP
System Error. Power Off then On and Notify System Administrator	04-565-00	IOT Controller communication failure	System fault. Switch the machine off then on, GP 14.
System Error. Power Off then On and Notify System Administrator.	16-503-00	Incomplete system information	Switch the machine off then on, GP 14. All machine services are disabled
System Error. Power Off then On and Notify System Administrator.	22-563-00	Incomplete system information	Switch the machine off then on, GP 14. All machine services are disabled

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
The Booklet Maker Tray in the Finisher is full. Empty the Tray.	12-728-00	The booklet maker output tray is full	Empty the tray. If the fault persists, perform the 311C-171 RAP for the HVF.
The Booklet Maker Tray in the Finisher is nearly full.	12-727-00	The booklet maker output tray is nearly full	The booklet maker tray is near full. User intervention will be required soon to empty the tray to allow continued booklet making. Print and copy services can continue; other machine services are unaffected.
The current job exceeds the tray capacity, you will be prompted to empty the tray	12-411-00	Copy Job will exceed the output destination's capacity	Empty the tray
The device is not available	22-585-00	Recovery mechanism has restored a lost parameter	Switch the machine off, then on, GP 14.
The Document Feeder is not available. The Document Glass is still available	03-597-00	The document feeder is not available. Use the document glass	Switch the machine off then on, GP 14.
The Document Feeder is not available. The Document Glass is still available.	05-538-00	The document handler not available.	A document feeder fault has occurred, copy jobs can only be made from the document glass. Printing can continue.
The Document Feeder is not available. The Document Glass is still available.r	05-542-00	Document transport indicates service is required.	Check the fault history, dC122 for any Chain 5 faults. Perform the relevant RAPs.
The Document Feeder Top Cover is open	05-502-00	The document feeder top cover is open.	Close the document feeder top cover. If the fault remains, perform the 305-305-00 RAP.
The document size was different than expected. The job has been deleted	05-546-00	On pre-feed the SPDH fails to recognize the size of the document	Reload the originals or select the document size. If the fault persists, perform the 305A RAP

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
The document size was different than expected. The job has been deleted.	22-507-05	Document is larger than expected	Try one of the following: Select mixed size originals and reload into the document feeder or make sure the originals are not creased or folded and retry from the document glass. If the problem persists, perform the 305A RAP
The E-mail Service cannot Un-Register. Notify your System Administrator.	17-558-00	E-mail service cannot un-register	Switch the machine off then on, GP 14. Scan to E-mail is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
The Fax Service cannot Register. Notify your System Administrator.	22-566-00	Fax service cannot register	Switch the machine off then on, GP 14. Fax and LAN Fax are disabled. Other machine services are unaffected. If the problem persists, perform the 322-371-00, 322-372-00 RAP
The Fax Service cannot Un-Register. Notify your System Administrator.	22-567-00	Fax service cannot un-register	Switch the machine off then on, GP 14. All machine services are disabled. If the problem persists, perform the 322-371-00, 322-372-00 RAP
The finisher front door is open	12-564-00	The finisher front door is open (2K LCSS)	Close the finisher front door. If the fault persists perform 311-300-00-110, 311-302-00-110, 311-303-00-110 RAP.
The finisher front door is open	12-564-01	The finisher front door is open (HVF - all variants)	Close the finisher front door. If fault persists perform the Front Door Interlock Checkout RAP in the 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
The finisher front door is open	12-564-03	The finisher front door is open (LVF BM)	Close the finisher front door. If the fault persists perform 311-300-00-150, 311-302-00-150, 311-303-00-150 RAP.
The finisher front door is open	12-564-04	The finisher front door is open (1K LCSS)	Close the finisher front door. If the fault persists perform 311-300-00-120, 311-302-00-120, 311-303-00-120 RAP.
The Front Door is open	01-510-00	The front door is open.	Copying and printing services are disabled. Perform the 301-300-00 RAP.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
The Internet Fax Service cannot Un-Register. Notify your System Administrator.	17-557-00	Internet Fax service cannot un-register	Switch the machine off then on, GP 14. Internet Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-950-19 to 316-959-19 RAP
The Left Side Door is open	01-514-00	The bypass tray and left door assembly is open	Copying and printing services are disabled. Perform the 301-305-00 RAP
The machine is not available	02-520-00	Software error has occurred.	Switch the machine off then on, GP 14
The machine is offline	03-504-00	NC status code	Switch the machine off then on, GP 14
The machine is offline	03-504-01	NC status code	Switch the machine off then on, GP 14
The Network Controller connection is about to be reset.	16-502-00	Status active when ever the network controller detects that a platform reset is about to occur	Cleared when the network controller reset is initiated
The Network Controller connection is about to be reset.	16-521-00	The network controller's CPI service process has stopped	Machine services are temporarily disabled. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-522-00	The network controller's job log service process has stopped	Some network services are not available. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-523-00	The network controller's job tracker service process has stopped	Some network services are not available. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-524-00	The network controller's Kerberos service process has stopped	Some network services are not available. The Network Controller connection is about to be reset
The Network Controller connection is about to be reset.	16-525-00	The network controller's scan to distribution service process has stopped	Some network services are not available. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-526-00	The network controller's SMB service process has stopped.	Some network service are not available. The network controller connection is about to be reset

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
The Network Controller connection is about to be reset.	16-527-00	The network controller's TCP/IP service process has stopped.	Some network service are not available. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-528-00	The network controller's WS scan temp service process has stopped.	Some network service are not available. The network controller connection is about to be reset
The Network Controller connection is about to be reset.	16-575-00	The network controller ESS registration service process has stopped	Automatic network controller reset. If the problem persists, perform the 316-160-09 RAP
The Network Controller connection is about to be reset.	16-576-00	The network controller ESS event notification service process has stopped	Automatic network controller reset. Switch the machine off then on, GP 14. If the problem persists, perform the 316-161-09, 316-164-09 RAP
The Network Controller connection is about to be reset.	16-577-00	The network controller ESS platform manager service process has stopped	Automatic network controller reset. Machine is unavailable. If the problem persists, perform the 316-162-09, 316-163-09 RAP
The Network Controller connection is about to be reset.	16-584-00	The network controller document manager agent process has stopped	Automatic network controller reset. Machine is unavailable
The Network Controller is initializing. Copy and Print jobs may be delayed	03-563-00	Network service are being established.	Please wait, the Network Controller is initializing. No user intervention is required. Printing is currently unavailable. If the fault persists, perform the 303-331-00, 303-332-00 RAP
The number of originals was less than the number originally scanned.	22-503-05	Insufficient originals detected in the SPDH.	Re-sort and reload all originals
The Output tray is almost full	04-569-00	The OCT detects that it is 90% full	The tray is almost full. The tray may be emptied now or when it is full. Printing and other machine services are unaffected
The Output Tray is full. Empty the Output Tray	04-568-00	The OCT is full.	Empty the tray.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
The Reprint Saved Jobs Service cannot Un-Register. Notify your System Administrator.	17-561-00	Reprint saved jobs service cannot un-register.	Switch the machine off then on, GP 14. Re-printing of saved jobs in disabled. If the problem persists, perform the 316-752-00, 316-753-00 RAP
The ROS motor has failure. Switch the machine off, wait 3 minutes, then switch on the machine again. If the fault persists call for assistance or press Close to use other services.	06-520-00	ROS motor failed.	Perform the 361-020-00 RAP
The Server Fax Service cannot Un-Register. Notify your System Administrator.	17-556-00	Server Fax service cannot un-register	Switch the machine off then on, GP 14. Server Fax is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-987-19, 316-988-19 RAP
The Toner Waste Container Door is open	01-512-00	The waste toner door is open.	Copying and printing services are disabled. Perform the 393-380-00 RAP
The Workflow Scanning Service cannot Un-Register. Notify your System Administrator.	17-560-00	Network scanning service cannot un-register.	Switch the machine off then on, GP 14. Scan service is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-985-19, 316-986-19 RAP
Toner Cartridge (R1) is nearly empty. Make sure you have a replacement.	09-568-00	Reorder toner cartridge (R1) but do not replace until prompted.	Order a new toner cartridge, PL 26.11 Item 3.
Toner control system failure	09-596-00	Toner control system fault	Switch off, then switch on the machine, GP 14. If the fault remains, perform the 393-360-00 to 393-363-00 RAP.
Toner control system failure	09-597-00	Toner control system fault	Perform the 393-360-00 to 393-363-00 RAP.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Toner Waste Container (R4) is missing or not seated properly.	09-590-00	Insert Waste Container	Reinsert the toner cartridge. If the fault persists perform 390B RAP.
Toner Waste Container (R4) is missing or not seated properly.	09-590-01	The waste toner container is missing	Perform 390B RAP.
Toner Waste Container (R4) is missing or not seated properly.	09-590-02	The waste toner container is missing	Perform 390B RAP.
Toner Waste Container (R4) is nearly full. Make sure you have a replacement.	09-508-00	Waste toner bottle is nearly full	Perform 390B RAP.
Tray 1 guides are not set properly	01-545-01	Dedicated tray 1 closed with media size other than what was set	Copying and printing services are available if the correct the paper size is correct in other trays. Perform the 371B RAP.
Tray 1 is empty. Add paper	07-544-00	Tray 1 is out of paper	Add paper. If fault persists perform 371A RAP.
Tray 1 is nearly empty. Add paper.	71-535-00	Tray 1 media low	Add media. Copying and printing can continue from other trays. Refer to 371A RAP
Tray 1 is not available. Notify System Administrator	03-587-00	Mechanical failure for tray 1	Switch the machine off then on, GP 14.
Tray 1 is open	07-513-01	Tray 1 is open	Close tray 1. If fault persists perform 371-500-00 RAP
Tray 1 is open	07-514-01	Adjustable tray 1 is open	Close tray 1. If fault persists perform 371-500-00 RAP
Tray 1 lifting.	71-536-00	Tray 1 lifting	No service action required. Print and copy services can continue from other rays if the correct media is available
Tray 2 guides are not set properly	01-545-02	Dedicated tray 2 closed with media size other than what was set	Copying and printing services are available if the correct the paper size is correct in other trays. Perform the 371B RAP.
Tray 2 is empty. Add paper	07-545-00	Tray 1 is out of paper	Add paper. If fault persists perform 371A RAP.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Tray 2 is nearly empty. Add paper.	72-535-00	Tray 2 media low	Add media. Copying and printing can continue from other trays. Refer to 371A RAP
Tray 2 is not available. Notify System Administrator	03-588-00	Mechanical failure for tray 2	Switch the machine off then on, GP 14.
Tray 2 is open	07-513-02	Tray 2 is open	Close tray 2. If fault persists perform 372-500-00 RAP
Tray 2 is open	07-514-02	Adjustable tray 2 is open	Close tray 2. If fault persists perform 372-500-00 RAP
Tray 2 lifting.	72-536-00	Tray 2 lifting	No service action required. Print and copy services can continue from other trays if the correct media is available
Tray 3 is empty. Add paper	07-533-00	Tray 3 is out of paper	Add paper. If fault persists perform 373B RAP
Tray 3 is nearly empty. Add paper.	73-535-00	Tray 3 media low	Add media. Print and copy services can continue from other trays if the correct media is available
Tray 3 is not available. Notify System Administrator	03-589-00	Mechanical failure for Tray 3	Switch the machine off then on, GP 14.
Tray 3 is open	07-513-03	Tray 3 is open	Close tray 3. If fault persists perform 372-500-00 RAP
Tray 3 lifting.	73-536-00	Tray 3 lifting	Print and copy services can continue from other trays if the correct media is available
Tray 4 is empty. Add paper	07-534-00	Tray 4 is out of paper	Add paper. If fault persists perform 373B RAP
Tray 4 is nearly empty. Add paper.	74-535-00	Tray 4 media low	Add media. Print and copy services can continue from other trays if the correct media is available
Tray 4 is not available. Notify System Administrator	03-590-00	Mechanical failure for tray 4	Switch the machine off then on, GP 14.
Tray 4 is open	07-513-04	Tray 4 is open	Close tray 4. If fault persists perform 374-500-00 RAP
Tray 4 lifting.	74-536-00	Tray 4 lifting	Print and copy services can continue from other trays if the correct media is available

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Tray 5 (Bypass) is empty. Add paper	07-535-00	Bypass tray is out of paper	Add paper. If necessary, perform 375A RAP
Tray 5 (Bypass) is not available. Notify System Administrator	03-591-00	Mechanical failure for Bypass tray	Switch the machine off then on, GP 14.
Tray 6 is empty. Add paper	07-536-00	PFP Tray is out of paper	Add paper. If fault persists perform 376A RAP
Tray 6 is nearly empty.	76-535-00	Tray 6 media low.	Add media. Print and copy services can continue from other trays if the correct media is available. If the problem persists, perform the 376A RAP.
Tray 6 is not available. Notify System Administrator	03-592-00	Mechanical failure for tray 6	Switch the machine off then on, GP 14.
Tray 6 is not available. Notify your System Administrator.	92-536-00	Tray 6 communication error	Perform the 341-366-00 RAP.
Tray 6 is open	07-513-06	PFP tray is open	Close PFP tray. If fault persists perform 376-500-00 RAP
Tray 6 is open	07-514-06	PFP tray loading door is open or the elevate switch is flipped down.	Close PFP tray. If fault persists perform 376-500-00 RAP
Tray 6 is undocked.	75-305-00	Tray 6 is undocked	Re-dock tray 6 to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
Tray 6 is undocked.	75-305-01	Tray 6 is undocked	Re-dock tray 6 to the machine. Print and copy services can continue from other trays if the correct media is available. Refer to 376-510-00 RAP
Tray 6 lifting.	76-536-00	Tray 6 is lifting	No action required. Print and copy services can continue from other trays if the correct media is available
Tray 6 lowered.	75-538-00	Tray 6 lowering	No action required. Print and copy services can continue from other trays if the correct media is available
Tray 6 lowering.	75-537-00	Tray 6 lowering	No action required. Print and copy services can continue from other trays if the correct media is available

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Tray 7 is empty. Add paper	07-537-00	Tray 7 is out of paper	Add paper. If fault persists perform 311J-171 RAP
Tray 7 is not available. Notify System Administrator	03-593-00	Mechanical failure for Tray 7	Switch the machine off then on, GP 14.
Tray 7 is open	07-514-07	Tray 7 is open	Close tray 7. If fault persists perform 311-300-00-171, 311-302-00-171, 311-303-00-171 RAP
Tray is ready for unloading. Press the button on Finisher to return tray to ready position.	12-740-00	Finisher tray is ready for unloading	Follow the instructions to unload the tray.
Trays 1 and 2 are not available. Notify your System Administrator.	70-312-00	Communications failure for trays 1 to 2	Switch the machine off then on, GP 14. If the problem persists, perform the 341-350-00, 341-351-00, 341-354-00 RAP
Unable to communicate to the attached accounting device.	17-514-00	External accounting device communication failure	Administrator intervention required to check the connection to the external accounting device
Unable to staple. Check for obstructions in the output trays.	12-901-00	The finisher is in degraded mode, unable to staple	Switch the machine off then on, GP 14. If the fault persists, perform 311F-171 RAP
Unexpected paper size or type detected from Tray 1	07-546-01	Tray 1 media or type mismatch detected	Check media. If fault persists perform 371B RAP.
Unexpected paper size or type detected from Tray 2	07-546-02	Tray 2 media or type mismatch detected	Check media. If fault persists perform 371B RAP.
Unexpected paper size or type detected from Tray 3	07-546-03	Tray 3 media or type mismatch detected	Check media. If fault persists perform ADJ 70.1 adjustment.
Unexpected paper size or type detected from Tray 4	07-546-04	Tray 4 media or type mismatch detected	Check media. If fault persists perform ADJ 70.1 adjustment.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Unexpected paper size or type detected from Tray 5 (Bypass)	07-546-05	Bypass tray media or type mismatch detected	Check media. If fault persists perform 375A RAP.
Unexpected paper size or type detected from Tray 6	07-546-06	Tray 6 media or type mismatch detected	Check media. If fault persists perform ADJ 70.2 adjustment.
Unexpected paper size or type detected from Tray 7	07-546-07	Tray 7 media or type mismatch detected	Check media. If fault persists perform 311-479-00-171 RAP.
Workflow Scanning hardware must be added or replaced. Notify your System Administrator.	16-554-00	Network controller - hardware must be added or replaced	Hardware must be added or replaced.
Workflow Scanning Service cannot Register. Power Off then On and Notify System Administrator.	17-559-00	Network scanning service cannot register.	Switch the machine off then on, GP 14. Scan service is disabled, print and other machine services are unaffected. If the problem persists, perform the 316-985-19, 316-986-19 RAP
Xerographic Module (R2) maintenance is required	09-560-00	Xerographic module maintenance is required	Use the manual cleaner to clean the charge scorotron. If the fault remains, perform the 391-060-00 RAP.
Xerographic Module (R2) manual maintenance required.	91-657-00	New toner cartridge detected. manually clean the corotron.	Clean the corotron.
Xerographic Module Cleaning Failure. Contact your System Administrator.	94-341-00	Scorotron cleaning has failed.	Perform the 394-341-00, 394-342-00 RAP.
Xerographic Module Cleaning in progress. Please wait.	91-660-00	Xerographic Module Cleaning routines in progress.	No service action.

Table 4 Status messages S to X

UI Message	Status Code	Reason for Message	Reference / Action
Your Administrator is reconfiguring the system. Services will not be available.	16-506-00	Your administrator is reconfiguring the system	The system administrator is saving the machine configuration to a remote station.

OF5 Boot Up Failure RAP

Use the following procedure if the machine;

- Does not come to a “Ready to scan your job” state.
- Locks up with a “Please Wait” or “Machine Self Test In Progress” message.
- Has a black/white, dark/blank or green UI touch screen and the power saver LED on the user interface is flashing.
- Has failed to load software.

Initial Actions

- If a boot up failure has occurred after the installation of new components, ensure those new components are compatible with the machine.
- Check that the power cord is connected to the machine.
- Check the 7 segment LED display on the rear of the SBC module. If a code is displayed, go to the OF2 POST Error RAP.
- Switch off the machine, GP 14. Remove the SIM card. Switch on the machine, GP 14. If the fault is cleared, install a new SIM card, PL 3.22 Item 17, if required.
- Switch off the machine GP 14. Remove the power cord from the customer power socket. Wait two minutes, then reconnect the plug into the socket. Switch on the machine, GP 14. If the fault still occurs then follow the procedure.
- Check the LEDs on the IOT PWB, OF7 IOT PWB Diagnostics RAP.
- Check CR23 on the SBC PWB is flashing, PL 3.22 Item 3. If CR23 is not flashing go to:
  - 301F +12V Distribution RAP
  - 301B 0V Distribution RAP

  and check the +12V and 0V supplies to the SBC PWB.
- Remove then re-install the SD card, PL 3.22 Item 16.
- Remove then re-install the memory module, PL 3.22 Item 11.
- Disconnect then reconnect all the PJs on the single board controller PWB, PL 3.22 Item 3.
- Check all the PJs are correctly connected on the UI control PWB, PL 2.10 Item 6.
- Check the UI harness connection to the SBC PWB, Wiring Diagram 11, PL 3.22 Item 22.
- Check the hard disk drive, 303C Hard Disk Failure RAP.
- If the problem occurs while entering or exiting sleep mode, go to 301K Sleep Mode RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Only use the correct plug to connect a power lead to a power outlet.

CAUTION

Incorrect voltage may damage the machine. The machine must only be connected to the power outlet of the correct voltage.

Switch off the machine, GP 14.

1. Disconnect P/J140, the Power distribution PWB/Scanner PWB comms/power harness, PL 3.22 Item 19 from the SBC PWB.
2. Disconnect the SBC PWB/scanner PWB data cable, PL 3.22 Item 20 from P/J250 on the SBC PWB.
3. If a LCSS, LVF BM, HVF or HVF BM is installed, disconnect the communication cable from PJ151, and the finisher power cord from PJ22 on the power and control module.
4. Install a finisher bypass harness, PL 26.10 Item 7.
5. If a fax is installed, remove the fax module, PL 20.05.
6. Switch on the machine, GP 14.

The machine boots up.

Y N

Perform the following;

- Check the UI, 302A Touch Screen Failure RAP.
- Go to:
  - 301F +12V Distribution RAP
  - 301E +5V Distribution RAP
  - 301D +3.3V Distribution RAP
  - 301B 0V Distribution RAP

CR23 and CR24 on the SBC PWB are incessantly on.

Y N

CR19 on the SBC PWB is on

Y N

Ensure that the memory module is installed in PJ17 on the SBC PWB.

Install new components as necessary:

1. SD card, PL 3.22 Item 16.
2. Memory module, PL 3.22 Item 11.
3. SBC PWB, PL 3.22 Item 3.

If the user UI touch screen is still black/white, dark/blank or green and the power saver LED is flashing, perform the AltBoot Software Loading procedure, GP 4.

A B

A B

Install a new SBC PWB, PL 3.22 Item 3.

Connect the Power distribution PWB/Scanner PWB comms/power harness and the SBC PWB/scanner PWB data cable. Switch on the machine, GP 14. **The machine boots up.**

Y N

Install a new Scanner PWB, PL 60.20 Item 4.

Connect the output device communication cable and power cord. Switch on the machine, GP 14. **The machine boots up.**

Y N

The output device is a HVF with a booklet maker.

Y N

Install new components as necessary:

- 1K LCSS PWB, PL 11.124 Item 1.
- 2K LCSS PWB, PL 11.26 Item 1.
- HVF PWB, PL 11.157 Item 2.
- LVF PWB, PL 11.90 Item 8.

Disconnect the booklet maker PWB. **The machine boots up.**

Y N

Install a new HVF PWB, PL 11.157 Item 2.

Install a new BM PWB, PL 11.166 Item 10.

Re-install the original Fax module. Switch on the machine, GP 14. **The machine boots up.**

Y N

Install new components as necessary:

- Fax PWB, PL 20.05 Item 7.
- SBC PWB, PL 3.22 Item 3.

If necessary, reload the software. Refer to GP 4 Machine Software.

OF6 Ozone and Air Systems RAP

Use this RAP to diagnose faulty machine fans. Faulty fans can cause smells or overheating.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Identify the suspect fan. Check that the fan is working correctly:

- Photoreceptor Fan
- Ozone Fan
- Power and Control Assembly Fan
- Single Board Controller Cooling Fan
- Vacuum Transport Fan (W/TAG 001)
- Duplex Paper Path Cooling Fans

Photoreceptor Fan

This fan draws air in at the rear of the machine and uses a duct to direct the air flow over the ROS, through the photoreceptor module and over the post fuser area. If the fan is suspect, go to the 390C Photoreceptor Fan RAP.

Ozone Fan

This fan draws air from the photoreceptor module and out through the ozone filter. Refer to PL 90.25 Item 1 and to Wiring Diagram 5.

If the components of this system are not in a good condition, ozone will not be removed from the xerographic area and deletions with shortened xerographic module life can be expected. Check the following:

- Check that the ozone seal on the rear face of the short paper path is in a good condition, if necessary install a new seal, PL 31.11 Item 6.
- Check that the ozone seal on the front face of the main drive module is in a good condition, if necessary install a new seal, PL 31.11 Item 6.
- Enter dC330 code 042-030 to run the ozone fan. If the fan does not run, refer to Wiring Diagram 5, if necessary install a new ozone fan, PL 90.25 Item 1.
- Check that the ozone filter is not blocked, if necessary install a new ozone filter PL 90.25 Item 3.

Power and Control Assembly Fan

This fan draws in air from the rear of the machine and blows it into the power supply. The fan is hard wired into the power supply. Refer to PL 1.10 Item 1.

Single Board Controller Cooling Fan

This fan is located within the single board controller PWB module. This fan draws air into the single board controller PWB module and blows the air onto the single board controller PWB.

Refer to the information that follows:

- Single board controller PWB, PL 3.22 Item 3.
- Wiring Diagram 11.

Vacuum Transport Fan (W/TAG 001)

This fan draws air down through the short paper path to assist the transport of A6 paper. Refer to PL 10.25 Item 1 short paper path and Wiring Diagram 6 (45-55 ppm) or Wiring Diagram 7 (65-90 ppm).

Duplex Paper Path Cooling Fans

This consists of a cooling fan, exhaust fan and a cooling duct assembly, all of which are integrated into the front door. The cooling fan 2 is located in the middle of the front door, PL 28.11 Item 6. This fan draws in air via the cooling duct into the front door and directs the air across the duplex transport area and into the image exit area. The cooling fan 1 is located in the front door, PL 28.11 Item 3. This fan draws air from the inverter base pan area and exhausts the air via the cooling duct in the front door.

The fans are enabled or disabled in dC131 location 791-078, Paper Path Cooling Fans Mode. The fans are run in dC330 code 042-036 Duplex cooling fans enable.

Refer to cooling fan 1, cooling fan 2 and the thermistor in Wiring Diagram 10.

Scanner Cooling Fan

This fan draws air in through a filtered vent situated in the lower left corner of the scanner module, then directs the air flow onto the LED heat sink of the scan carriage assembly, refer to PL 60.15 Item 1 and Wiring Diagram 45. The fan generates a lock alarm signal that outputs the status of the fan motor. To check the fan, refer to 362-960-00 LED Fan Lock Alarm.

SPDH Motor Cooling Fan

This fan draws air in at the rear of the SPDH, then directs the air flow onto the SPDH feed motor, refer to PL 5.18 Item 7 and Wiring Diagram 14. The fan generates a lock alarm signal that outputs the status of the fan motor. To check the fan, refer to 305-961-00 SPDH Motor Fan Lock Alarm.

SPDH LED Cooling Fan

This fan draws air in at the rear of the SPDH, then directs the air flow via a duct onto the LED heat sink of the side 2 scan assembly, refer to PL 5.18 Item 8 and Wiring Diagram 14. The fan generates a lock alarm signal that outputs the status of the fan motor. To check the fan, refer to 305-960-00 SPDH LED Fan Lock Alarm.

OF7 IOT PWB Diagnostics RAP

Purpose

To assist in identifying any suspected problems with the IOT PWB. If directed here from another procedure always return to that procedure.

Perform the IOT PWB corruption check before a new IOT PWB is installed. If the fault still occurs after completing this check then install a new IOT PWB.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following checks:

- IOT NVM Corruption Check.
- IOT PWB Voltage Check.
- IOT PWB Communications Check.

Ensure the machine is in normal mode (not standby mode).

IOT NVM Corruption Check

Corruption of the IOT NVM can cause paper jams, fuser temperature or xerographic control faults. Perform these steps before a new IOT PWB is installed.

Perform the steps that follow:

1. Enter dC131 location 791-087 Developer Material Age (Number of prints). Note the developer age value. Also check when the developer was last changed, to ensure that the age value is correct.
2. Go to dC301 NVM initialization
3. Select, Domain = Copier.
4. Select, Sub Domain = Copy Controller.
5. Select, NVM Data = All.
6. Select Initialize.
7. Switch off the machine, then switch on the machine, GP 14. Check if the fault still occurs.
   - If the fault does not occur, then go to step 6.
   - If the fault still occurs, install a new IOT PWB, PL 1.10 Item 2.
8. Perform dC604 Registration Setup Procedure.
9. Enter dC131 location 793-010 TC Sensor Control Voltage. Record the value on the NVM sheet stored in the wallet on the rear cover.
10. Enter dC131 location 791-087 Developer Material Age (Number of prints). Check that the value for the developer age is correct, reset the value if required.
11. Perform SCP 5 Final Actions

IOT PWB Voltage Check

1. On the IOT PWB check that the voltage-present LEDs that follow are on, Figure 1:

- CR12 - Indicates the presence of 3.3V.
- CR13 - Indicates the presence of 5V.
- CR15 - Indicates the presence of 12V.
- CR16 - Indicates the presence of 24V.
- CR36 - Indicates the presence of 3.3V standby supply voltage.

2. If CR16 is not on, but 24V is present at P/J27 pin 1, go to the 301G +24V Distribution RAP. If +24V is not present at P/J27, pin 1, check the voltage at P/J26 pin 9. This is the Low Power Mode Enable signal. If this signal is high, perform the 301L LVPS Checkout RAP.
3. If no LEDs are on, or only the CR36 3.3VSB is on, go to 301H Short Circuits and Overloads RAP.

IOT PWB Communications Check

1. Switch off the machine GP 14. Switch on the machine, GP 14. Observe the following conditions, Figure 1:
   - CR14 is off.
   - CR27 is flashing at about 2 Hz.
   - CR28 and CR29 are flashing alternately at about 1 Hz.
2. If any of the above conditions do not apply, perform the steps that follow:
   - Switch off the machine, GP 14.
   - Use the jumpers to short J17 pins 1 and 2, J18 pins 1 and 2, J19 pins 1 and 2, Figure 1.
   - Switch on the machine, GP 14. CR14 will illuminate during the reset of the IOT PWB. If the LED does not illuminate allow the machine to remain powered on for 1 minute before performing the next step.
   - After the machine has powered up, switch off the machine, GP 14.
   - Lift the jumpers from J17, J18 and J19. Park the jumpers on one pin only.
   - Switch on the machine, GP 14.
3. If any of the above conditions still fail, then install a new IOT PWB, PL 1.10 Item 2.

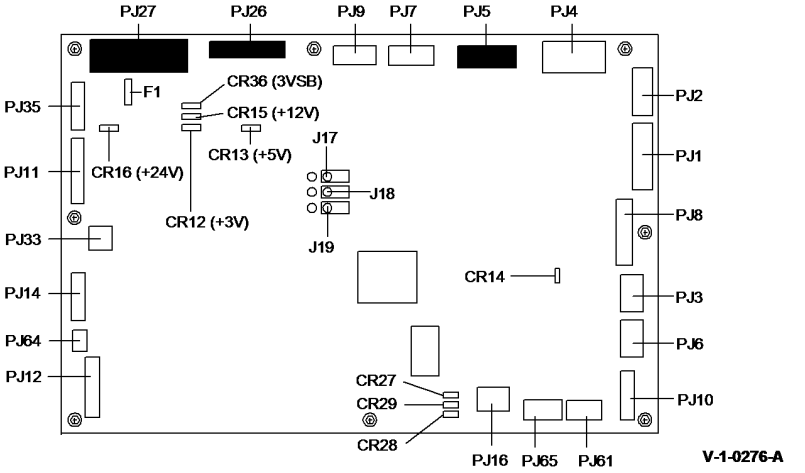


Figure 1 IOT PWB LED and switch locations

OF8 Multi-feed RAP

To solve several sheet multi-feeds or extra blank sheet output problems.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper. Do not use incorrectly cut paper, damp paper, paper with rough edges, badly drilled paper, paper with wrapper wax or glue contamination. Refer to IQ1 Image Quality Entry RAP.
- Check the paper specification, GP 20.
- Multi-feed from the bypass tray, go to 375A Bypass Tray RAP

Procedure

When checking for multi-feeds always use a new ream of paper. If a new ream can not be used, then perform the following:

- Fan the paper.
- Turn the paper round or turn the paper over.
- Remove four or five sheets from the top of the stack.
- When loading multi-reams of paper into tray 3 or tray 4. Remove the top and bottom sheet from each ream. This will prevent ream interface multi-feeds.

For tray 1 and tray 2, check the following:

- Check that the paper tray side guides are set to the correct paper size.
- The paper tray drops when the tray is pulled out and the tray elevates when pushed in.
  - Check the paper feed assembly, REP 80.1.
  - Check the paper feed rolls, REP 80.25.
  - Install new components as necessary, PL 80.26.
- The paper trays for worn, broken or missing components.
  - Install new components as necessary, PL 70.10.

For tray 3 and tray 4, check the following:

- The tray moves down when the tray is pulled out, and moves up when the tray is closed.
  - Check tray 3 paper feed assembly, REP 80.30.
  - Check tray 4 paper feed assembly, REP 80.31.
  - Install new components as necessary, PL 80.32, PL 80.33.
- The paper trays for worn, broken or missing components.
  - Install new components as necessary, PL 70.18.
- Perform ADJ 80.3 Tray 3 and Tray 4 Retard Roll Pressure.

For tray 6 check the following:

- The tray moves down when the door is opened, and moves up when the door is closed.
  - Check the paper feed assembly.
  - Check the paper feed rolls, PL 80.45 Item 2.
  - Install new components as necessary, PL 80.45.

For the bypass tray, perform the following:

- Ensure that the customer is not filling the tray above the max fill line.
- Clean the feed roll and retard pad with a damp cloth with water.
- Install a new feed roll and retard pad assembly, PL 70.30 Item 21.

OF9 False Fuser End of Life RAP

Use this RAP if the fuser module has reached its end of life, 400,000 prints, prematurely.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC131 locations 658-131, 658-132 and 658-133, then check the fuser module image count. If the image count is unexpectedly high, 422,000 or greater, then the CRUM data is corrupted.

Procedure

Check the following:

1. Refer to Wiring Diagram 5. Check the wiring harness at PJ141. Repair the wiring as necessary, REP 1.2.
2. Check for damage to the fuser CRUM socket on the drives module, (45-55 ppm) PL 40.15 Item 1, or (65-90 ppm) PL 40.10 Item 1.
3. Check for damage to the CRUM plug on the fuser module, (45-55 ppm) PL 10.8 Item 1, or (65-90 ppm) PL 10.10 Item 1.
4. W/TAG 001 Only. Check that the harness from the vacuum transport fan has not been trapped in the fuser CRUM socket, Figure 1. Repair the wiring or install a new short paper path assembly, PL 10.25 Item 1. Use a cable tie to route the wires away from the fuser module.
5. If the fault remains, go to the OF10 Intermittent Failure RAP and refer to the Electrostatic Discharge Checkout.

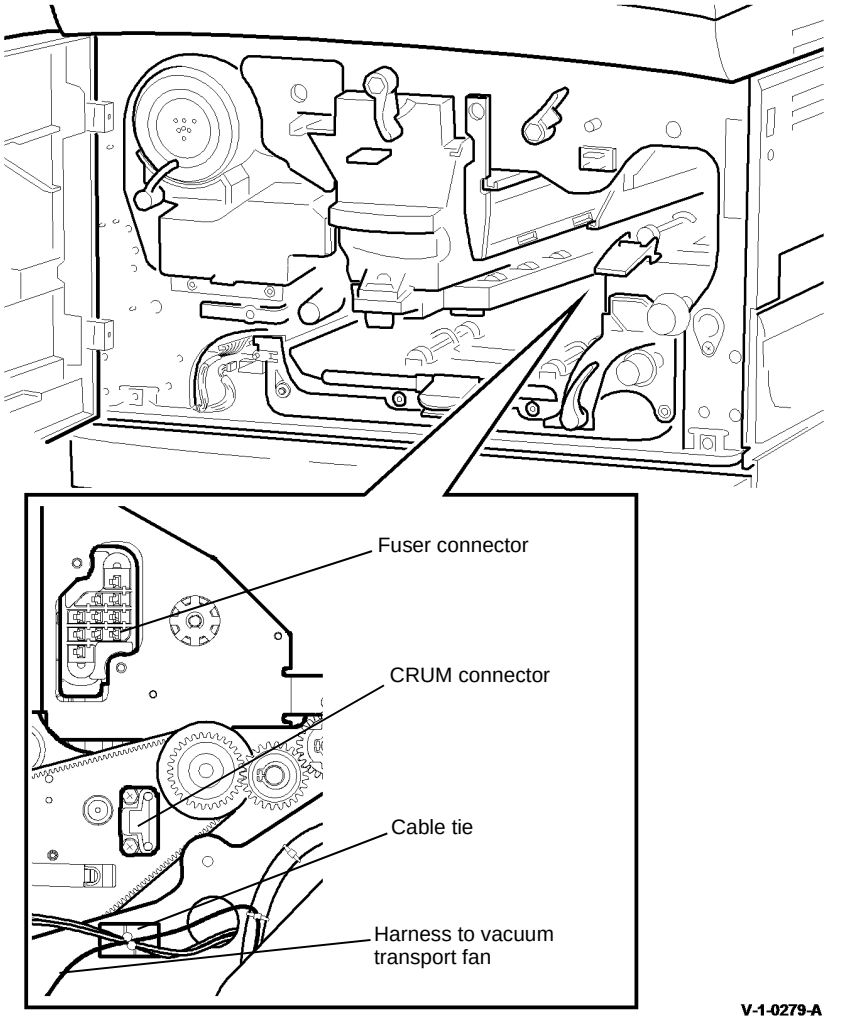


Figure 1 Fuser and CRUM connector

OF10 Intermittent Failure RAP

Use this RAP to locate failures when no specific cause can be found, i.e. if the machine resets to 'Ready to scan your job' or 'Please wait' during a print / copy run, or a fault code occurs which cannot easily be repeated.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Perform the following to gather additional information about the fault:

- Ask the customer if there are any specific functions that cause the fault to occur; e.g. using the input or output module, or making reduced images.
- Enter faults mode and check the active messages and the event log. If a fault code is raised when the failure occurs, then go to the appropriate RAP.
- Make copies and observe where the paper stops and which components are switched on or off when the failure occurs.
- Check if there is a repetitive pattern to the failure.

Procedure

Go to the relevant checkout:

- Customer Power Supply Checkout
- External Electrical Equipment Checkout
- Common Causes Checkout
- Connectors and Wiring Checkout
- Power Supply Checkout
- EPROMs Checkout
- Electric Motors Checkout
- Solenoids and Clutches Checkout
- Switches and Sensors Checkout
- High Voltage Arcing Checkout
- Registration Guide Checkout
- Developer Assembly Checkout
- Xerographic Module and Corotron Checkout
- Electrostatic Discharge Checkout
- Paper Trays Checkout
- Duplex Transport Assembly Checkout
- Output Device Checkout

Customer Power Supply Checkout

WARNING

Take care when measuring AC mains (line) voltage. Electricity causes death or injury.

CAUTION

If you suspect that the customer power supply is incorrect, do not try to correct the customer power supply. Do not reconnect the printer. Inform the customer and your manager.

- Measure the customer power supply voltage at the power outlet and check that the customer power supply is within specification. Refer to GP 22 Electrical Power Requirements.
- Check that the customer power supply does not drop below the specification when the copier is making copies, use a digital meter and select 'Peak Hold'. Refer to GP 22 Electrical Power Requirements.

External Electrical Equipment Checkout

WARNING

Take care when measuring AC mains (line) voltage. Electricity causes death or injury.

CAUTION

If you suspect that the customer power supply is incorrect, do not try to correct the customer power supply. Do not reconnect the machine. Inform the customer and your manager.

Perform the following:

- Ask the customer if there is any electrical equipment, which uses a large amount of current, that is connected to the same supply circuit as the machine.
- With the customer's assistance, check if the failure occurs when electrical equipment near to the machine is switched on or off.
- If possible, connect the machine to a different supply circuit from the equipment that is causing the problem.

Common Causes Checkout

Make the following checks of common causes of intermittent failures:

- Check for intermittent connections in the fuser connector assembly, (45-55 ppm) PL 40.15 Item 9 or (65-90 ppm) PL 40.10 Item 9.
- Check that the interlock switch, PL 1.10 Item 7, is fully actuated by the front interlock. If the fault is eliminated when an interlock cheater is installed, check that the interlock actuator bracket is not damaged. Install new components as necessary.

Connectors and Wiring Checkout

Refer to REP 1.2 for details of wiring harness repair.

Check the following:

- Visible signs of damage to the wiring and the ribbon cables.
- Check for pinched wires near moving parts.

- The SPDH module harness for broken wiring. Ensure that the ground terminals are secure.
- For the continuity of harnesses by checking for wire breaks inside insulation. Gently pull the relevant connector and wire while measuring continuity.
- Check that all the PWB and in-line connections are good. Refer to PJ Locations.
- Check the continuity of the ground connections to the developer module, fuser module and input and output modules. Refer to the 301A Ground Distribution RAP.
- Check that all the input and output module static eliminators are connected correctly and in good condition; refer to the relevant input or output module RAP.

Power Supply Checkout

Check the power cord for continuity. Refer to the 301C AC Power RAP.

EPROMs Checkout

Check that all EPROMs are installed correctly. Refer to REP 3.3 Single Board Controller and Power Distribution PWBs.

Electric Motors Checkout

Refer to GP 10 How to Check a Motor and perform the following:

- Disconnect each motor in turn to locate the motor that is causing the fault. When the faulty motor has been located, install a new motor.
- If the fault still exists, locate the PWB that drives the motor and install a new PWB.

Solenoids and Clutches Checkout

Refer to GP 12 How to Check a Solenoid or Clutch and perform the following:

- Check that the components are installed correctly.
- Check that there is no mechanical binding, slipping or interference.
- Enter the relevant output codes and check that the energizing of the components is reliable. Check if the fault is caused when the components de-energize.
- If it is suspected that a clutch or solenoid is faulty, install a new component as necessary.
- If the fault still exists, locate the PWB that drives the component and install a new PWB.

Switches and Sensors Checkout

Refer to GP 11 How to Check a Sensor, GP 36 How to Check an Adaptive Sensor and GP 13 How to Check a Switch. Perform the following:

- Check that the components are clean and installed correctly. Ensure that the wiring to the components is connected correctly.
- Enter the relevant input codes and check that the sensing of the components is reliable. Check if the fault is caused when the components are actuated.
- If it is suspected that a switch or sensor is faulty, install a new component as necessary.
- If the fault still exists, locate the PWB that controls the component and install a new PWB.

High Voltage Arcing Checkout

Use this Checkout when there are intermittent 4X-XXX failures and the suspect cause is high voltage arcing.

Refer to the 391-060-00 HVPS Fault RAP and complete all of the actions to check the HVPS.

Registration Guide Checkout

- Check that the upper registration and lower registration guides are not shorted to ground. If a short to ground is found, inspect the guides and harnesses between the registration guide and bias lead at CB terminal on the HVPS.
- Check that there is continuity between the upper and lower registration guide. Check that the registration bias terminal screw is tight.
- Check that the bias contact on the registration guide is not damaged (45-55 ppm) PL 80.15 Item 23 or (65-90 ppm) PL 80.17 Item 23.
- Check that the transfer/detack corotron shield is not damaged. Install a new transfer/detack corotron, PL 90.20 Item 8. Check the registration guide for damaged, (45-55 ppm) PL 80.15 Item 4 or (65-90 ppm), PL 80.17 Item 4.

Developer Assembly Checkout

- Check the harness between DB terminal on the HVPS and PJ94 on the black developer assembly for shorts to ground or damage.
- Check the ground line from PJ93 pin 10 on the developer assembly is in place and that the connector is installed correctly and undamaged. Confirm that there is continuity between the connector and ground.
- Inspect the developer assembly for damage and or incorrect assembly that may cause arcing.
- If no fault is found, install a new developer assembly, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

Xerographic Module and Corotron Checkout

- Check the transfer/detack corotron guide and the surface of the photoreceptor for damage and contamination that indicates that these components are colliding with each other. Ensure that both components are installed correctly.
- Inspect the transfer/detack corotron for correct installation. If any damage or wear is identified, install new transfer/detack corotron, PL 90.20 Item 8.
- Check that the charge scorotron leaf spring on the drives module for damage. Check the spring and the terminal on the xerographic module for signs of arcing.
- Disconnect the corotron harnesses one at a time from the HVPS. Make copies to determine if the fault is caused by one of these components. Install new components if the fault is determined and isolated.
- Inspect the HVPS and its surrounding area for signs of arcing. If necessary install a new HVPS, PL 1.10 Item 5.
- Check the corotron harnesses on the HVPS for damage and short circuits to ground.
- Check that the corotron wires are correctly tensioned and terminal blocks are clean and free of arcing marks.
- Check the transfer/detack corotron is located correctly in the short paper path assembly. Ensure that the short paper path moves freely and latches in the correct position. Refer to the replacement procedure in REP 10.1.
- Check that the bias contact on the registration guide is not damaged (45-55 ppm) PL 80.15 Item 23 or (65-90 ppm) PL 80.17 Item 23.
- Check that there is continuity between the upper and lower registration guide and that the bias terminal screw is tight.

Electrostatic Discharge Checkout

Perform the following:

- If the fault only occurs when feeding from a specific paper tray, go to Paper Trays Checkout.
- If the fault only occurs when only making duplex copies, go to Duplex Transport Assembly Checkout.
- Check that all components and connectors are seated correctly on the SBC PWB.

Paper Trays Checkout

- Check that the paper tray size detection sensors match the size of paper in the trays. Check that the control panel indicators display the correct size of paper.
- Perform the Electrostatic Discharge Checkout.
- Refer to the appropriate RAPs to check the operations of sensors, feed components and associated harnessing.
  - 381-101-00, 381-111-00 Tray 1 Misfeed RAP
  - 381-102-00, 381-112-00 Tray 2 Misfeed RAP
  - 381-103-00, 381-113-00 Tray 3 Misfeed RAP
  - 381-104-00, 381-114-00 Tray 4 Misfeed RAP
  - 381-115-00, 381-117-00 Tray 6 Misfeed RAP

Duplex Transport Assembly Checkout

- Check the operation of the duplex tray latch.
- Check the ground connections on the duplex transport assembly. Refer to 301A Ground Distribution RAP.
- Check for continuity between the upper guide and the transport drive shafts.
- Check that the duplex transport is located correctly, REP 80.5 Duplex Transport.

Output Device Checkout

To run the machine without the output device connected, use a finisher bypass harness, PL 26.10 Item 7. If the problem is cleared, then go to the appropriate output device.

- 1K LCSS. Check the following:
  - Ground connection on the power cord, PL 11.124 Item 8.
  - Static eliminator on bin 0 entry, PL 11.118 Item 7.
  - Static eliminator on the tamper assembly, PL 11.112 Item 5.
  - Static eliminator on the bin 1 entry, PL 11.120 Item 7.
  - Check that all of the connectors on the 1K LCSS PWB are pushed fully home. Ensure that all of the ground wires are connected to the frame.
  - Check all the harnesses for damage and short circuit to ground.
- 2K LCSS. Check the following:
  - Ground connection on the power cord, PL 11.26.
  - Static eliminator on bin 0 entry, PL 11.22 Item 7.
  - Static eliminator on the tamper assembly, PL 11.16 Item 5.
  - Static eliminator on the bin 1 entry, PL 11.23 Item 7.
  - Check that all of the connectors on the LCSS PWB are pushed fully home. Ensure that all of the ground wires are connected to the frame.
  - Check all the harnesses for damage and short circuit to ground.
- LVF BM. Check the following:
  - Ground connection on the power cord, PL 11.90 Item 4.
  - Static eliminator on bin 0 entry, PL 11.70 Item 7.
  - Static eliminator on the tamper assembly, PL 11.64 Item 5.
  - Static eliminator on the bin 1 entry, PL 11.72 Item 7.
  - Static eliminator on the exit upper guide, PL 11.88 Item 9.
  - Check that all of the connectors on the LVF PWB and LVF BM PWB are pushed fully home. Ensure that all of the ground wires are connected to the frame.
  - Check all the harnesses for damage and short circuit to ground.
- HVF. Check the following:
  - Ground connection to the power supply unit, PL 11.157 Item 1.
  - Static eliminator on BM entry. PL 11.161 Item 26.
  - Exit brush on HVF top exit, PL 11.155.
  - Static eliminator on BM exit, PL 11.168 Item 16.
  - Exit brush on the Tri folder right hand frame, PL 11.190.
  - Ground wire on the BM compiler motor, PL 11.166 Item 4.
  - Ground wire on the BM back stop motor, PL 11.163 Item 1.
  - Ground wires to HVF entry and exit feed motors, PL 11.150.
  - Ground wires to HVF buffer reed and bypass feed motors, PL 11.150.
  - Ground wire to front of HVF paddle module, PL 11.145 Item 2.
  - Ground wire to the HVF offset motor, PL 11.140 Item 19.
  - Ground wire to HVF paper pusher motor, PL 11.145 Item 13.
  - Ground wire to HVF staple assembly, PL 11.140 Item 14.
  - Check that all of the connectors on the HVF PWB, and BM PWB are pushed fully home. Ensure that all of the ground wires are connected to the frame.
  - Where the Tri Folder and the Inserter options are installed check that the PWB connectors are pushed fully home. Ensure that all of the ground wires are connected to the frame
  - Ground wire on the inserter PWB, PL 11.179 Item 9.
  - Inserter docking PJ and connector.
  - Check all the harnesses for damage and short circuit to ground.

NOTE: *The HVF may optionally have a tri folder and inserter unit. Where fitted, these should also be checked.*

OF11 Waste Toner Contamination RAP

Use this RAP if there is excessive waste toner contamination in the machine or on the customer's floor.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Waste toner is being deposited in the waste toner bottle.

Y N

Remove the waste toner bottle and waste toner door, REP 90.1. Place a sheet of paper in the bottom of the aperture from where the waste toner bottle was removed, to collect fallen toner. Enter dC330, code 091-010 photoreceptor motor. Push back the waste toner shutter, Figure 1, to expose the auger. **The auger rotates.**

Y N

Install a new main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Perform the following

- Remove and examine the shutter, Figure 1. Ensure that the shutter operates correctly and allows waste toner to reach the bottle. If necessary install a new shutter, (45-55 ppm) PL 40.15 Item 11 or (65-90 ppm) PL 40.10 Item 13.
- Remove the auger damper, (45-55 ppm) PL 40.15 Item 13 or (65-90 ppm) PL 40.10 Item 11. Remove the xerographic module. Use a toner vacuum cleaner to remove waste toner from the duct between the xerographic module and the waste toner bottle. Re-install all removed components. Monitor the waste toner bottle during subsequent customer use of the machine.

Waste toner is being deposited in the waste toner bottle

Y N

Install new components:

1. Xerographic module, PL 90.20 Item 2.
2. Main drive module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.

Perform SCP 5 Final Actions.

Check that the waste toner bottle is undamaged and that the waste toner bottle seal, Figure 1, is undamaged.

If necessary, install new parts:

- Waste toner bottle, PL 90.10 Item 1.
- Shutter assembly, (45-55 ppm) PL 40.15 Item 11 or (65-90 ppm) PL 40.10 Item 13.

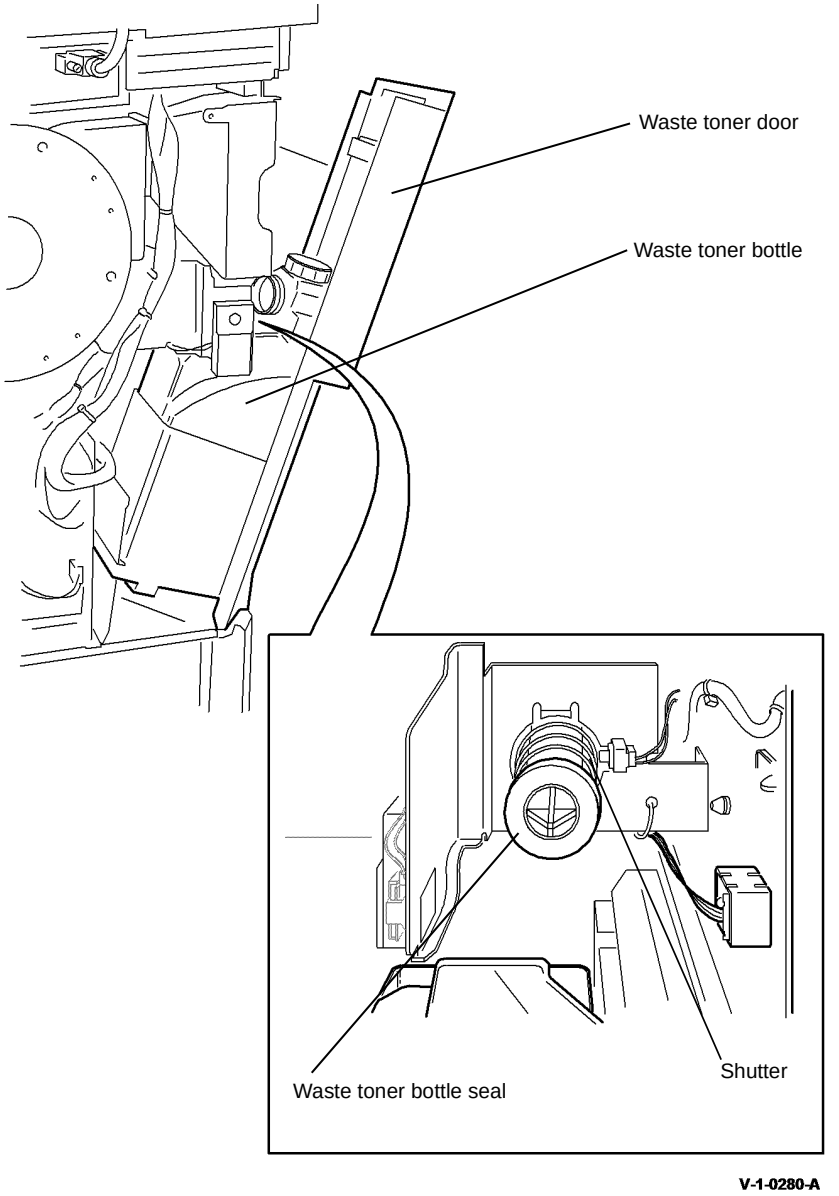


Figure 1 Component location

OF12 False Xerographic Module End of Life RAP

Use this RAP if the xerographic module has reached its end of life, 400,000 prints, prematurely.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC131 locations 658-128, 658-129 and 658-130, then check the xerographic module image count. If the image count is unexpectedly high, 422,000 or greater, then the CRUM data is corrupted.

Procedure

Perform the following:

1. Refer to Wiring Diagram 5. Check the wiring harness at PJ141. Repair the wiring as necessary, REP 1.2.
2. Check for damage to the xerographic module CRUM connector. If necessary, install a new drives module, (45-55 ppm) PL 40.15 Item 1 or (65-90 ppm) PL 40.10 Item 1.
3. Check for damage to the CRUM plug on the xerographic module, PL 90.20 Item 2. If necessary, install a new xerographic module.
4. Refer to Wiring Diagram 10. Make sure all connectors on the HVPS and PJ55 are secure.
5. Install a new HVPS, PL 1.10 Item 5.
6. If the fault remains, go to the OF10 Intermittent Failure RAP and refer to the Electrostatic Discharge Checkout.

OF13 Convenience Stapler RAP

To identify problems with the convenience stapler.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

CAUTION

Incorrect voltage may damage the convenience stapler. The convenience stapler must not be connected to the power outlet if the voltage is incorrect.

***NOTE:** There are no serviceable components in the convenience stapler.*

Check that the power lead is correctly connected to the convenience stapler, Figure 1. Check the AC mains (line) voltage at the customer power outlet. **The voltage measured is within the power requirements, GP 22.**

Y N

If the voltages are incorrect or the wiring of the main supply is found to be defective, inform your technical manager and the customer. Do not attempt to repair or adjust the customer supply.

Install a new convenience stapler, PL 25.10 Item 1.

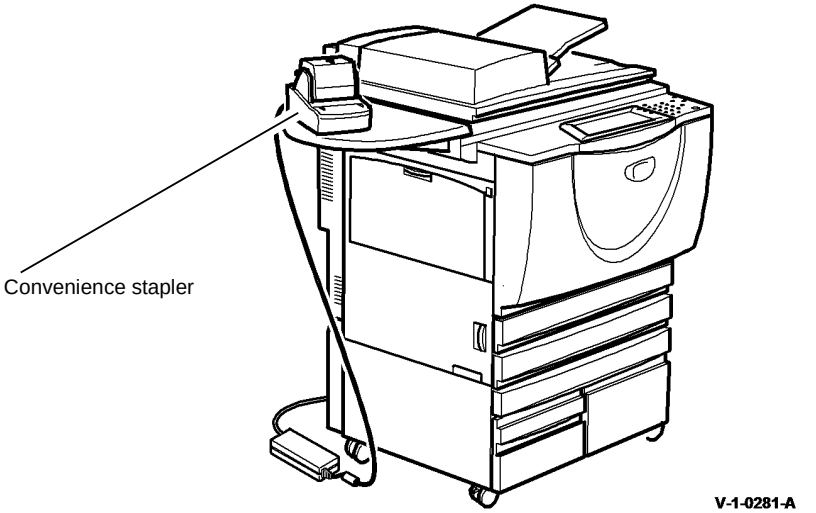


Figure 1 Component location

OF14 Extensible Interface Platform RAP

Use this RAP when experiencing faults with the Xerox Extensible Interface Platform.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. As necessary, perform the following:
   - Reload the Machine software, GP 4, using the Altboot process. Ask the customer to resubmit the EIP enablement file and restore EIP settings
   - Install a new UI control PWB, PL 2.10 Item 6.
   - Perform the 303D SBC PWB Diagnostics RAP.
2. Request the customer to check their network and software.

OF15 Xerox Secure Access RAP

Overview

Xerox Secure Access uses an external device, such as a card reader or biometric device, to authorize access to the workcentre. The reader passes the information to the workcentre, which handles the authentication process, including which UI screens are displayed, accepting UI responses that define their content and order. The workcentre can gather user identities and passwords directly from an external server. All communication is via the workcentre's connection to the ethernet. Figure 1 Network Diagram.

Xerox Secure Access is controlled via the CentreWare Web UI. The active status is displayed in tools within Access Control. If communications cannot be established with the Xerox Secure Access Server, the service may be temporarily disabled by touching the now enabled Off button within the Xerox Secure Access tools window. Once communication is re-established the stored Xerox Secure Access setting are restored.

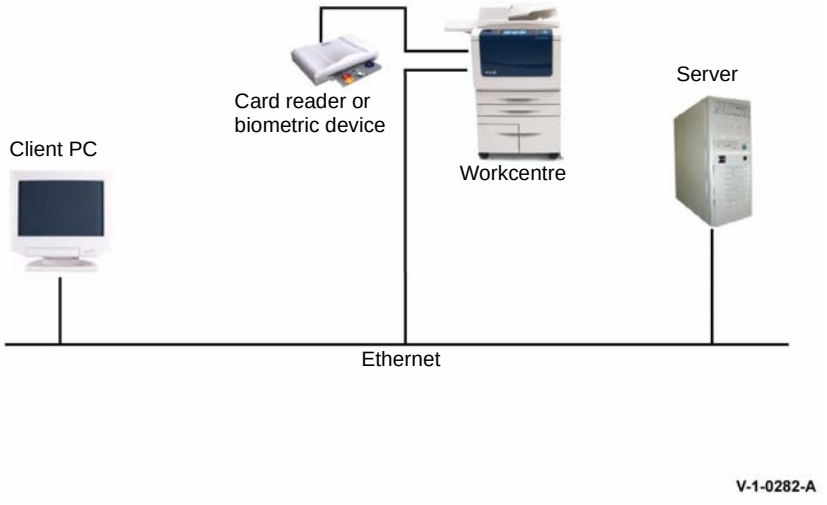


Figure 1 Network Diagram

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Before working on the Xerox Secure Access, test the machine in service mode, GP 1 to ensure no faults are displayed and that the machine is functioning properly. If it is not, repair any problems before proceeding with diagnosing the Secure Access Accessory. Service mode can be entered to test copier functionality when Secure Access is installed.

Perform the steps that follow:

- Check the connection between the card reader and the workcentre.
- Check if the LEDs are on or blinking on the card reader. If the LEDs on the card reader are not operating, go to Card Reader Failure.
- If customers have problems of install / setting up, or any other problems related to their Secure Access Administrator, they should refer to the Installation / Administration Guide or contact Xerox Technical Support.

Card Reader Failure

The primary failure modes of the card reader are power problems or failed hardware components. The symptom of these failures can be detected by observing the LEDs on the card reader. Table 1.

- The Green LED on the Card Reader is On
- The Green LED on the Card Reader Flashes Rapidly
- The Red LED on the Card Reader is On
- The Red LED on the Card Reader Flashes Slowly
- The Red LED on the Card Reader Flashes Rapidly
- The Card Reader LEDs are neither On nor Flashing

Table 1 LED identification

When the LED on the card reader is	Meaning
Red	The authentication device is in idle mode; there is no active session.
Green	The authentication device is in ready mode; a session is active.
Slow flashing red	The authentication device has no connection to the server.
Slow flashing green	The authentication device is communicating to the server.
Fast flashing red	Invalid card / password; access denied

The Green LED on the Card Reader is On

- This indicates an active Secure Access Session and the Card Read correctly corresponds to a valid Secure Access Account.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.
- Ensure that the card corresponds to a valid Secure Access Account.

The Green LED on the Card Reader Flashes Rapidly

- This indicates a valid card swipe and the system is in process of authentication on the server.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.
- If the UI on the machine is locked and no secondary PIN is required. Check that the Xerox Secure Access is installed correctly, and ask the customer to check the configuration at the server.

The Red LED on the Card Reader is On

- This indicates the card reader is in an idle state. If the red LED remains on, and the UI remains locked after a card is swiped, re-orient the card and re-swipe.
- Try a known good card in the reader. If the known good card works on the problem card reader, ask customer to make sure the problem card corresponds to a valid Secure Access Account.
- Try the card in a known good card reader. If the card is working on a known good card reader, install a new card reader.

The Red LED on the Card Reader Flashes Slowly

- This indicates the reader is connected to the controller but the controller is not connected to the server. Make sure the connectors of the LAN connections are working properly. If the connections are working, this indicates the network may not work properly. Ask customer to check with Network Administrator.

The Red LED on the Card Reader Flashes Rapidly

- This indicates a valid card but does not correspond to a valid Secure Access Account at the server, test with a known valid user's card.
- If all cards react the same way, this indicates the server configuration may not be correct. Ask the customer to check the server configuration.
- If some cards react this way, this indicates the cards are not valid. Ask the customer to check that the problem cards for the following:
  - A properly formed certificate can be found on the card
  - A personal identifier entered by the system administrator can be validated against the card
  - The card is not damaged or worn

The Card Reader LEDs are neither On nor Flashing

- Check that the Secure Access feature is correctly installed.
- If there is still no LED illumination on the card reader, install a new card reader.

  NOTE: *if there is another working card reader available, the readers can be changed over to confirm failure.*

- If the Card Reader is not functioning, the web page of the machine has a setting that will enable UI keypad access. If the users know their card access number, they can use the machine by manually entering their number. The process is as follows:
  1. Go to the machine web page under properties and then security and check the box that says "Allow local user interface initiation".
  2. Enable the keypad and test with valid credentials. This will validate the rest of the secure access function.
  3. Leave the system in this mode until the new card reader can be installed.

OF16 USB Keyboard RAP

Use this RAP if an optional external keyboard fails to communicate with the machine.

Overview

The optional USB keyboard feature enables the customer to connect a standard USB keyboard to the machine. This allows textual input to, and navigation between fields on the UI screen.

NOTE: *This feature requires SMP1 or higher software.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Confirm that the machine software version is SMP1 or higher.
2. Check that the USB keyboard is plugged into a USB port on the machine.
3. Ensure that the USB ports are enabled.
   a. Print a configuration report.
   b. Check the configuration report under the heading Connectivity Physical Connections.
   c. If Software Tools is not listed next to USB Connection Mode, ask the customer to enable USB. Or enter Customer Administration Tools, GP 24. Enable USB.
      i. Refer to the USB Port Security Setting Check in GP 4.
      ii. Refer to GP 28 USB Connection Mode.
4. Confirm that the USB port is functional.
   a. Connect the USB keyboard to a different USB port if available.
   b. Perform dC361 NVM Save. If the NVM can be saved to a USB flash drive, the USB port is functional.

      NOTE: *It is not necessary to perform the NVM restore procedure.*

   c. If the USB port checks fail, perform the 303D SBC PWB Diagnostics RAP.
5. Confirm the USB keyboard is functional.
   a. Connect the USB keyboard to the PWS.
   b. Ask the customer to connect the USB keyboard to a computer.
   c. If the USB keyboard checks fail, ask the customer to install a different USB keyboard.

3 Image Quality

Image Quality RAPs

Image Quality Specifications

IQ1 Image Quality Entry RAP

Use this RAP to determine the source of an image quality problem.

When border erase is switched off, an image defect within 5mm of the edge of the sheet is acceptable.

Initial Actions

- Check the condition of the paper. Do not use incorrectly cut paper, damp paper, paper with rough edges, badly drilled paper, paper with wrapper wax or glue. Paper and media should be stored flat, enclosed in wrappers, in a cool dry environment.
- Check that the paper is within specifications. GP 20.
- Check that paper tray guides are set to the correct paper size.
- Check the document guides on the SPDH.
- Check the original documents for defects. If the documents are damaged passing through the SPDH, go to the 305D Damaged Documents RAP.
- Ensure that the image adjustment mode selections are those used by the customer.

  NOTE: *If the customer is using Toner Save mode, explain that this will lighten the image to save toner. Standard mode (Toner save disabled) should be used for image quality problem solving.*

- Enter Administrator Mode on the UI. Press the Machine Status Button, select the Tools tab, select the Service Settings tab, select the Copy Service tab. Disable the Toner Saver mode if it is not already disabled. At the end of the IQ procedure, remember to set the Toner Saver mode back to the original setting. Make test prints, if the image quality problem is now fixed, go to SCP 5 Final actions.
- Clean the charge and transfer/detack corotrons.

Procedure

If necessary, refer to IQ1 Internal Test Patterns for:

- A description of image quality defects.
- The optimum test pattern to be used to diagnose the defect.
- An example of all internal test patterns.

If possible, use the customer job to recreate the image quality problem.
Enter service mode, GP 1. Select Diagnostics. Select dC612 Print Test Patterns. Select a suitable test pattern. Select 1 Sided. Press Start Test. **The printed images of the internal test pattern are good.**

Y N

Go to IQ2 Defects RAP.

Check the back of the prints for toner contamination. **The back of the prints are clean.**

Y N

Go to IQ2 Defects RAP.

Select a suitable test pattern. Select 2 Sided. Press Start Test. **The printed images of the internal test pattern are good.**

Y N

Go to IQ2 Defects RAP.

A

Check the prints for damage. **The prints are not damaged.**

Y N

Go to the IQ5 Print Damage RAP.

If a fax module is installed, send a test fax to the machine. **The fax image quality is good.**

Y N

Compare the fax print with an internal test pattern print. **The fax print and the internal print display the same defect.**

Y N

Go to IQ9 Unacceptable Received Fax Image Quality RAP.

Go to IQ2 Defects RAP.

Exit service mode. Use the prints of the internal test pattern and make copies of these from the SPDH. **The copies of the internal test pattern are good.**

Y N

Go to the IQ7 SPDH, Document Glass and Scanner RAP.

Use the print of the internal test pattern and make three copies from the document glass. **The copies of the internal test pattern are good.**

Y N

Check the image quality defects. **The defects on the copies are identical.**

Y N

Go to the IQ2 Defects RAP.

Go to the IQ7 SPDH, Document Glass and Scanner RAP.

Compare the image dimensions of the internal test pattern with the prints through the SPDH and from the document glass. Refer to IQS 8 Magnification. **The dimensions are within specifications.**

Y N

Go to ADJ 3.2 Magnification Adjustment.

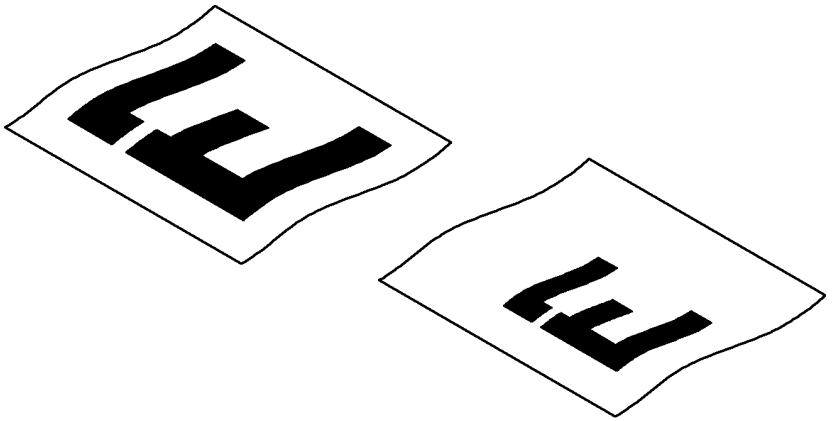
If possible, use the customer document to make a simplex copy from the document glass and a duplex copy through the SPDH, at 100% magnification. Make another copy at a different magnification setting. Compare the images, Figure 1. **The defect is on the same part of the image.**

Y N

Return to the start of this procedure and select a different internal test pattern to check the image quality.

Perform the following as necessary:

- If the defect is on the simplex copy, perform ADJ 60.3 Scanner Cleaning Procedure
- If the defect is on side 1 of the duplex copy, perform ADJ 60.3 Scanner Cleaning Procedure
- If the defect is on side 2 of the duplex copy, perform ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure



V-1-0284-A

Figure 1 The defect location check

IQ1 Internal Test Patterns

Table 1 defines the image defect, gives a description of the defect and identifies the optimum test pattern to be used.

Table 2 describes the test patterns and the purpose for which they should be used to identify image quality defects.

Use the test patterns 1, 2, 5, 8, 14, 16 and 19 for image quality analysis. The other test patterns are designed for the use of initial machine calibration by the manufacturer.

Table 1 Image quality defects

Image quality defect	Description of defect	Optimum internal test pattern
Background	Uniform darkening across all the non print areas	1
Bands	Grey to dark in the light or non-image areas of the print in the process direction or across the process direction. See also narrow bands.	2, 3
Barber pole deletions	A series of finger print deletions that form a pattern like a barber pole or auger marks. The deletions are repeated at proximately 7cm and are approximately 30 degrees to the lead edge throughout a grey or dark dusting.	3
Beads on print	Developer beads in the light or non-image areas of the print.	1, 2
Black image	A print that is black or grey all over, but has no visible image of the original document.	1
Blank image	No visible image.	3

Table 1 Image quality defects

Image quality defect	Description of defect	Optimum internal test pattern
Blurred image	Part or whole of the image has the appearance of being out of focus. Refer to IQS 4 Resolution.	9, 11, 12, 13 and 14
Dark prints	Very dark background with a visible image.	1, 11, 12, 13 and 14
Deletions	Areas of the image missing from the print. Deletions may be in the form of white spots, marks, lines, or whole areas of toner missing from the print.	2, 3, 4, 9
Displaced and fragmented image	Distorted images, part images and missing images (scrambled images). Displaced images.	3, 9, 11, 12, 13 and 14
Light images	The image is visible on the print, but with insufficient solid area density.	5, 8
Lines	Black or white lines across the process direction or in the process direction. See also the description, displaced and fragmented image.	2, 3, 4
Magnification	At 100% magnification the printed image differs from the size of the image on the original document. Refer to IQS 8 Magnification.	5, 11, 12, 13 and 14
Marks	Dark marks in the non-image areas of the print.	1, 2
Misregistration	The image on the paper is Misregistered. Refer to IQS 7 Registration.	9
Narrow Bands	Bands across the process direction visible in halftone areas.	4
Non uniformity	Variation in image quality and density across the print. See also uneven density.	3
Offsetting	A previous image that was not removed from the fuser roll during the cleaning cycle. The image is repeated at regular intervals.	7
Part images and missing images	Incomplete or missing images.	3, 9, 11, 12, 13 and 14
Print damage	Creases, curl, cuts, folds, wrinkles, or embossed marks are visible on the print.	3
Repeat images	Refer to offsetting defects and residual image defects.	7, 11, 12, 13 and 14
Residual image	A previous image that was not removed from the photoreceptor during the cleaning cycle.	7, 11, 12, 13 and 14
Rotated image	The image on the printed document has turned 90 degrees to the image printed on the original document.	11, 12, 13 and 14
Skew	A difference in angular alignment between image on the print and the original document.	9
Skips.	Loss or stretching of the image, and compression of the image, in bands across the process direction.	9

Table 1 Image quality defects

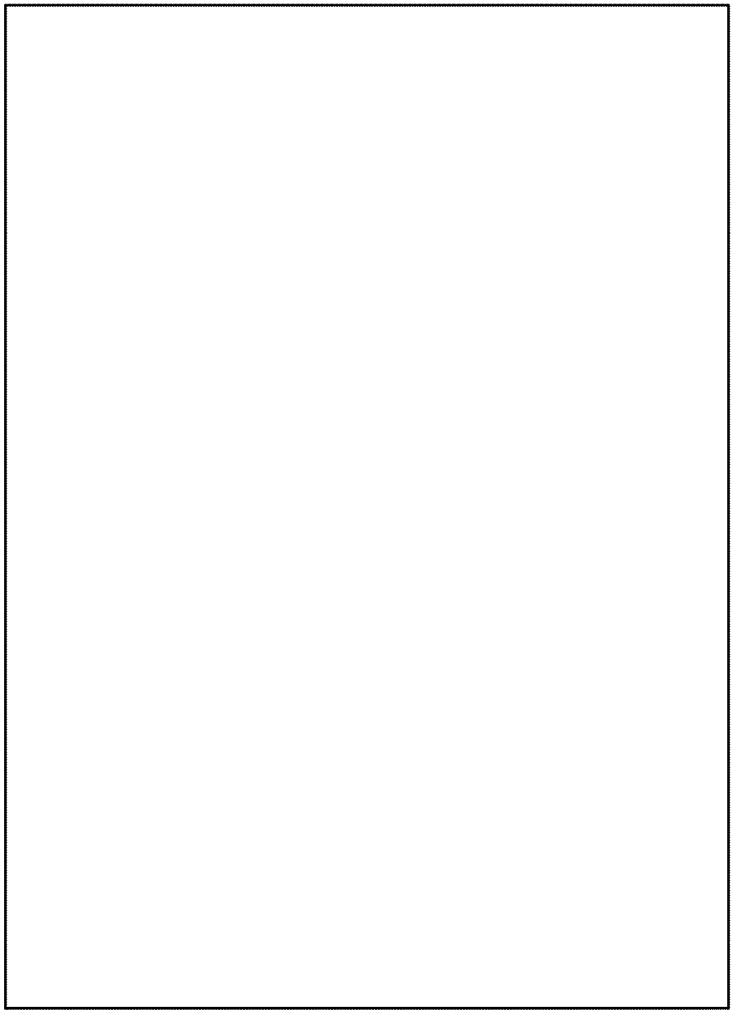
Image quality defect	Description of defect	Optimum internal test pattern
Smears	Loss or stretching of the image, and compression of the image, in bands across the process direction.	9
Smudges	Darker images across the process direction.	3
Spots	Dark spots in the non-image areas of the print.	1, 2
Streaks	Lines on the print, in the process direction of the non-image area.	2, 3
Stretched and distorted images	The image on the paper is stretched or distorted.	9
Toner contamination on the back of prints	Random black spots or marks	2
Uneven density	Variation in image density across the print. See also non uniformity.	3
Unfused prints	The toner image on the finished print is not fused to the print medium.	7

Table 2 Internal test patterns

Number	Description	Purpose
ITP1	0% coverage, Figure 2.	Use for background defects spots and scratches.
ITP2	25% halftone (106dpi 45deg), Figure 3.	Use for light density uniformity, deletions, lines, bands and streaks.
ITP3	50% halftone (106dpi 45deg), Figure 4.	Use for uniformity, fuser defects, lines, bands, streaks and smears and barber pole deletions.
ITP4	Perpendicular lines (2on/2off), Figure 5.	Use for motion quality. ROS, developer, registration transport, fuser and intermediate gear trains.
ITP5	Original IOT TRC+MQ, Figure 6.	Use for the light copies RAP.
ITP6	Perpendicular bands (1 inch on/1 inch off), Figure 7.	Use for solid area reproducibility, checking fusing, stripper finger marks, solid area, offsetting and cleaning.
ITP7	Black band (off, 4.75inch on/ 1.75inch on), Figure 8.	Use for fuser offsetting and cleaning failure. Stress test for stripping from the fuser.
ITP8	Step-wedge (106dpi 45deg), Figure 9.	The 50% wedge is used for checking IOT darkness.
ITP9	Quadrille lines (4on/60off), Figure 10.	Use to check for deletions, skew and skips.
ITP10	Registration print, Figure 11.	Use to check registration and skew.

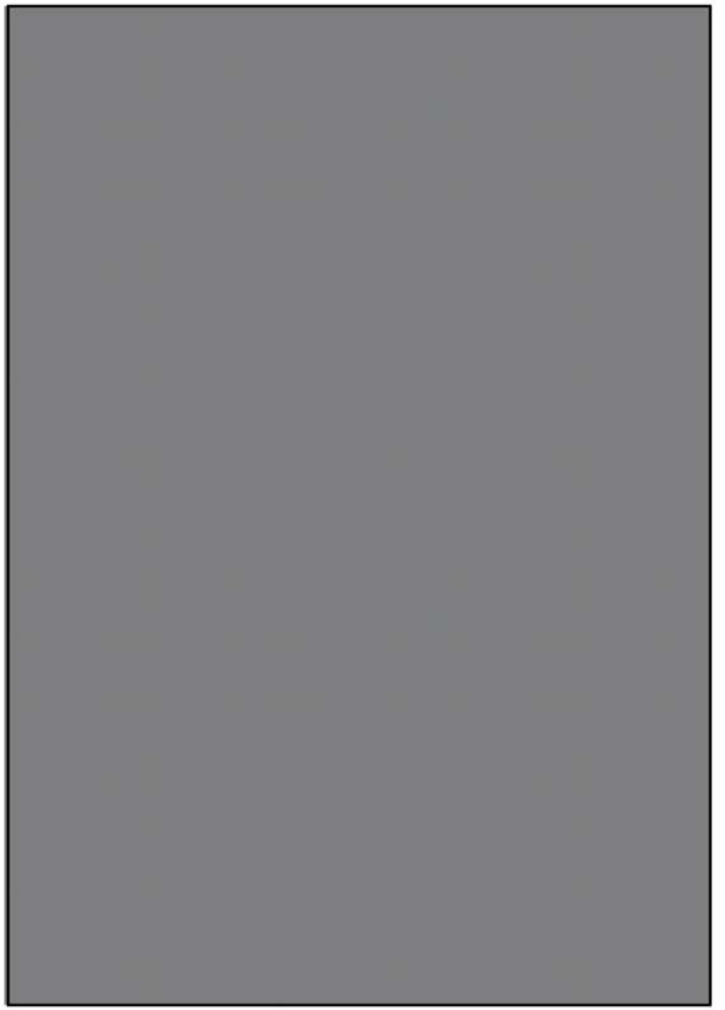
Table 2 Internal test patterns

Number	Description	Purpose
ITP11	Field test pattern (letter). Uniformity areas, registration marks and resolutions targets, Figure 12 and Figure 13 (2 pages).	Use to check registration, resolution, uniformity, streaks and bands.
ITP12	Field test pattern (A4). Uniformity areas, registration marks and resolutions targets, Figure 12 and Figure 13 (2 pages).	Use to check registration, resolution, uniformity, streaks and bands.
ITP13	Field test pattern (A3). Uniformity areas, registration marks and resolutions targets, Figure 12 and Figure 13 (2 pages).	Use to check registration, resolution, uniformity, streaks and bands.
ITP14	Field test pattern (tabloid). Uniformity areas, registration marks and resolutions targets, Figure 12 and Figure 13 (2 pages).	Use to check registration, resolution, uniformity, streaks and bands.
ITP15	TP3, Figure 14.	For service engineers general use.
ITP16	TP16 Figure 15.	For service engineers general use.
ITP17	TP21 (11x17inch) Figure 16.	For service engineers general use.
ITP18	TP36 Figure 17.	For service engineers general use.
ITP19	Smear (11x17inch) Figure 18.	For service engineers general use.
ITP20	100% coverage Figure 19	For service engineers general use.



V-1-0285-A

Figure 2 Internal test pattern 1



V-1-0286-A

Figure 3 Internal test pattern 2

Figure 4 Internal test pattern 3

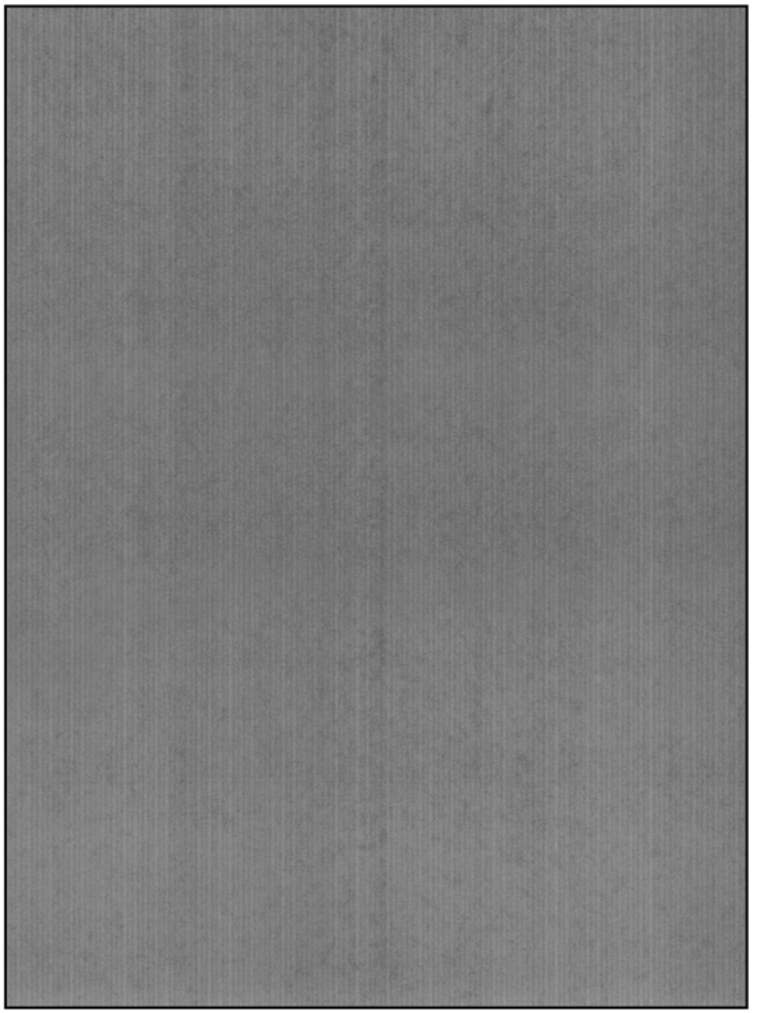
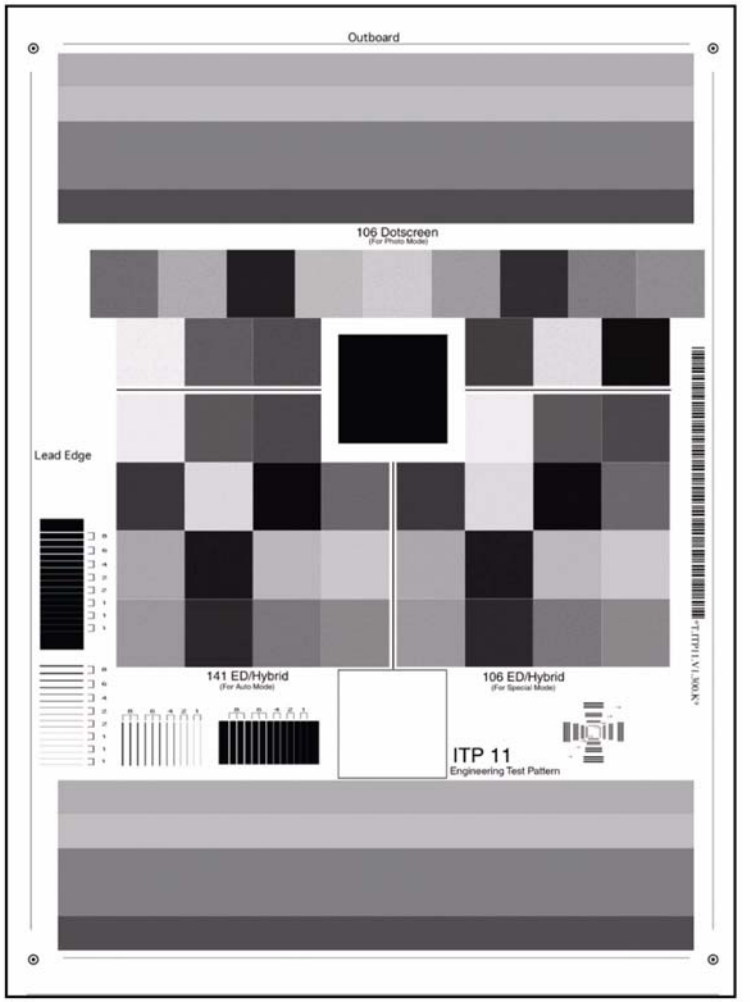
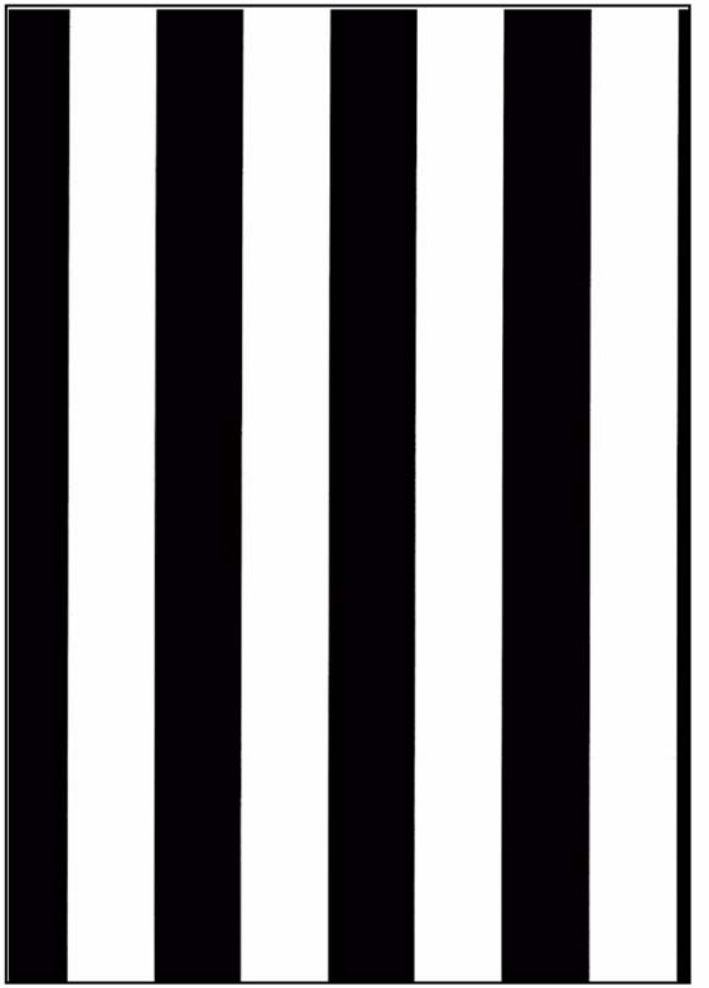


Figure 5 Internal test pattern 4



V-1-0291-A

Figure 6 Internal test pattern 5



V-1-0292-A

Figure 7 Internal test pattern 6

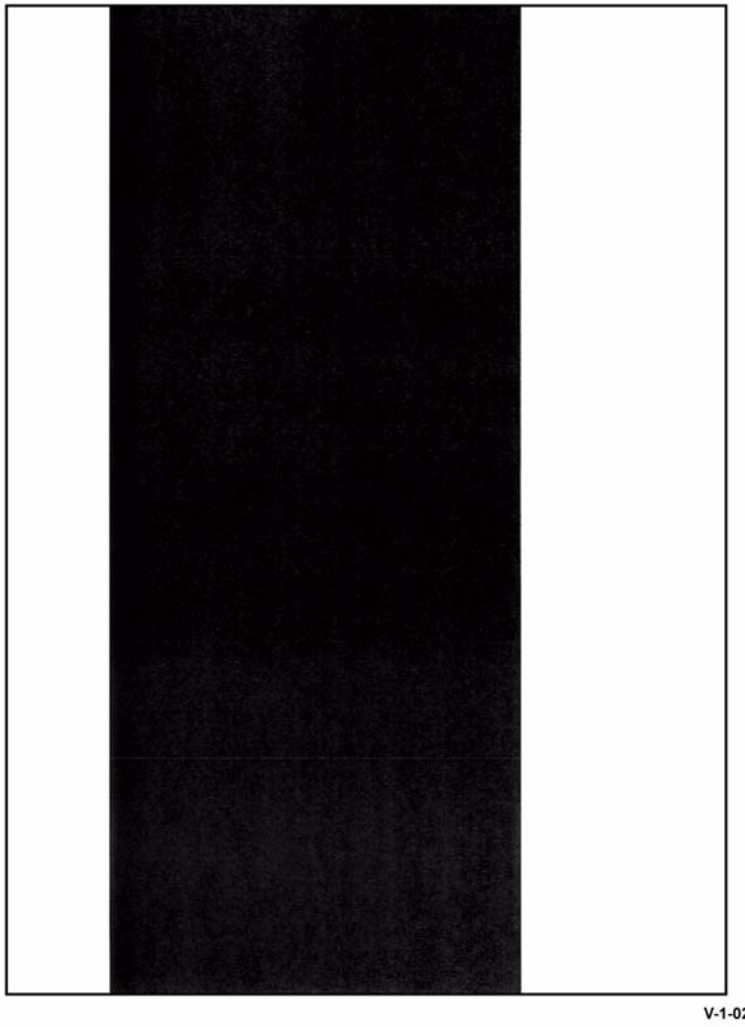


Figure 8 Internal test pattern 7

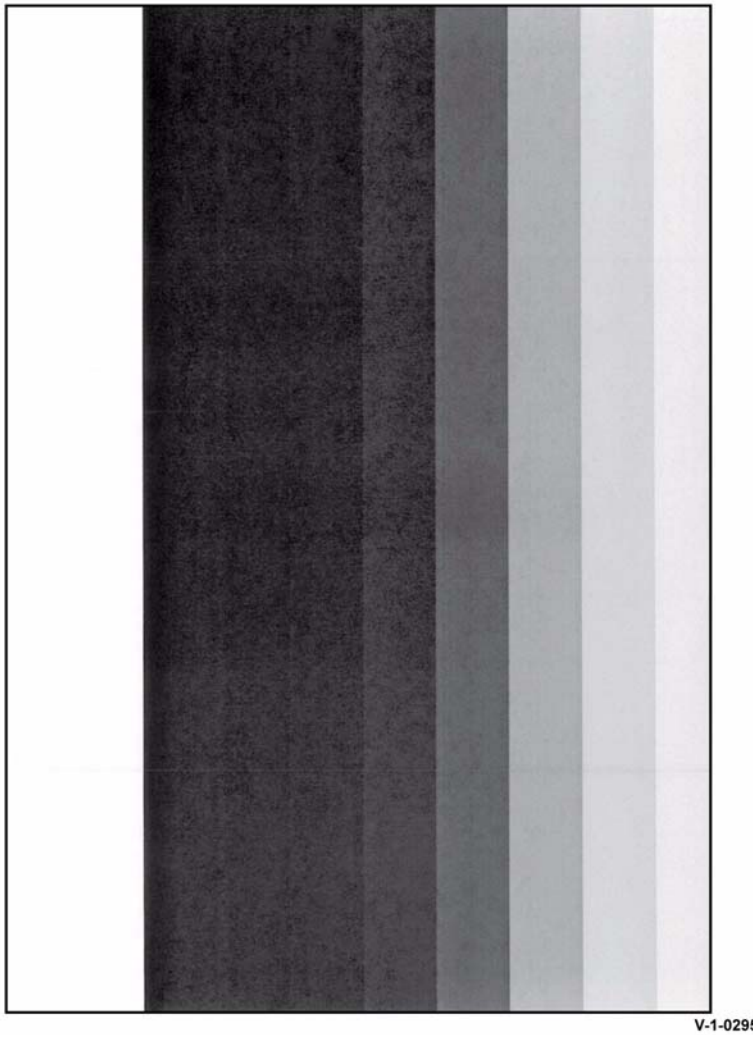


Figure 9 Internal test pattern 8

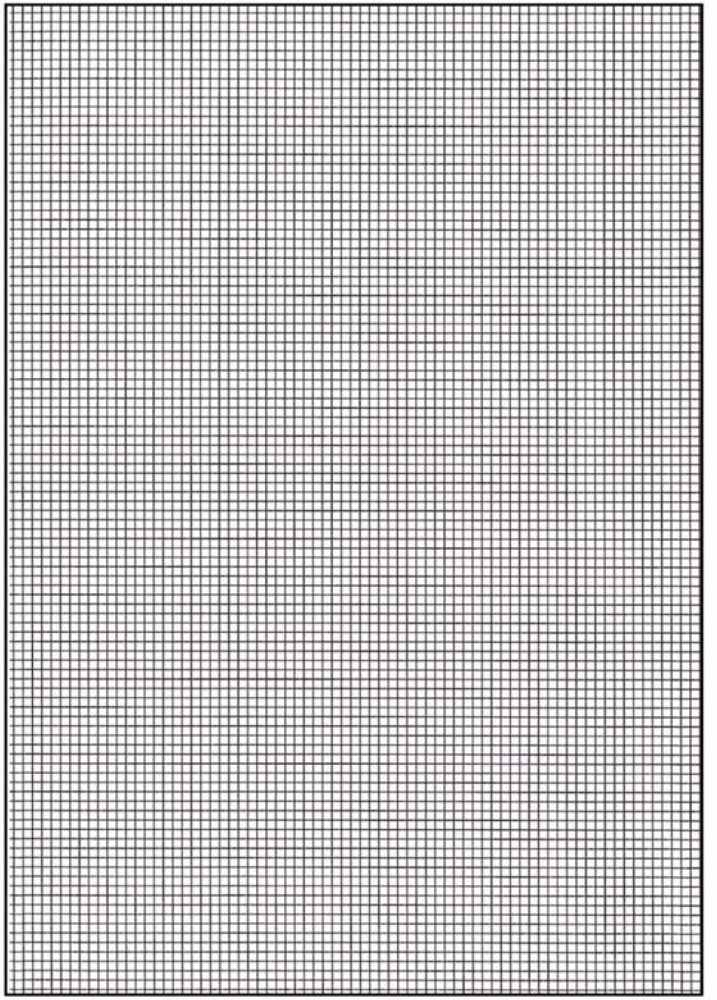


Figure 10 Internal test pattern 9

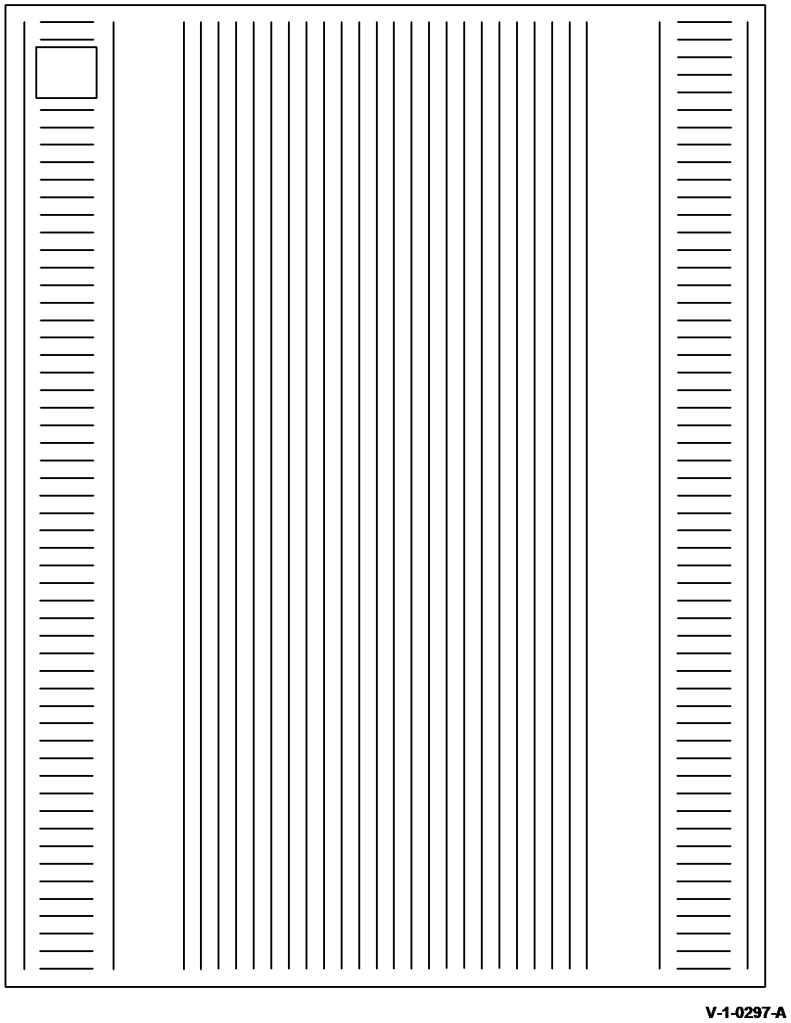
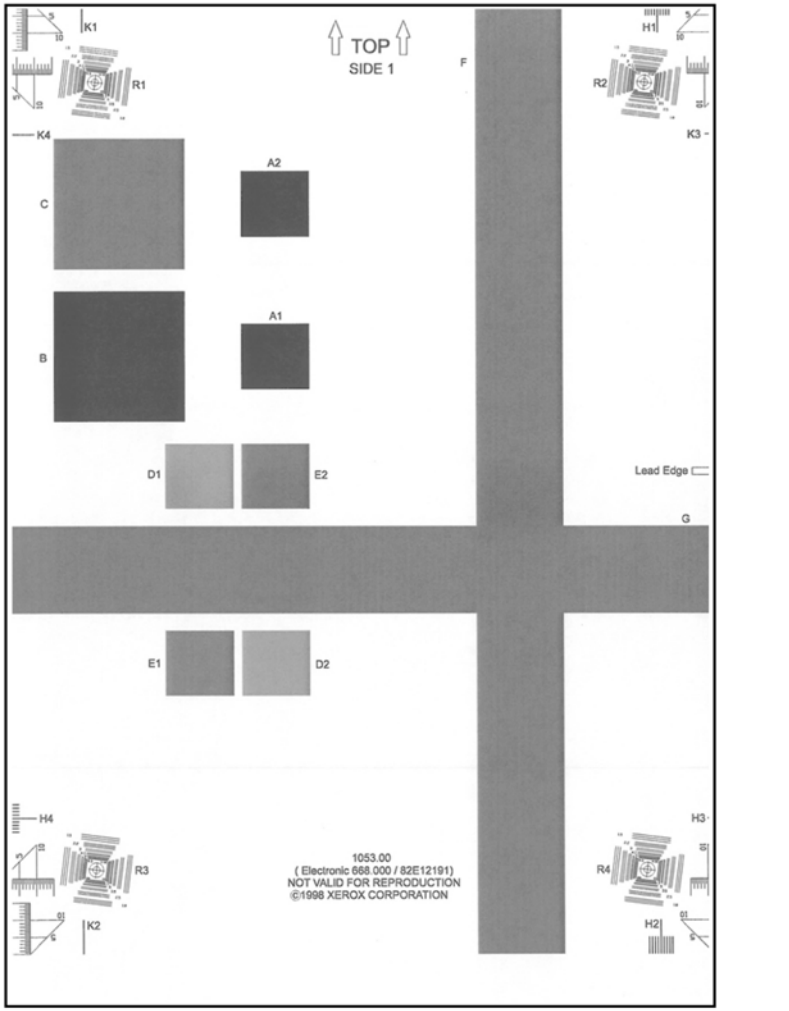
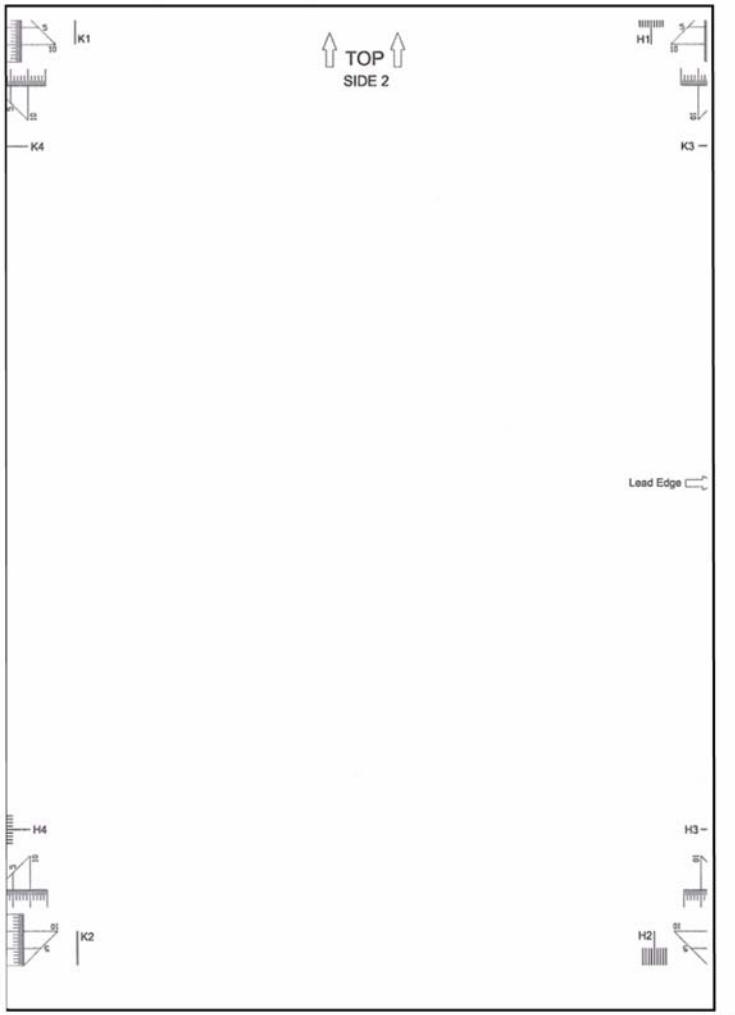


Figure 11 Internal test pattern 10



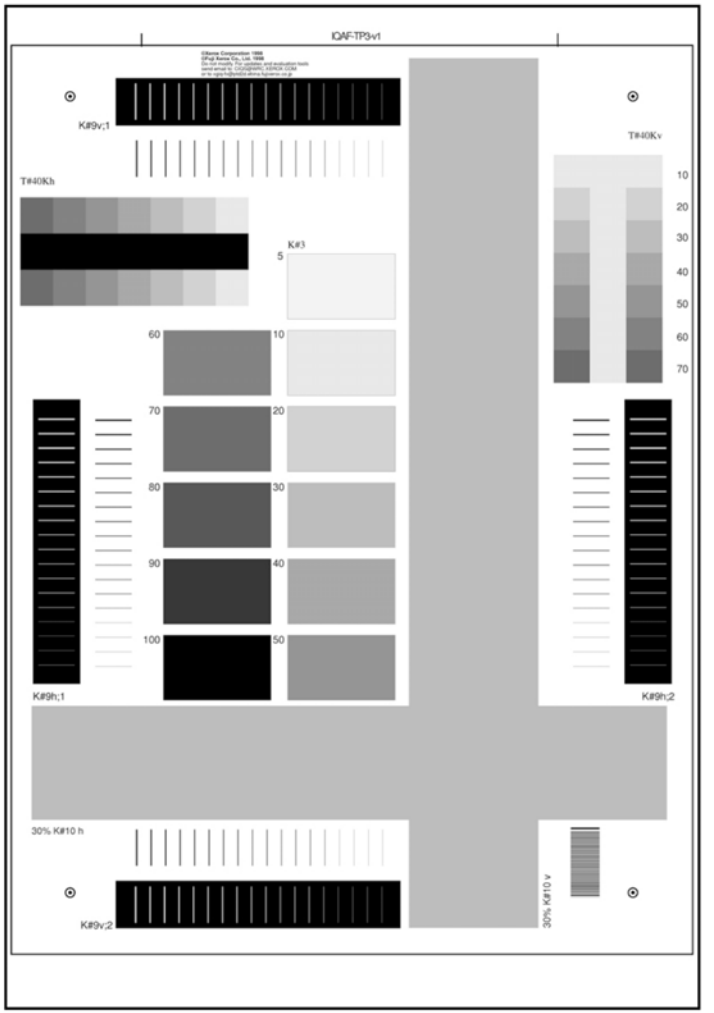
V-1-1493-A

Figure 12 ITP 11, 12 13 and 14 (side 1)



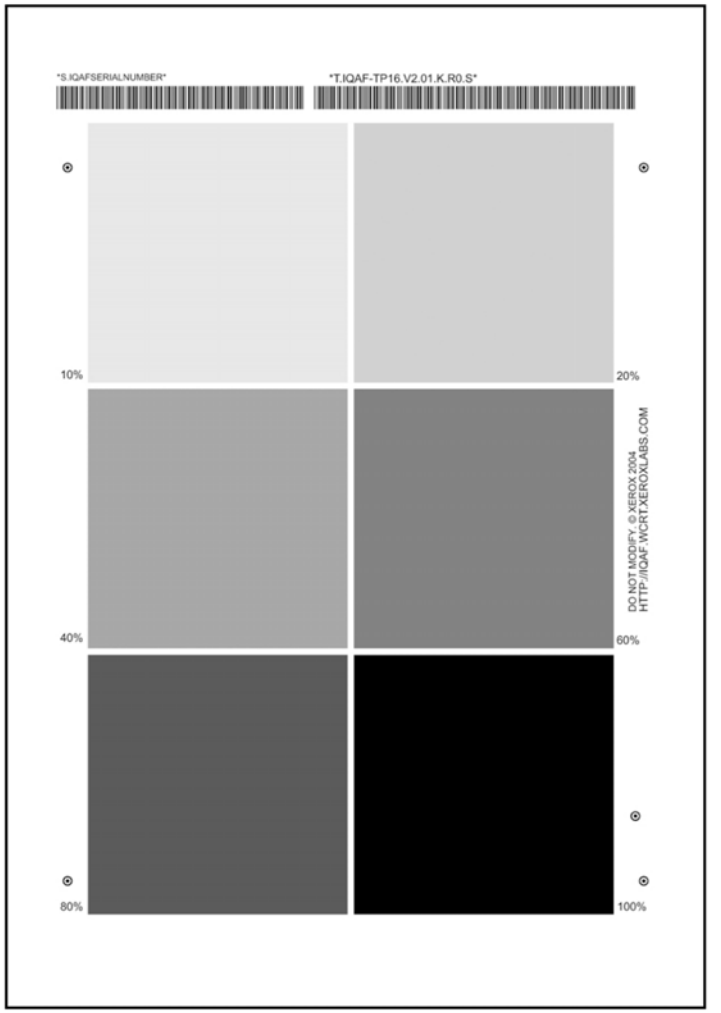
V-1-1494-A

Figure 13 ITP 11, 12 13 and 14 (side 2)



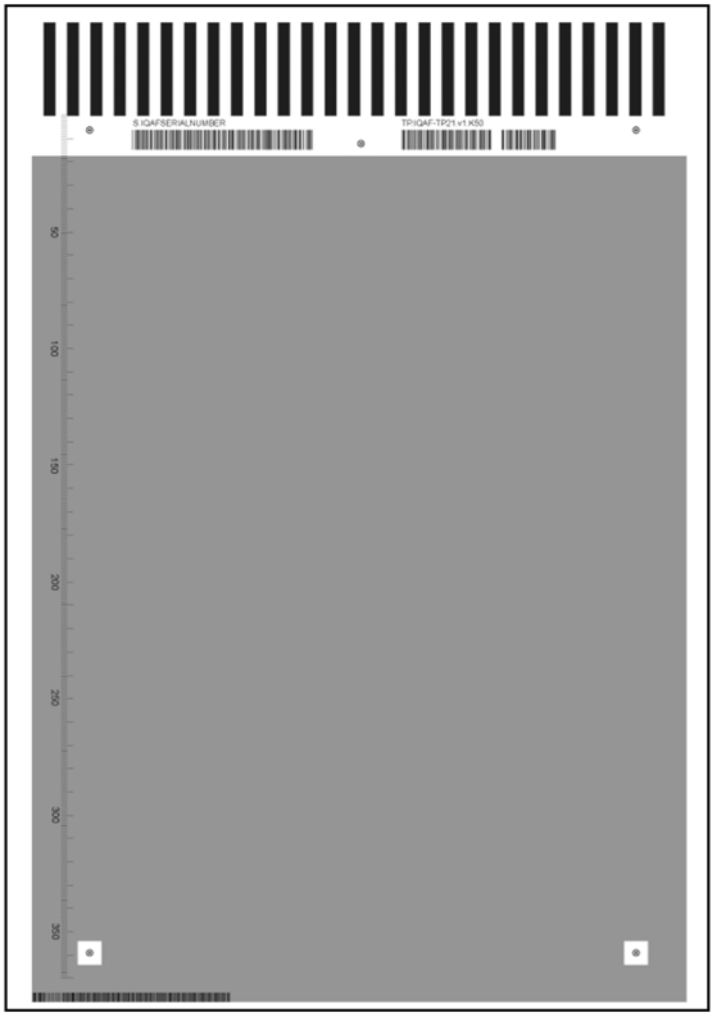
V-1-1496-A

Figure 14 Internal test pattern 15



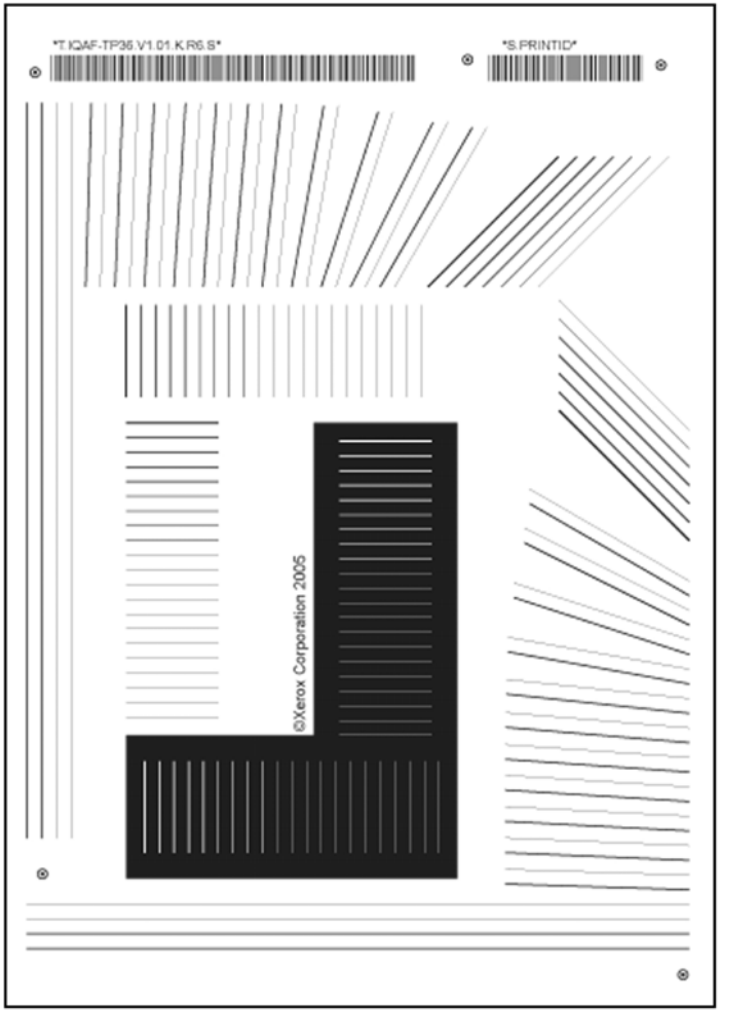
V-1-1497-A

Figure 15 Internal test pattern 16



V-1-1498-A

Figure 16 Internal test pattern 17



V-1-1499-A

Figure 17 Internal test pattern 18

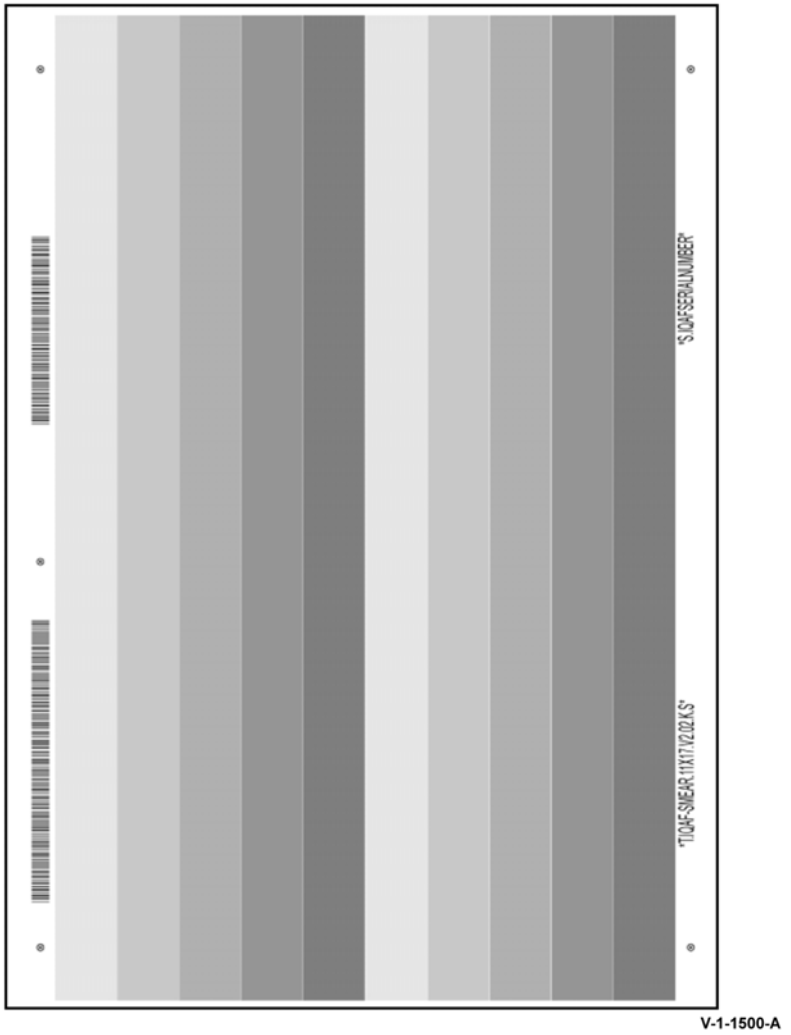


Figure 18 Internal test pattern 19

Figure 19 Internal test pattern 20

IQ2 Defects RAP

Use this RAP to resolve image quality defects.

When border erase is switched off, an image defect within 5mm of the edge of the sheet is acceptable.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the error log for the following codes: 93-310, 93-390, 93-360, 93-361, 93-362, 93-363. If any of the codes are displayed, go to the 393-310-00, 393-390-00 Low Toner Sensor Failure RAP or the 393-360-00 to 393-363-00 Toner Concentration Sensor Failure RAP.

Procedure

Refer to the appropriate image quality failure and perform the appropriate action.

- **Background**. Refer to the IQS 6 Copy / Print Defects and IQS 2 Background. Go to the IQ3 Xerographic RAP.
- **Bands**. Go to the IQ3 Xerographic RAP.

  White bands on a grey or dark dusting. Check for developer leakage, refer to IQ3 Developer Assembly Checkout.
- **Barber pole deletions.** A series of finger print deletions that form a pattern like a barber pole or auger marks. The deletions are repeated at proximately 7cm and are approximately 30 degrees to the lead edge throughout a grey or dark dusting. Go to IQ12 Barber Pole Deletions/Developer Leakage RAP.
- **Beads on print**. Clean the following:
  - Developer beads hanging from the developer roll and the lower lip, Figure 1.
  - The developer roll area, above and in the recesses below the roll, Figure 1.
  - The halo guide and the registration guide, Figure 1.
  - The drive roll assembly, PL 80.15 Item 9 and under the registration nip assembly, PL 80.15 Item 5. Refer to Figure 1.
  - The duplex transport (45-55 ppm) PL 80.22 or (65-90 ppm) PL 80.20.
  - The base pan of the machine.

  Go to IQ3 Xerographic RAP and complete the Xerographic Module and Short Paper Path Checkout and the Developer Assembly Checkout.

  Improperly seated transfer/detack end block covers, or a misadjusted halo guide can score the surface of the drum, leading to developer loss and premature xerographic module replacement. Perform ADJ 90.4 Xerographic Cleaning.
- **Black band.** Copies have black band 1 inch wide from top of the copy. At start print the scan carriage assembly moves to the right, start to scan and then pulsates for an inch. Check the connections on the scanner PWB. Install a new scanner PWB, PL 60.20 Item 4.
- **Part Image / Part Black Image**
  - Go to IQ7 IQ7 SPDH, Document Glass and Scanner RAP
- **Black image**. Check the following conditions:
  - If both the print and the copy are completely black, go to the 361-350-00 ROS Laser Not Under Control RAP.
  - If only the print is good, but the copy is black, go to the 362-450-00 to 362-472-00, 362-781-00 Scanner Calibration Faults RAP, for side 1 black images, or go to the 366-450-00 to 366-463-00, 366-466-00 to 366-468-00 SPDH Scanner Calibration Faults RAP, for side 2 black images.
  - For other black images, go to the IQ3 Xerographic RAP.
- **Blank image**. Perform the following:
  - Insert a door cheat and make a copy. At the same time use a flashlight and illuminate the photoreceptor between the developer and the xerographic module. Check the following:

    If the copy is completely blank, go to the IQ3 Xerographic RAP.

    If the copy has a dark band go to the 361-340-00 ROS Laser Failure RAP.

    If the blank images are additional output. Go to the OF8 Multifeed RAP
  - Check the developer drives:
    1. Remove the xerographic module, PL 90.20 Item 2.
    2. Make a visible bald patch on the developer roll by moving the developer brush.
    3. Re-install the xerographic module.
    4. Enter dC330 code 042-010 main motor, MOT42-010. Run MOT42-010 for approximately 5 seconds.
    5. Remove the xerographic module, PL 90.20 Item 2.
    6. Check for the visible bald patch on the developer roll. If the patch is still visible, check the drives to the developer, GP 7.
  - If 46-060 faults are in the fault history log, go to the 391-060-00 HVPS Faults RAP.
  - If only side 1 is blank, go to the 362B Side 1 Exposure Lamp Failure RAP.
  - If only side 2 is blank, go to the 362C Side 2 Exposure Lamp Failure RAP.
- **Blurred image**. Perform the following:
  1. Check that the documents are flat on the document glass.
  2. Use a new ream of paper.
  3. Check that the transfer and detack corotrons wires are secure and taut. If necessary install a new transfer/detack corotron, PL 90.20 Item 8.
  4. The xerographic drum may be heat damaged by fuser temperature control problems. Look for the indicators that follow:
     - Characters on copies/prints are bold, thick and smeared looking (blurred, out of focus).
     - An inspection of the photoreceptor reveals a yellow/green haze on the drum surface.
     - The top photoreceptor seal, which is normally white, may be yellow/brown, curled and shrunken.
     - Make a print of internal test pattern 5, refer to dC612. The defect can sometimes be a fairly well defined darker band approximately 25mm (1 inch) wide running from inboard to outboard on the photoreceptor. Other times it may not be a well defined and there may be more than one defect area on the drum.

– There may be 10-315 or 10-320 faults in the fault history file.

The cause of this fault is the fuser lamp coming on and staying on in standby, the excessive heat damages the drum, due to an intermittent fault. Perform the actions that follow:

a. Install a new xerographic module, PL 90.20 Item 2.

b. Perform dC301 NVM Initialisation and select the Copier NVM Initialization routine. Do not save/restore NVM because this may restore corrupted NVM. However if the NVM was saved from a time when the machine did not have the fault, then and NVM restore should be performed.

c. If the problem continues, Install a new fuser module assembly, PL 10.8 Item 1 (45 to 55 ppm) or PL 10.10 Item 1 (65 to 90 ppm).

d. If the problem persists, perform the following as necessary:

i. OF7 IOT PWB Diagnostics RAP.

ii. Install a new fuser connector assembly, PL 40.10 Item 9 (65 to 90 ppm) PL 40.15 Item 9 (45 to 55 ppm).

iii. Install a new LVPS and base module PL 1.10 Item 3.

- **Dark prints**. Go to the IQ3 Xerographic RAP.
- **Deletions**. Check the following:
  – If the deletions are on side 2 of a duplex print or copy, go the IQ5 Print Damage RAP. Also refer to the white lines defect.
  – Intermittent (1 in 50 to 1 in 400 copies) irregularly-shaped deletions positioned near the centre of the leading edge, and on either side of the print. This type of deletion is known as Cockle deletion, refer to IQ13 Cockle Deletion RAP.
  – If the deletions are small spots, this can be caused by beads on the image. Refer to the beads on print defect.
  – If the deletions are faded or deleted areas on the outboard area of prints and copies and installing a new xerographic module removes the defect, but it returns within 2500 prints/copies and the defect gets worse over time, check the ozone system. Refer to the OF6 Ozone and Air Systems RAP.
  – Go to the IQ3 Xerographic RAP.
- **Displaced and fragmented image**. Check the following:
  – If the machine is lower than 750 metres (2461 feet) above sea level, go to the IQ3 Xerographic RAP.
  – If the machine is higher than 750 metres (2461 feet) above sea level, check the transfer/detack assembly for arcing. If necessary go to dC131 NVM Read / Write location 791-028 Altitude adjust. Check the value is correct.
  – Refer to IQ7 SPDH, Document Glass and Scanner RAP. Perform the IQ7 Scanner Checkout.
  – Refer to OF10 Intermittent Failure RAP and perform the Electrostatic Discharge Checkout.
- **Grey images**. Dark grey images too dark or light images too light. Go to ADJ 90.2 Optimize Dark and Light Grey Image.
- **Light images**. Go to the IQ11 Light Copies/Prints RAP.
- **Lines**. Perform the following:
  – If there are dark lines in the process direction that are continuous from edge to edge of the image, install a new xerographic module, PL 90.20 Item 2.
  – White lines or deletions in the process direction that are continuous from edge to edge of the image. Check the following:

    Contamination of the scorotron. Refer to IQ3 Xerographic RAP

    Damage to the fuser roll. Refer to IQ4 Fuser Module RAP

    Spots or marks on the CVT glass. Refer to IQ7 SPDH, Document Glass and Scanner RAP
  – White lines in the process direction that are continuous from edge to edge of the image can be caused by ROS contamination. Perform the following:
    1. Print test pattern 5.
    2. Remove the xerographic module, PL 90.20 Item 2.
    3. Remove the ROS securing screw, refer to REP 60.15.
    4. Push the ROS to the rear of the machine.

       NOTE: *The ROS will move back approximately 12mm (0.5 inch).*

    5. Install the xerographic module.
    6. Print test pattern 5.
    7. Check the printed test patterns. If the line has moved, perform ADJ 60.1 ROS Window Cleaning Procedure and if necessary, ADJ 60.2 ROS Cleaning Procedure.
    8. Return the ROS to the correct location. Install the ROS securing screw.
  – White lines or deletions on side 2 in the process direction that are continuous from edge to edge of the image. Clean the side 2 scan assembly glass, ADJ 60.4.
  – If the problem persists, go to the IQ3 Xerographic RAP.
- **Magnification**. Refer to IQS 8 Magnification. Go to ADJ 3.2 Magnification Adjustment.
- **Marks and Spots**. Perform the following:
  – Check the original documents for spot and marks.
  – Refer to the IQS 6 Copy / Print Defects. Go to the IQ3 Xerographic RAP.
- **Misregistration**. Perform the following:

1. Produce a duplex scan of test pattern82E2010 to E-mail or USB. Observe the scanned files on a PC screen. If scanned files are good, continue at step 2. If the scanned files show misregistration, perform ADJ 60.5 IIT Registration, Magnification and Calibration.
2. Enter dC131. Check that the buckle settings are set to default for the following NVM IDs.
   – 781-007, LeRegSnrToClutchOn
   – 781-026, Simplex buckle transparency
   – 781-027, Simplex buckle envelopes
   – 781-028, Simplex buckle labels
   – 781-029, Simplex buckle cardstock

   Increase the values in increments of 10 until the problem is resolved.
3. Open the front door, install a cheat in the front door interlock. Run the copies and observe the jam clearance knob 4c on the front of the registration roll. The knob must turn / stop while making copies. If the knob turns continuously and does not stop, install a new registration clutch, PL 80.15 Item 7 (45-55 ppm), PL 80.17 Item 7 (65-90 ppm).

4. If the registration is variable after a developer spillage over the registration transport, install a new registration clutch, PL 80.15 Item 7 (45-55 ppm), PL 80.17 Item 7 (65-90 ppm).
5. If the top edge registration is variable after a dC604 Registration Setup. Check that the ROS securing screw is tight, refer to REP 60.15.
6. For any other registration problem, refer to dC604 Registration Setup.

- **Motion quality banding**. Go to IQ6 Narrow Bands RAP.
- **Narrow bands**. Go to IQ6 Narrow Bands RAP.
- **Non uniformity**. Perform the following:
  - Go to IQ3 Xerographic RAP and complete the ROS Checkout.
  - Print internal test pattern 12. If the print has a non uniform density defect, install a new ROS, PL 60.10 Item 8.
  - Perform the IQ3 Developer Assembly Checkout.
- **Offsetting**. A toner image that adheres to the fuser roll or output rolls and transfers to another area of the print. The repeat intervals for a fuser roll defects are at 110mm for all speeds. The repeat intervals for the pressure roll are 110mm for 45-55 ppm and 126mm for 65-90 ppm machine due to the different size of the pressure roll.

  Perform the following:
  - Check that the fuser roll is cleaned and lubricated by the fuser web. Go to IQ4 Fuser Module RAP
  - Check the fuser web motor, refer to the 310A Fuser Web Motor RAP
- **Part images and missing images**. Go to 305A Document Size Sensor Failure RAP.
- **Print damage**. Go to the IQ5 Print Damage RAP.
- **Repeat image defects**. Perform the following:
  - If the distance between repeated defects in the process direction on A3 (11X17 inches) printed images is 264mm, install a new xerographic module, PL 90.20 Item 2.
  - If the repeated distance between defects is 110mm (45-55ppm) or 126mm (65-90ppm), go to the IQ4 Fuser Module RAP.
  - If the repeated distance between defects in the cross process direction is 90mm and 80mm (3.54 and 3.15 inches) that line up with the xerographic module stripper fingers, go to the IQ3 Xerographic RAP. Perform the Xerographic Module and Short Paper Path Checkout.
  - If there other defects that are repeated in sequential images, install a new xerographic module, PL 90.20 Item 2.
- **Residual image**. Perform the following:
  - If the repeated residual image on A3 (11X17 inches) paper is 264mm, install a new xerographic module, PL 90.20 Item 2.
  - If the problem persists, go to the IQ3 Xerographic RAP
- **Rotated image**. Go to the 362A Scanning Document Size RAP.
- **Scrambled image**. Perform the following:
  - Check the connections on the ROS data cable, PJ112 on the SBC PWB, PL 3.22 Item 3 and PJ7 on the ROS, PL 60.10 Item 8. Refer to Wiring Diagram 11.
  - Check for a loose or missing bias connection, PL 80.15 Item 23, to the halo guide on the short paper path. A bad connection can cause arcing and show on the print as a scrambled image.
- **Skew**. Refer to the IQS 5 Skew and the IQ8 Skew RAP.
- **Skips**. Skips are associated with a variation in the relative scan speed of the projected image and the rotation speed of the photoreceptor.

  Refer to the IQS 6 Copy / Print Defects. Go to the IQ3 Xerographic RAP
- **Smears**. Smears are associated with a variation in the rotation speed of the photoreceptor or speed of the paper.

  Refer to the IQS 6 Copy / Print Defects. Go to the IQ3 Xerographic RAP
- **Smudges**. They are caused by the unfused image being disturbed. Go to the IQ3 Xerographic RAP.
- **Streaks**. The result of disturbance either before or after image transfer. Go to the IQ3 Xerographic RAP.
- **Stretched and distorted images**. Perform the following:
  - If the defect is present on Fax, Scan to E-mail or Scan to File, send the job at a higher resolution. Select fine or super fine resolution.
  - Check for the paper stalling or catching as it passes under the xerographic drum.
  - Check for wear or damage on the transport rolls.
  - Check the document feed, refer to IQ7 SPDH, Document Glass and Scanner RAP, perform the SPDH Checkout.
- **Toner contamination on the back of prints**. Perform the following:
  - Clean the lower bias guide, PL 80.15 Item 22 and the registration nip assembly, PL 80.15 Item 5.
  - Clean the transfer / detack corotron, Figure 1.
  - If the transfer / detack corotron was contaminated with toner, perform ADJ 90.3 Magnetic Developer Seal Brush Adjustment.
  - Clean the short paper path assembly, PL 90.20 Item 3.
  - If the problem persists go to the IQ3 Xerographic RAP.
- **Uneven Density**. Perform the following:
  - If the uneven density occurs at 20mm (0.75 inches) intervals in a band along the lead edge of the paper, perform the following:

    Enter service mode, GP 1. Enter dC131. Check that 791-019, Detack LE Side 1 and 791-022, Detack LE Side 2 are set to default.

    Refer to IQS 1 Solid Area Density, to check for the correct density.

    Install a new transfer/detack corotron, PL 90.20 Item 8.

    CAUTION

    If the NVM values are increased, paper stripping faults can occur. The faults can include damage to the lead edge of the paper, paper jams, stripper finger contamination and marks on copies.

    If the uneven density is still present, enter service mode, GP 1. Enter dC131. Increase 791-019 and 791-022 in increments of 5 to a maximum of 150.
  - Check that the developer assembly has been correctly installed, REP 90.2.
  - ADJ 60.1 ROS Window Cleaning Procedure.
  - ADJ 60.2 ROS Cleaning Procedure.
  - If problem persists go to IQ3 Xerographic RAP.

- **Unfused prints**. Refer to the IQS 3 Fusing and IQ4 Fuser Module RAP.

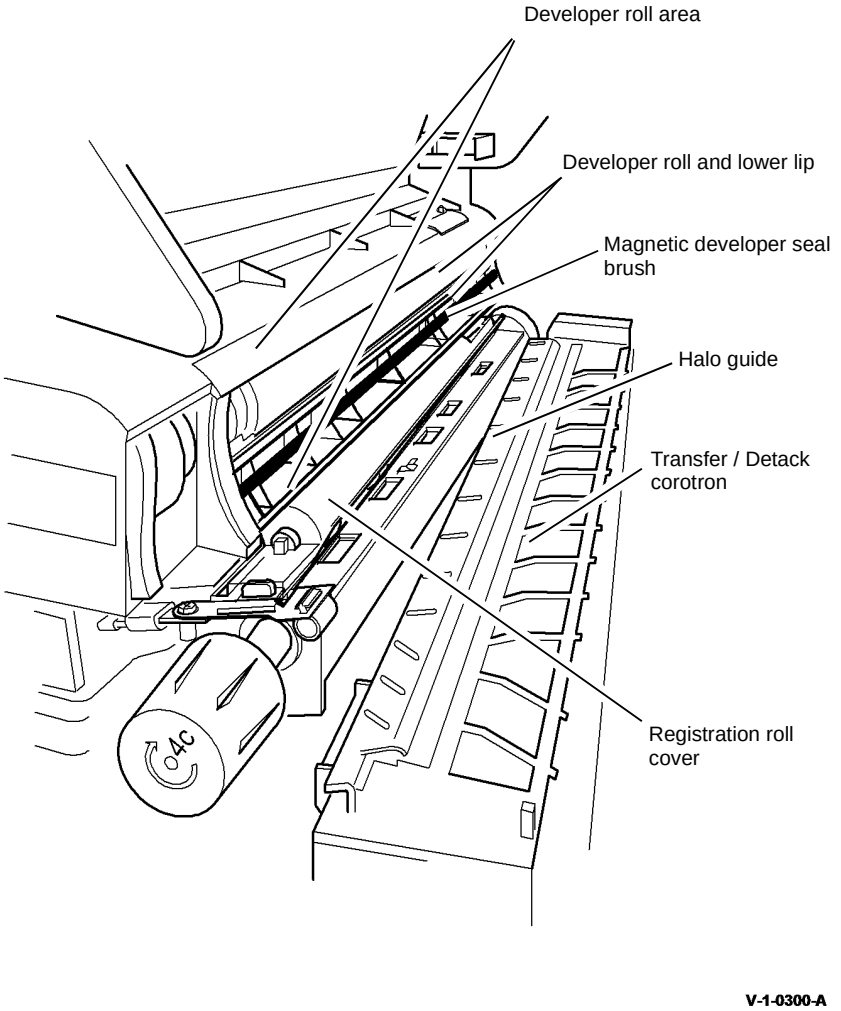


Figure 1 Component location

IQ3 Xerographic RAP

Use this RAP to determine the cause of the image quality problem.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Follow the service procedure exactly as written. Use of controls or adjustments other than those specified in this manual, may result in an exposure to invisible laser radiation. During servicing, the invisible laser radiation can cause eye damage if looked at directly.

Perform the following checks and if necessary, install new components:

- Check that the photoreceptor fan is working. If the fan is working, air will be drawn into the air intake. If necessary refer to the 390C Photoreceptor Fan RAP and the OF6 Ozone and Air Systems RAP.
- **(65-90 ppm)** Check that the duplex paper path cooling fans are working, refer to the OF6 Ozone and Air Systems RAP.
- Check that the relative humidity sensor is working. Go to the 391-365-00 Humidity Sensor Failure RAP.
- Perform ADJ 90.4 Xerographic Cleaning.
- Check the registration/developer bias harness connection, (45-55 ppm) PL 90.17 Item 6 or (65-90 ppm) PL 90.15 Item 6. Refer to Figure 1.
- Check that the corotron lead connections to the HVPS are secure, PL 1.10 Item 5. If necessary, refer to the 391-060-00 HVPS Faults RAP.
- Check for loose ground connections. Go to the 301A Ground Distribution RAP.

Make prints. If the image quality defect is still present perform the procedure.

Procedure

The following components can cause image quality defects. Perform the checks:

- Xerographic Module and Short Paper Path Checkout
- Developer Assembly Checkout
- Fuser Module Checkout
- ROS Checkout
- Scanner Checkout

Xerographic Module and Short Paper Path Checkout

NOTE: *When a new xerographic module is installed, a new transfer/detack corotron. must be installed at the same time. The transfer/detack corotron is supplied with the xerographic module.*

- Check the xerographic module stripper fingers for wear, damage and contamination. If necessary install a new XRU skids kit, PL 31.13 Item 16.
- If there are xerographic module stripper finger marks (three marks/dots/spots that line up with the xerographic module stripper fingers) on the edge or the body of the prints/copies, together with some or all of the following symptoms:
  - Toner contamination of the xerographic module stripper fingers and /or star wheels on the stripper finger arms
  - Broken or missing stripper fingers caused by frequent jam clearances
  - Paper wrinkles
  - Inverter jams
  - Dog eared copies/print

  The detack transformer in the HVPS has failed or is failing, so there is no voltage or a low voltage supplied to the detack corotron. Perform the following:

  1. Detack voltage check:
     - Remove the outboard shield from the transfer/detack corotron
     - Set the service meter to read AC volts, set the range to 0000
     - Connect the positive meter lead to the small spring that tensions the detack corotron wire
     - Connect the negative meter lead to the machine frame
     - Cheat the front door interlock switch
     - Enter dC330 code 091-064, detack corotron, press start. The meter should read OL (over limit), if it does not, the detack voltage is below specification
  2. Ensure the detack lead is connected to the HVPS.
  3. Check that there is continuity in the detack circuit by checking for 47K Ohms between the small spring that tensions the detack corotron wire and the HV detack lead at the HVPS. If necessary install a new transfer/detack harness, PL 90.20 Item 9.
  4. Ensure the chute bias (CB) lead is connected to the HVPS and the other end is connected to the spade connector on the registration transport. Check the continuity of this lead is less than 1 ohm.
  5. If checks 2, 3 and 4 are good and check 1 shows that the detack voltage is below specification, install a new HVPS, PL 1.10 Item 5.
- Hold the xerographic module and view the rear end. Check the toner reclaim drive coupling is free to rotate in a clockwise direction. If the black drive coupling does not rotate freely, install a new xerographic module, PL 90.20 Item 2.
- Check that the surface of the photoreceptor is not chipped, scored or scratched. The damage can be caused by the covers on the end blocks of the transfer/detack corotron. Check that the covers are locked in position. Check that the halo guide is not in contact with the drum.

  If the photoreceptor is damaged, install a new xerographic module, PL 90.20 Item 2.
- Check that there is continuity between the halo guide and the registration guide, Figure 1. Raise and lower the short paper path assembly, PL 10.25 Item 1, several times to ensure that the continuity is consistent. If the continuity is inconsistent, examine the registration and halo guide bias contact for deformation, PL 80.15 Item 23. Figure 1.
- If the transfer/detack corotron, Figure 1, is contaminated with toner. Perform the Developer Assembly Checkout.
- Raise and lower the short paper path assembly, PL 10.25 Item 1, to ensure that the transfer/detack corotron is parallel to the photoreceptor. Check that the movement of raising the short paper path assembly is smooth, REP 10.1.
- Check the waste toner system, refer to OF11 Waste Toner Contamination RAP.

Developer Assembly Checkout

- Operate the xerographic module latch, PL 90.20 Item 7. Check the operation of the latch mechanism. Check the operation of the developer paddle, PL 90.20 Item 14.
- Check that the developer assembly moves freely and rests against the xerographic module, refer to REP 90.2 Developer Assembly.
- Check the magnetic developer brush seal for a uniform profile. Refer to ADJ 90.3 Developer Magnetic Seal Brush Adjustment.
- If the transfer/detack corotron, Figure 1, is contaminated with toner, perform ADJ 90.3 Magnetic Developer Seal Brush Adjustment.
- Install a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

  After a new developer module has been installed, check the image quality. Print internal test pattern 2 and 5, run 25 of each. If there is an image quality problem, install a new xerographic module, PL 90.20 Item 2.

Fuser Module Checkout

- Check the fuser rolls and stripper fingers for toner and developer contamination. If contamination is present, go to the IQ4 Fuser Module RAP.

ROS Checkout

- Perform ADJ 60.1 ROS Window Cleaning Procedure.
- Perform ADJ 60.2 ROS Cleaning Procedure.
- Check there are no obstructions between the ROS and the photoreceptor window.
- Check the connection PJ7, Wiring Diagram 11 and the ROS power distribution/communication harness, PL 60.10 Item 5, from the ROS to the SBC PWB.
- Check that all the connections to the SBC PWB are good, GP 7.
- Check that the ROS securing screw is tight, refer to REP 60.15.

Scanner Checkout

For side 1 image problems check the exposure lamp in the scan carriage, PL 60.25 Item 1 is working correctly and consistently. If necessary, install a new scan carriage assembly, PL 60.25 Item 1.

For side 2 image problems check the exposure lamp in the side 2 scan assembly, PL 60.30 Item 1 is working correctly and consistently. If necessary, install a new side 2 scan assembly, PL 60.30 Item 1.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

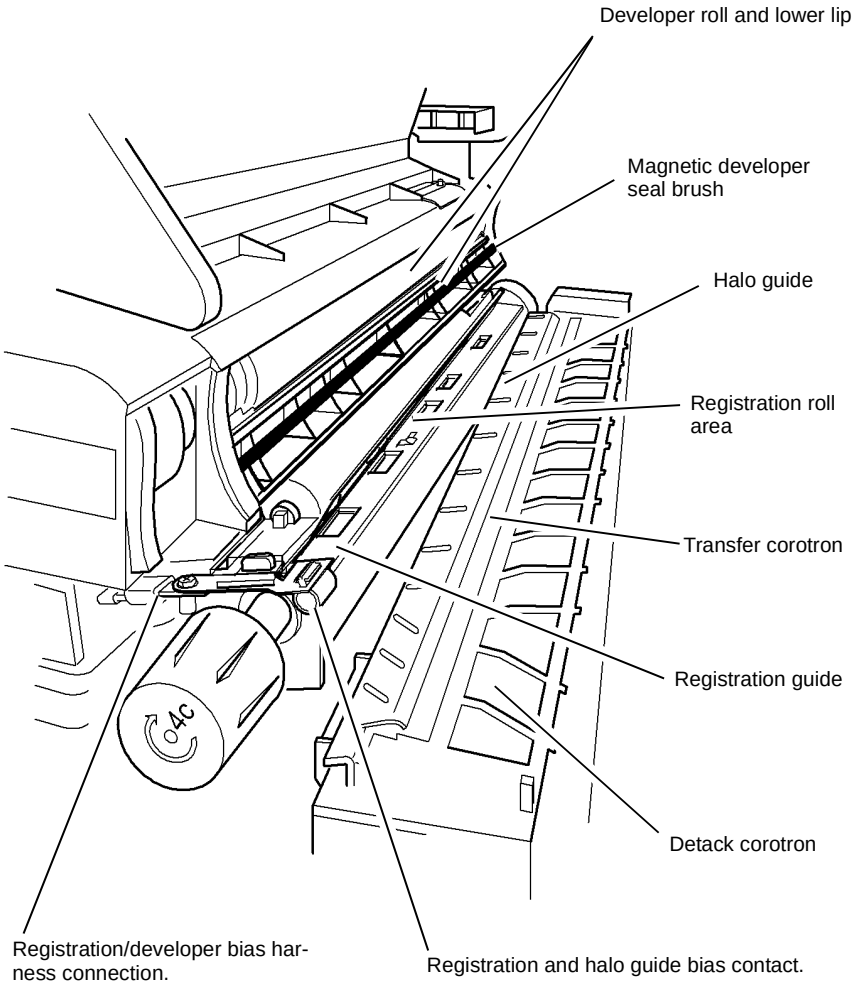


Figure 1 Component location

IQ4 Fuser Module RAP

Use this RAP for fuser module related problems.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

- Enter dC131. Check the NVM values for 710-001 - Standby Temp, 710-002 - Run Temp and 710-027 - Card stock offset. If the NVM values are increased, fusing performance is improved, but contamination can occur. If the NVM values are decreased, fusing performance is reduced.
- Poor fusing can be caused by alternative quality paper and heavily embossed envelopes, GP 20. If the customer is using alternative quality paper, select the card stock setting on the GUI. Adjusting 741-052 only changes the fuser temperature when card stock is selected. Some 200gsm papers do not fuse correctly.
  - Check that the customer is using tray 1 and tray 2 for alternative quality paper or heavy weight paper.
  - Refer to IQS 3 Fusing.
- Check the following for wear and contamination:
  - Stripper fingers. If possible remove the contamination. If the stripper fingers are damaged or worn, install a new fuser stripper fingers, (45-55 ppm) PL 10.8 Item 4 or (65-90 ppm) PL 10.10 Item 4.
  - Fuser rolls. If the fuser rolls are damaged or worn, install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.

    NOTE: *Do not change the fuser module, because of the appearance of wrinkles on the pressure roll. This is normal for the pressure roll, caused by the conductive sleeve that stretches as the silicon rubber base of the roll expands. The pressure rolls are more wrinkled on the 65-90 ppm machines, due to the higher run temperatures.*

  - Fuser web. If this is heavily contaminated or shows no sign of advancement, go to the 310A Fuser Web Motor RAP.

IQ5 Print Damage RAP

Use this RAP when the prints have nicks, tears, creases, folds, curled edges or wrinkles.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter dC612. Select the internal test pattern 14. Make prints to identify where the prints are damaged.

Check the paper supply for the following:

- Curled paper in the paper trays, go to Curl Measurement.
  - If the paper in trays 1 and 2 has excessive curl install a tray 1 and tray 2 lip kit, PL 70.10 Item 24
  - In high humidity environments, If there is excessive curl on paper in trays 3 and 4 install a HCF Heater kit, PL 31.13 Item 15.

Check the paper path, Figure 2 for the following:

- Obstructions.
- Damaged guides and rolls, GP 7. Pay particular attention to the areas that align with the damage on the prints. For example, fuser stripper fingers.
- The edges of the paper path for protruding objects.
- Ensure that the paper feed does not skew the paper, go to the appropriate procedure:
  - 381-101-00, 381-111-00 Tray 1 Misfeed RAP
  - 381-102-00, 381-112-00 Tray 2 Misfeed RAP
  - 381-103-00, 381-113-00 Tray 3 Misfeed RAP
  - 381-104-00, 381-114-00 Tray 4 Misfeed RAP
  - 381-115-00, 381-117-00 Tray 6 Misfeed Entry RAP
- Check that the paper strips from the xerographic module and enters the fuser nip correctly. If necessary, perform the following:
  - If the paper does not correctly strip from the xerographic module, ensure that all the HT leads on the HVPS PWB are correctly connected, refer to REP 1.1.
  - If the paper is contacting the upper fuser roll before entering the fuser roll nip, check that the short paper path is correctly latched and the transfer/detack corotron, PL 90.20 Item 8, is correctly positioned, ADJ 90.1 Corotron Cleaning.
- Check that the fuser roll stripper fingers are clean.
- If the prints are creased or wrinkled after the fuser module, then install a new fuser module, (45-55 ppm) PL 10.8 Item 1 or (65-90 ppm) PL 10.10 Item 1.
- Ensure that paper path sensor actuators move freely, GP 7.
- If the paper is corrugated after passing through the fuser module, install a new tri-roll shaft assembly, PL 10.12 Item 8.
- If the paper is curled after passing through the fuser module, go to Curl Measurement.
- Check the inverter for damage or wear, GP 7.
- If the paper has a dog ear on the inboard corner, install a new inverter decurler assembly, PL 10.11 Item 23.
- Check the duplex and registration transport assemblies for damage or wear, and ensure the jam clearance latch is located correctly.
  - If the paper displays wrinkles due to excessive buckle in the duplex or registration transport, perform ADJ 80.2 Simplex and Duplex Buckle Timing
- If the output device suffers from poor stacking, perform the following as necessary:
  - Check that the output device is not positioned near an air conditioning or ventilation output duct. Air flow across the output bins can cause poor stacking.
  - 311A-110 2K LCSS Poor Stacking RAP
  - 311J-120 1K LCSS Poor Stacking RAP
  - 311A-150 LVF BM Poor Stacking RAP
  - 311G-171 HVF BM Poor Stacking RAP
- Remove the output device, then connect a finisher bypass harness, PL 26.10 Item 7. Check the paper path through the inverter assembly, PL 10.11 Item 23.

  If the paper has excessive curl after passing through the inverter decurler, perform ADJ 10.1 Inverter Decurler Adjustment.

If the paper path and the duplex path are good, check that the paper and other media used, is of the correct weight and size, GP 20.

Curl Measurement

Make five simplex prints. Refer to Figure 1. If the curl on the print exceeds 13mm (0.5 inch), perform the following checks:

- Check the paper storage and wrapping
- Turnover the paper stack in the paper tray
- Use paper from a new ream
- If the fault persists, perform the IQ4 Fuser Module RAP

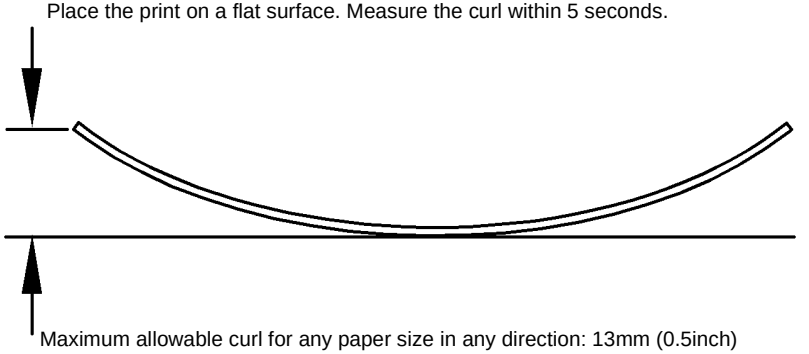


Figure 1 Curl height measurement

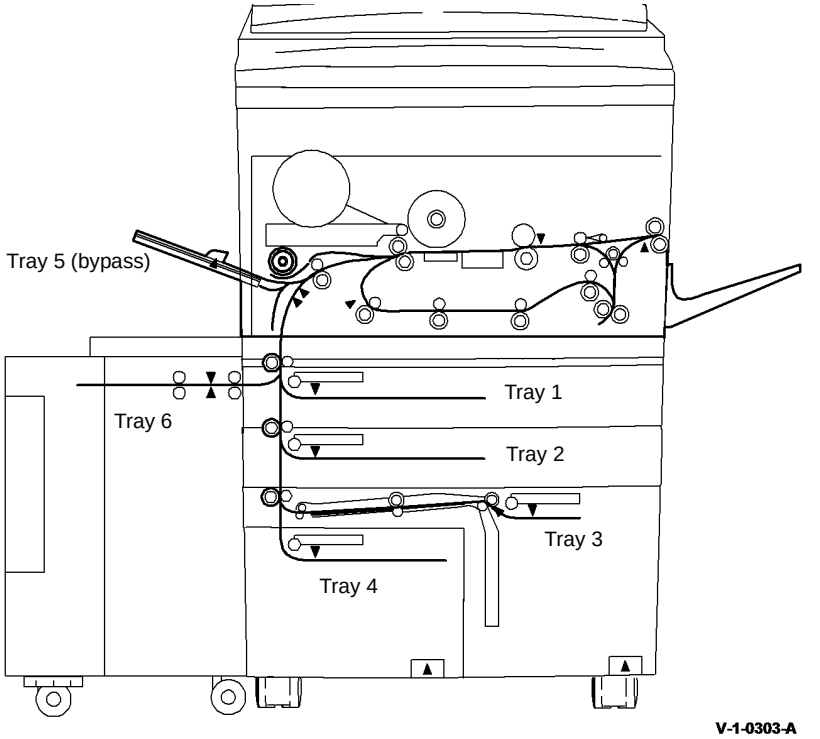


Figure 2 Paper path

IQ6 Narrow Bands RAP

Use this RAP to determine the cause of narrow bands.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Produce a duplex scan of test pattern 82E2010 to E-mail or scan to USB. Observe the scanned files on a PC screen. **There are dark edges, coloured edges or bands on the scanned image.**

Y N

Go to dC612, make a simplex print of internal test pattern 5 and compare it to Figure 1. Figure 1 shows a sample of acceptable motion quality banding. **The banding on the print is worse than the sample in Figure 1.**

Y N

Go to SCP 5 Final Actions.

Check the pitch of the bands. **The bands have a regular pitch.**

Y N

Bands that are irregular are caused by worn gears in the following areas. Examine the gears, the shafts and the bearings, GP 7, install new components as necessary:

- Registration transport gears; PL 80.15 Item 17, PL 80.15 Item 18 and PL 80.15 Item 19.
- Registration transport drive pulley, (45-55 ppm) PL 40.17 Item 14 or (65-90 ppm) PL 40.12 Item 15.
- Main drive belts, (45-55 ppm) PL 40.17 Item 9 or (65-90 ppm) PL 40.12 Item 9 and PL 40.12 Item 18.
- Developer drive gear, (45-55 ppm) PL 40.17 Item 15 or (65-90 ppm) PL 40.12 Item 17.
- Fuser drive gear, (45-55 ppm) PL 40.17 Item 10 or (65-90 ppm) PL 40.12 Item 10.
- Developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.
- Short paper path (W/TAG 001) gears, PL 10.25 Item 3 and PL 10.25 Item 5.

The ROS makes the narrow bands that are only visible on half tone prints.

- Machine speed of 45-55 ppm, the pitch is 9.8 bands to 1cm (24.9 bands to 1 inch).
- Machine speed of 65-90 ppm, the pitch is 10 bands to 1cm (25.4 bands to 1 inch).

To resolve banding caused by motion wobble of the ROS, install a new ROS, PL 60.10 Item 8.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

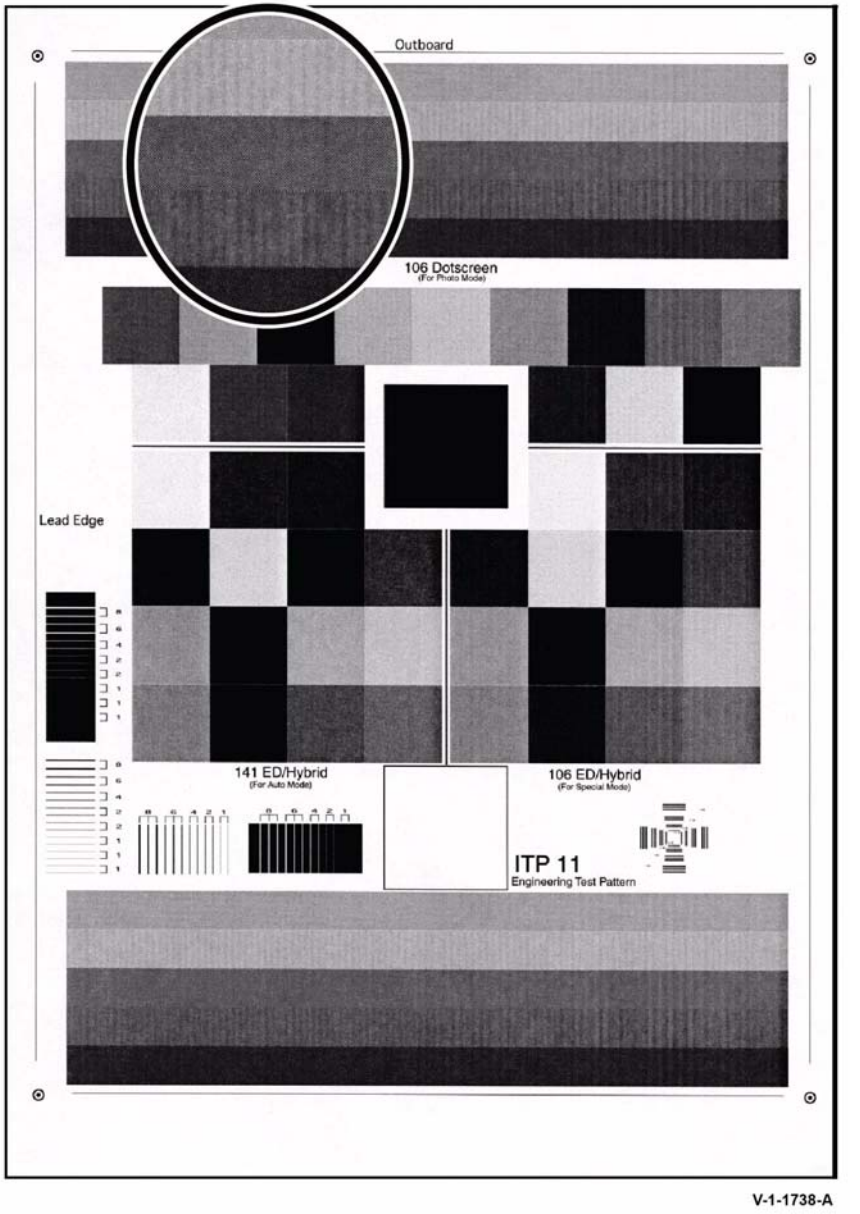


Figure 1 Acceptable MQ banding

IQ7 SPDH, Document Glass and Scanner RAP

Use this RAP to identify failures caused by the SPDH, document glass and the scanner.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following:

- SPDH Checkout
- Document Glass Checkout
- SPDH Scan Assembly Checkout
- Scan Carriage Assembly Checkout

SPDH Checkout

Perform the following:

- Clean the underside of the SPDH area around the SPDH scan assembly, PL 5.10 Item 12. Refer to ADJ 5.4 SPDH Cleaning Procedure.
- If the copies of the internal test pattern have white lines or deletions on side 2 in the process direction that are continuous from edge to edge of the image, clean the side 2 scan assembly glass. Refer to ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure.
- Clean the top surface of the CVT glass and the document glass. Refer to ADJ 60.3 Scanner Cleaning Procedure.
- If the documents are skewed. Check that the SPDH document input guides are correctly adjusted. If necessary, perform ADJ 5.3 SPDH Skew
- Check that the SPDH is seated correctly, perform the ADJ 5.2 SPDH Height Adjustment.
- Make scan to file or scan to USB files from the SPDH and the document glass. If the images from the SPDH are lighter or darker than those from the document glass, go to dC131 NVM Read/Write location 801-020 CvtWhiteRefMonoSide1 to adjust the setting.
- Make scan to file or scan to USB files from the SPDH. If the images have a background problem, perform the following:
  - Check the SPDH height, Refer to ADJ 5.2 SPDH Height Adjustment.
  - Perform ADJ 60.5 IIT Registration, Magnification and Calibration.
  - Copying thick documents can leave the SPDH raised above the document glass.

    Raise and lower the SPDH five times. If the SPDH is still raised, install new counterbalances, PL 5.10 Item 2 and PL 5.10 Item 4.
- Make scan to file or scan to USB files from the SPDH. If the images are stretched or smudged, lower the height of the SPDH by half a turn of the setting screws, refer to ADJ 5.2 SPDH Height Adjustment. Make new files from the SPDH after each adjustment. If the fault persists, re-adjust the height of the SPDH as necessary.

Document Glass Checkout

Perform the following:

- Clean the top surface of the CVT glass and the document glass. Refer to ADJ 60.3 Scanner Cleaning Procedure.
- Check that the white AGC strip on the CVT glass is on the rear underside of the glass.
- Check the condition of the SPDH document pad, If necessary clean the pad or install a new pad, PL 5.10 Item 3.

Scan Carriage Assembly Checkout

Perform the following:

- If the copy of the internal test pattern (made from the IQ1 RAP) is fragmented and displaced, perform the following:
  - Check the ribbon cable from the scanner CCD PWB, PJ445 to the scanner PWB, PJ412. Refer to Wiring Diagram 44.
  - Check the ribbon cable from the scanner CCD PWB, PJ446 to the scanner PWB, PJ416. Refer to Wiring Diagram 44.
  - Check the harness connections from the scanner PWB, PJ411 to the SBC PWB, PJ250. Refer to Wiring Diagram 44.
  - Check the harness connections from the scanner PWB, PJ410 to the power distribution PWB, PJ140. Refer to Wiring Diagram 44.
  - If fragmented and displaced images appear in a regular pattern across process direction, remove and re-seat the memory module, PL 3.22 Item 11.
- Raise the SPDH. Enter dC330 code 062-002 scanner exposure lamp. If the scanner exposure lamp does not illuminate, go to the 362B Side 1 Exposure Lamp Failure RAP.
- Check the scan carriage for contamination. Refer to ADJ 60.3 Optics Cleaning Procedure.

SPDH Scan Assembly Checkout

Perform the following:

- If the copy of the internal test pattern (made from the IQ1 RAP) is fragmented and displaced, check the following:
  - The ribbon cable from the side 2 CCD PWB, PJ451 to the to the scanner PWB, PJ413. Refer to Wiring Diagram 44.
  - The ribbon cable from the side 2 CCD PWB, PJ452 to the to the SPDH PWB, PJ458. Refer to Wiring Diagram 12
  - If fragmented and displaced images appear in a regular pattern across the process direction, remove and re-seat the memory module, PL 3.22 Item 11.
- Raise the SPDH. Enter dC330 code 066-002 SPDH exposure lamp. If the SPDH exposure lamp does not illuminate, go to the 362C Side 2 Exposure Lamp Failure RAP.
- Check the SPDH scan assembly for contamination. If necessary clean the assembly, ADJ 60.4 or install new parts, PL 5.10 Item 12.

Part Image / Part Black Image

Description

Refer to Figure 1. A strip of the image next to the leading edge is good but the remainder of the page is black, with a sharp joint between the 2 parts that runs from inboard to outboard. If the output is duplex, side 2 of the copy/scan will have a larger proportion of black or may be completely black. The fault history may contain 305-960 and 362-960 and codes.

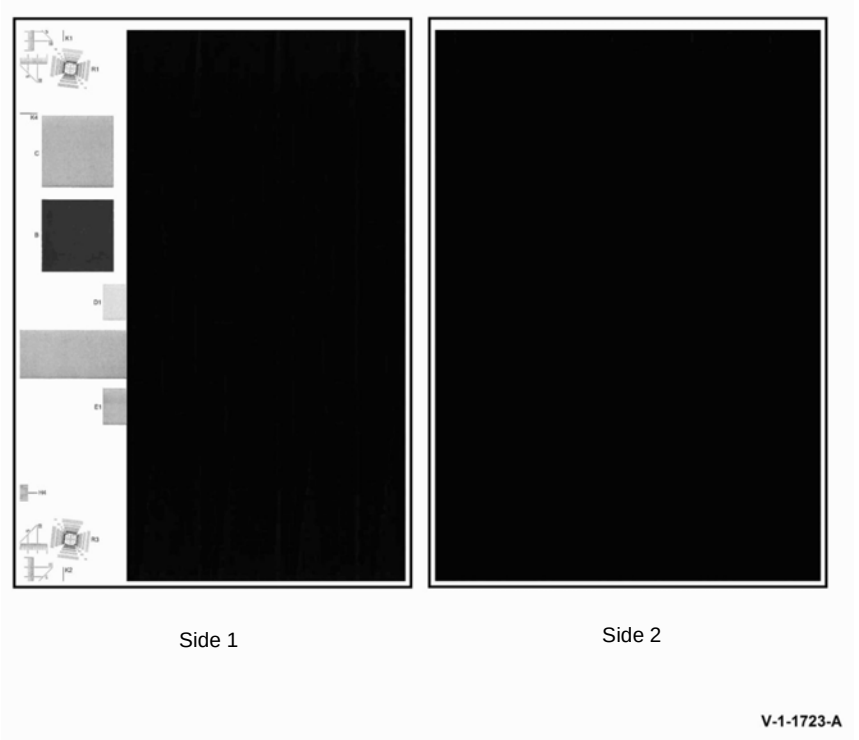


Figure 1 IQ sample

Procedure

Perform the 362-960-00 LED Fan Lock Alarm RAP.

Perform the 305-960-00 SPDH LED Fan Lock Alarm RAP.

IQ8 Skew RAP

Use this RAP to determine the source of skew.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Perform the misregistration procedure in the IQ2 Defects RAP.

Procedure

Enter dC612. Select the relevant test pattern.

- ITP 11 Field test pattern (letter).
- ITP 12 Field test pattern (A4).
- ITP 13 Field test pattern (A3).
- ITP 14 Field test pattern (tabloid).

Make 5 simplex prints. Check the prints for skew, refer to IQS 5 Skew. **The prints are skewed.**

Y N

Use the internal test pattern 16 and select 2 sided. Make 5 prints. Check the prints for skew, refer to IQS 5 Skew. **The prints are skewed.**

Y N

Use a print of the internal test pattern 16 as a master and make 5 copies from the document glass. Check the copies for skew. **The copies are skewed.**

Y N

Use a print of the internal test pattern 16 as a master and make 5 copies fed through the SPDH, Figure 1. Check the copies for skew. **The copies are skewed.**

Y N

No skew is present. Re-define the image quality defect. Refer to IQ1 Image Quality Entry RAP.

The skew is originating in the SPDH. Go to ADJ 5.3 SPDH Skew Adjustment.

There is a skew problem originating in the scanner. Complete a visual check of the following:

- The scan carriage is not damaged and moves freely.
- The scan drive belt is in a good condition and is routed correctly, refer to REP 60.11.
- If necessary, install a new scanner module, PL 60.15 Item 1.

The skew occurs in the duplex paper path.

- Check the nip and drive rolls in the inverter assembly, PL 10.12 and PL 10.14.

A

A

- Check the drive and idler rolls in the duplex transport, (45-55 ppm) PL 80.22 Item 7 or (65-90 ppm) PL 80.20 Item 7.
- Install new components as necessary.

Using the prints made from dC612, check the prints for distortion by measuring between the lines produced. **The lines are parallel to each other.**

Y N

Install a new ROS, PL 60.10 Item 8.

Make five prints from each tray and the bypass tray to identify the source of skew.

- Check the feed rolls and guides for contamination.
- Check the feed rolls and transport rolls for wear. Install new parts as necessary.
- If there is skew from tray 3 or tray 4, install a new metal idler roll assembly, PL 80.36 Item 8 (tray 3) or PL 80.33 Item 2 (tray 4).
- Check for wear on the tray 3 and 4 skew brackets. If necessary install new skew brackets, PL 70.18 Item 15 (tray 3) or PL 70.18 Item 16 (tray 4).
- Check that there is no variation in the size or weight of the sheets of paper in each tray.
- Check that the paper weight and type is within the specification. Refer to GP 20 Paper and Media Size Specifications.
- Check that the paper size guides are set correctly.
- Perform the OF8 Multifeed RAP.
- Check that the bypass tray width guides are set correctly.
- Check the bypass tray pre-reg nip rolls. If necessary, install a skew bypass tray spares kit, PL 70.30 Item 29.
- Open the left hand door and check for wear on the ribs, Figure 2. If necessary install a new bypass tray and left hand door assembly, PL 70.30 Item 1.
- Check that the interlock cover is not loose, PL 70.30 Item 23. If necessary bias the cover to the right and tighten the two screws.
- Check the paper paths for obstructions. Refer to the IQ5 Print Damage RAP.
- Check the registration clutch. Refer to the 381-150-00, 381-151-00, 381-190-00 to 381- Registration Jam Entry RAP.
- Check that the locking foot of the registration transport is correctly located in the base frame, REP 80.2.

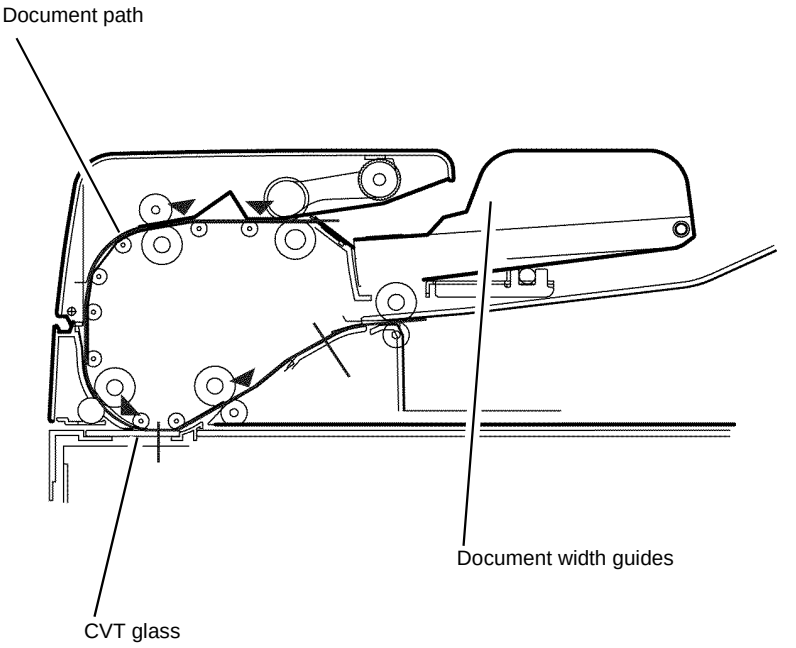


Figure 1 Document path through the SPDH

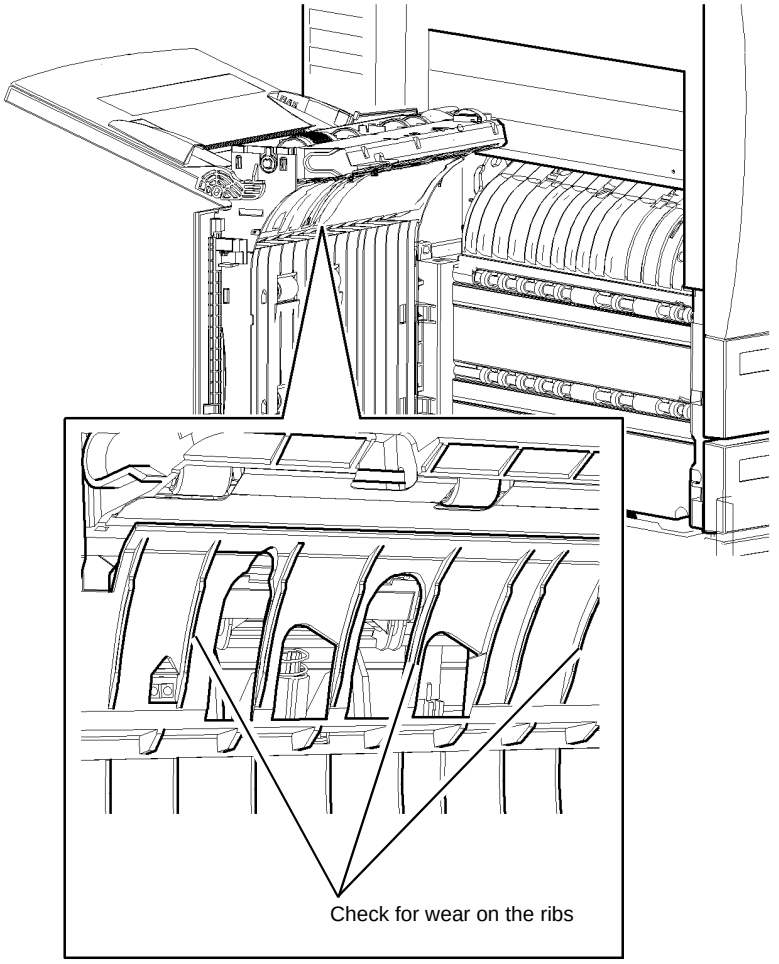


Figure 2 Left hand door

IQ9 Unacceptable Received Fax Image Quality RAP

Use this RAP to identify the causes of poor reception.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Verify the following:

- This problem occurs only when receiving transmissions.
- This problem occurs on all receiving transmissions.
- Check the fax country setting, NVM location 200-043, is correct. Refer to the Fax NVM Document.

Procedure

The condition of the original transmission document is good.

Y N

Generate a new document from the original.

If possible, establish voice contact using the same telecommunication link as used to receive the document. **The line is free of interference sounds and the normal voice can be heard clearly.**

Y N

Go to the 20G Fax Module Checkout RAP.

Receive the document at a slower receive speed. Set the NVM location 200-089 Line 1 = 11 and location 200-090 Line 2 = 11. Refer to the Fax NVM Document. **The image quality is acceptable.**

Y N

The telecommunication links and harnesses are connected properly.

Y N

Correct the connections.

Check the condition of the telecommunication links and harnesses. **The telecommunication links and harnesses are good.**

Y N

Install a new line cable and connectors.

Verify the operation of the machine and the communication link by transmitting between machines over a known good link. **All received documents have an acceptable image quality.**

Y N

Install a new fax PWB, PL 20.05 Item 7.

Go to the 20G Fax Module Checkout RAP.

Inform the remote user of the required changes to the settings.

IQ10 Image Quality Improvement RAP

Use this RAP if the customer is not satisfied with the image quality.

The image quality can be altered by changing the image quality defaults. This will optimize the image quality to the unique requirements of the customer.

A combination of changes may give the best result. It is recommended to change the image quality options and then perform ADJ 90.2 Optimize Dark and Light Grey Image. The alternative would be to change the image quality options.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Perform IQ3 Xerographic RAP before starting this procedure
- Make a copy of the customer document that shows the defect and keep as a reference.
- Ensure that the customer image quality requirements are understood.
- Enter dC131. Reset location 791-026 - IQA Grid V Offset and 761-008 - IQA ROS Level Offset to the default value then continue with the procedure.

Procedure

Make a copy of the customers document with different image quality setups until the image quality has been improved. Use different combinations of the image quality options that are available. Set the image quality setting, as the default. Refer to the image quality options that follow:

Original type - a choice of 5 options:

- Photo and text
- Text
- Photo
- Map
- Newspaper/Magazine

How original was produced - a choice of 5 options

- Printed
- Photo copied
- Photograph
- Ink Jet
- Solid ink

Image options

- Lighten/darken - a choice of 7 steps from lightest to darkest
- Sharpness - a choice of 5 steps from softest to sharpest

Image enhancement

- Image enhancement, a choice of Off or Auto suppression
- Contrast
  - Manual contrast - a choice of 5 levels from lowest to highest
  - Auto contrast

1. Login to Customer Administrator Tools, GP 24. In the Tools Pathway, select:
   - Feature Defaults.
   - Set Copy Defaults.
   - Image Quality.
2. Change the settings as required.

   NOTE: *If the Text or the Halftone Photo option are selected then the Sharpness and Contrast slider are greyed out. The Text option is the same as High Contrast 2. The Halftone Photo is the same as Low Contrast 1.*

   Save the image quality options to be used as the default setting.

   Select End Defaults and Exit Tools.
3. Run different jobs to confirm that the changes made have not caused other image quality problems.
4. If the image quality still does not meet the requirements of the customer, go to ADJ 90.2 Optimize the Dark and Light Grey Image.
5. Record the new values in the machine log book.
6. Perform NVM Save and Restore, GP 5.

IQ11 Light Copies/Prints RAP

Use this RAP when the machine is making light copies.

Perform IQ1 Image Quality Entry RAP before starting this RAP.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Examine the fault log and troubleshoot any current 310-XXX-XX, 36X-XXX-XX or 39X-XXX faults.

***NOTE:** If the customer is using Toner Save mode, explain that this will lighten the image to save toner. Standard mode (Toner Save disabled) should be used for image quality problem solving.*

Enter Administrator Mode on the UI. Press the Machine Status Button, select the Tools tab, select the Service Settings tab, select the Copy Service tab. Disable the Toner Saver mode if it is not already disabled. Make test copies, if the light copies problem is now fixed, go to SCP 5 Final actions.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

Make test copies, if the light copies problem is now fixed, go to SCP 5 Final actions.

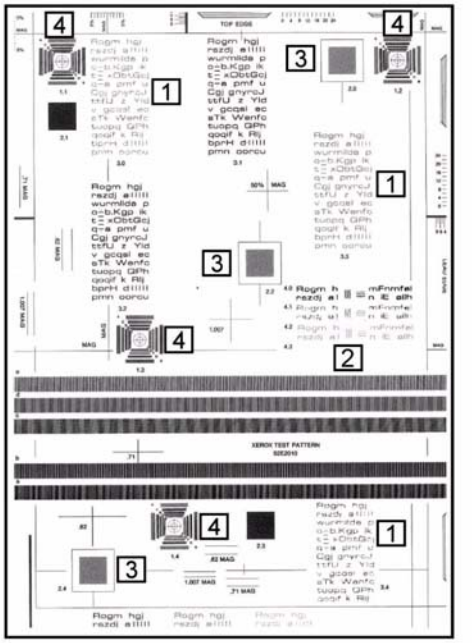
Procedure

1. Clean the document glass and CVT glass. ADJ 60.3 Scanner Cleaning Procedure.
2. Ensure the white patch on the CVT glass is present at the rear of the glass and is facing downwards.
3. Remove and inspect the xerographic module. If the drum is discolored or hazy, install a new module, PL 90.20 Item 2. Check the operation of the photoreceptor and ozone fans, refer to OF6 Ozone and Air Systems RAP.
4. Clean the charge corotron and erase lamp, ADJ 90.4.
5. Clean the transfer/detack corotron, ADJ 90.1.
6. Clean the ROS window, ADJ 60.1.
7. With the xerographic module in the machine, remove the fuser module. Reach under the bottom back end of the short paper path, PL 10.25, push it upwards to ensure it is positioned against the bottom frame of the xerographic module. If the short paper path will not latch properly, inspect it for damage and if necessary, install a new short paper path assembly, PL 10.25 Item 1.
8. Check that there is toner in the toner cartridge.
9. Check that the machine is level. If the machine is not level, the developer can leak from the developer module, causing light images.
10. Print internal test print 3, dC612 and check for barber pole deletions. Refer to IQ12 Barber Pole Deletions / Developer Leakage RAP.
11. Remove the developer unit and check that the magnetic roll can be turned using normal force. If it is too difficult or too easy to turn, or if developer spills out, install a new developer module, (65-90ppm) PL 90.15 Item 2, (45-55ppm) PL 90.17 Item 2 and toner dispense module, (65-90ppm) PL 90.15 Item 1, (45-55ppm) PL 90.17 Item 1.
12. If a new developer module and toner dispenser were installed as directed in the previous bullet point, check that the waste toner auger is operating. Refer to the OF11 Waste Toner Contamination RAP.
13. Go to Sub Procedure 1 or Sub Procedure 2.
    - If this is a newly installed machine that has not had any new parts or NVM values changed, go to Sub Procedure 1.
    - If this machine has had new parts or NVM values changed or when performing part 1 does not satisfy the customer's requirements, go to Sub Procedure 2.

Sub Procedure 1

Procedure

1. Make one document glass copy of test pattern 82E2010 (A4), or 82E2020 (8.5 x 11 inches).
2. Evaluate the copy at each numbered area as shown in Figure 1.



Key

1
Text areas 3.0, 3.3 and 3.4 should be clearly visible

2
The 4.1 line pairs should be clearly visible

3
The 2.0, 2.2 and 2.4 squares should be darker than in the original document

4
The bulls eye targets should be clearly reproduced

V-1-0306-A

Figure 1 Copy of test pattern 82E2010 / 82E2020

CAUTION

Do not set the charge grid voltage outside the minimum or maximum values

3. If the copy does not meet the above specification, alter the charge grid voltages. Enter service mode dC131, location 791-007, Charge Grid and decrease the value by 25. Refer to Table 1.

   NOTE: *The effect of altering the charge grid voltage is best monitored by observing the 4.1 line pair, the 3.4 text area and the bull's-eye targets on this test pattern. Decreasing the charge grid voltage darkens the grey scale. Increasing the charge grid voltage lightens the grey scale. To save new NVM values, exit service mode correctly and ensure the machine reboots.*

Table 1 Charge grid NVM location 791-007 values

Speed	Min./Max Values	Default Value
45-55 ppm	150/700	396
65-90 ppm	150/700	408

4. Save the new NVM value then exit service mode via call closeout. Use the copier reboot option. Evaluate another platen copy of test pattern 82E2010/82E2020. If necessary, lower the value in dC131, location 791-007 by decrements of 10 until the copy meets the specification.
5. If the copy still fails to meet the specification after decreasing the charge grid value by a total of 50, go to Sub Procedure 2.
6. If the copy meets the specification, record the dC131, location 791-007 NVM value in the machine log book. Save a copy of the test pattern 82E2010/2020 in the log book. Save the NVM, GP 5.

Sub Procedure 2

Procedure

NOTE: *Perform this part of the procedure on machines that have had new parts or have had NVM values changed. Also, perform this part of the procedure when copies have failed to meet the specification in Sub Procedure 1.*

Make the following copies and prints. Mark these "START" and save them for reference. Figure 1, Figure 4 and Figure 5 show examples of these:

- With normal copy quality settings, make one SPDH copy of test pattern 82E2010 (A4), or 82E2020 (8.5x11 inches).
- With normal copy quality settings, make one document glass copy of test pattern 82E2010 (A4), or 82E2020 (8.5x11 inches).
- Make one print of Internal test pattern 5, dC612.
- Make one print of Internal test pattern 8, dC612.

The copies meet the specification.

Y **N**

Remove the xerographic module. Remove the developer module, REP 90.2. Clear the developer from the developer roll by rotating the drive gear. Re-install the developer and xerographic modules. Enter dC330, code 042-010 main motor MOT42-010. Run MOT42-010 for approximately 5 seconds. Remove the xerographic module and inspect the developer roll. **The developer roll has developer on its surface.**

Y **N**

Check the drives to the developer, GP 7. If no problem is found, install a new developer paddle, PL 90.20 Item 14. If necessary, install a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

Perform dC301, Copier NVM initialisation. This sets the machine NVM to default. Make one SPDH and one document glass copy of test pattern 82E2010/82E2020. Then run one each of Internal test patterns 5, and 8, dC612. Compare these copies and prints to Figure 1, Figure 4 and Figure 5. **The copies meet the specification.**

Y **N**

Check dC131 NVM location 793-010, TC Sensor Control Voltage. **The value is between 805 and 1200.**

Y **N**

Change the value to 1000. Save the new NVM value and exit service mode using call closeout and the machine reboot option. Run 200 copies of internal test print 12 to stabilise the machine. Copy and evaluate test pattern 82E2010/82E2020 then print and evaluate internal test patterns 5 and 8, dC612. Refer to Figure 1, Figure 4 and Figure 5. If the copies and prints now meet the specification, perform Final Actions within this procedure. If the copies and prints still fail to meet the specification, continue with this procedure.

The value is between 805 and 1200, Produce a solid black print. Refer to the Solid Black Print Routine. Evaluate the print as follows:

Use the density reference chart 82P520 or 82E8230. Compare the solid black area of the print, with the 1.3 -1.5 reference patches of the chart, Figure 3. If using 82P520, the solid black print should be darker than the 1.4 reference, but lighter than the 1.5 reference. If using 82E8230, the solid black print should be as dark or darker than the 1.3, but lighter than the 1.5. **The solid black is good and not grey or mottled.**

Y **N**

Check that the toner dispenser is working. Open the bypass tray and remove the upper left hand cover, PL 28.10 Item 3. Refer to Wiring Diagram 8, Monitor the voltage on the red wire on pin 8 of PJ93 while printing 20 copies of test pattern 82E2010/82E2020. This is the output of the toner concentration sensor. The voltage should be between +1.5V and +2.8V. **The voltage is correct.**

Y **N**

If the voltage is consistently above +2.8V, the toner dispenser is not operating correctly. Install a new toner dispenser module, (45-55 ppm) PL 90.17 Item 1 or (65-90 ppm) PL 90.15 Item 1.

If the voltage is below +1.5V, install a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

Enter service mode dC131, location 793-010, TC Sensor Control Voltage. Increase the value by 200, or to the maximum value of 1200 if an increase of 200 is not available.

A B C

A B C

Save the new NVM value and exit service mode using call closeout and the machine reboot option.

Run 200 copies of internal test pattern 12, then produce a solid black print using the Solid Black Print Routine. Check the solid black area of the print using the density reference chart, Figure 3, as checked previously. **The print is solid black and meets the specification.**

Y N

Install a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

The solid black reproduction is good. Perform Final Actions.

Perform the ROS Check, then perform Final Actions.

The prints meet the specification.

Y N

Go to the IQ2 Defects RAP.

Sent print jobs are light or not of the correct density.

Y N

Perform Final Actions.

Make image quality adjustments in the print driver.

The prints meet the specification.

Y N

Go to the IQ2 Defects RAP.

Sent print jobs are light or not of the correct density.

Y N

Perform Final Actions.

Make image quality adjustments in the print driver.

Solid Black Print Routine

Unscrew the head of an AA Mini-Mag Lite. Ensure fresh batteries are installed. With the light lit, place the Mini-Mag Lite in the slot on the top side of the xerographics module, with the back of the Mini-Mag Lite to the rear of the module, Figure 2. Run one copy. Remove the Mini-Mag Lite to prevent light shock on the drum.

On the copy, the area of the drum that was blocked by the Mini-Mag Lite should be white. The area of the drum illuminated by the Mini-Mag Lite should be solid black.

ROS Check

Print one internal test print 8, dC612. Evaluate the print, refer to Figure 5:

CAUTION

Do not set the laser tight levels outside the minimum or maximum values.

1. The two darkest bands, 7 and 8, should be solid black and almost or completely indistinguishable from each other. If bands 7 and 8 are not solid black, refer to Table 2. Enter dC131, location 761-001, Laser Light Level. Raise or lower the value by 250. Raising the value darkens the print density and merges the darker bands. Lowering the value lightens the print density and separates the darker bands. If this part of the specification cannot be met, clean the ROS, ADJ 60.2. If necessary, install a new ROS, PL 60.10 Item 8.
2. Bands 1 to 6 inclusive should all be distinct from each other.
3. Band 1 may be white or light grey. If any of these bands merge, the SBC PWB is defective. Perform the 303D SBC PWB Diagnostics RAP.

Table 2 Laser light level NVM location 761-001 values

Speed	Min./Max Values	Default Value
45-55 ppm	1500/6000	1912
65-90 ppm	1500/6000	1815

4. When the specifications in the above three steps are met, the ROS is functioning correctly.

Final Actions

- Record all changes in the log book for future reference. Perform an NVM Save, GP 5 then SCP 5 Final Actions.

  Make the following copies and prints. Mark these “FINISH” and write the new NVM values on these prints and copies. Save these documents in the machine for future reference:

  – Make one SPDH copy of test pattern 82E2010 (A4), or 82E2020 (8.5x11 inches).
  – Make one document glass copy of test pattern 82E2010 (A4), or 82E2020 (8.5x11 inches).
  – Make one print of Internal test pattern 5, dC612.
  – Make one print of Internal test pattern 8, dC612.
- Run sample customer documents. If necessary, use the image quality options (sharpness/contrast/lighter/darker) on the UI to customize the look of the customer's copies as detailed in IQ10.
- Run dC604 Registration Setup Routine.
- Record any image quality options selected onto the customer copy, and save in the machine for future reference.

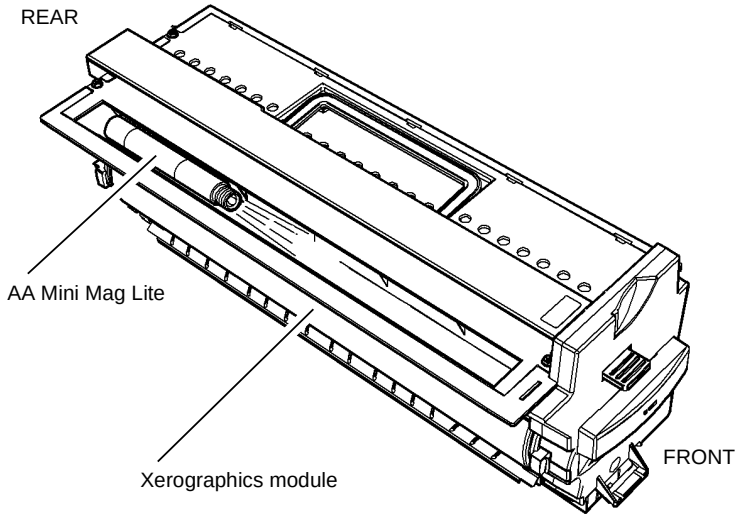


Figure 2 Xerographics module with AA Mini Mag-lite

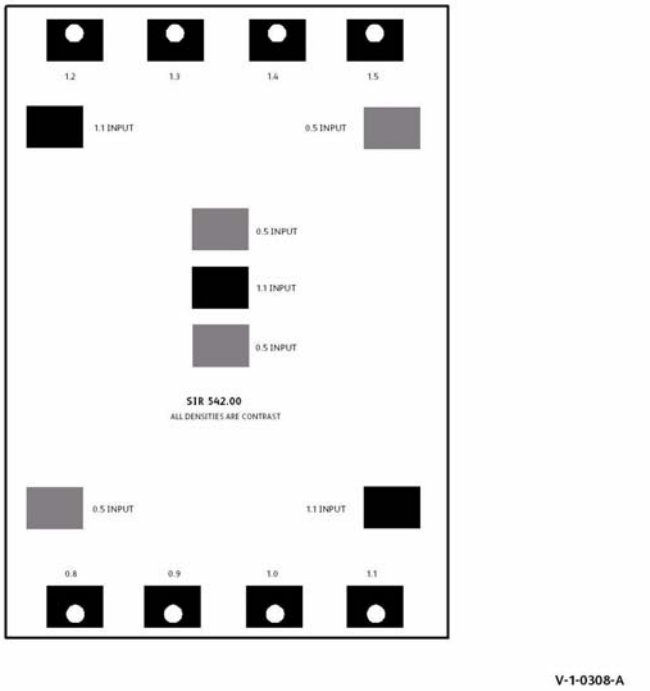


Figure 3 Density reference chart 82P520/82E8230

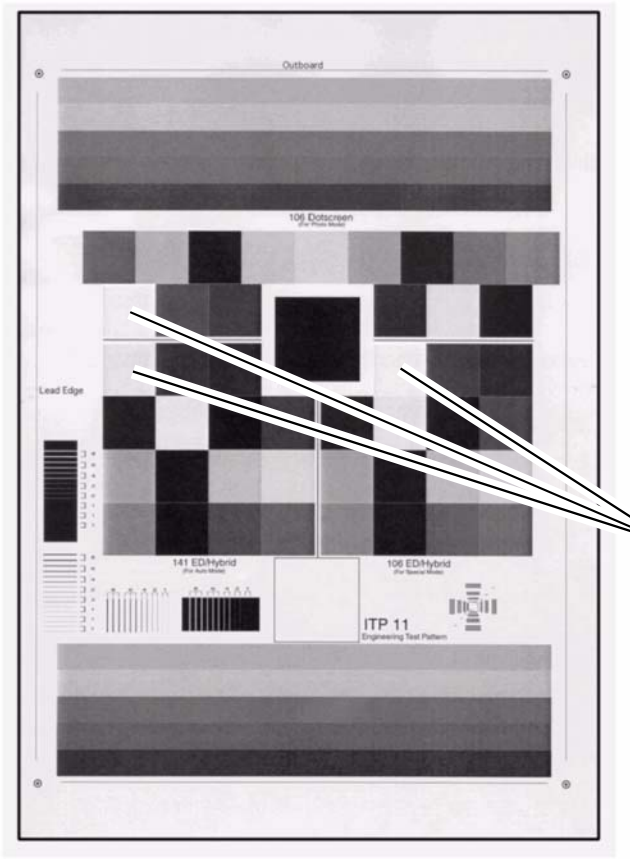


Figure 4 Internal test print 5

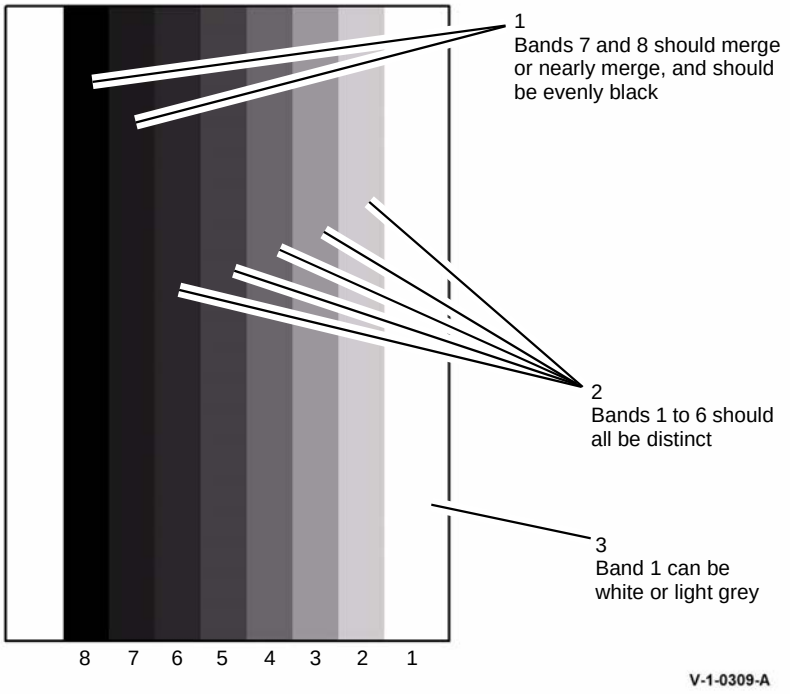


Figure 5 Internal test print 8

IQ12 Barber Pole Deletions / Developer Leakage RAP

Use this RAP to cure barber pole deletions and developer leakage problems.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the machine is level. If the machine is not level, developer can leak from the developer module.
- Clean the charge scorotron, ADJ 90.4.
- Clean the transfer/detack corotron, ADJ 90.1.
- Check and clean the erase lamp, ADJ 90.4.
- Check that the high voltage connections and the PJs on the HVPS are correctly and securely seated. Refer to 391-060-00 HVPS Fault RAP.

Procedure

Print the internal test pattern 3, dC612. If the barber pole deletions are present, they appear as shown in Figure 1.

These deletions appear when 0.5kg (1.1 lbs.) or more of the developer is lost from the developer module. This represents half of the developer charge. The causes of loss of developer are:

- A damaged, (scored or scratched), drum. The drum can be scratched by a mis-adjusted or bent detack / transfer corotron.
- A contaminated charge corotron can create an electrostatic 'hot spot' on the drum. Contamination can be caused by excessive book copying without having selected the Bound Original feature on the Image Adjustment Screen.
- The machine is not level. A 2 degree tilt, front to rear, causes developer to leak out from the overflow tube in the rear of the developer module, into the waste bottle.
- The spacing between the developer module and the xerographics module is incorrect. In this case, developer spills out at the magnetic brush into the base pan of the machine.
- A defective developer module. If the magnet separates from the magnetic roll, developer may spill out of the developer module, along the length of the magnetic roll. Worn developer bearings can allow developer to leak out of the housing at the inboard and outboard ends.

Remove the xerographics module and examine the drum surface for chips, scores and scratches. The non image area of the drum must also be free of chips, scores and scratches.

The drum surface is good.

Y N

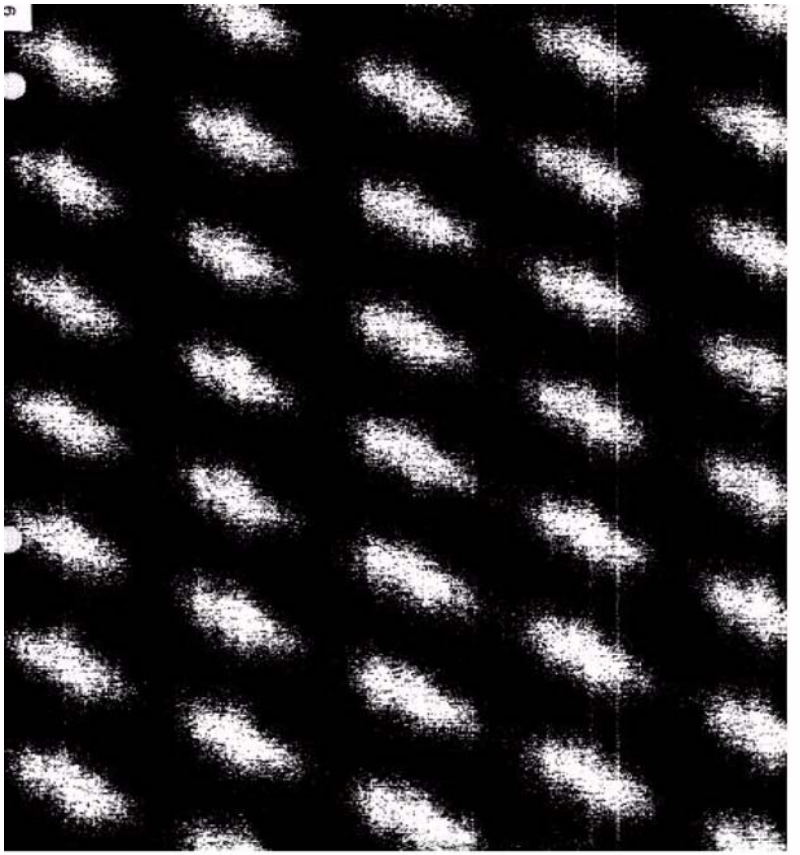
Install a new xerographic module, PL 90.20 Item 2. Discard the remaining developer and install a full developer charge, (65-90 ppm) PL 90.15 Item 25 or (45-55) PL 90.17 Item 24.

Perform the following:

- Remove the left cover, PL 28.10 Item 3. Run the machine and check the developer bias, is approximately -350V on the single red wire at the high voltage connection to the developer module, Wiring Diagram 10. If necessary, go to 391-060-00 HVPS Fault RAP.

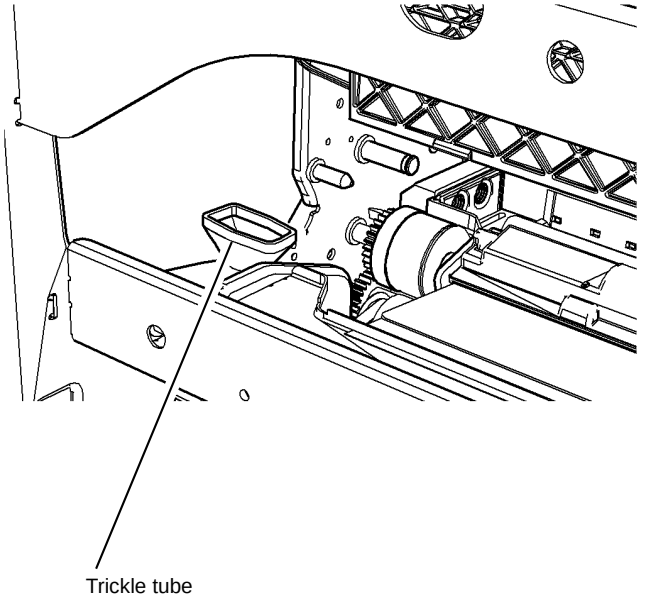
***NOTE:** The developer bias voltage increases with developer age from approximately -350V with new developer material, to approximately -441V with developer material that has produced 1.2 million images.*

- Ensure there is a good fit between the trickle door at the rear of the developer module and the trickle tube. Refer to Figure 2 and Figure 3.
- If there has been a developer spillage into the base pan of the machine, check the developer module latching. The developer module locates onto two locating pins at the front of the machine and two locating pins in the rear frame of the machine. Refer to Figure 3 and Figure 4. Ensure the locating pins are clean and perpendicular, (at 90 degrees), to the machine rear frame.
- Check for, and remove any excess material round the locating holes on the developer module. If necessary, apply some plastislip grease, PL 26.10 Item 8 around the locating holes to ensure smooth operation. If the developer module still will not latch properly, install a new developer paddle, PL 90.20 Item 14.
- If a large amount of developer material has been lost, discard the remaining developer and install a full developer charge, (65-90 ppm) PL 90.15 Item 25 or (45-55) PL 90.17 Item 24.
- If there is still developer leakage, install a new xerographics module, PL 90.20 Item 2. At the same time, install a new developer module, (45-55) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.
- If the customer copies books, instruct them in the use of the Book Copying feature on the Layout Adjustment screen.



V-1-0311-A

Figure 1 Example of barber pole deletions



V-1-0312-A

Figure 2 Developer trickle tube

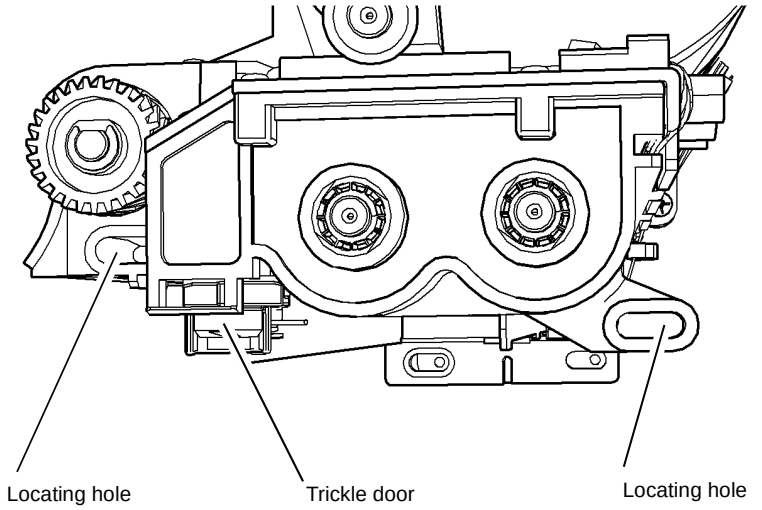


Figure 3 Developer trickle door and rear locating holes

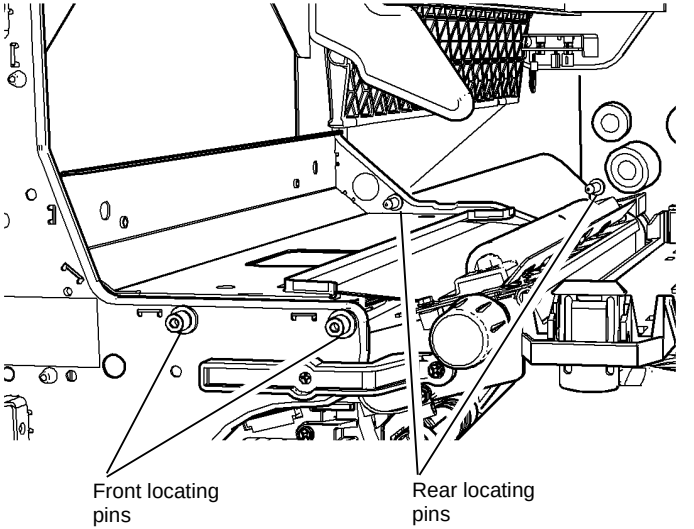


Figure 4 Developer module locating pins

IQ13 Cockle Deletion RAP

Use this RAP to cure intermittent cockle deletion on buckled/rippled copies.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the IQ1 Image entry RAP before starting this RAP.

Procedure

Run 20 simplex and 20 duplex copies of test pattern 9, dC612. Check the copies for cockle deletions. If cockle deletions are present they appear as shown in Figure 1.

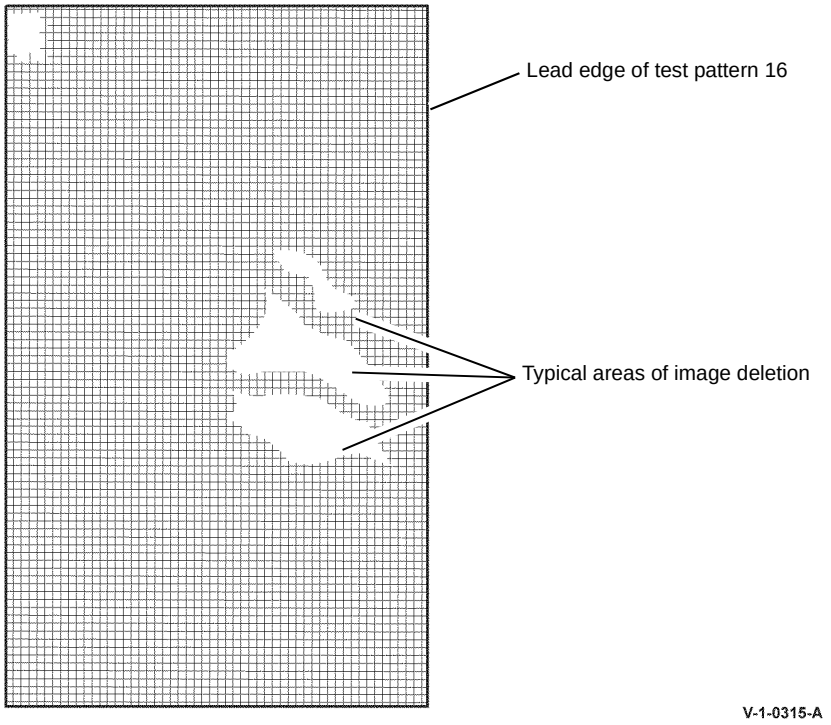


Figure 1 Cockle deletions

These deletions appear when the paper is buckled in the duplex transport and registration transport assemblies. The effect of the buckling forms a permanent ripple in each sheet of paper which leads poor image transfer. The known causes of paper buckle are:

- Worn/damaged components within the duplex transport assembly
- Worn/damaged components within the registration transport assembly

Remove the duplex transport assembly, REP 80.5, then inspect the assembly for damage, GP 7. **The duplex transport assembly is in good condition.**

Y N

Install a new duplex transport assembly, (45-55 ppm) PL 80.22 Item 1 or (65-90 ppm) PL 80.20 Item 1.

Remove the registration transport assembly, REP 80.2, then inspect the assembly for damage, GP 7. **The registration transport assembly is in good condition.**

Y N

Replace the registration transport assembly, (45-55 ppm) PL 80.15 Item 1 or (65-90 ppm) PL 80.17 Item 1.

Refer to GP 18, lubricate the registration transport nip assembly.

Run 20 simplex and 20 duplex copies of test pattern 9, dC612. Check the copies for cockle deletions. **The copies are good.**

Y N

Perform ADJ 80.2 Simplex and Duplex Buckle Timing.

Record all changes in the log book for future reference. Perform SCP 5 Final Actions.

IQS 1 Solid Area Density

Documents

Test patterns: 82E2000 (A3 and 11X17) 82E2010 (A4) 82E2020 (8.5X11) and the solid area density scale, 82E8230 (SIR 542.00) for reference.

Specification

Copy

Compare the copies of one of the above 82E series test patterns, Figure 1, made from the document glass, with the solid area density scale, 82E8230 (SIR 542.00):

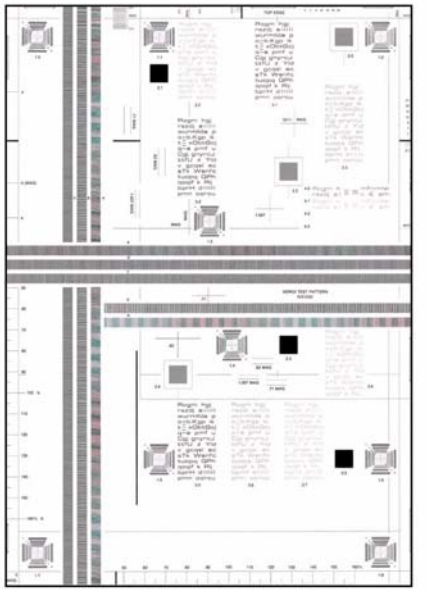
- The density of the 2.1; 2.3; and 2.5 areas must be as dark or darker than the 1.3 reference, but less than 1.5.
- The 3.0, 3.3 and 3.4 text areas should all be visible.
- The 4.1 line pair should be visible.
- The 2.0, 2.2 and 2.4 squares should be darker than the original document.
- The bullseye targets should be clearly reproduced.

Print

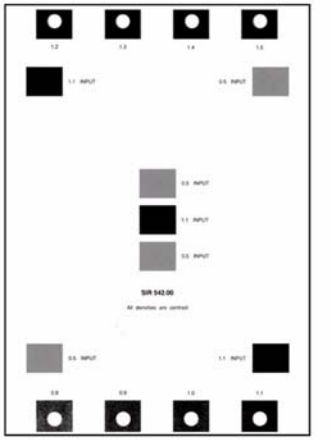
Compare a print of the internal test pattern 12, Figure 2, with the solid area density scale, 82E8230 (SIR 542.00). The density of the solid areas must be as dark or darker than the 1.3 reference, but less than 1.5.

Corrective action

If the solid area density specification is not met, then go to the IQ2 Defects RAP.



82E2000



SIR 542.00

V-1-0316-A

Figure 1 Test patterns

V-1-0317-A

Figure 2 Internal test pattern 12

IQS 2 Background

Documents

Test patterns: 82E2000 (A3 and 11X17) 82E2010 (A4) 82E2020 (8.5X11) and visual scale, 82P448 for reference.

Specification

Copy

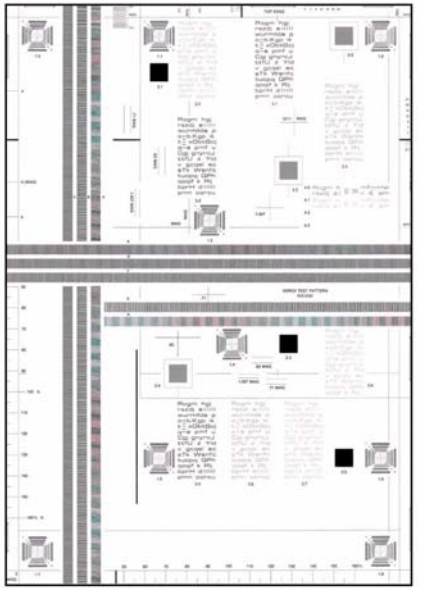
Compare the copies of one of the above 82E series test patterns, Figure 1, made from the document glass, with the visual scale, 82P448. The background of the copies must not be darker than the reference area B.

Print

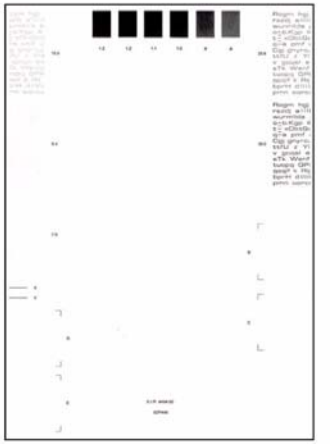
Compare a print of the internal test pattern 1, Figure 2, with the visual scale, 82P448. The background of the print must not be darker than the reference area B.

Corrective Action

If the background specification is not met, then go to the IQ3 Xerographic RAP.



82E2000



SIR 494.00
82P448

V-1-0318-A

Figure 1 Test pattern

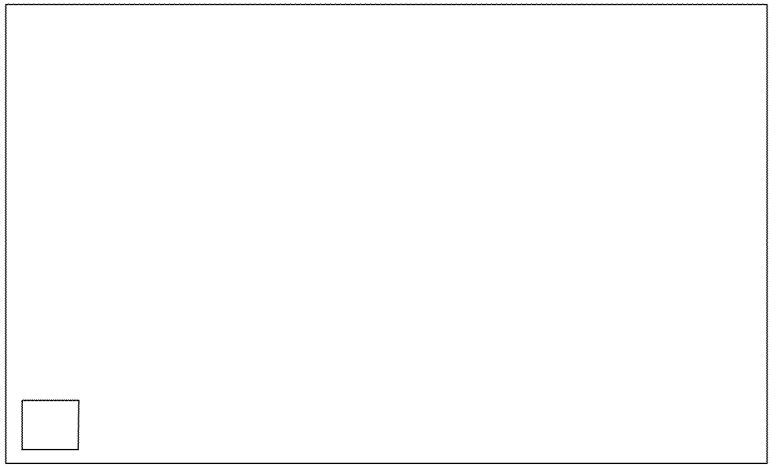


Figure 2 Internal test pattern 1

IQS 3 Fusing

Documents

Test Patterns: 82E2000 (A3 and 11X17) 82E2010 (A4) 82E2020 (8.5X11).

Procedure

Make 5 copies of the test pattern, Figure 1. Check the fusing by folding one of the copies through the center of a solid area. Use a finger to apply medium pressure along the fold to crease the paper. Unfold the copy. Use a finger to lightly rub the area of the fold and adjacent areas.

Specification

Any break should measure less than 1mm (1/32 inch) across the line of a fold. Any area rubbed with a cloth should not smudge or the image lift off the surface of the paper. When checking the fusing on heavy weight paper (200gsm), rub the image with a finger. Images fused on the smooth side have a greater resistance to rubbing than images fused on the rough side. Do not attempt to fold heavy weight paper, as this breaks the fibres.

Corrective Action

If the fusing specification is not met, go to the IQ4 Fuser Module RAP.

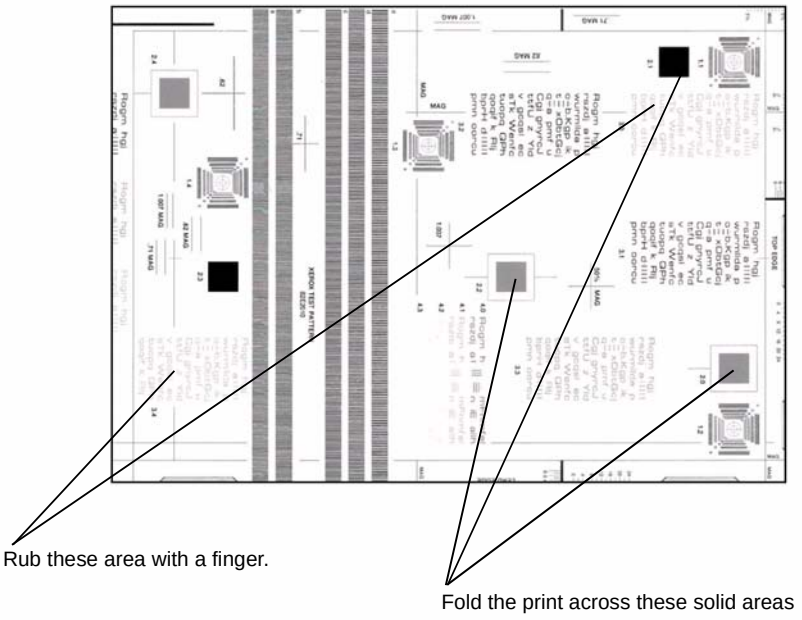


Figure 1 Test pattern

IQS 4 Resolution

Documents

Test patterns: 82E2000 (A3 and 11X17) 82E2010 (A4) 82E2020 (8.5X11).

Specification

Copy

Make copies of a test pattern. from the document glass. Examine the targets of the second copy to determine the overall resolution of the copy. The lines identified by the letter H, Figure 1, should be clearly reproduced at 100%

Print

Make 3 prints of internal test pattern 5. Examine the lines of the second print. All lines should be resolved.

Corrective action

If the resolution specification is not met, refer to IQ2 Defects RAP.

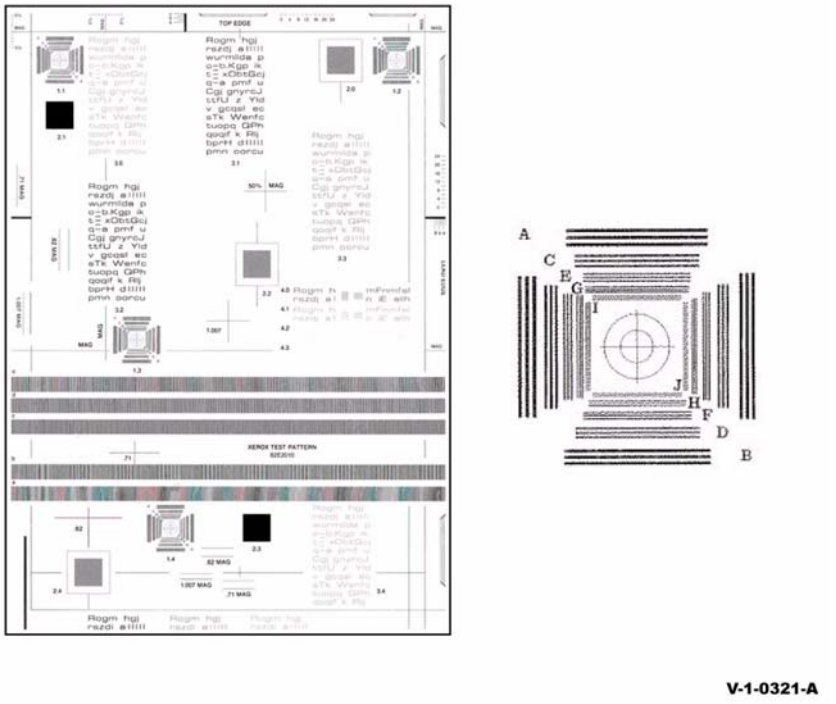


Figure 1 Test pattern

IQS 5 Skew

Documents

Test patterns: 82E2000 (A3 and 11x17), 82E2010 (A4), 82E2020 (8.5x11). Use for checking copy skew with border erase turned off or scan skew.

Procedure

Go to the relevant procedure:

- Print Skew.
- Copy Skew.
- Scan Skew.

Print Skew

Specification

Refer to Table 1.

Table 1 Print skew measurement

Source of paper	Maximum Allowable Skew
Trays 1, 2, 3, 4 and 6 simplex	1mm (0.04 inch)
Trays 1, 2, 3, 4 and 6 duplex	1mm (0.04inch)
Tray 5 (bypass tray)	1mm (0.04 inch)

Skew measurement

To check for skew, perform the following:

1. Enter dC612. Make a simplex print of the relevant internal test pattern:
   - ITP 11 Field test pattern (letter).
   - ITP 12 Field test pattern (A4).
   - ITP 13 Field test pattern (A3).
   - ITP 14 Field test pattern (11x17).

   NOTE: *Two, single sided pages will be printed.*
2. Refer to Figure 1. Determine the amount of skew by using the corner scales. Measure the distance to the lead edge of the paper at the inboard and outboard edges.
3. Make a duplex print of the same internal test pattern.
4. Refer to Figure 2. Determine the amount of skew by using the corner scales. Measure the distance to the lead edge of the paper at the inboard and outboard edges.
5. If skew is not within specification on either side, perform ADJ 80.2 Simplex and Duplex Buckle Timing.

Copy Skew

Specification

Refer to Table 2.

Table 2 Copy skew measurement

Type of Copy	Maximum Allowable Skew from Trays 1, 2, 3 and 4	Maximum Allowable Skew from Bypass Tray
Platen simplex	1.3mm (0.05 inch)	1.3mm (0.05 inch)
Platen duplex	1.3mm (0.05 inch)	1.3mm (0.05 inch)
SPDH simplex	3mm (0.12 inch)	3mm (0.12 inch)
SPDH duplex	3mm (0.12 inch)	3mm (0.12 inch)

Skew Measurement

To check for skew, perform the following:

1. Make a simplex copy of test pattern 82E2000 (A3 and 11x17), 82E2010 (A4) or 82E2020 (8.5x11).
2. Make a duplex copy of the same test pattern.

   NOTE: *When making the duplex copy, place the test pattern so that the side of the test pattern with the datum line is copied onto side 2.*
3. Refer to Figure 3. Determine the amount of skew by either:
   - measuring the distance between the datum line and the lead edge of the paper at the inboard and outboard edges.
   - using the grid A and grid B areas of the test pattern to directly measure the skew difference.

   NOTE: *Grid A and grid B are small areas of parallel lines 1mm apart.*
4. If skew is not within specification, perform ADJ 80.2 Simplex and Duplex Buckle Timing.

Scan Skew

Specification

Refer to Table 3

Table 3 Scan skew measurement

Type of Scan	Maximum Allowable Skew from Trays 1, 2, 3, 4 and Bypass
Platen simplex	1.3mm (0.05 inch)
Platen duplex	1.3mm (0.05 inch)
Document handler simplex CVT simplex	3mm (0.12 inch)
Document handler duplex SPDH	3mm (0.12 inch)

Skew Measurement

To check for skew, perform the following:

1. Produce a Scan to USB file of test pattern 82E2000 (A3 and 11x17), 82E2010 (A4) or 82E2020 (8.5x11), then view the file on a computer screen.
2. Refer to Figure 3. Determine the amount of skew by either:

- measuring the distance between the datum line and the lead edge of the paper at the inboard and outboard edges.
- using the grid A and grid B areas of the test pattern to directly measure the skew difference.

NOTE: *Grid A and grid B are small areas of parallel lines 1mm apart.*

3. If skew is not within specification, perform the relevant procedure:
   - For skew produced in the SPDH, go to ADJ 5.3 SPDH Skew and perform the Side 2 Skew Adjustment
   - For skew produced from the document glass, check the SPDH is seated correctly, perform ADJ 5.2 SPDH Height. Also got to ADJ 5.3 SPDH Skew and perform the Side 1 Skew Adjustment.

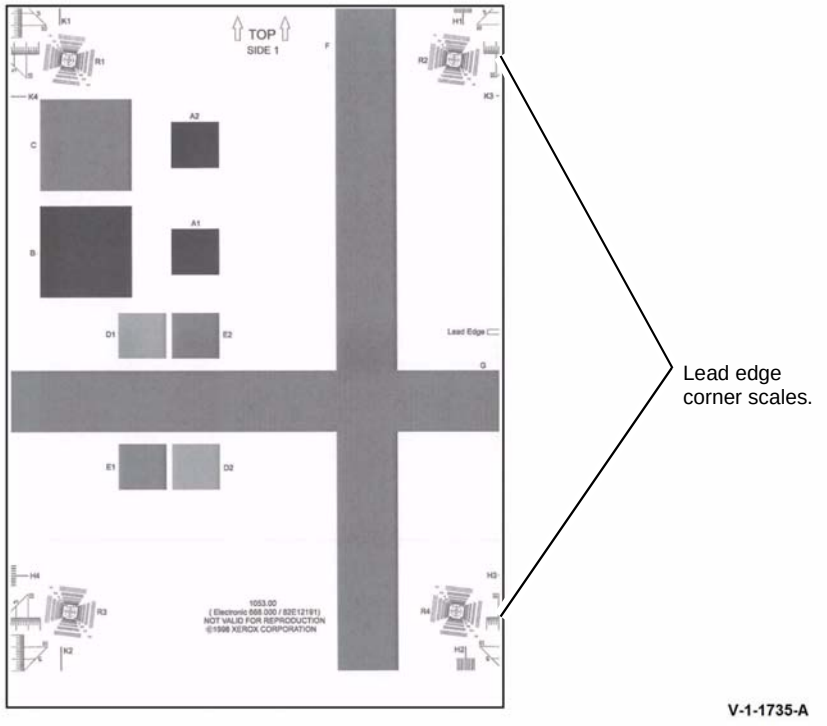


Figure 1 Print skew measurement (simplex)

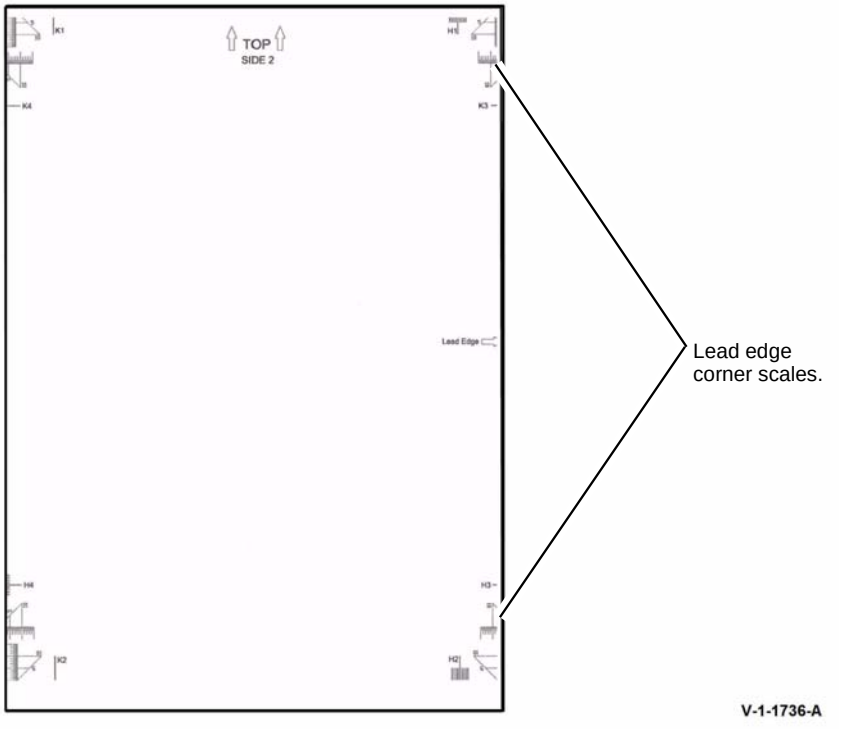


Figure 2 Print skew measurement (duplex)

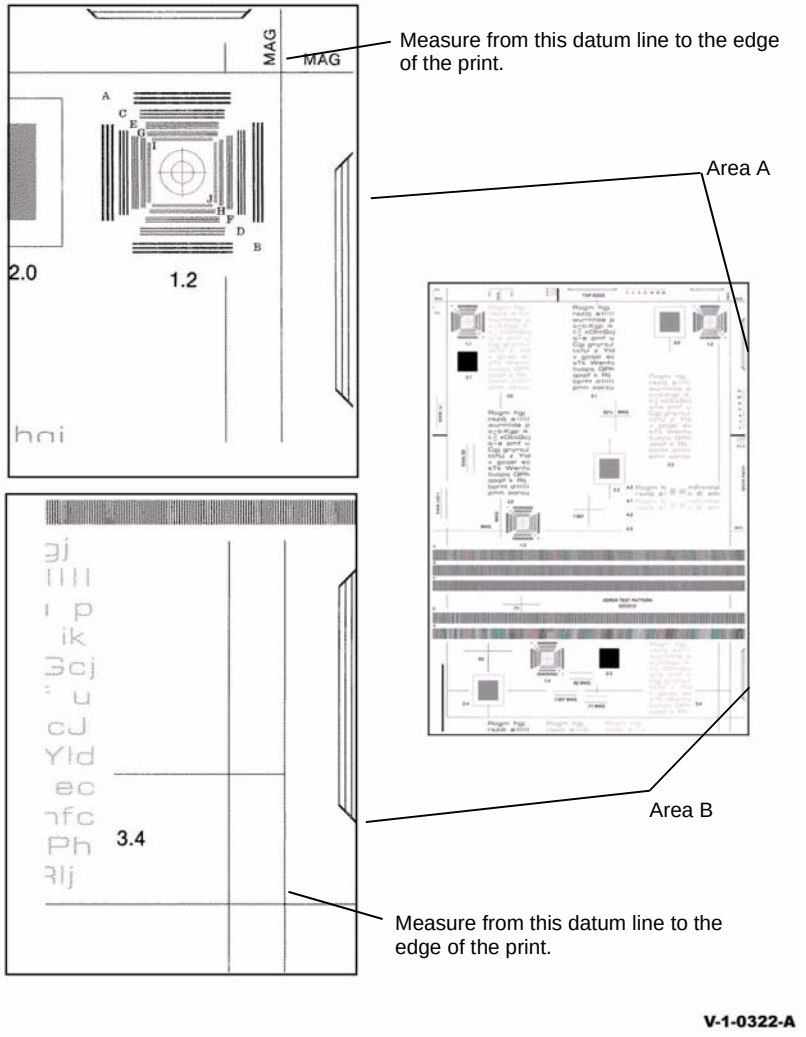


Figure 3 Skew measurement

IQS 6 Copy / Print Defects

The printer should produce prints free of defects. Any defects not explicitly covered by this specification should be considered as a fault.

Show through

No show through of the underside of the document handler should be visible when using Xerox 80gsm (20lb) or heavier paper as an input document. The check is made with the document handler closed and in normal copy / print mode. Some show through might occur using 60gsm (15lbs) paper as documents.

Corrective action

If show though of the underside of the document handler is visible, ensure that the document pad is clean. Refer to ADJ 5.4 SPDH Cleaning. If necessary, install a new document pad, PL 5.10 Item 3.

Oil on copies or prints

No oil should be evident on any print when viewed normally. Oil should not be visible on any transparency when viewed using an overhead projector. It should be possible to mark fused transparencies with a spirit based marker pen.

Dark spots

Dark spots are toner deposits in the background area of a copy / print. The specification is for the total image area. To assess for dark spots use the dC612 internal test pattern 1.

- Spots of 0.4 mm (1/64 inch) and larger - none allowed
- Spots smaller than 0.4 mm (1/64 inch) - no more than 3 spots per 25mm x 25mm square (1 square inch) on any 2 sheets of a job

Corrective Action

Go to the IQ7 Document Glass and Scanner IQ defects RAP and perform the marks and spots procedure.

White spots

White spots are areas visible on a half tone or solid area where the toner has failed to be deposited. The specification is for the total image area. To assess for white spots use the dC612 internal test pattern 5.

- Spots of 0.4 mm (1/64 inch) and larger - none allowed
- Spots smaller than 0.4 mm (1/64 inch) - no more than 3 spots per 25mm x 25mm square (1 square inch)

Corrective Action

Go to the IQ2 Defect RAP and perform the deletions procedure.

Skips and smears

Skips and smears are image disturbances that are assessed using the ladder scale A. Use one of the test patterns, 82E2000 (A3 and 11X17) 82E2010 (A4) 82E2020 (8.5X11). Refer to Table 1 to assess image disturbances.

Table 1 Skips and smears

Magnification ratio%	Maximum number disturbances	Test area of document
All magnification	None	Ladder scale A. 3 line pairs

Paper wrinkle

Paper wrinkles which result in the loss of information are unacceptable at any level. In any mode, copy / prints containing wrinkles or creases which do not result in the loss of information may occur less frequently than 1 in 500 consecutive copies / prints in that mode. This is applicable to all base line papers; to simplex and duplex prints, provided the paper is stored inside the printer and that the printer is operated within the environmental specification.

Corrective Action

Perform the checks that follow:

- That the paper stock conforms to the specification, refer to GP 20 Paper and Media Size Specifications. Inform the customer if the paper is outside of the specifications.
- The customer's paper storage conditions. Paper must be stored in unopened packs in cool dry conditions. Inform the customer if the storage conditions are not good.
- The environmental conditions, refer to GP 23 Environmental Data. Inform the customer if the environmental conditions are outside of the specifications.
- For damaged rollers in the paper path.
  - Wrinkles occurring before image transfer can be flattened by the fuser, resulting in a wrinkled image even though the paper is flat. This type of wrinkle shows up well on a print of dC612 internal test pattern 3.
  - Wrinkles occurring after transfer tend to be creased into the paper and can be caused in the fuser.

Hole Punch Performance

The hole punch unit makes a set of holes near the trail edge of single copies or prints. The dimension between the holes are set by the hole punch. The position of the holes from the trail edge is controlled by the software that uses timing information from the punch sensor. The specification for the hole positions in the top to bottom direction is +/-2 mm, with A4 / 80 gsm (8.5x11, 75 gsm) simplex, from a single tray in a nominal environment. For all paper sizes, weights, trays and environments, the specification is +/-3 mm.

Corrective Action

Perform ADJ 11.3-110 Hole Punch Position (2K LCSS), or ADJ 11.3-150 Hole Punch Position (LVF).

IQS 7 Registration

Documents

Test patterns: 82E2010 (A4), 82E2020 (8.5 X 11)

Specifications

Refer to Table 1.

Table 1 Registration measurement

Source of paper	SPDH	Document glass	Printer reference only
All trays, bypass tray and duplex lead edge registration	2.3 mm (3/32 inch)	1.6 mm (1/16 inch)	1.6 mm (1/16 inch)
All trays, bypass tray and duplex top edge registration	3 mm (1/8 inch)	2.1 mm (3/32 inch)	1.6 mm (1/16 inch)

Registration measurement

Use the areas A and B on the test pattern, Figure 1, to measure the displacement of the lead edge on the image. Use the area C, Figure 1, to measure the top edge displacement. The displacement measured at A and B should be equal.

NOTE: *If a difference between measurements at A and B of a SPDH copy are greater than 3 mm, refer to IQS 5 Skew.*

NOTE: *If a difference between measurements at A and B of a document glass copy are greater than 1.3 mm, refer to IQS 5 Skew.*

Corrective Action

Refer to ADJ 3.1 Registration Setup.

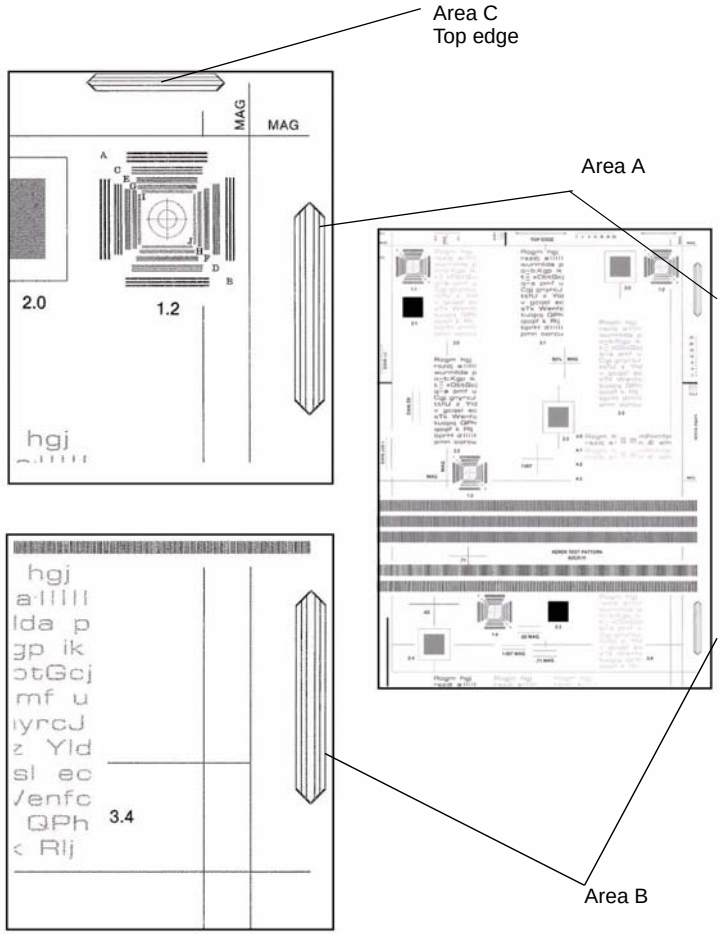


Figure 1 Registration measurement

IQS 8 Magnification

Documents

Use the internal test pattern generated in dC604 Registration Setup.

Specifications

Refer to Table 1.

Table 1 Specifications

Source of image	In process direction	Across process direction
Printer (In ambient conditions using 80gsm/20lb A4/letter LEF)	equal to and less than 0.4%	equal to and less than 0.4%
Printer (In hot/wet or cool/dry conditions using other papers)	equal to and less than 0.5%	equal to and less than 0.5%
Document glass	less than + 0.7% to -0.7%	less than + 0.7% to -0.7%
SPDH	less than + 1% to -0.5%	less than + 0.7% to -0.7%

Magnification measurement

Make copies of the registration test pattern from the document glass and through the SPDH. Fold the printed images across Zone A to Zone C and from Zone B to Zone D. Lay the folded printed images over the unfolded test pattern. Compare the dimensions, Figure 1.

Corrective action

Refer to ADJ 3.2 Magnification Adjustment.

NOTE: *There are no across process direction adjustments.*

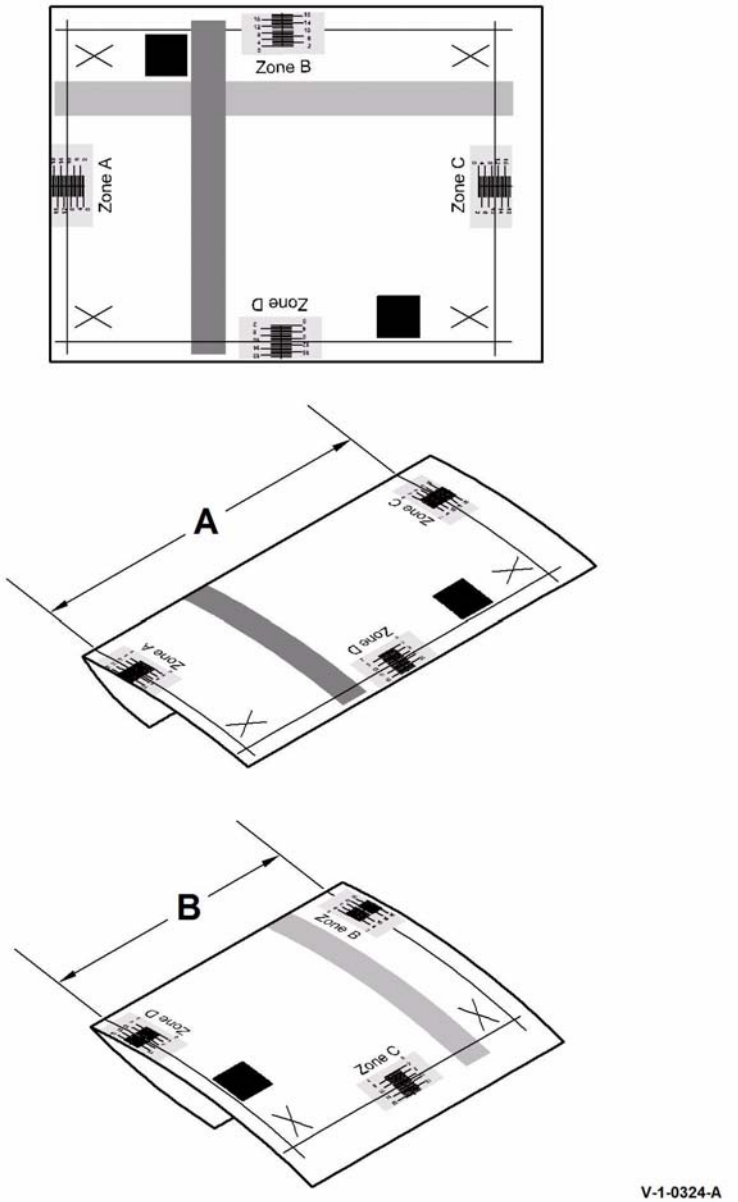


Figure 1 Magnification check

4 Repairs/Adjustments

REPs 11-120 - 1K LCSS

REPs 11-150 - LVF BM

REPs 11-171 - HVF

REPs 80 - Paper Transport

REPs 90 - Xerographics

ADJs 3 - Registration

ADJs 5 - SPDH

ADJs 10 - Print Transport and Fusing

ADJs 11-110 - 2K LCSS

REP 1.1 Power and Control Assembly

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

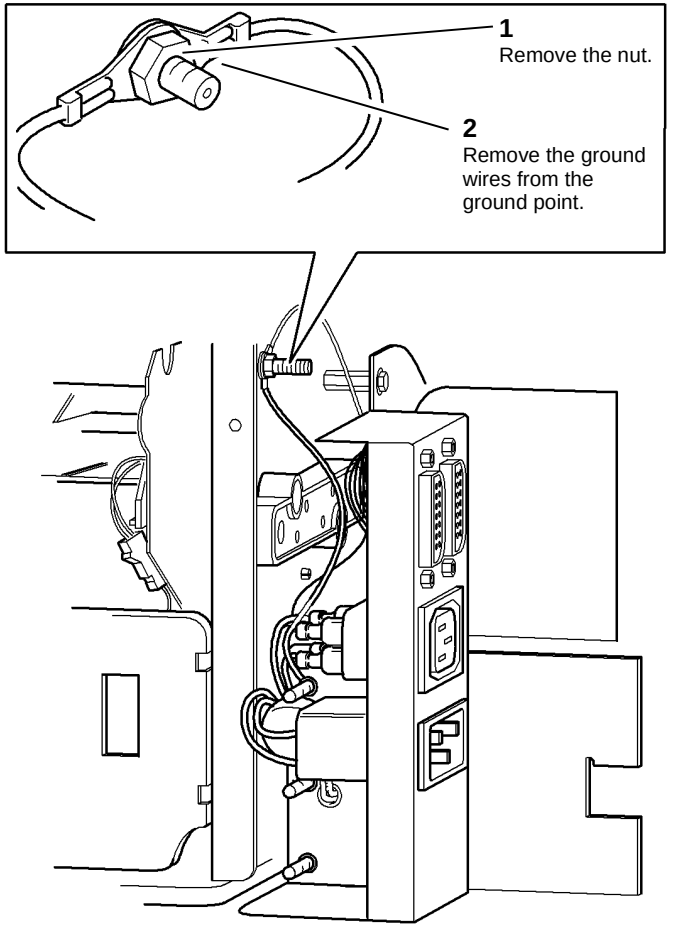
Ensure that E.S.D. procedures are observed during the removal and installation of the IOT PWB.

Figure 1 ESD Symbol

***NOTE:** 1. If a new power and control assembly complete with IOT PWB is to be installed refer to REP 3.1 IOT PWB.*

***NOTE:** 2. Before starting this procedure, read and record the dC131 NVM values in location 791-087 Developer age, and 793-010 TC Sensor Control Voltage. After installing the new IOT PWB, perform an NVM restore, GP 5, and write the values recorded from the old IOT PWB into dC131 NVM locations 791-087 and 793-010. Load software if required, GP 4. Go to dC132 and enter the machine serial number as it appears on the serial number plate on the front frame of the machine.*

1. Switch off the machine, GP 14. disconnect the power cord.
2. Pull out tray 1 and tray 2 approximately 100mm (4 inches).
3. Disconnect the tray 6 harness (if fitted) and the output device.
4. Remove the rear cover, PL 28.10 Item 1.
5. Remove the waste toner bottle door assembly, REP 90.1.
6. Figure 2. Disconnect the ground wires from the main frame ground point.



V-1-0325-A

Figure 2 Main frame ground point

7. Figure 3. Remove the cable ties.

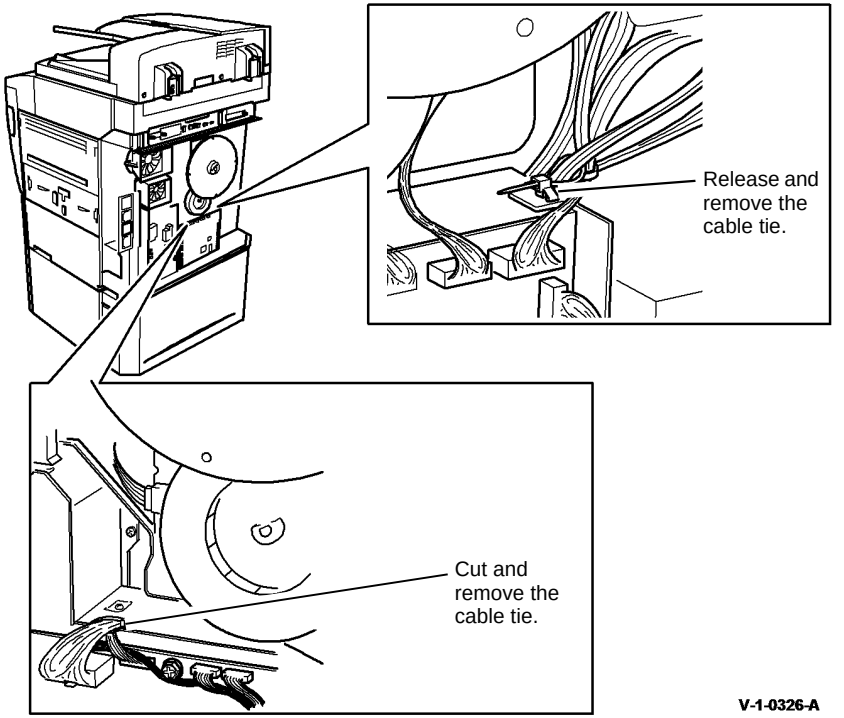


Figure 3 Cable ties removal

8. Figure 4. Remove the securing screw from the power and control assembly.

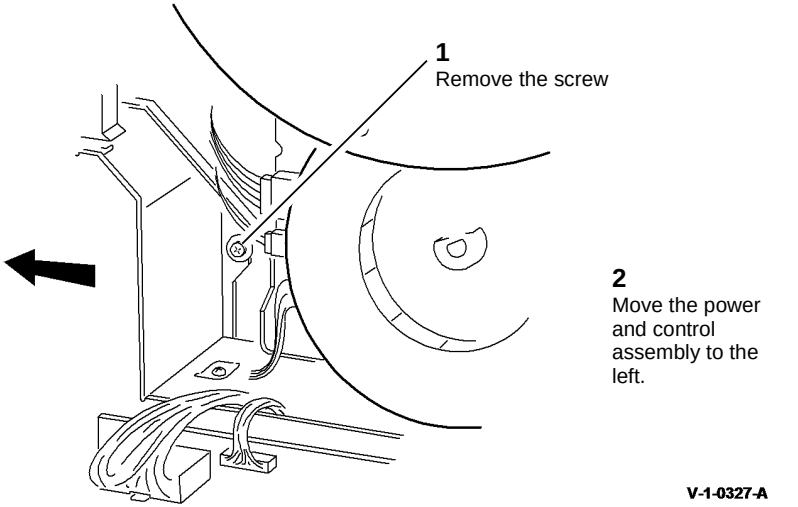


Figure 4 Power and control assembly

9. Figure 5. Disconnect wiring.

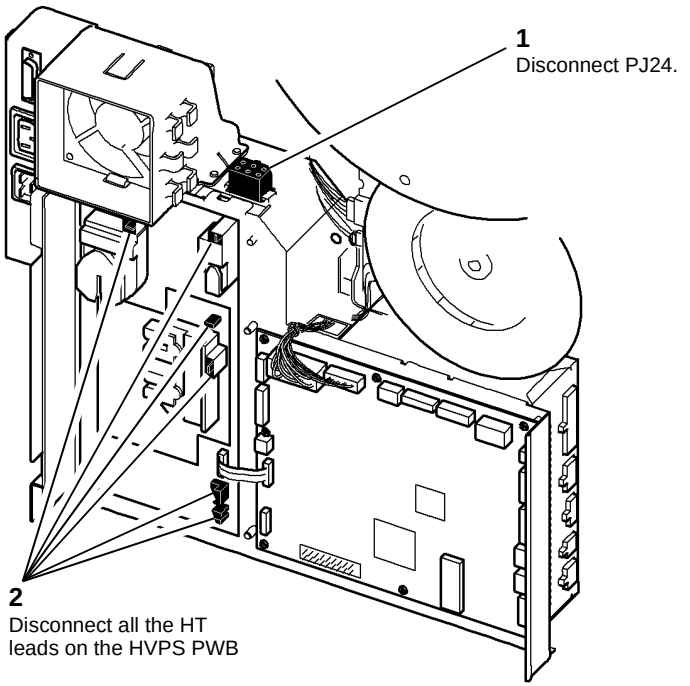
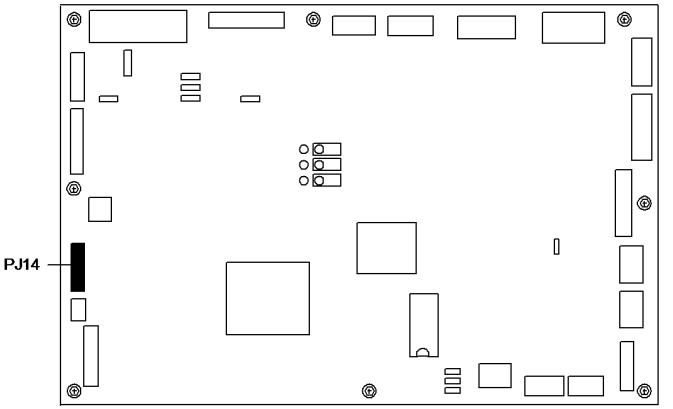


Figure 5 Wiring disconnection

10. Figure 6. Disconnect the IOT PWB wiring.

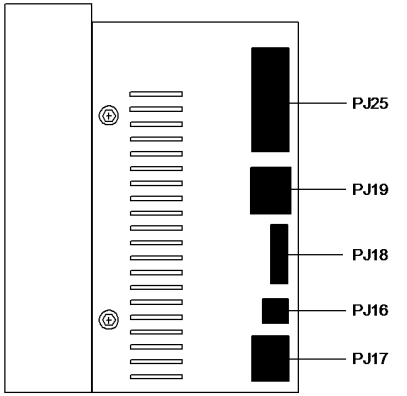


1
Disconnect all the PJs except PJ14

V-1-0329-A

Figure 6 IOT PWB disconnection

11. Figure 7. Disconnect the LVPS wiring.



1
Disconnect all of the PJs from the LVPS

Figure 7 LVPS disconnection

12. Remove the power and control assembly.

Replacement

- If a new LVPS and base module is installed with the HVPS and IOT PWB transferred from the failed LVPS and base module then perform steps 1 to 3.
- If a new power and control assembly complete with IOT PWB has been installed then perform steps 1 to 4.

CAUTION

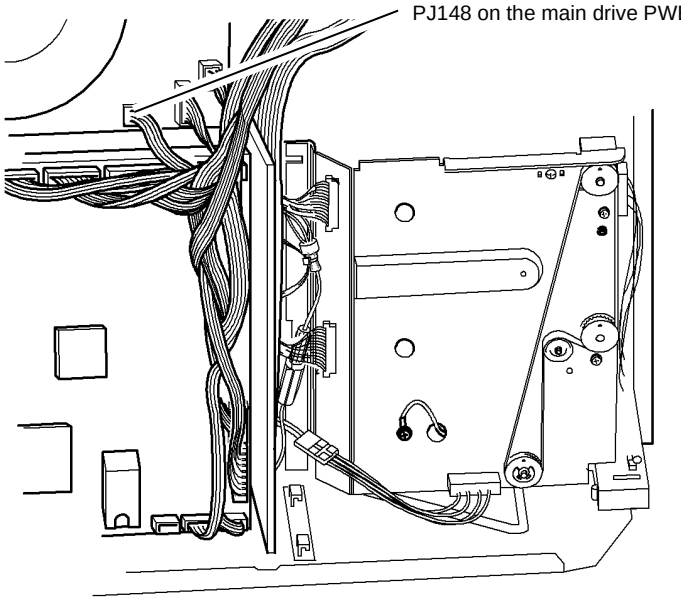
Ensure the HT leads are correctly connected. Ensure that the female spade connector is encasing the male spade connector. The connection must be a tight fit, if it is loose the male spade may be incorrectly positioned between the female spade and the outer insulation of the connector.

CAUTION

Do not trap the harnesses when the power and control assembly is installed.

Perform the following:

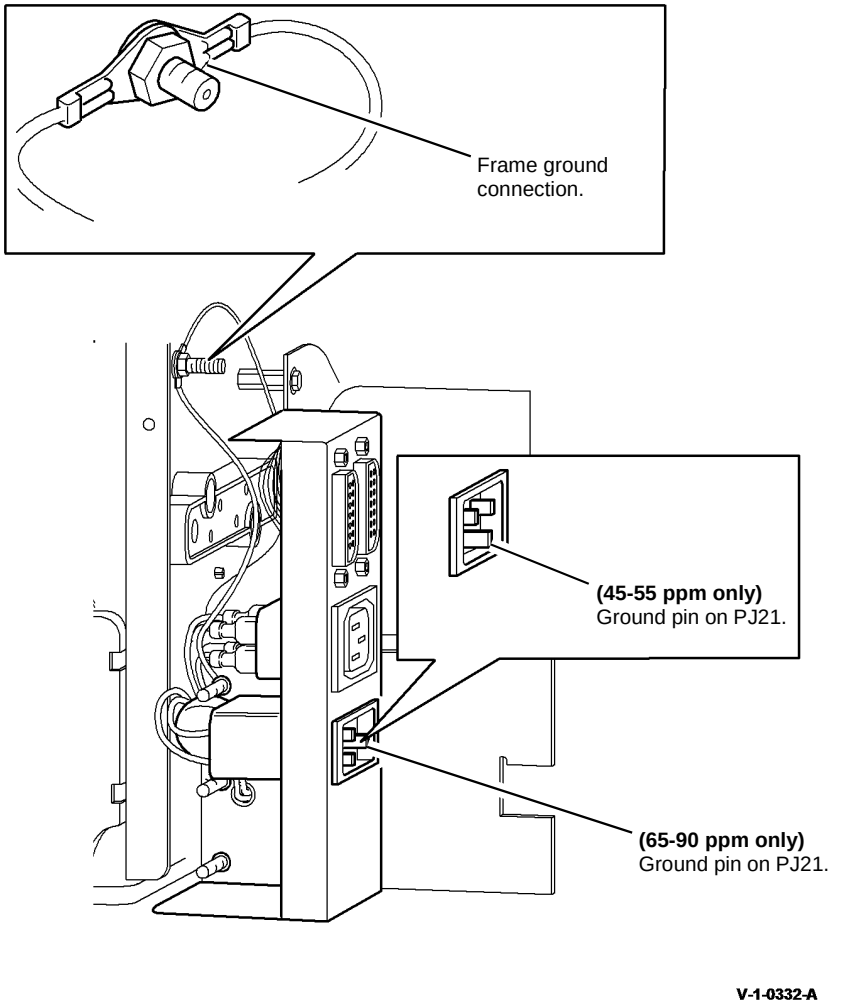
1. Figure 8. Check that PJ148 has not been disconnected on the Main Drive PWB.



V-1-0331-A

Figure 8 PJ148 location

2. Figure 9. Ensure that the nut on the ground connection is tightened to secure the ground terminals.
3. Figure 9. Use a digital multimeter set to a resistance range. Verify that there is continuity between the ground pin on PJ21 and the frame ground connection.



V-1-0332-A

Figure 9 Ground check

4. Reconnect the power cord and switch on the machine, GP 14.
5. If necessary, reload the software set, GP 4.

NOTE: *After the software reload has been completed, the machine resets and gives a message 'Restoring Configuration Settings'. Do not switch off the machine or intervene during this NVM transformation process.*

6. Check the machine serial number, dC132.

REP 1.2 Wiring Harness Repairs

Purpose

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not attempt any repairs to the power cord or safety ground harness/conductor.

NOTE: *Safety ground connections use green/yellow cables, or green cables with a yellow stripe or band.*

The steps that follow identify the relevant procedures for repairing the various connectors contained within the copier.

1. If wiring is damaged, use connector splicing blocks to repair damaged wiring.
2. The following harness assemblies are not repairable; install new parts:
   - Any ribbon cable.
   - HDD cable, PL 3.22 Item 4.
   - ROS data cable, PL 3.22 Item 6.
   - SBC PWB/scanner PWB data cable PL 3.22 Item 20.
   - SBC PWB/UI USB port harness, PL 3.22 Item 22.
   - SBC PWB/UI control PWB harness, PL 3.22 Item 23.
3. The following connectors can be repaired by removing the faulty terminals and installing new terminals:
   - Molex SL connectors - REP 1.3.
   - Male Hirose DF1B connectors - REP 1.4.
   - AMP EI connectors - REP 1.5.
   - Hirose DF11 connectors - REP 1.6.
   - AMP CT connectors - REP 1.7.
   - Molex Mini-Fit Junior connectors - REP 1.11.

REP 1.3 Molex SL Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Molex connectors have small black housings in single or double rows, formed with miniature square section pins and sockets.*

1. If the damaged connector is in the centre of a double row housing beneath the latching clip, the latching prong will not be accessible to release the connector from the housing. Therefore it will be necessary to disassemble the housing as shown in Figure 1.

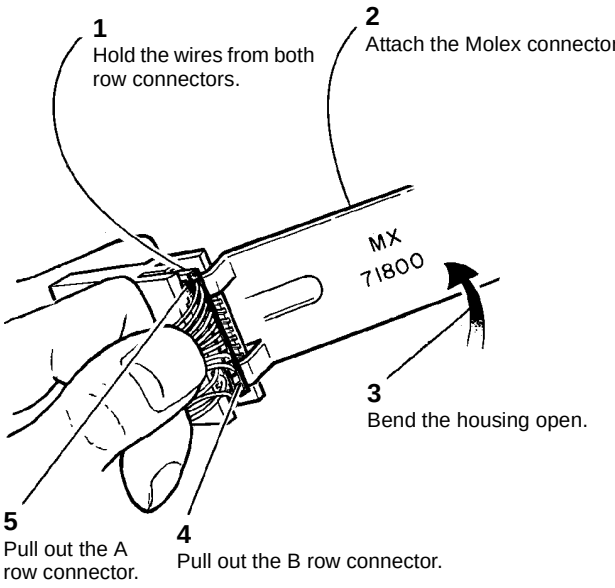


Figure 1 Disassembling the connector.

2. Figure 2. Remove the terminal from the connector housing using the Molex extractor tool.

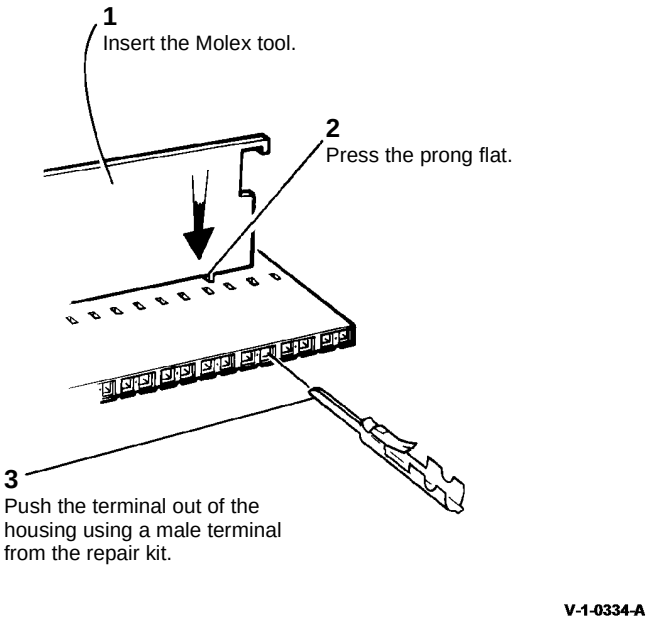


Figure 2 Removing the terminal.

3. Cut off the damaged terminal, then strip 3mm of insulation from the end of the wire.

Replacement

1. Select the correct replacement terminal, and identify the appropriate crimp positions for the terminal.
2. Figure 3. Insert a male or female terminal into the appropriate position of the crimp tool, then close the tool just enough to hold the terminal.

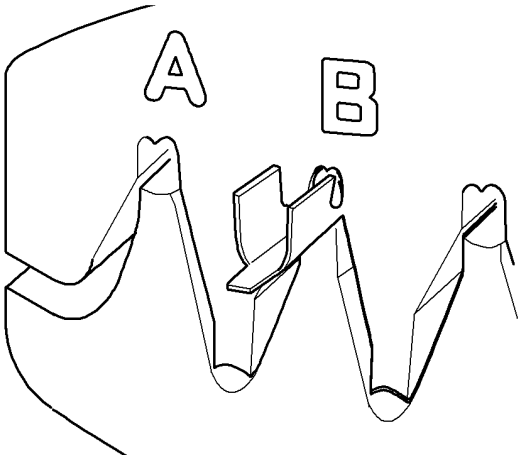


Figure 3 Crimping the terminal.

3. Insert the wire fully into the terminal so that the stripped portion of the wire is within the inner grip of the terminal. Close the crimp tool fully to make the crimp.
4. Figure 4. Insert the crimped terminal into the appropriate position of the crimp tool and close the crimp tool, to fasten the insulation of the wire in the outer grip of the terminal.

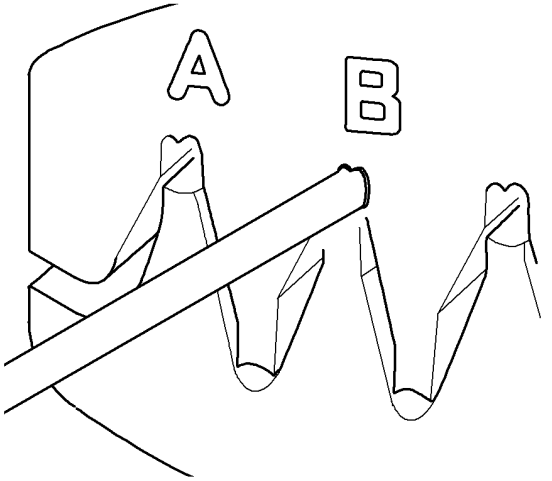


Figure 4 Crimping the insulation grip.

5. Figure 5. Check that the crimp is correctly made.

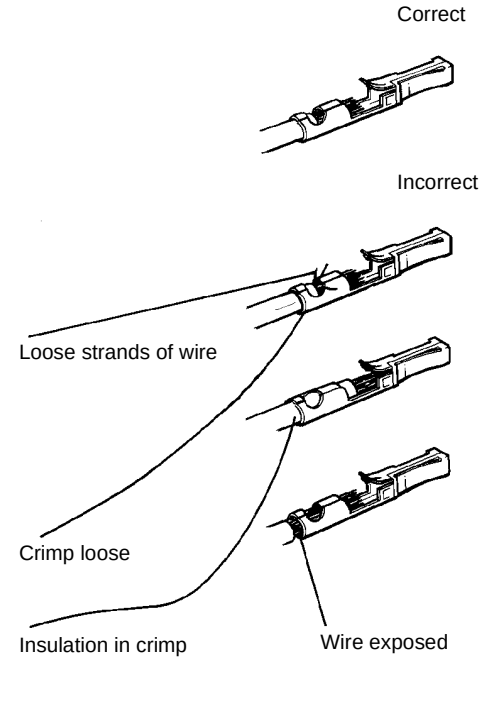


Figure 5 Inspecting the finished crimp.

6. Insert the replacement terminal into the connector housing.
7. If the repair was carried out on a double row connector that was disassembled, push both connectors into the housing taking care that the “A” connector is fitted on the fastener side.

REP 1.4 Male Hirose DF1B Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1. Remove the damaged terminal from the housing.

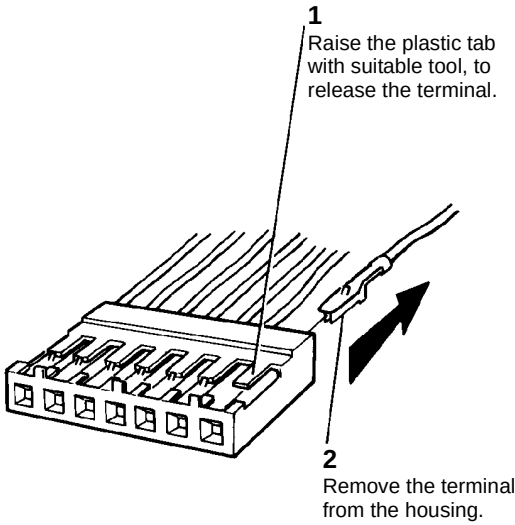


Figure 1 Remove the terminal

2. Cut off the damaged terminal, then strip 3mm of insulation from the end of the wire.

Replacement

CAUTION

There are different terminals for large gauge and small gauge wire. Ensure that the correct replacement terminal is used.

1. Select the correct replacement terminal and identify the appropriate crimp positions for the terminal.

   NOTE: *These connectors can be repaired using either crimp terminals or pre-crimped terminals with flying lead and butt connector, as required.*

2. Figure 2. Insert the terminal into the appropriate position of the crimp tool and close the tool just enough to hold the terminal.

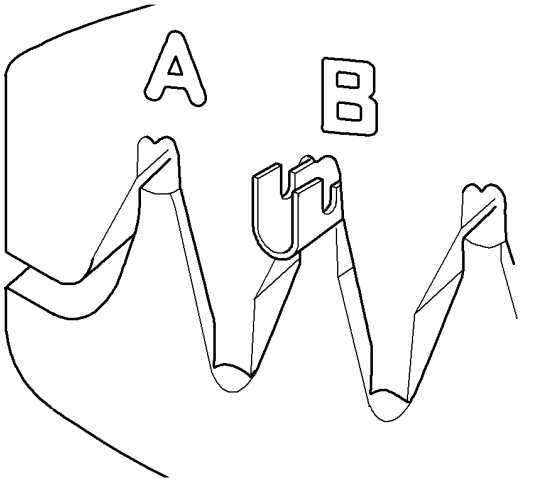
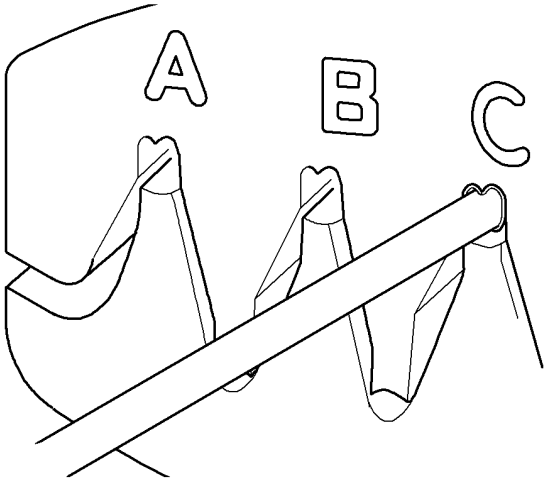


Figure 2 Crimping the terminal.

3. Insert the wire fully into the terminal so that the stripped portion of the wire is within the longer grip of the terminal and the insulation of the wire is within the cable grip of the terminal. Close the crimp tool fully to make the crimp; check that the wire is firmly crimped in the terminal.

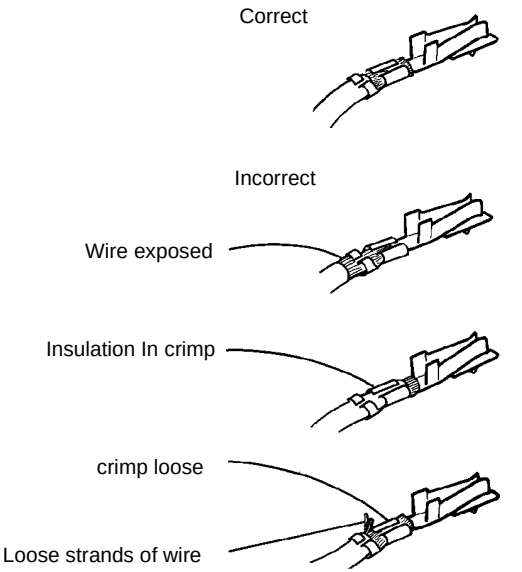
4. Figure 3. Insert the crimped terminal into the appropriate position of the crimp tool, then close the crimp tool to firmly fasten the insulation of the wire in the cable grip of the terminal.



V-1-0340-A

Figure 3 Crimping the insulation grip.

5. Figure 4. Check that the crimp is correctly made.



V-1-0341-A

Figure 4 Inspecting the finished crimp.

6. Insert the replacement terminal into the connector housing.

REP 1.5 AMP EI Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The male housings contain socket terminals, and the female housings contain pin terminals.*

1. Use the extractor tool, to release the terminal from the housing. Refer to Figure 1 to identify the male housing and terminal type. Refer to Figure 2 to identify the female housing and the terminal type.

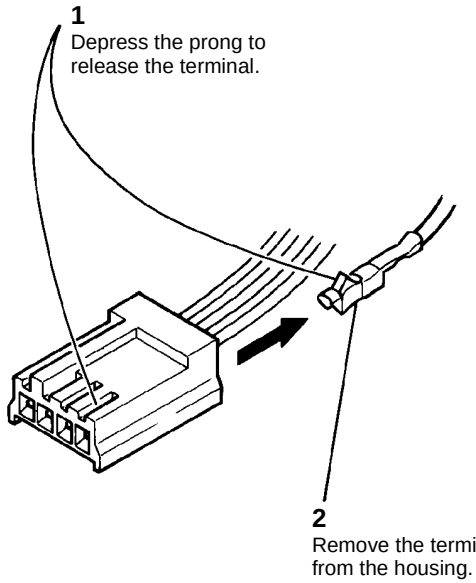


Figure 1 Terminal removal; male housing.

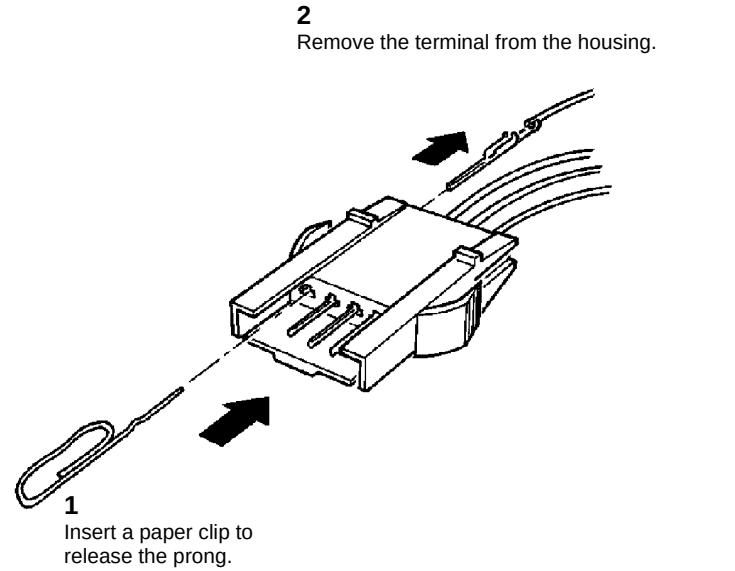
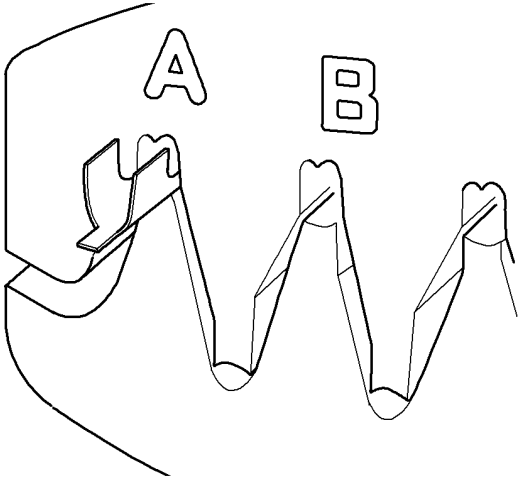


Figure 2 Terminal removal; female housing.

2. Cut off the damaged terminal, then strip 3mm of insulation from the end of the wire.

Replacement

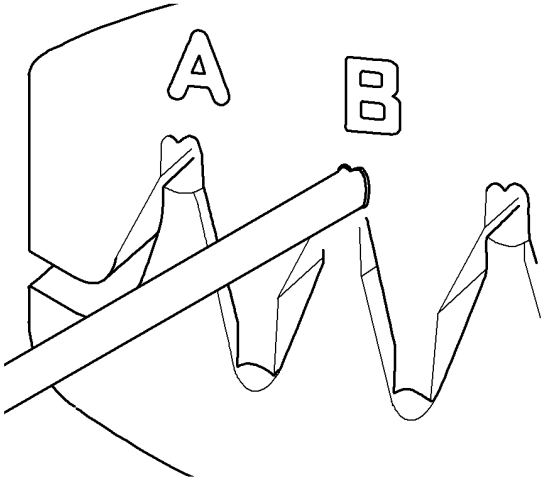
1. Select the correct replacement terminal and identify the appropriate crimp positions for the terminal.
2. Figure 3. Insert the terminal into the appropriate position of the crimp tool and close the tool enough to hold the terminal.



V-1-0344-A

Figure 3 Crimping the terminal.

3. Insert the wire completely into the terminal, so that the stripped portion of the wire is in the longer grip of the terminal. The insulation of the wire is within the cable grip of the terminal. Close the crimp tool completely to make the crimp. Check that the wire is crimped firmly in the terminal.
4. Figure 4. Insert the crimped terminal into the appropriate position of the crimp tool and close the crimp tool to firmly fasten the insulation of the wire in the cable grip of the terminal.



V-1-0345-A

Figure 4 Crimping the insulated grip.

5. Figure 5. Check that the crimp is correctly made.

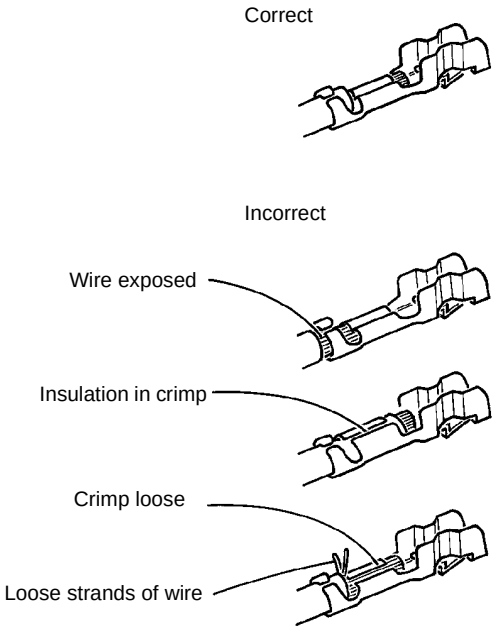


Figure 5 Inspect the finished crimp

6. Insert the replacement terminal into the connector housing.

REP 1.6 Hirose DF11 Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The male housing contains female terminals that cannot be crimped in the field; if a terminal is damaged, install a new terminal with flying lead.*

1. Figure 1. Remove the damaged terminal from the connector housing.

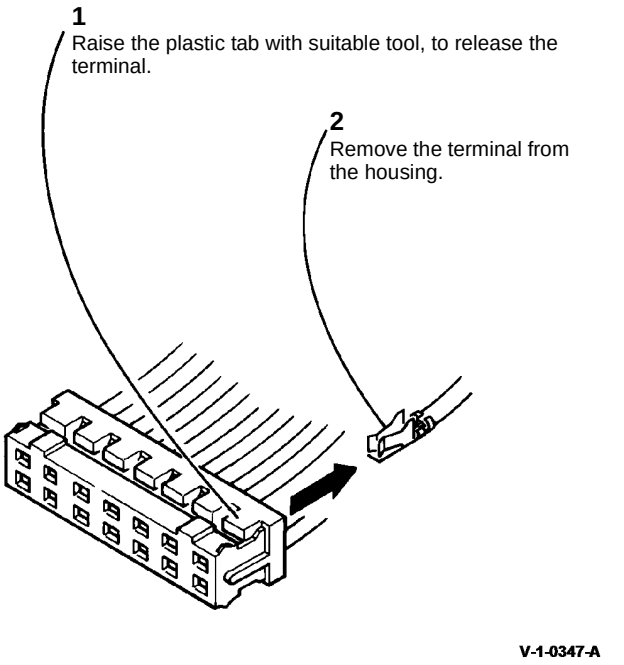


Figure 1 Terminal removed

2. Cut the damaged terminal off the wire.

Replacement

1. Insert the replacement terminal with flying lead into the connector housing.
2. Use a butt connector to connect the flying lead to the original wire.

REP 1.7 AMP CT Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Amp CT connectors use in-line adaptors to connect housings together. Ensure that the correct adaptor is used for each in-line connection. Do not attempt to disassemble or repair the in-line adaptors.

NOTE: *There are two types of CT connector: insulation displacement connector (IDC) or crimp terminal. Repairing crimp terminal CT connectors is performed by installing individual replacement terminals with flying leads, connected to the existing wiring with connector splicing blocks (removal steps 2 and 3). Repairing IDC connectors is performed by installing a complete replacement housing with wires already fitted, connected to the existing wiring with connector splicing blocks (removal steps 4 and 5). The replacement procedure is only applicable to crimp terminal connectors.*

1. Identify the terminal type. Go to step 2 for a housing containing crimp terminals, or go to step 4 for a housing containing insulation displacement (IDC) terminals.
2. Figure 1. Remove the damaged crimp terminal from the connector housing.

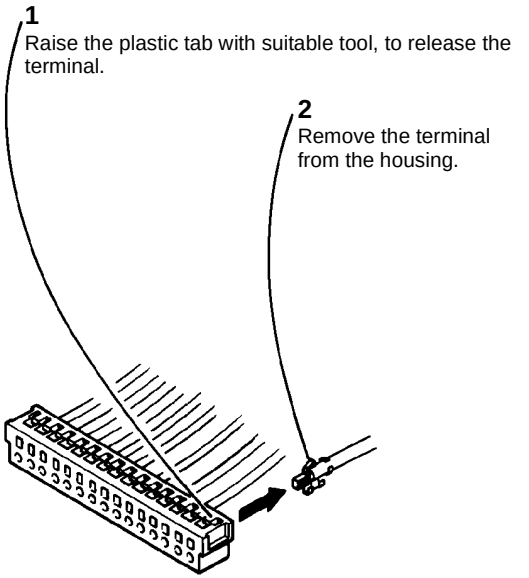


Figure 1 Terminal removal.

3. Cut the damaged crimp terminal off of the wire.
4. IDC housings are repaired by installing a complete replacement housing with wires already fitted, These are connected with connector splicing blocks to the existing wiring. Select the correct replacement connector.
5. Cut one wire from the faulty connector and then reconnect the wire to the appropriate flying lead on the replacement connector. Repeat this process for each wire in turn, until the faulty connector has been fully disconnected and the replacement connector installed in its place.

Replacement

1. Insert the replacement crimp terminal with flying lead into the connector housing.
2. Use a connector splicing block to connect the flying lead to the original wire.

REP 1.8 Front Door Interlock Switch

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Pull the fuser module out a short way.
2. Figure 1. Release the front door interlock switch.

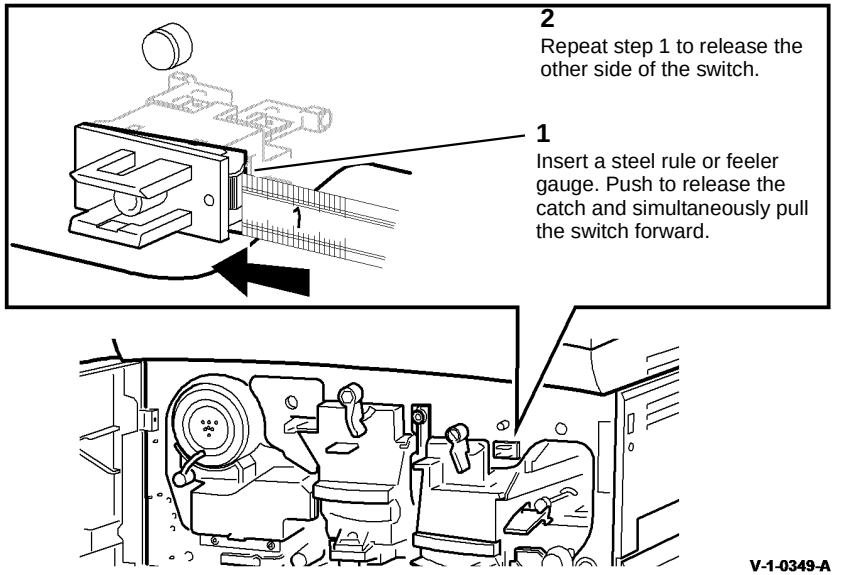


Figure 1 Switch release

3. Figure 2. Remove the front door interlock switch.

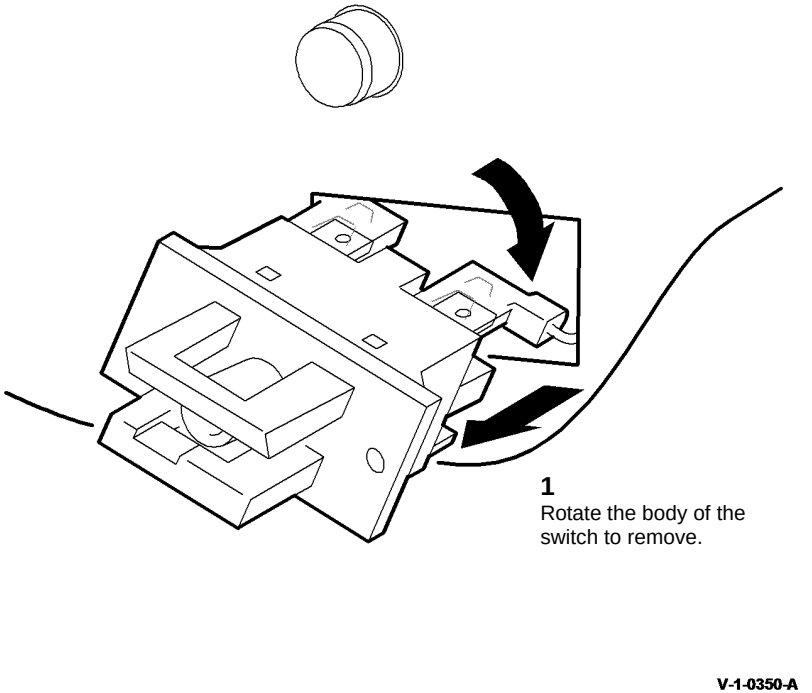


Figure 2 Removing the switch

Replacement

Reverse the removal procedure to replace the door interlock switch.

REP 1.9 LVPS and Base Module

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

1. Remove the power and control assembly, REP 1.1.
2. Remove the HVPS, (2 screws) and the IOT PWB, (8 screws), from the LVPS and base module.
3. Remove the insulating sheet from behind the HVPS.
4. Figure 2. Remove the harness.

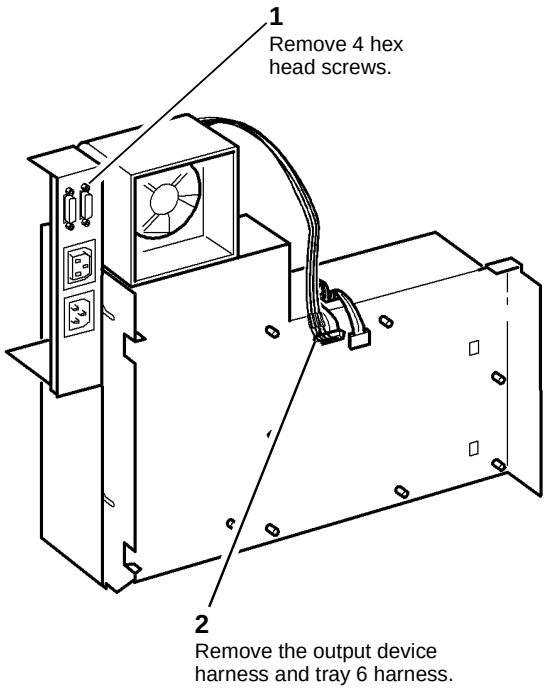


Figure 2 Harness removal

Replacement

CAUTION

Do not over tighten the four hex head screws. The screws break very easily.

1. The Replacement procedure is the reverse of the Removal procedure.

REP 1.10 HVPS

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

1. Remove the rear cover, PL 28.10 Item 1.
2. Figure 2. Remove the HVPS.

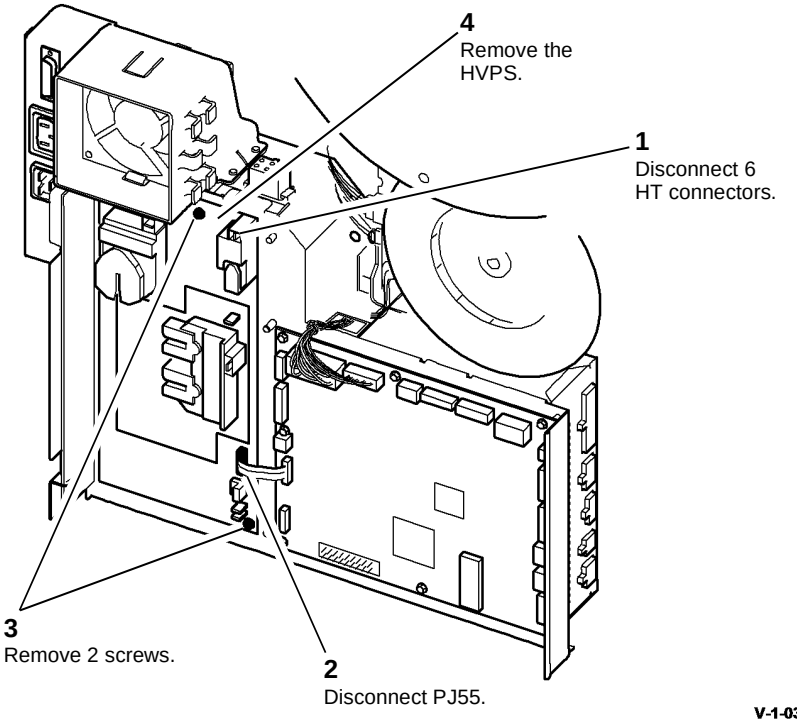


Figure 2 Remove the HVPS

Replacement

CAUTION

Ensure the HT leads are correctly connected. Ensure that the female spade connector is encasing the male spade connector. The connection must be a tight fit, if it is loose the male spade may be incorrectly positioned between the female spade and the outer insulation of the connector.

1. Reverse the removal procedure to replace the HVPS.

2. Figure 3. Ensure that the white plastic insulator underneath the HVPS is seated correctly under the locating tabs and over the two metal studs.

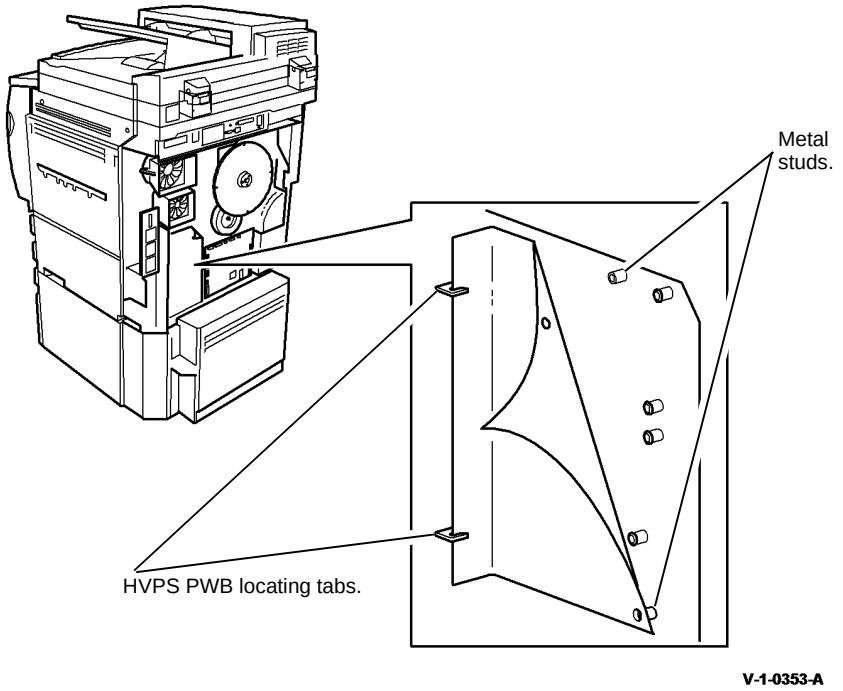


Figure 3 HVPS insulator location

3. Figure 4. Use a digital multimeter set to a resistance range. Verify that there is continuity between the ground pin on PJ21 and the frame ground connection.

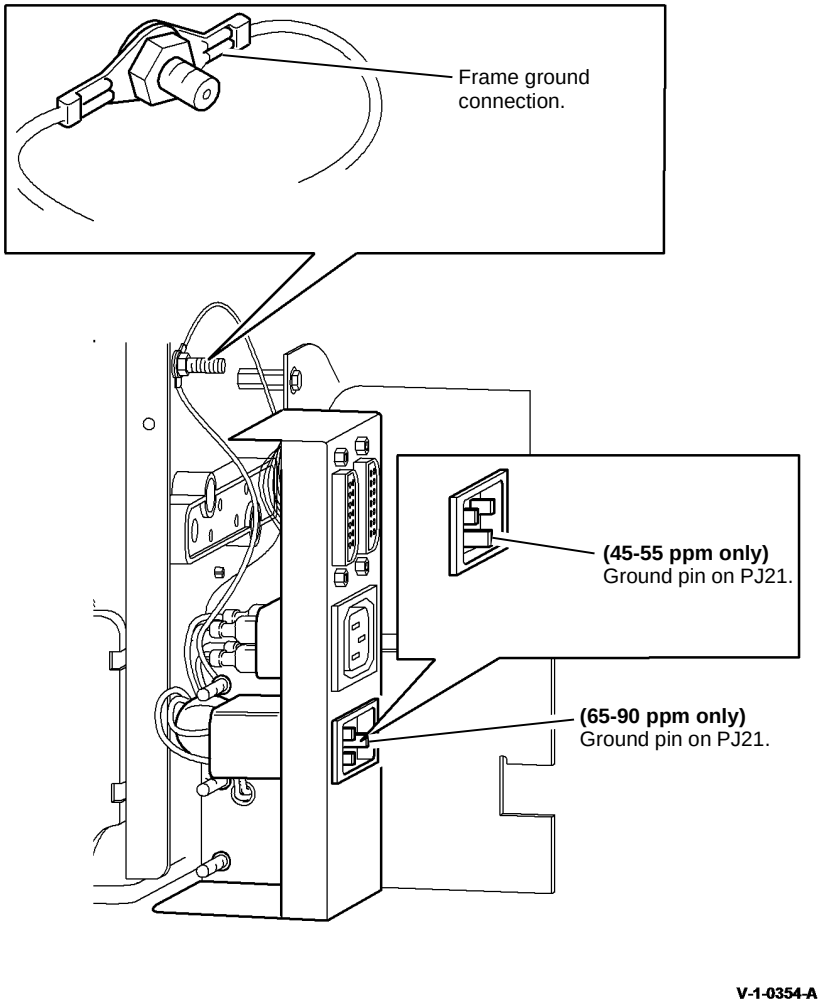


Figure 4 Ground connection check

REP 1.11 Molex Mini-Fit Junior Connectors

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

1. Figure 2. Remove the terminal from the housing, using the Molex, Mini-Fit extractor tool.

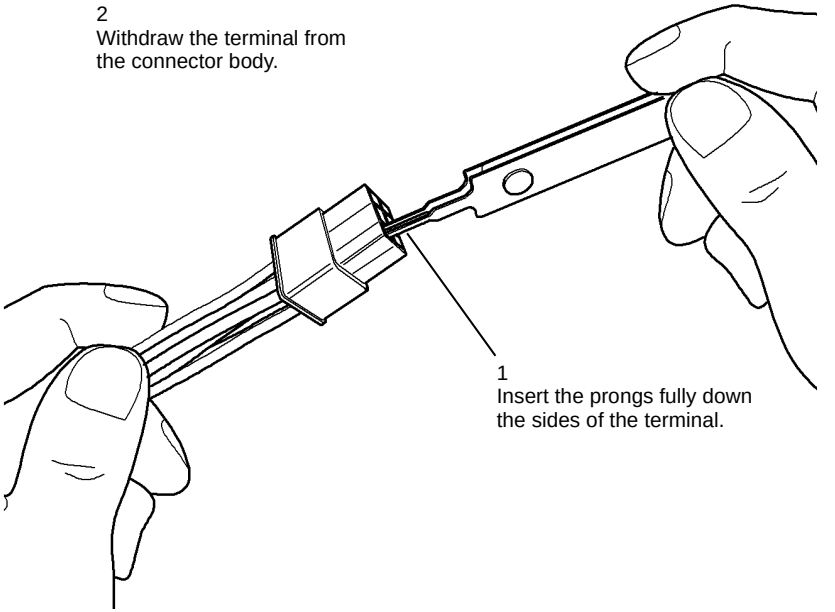


Figure 2 Removing the terminal

2. Cut off the damaged terminal, then strip 4mm of insulation from the end of the wire.

Replacement

1. Select the correct terminal type.

2. Figure 3. Insert the terminal into the appropriate position of the crimp tool and close the tool just enough to hold the terminal.

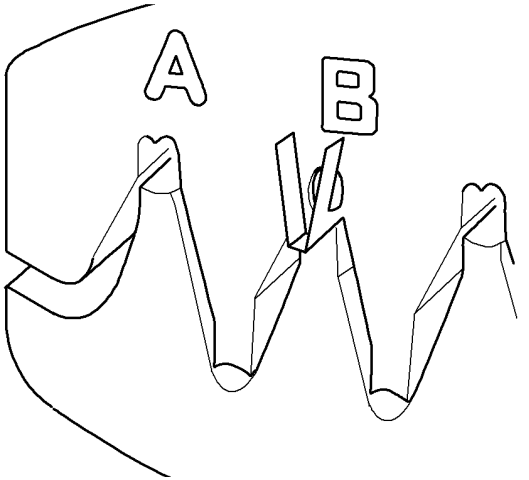


Figure 3 Crimping the terminal

3. Insert the wire fully into the terminal so that the stripped portion is within the inner grip of the terminal. Close the crimp tool fully to make the crimp.
4. Figure 4. Insert the crimped terminal into the appropriate position of the crimp tool and close the crimp tool to fasten the wire insulation in the outer grip of the terminal.

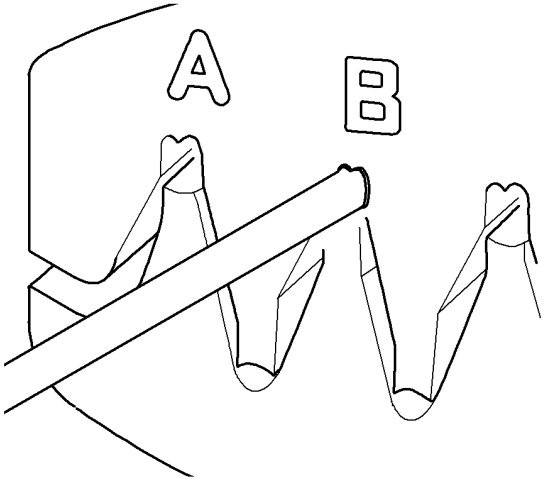


Figure 4 Crimping the insulation grip

5. Figure 5. Check that the crimp is correctly made.

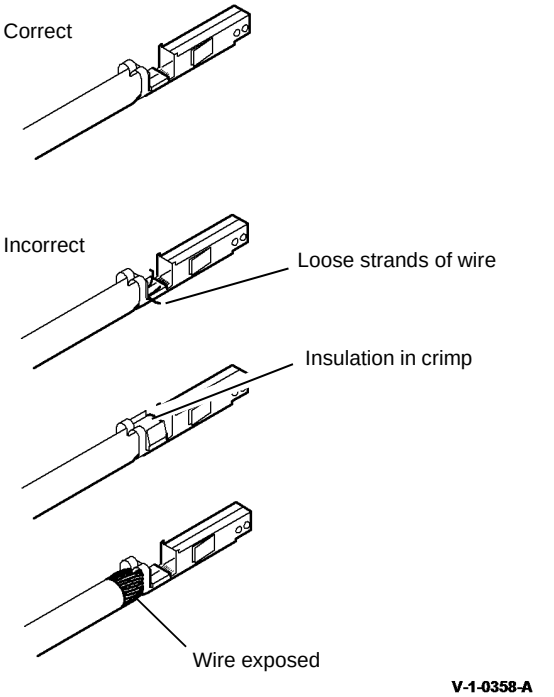


Figure 5 Inspecting the finished crimp

6. Insert the replacement terminal into the connector housing.

REP 2.1 User Interface Assembly

Parts List on PL 2.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the user interface assembly.

1. Open the front door assembly, PL 28.10 Item 10.
2. Remove the user interface assembly, Figure 2.

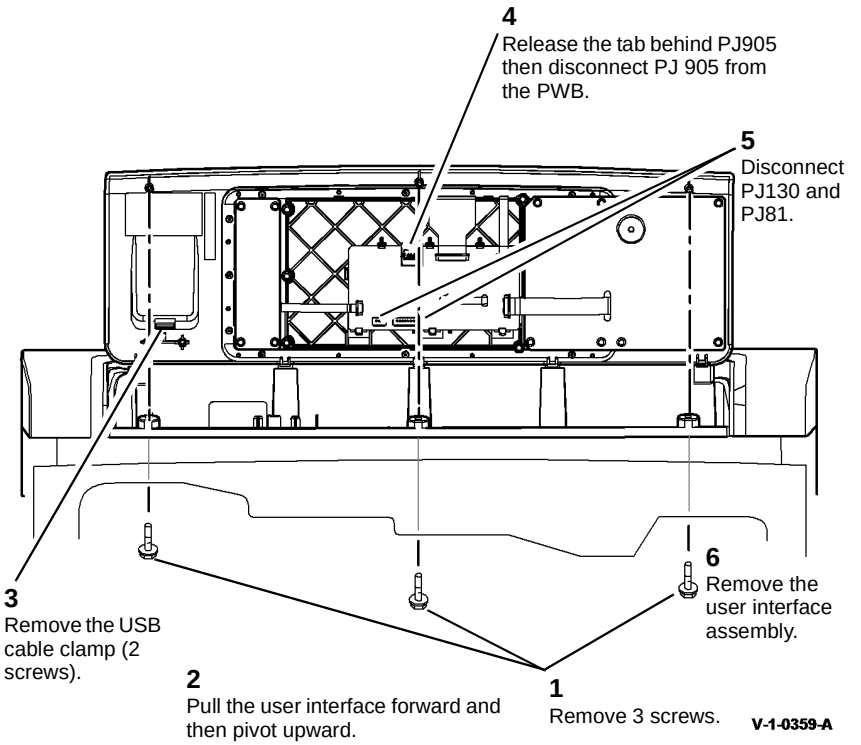


Figure 2 UI assembly removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before the screws are installed.
2. If prompted, reload the software set, GP 4. The software will automatically upgrade or downgrade when the machine is switched on, GP 14.

REP 2.2 UI Touch Screen

Parts List on PL 2.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the user interface touch screen PWB.

1. Remove the UI control PWB, REP 2.3.
2. Remove the UI screen clamp, PL 2.10 Item 2.
3. Remove the UI touch screen, PL 2.10 Item 4.

Replacement

The replacement is the reverse of the removal procedure. Refer to GP 6 before the screws are installed.

REP 2.3 UI Control PWB

Parts List on PL 2.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the user interface control PWB.

1. Remove the user interface assembly, REP 2.1
2. Put the user interface assembly on a flat surface.

CAUTION

The cable clamps are very fragile and only need to be moved slightly to release the ribbon cables.

3. Disconnect PJ907, PJ908, PJ909 and PJ943 by pulling the clamp away from each connector. Disconnect PJ945 by lifting the clamp. Refer to Figure 2.

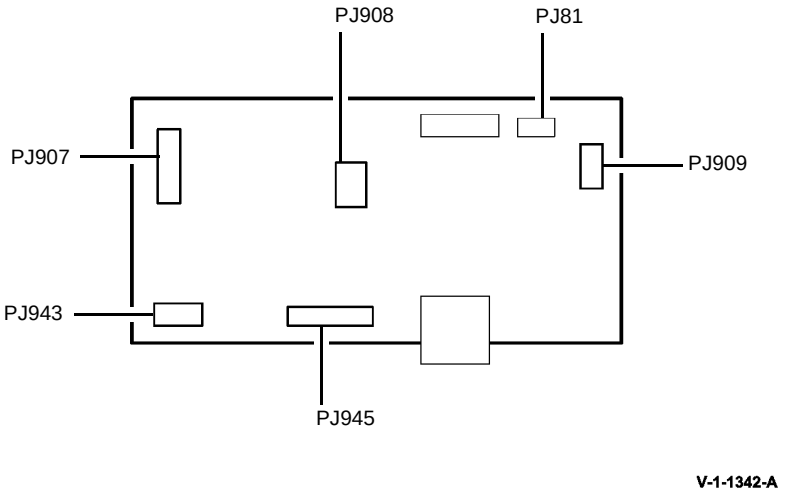


Figure 2 UI Control PWB

4. Remove the UI control PWB, Figure 3.

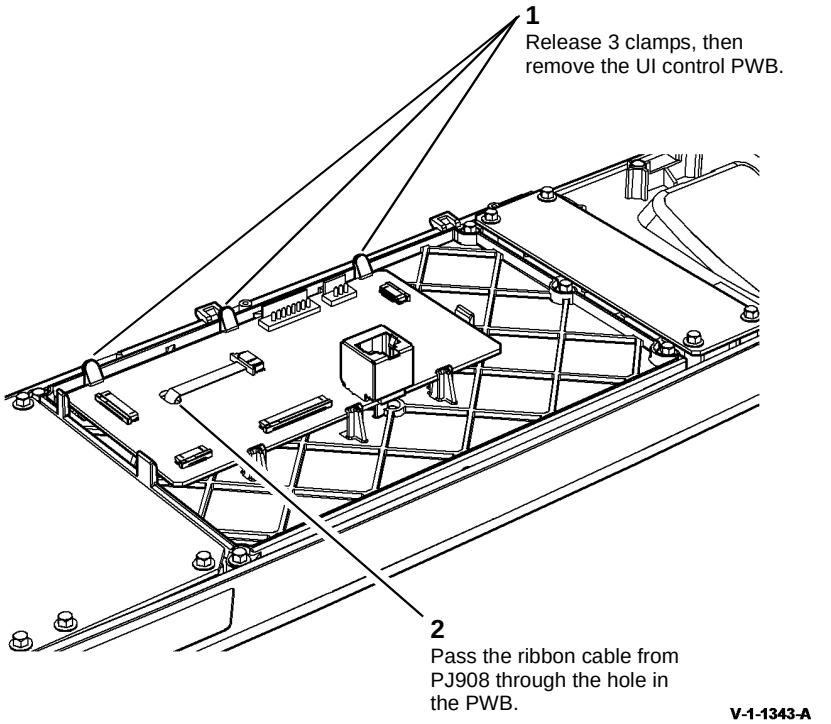


Figure 3 UI control PWB removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before the screws are installed.
2. Make sure the ribbon cable to PJ908 is routed through the hole in the PWB.
3. The ribbon cable to PJ907 is positioned over the cable clamp, all other ribbon cables are positioned under their cable clamps.

REP 3.1 IOT PWB

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the IOT PWB.

CAUTION

Take care if a new IOT PWB, scanner PWB, hard disk or SD card is to be installed. Ensure that any combination of these components are replace one at a time, and that the machine is switched off and then on again (GP 14) between each installation of a PWB or the hard disk. Failure to do so will cause corruption of the machine's NVM configuration data, GP 27.

1. Remove the rear cover, PL 28.10 Item 1.
2. Enter dC131. Record the developer age value 791-087. Record the TC sensor control voltage 793-010.
3. Disconnect the PJs from the IOT PWB.
4. Remove the IOT PWB (8 screws).

Replacement

Perform the following:

NOTE: *If the original IOT PWB had been re-installed, do not perform steps 2, 3 and 4.*

1. Install the IOT PWB. Ensure the IOT PWB ground contact screw is tight on the IOT PWB, Figure 2. Ensure the contact faces are clean. Ensure the screw is bright plated and not black.
2. If necessary, reload the software set, GP 4. The machine will automatically upgrade or downgrade the software when the machine is switched on.

NOTE: *After the software reload has been completed, the machine resets and gives a message 'Restoring Configuration Settings'. Do not switch off the machine or intervene during this NVM transformation process.*

3. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.
4. If necessary, perform a NVM restore, dC361.
5. Enter dC131. Write the developer age value 791-087. Write the TC sensor control voltage 793-010.

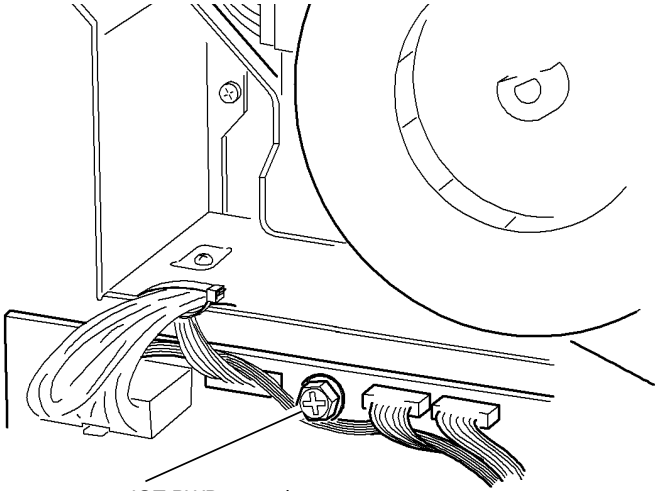


Figure 2 IOT PWB ground contact screw

REP 3.2 Hard Disk Drive

Parts List on PL 3.22 Item 2

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the disk drive.

CAUTION

Take care if a new IOT PWB, scanner PWB, hard disk or SD card is to be installed. Ensure that any combination of these components are replace one at a time, and that the machine is switched off and then on again (GP 14) between each installation of a PWB or the hard disk. Failure to do so will cause corruption of the machine's NVM configuration data, GP 27.

1. Check if either McAfee Integrity Control or XPS are enabled. If either are enabled, they will need to be re-enabled after installation of a new hard disk drive. Refer to GP 17 How to Re-Enter Optional Feature Installation Keys.

   NOTE: *McAfee Integrity Control and XPS are the optional features available on the WorkCentre 5890F.*

2. Pull out the single board controller PWB module.
3. Disconnect the HDD Cable, PL 3.22 Item 4 from the rear of the hard disk.
4. Remove the hard disk drive, PL 3.22 Item 2.

Replacement

1. Replacement is the reverse of the removal procedure.
2. Perform an Altboot, GP 4.
3. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.
4. If necessary, re-enable either McAfee Integrity Control or XPS. Refer to GP 17 How to Re-Enter Optional Feature Installation Keys.

REP 3.3 Single Board Controller PWB

Parts List on PL 3.22

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the SBC PWB.

1. Pull out the single board controller PWB module.
2. Remove the following components from the from single board controller PWB:
   - If installed, the foreign interface PWB, PL 3.22 Item 26.
   - Memory module, PL 3.22 Item 11.
   - SD card, PL 3.22 Item 16.
   - SIM card, PL 3.22 Item 17.

CAUTION

Disconnect PJ212 by carefully lifting the clamp. The cable clamp is very fragile and only needs to be moved slightly to release the ribbon cables.

3. Disconnect the PJs from the Single Board Controller PWB.
4. Remove the single board controller PWB, PL 3.22 Item 3.

Replacement

CAUTION

Ensure the SPDH/Power distribution PWB harness from PJ152 at the rear of the single board controller PWB module is not routed under the single board controller PWB. It must be routed away from the PWB, to the right.

1. Replacement is the reverse of the removal procedure.
2. Perform an Altboot, GP 4.
3. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.

REP 3.4 SD Card

Parts List on PL 3.22

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during the removal and installation of the IOT PWB.

CAUTION

Take care if a new IOT PWB, scanner PWB, hard disk or SD card is to be installed. Ensure that any combination of these components are replace one at a time, and that the machine is switched off and then on again (GP 14) between each installation of a PWB or the hard disk. Failure to do so will cause corruption of the machine's NVM configuration data, GP 27.

1. Pull out the single board controller PWB module.
2. Remove the SD card, PL 3.22 Item 16 from the from single board controller PWB:

Replacement

1. Replacement is the reverse of the removal procedure.
2. Reload the software, GP 4.
3. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.

REP 5.1 Top Cover Assembly

Parts List on PL 5.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 15.
2. Remove 5 screws then the rear cover, PL 5.10 Item 1.
3. Prepare to remove the top cover assembly, Figure 1.

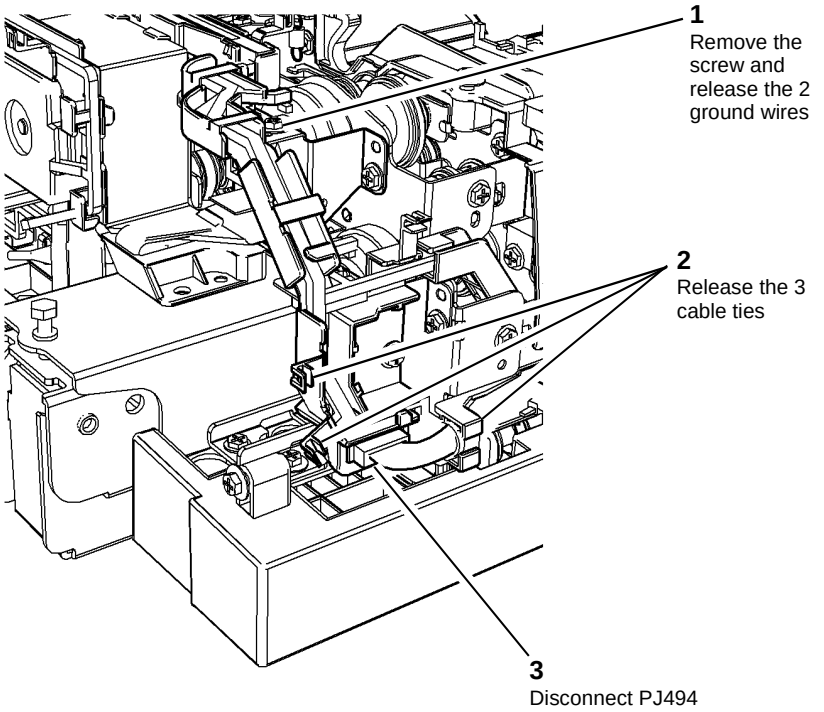


Figure 1 Preparation

4. Release the front hinge, Figure 2.

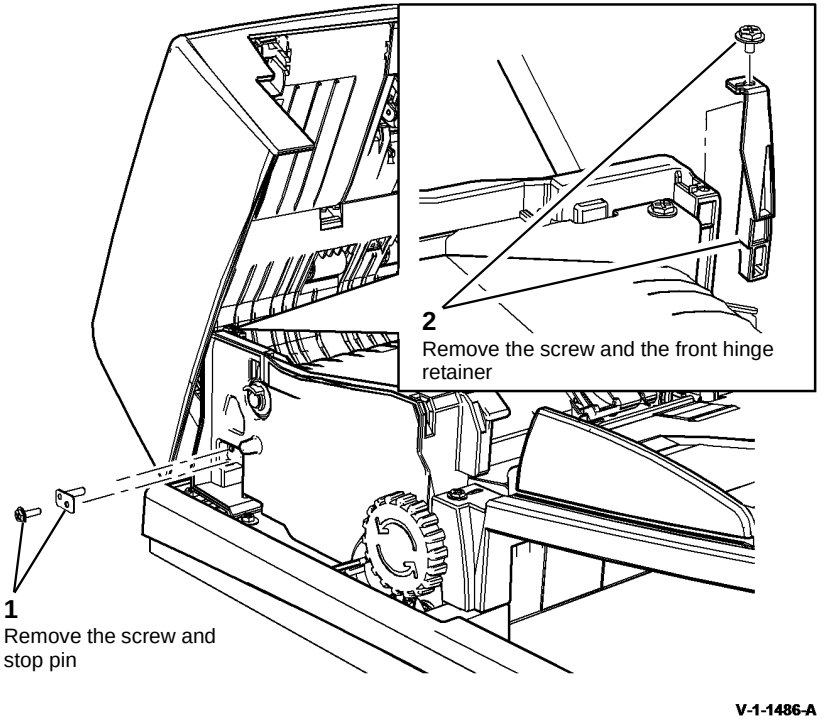


Figure 2 Front hinge release

5. Remove the top cover assembly, Figure 3.

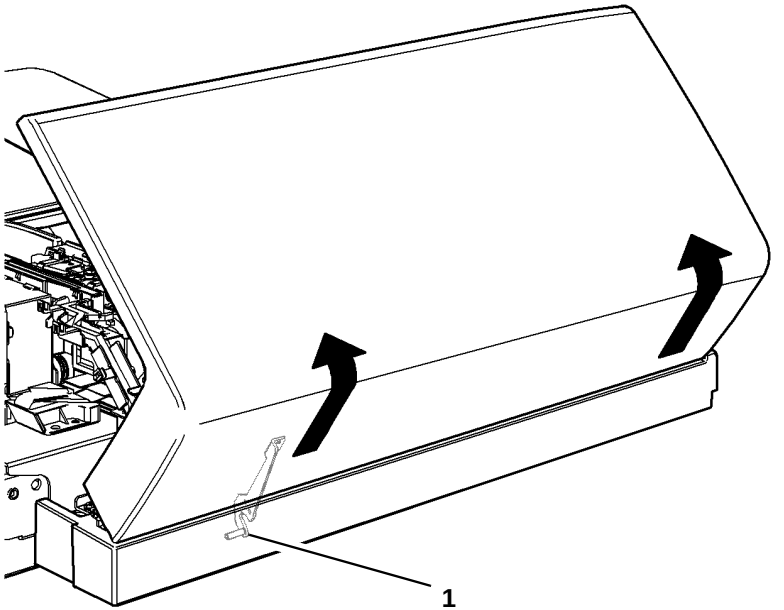


Figure 3 Top cover assembly

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 5.3 SPDH Skew Adjustment.

REP 5.2 Feed Roll, Nudger Roll and Feed Assembly

Parts List on PL 5.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 15.
2. Pull open the lower cover PL 5.20 Item 13.
3. Remove the feed and nudger rolls, Figure 1.

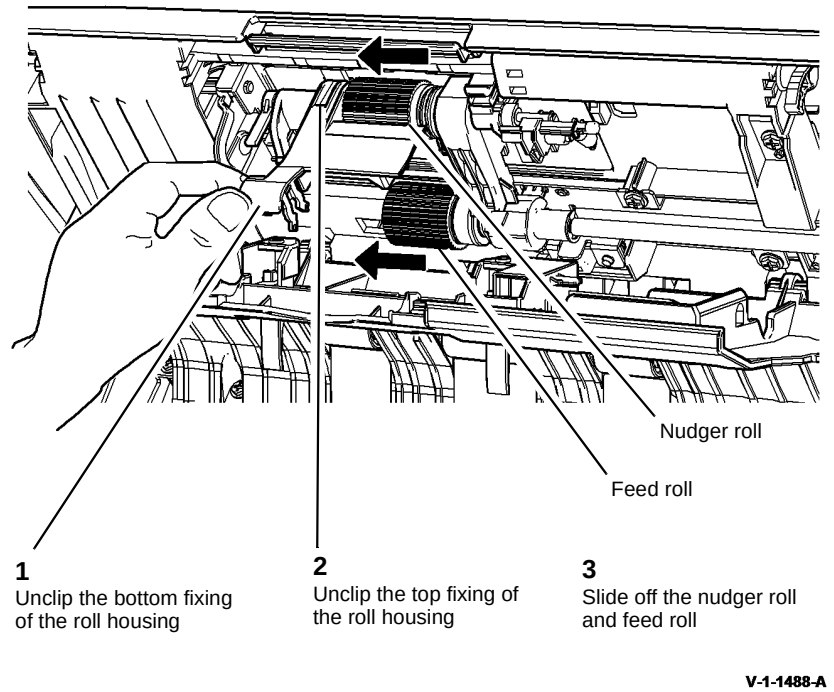


Figure 1 Feed and Nudger roll removal

4. Remove the top cover assembly, REP 5.1.

5. Remove the feed assembly, Figure 2.

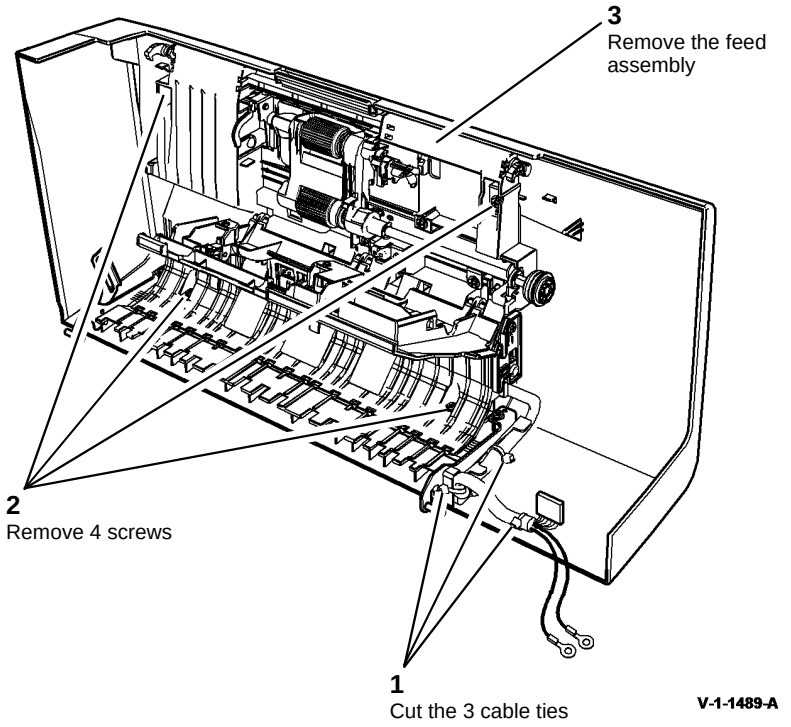


Figure 2 Feed assembly removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

The replacement is the reverse of the removal procedure.

1. If either the feed or nudger roll are defective, it is imperative that new feed roll, nudger roll and retard rolls are all installed as a complete new set, Refer to REP 5.3 Retard Roll & Separation Assembly.
2. If new feed, nudger and retard rolls are installed, reset the document feeder feed roller count. Refer to dC135 CRU/HFSI Status. Select dC131 location 606-482. Reset the copy count to zero.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.3 Retard Roll and Separation Assembly

Parts List on PL 5.25

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 15.
2. Pull open the retard roll cover, PL 5.25 Item 2.
3. Remove the retard roll, Figure 1.

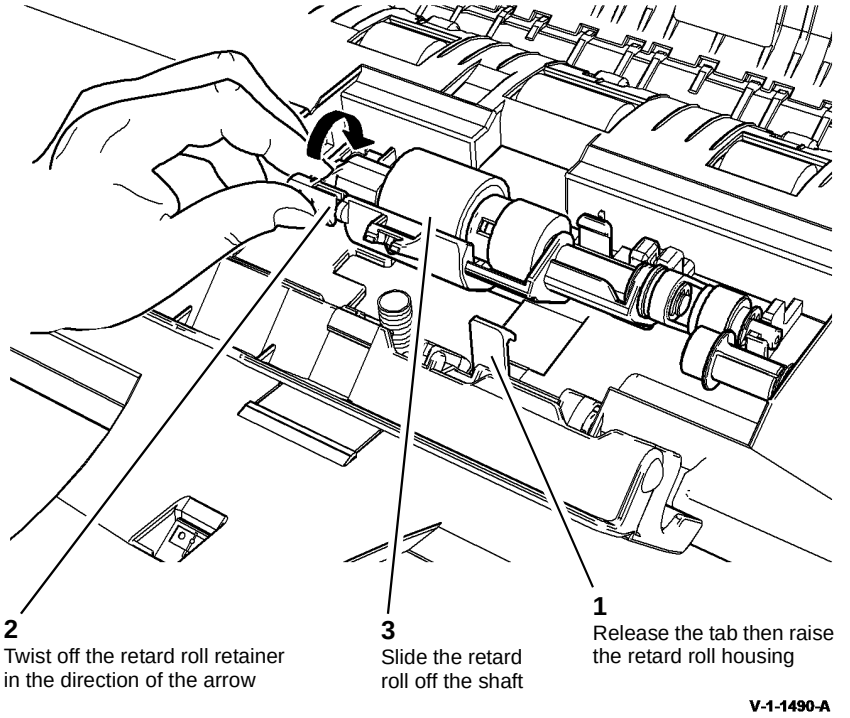


Figure 1 Retard roll removal

4. Remove the separation assembly, Figure 2.

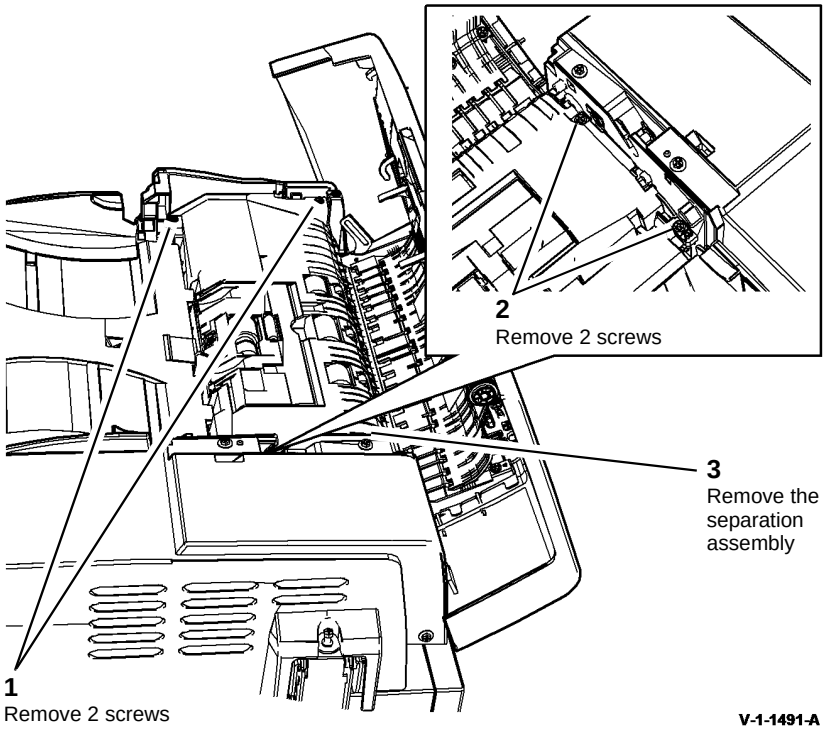


Figure 2 Separation assembly removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

The replacement is the reverse of the removal procedure.

1. If either the feed or nudger roll are defective, it is imperative that new feed roll, nudger roll and retard rolls are all installed as a complete new set.
2. If new feed, nudger and retard rolls are installed, reset the document feeder feed roller count. Refer to dC135 CRU/HFSI Status. Select dC131 location 606-482. Reset the copy count to zero.

REP 5.4 Input Tray Assembly

Parts List on PL 5.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Prepare to remove the input tray upper assembly, Figure 1.

NOTE: *Machines W/TAG D-003 will only have one ground wire.*

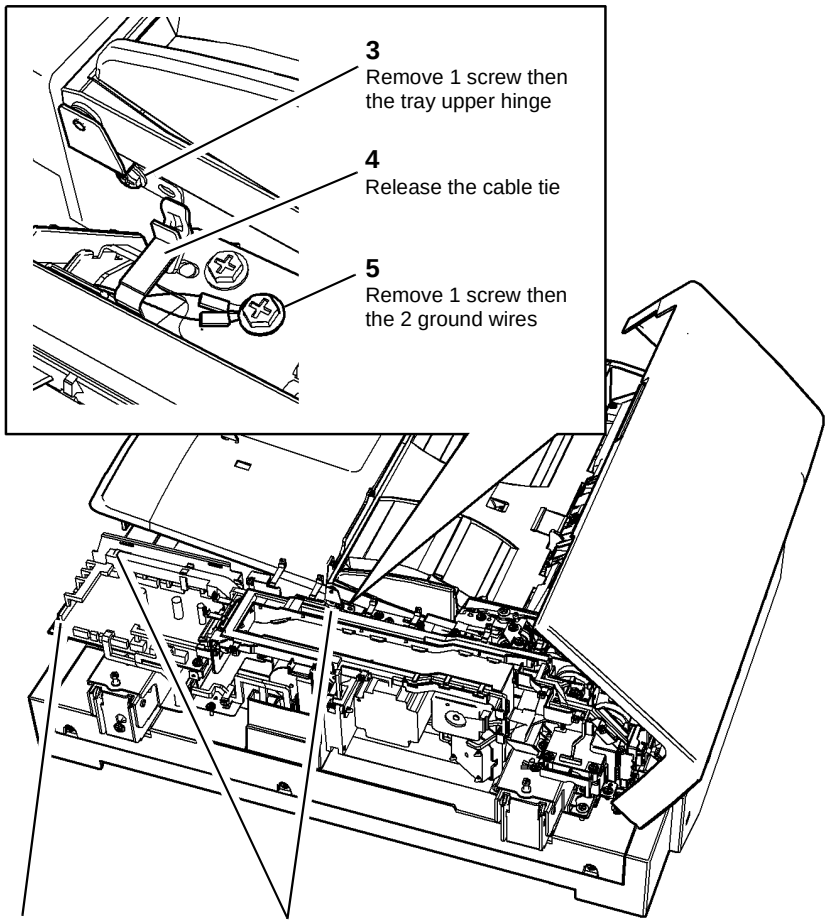


Figure 1 Preparation

3. Remove the input tray upper assembly, Figure 2.

NOTE: *Machines W/TAG D-003 will only have one ground wire.*

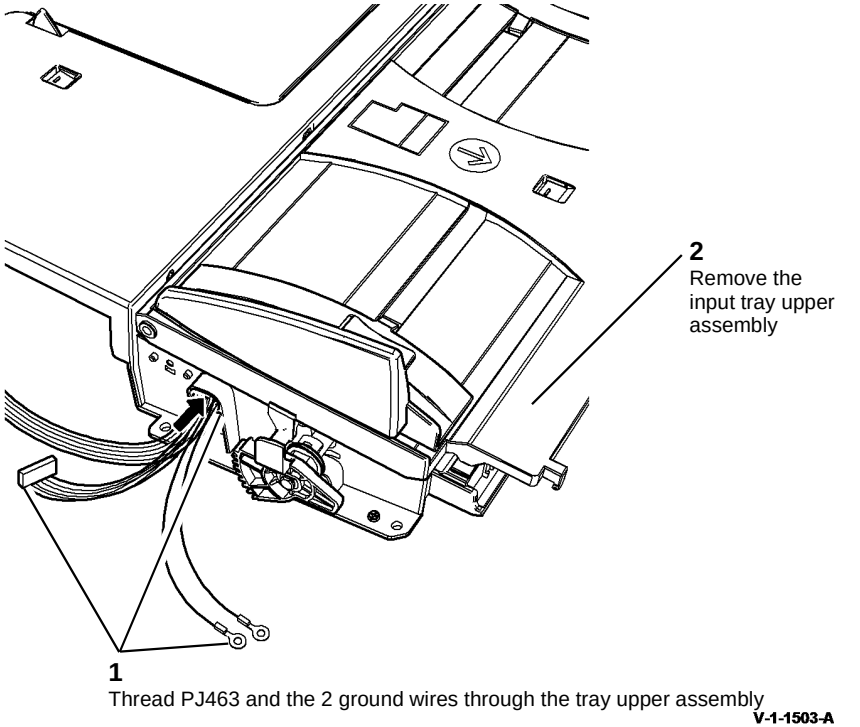


Figure 2 Upper assembly removal

4. Prepare to remove the input tray lower assembly, Figure 3.

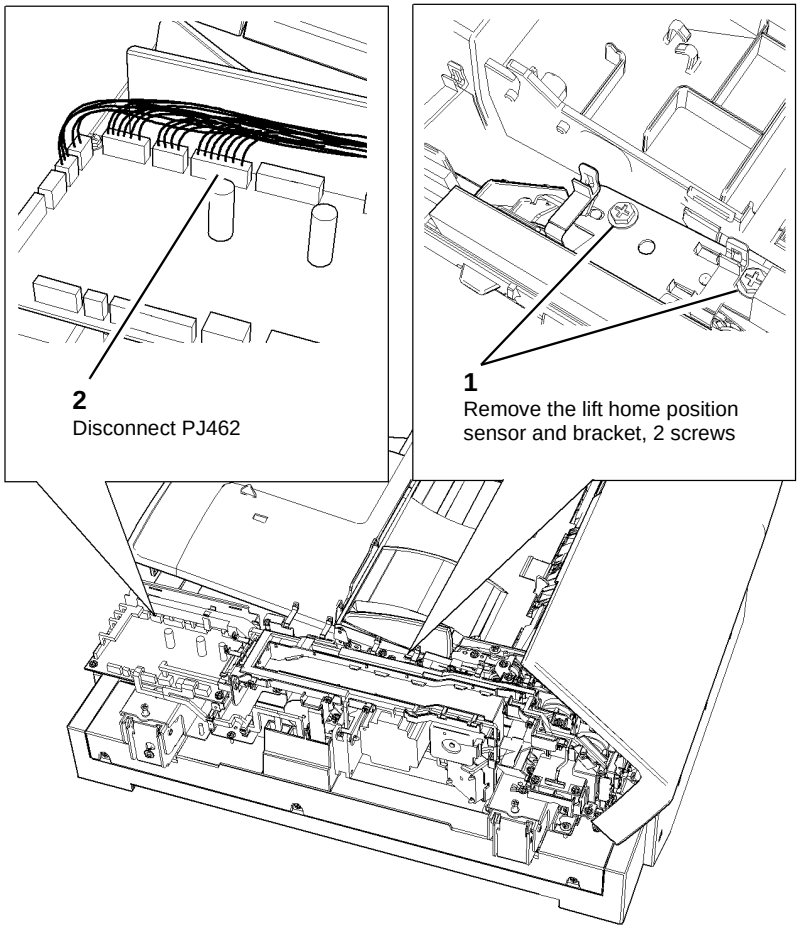


Figure 3 Preparation

5. Remove the input tray lower assembly, Figure 4.

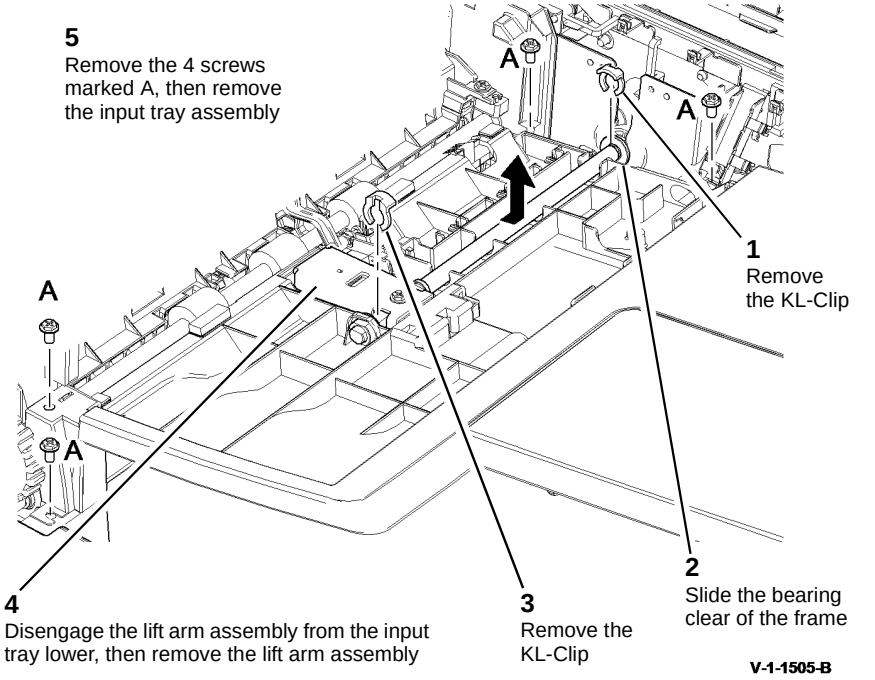


Figure 4 Input tray lower removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

1. The replacement is the reverse of the removal procedure.
2. Ensure that the ground spring is correctly positioned on the elevator shaft and under the elevator arm, Figure 5.

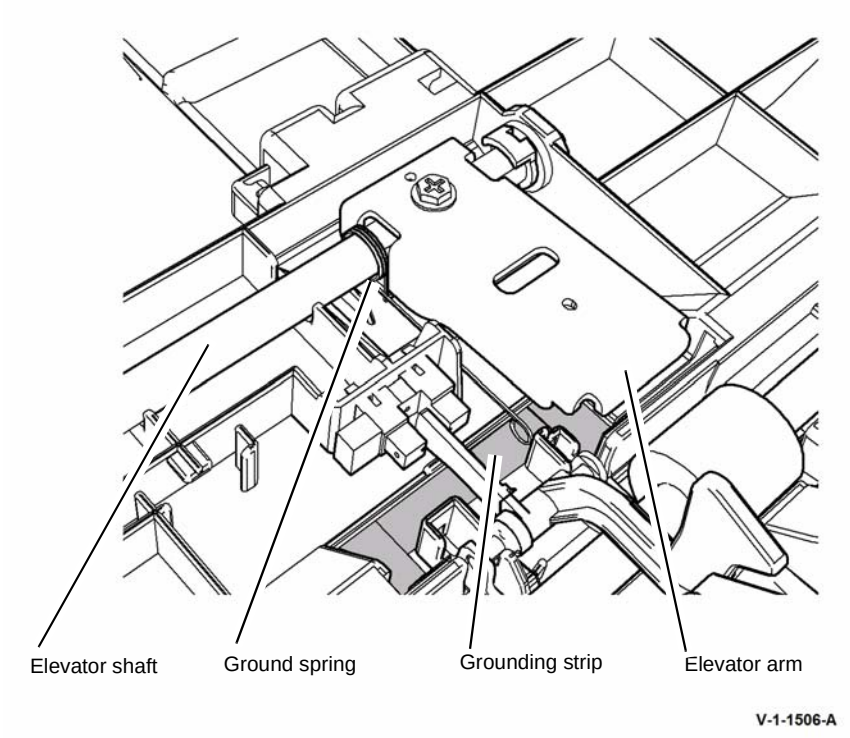


Figure 5 Ground spring position

3. Perform ADJ 5.5 SPDH Registration.

REP 5.5 Takeaway Roll Assembly

Parts List on PL 5.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

The working area is restrictive, take care not to drop any components. Extensive repair procedures may be required to retrieve fallen parts from within the SPDH.

1. Remove the separation assembly, REP 5.3.
2. Remove 5 screws then the rear cover, PL 5.10 Item 1.

3. Remove the takeaway roll assembly, Figure 1.

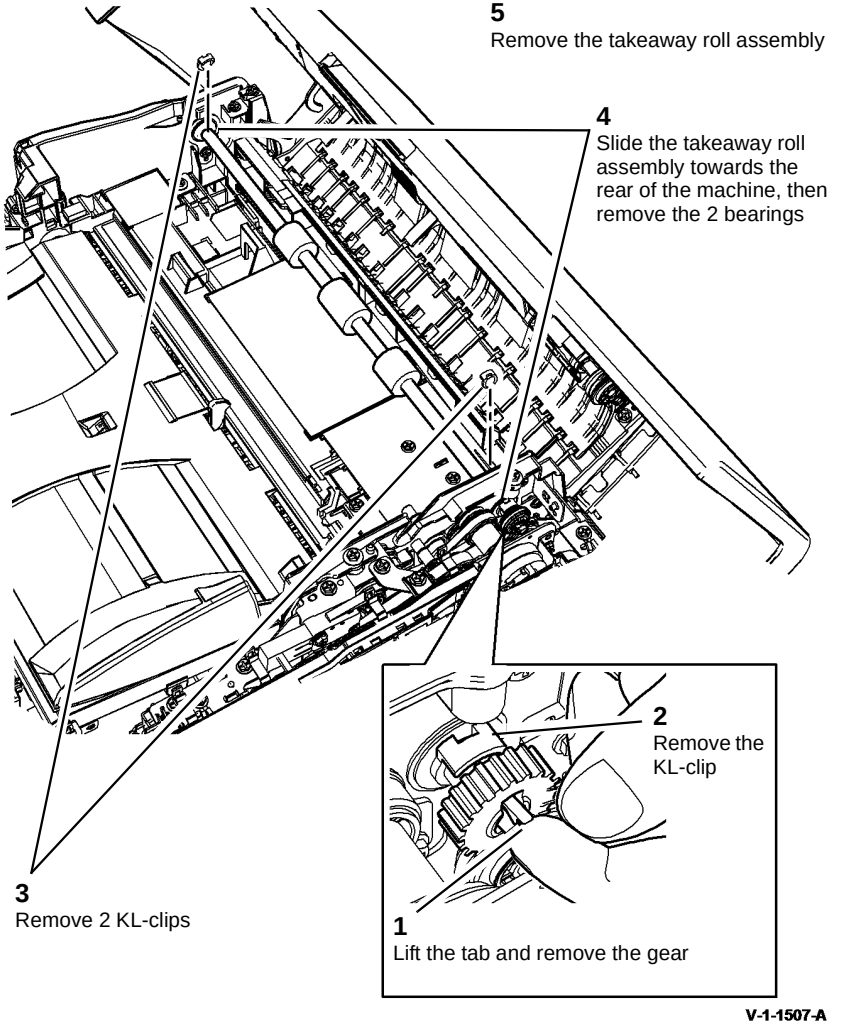


Figure 1 Takeaway roll removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.6 Lower Pre Scan Roller Assembly

Parts List on PL 5.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Removal

CAUTION

Handle the lower pre scan assembly with care. The lower pre scan assembly is loosely assembled and contains 2 springs under compression. The assembly can spring apart on removal.

1. Remove the lower pre scan roller assembly, Figure 1.

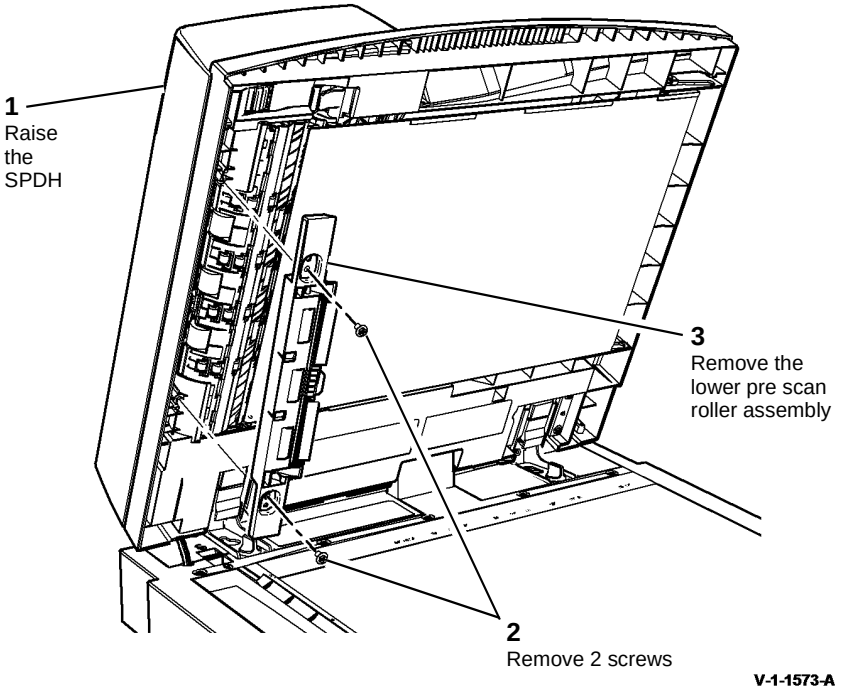


Figure 1 Lower Pre scan roller assembly

Replacement

1. The replacement is the reverse of the removal procedure.

2. In the event that the pre scan roller assembly should become disassembled, prepare to assemble the pre scan roller assembly, Figure 2.

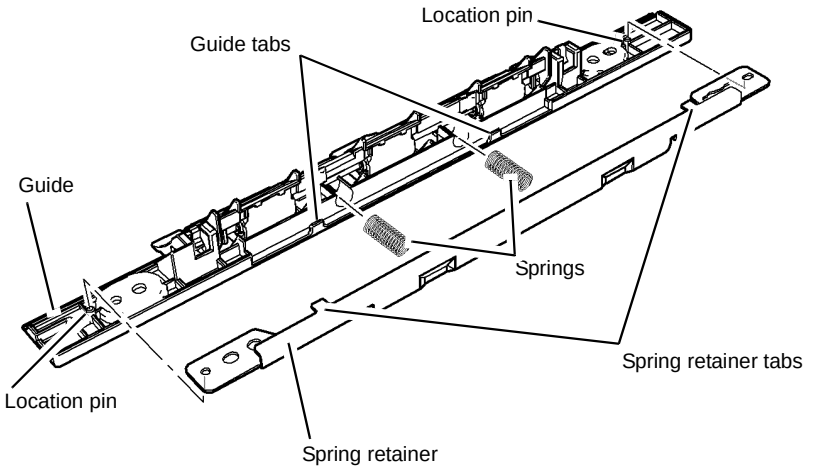


Figure 2 Component orientation

3. Assemble the pre scan roller assembly, Figure 3.

NOTE:

The fixings for the spring retainer are identical at both ends of the assembly.

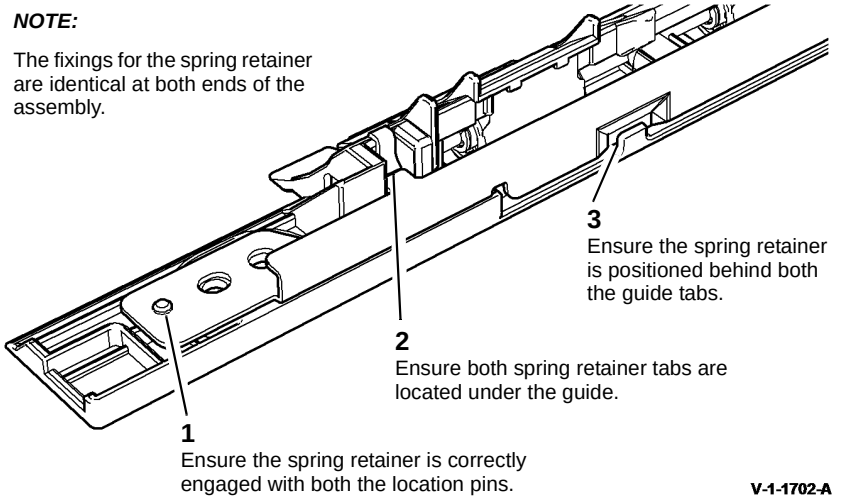


Figure 3 Assembled components

REP 5.7 Exit Roll Assembly

Parts List on PL 5.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the SPDH read assembly outer frame, by performing REP 5.25 up to step 2.
2. Remove the front components, Figure 1.

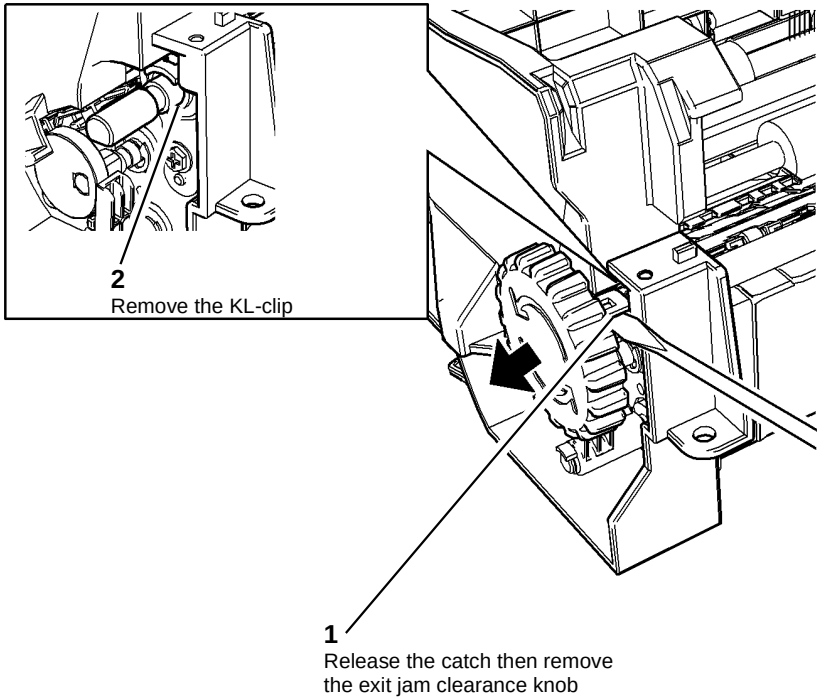


Figure 1 Front components removal

3. Prepare to remove the exit roll assembly, Figure 2.

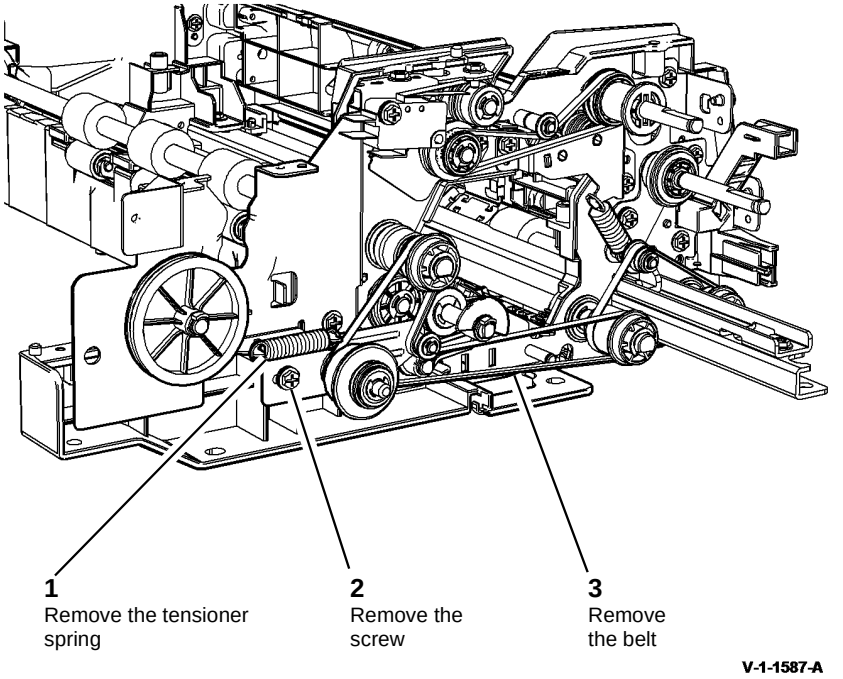


Figure 2 Preparation

4. Remove the rear components, Figure 3.

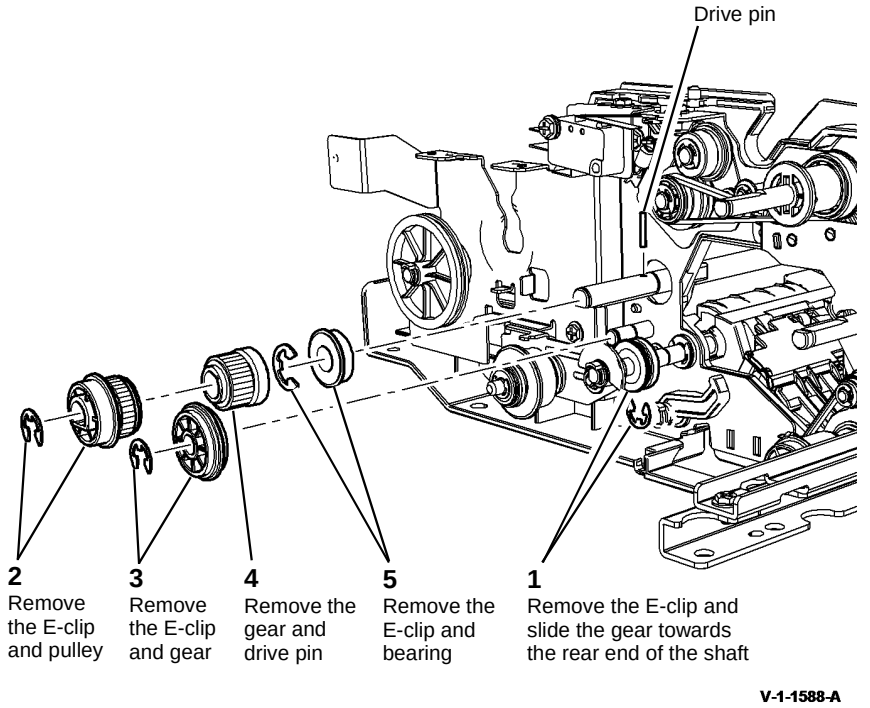


Figure 3 Rear components removal

5. Remove the exit roll assembly, Figure 4.

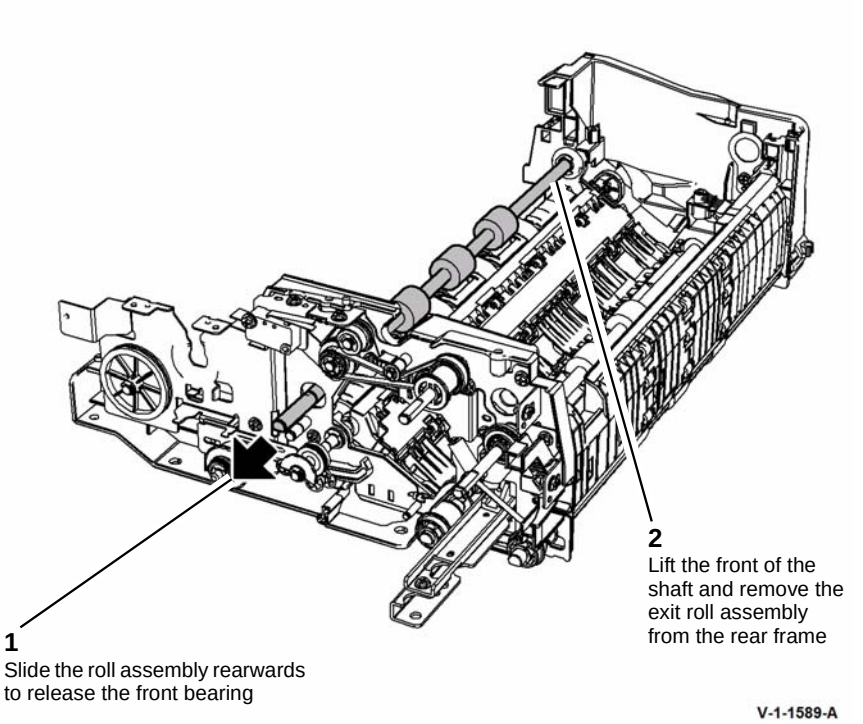


Figure 4 Exit roll assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.8 Stack Height Sensor, Takeaway Sensor and Feed Sensor

Parts List on PL 5.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 1.
2. Remove the feed assembly frame, Figure 1.

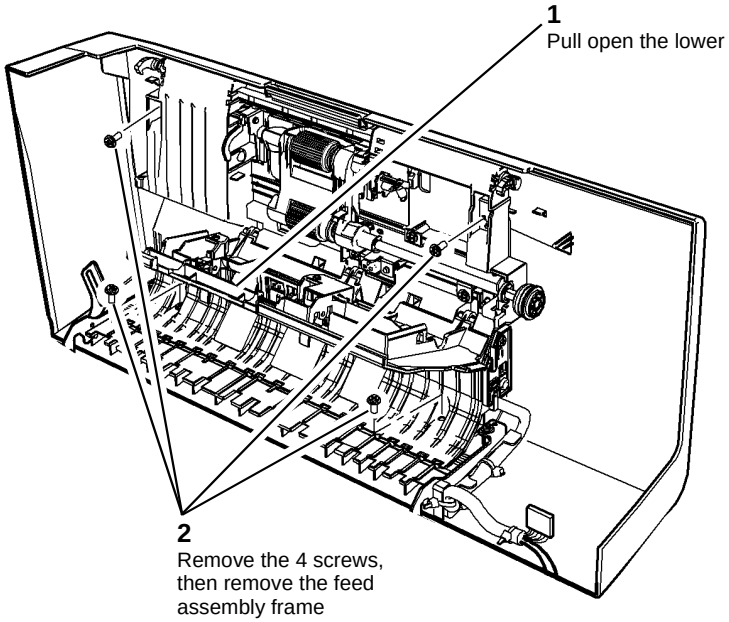


Figure 1 Frame removal

3. Remove the appropriate sensor, Figure 2.

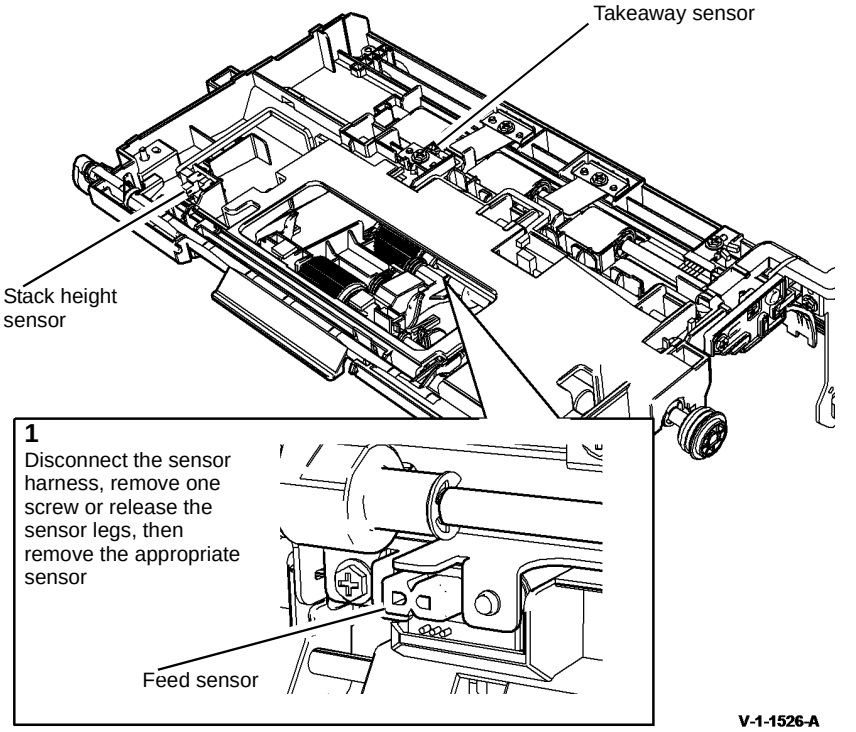


Figure 2 Sensor removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6

1. The replacement is the reverse of the removal procedure.
2. Ensure the feed assembly frame is located correctly within the top cover before tightening the four screws.

REP 5.9 Length Sensors

Parts List on PL 5.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the input tray lower cover, 2 screws, PL 5.30 Item 4.
2. Remove the appropriate length sensor, Figure 1.

NOTE: *Machines W/TAG D-003 do not have a ground wire connected to a grounding strip, adjacent to length sensor 2.*

1
Disconnect the PJ, then remove the appropriate sensor

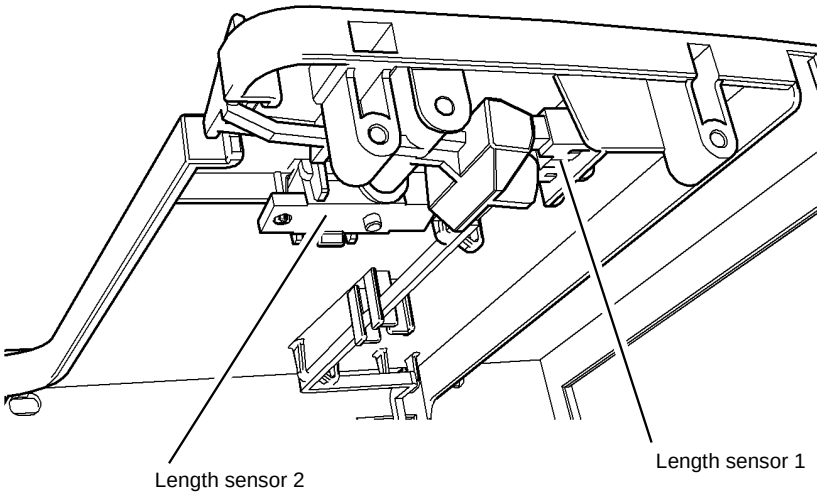


Figure 1 Length sensors removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

The replacement is the reverse of the removal procedure.

REP 5.10 SPDH Reg Sensor

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the side 2 scan assembly, REP 60.6.
2. Prepare to remove the SPDH reg sensor, Figure 1.

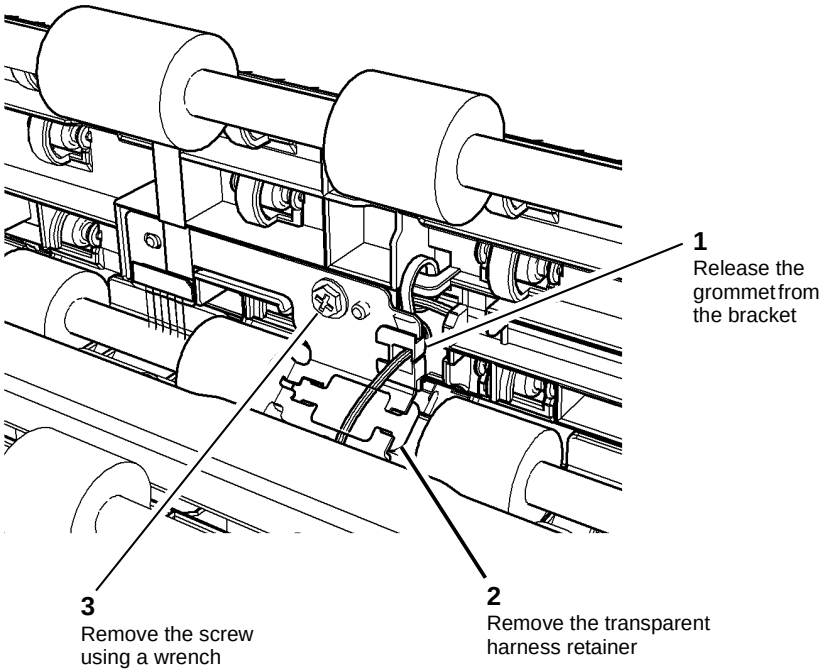


Figure 1 Preparation

3. Remove the SPDH reg sensor and bracket assembly, Figure 2.

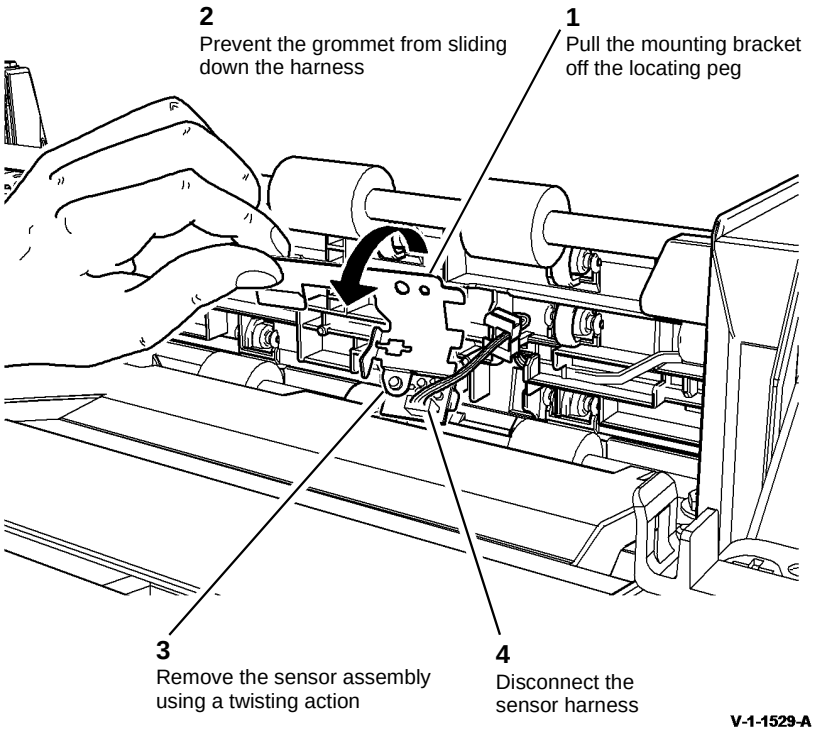


Figure 2 Sensor assembly removal

4. Remove the sensor from the bracket, Figure 3.

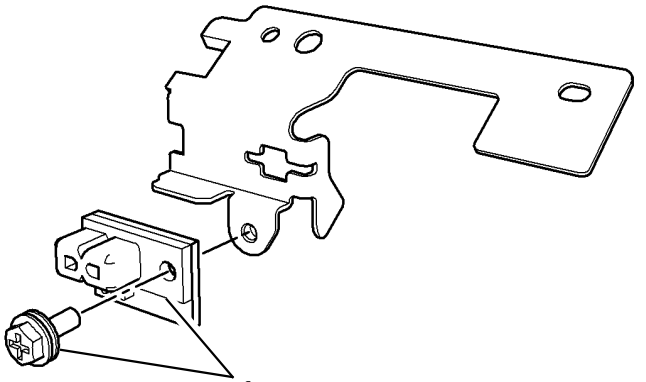


Figure 3 Sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.11 Calibration Home Position Sensor

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the LED cooling fan, REP 5.21.
2. If necessary rotate the exit jam clearance knob, PL 5.17 Item 5, so that the flag is not within the gap of the sensor.
3. Remove the calibration home position sensor, Figure 1.

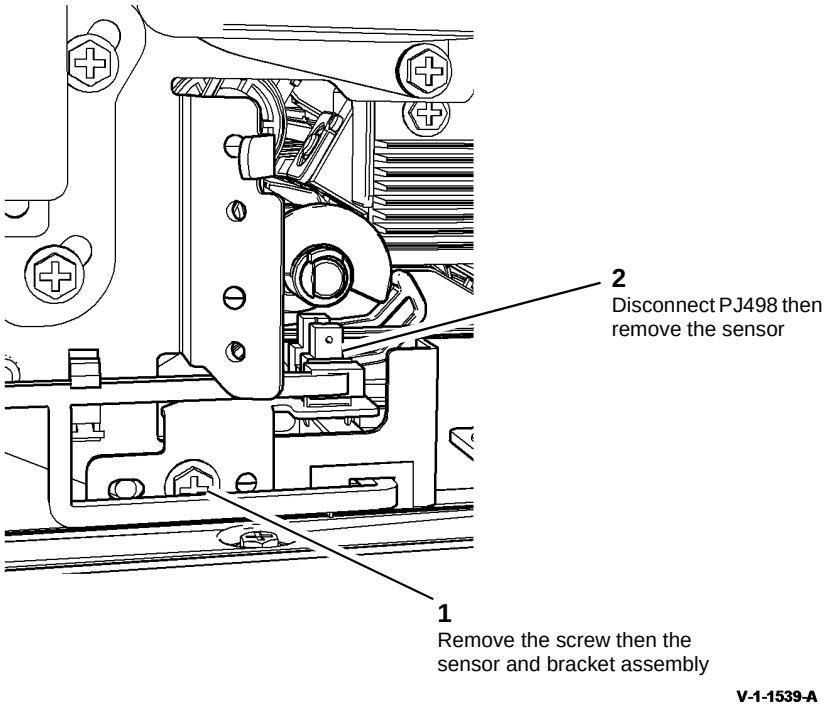


Figure 1 Sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.12 Feed Motor and Belt

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

CAUTION

The working area is restrictive, take care not to drop any components. Extensive repair procedures may be required to retrieve fallen parts from within the SPDH.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Remove the feed motor, Figure 1.

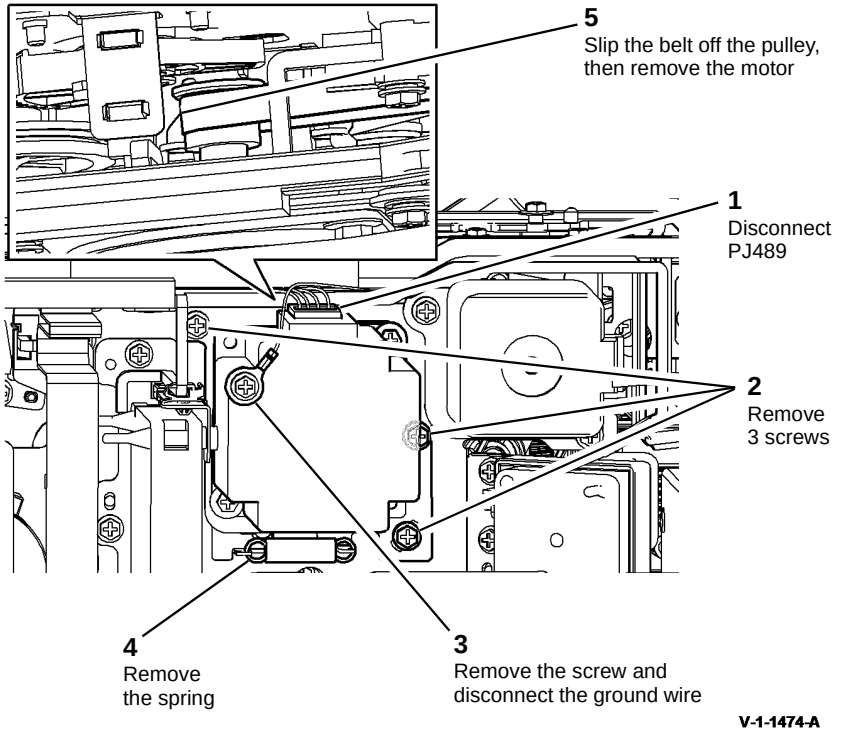


Figure 1 Feed motor removal

3. Remove the feed motor belt, Figure 2.

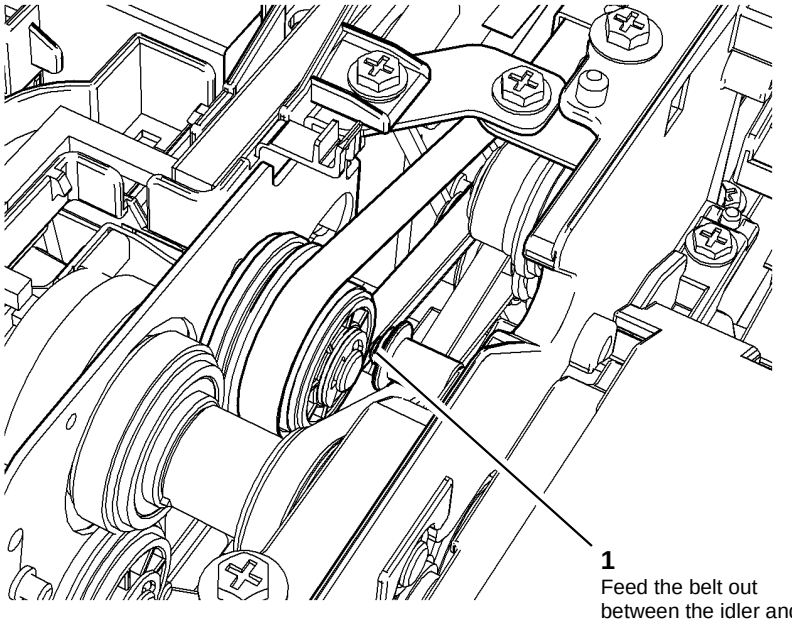


Figure 2 Feed motor belt removal

Replacement

NOTE: *Temporary removal of the top cover interlock switch with mounting bracket, (PL 5.10 Item 13, PL 5.10 Item 14) and the lift home position sensor with sensor bracket, (PL 5.18 Item 9, PL 5.18 Item 10) will provide improved access during the installation of the motor drive belt.*

The replacement is the reverse of the removal procedure.

1. Position the motor in the loop of the drive belt.
2. Insert but do not tighten the 3 screws.
3. Attach the spring to correctly tension the drive belt, then tighten the 3 screws.

REP 5.13 Read Motor

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

CAUTION

The working area is restrictive, take care not to drop any components. Extensive repair procedures may be required to retrieve fallen parts from within the SPDH.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Remove the read motor, Figure 1.

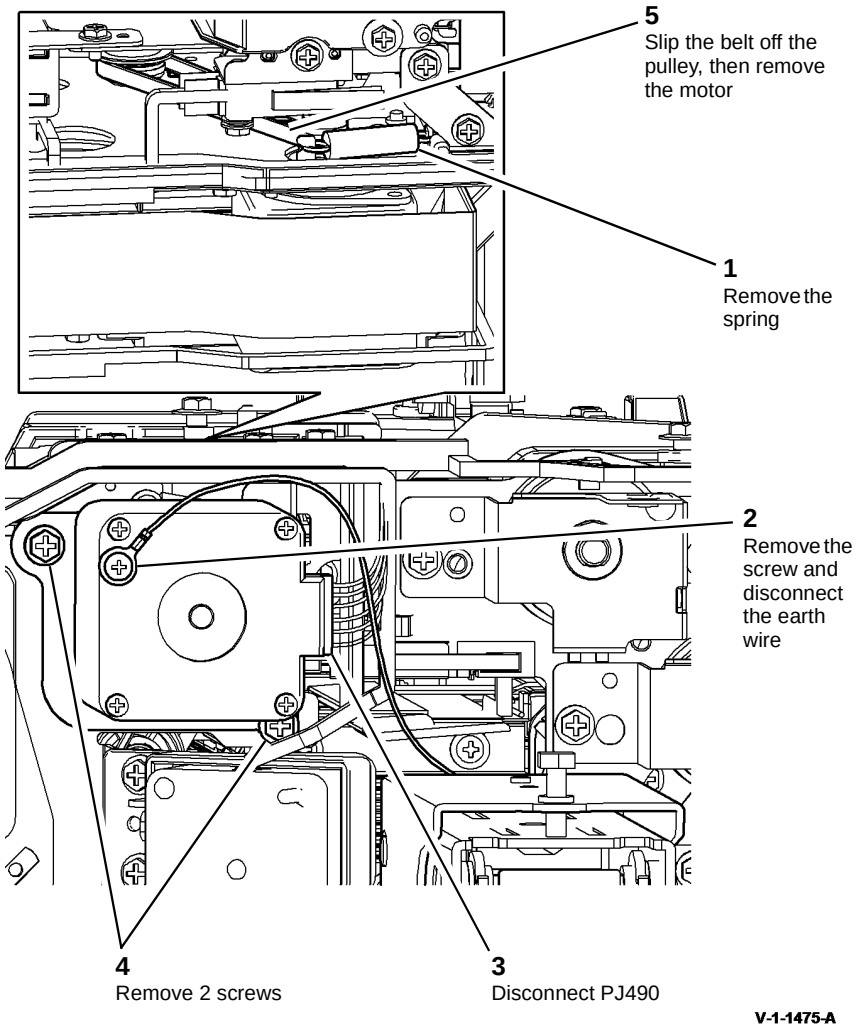


Figure 1 Read motor

Replacement

NOTE: *Temporary removal of the top cover interlock switch with mounting bracket, (PL 5.10 Item 13, PL 5.10 Item 14) and the lift home position sensor with sensor bracket, (PL 5.18 Item 9, PL 5.18 Item 10) will provide improved access during the installation of the motor and tension spring.*

1. Position the motor in the loop of the drive belt.
2. Insert but do not tighten the 2 screws.
3. Attach the spring to correctly tension the drive belt, then tighten the 2 screws.
4. The remainder of the replacement is the reverse of the removal procedure.

REP 5.14 Feed Clutch

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 15.
2. Remove 5 screws then the rear cover, PL 5.10 Item 1.
3. Prepare to remove the feed clutch, Figure 1.

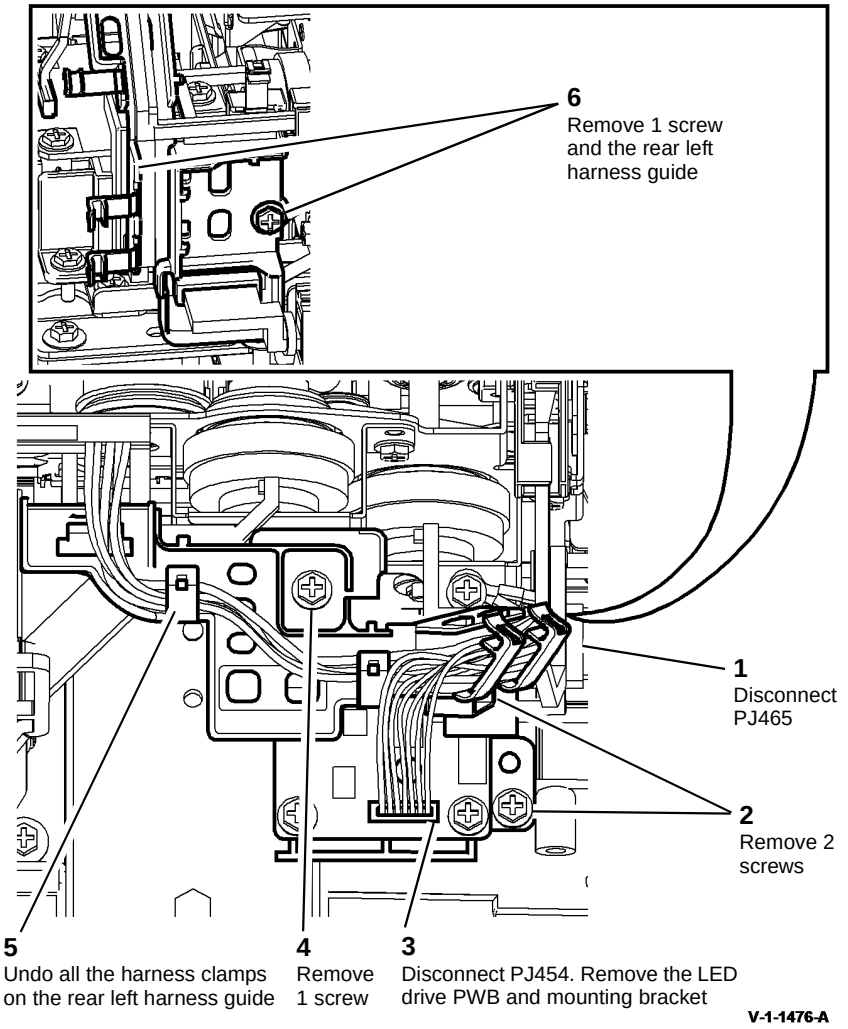


Figure 1 Preparation

4. Remove the feed clutch, Figure 2.

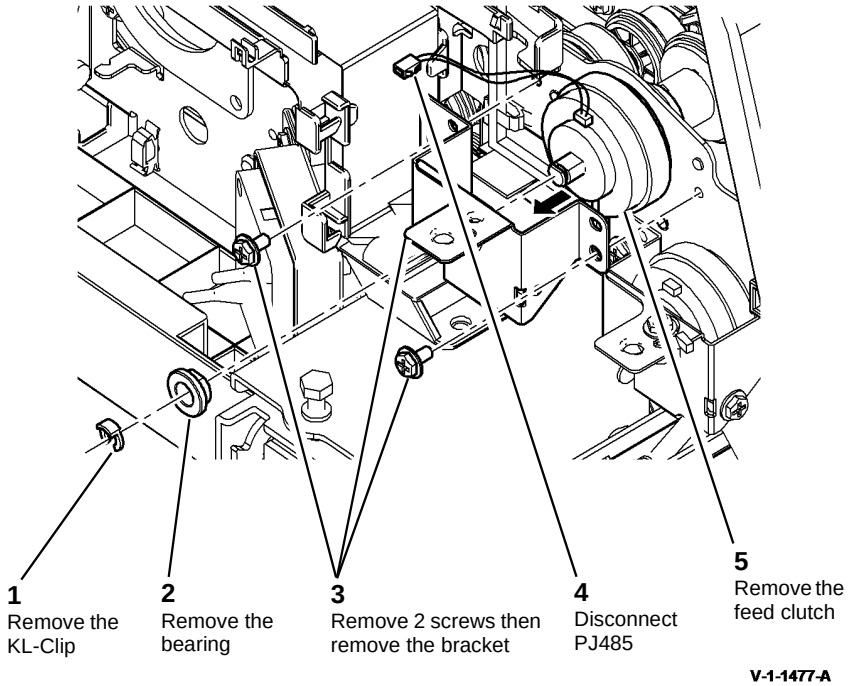


Figure 2 Feed clutch removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the feed clutch engages correctly with the bracket, Figure 3.

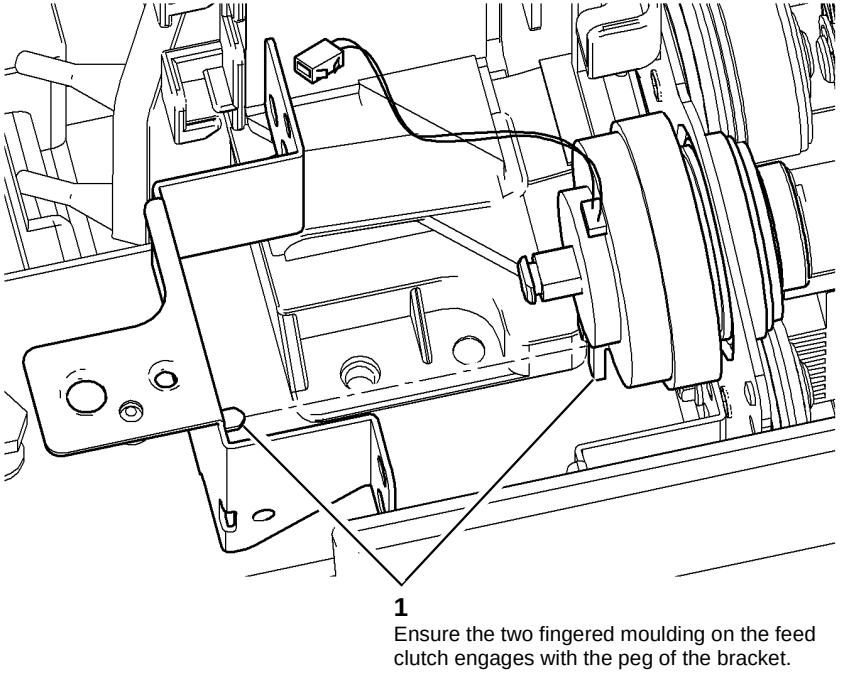


Figure 3 Clutch locator

REP 5.15 Takeaway Clutch

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the SPDH top cover assembly, PL 5.20 Item 15.
2. Remove 5 screws then the rear cover, PL 5.10 Item 1.
3. Prepare to remove the TAR clutch, Figure 1.

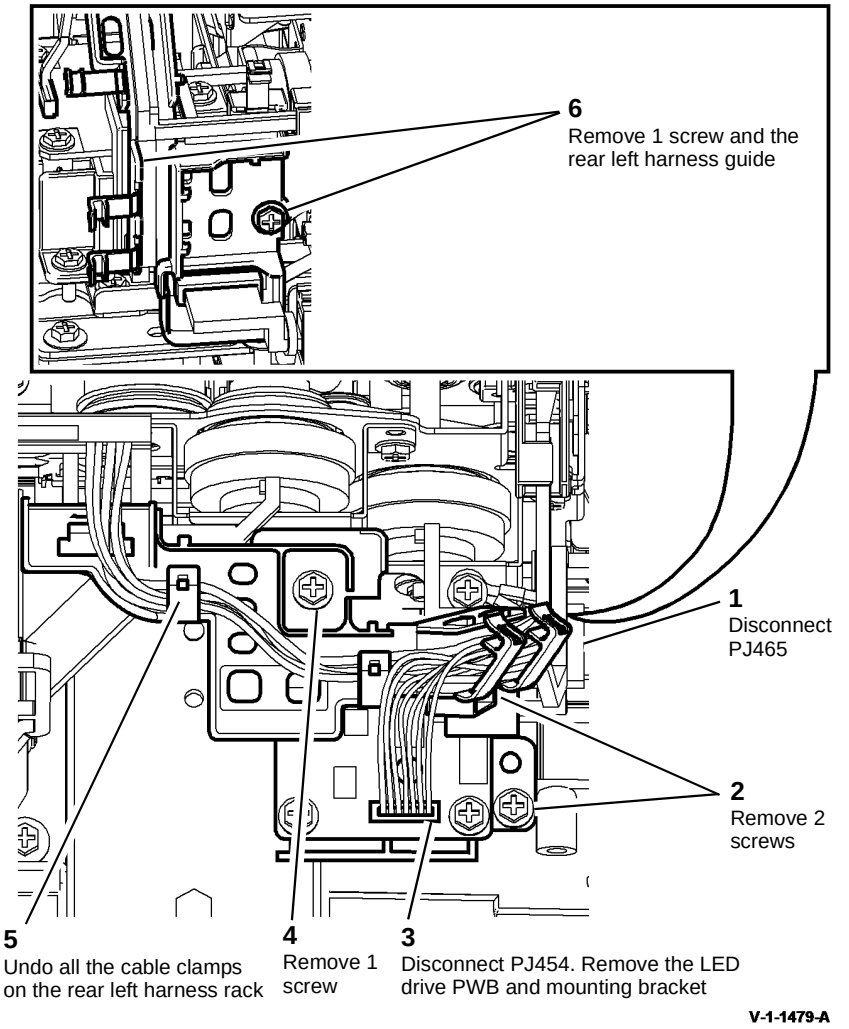


Figure 1 Preparation

4. Remove the Takeaway clutch, Figure 2.

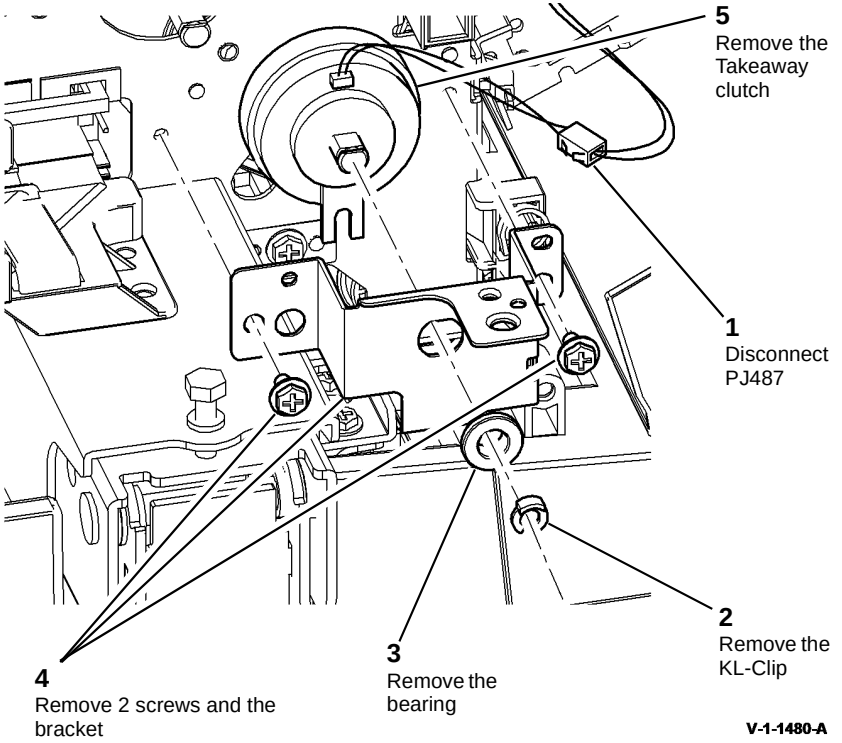


Figure 2 TAR clutch removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the Takeaway clutch engages correctly with the bracket, Figure 3.

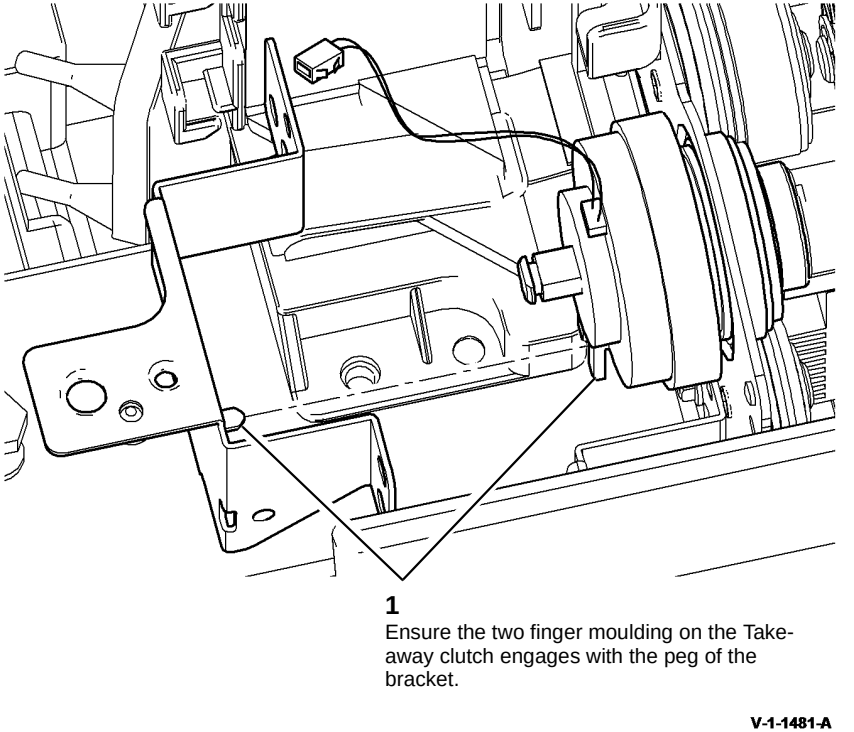


Figure 3 Clutch locator

REP 5.16 Document Guide Sensors and Doc Present Sensor Actuator

Parts List on PL 5.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Remove the tray upper hinge, Figure 1.

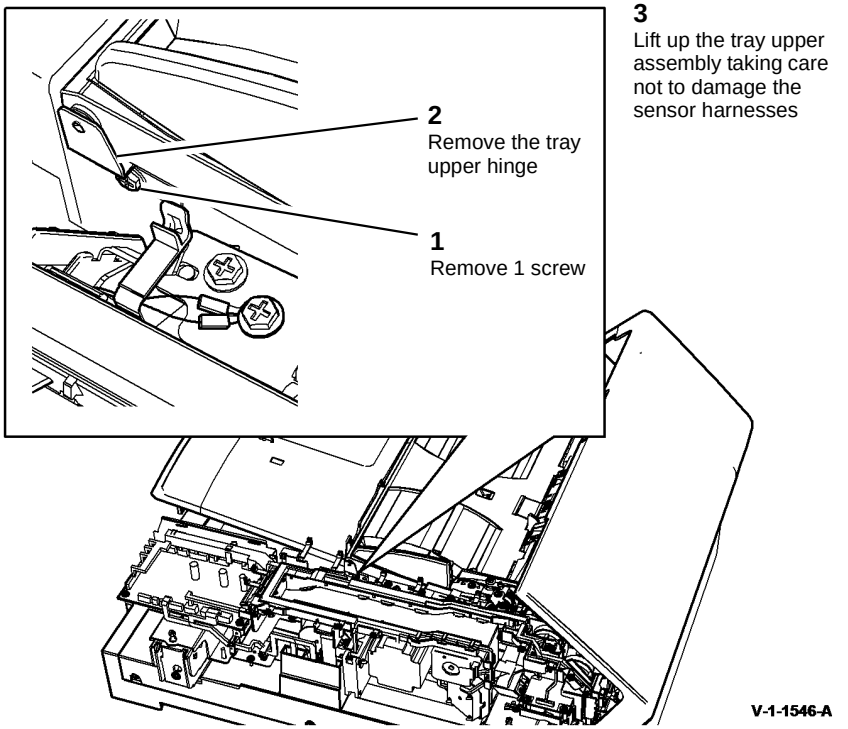


Figure 1 Hinge removal

3. Release the sensor mounting plate, Figure 2.

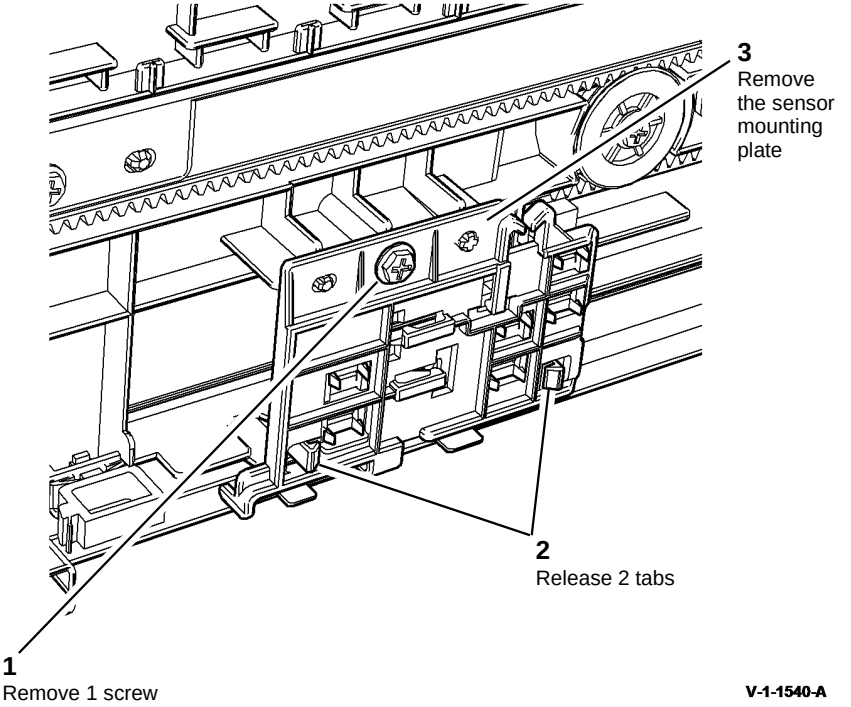
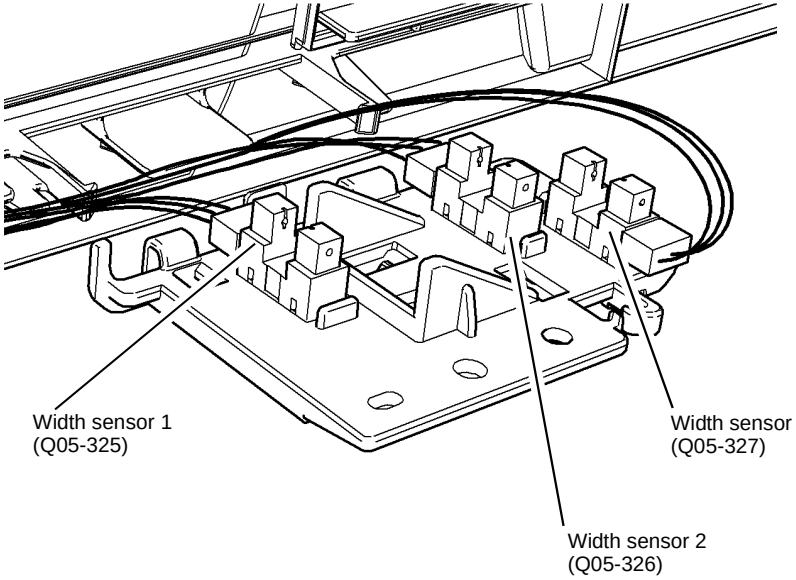


Figure 2 Mounting plate release

4. Remove the document width sensors, Figure 3.

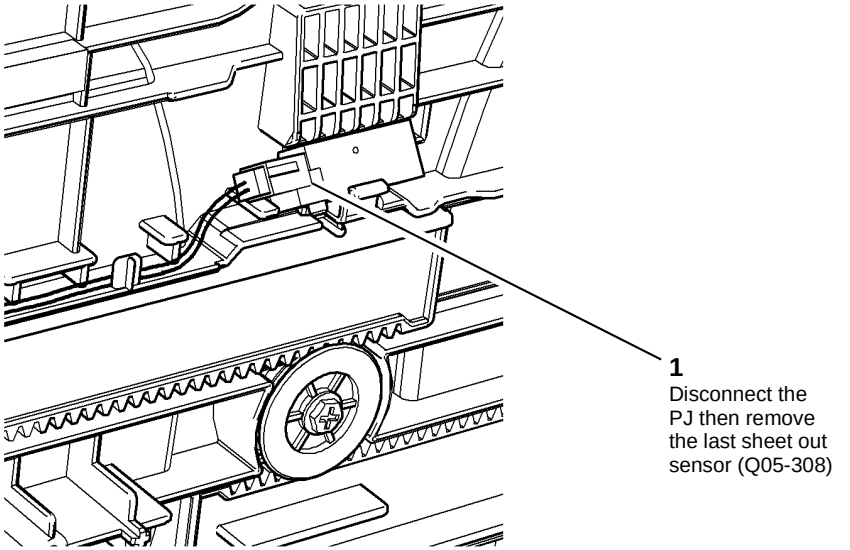


1
Disconnect the appropriate PJ then remove the appropriate width sensor.

V-1-1541-A

Figure 3 Width sensors removal

5. Remove the last sheet out sensor, Figure 4.

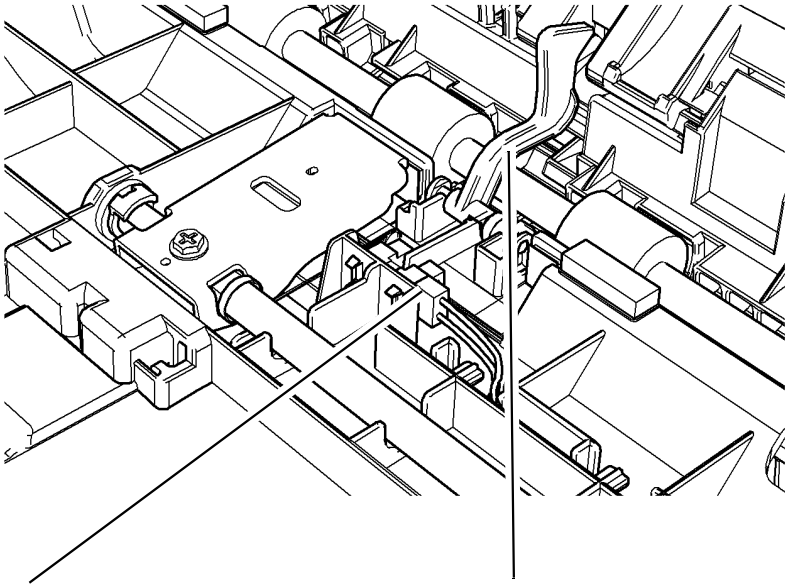


1
Disconnect the PJ then remove the last sheet out sensor (Q05-308)

V-1-1542-A

Figure 4 Last sheet out sensor removal

6. Remove the doc present sensor, Figure 5.



1
Disconnect the PJ then remove the doc present sensor (Q05-309)

2
If required, remove the doc present sensor actuator.

V-1-1547-A

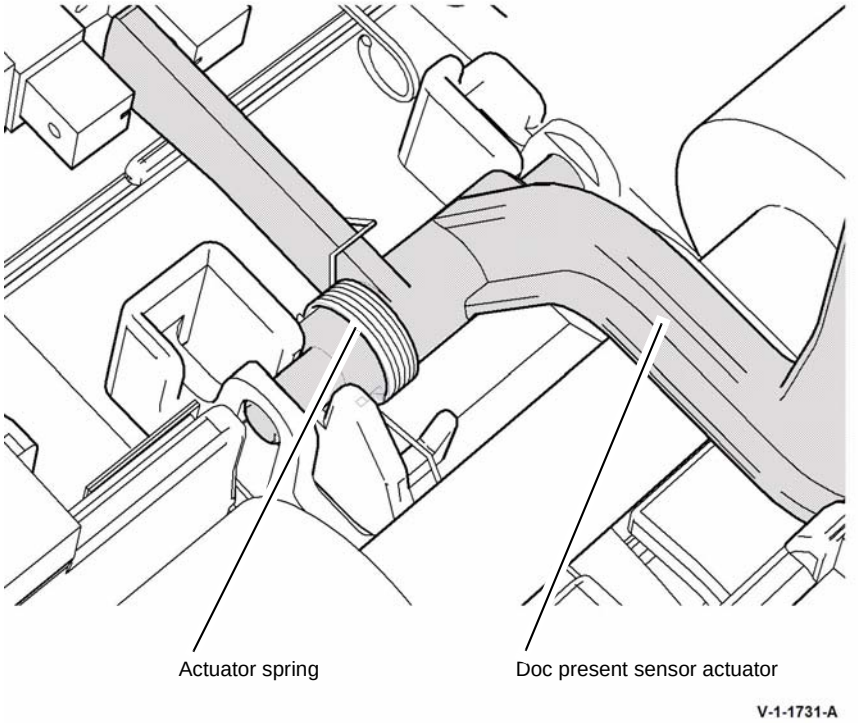
Figure 5 Doc present sensor removal

Replacement

CAUTION

Be careful when self tapping screws are installed into plastic components, refer to GP 6.

1. The replacement is the reverse of the removal procedure.
2. Ensure the actuator spring is positioned correctly, Figure 6.



V-1-1731-A

Figure 6 Spring position

REP 5.17 Pre Scan Roll Assembly

Parts List on PL 5.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the SPDH read assembly outer frame, by performing REP 5.25 up to step 2.
2. Place the SPDH read assembly upside down on a work surface.

CAUTION

The mid scan and pre scan document guides are spring loaded, take care to not lose the springs when the guides are opened.

3. Prepare to remove the mid scan document guide, Figure 1.

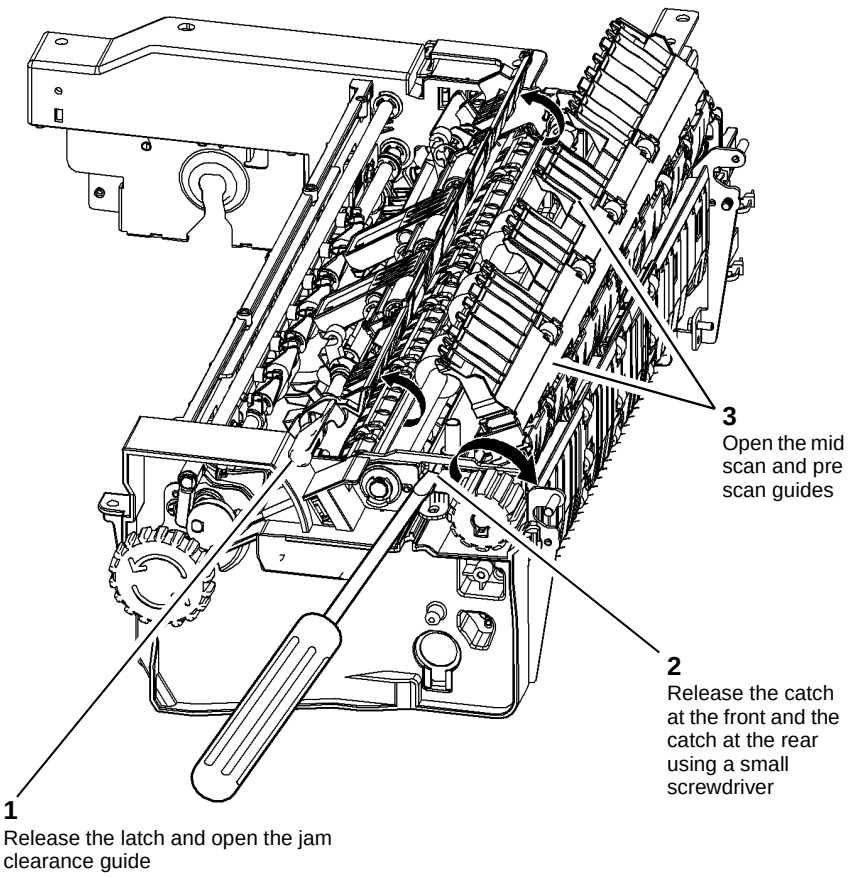


Figure 1 Preparation

4. Remove 4 springs, Figure 2.

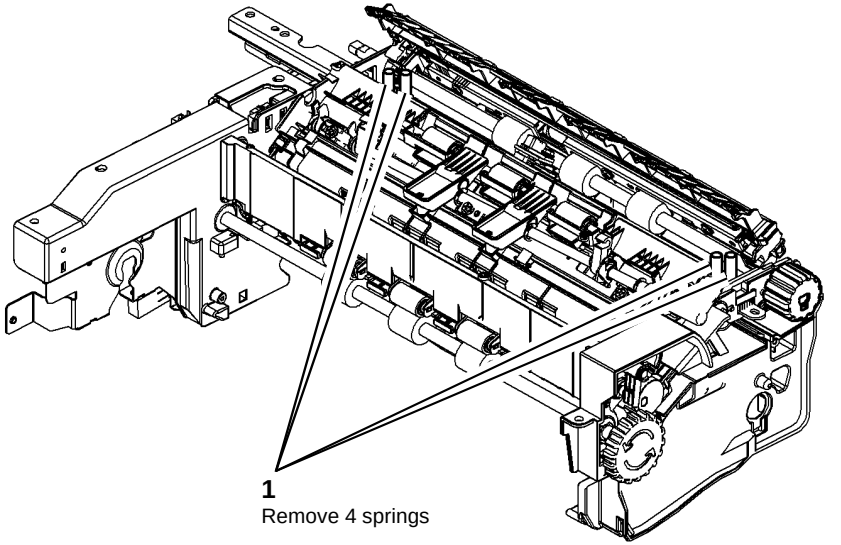


Figure 2 Springs removal

5. Remove the mid scan document guide and pre scan clearance knob, Figure 3.

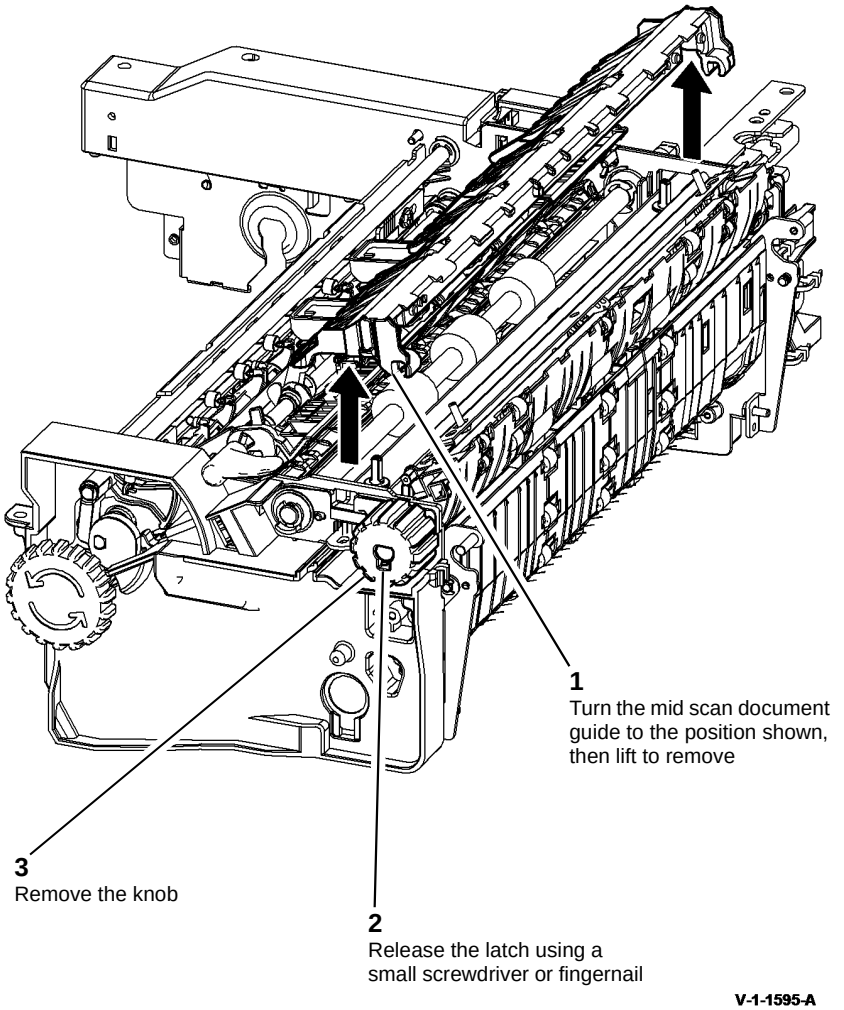


Figure 3 Guide and knob removal

6. Remove the pre scan document guide, Figure 4.

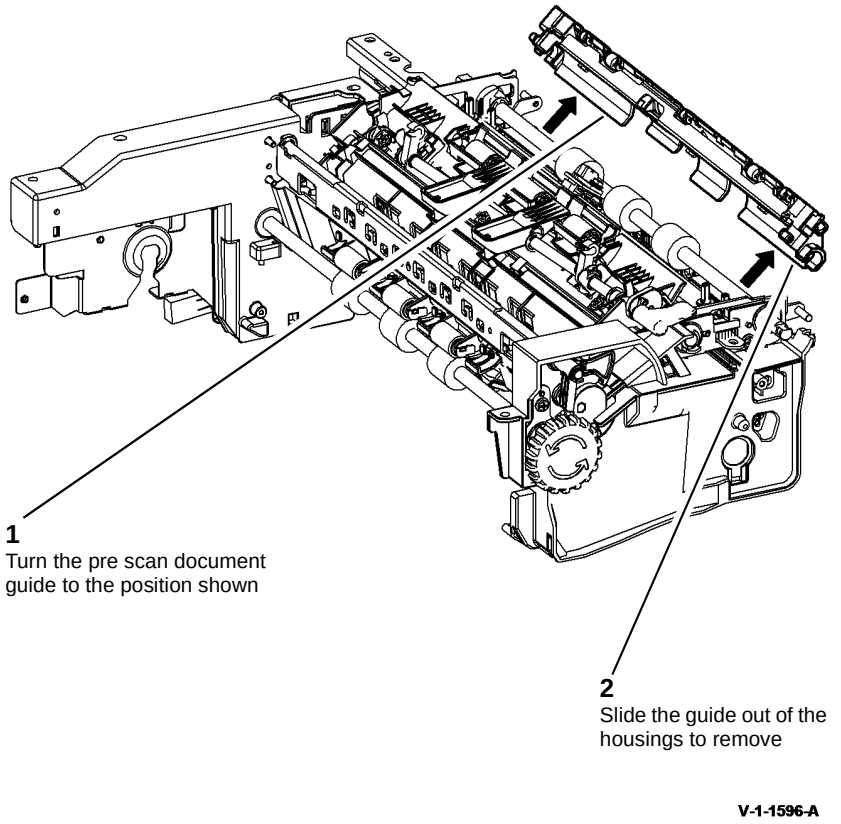


Figure 4 Pre scan guide removal

7. Prepare to remove the pre scan roll assembly, Figure 5.

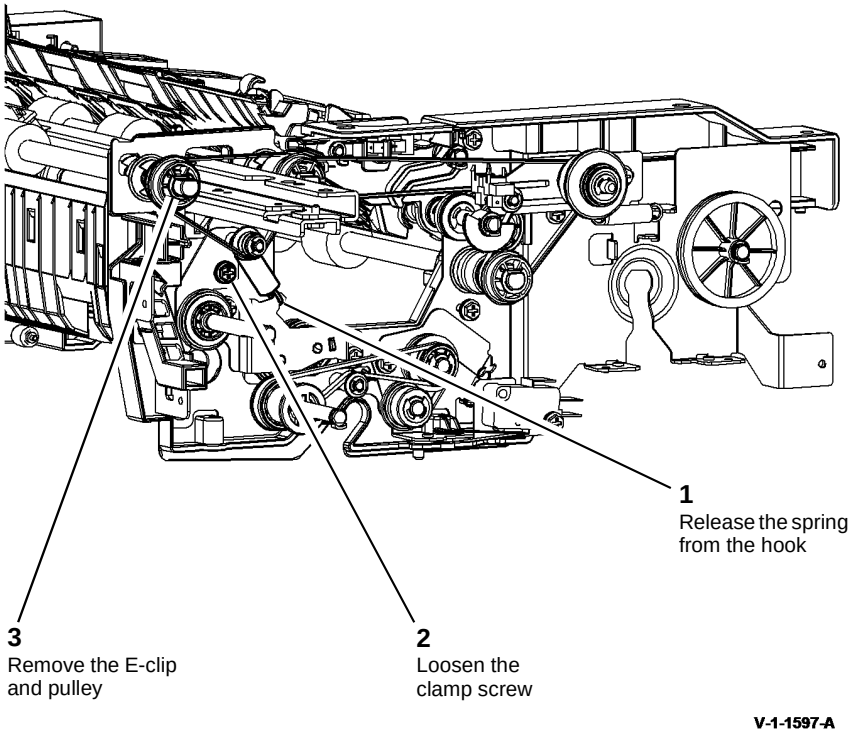


Figure 5 Preparation

8. Remove the pre scan roll assembly, Figure 6.

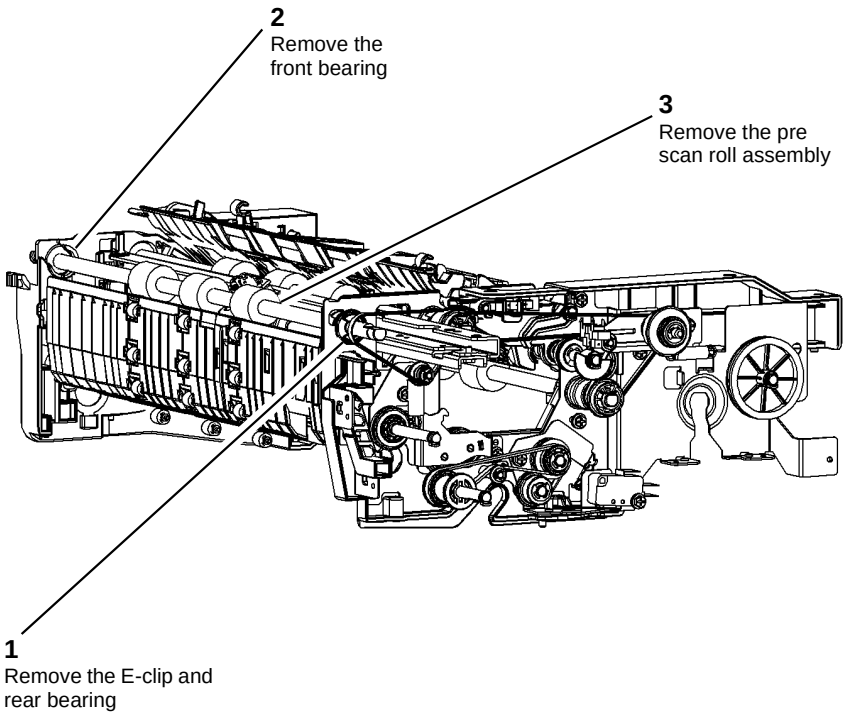


Figure 6 Pre scan roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.18 Mid Scan Roll Assembly

Parts List on PL 5.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the SPDH read assembly outer frame, by performing REP 5.25 up to step 2.
2. Place the SPDH read assembly upside down on a work surface.

CAUTION

The mid scan and pre scan document guides are spring loaded, take care to not lose the springs when the guides are opened.

3. Open the mid scan document guide and pre scan document guide, Figure 1.

4. Release the belt tension in the two drive belts, Figure 2.

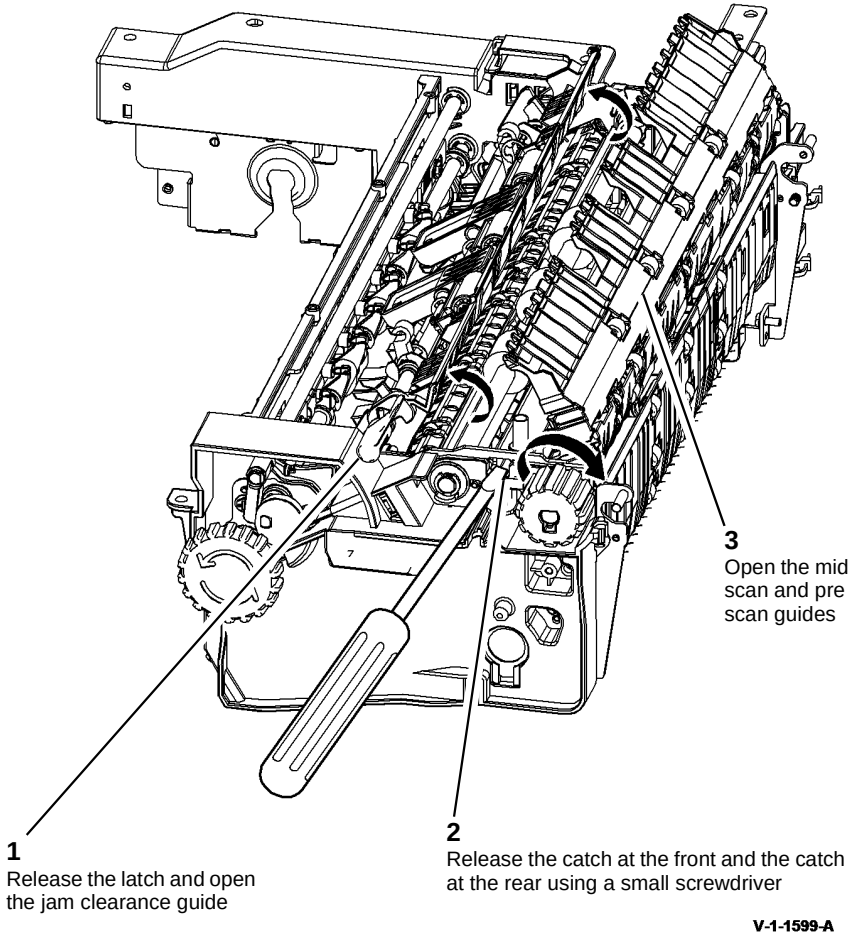


Figure 1 Guides opening

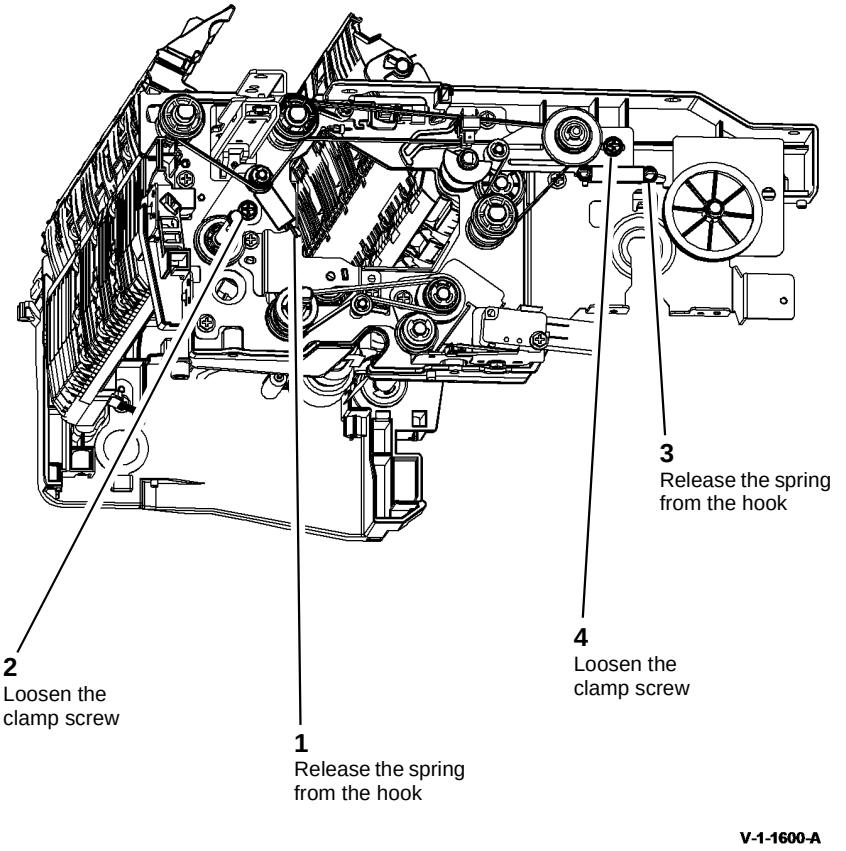


Figure 2 Belt tensions release

5. Remove the mid scan roll assembly, Figure 3.

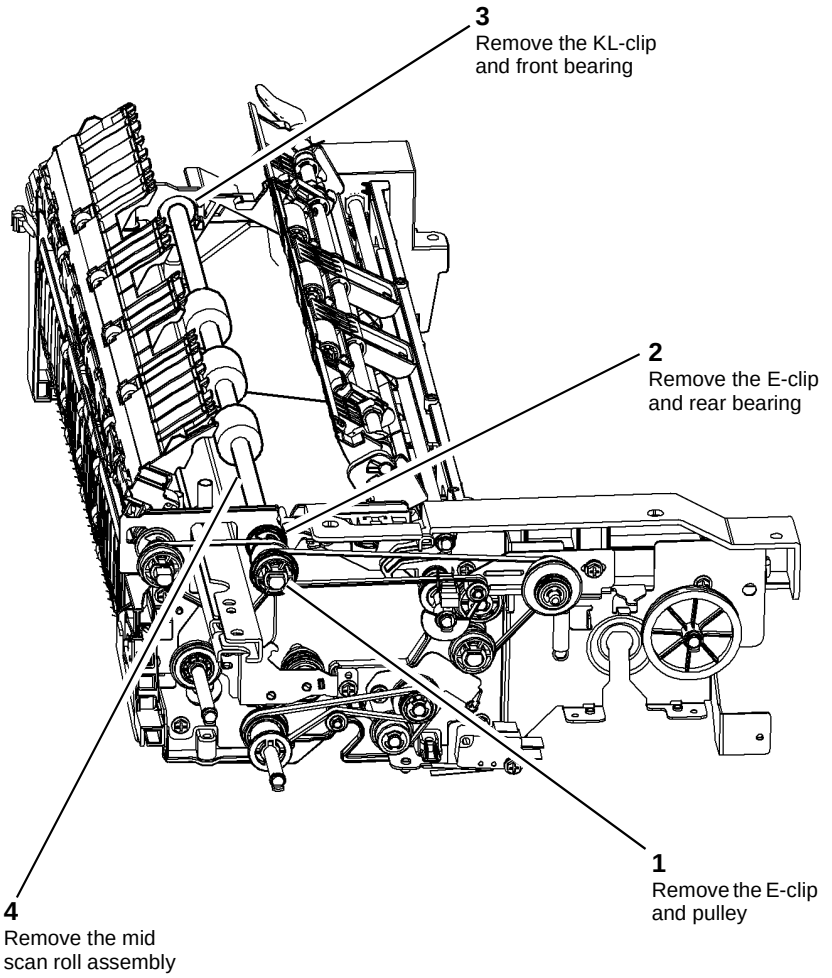


Figure 3 Mid scan roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.19 SPDH Removal

Parts List on PL 5.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the scanner rear cover and faraday shield, REP 60.1.
2. Disconnect the communication and power cables, Figure 1.

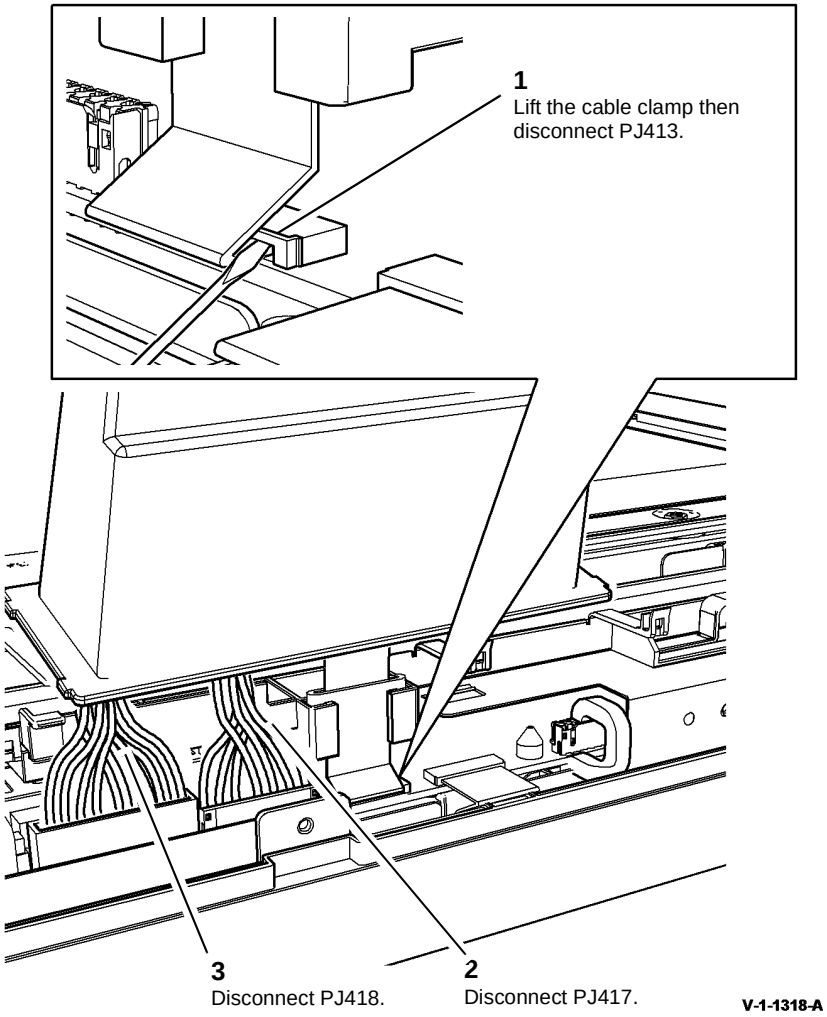


Figure 1 SPDH to Scanner Connections

WARNING

Use safe handling procedures when removing the module, GP 16. The module is heavy.

NOTE: *The SPDH weight is 11.5Kg (25.4lb).*

3. Remove the SPDH from the machine, Figure 2.

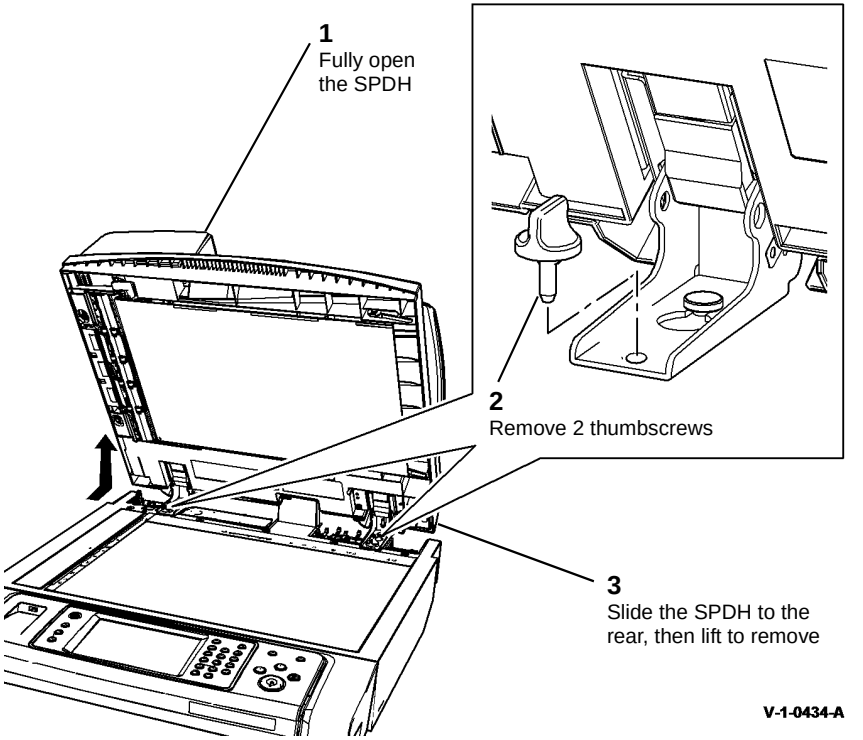


Figure 2 SPDH removal

4. If necessary remove the SPDH harness guide, Figure 3.

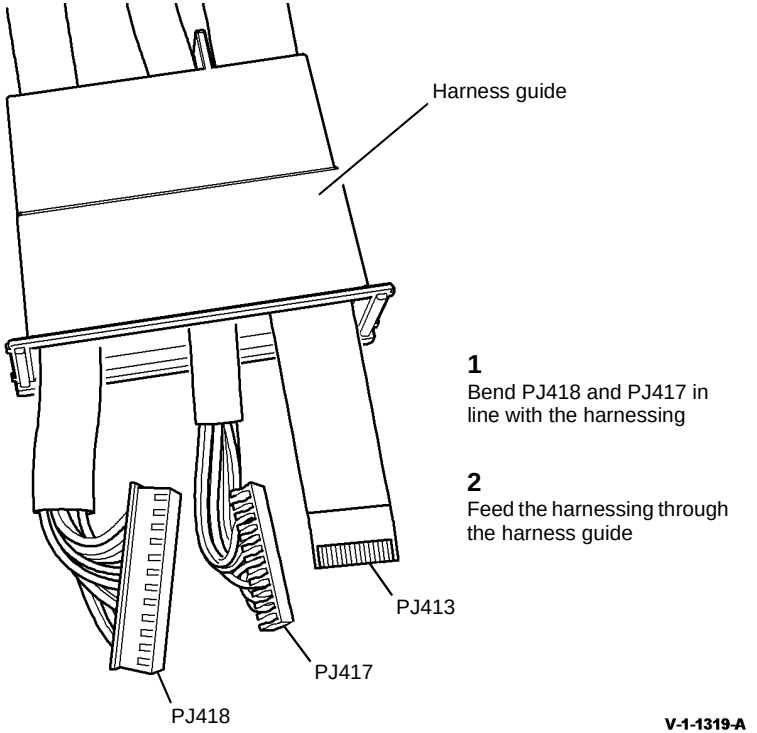


Figure 3 SPDH Harness guide removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new SPDH is installed, perform the steps that follow:
   a. Ensure the thumb screws are secure and fully tightened.
   b. Select dC131 location 606-482. Reset the copy count to zero.
   c. Reset the document feeder feed roller count. Refer to dC135 CRU/HFSI Status.
   d. SPDH height adjustment, ADJ 5.2.
   e. SPDH registration adjustment, ADJ 5.5.
   f. SPDH skew adjustment, ADJ 5.3.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.20 Motor Cooling Fan

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Disconnect PJ470 on the SPDH PWB.
3. Release the 5 cable ties leading to the motor cooling fan from the SPDH PWB.
4. Remove the motor cooling fan, Figure 1.

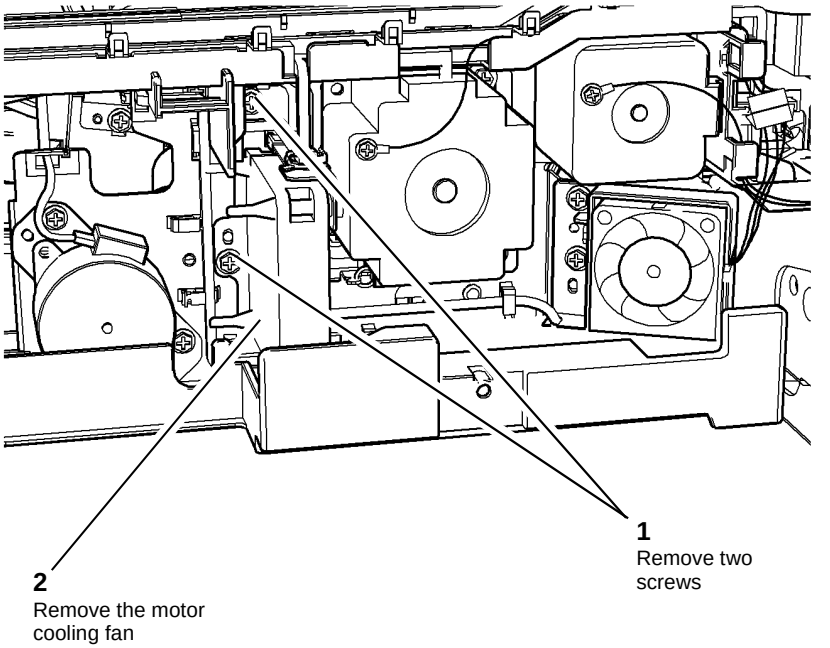


Figure 1 Motor cooling fan removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.21 LED Cooling Fan

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove 5 screws then the rear cover, PL 5.10 Item 1.
2. Remove the LED cooling fan, Figure 1.

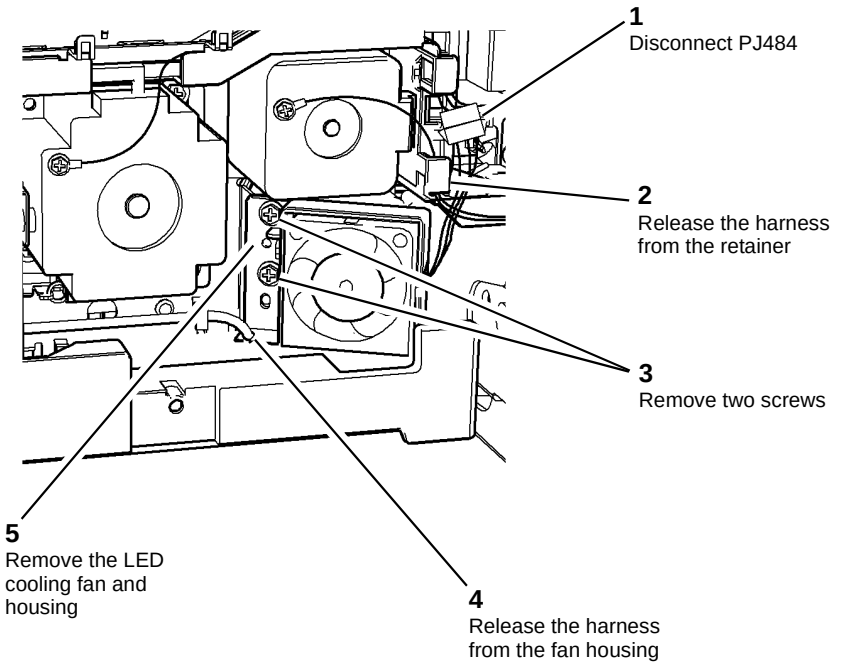


Figure 1 LED Cooling fan removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.22 Side 2 Scan Power and Data Ribbon Cables

Parts List on PL 5.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the side 2 scan assembly, REP 60.6.
2. Prepare to remove the side 2 scan assembly data ribbon cable and power ribbon cable, Figure 1.

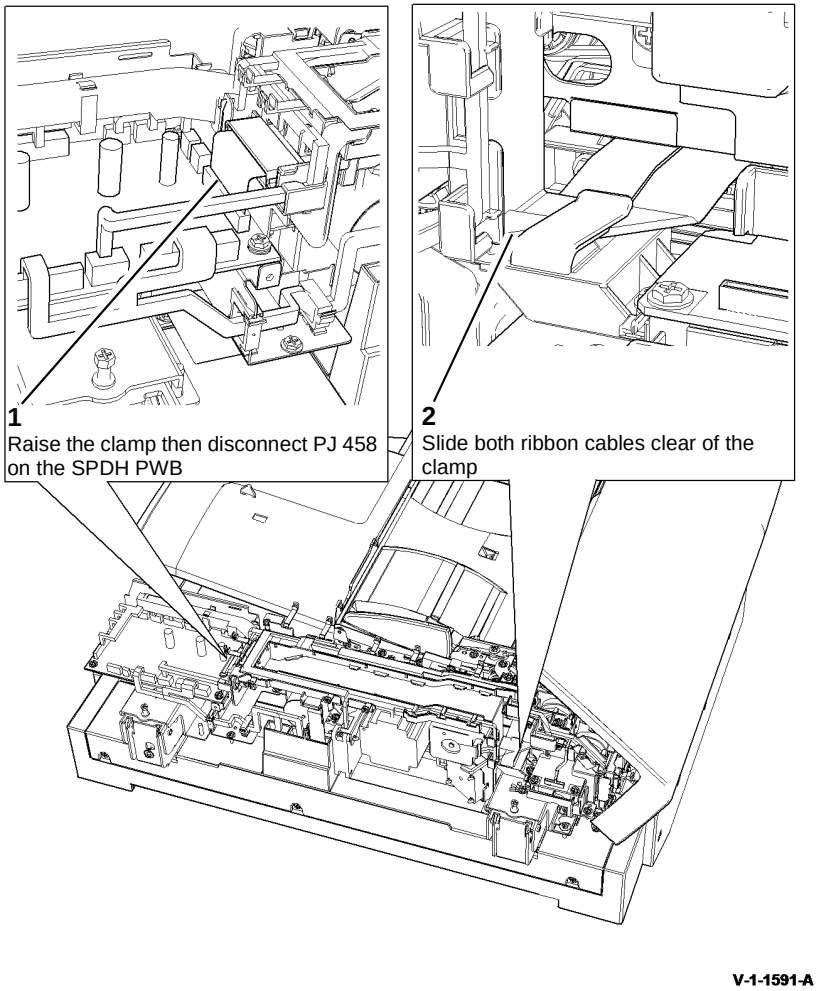


Figure 1 Preparation

3. Remove the side 2 scan assembly data ribbon cable and power ribbon cable, Figure 2.

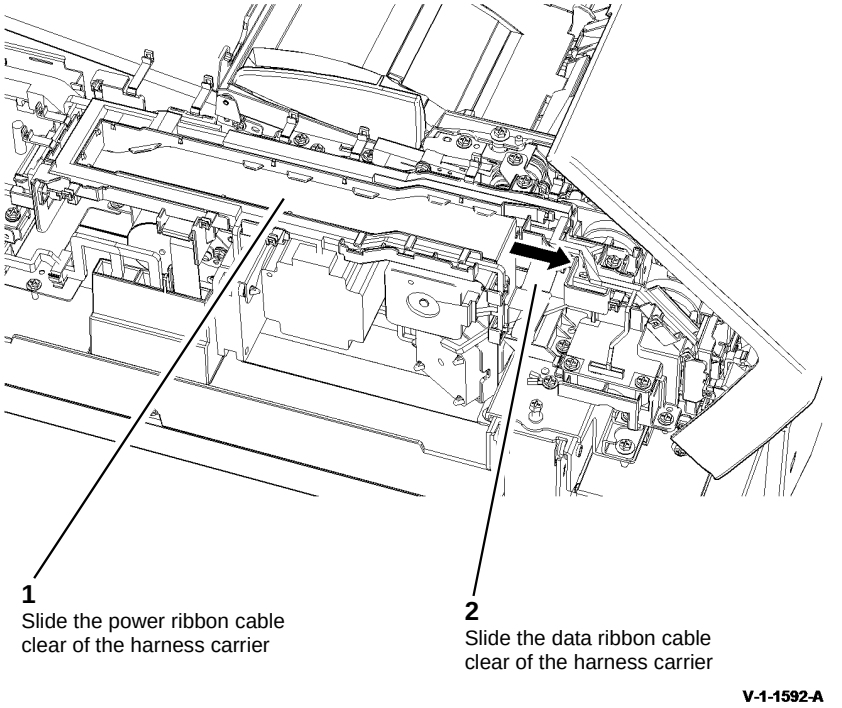


Figure 2 Ribbon cable removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Figure 3 shows the folds of the two ribbon cables.
3. New ribbon cable are supplied un-folded, but have the position of the folds marked on the cable. Use the old cable as a pattern and refer to Figure 3 to form the folds in the new ribbon cable before installing on the machine.

NOTE: *If the power ribbon cable appears to be to long, form a Z fold in the cable where it lies over the harness carrier.*

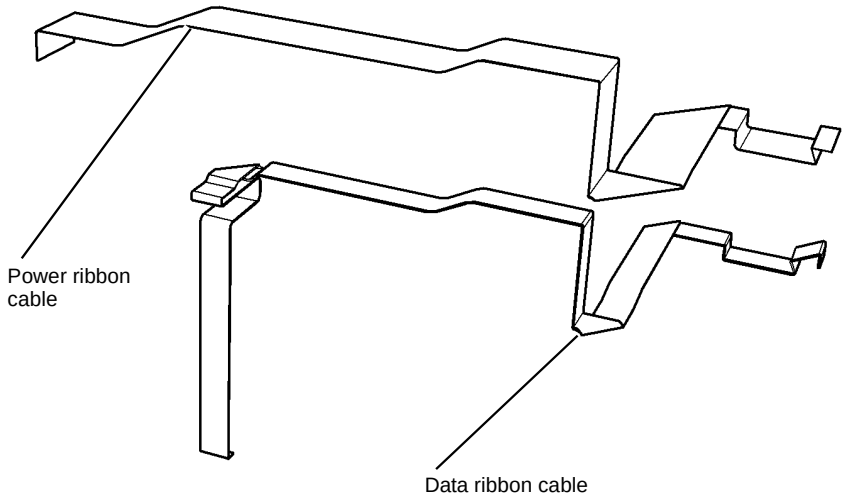


Figure 3 Ribbon cable folds

REP 5.23 SPDH Read Assembly

Parts List on PL 5.19

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the document pad, PL 5.10 Item 3, by removing two K-L clips from the right side of the pad, then un-clip the two fasteners at the left side.
2. Remove the read assembly lower fasteners, Figure 1.

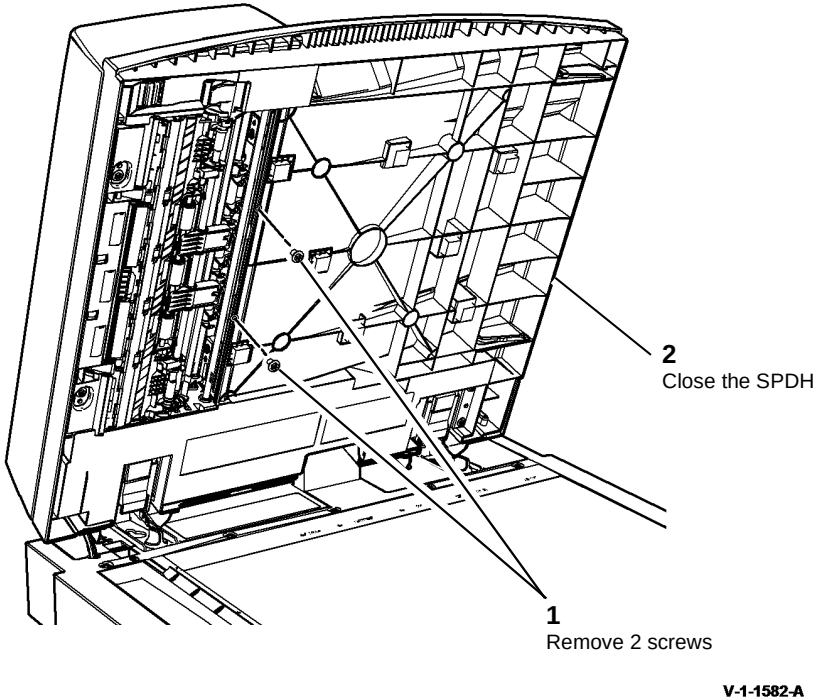


Figure 1 Lower fasteners removal

3. Remove the SPDH, REP 5.19.
4. Remove the input tray assembly, REP 5.4.
5. Remove the top cover assembly, REP 5.1.
6. Remove the tray elevator motor, REP 5.24.
7. Remove the motor cooling fan, REP 5.20.
8. Remove the feed motor, REP 5.12.
9. Remove the LED cooling fan, REP 5.21.
10. Remove the read motor, REP 5.13.
11. Remove the feed clutch, REP 5.14.
12. Remove the TAR clutch, REP 5.15.
13. Remove the SPDH ribbon harnesses, REP 5.22.
14. With the exception of PJ459 and PJ460. Disconnect all the remaining PJs on the SPDH PWB.
15. Disconnect the top cover interlock switch, PL 5.10 Item 13.
16. Remove the calibration home position sensor and bracket, REP 5.11.
17. Release from the harness carrier any remaining harnesses that are still attached to components
18. Remove the harness carrier, Figure 2.

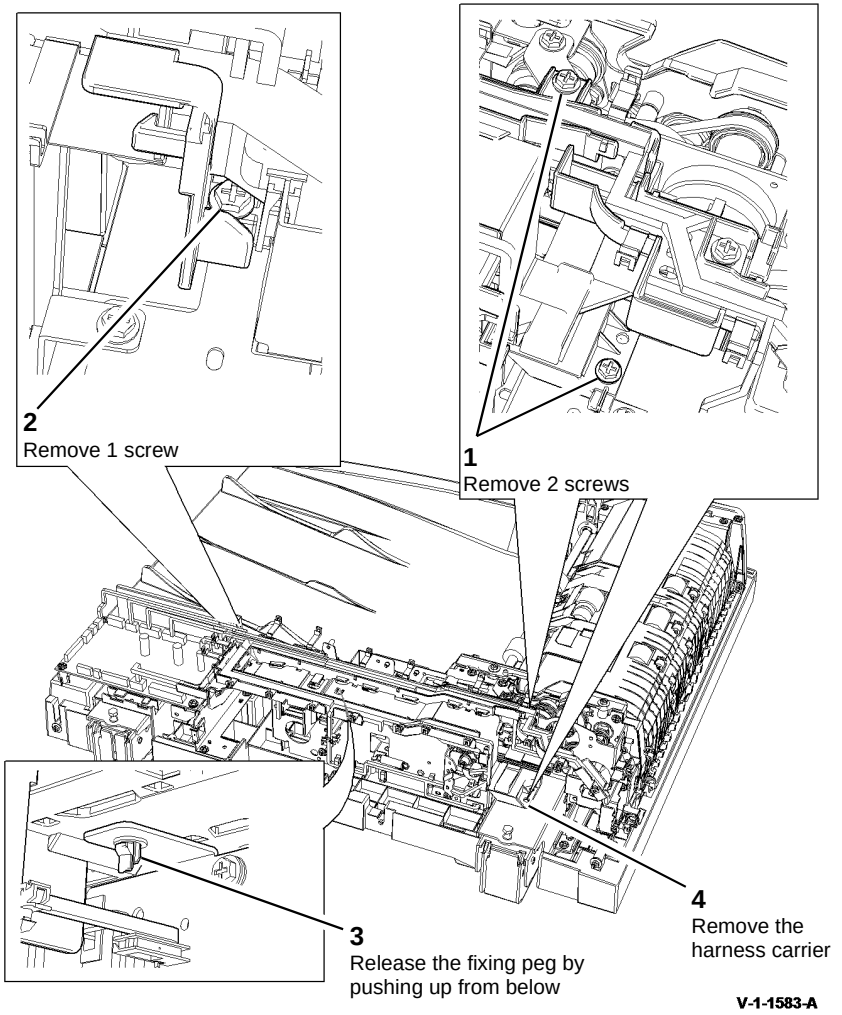


Figure 2 Harness carrier removal

19. Remove the SPDH read assembly, Figure 3.

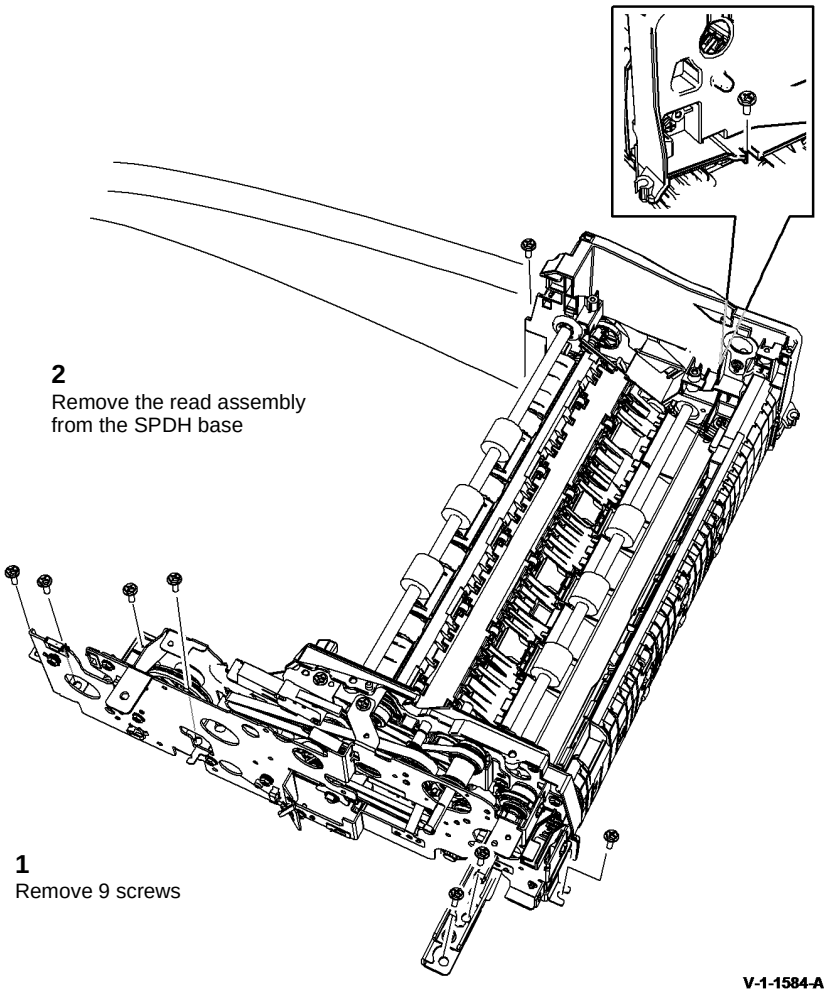


Figure 3 SPDH read assembly removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. When installing the feed motor and read motor, refer to Figure 4 for the drive belt routing.

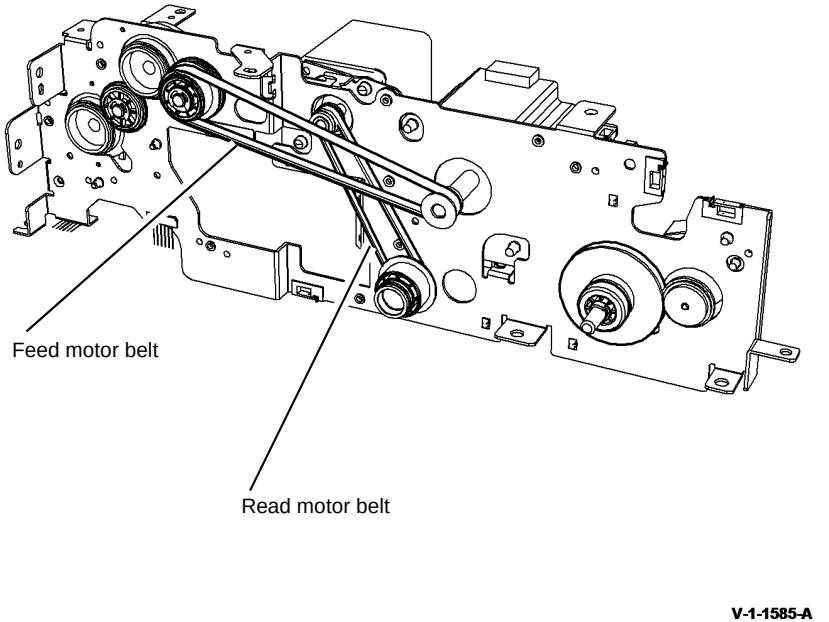


Figure 4 Drive belt routing

3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 5.24 Tray Elevator Motor

Parts List on PL 5.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not remove the SPDH while the SPDH is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the SPDH harness guide, PL 5.10 Item 15 to allow access to the tray elevator motor, refer to REP 5.19. Note; it is not necessary to remove the SPDH from the scanner to perform this procedure.
2. Disconnect PJ469 on the SPDH PWB.
3. Release the 3 cable ties leading to the tray elevator motor from the SPDH PWB.
4. Remove the tray elevator motor, Figure 1.

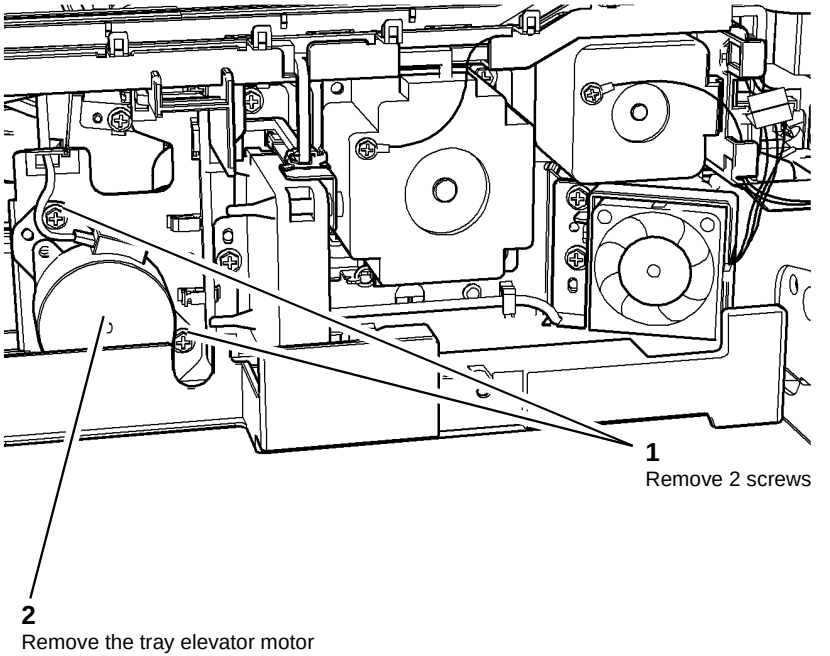


Figure 1 Motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.25 SPDH Read Assembly Drives

Parts List on PL 5.19

Removal

This procedure deals with all of the components within the SPDH drive kit, PL 5.19 Item 23.

1. Remove the SPDH read assembly, REP 5.23.
2. Remove the outer frame, Figure 1.

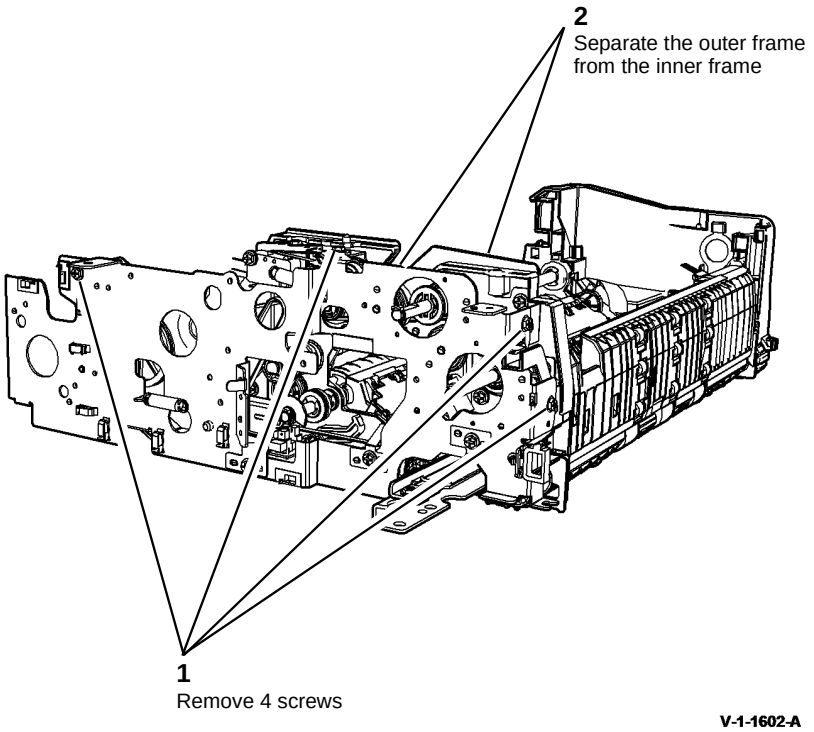


Figure 1 Outer frame removal

3. Figure 2, remove the mid scan drive belt, PL 5.19 Item 21 and the pre scan roll drive belt, PL 5.19 Item 20.

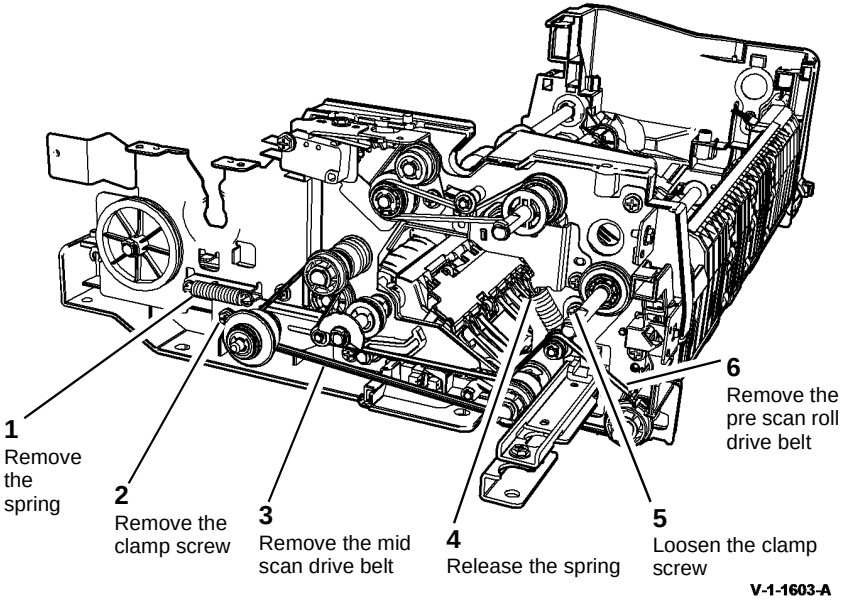


Figure 2 Drive belts removal

4. Figure 3, Remove the calibration shutter driven gear PL 5.19 Item 8 and the bearing.

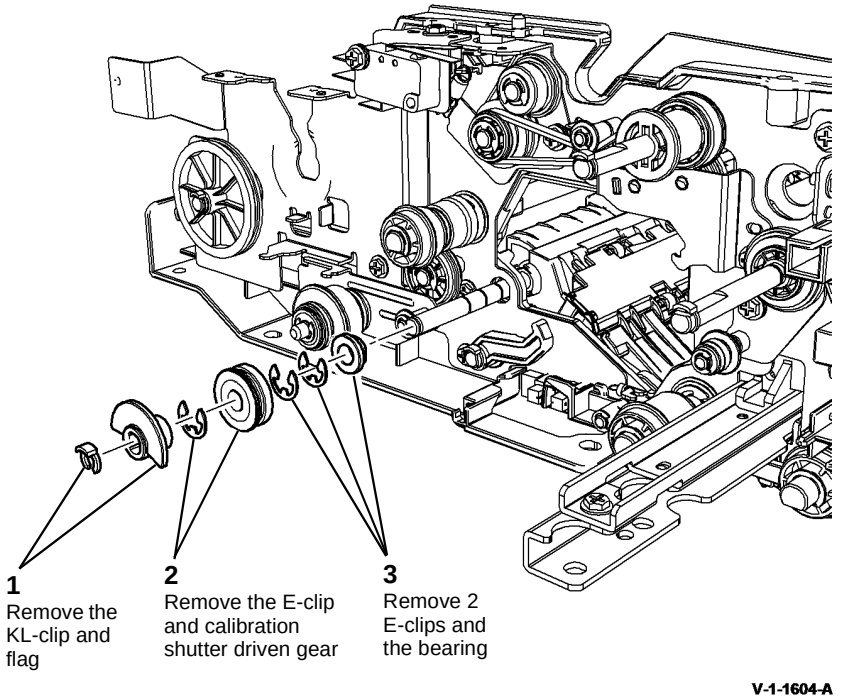


Figure 3 Shutter components removal

5. Figure 4, remove the calibration shutter idler gear, PL 5.19 Item 7, the exit roll drive pulley, PL 5.19 Item 12 and the calibration shutter drive gear, PL 5.19 Item 10.

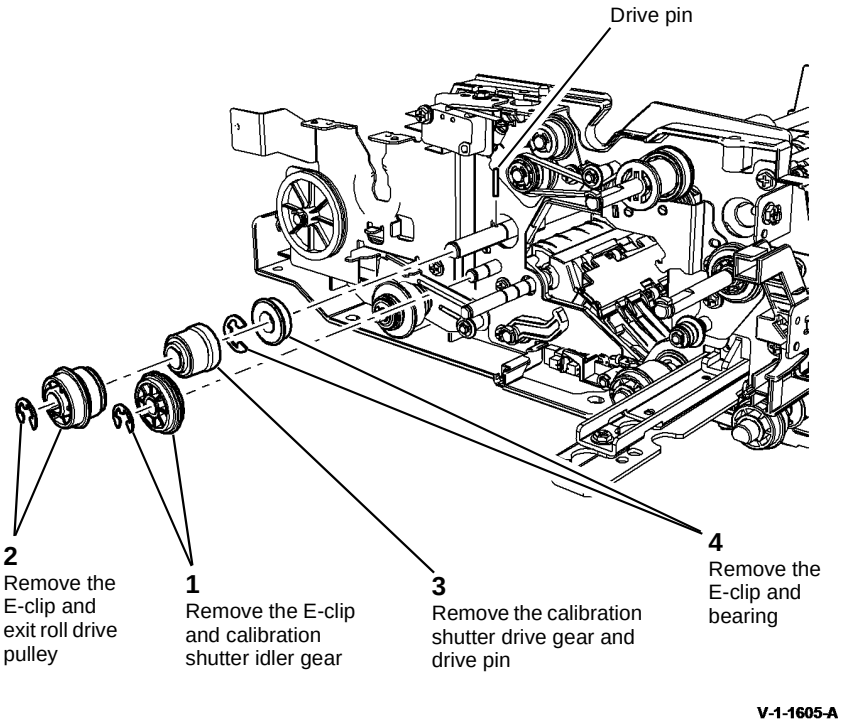


Figure 4 Exit roll components removal

6. Figure 5, Remove the calibration shutter lever and bearing.

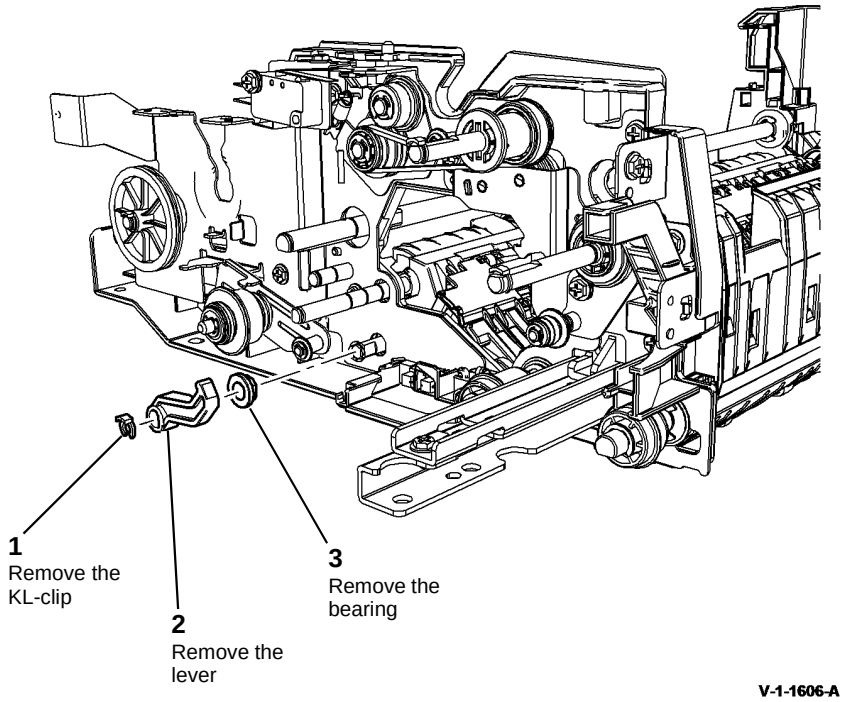


Figure 5 Shutter lever removal

7. Remove the top cover interlock switch and bracket (1 screw), PL 5.10 Item 13 and PL 5.10 Item 14.

8. Figure 6, remove the mid scan roll drive pulley, PL 5.19 Item 13 and bearing.

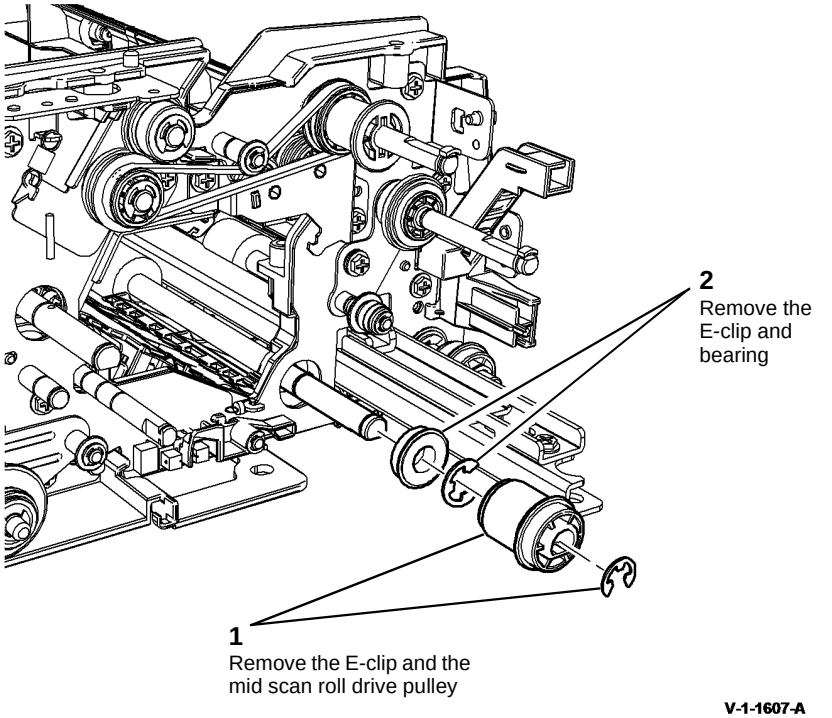


Figure 6 Mid scan pulley removal

9. Figure 7, remove the pre scan roll drive pulley, PL 5.19 Item 12 and bearing.

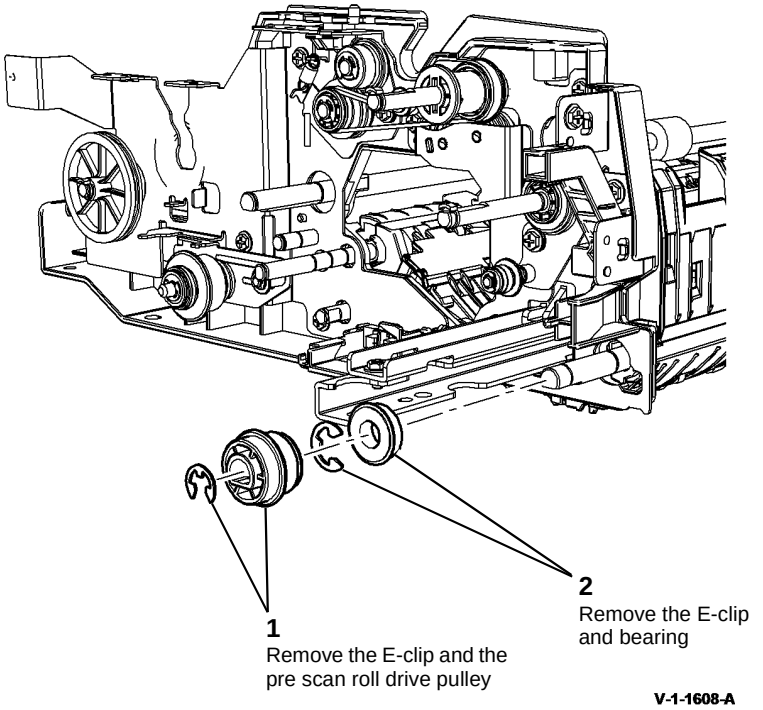


Figure 7 Pre scan roll pulley removal

10. Figure 8, remove the tray elevator reduction gear, PL 5.19 Item 9.

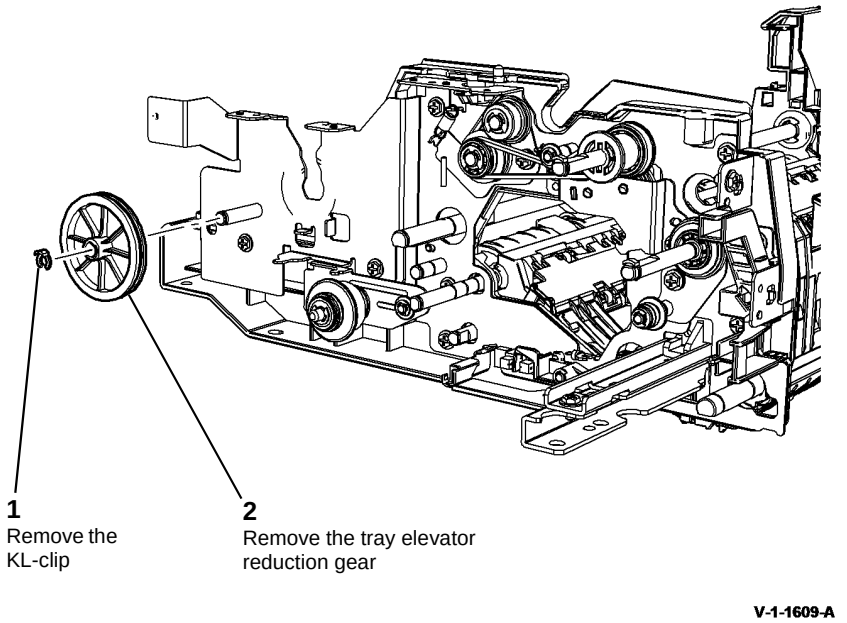


Figure 8 Reduction gear removal

11. Figure 9, remove the read motor intermediate pulley, PL 5.19 Item 15 and the belt tensioner.

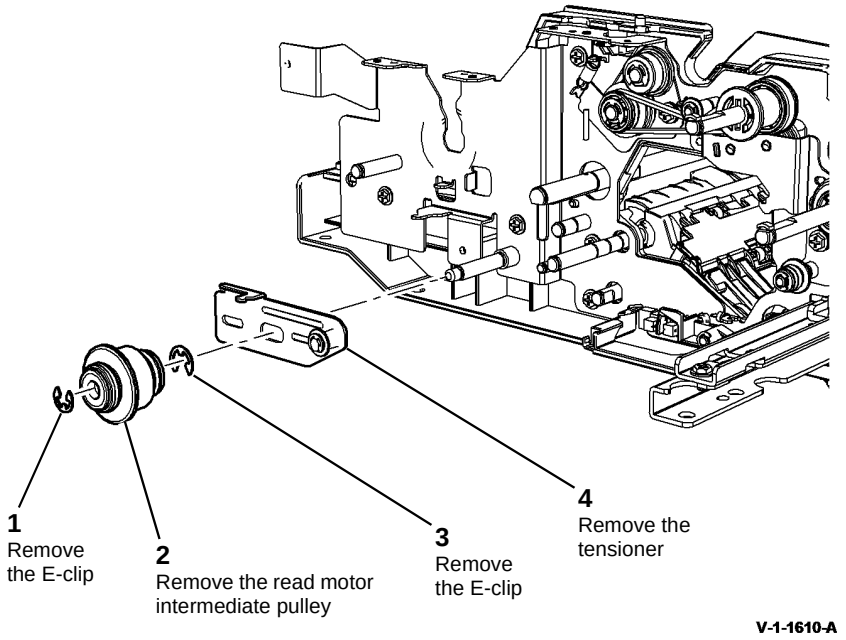


Figure 9 Intermediate pulley removal

12. Figure 10, remove the pre scan belt idler pulley, PL 5.19 Item 14.

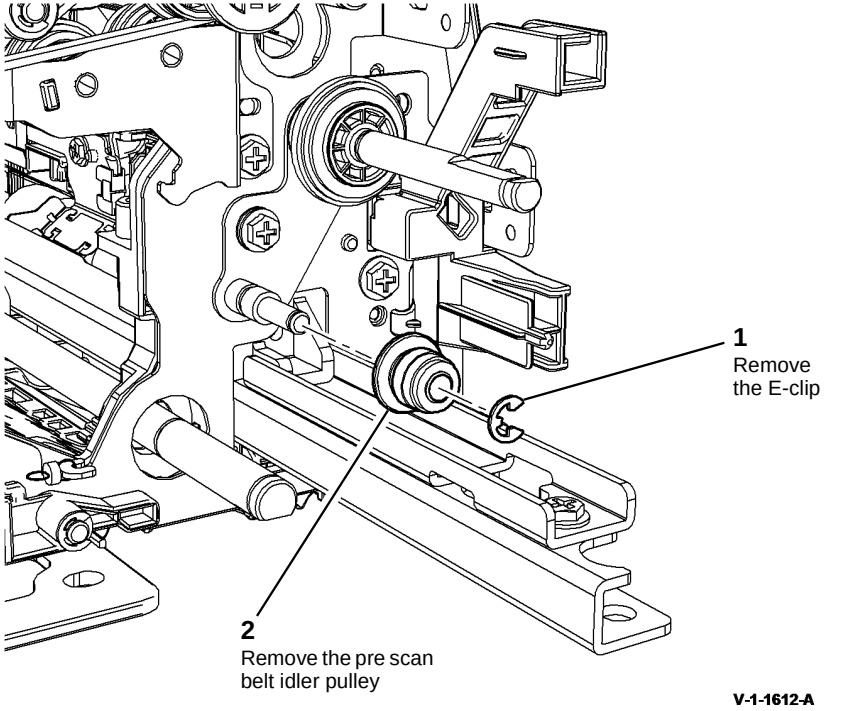


Figure 10 Idler pulley removal

13. Figure 11, remove the drives support plate.

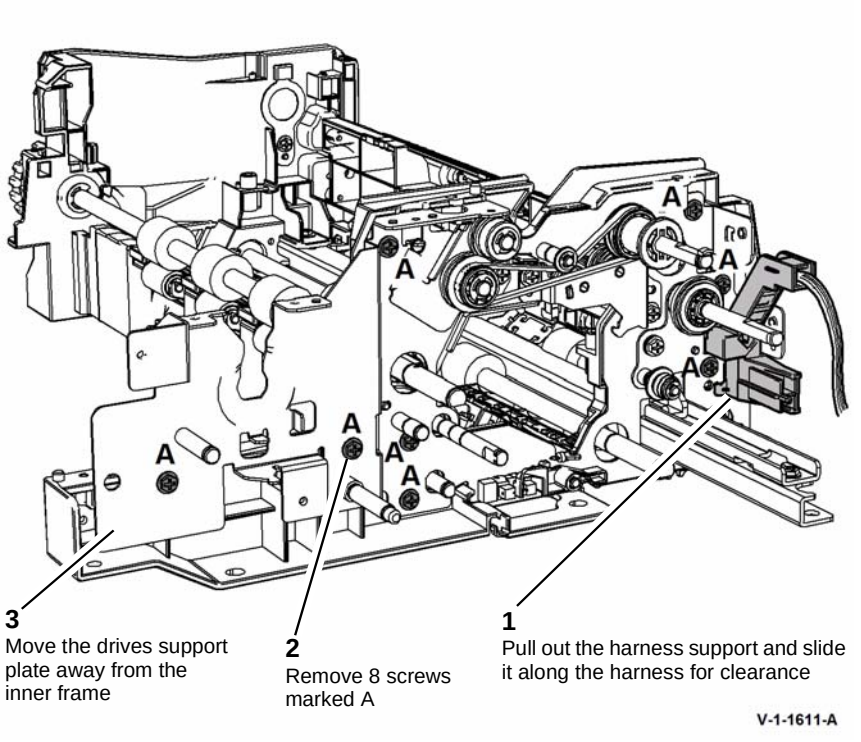


Figure 11 Support plate removal

14. Figure 12, from the front face of the drives support plate, remove the takeaway roll drive gear, PL 5.19 Item 6.

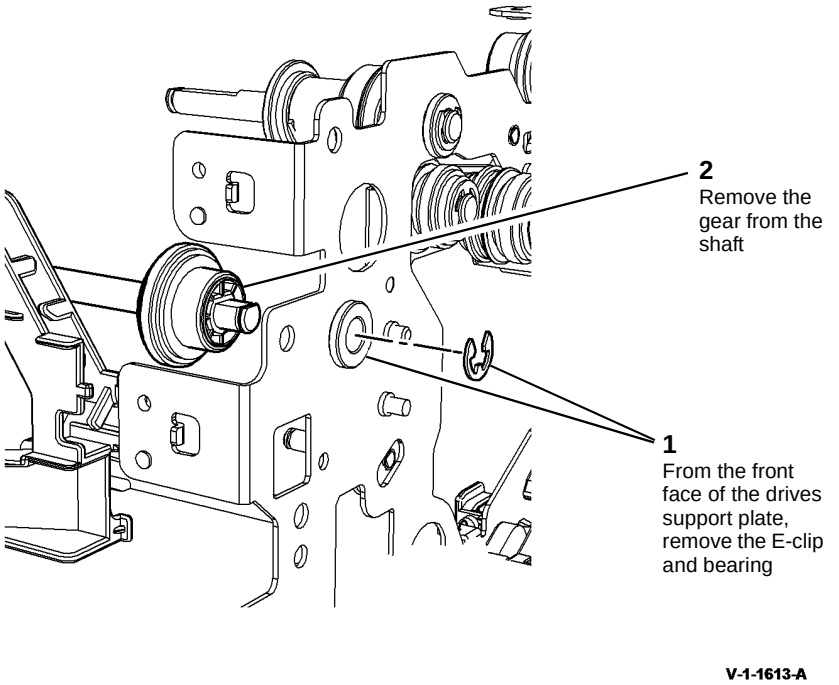


Figure 12 Drive gear removal

15. Figure 13, remove the retard/feed drive gear/pulley, PL 5.19 Item 22 and feed assembly drive belt, PL 5.19 Item 18.

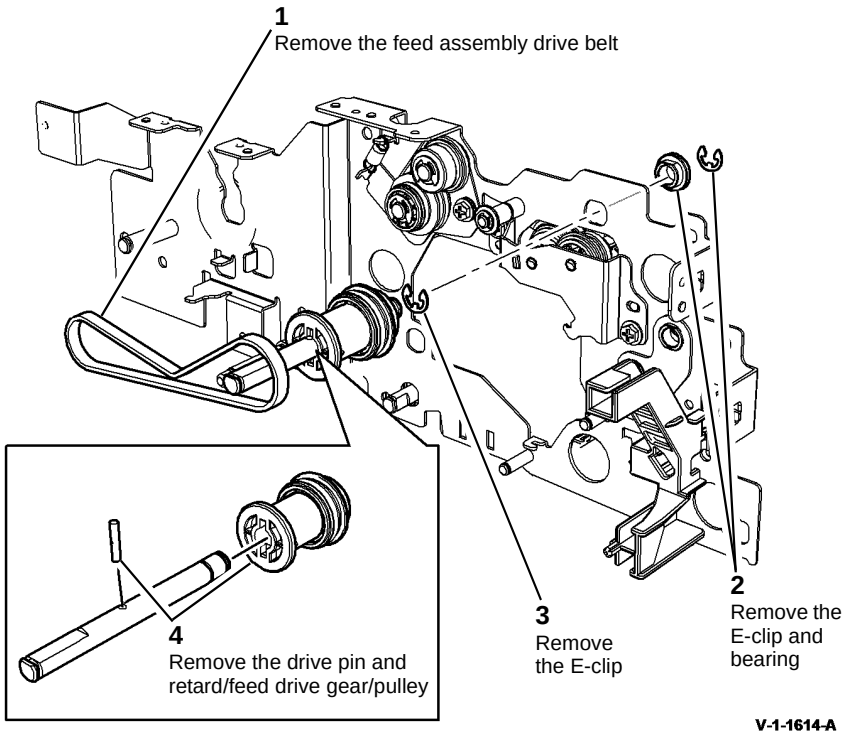


Figure 13 Gear and belt removal

16. Figure 14, remove the feed assembly drive idler gear, PL 5.19 Item 5 and the feed assembly drive gear/pulley, PL 5.19 Item 11.

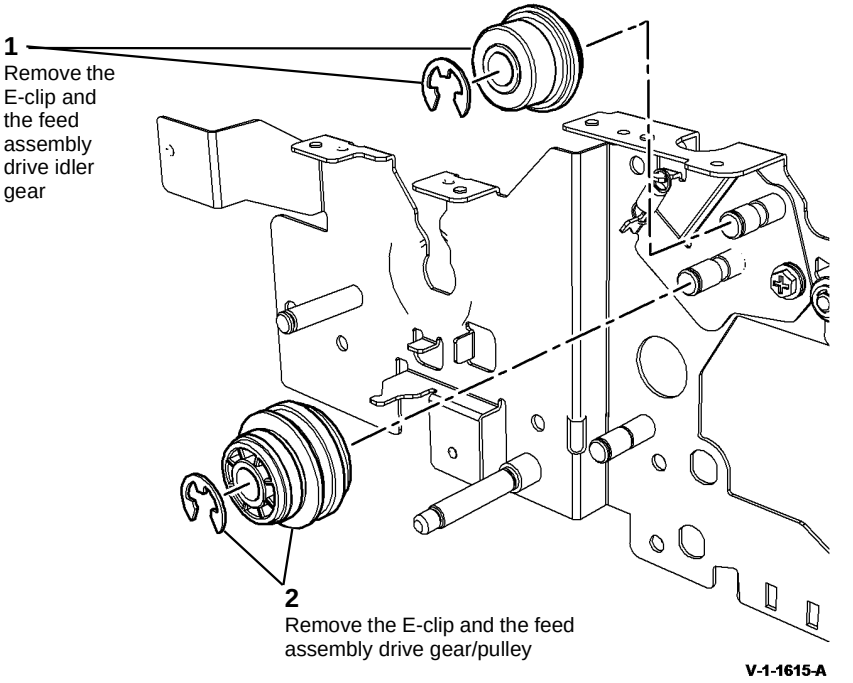


Figure 14 Drive and idler gears removal

17. Figure 15, from the front face of the drives support plate, remove the retard roll intermediate drive gear, PL 5.19 Item 1, the retard roll driven gear, PL 5.19 Item 2 and the retard roll drive gear, PL 5.19 Item 3.

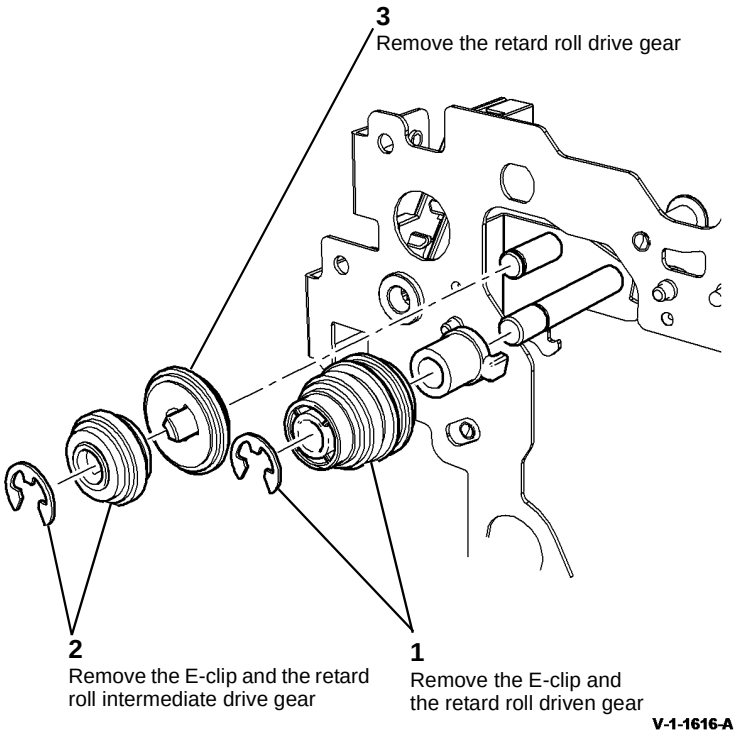


Figure 15 Retard drive removal

18. Figure 16, from the front face of the outer frame, remove the tray elevator reduction gear, PL 5.19 Item 9.

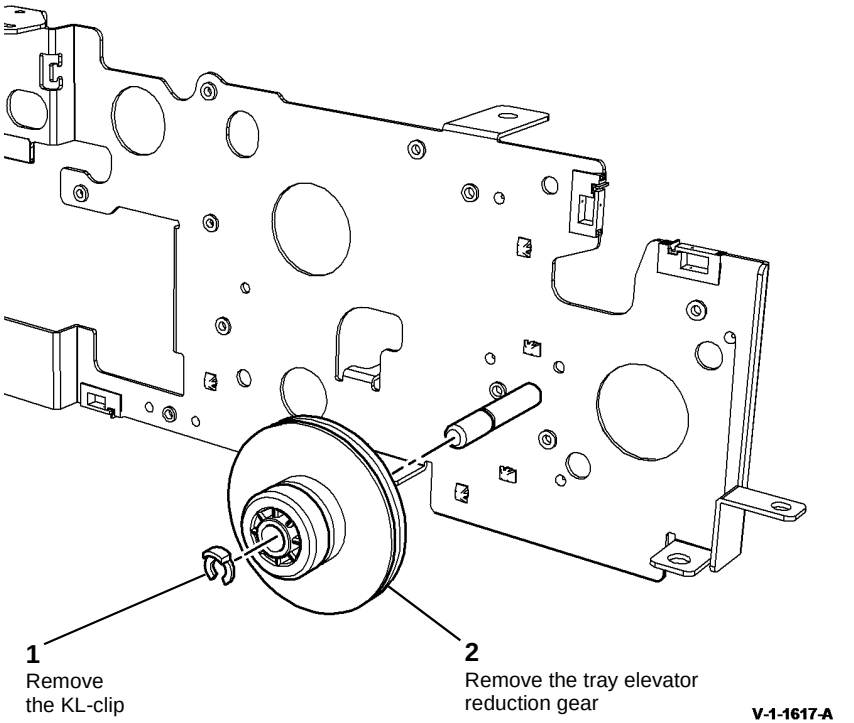


Figure 16 Reduction gear removal

19. Figure 17, from the front face of the outer frame, remove the feed clutch drive gear/pulley, PL 5.19 Item 4 and the TAR clutch drive gear, PL 5.19 Item 7.

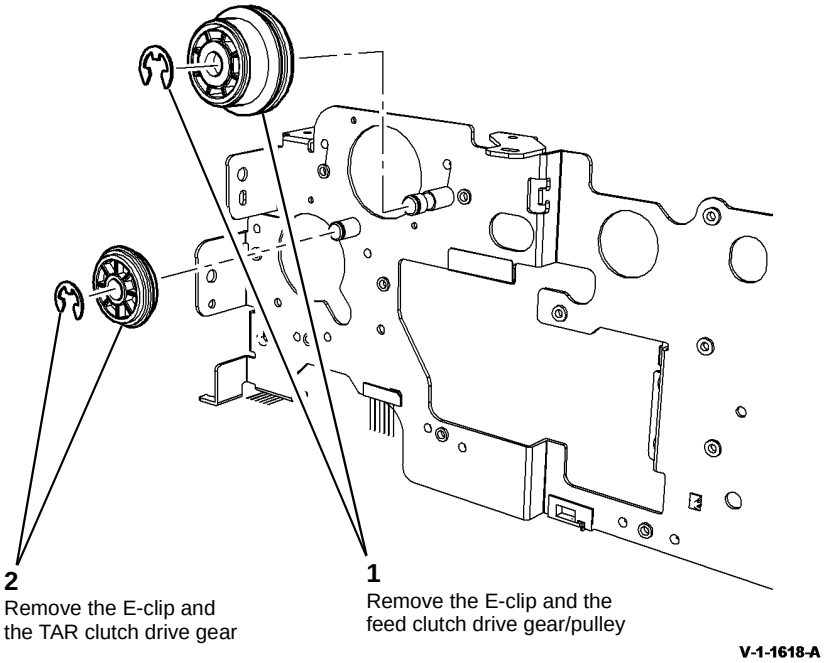


Figure 17 Gears removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 10.1 Short Paper Path Assembly

Parts List on PL 10.25

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The following removal procedure illustrates the W/OTAG 001 short paper path assembly. However, this procedure is also common to the W/TAG 001 short paper path assembly.*

1. Remove the fuser assembly, (45-55 ppm) PL 10.8 Item 1, (65-90 ppm) PL 10.10 Item 1.
2. Remove the duplex transport, REP 80.5.
3. Remove the xerographic module and place in a black bag, PL 90.20 Item 2.
4. Remove the transfer / detack corotron, PL 90.20 Item 8.
5. Remove the rear cover, PL 28.10 Item 1.
6. Prepare the power and control module, Figure 1.

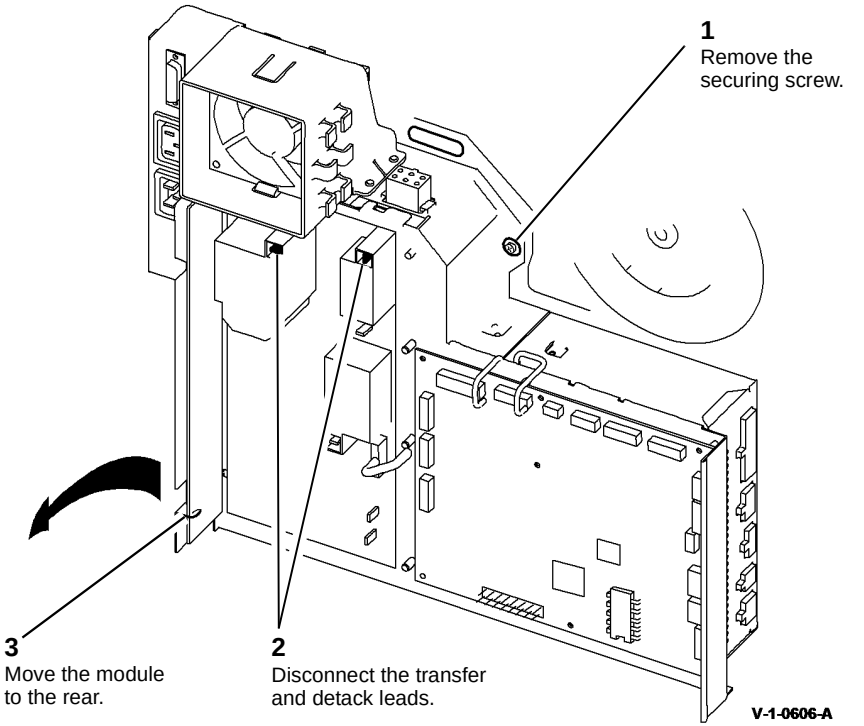


Figure 1 Prepare the power and control module

7. Remove the short paper path assembly, Figure 2.

NOTE: *On W/TAG 001 machines, PJ43 will be connected to the short paper path fan. Disconnect PJ43 before removing the short paper path.*

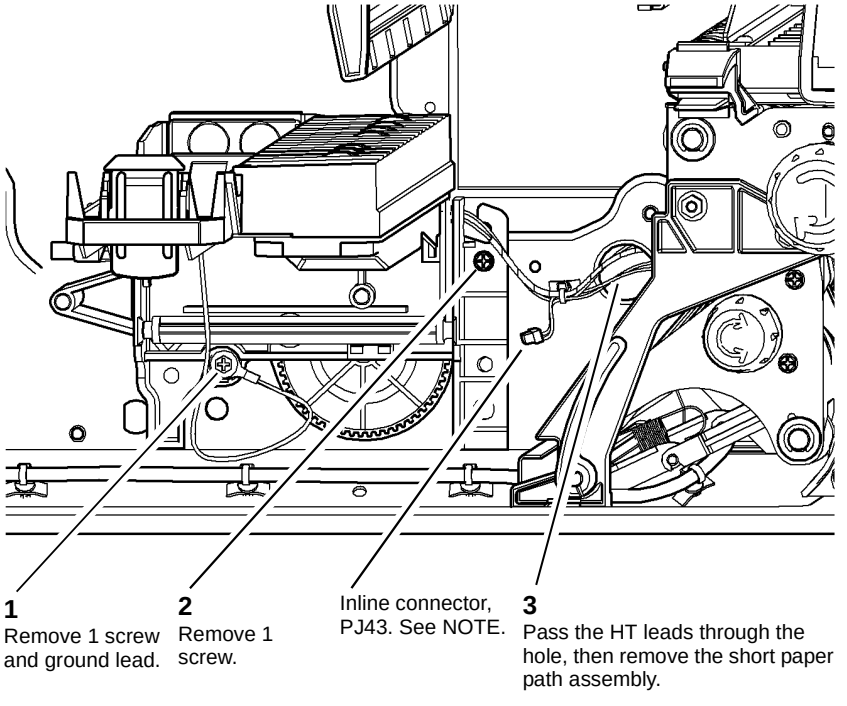


Figure 2 Remove short paper path assembly

Replacement

NOTE: *On W/TAG 001 machines, the following replacement procedure must be performed in conjunction with the related service kit instruction.*

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

CAUTION

To ensure the transport hinge is located correctly, First install the left hand screw, with the ground lead, then the right hand screw.

2. Check that the detack wire with the plastic sleeve is routed correctly on the transport hinge, Figure 3.

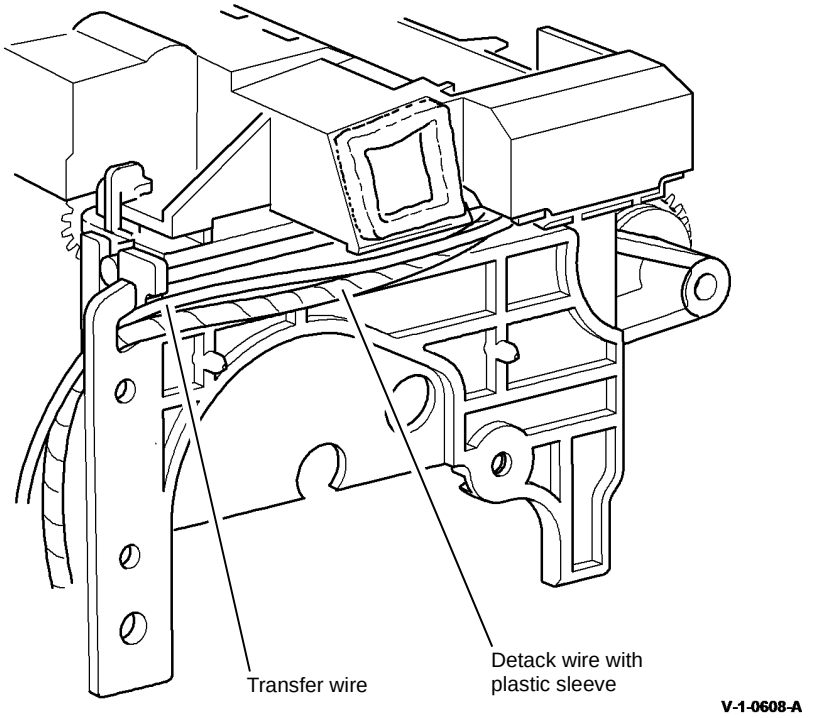


Figure 3 Spiral wrap location

3. Position the ground wire terminal in the left hand screw location on the hinge bracket and position the HT leads, Figure 4.
4. When locating the hinge bracket to the frame make sure that the hinge is pushed fully against the frame.
5. To ensure that the transport hinge is located correctly, first install the left hand screw, with the ground wire, then the right hand screw.

NOTE: *Ensure that both ends of the ground lead are connected to the correct terminals.*

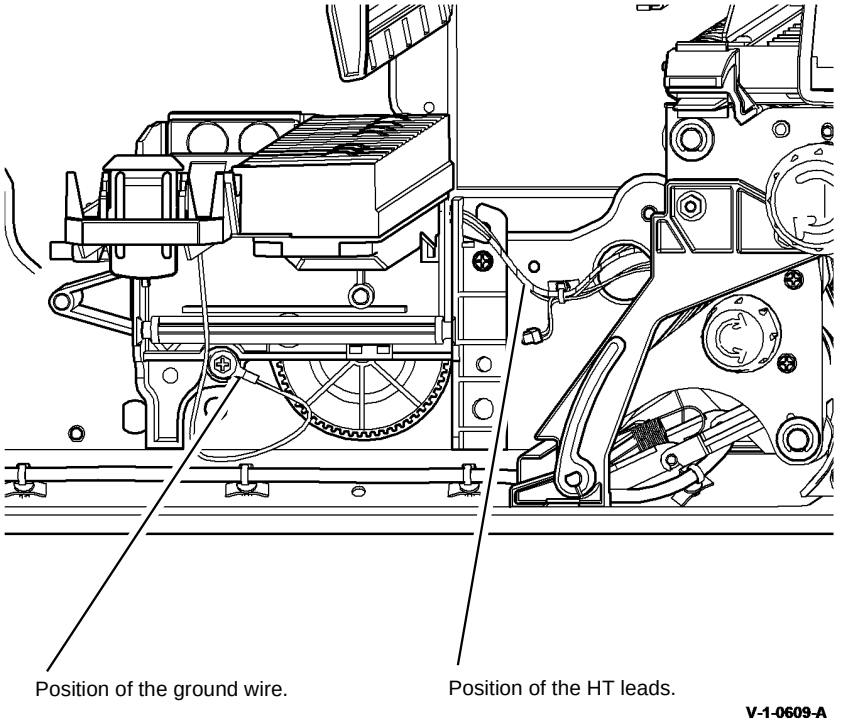


Figure 4 Ground wire and spiral wrap

6. After completing the replacement procedure, check that the short paper path assembly latches without excessive force.
7. Raise and lower the latch mechanism of the short paper path assembly, PL 10.25 Item 1, to ensure that the transfer / detack corotron is parallel to the photoreceptor. If the movement of raising the short paper path assembly is not smooth, check the action of the corotron carrier PL 10.25 Item 2.

REP 10.2 Inverter Decurler Assembly

Parts List on PL 10.11, PL 10.12, PL 10.13, PL 10.14

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

1. Remove the fuser assembly, (45-55 ppm) PL 10.8 Item 1, (65-90 ppm) PL 10.10 Item 1.
2. Remove the duplex transport, REP 80.5.
3. Remove or undock the relevant output device:
   - REP 12.1 OCT Transport Assembly
   - REP 11.11-120 1K LCSS Removal
   - REP 11.13-110 2K LCSS Un-docking
   - REP 11.13-150 LVF BM Un-docking
   - REP 11.13-171 HVF Un-docking
4. Remove the right cover, PL 28.10 Item 4.
5. Remove the rear cover, PL 28.10 Item 1.
6. Remove the inverter decurler adjuster and retaining ring, Figure 1.

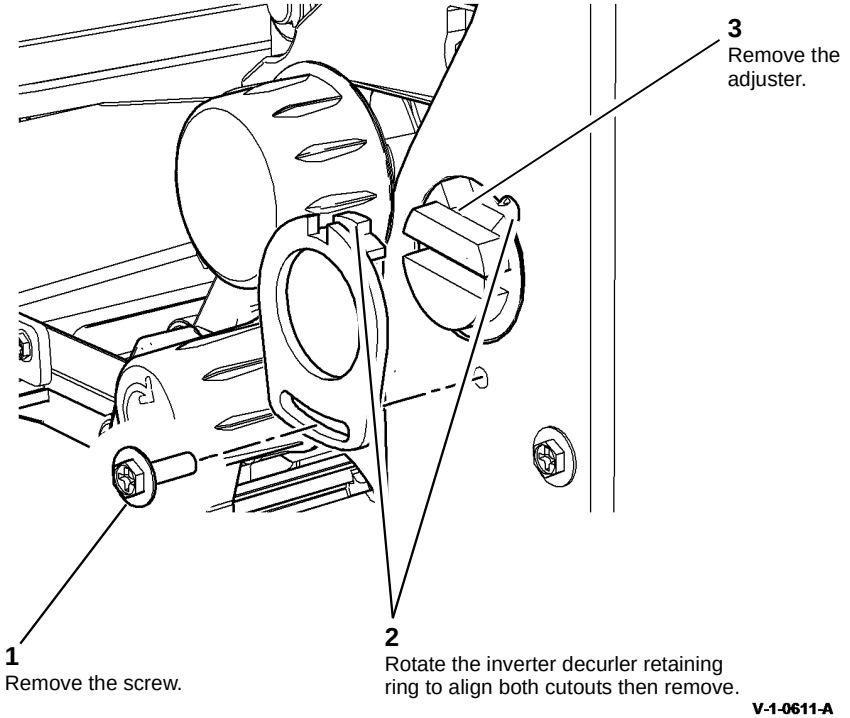


Figure 1 Adjuster and retaining ring

7. Remove the tie bar. Figure 2.

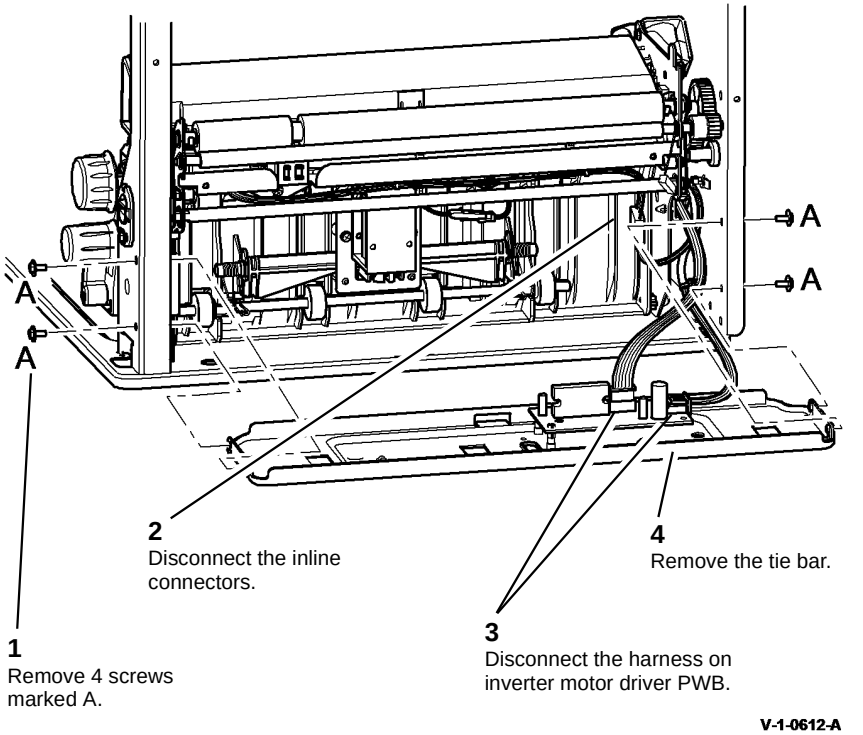


Figure 2 Tie bar

8. Prepare to remove the inverter decurler assembly, Figure 3.

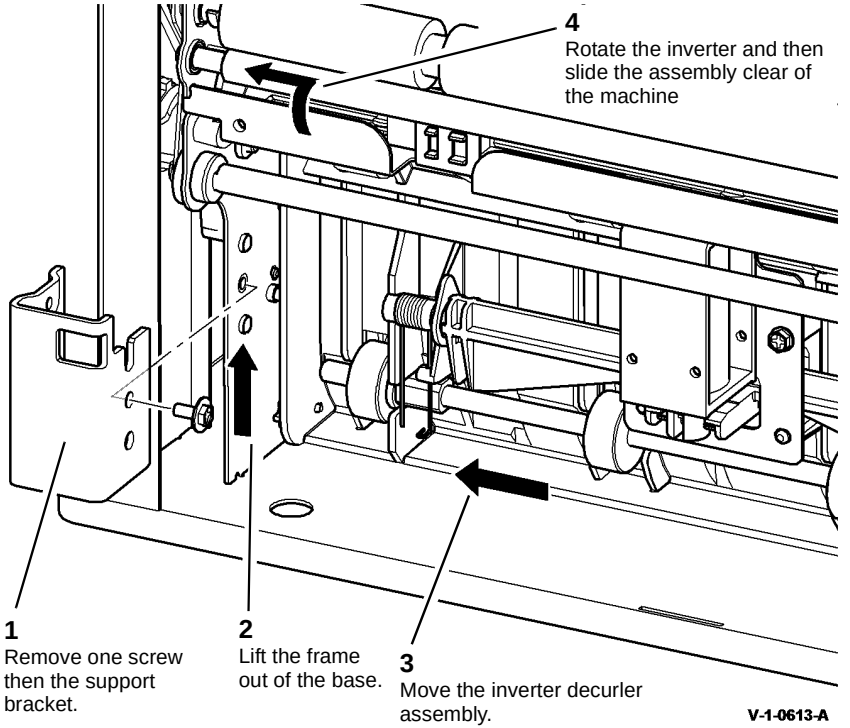


Figure 3 Move the inverter to the front

9. Remove the inverter decurler assembly through the right side of the machine, Figure 4.

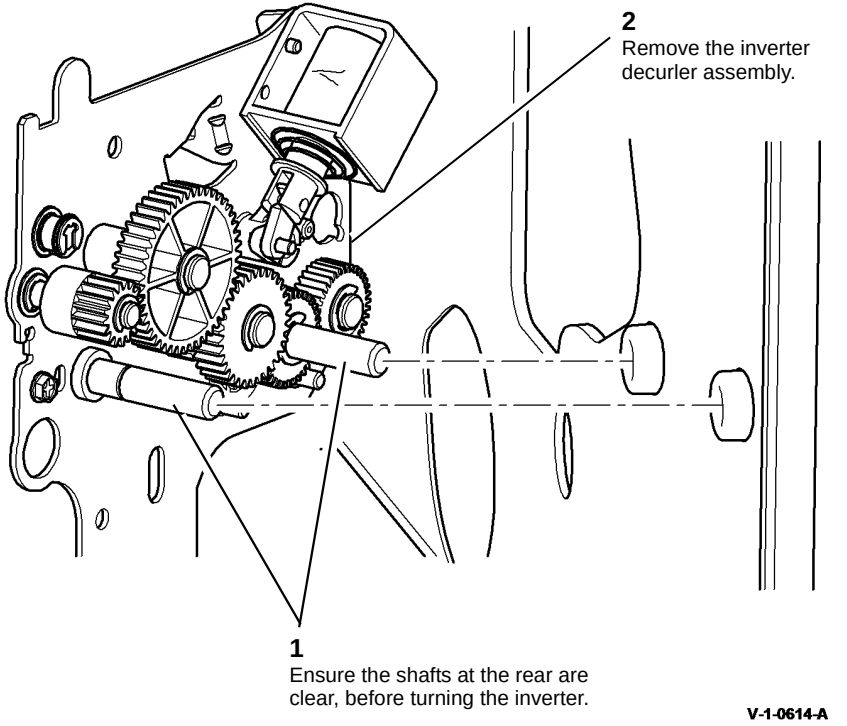


Figure 4 Removal

Replacement

Before installing the inverter decurler assembly check the following:

1. The inverter motor harness is routed correctly. Check that the harness does not get trapped between the inverter frame and the base.
2. The solenoid harness connector is located at the rear of the inverter frame, Figure 5.

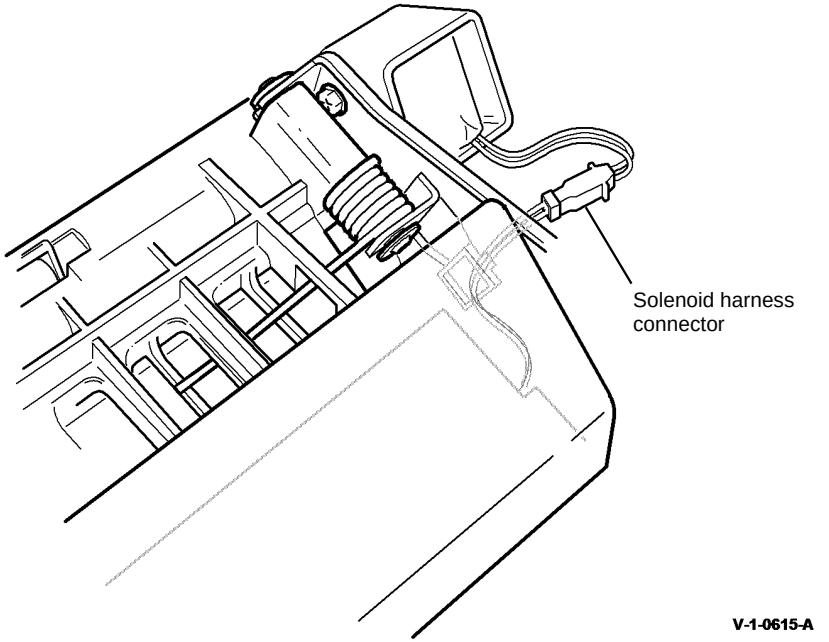


Figure 5 Solenoid harness connector

3. The IOT exit sensor mounting bracket is correctly located in the cut-out at the front and rear of the inverter frame, Figure 6.

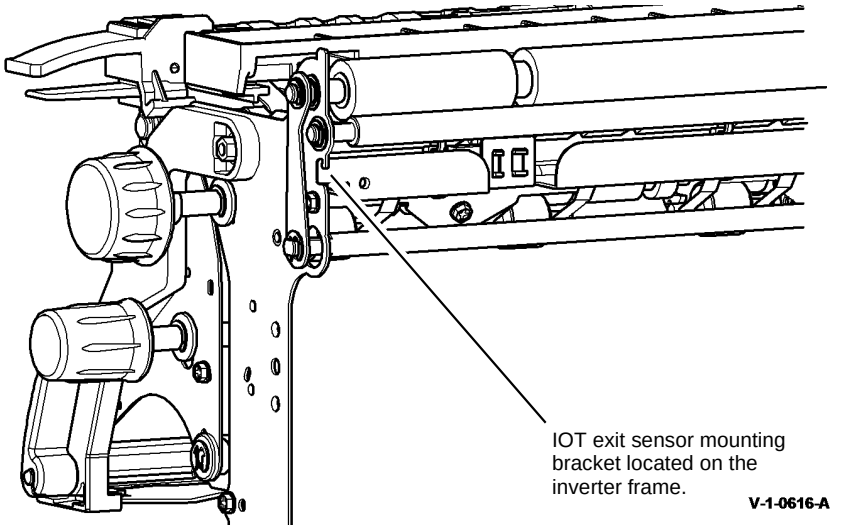


Figure 6 IOT exit sensor mounting bracket

4. Make sure that the baffle guide, PL 10.13 Item 3 and upper baffle, PL 10.12 Item 14 are linked correctly. When latch 3d/4d is released, the two baffles must lift together.

5. Ensure the gear indexer is set to the neutral position, Figure 7.

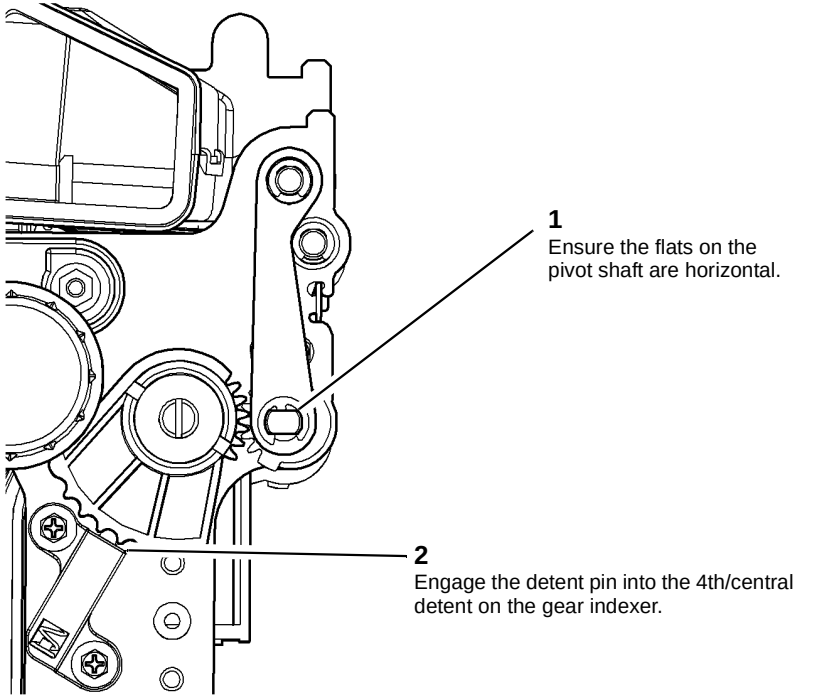


Figure 7 Initial setup of the gear indexer

6. Replacement of the inverter assembly is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

   NOTE: *When the idler shafts are located, Figure 4. Rotate knob 3C clockwise to engage the drives coupling between the inverter and the drives plate. This will also allow the inverter to locate into the base of the machine, Figure 3.*

7. Perform ADJ 10.1 Inverter Decurler Adjustment.

REP 10.3 Inverter Motor

Parts List on PL 10.14

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

1. Remove the inverter assembly, REP 10.2.
2. Remove the inverter motor, Figure 1.

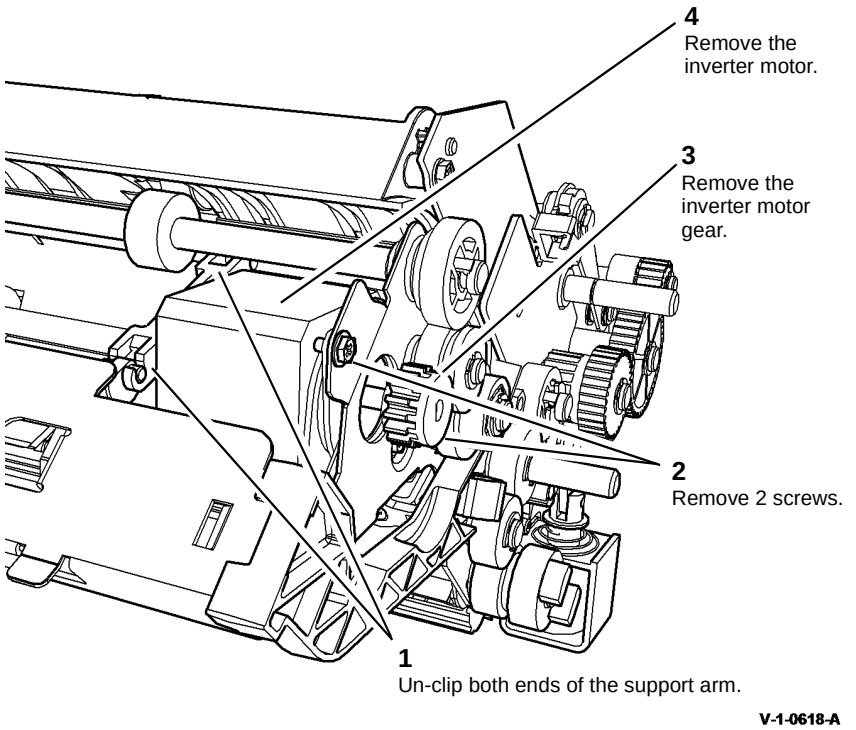


Figure 1 Inverter motor

Replacement

Replacement is the reverse of the removal procedure.

REP 10.4 Inverter Path Solenoid

Parts List on PL 10.11

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Remove upper baffle assembly, REP 10.7.
3. Remove the diverter solenoid, Figure 1.

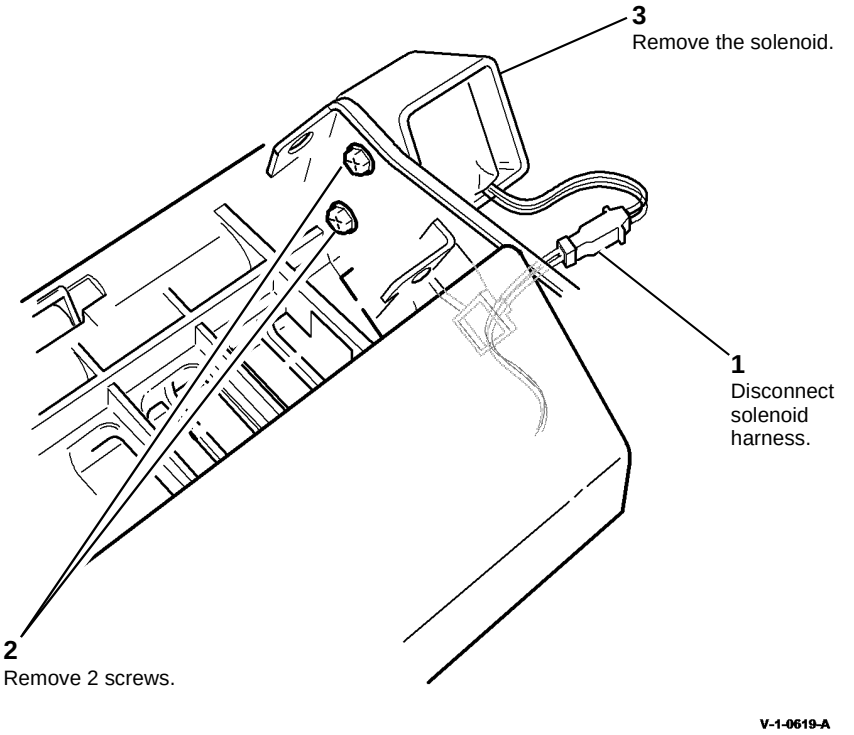


Figure 1 Inverter path solenoid

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that the solenoid harness connector is located at the rear of the inverter frame as in Figure 1.
3. Make sure that the link arm is connected to the solenoid armature. Manually operate the solenoid armature and check that the inverter gate operates correctly.

REP 10.5 Inverter Nip Solenoid

Parts List on PL 10.11

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tie bar, Figure 1.

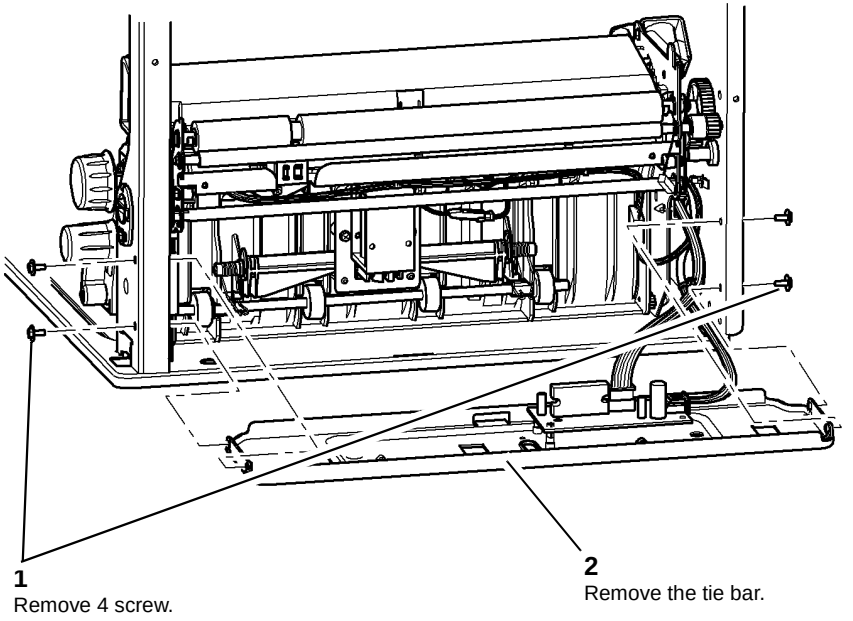


Figure 1 Remove the tie bar

2. Remove the inverter nip solenoid, Figure 2.

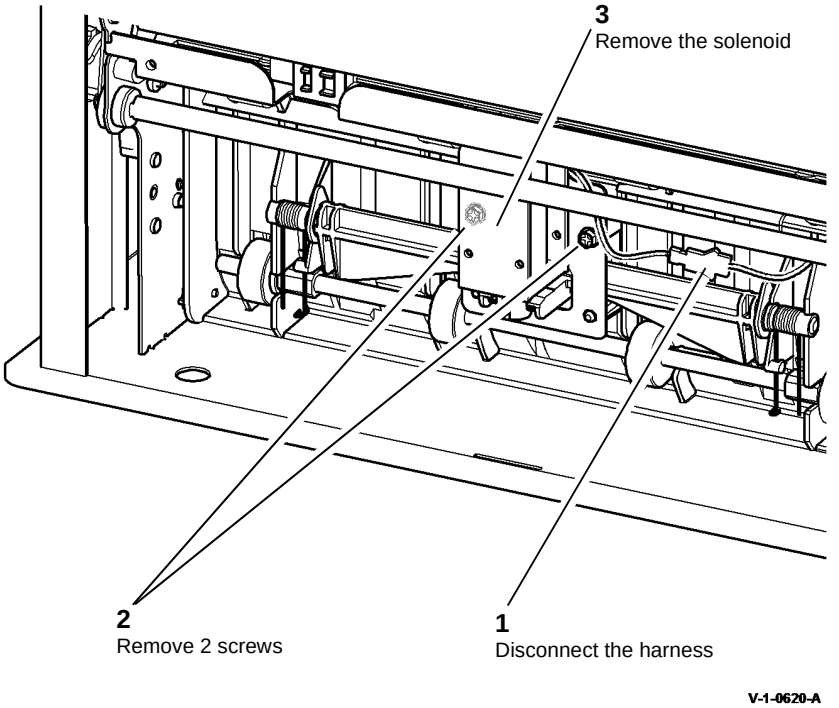


Figure 2 Inverter nip solenoid

Replacement

Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 10.6 Decurler Camshaft Assembly

Parts List on PL 10.13

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Prepare to remove the camshaft, Figure 1.

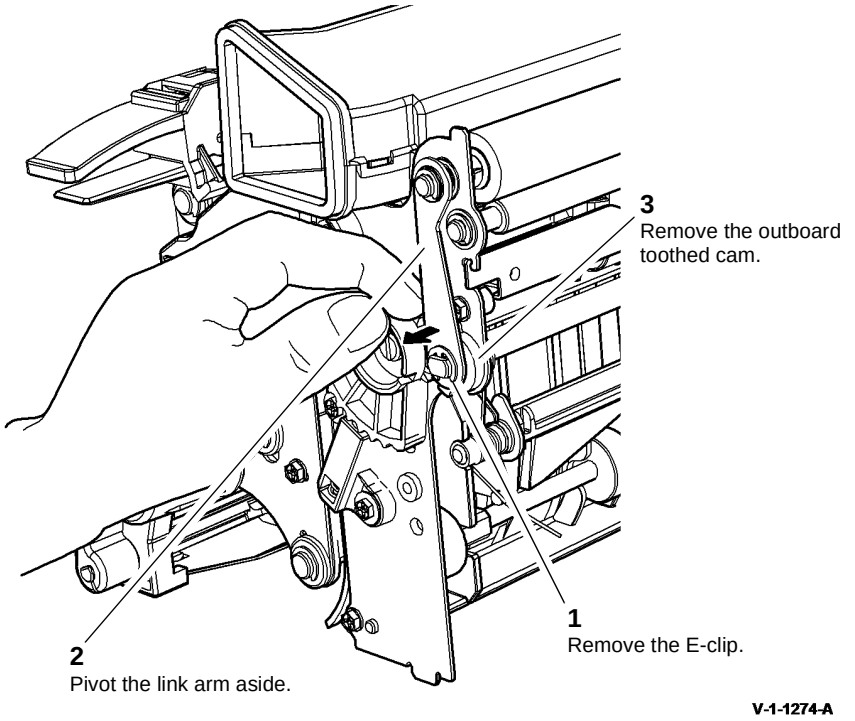


Figure 1 Outboard fixings

3. Remove the camshaft, Figure 2.

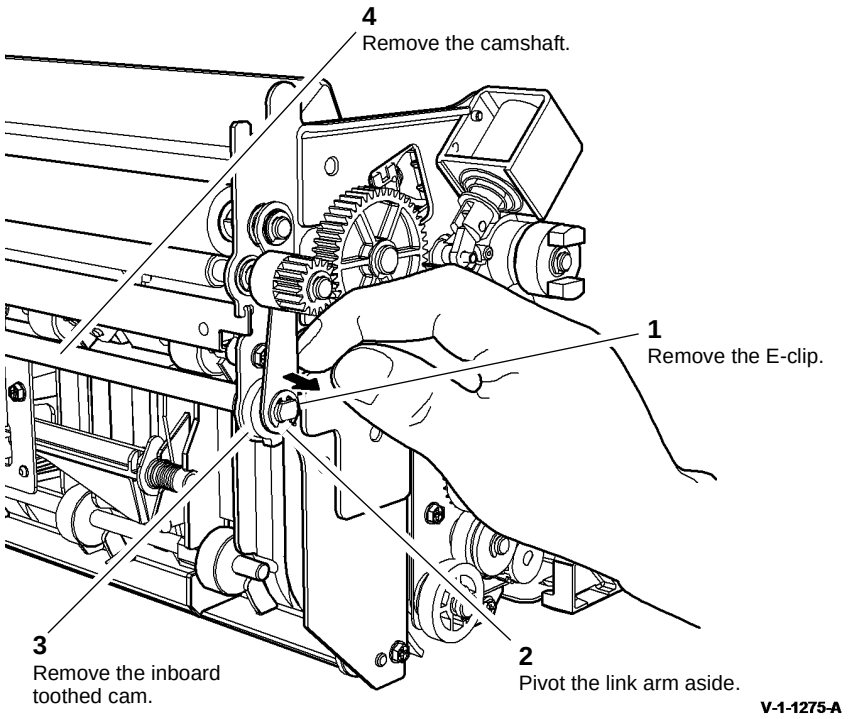


Figure 2 Inboard fixings

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure the position of the gear indexer is set to neutral, Figure 3.

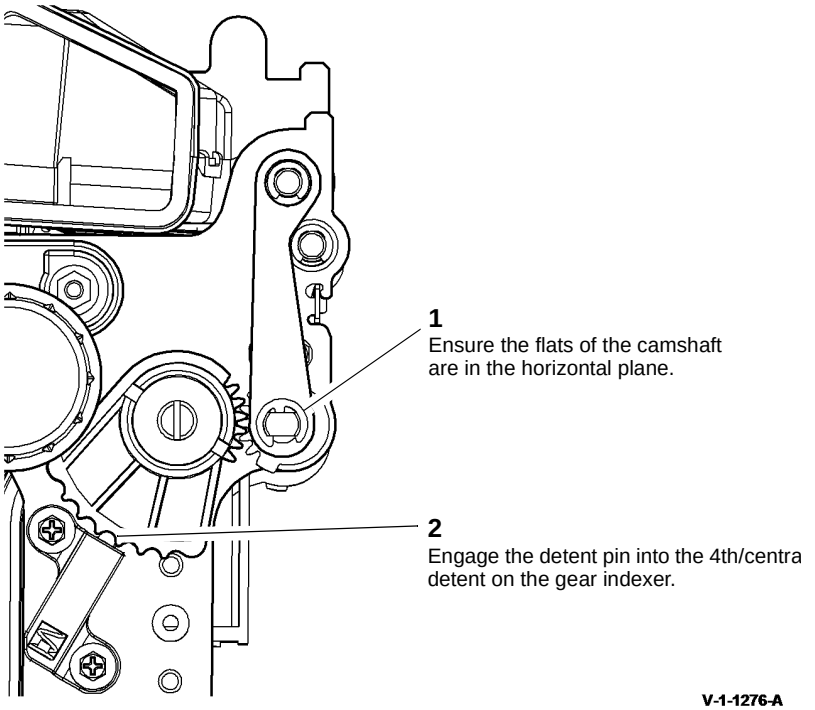


Figure 3 Neutral position

3. Ensure the inboard toothed cam is orientated correctly, Figure 4.

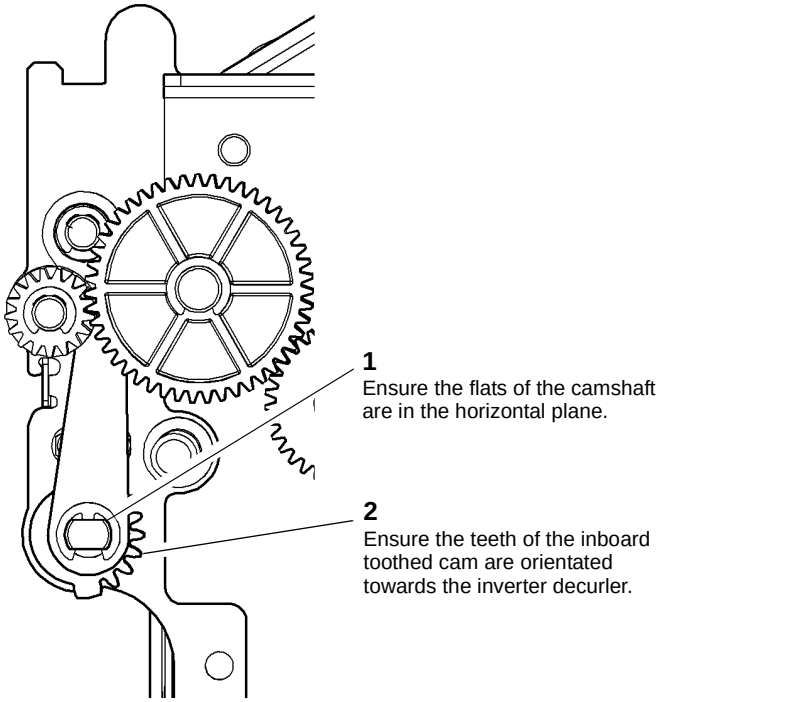


Figure 4 Inboard cam position

REP 10.7 Upper Baffle Assembly

Parts List on PL 10.12

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. **(65-90 ppm Only).** Remove the inverter sensor, REP 10.20.
3. Remove the upper baffle assembly, Figure 1.

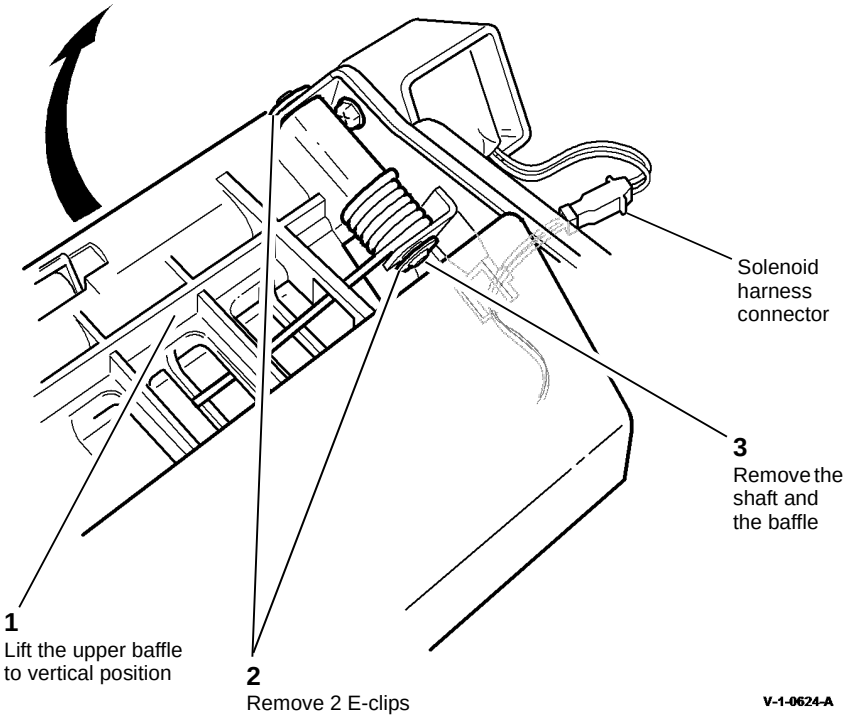


Figure 1 Upper baffle assembly

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that the solenoid harness connector is located at the rear of the inverter frame, refer to Figure 1.
3. Make sure that the two upper baffles are linked correctly. When the latch 3d/4d is released, the two baffles lift together.

REP 10.8 Nip Split Shaft Assembly

Parts List on PL 10.11

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove or undock the relevant output device:
   - REP 12.1 OCT Transport Assembly
   - REP 11.11-120 1K LCSS Removal
   - REP 11.13-110 2K LCSS Un-docking
   - REP 11.13-150 LVF BM Un-docking
   - REP 11.13-171 HVF Un-docking
2. Remove the right cover, PL 28.10 Item 4.
3. Remove the rear cover, PL 28.10 Item 1.

4. Remove the tie bar, Figure 1.

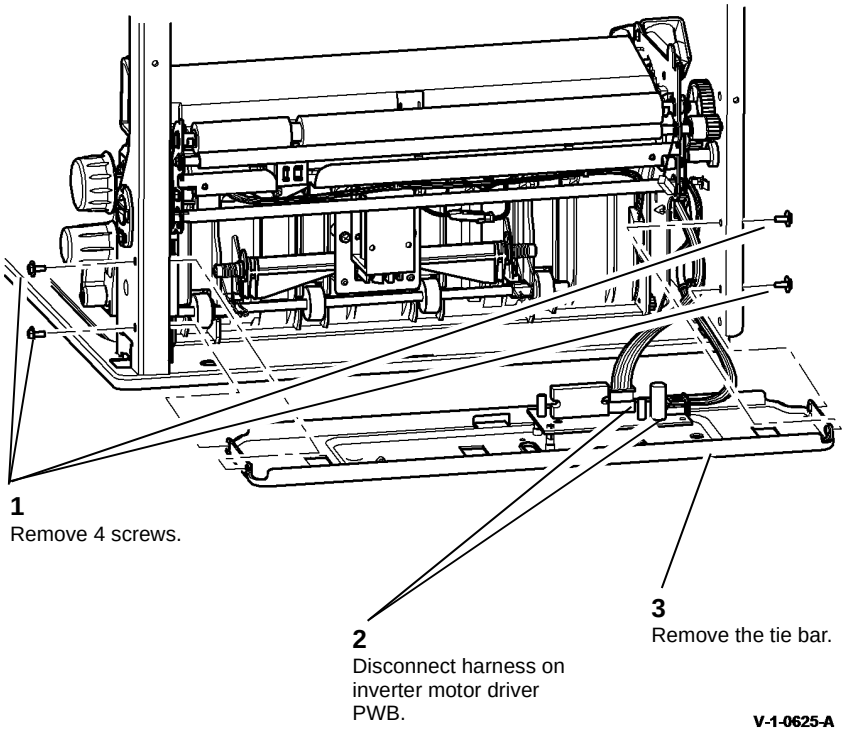


Figure 1 Tie bar

5. Remove the nip split shaft assembly, Figure 2.

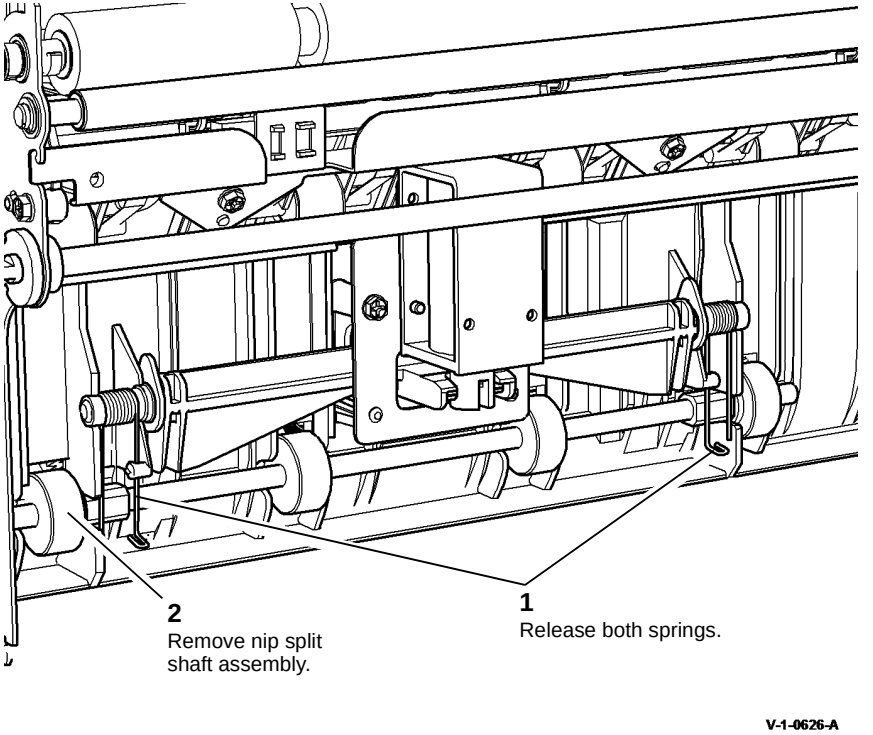


Figure 2 Nip split shaft assembly

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that both springs are positioned correctly, Figure 3.

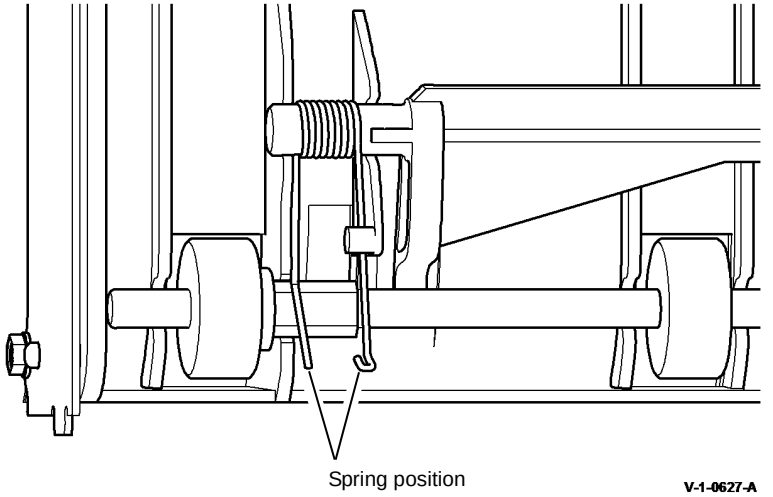


Figure 3 Location of the spring

REP 10.9 Shaft Actuator

Parts List on PL 10.11

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Remove the inverter nip solenoid, REP 10.5.
3. Remove the shaft actuator, Figure 1.

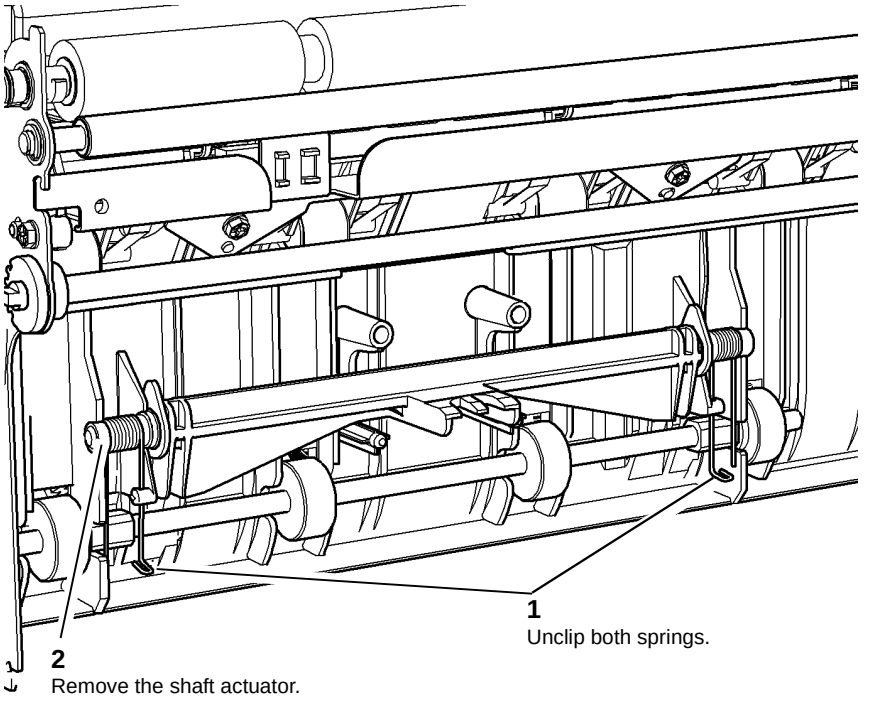


Figure 1 Shaft actuator

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that both springs are positioned correctly, Figure 2.

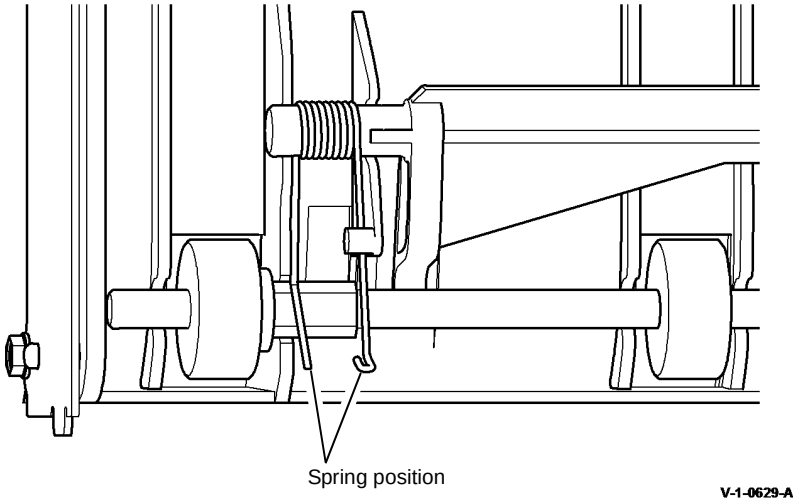


Figure 2 Location of the spring

REP 10.10 Fuser Latch

Parts List on (45-55 ppm) PL 10.8, (65-90 ppm) PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the SPDH, REP 5.19.
2. Remove the scanner module mounting frame, REP 60.16.
3. Refer to REP 60.1 and move the ROS to the side, Figure 1.

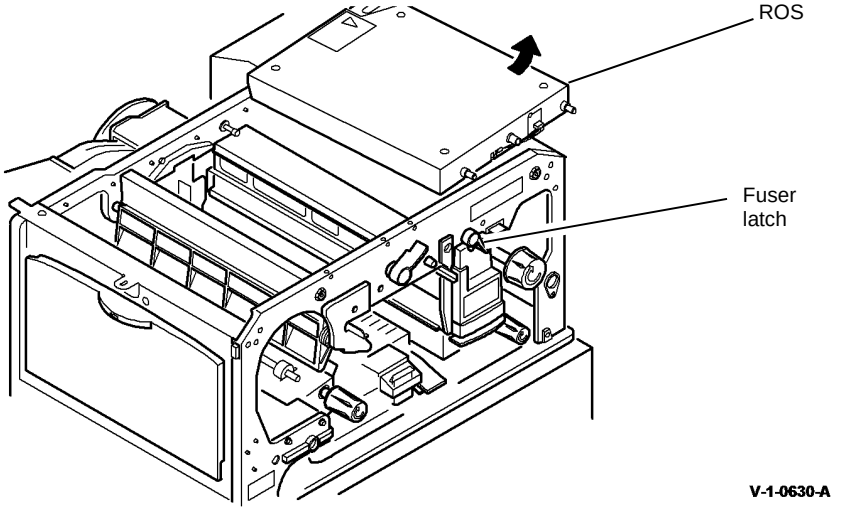


Figure 1 Move the ROS

WARNING

Take care when removing the latch. The latch contains a compressed spring, which can cause injury when released.

4. Hold the fuser latch pin in position with a screw driver and remove the screw at the back of the latch to release the fuser latch, latch pin and spring, Figure 2.

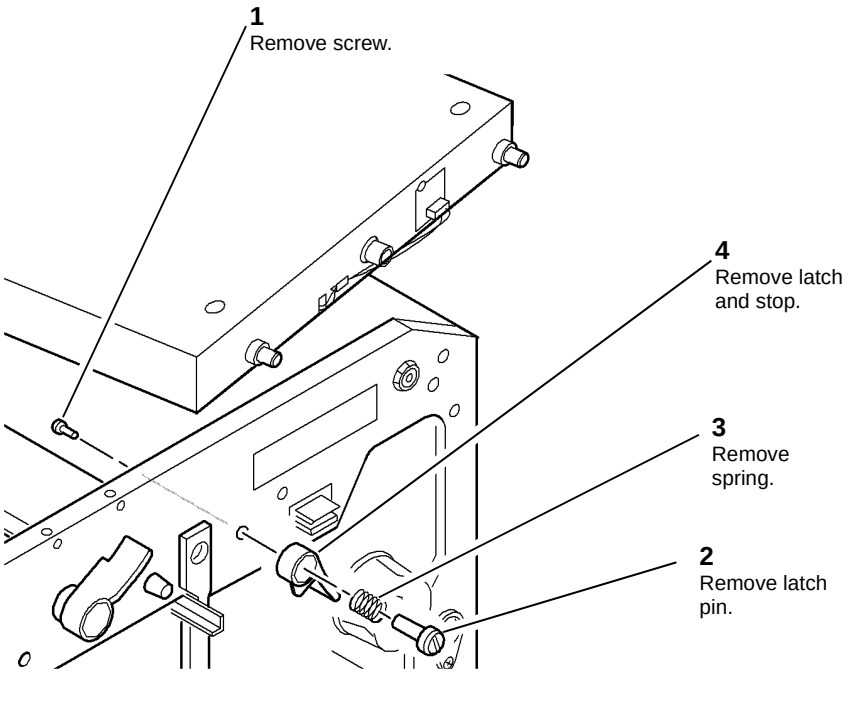


Figure 2 Remove the fuser latch

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Ensure that the latch stop is seated over the locator post on the machine frame, Figure 3.

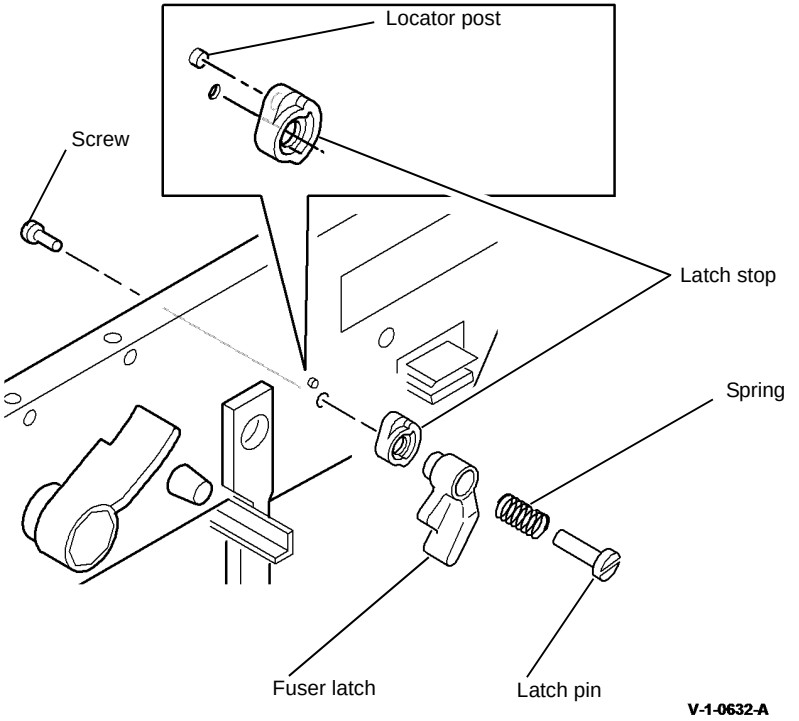


Figure 3 Locate the latch stop

REP 10.11 Inverter Gate

Parts List on PL 10.12

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter path solenoid, REP 10.4.
2. Remove the upper baffle assembly, REP 10.7.
3. Remove the inverter path solenoid link, Figure 1.

   NOTE: *When the link arm has been removed, a new link arm must be installed, PL 10.11 Item 1.*

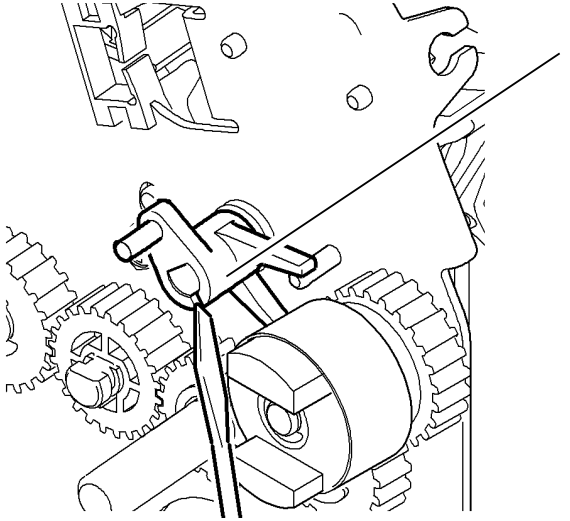


Figure 1 Inverter path solenoid link

4. Remove the tri-roll jam clearance knob 3C, Figure 2.

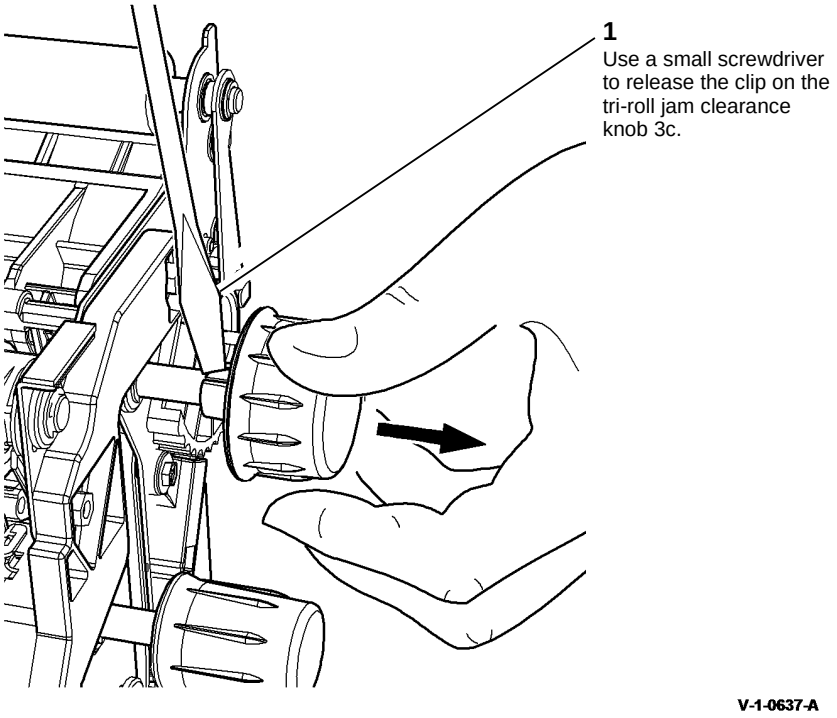


Figure 2 Tri-roll knob

CAUTION

Take care not break the inverter assembly bracket.

5. Prepare to remove the inverter gate, Figure 3.

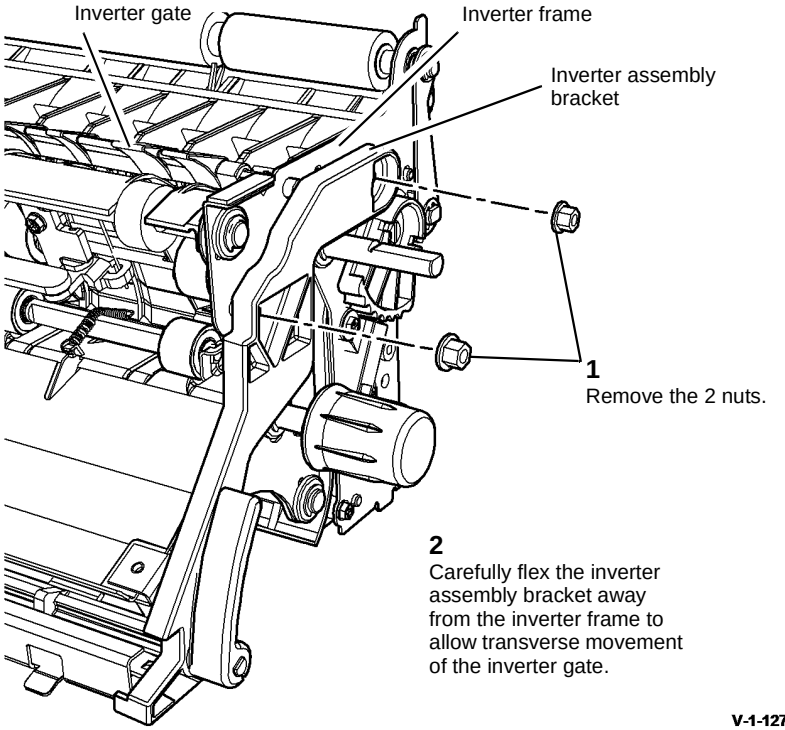


Figure 3 Inverter bracket

6. Remove the inverter gate, Figure 4.

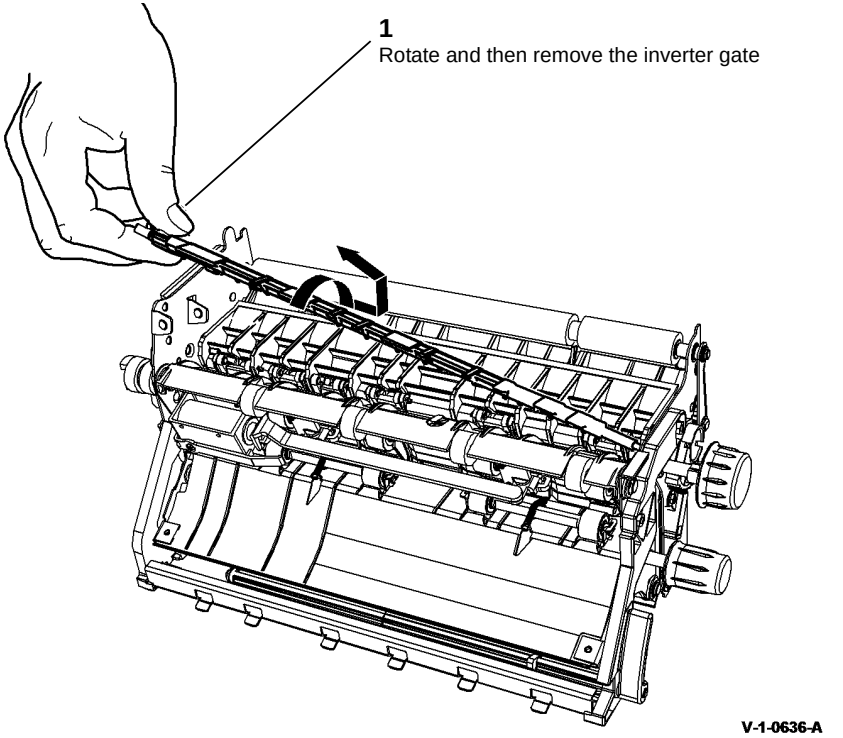


Figure 4 Inverter gate

Replacement

Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 10.12 Tri-Roll Shaft Assembly

Parts List on PL 10.12

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter gate, REP 10.11.
2. Remove the tri-roll shaft outboard bearing, Figure 1.

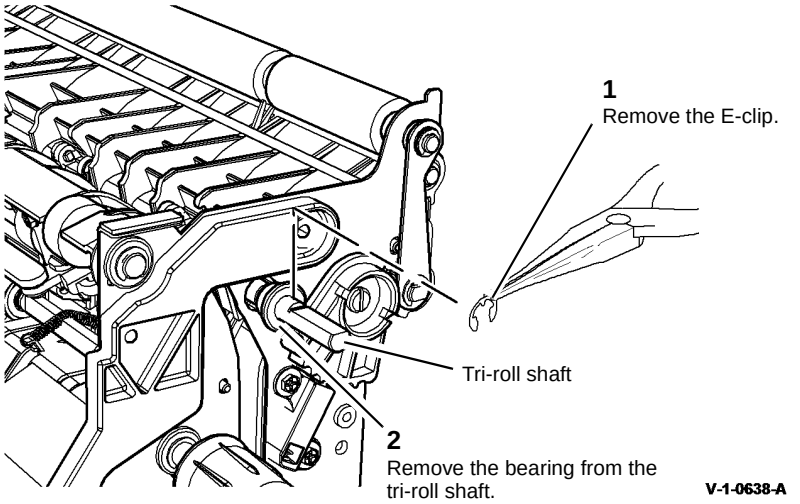


Figure 1 Tri-roll bearing

3. Remove the tri-roll shaft inboard bearing Figure 2.

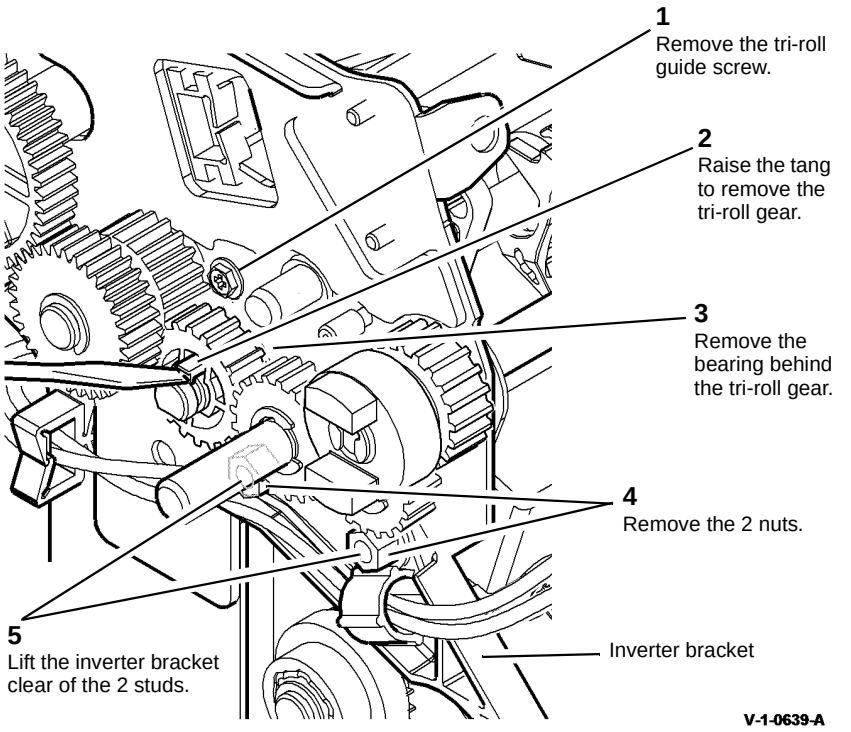


Figure 2 Tri-roll drive gear

4. Remove the inboard bearing of the post fuser exit roller, Figure 3.

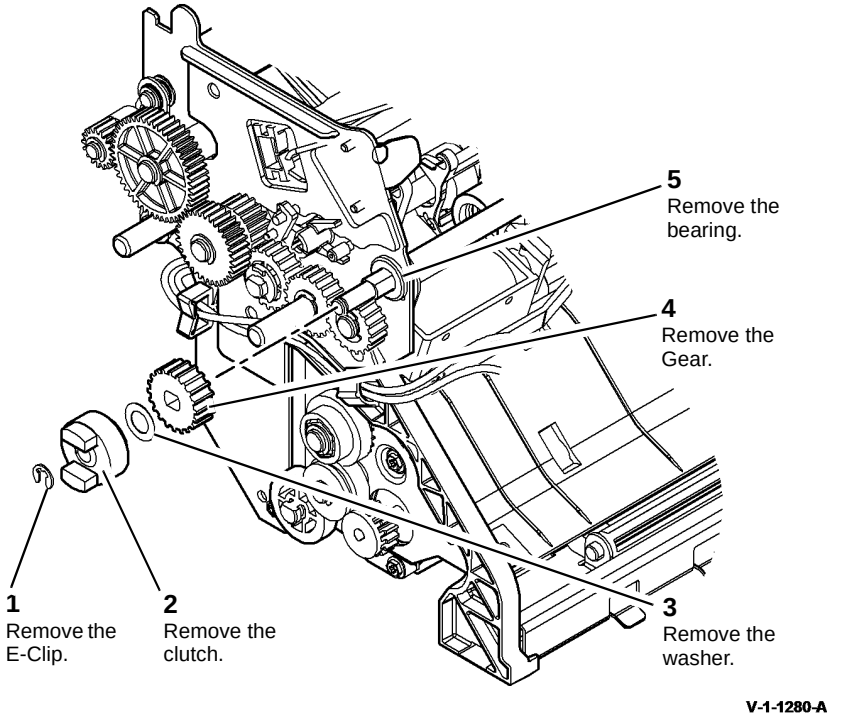


Figure 3 Inboard bearing

5. Prepare to remove the pivot assembly, Figure 4.

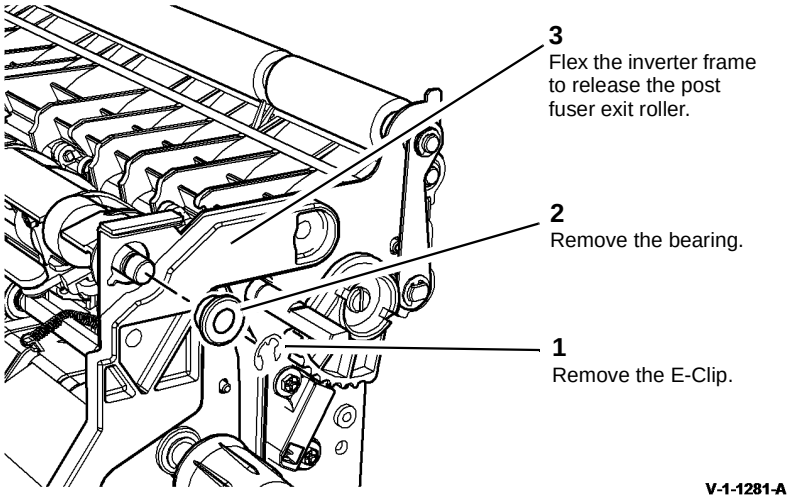


Figure 4 Inboard bearing

6. Prepare to remove the rear gravity gate finger, Figure 5.

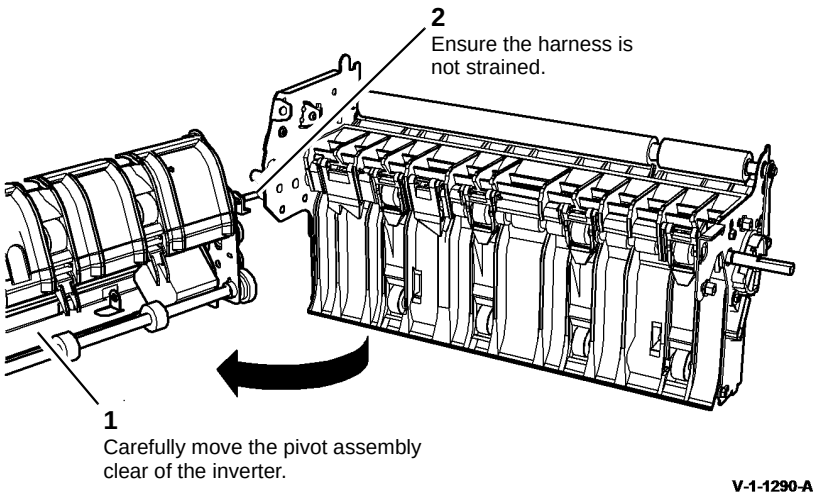


Figure 5 Pivot Assembly

NOTE: *The five gravity gate fingers wrap around the tri-roll shaft. Removal of the rear gravity gate finger aids the removal of the tri roll guide.*

7. Remove the rear gravity gate finger, Figure 6.

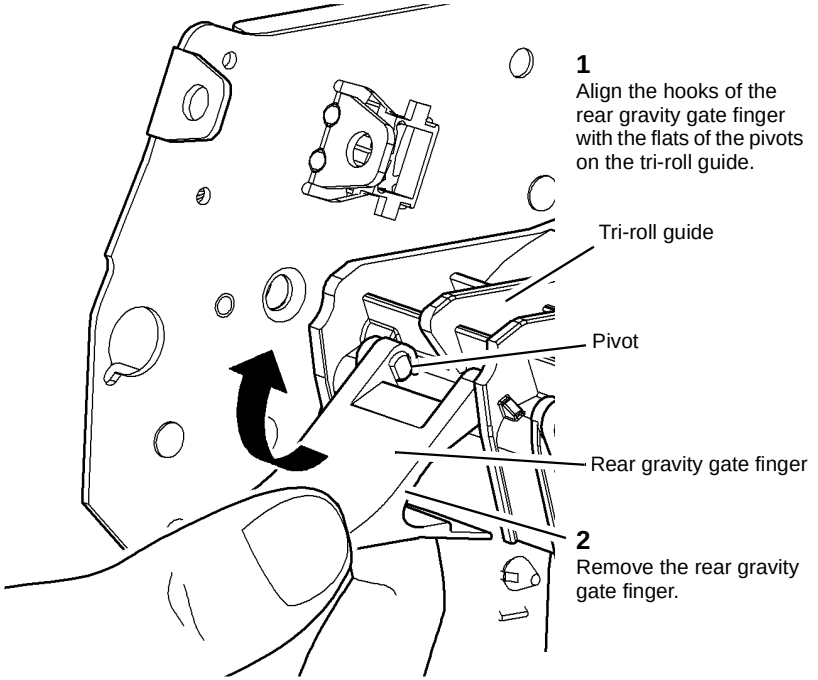


Figure 6 Gravity Gate Finger

8. Remove the tri-roll guide, Figure 7.

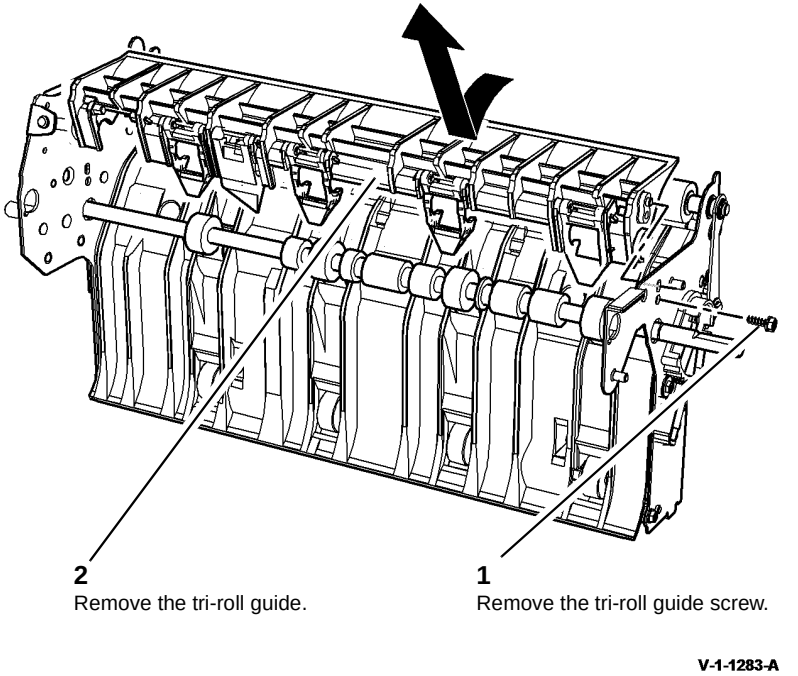


Figure 7 Tri-roll guide removal

9. Remove the tri-roll shaft, Figure 8.

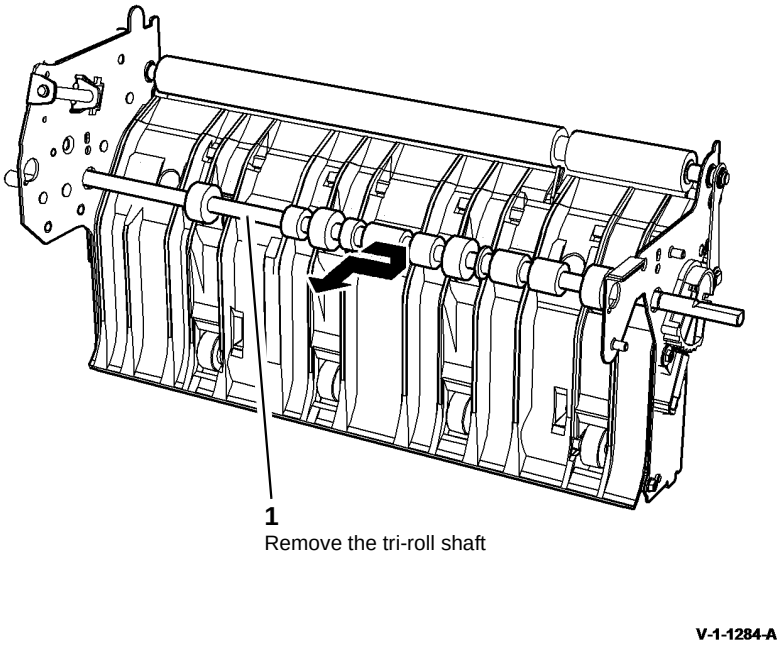


Figure 8 Tri-roll shaft removal

Replacement

Refer to GP 6 before refitting the tri-roll guide screw.

1. Re-install the following components:
   a. Tri-roll shaft, Figure 8.
   b. Tri-roll guide, Figure 9.

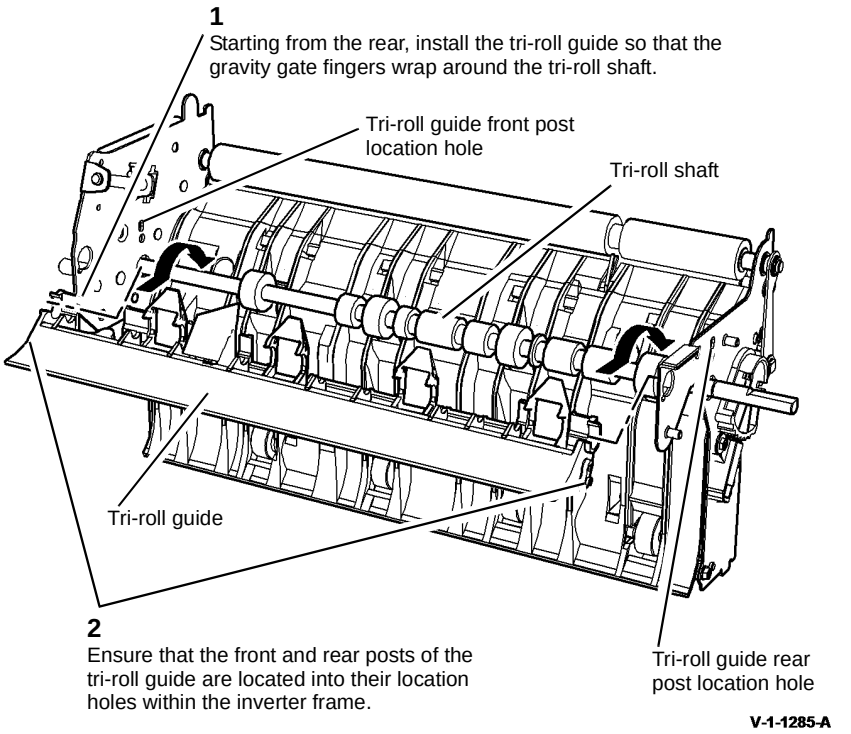


Figure 9 Install tri-roll guide

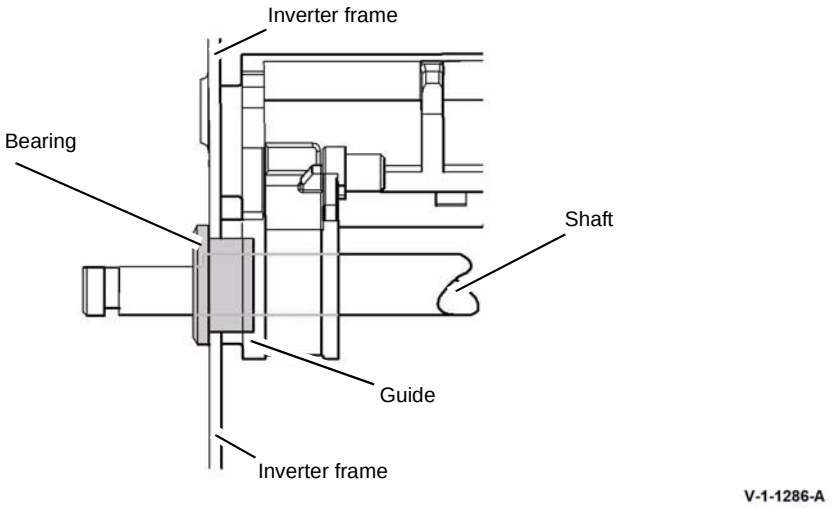


Figure 10 Locate the bearings

c. The rear gravity gate finger, Figure 6.

d. The tri-roll bearings and E-clips, Figure 1 and Figure 2. The bearings locate through the inverter fame then into the guide, Figure 10.

e. Tri-roll gear and inverter bracket, Figure 2.

f. Tri-roll guide securing screws, Figure 2 and Figure 7. Ensure that the posts of the tri-roll guide are located into the inverter frame, Figure 9.

g. Install bearing and E-clip on the post fuser exit roller, Figure 3 and Figure 4. The bearings locate through the inverter fame then into the guide, Figure 10.

h. Install the inverter gate, REP 10.11.

REP 10.13 Fuser Web Motor Assembly

Parts List on (45-55 ppm) PL 40.17, (65-90 ppm) PL 40.12

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the main drive module, (45-55 ppm) REP 40.1, (65-90 ppm) REP 40.5.
2. Disconnect PJ154 on the main drive PWB and remove the fuser web motor assembly, (45-55 ppm) Figure 1, (65-90 ppm) Figure 2.

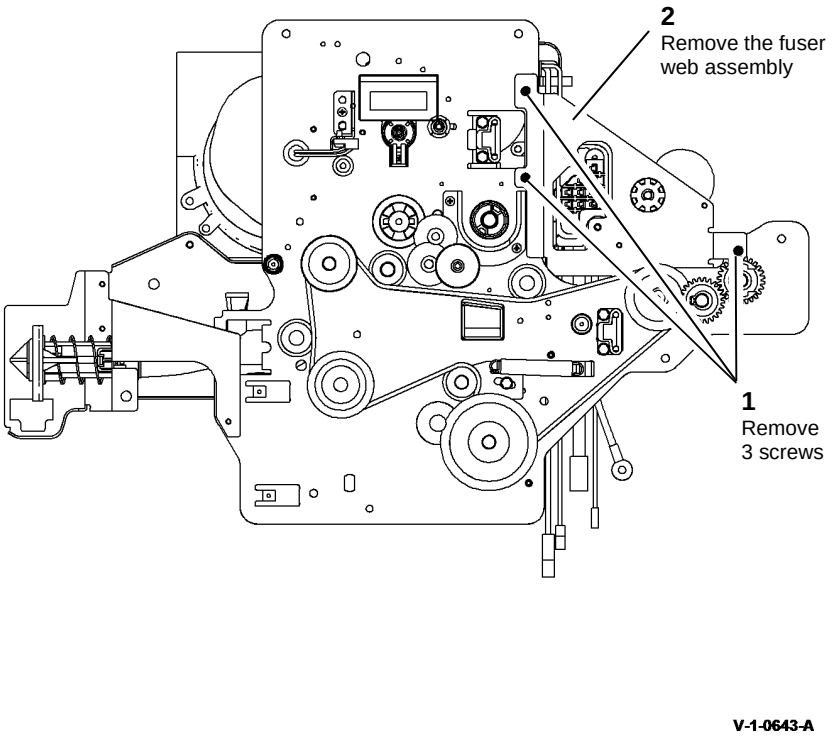


Figure 1 Drives module 45-55 ppm

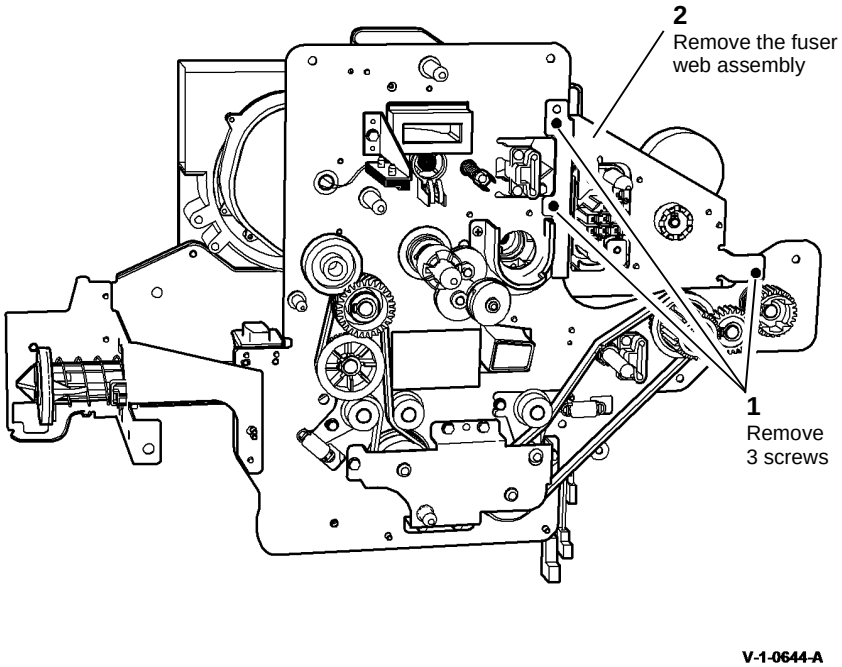


Figure 2 Drives module 65-90 ppm

3. Remove the fuser connector assembly from the fuser web motor assembly, Figure 3.

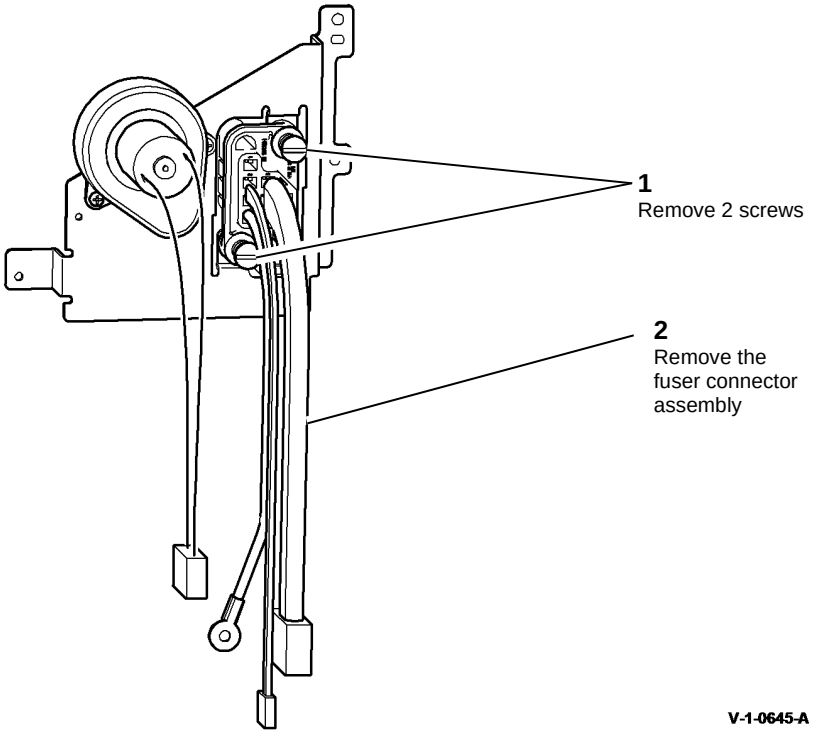


Figure 3 Fuser web motor assembly

Replacement

The replacement is the reverse of the removal procedure.

REP 10.14 Decurler Roll

Parts List on PL 10.13

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Remove the baffle guide (45-55 ppm) PL 10.13 Item 3 or the inverter assembly duct (65-90 ppm) PL 10.13 Item 2.
3. Remove the decurler roll inboard fixings, Figure 1.

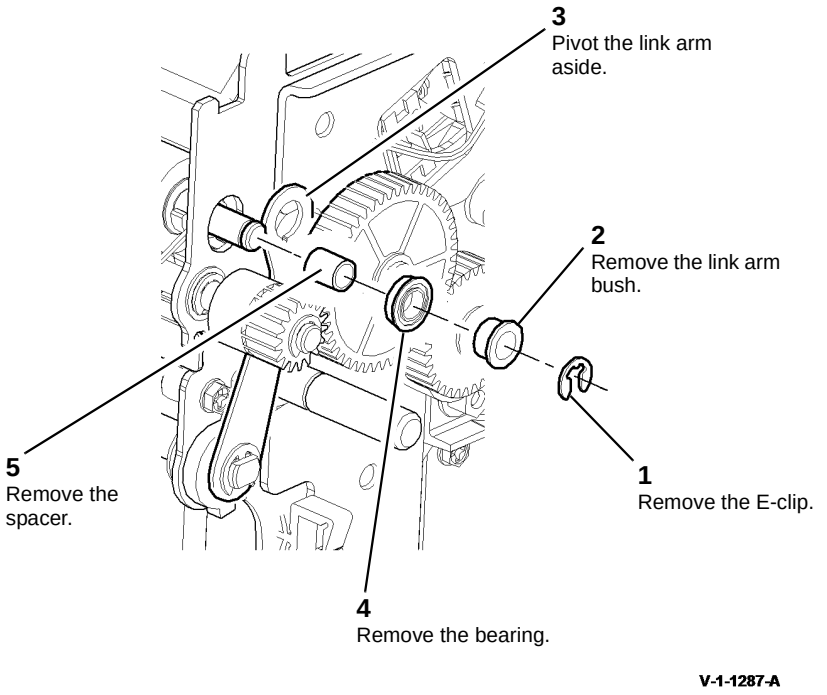


Figure 1 Outboard fixings

4. Remove the decurler roll inboard fixings, Figure 2.

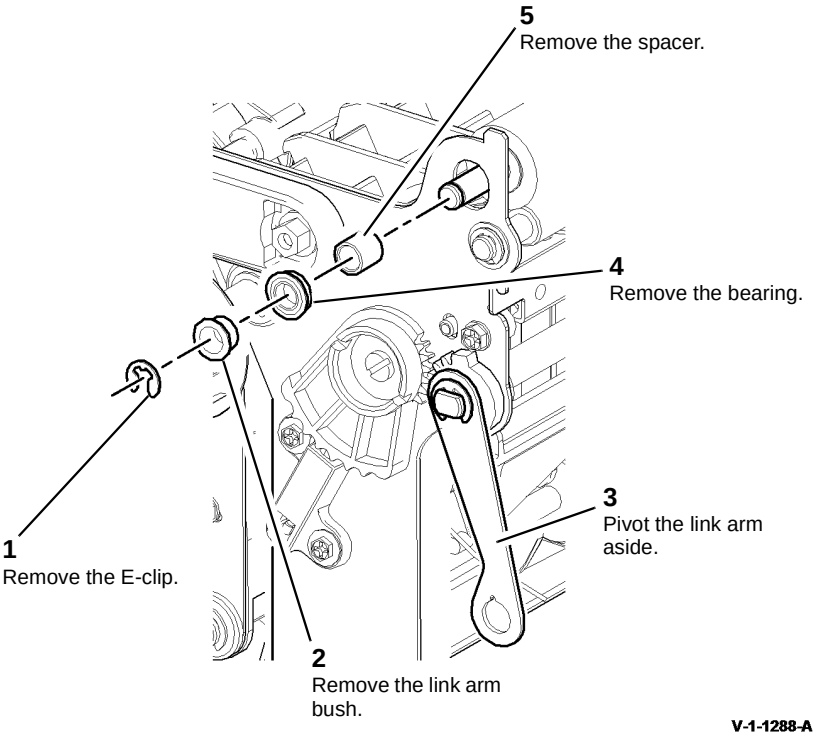


Figure 2 Outboard fixings

5. Remove the decurler roll, Figure 3.

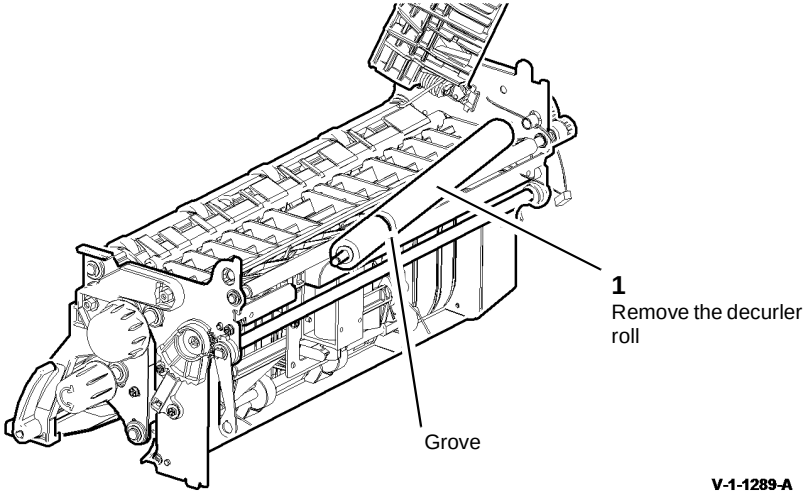


Figure 3 Decurler Roll

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure that the decurler roll is installed with the grove located towards the outboard side of the inverter decurler assembly, Figure 3.

REP 10.15 Intermediate Drive Belt (W/TAG 001)

Parts List on PL 10.25

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the short paper path assembly, REP 10.1.
2. Release the transfer / detack corotron harness from the supports, Figure 1.

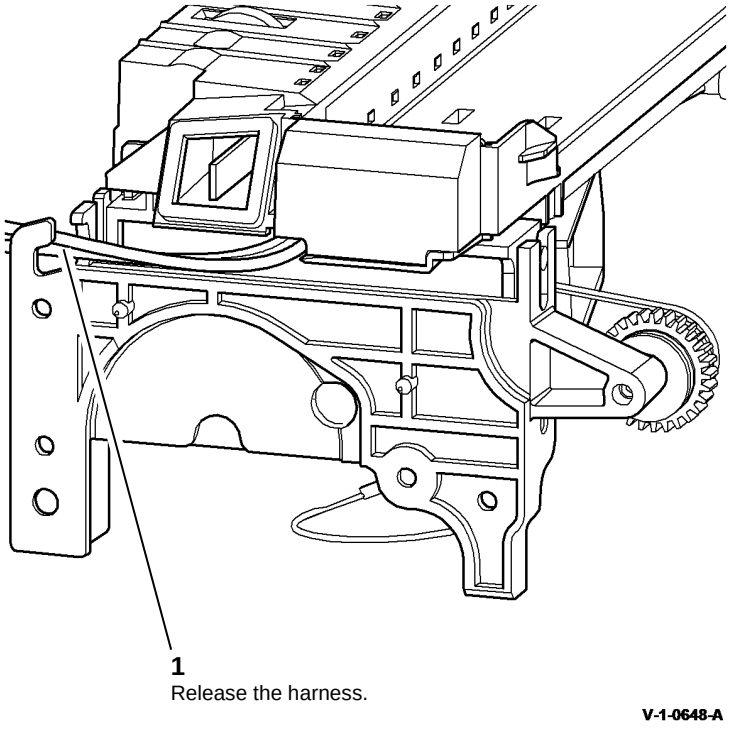


Figure 1 Transfer / detack corotron harness

3. Remove the securing screw to release the drives assembly, Figure 2.

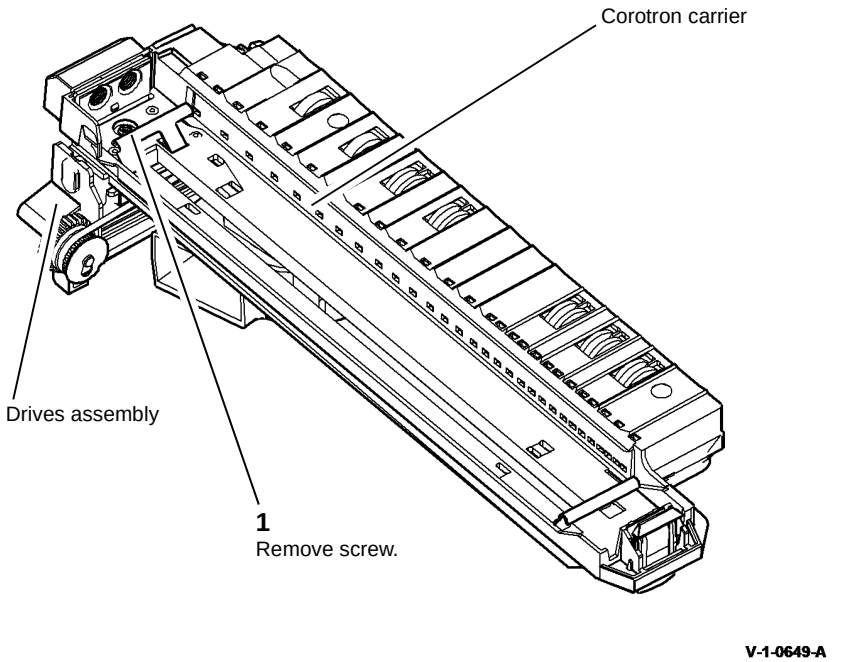


Figure 2 Short paper path assembly

4. Remove the vacuum fan, Figure 3.

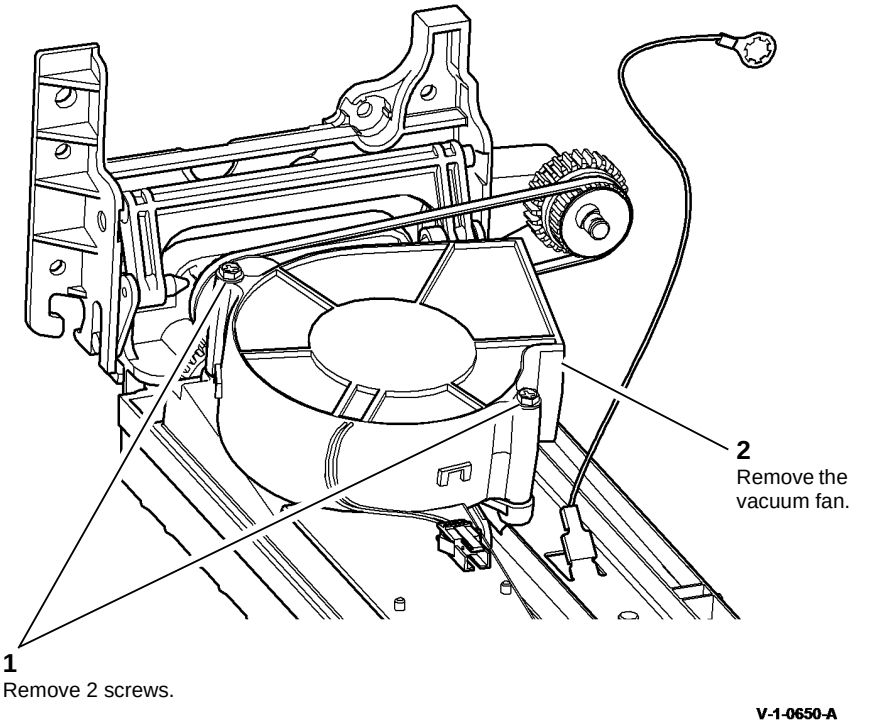


Figure 3 Remove vacuum fan

5. Remove the intermediate drive assembly, Figure 4.

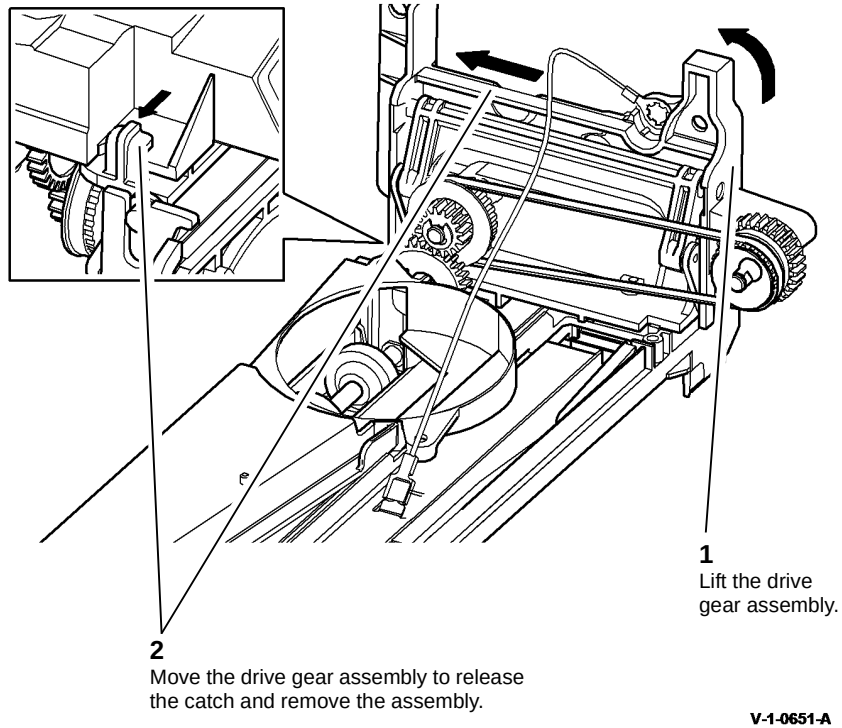


Figure 4 Remove the drive assembly

6. Remove the intermediate drive belt, Figure 5.

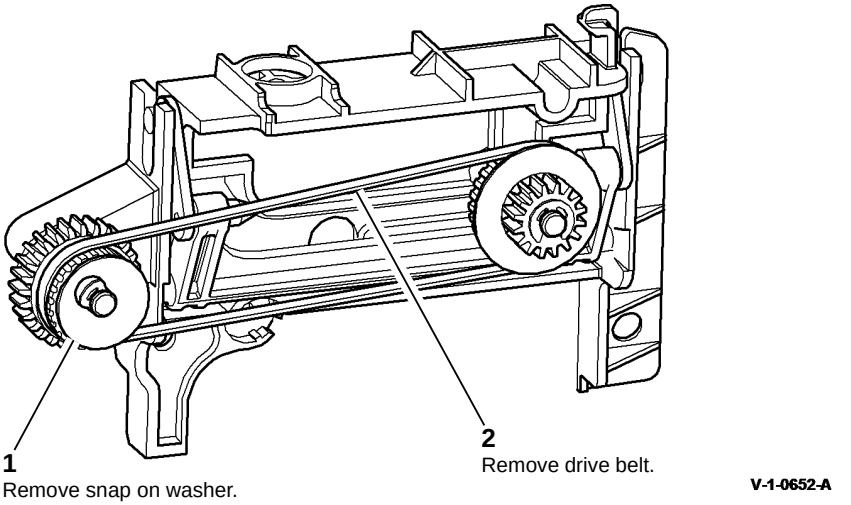


Figure 5 Remove the drive belt

Replacement

1. Replacement is the reverse of the removal procedure.
2. Check that the transfer / detack HT leads are correctly positioned at the rear of the short paper path assembly, Figure 1.

REP 10.16 Fuser Exit Switch

Parts List on (45-55 ppm) PL 10.8, (65-90 ppm) PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Do not touch the fuser while it is hot.

1. Remove the fuser module, (45-55 ppm) PL 10.8 Item 1, (65-90 ppm) PL 10.10 Item 1.
2. Remove the top cover from the fuser module, Figure 1.

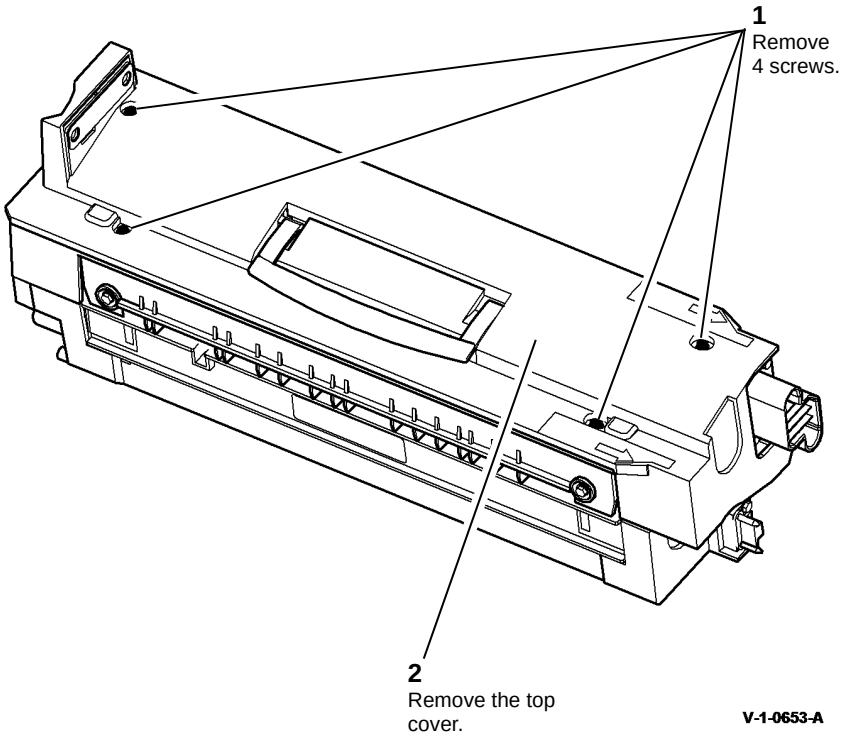


Figure 1 Remove the top cover

3. Remove the upper paper guide assembly, Figure 2.

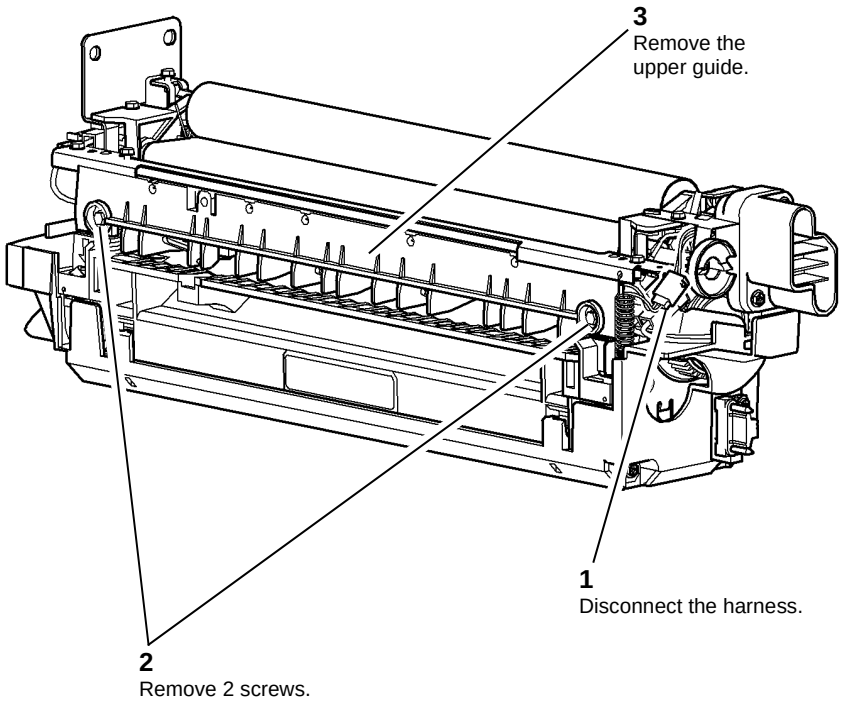


Figure 2 Upper guide removal

4. Release the harness and remove the fuser exit switch, Figure 3.

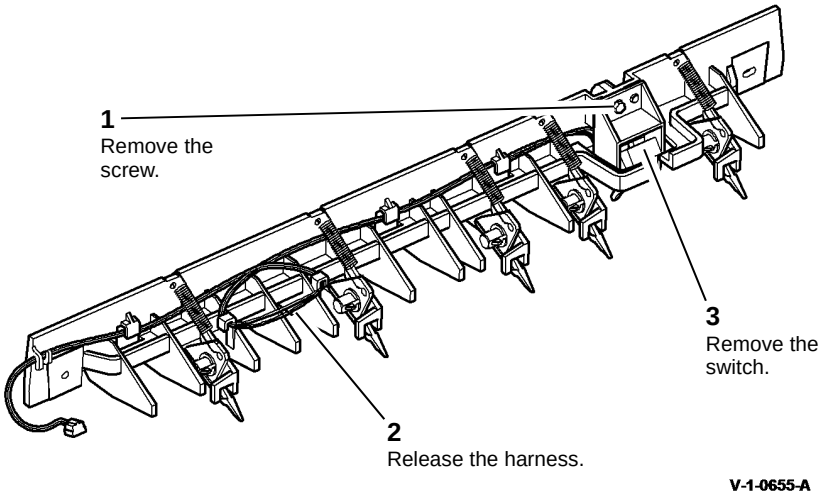


Figure 3 Fuser exit switch removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. On 65-90 ppm machines, make sure that the harness and the connector are routed away from the spring, Figure 4.

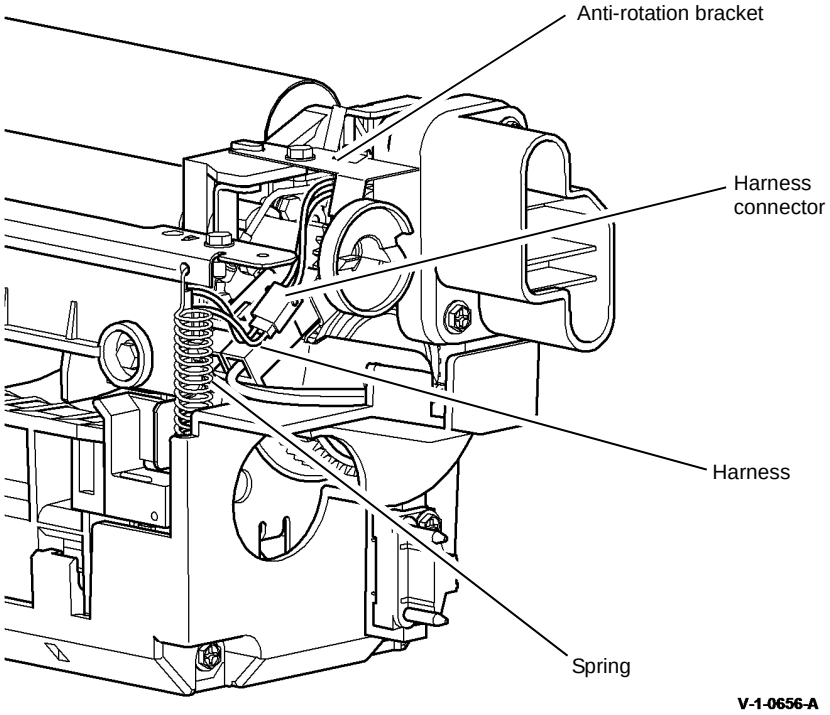


Figure 4 Harness location 65-90 ppm

3. On all machines. Check for 5mm clearance between the anti-rotation bracket and the heater lamp wires, Figure 4. Inspect the heater lamp wires for damage. If the wires are damaged install a new fuser module.

REP 10.17 IOT Exit Sensor

Parts List on PL 10.11

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove or undock the relevant output device:
   - REP 12.1 OCT Transport Assembly
   - REP 11.11-120 1K LCSS Removal
   - REP 11.13-110 2K LCSS Un-docking
   - REP 11.13-150 LVF BM Un-docking
   - REP 11.13-171 HVF Un-docking
2. Remove the right cover, PL 28.10 Item 4.
3. Remove the rear cover, PL 28.10 Item 1.

4. Remove the tie bar, Figure 1.

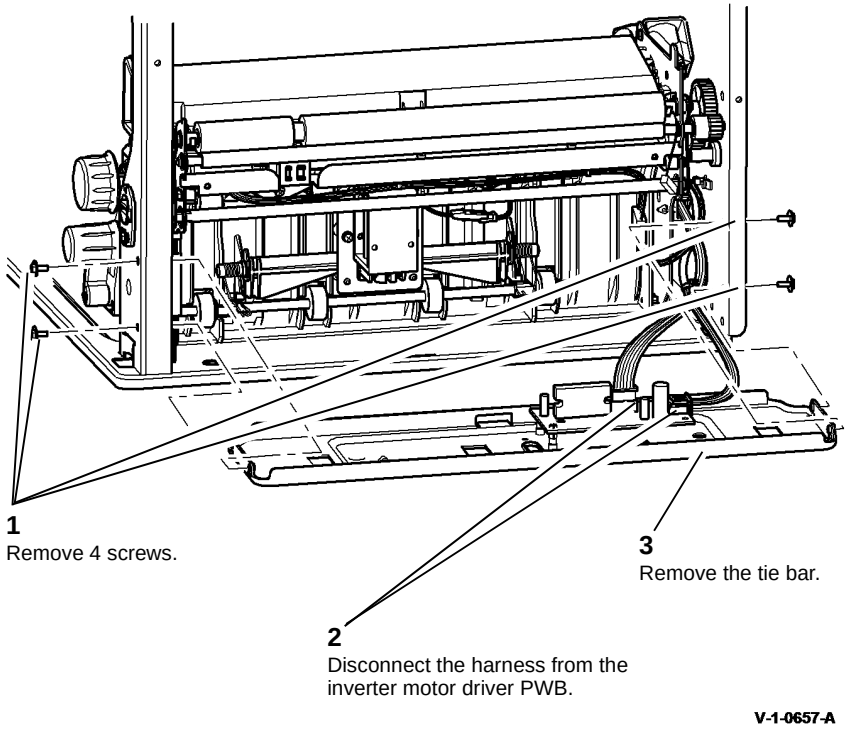


Figure 1 Remove the tie bar

5. Release the IOT exit sensor mounting bracket, Figure 2.

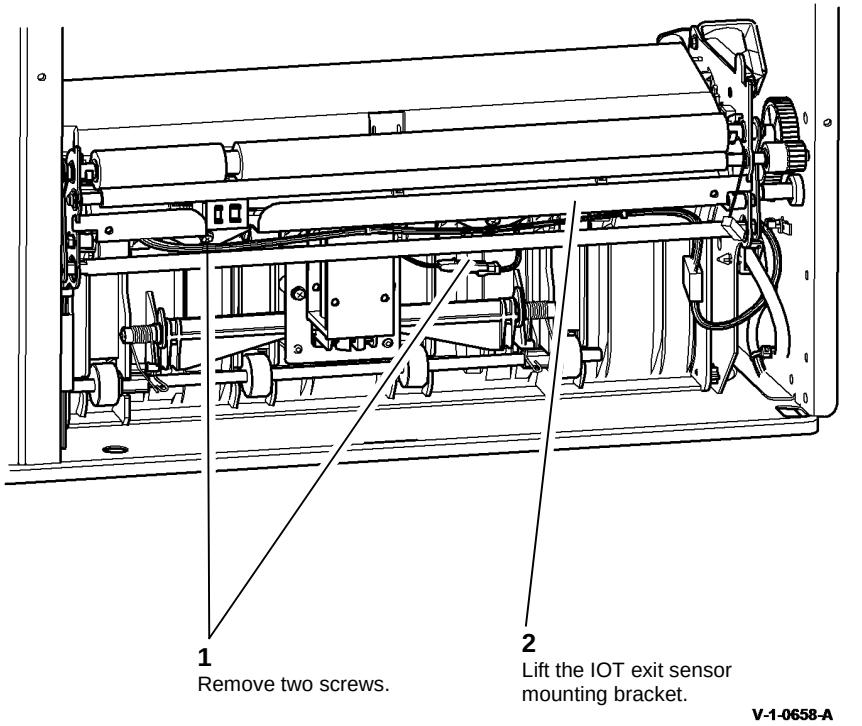


Figure 2 Release the mounting bracket

6. Remove the IOT exit sensor, Figure 3.

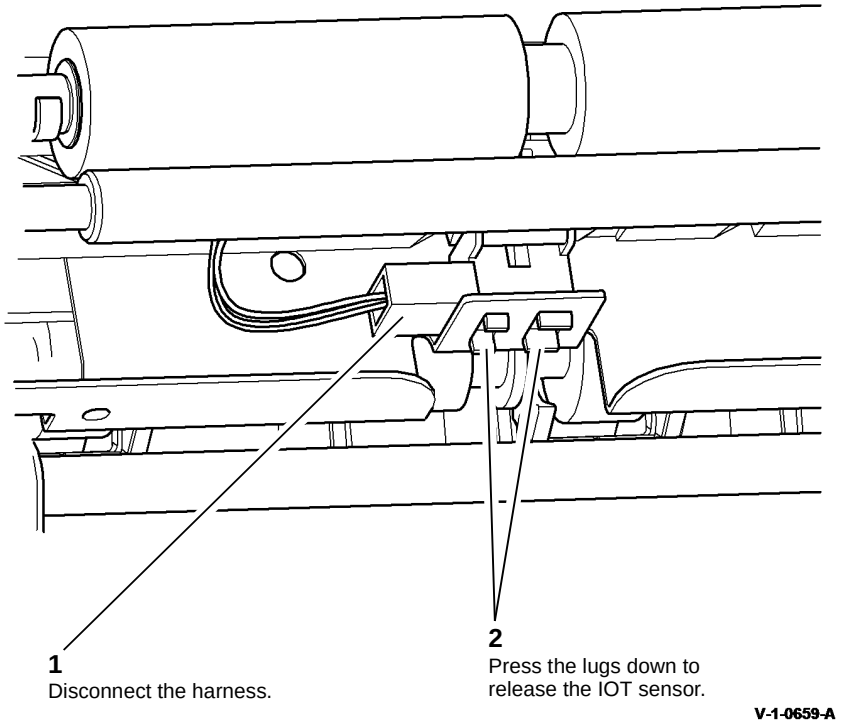


Figure 3 Remove the IOT Exit sensor

Replacement

The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws to the output guide.

REP 10.18 Inverter Jam Clearance LEDs

Parts List on PL 10.12, PL

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. For the upper LED, perform the following:
   a. Disconnect the connector from the upper LED, PL 10.12 Item 23.
   b. Open the upper baffle assembly, PL 10.12 Item 22.
   c. Unclip, then remove the upper LED.
3. For the lower LED, perform the following:
   a. Disconnect the connector from the lower LED, PL 10.14 Item 12.
   b. Unclip, then remove the lower LED.

Replacement

1. The replacement is the reverse of the removal procedure.
2. After reinstalling the upper LED, make sure that the two upper baffles are linked correctly. When the latch 3d/4d is released, the two baffles lift together.

REP 10.19 Tri-Roll Nip Split Solenoid

Parts List on PL 10.14

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Remove the tri-roll nip split solenoid, Figure 1.

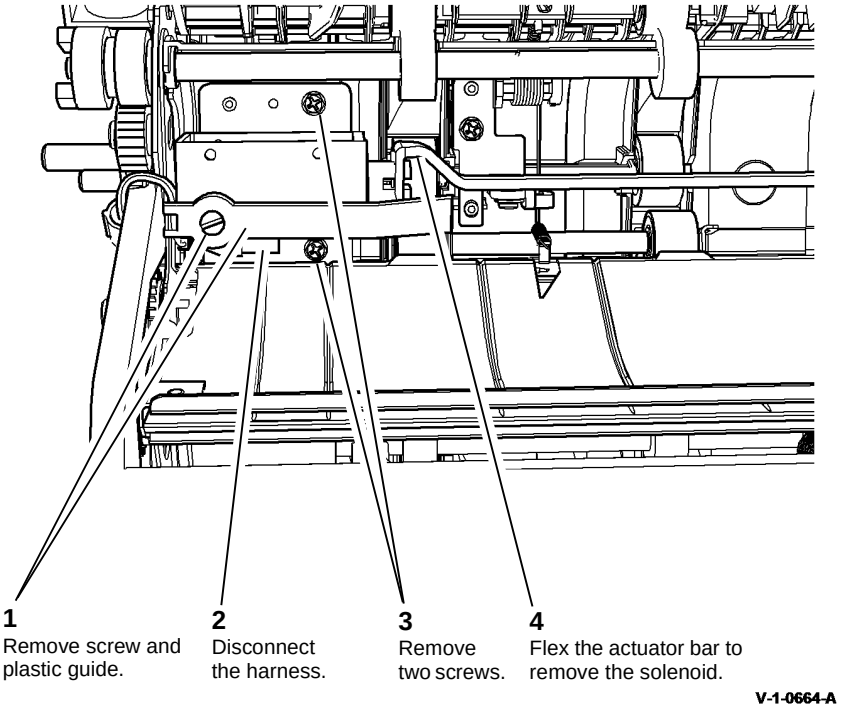


Figure 1 Remove the solenoid

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Before the inverter is installed, manually operate the solenoid and check that the nip rolls operate correctly.
3. Check that the wires to the solenoid are free to move and not trapped by the plastic guide, Figure 2.

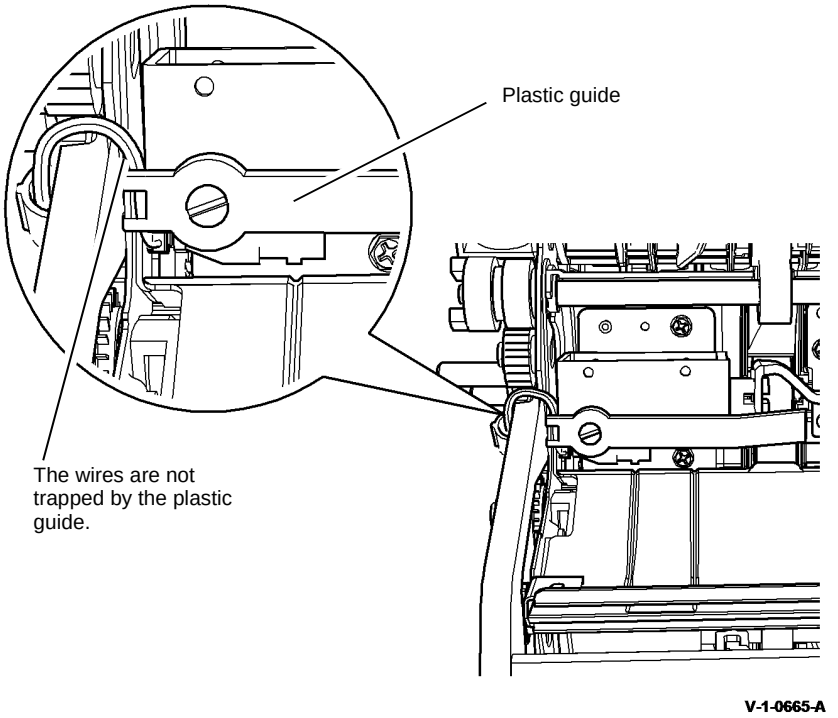


Figure 2 Route solenoid wires

REP 10.20 Inverter Sensor

Parts List on PL 10.12

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inverter assembly, REP 10.2.
2. Remove the inverter sensor, Figure 1.

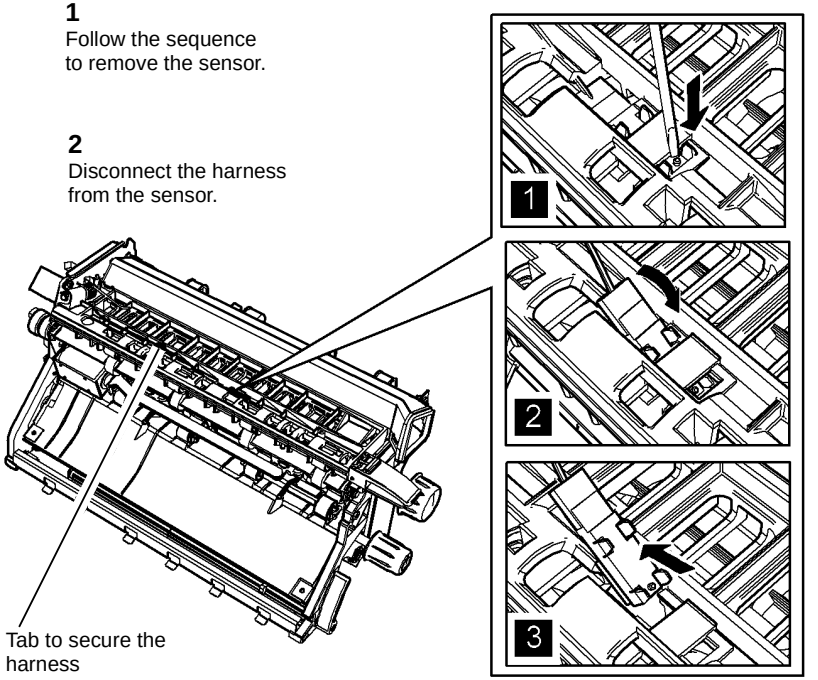


Figure 1 Remove the inverter sensor

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Route the harness under the tab on the upper baffle, Figure 1.
3. Make sure that the upper baffle and the inverter assembly duct are linked correctly. When the latch 3d/4d is released, the two items lift together.

REP 11.1-110 2K LCSS Covers

Parts List on PL 11.2.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the covers, Figure 1.

NOTE: *Removing the top cover first will allow easy removal of the front and rear covers.*

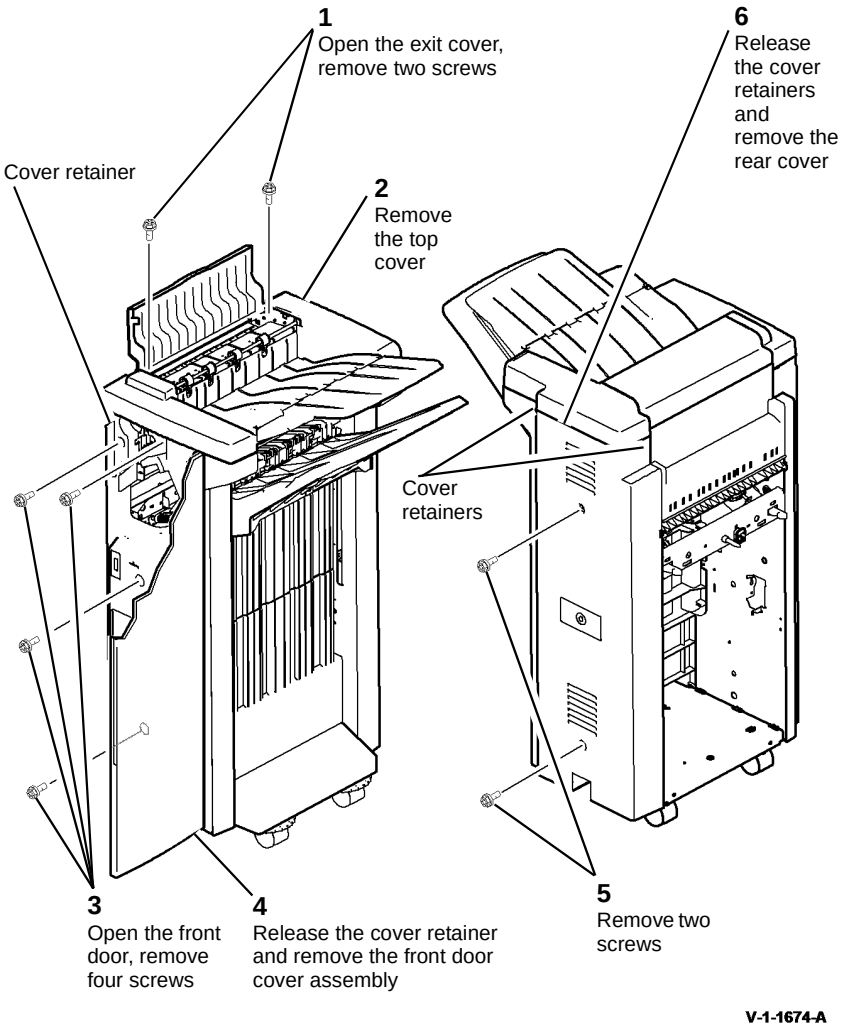


Figure 1 Removing the covers

Replacement

Reverse the removal procedure to replace the covers.

REP 11.2-110 Input Drive Belt and Transport Motor 1

Parts List on PL 11.14.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS rear cover, REP 11.1-110.
2. Remove the motor and drive belt, Figure 1.

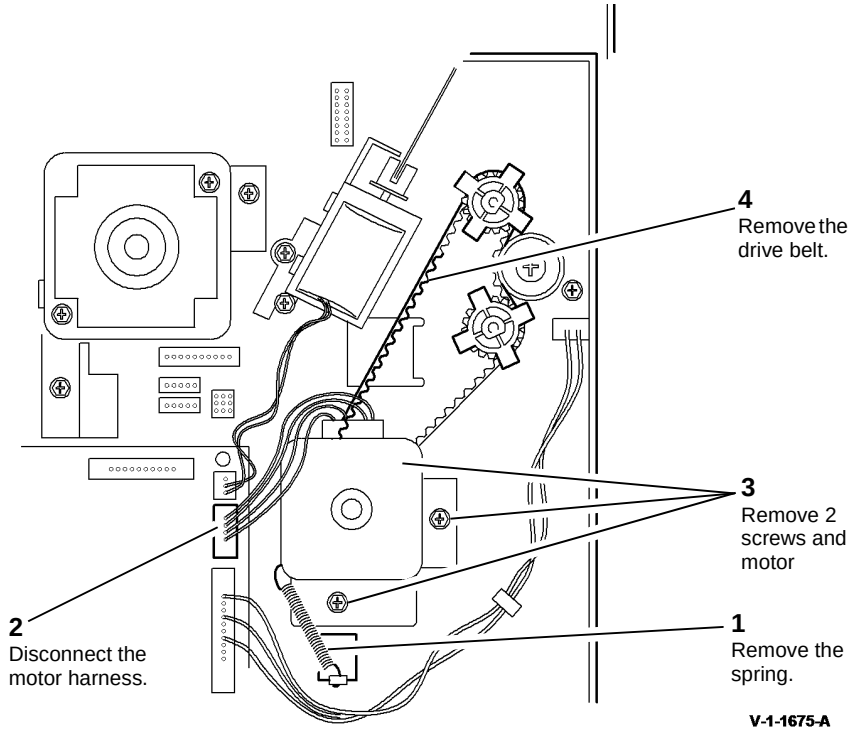


Figure 1 Removing the drive belt

Replacement

1. Place the belt around the pulleys.
2. Install the motor screws, but do not tighten.
3. Install the spring
4. Rotate the shaft by hand to ensure the belt runs smoothly over the pulleys and allow the spring to tension the belt, ADJ 11.4-110.
5. Tighten the motor screws and re-connect the harness.
6. Install the 2K LCSS rear cover, REP 11.1-110.

REP 11.3-110 Intermediate Paper Drive Belt

Parts List on PL 11.22.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS rear cover and top cover, REP 11.1-110.
2. Remove the intermediate paper drive belt, Figure 1.

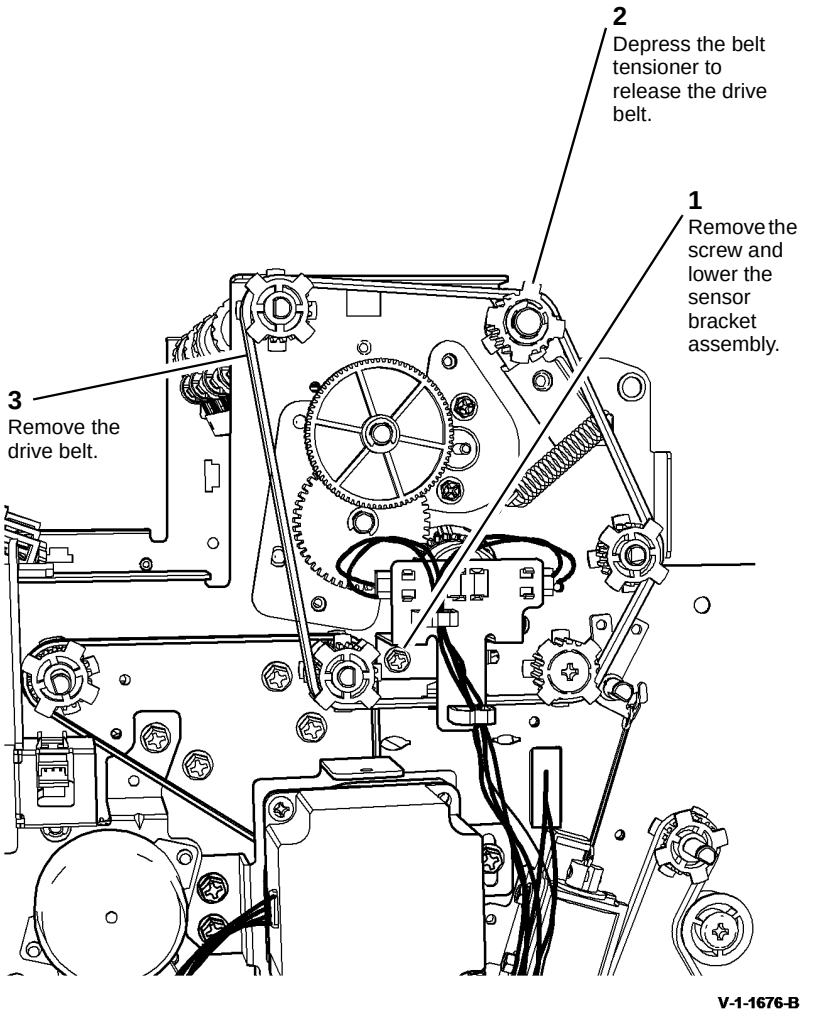


Figure 1 Removing the drive belt

Replacement

1. If necessary lubricate the belt tensioner, refer to ADJ 40.1.
2. Install the belt over the pulleys, ensuring that the belt is on all five pulleys.

   NOTE: *Two of the pulleys are free to slide along the shaft. Ensure the belt is correctly located on these pulleys.*

3. Reverse the removal procedure to install the remainder of the components..

REP 11.4-110 Paper Output Drive Belt and Transport Motor 2

Parts List on PL 11.22.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS rear cover, REP 11.1-110.
2. Remove the intermediate drive belt, REP 11.3-110.
3. Remove the output drive belt and motor, Figure 1.

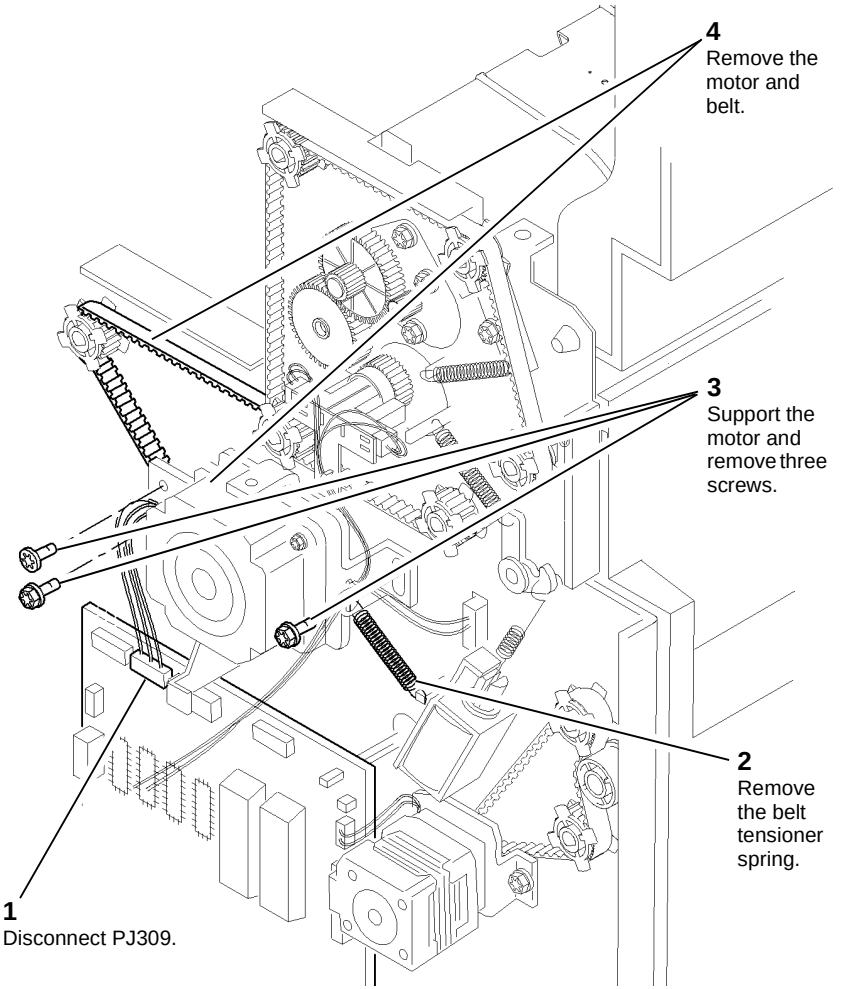


Figure 1 Removing the drive belt

Replacement

1. Install the belt over the pulleys.
2. Install the motor pivot shouldered screw and fully tighten.
3. Install the two motor mounting bracket securing screws but do not tighten them.
4. Install the belt tensioner spring.
5. Rotate the belt by hand to allow the spring to tension the belt, ADJ 11.4-110. Tighten the screws.
6. Install the intermediate drive belt, REP 11.3-110.
7. Install the 2K LCSS rear cover, REP 11.1-110.

REP 11.5-110 Bin 1 Drive Belts

Parts List on PL 11.10.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS front and rear covers, REP 11.1-110.
2. Remove the bin 1 drive belt (rear) Figure 1.

NOTE: *Keep all of the components removed as a set. The set of rear frame components are different from the front frame set.*

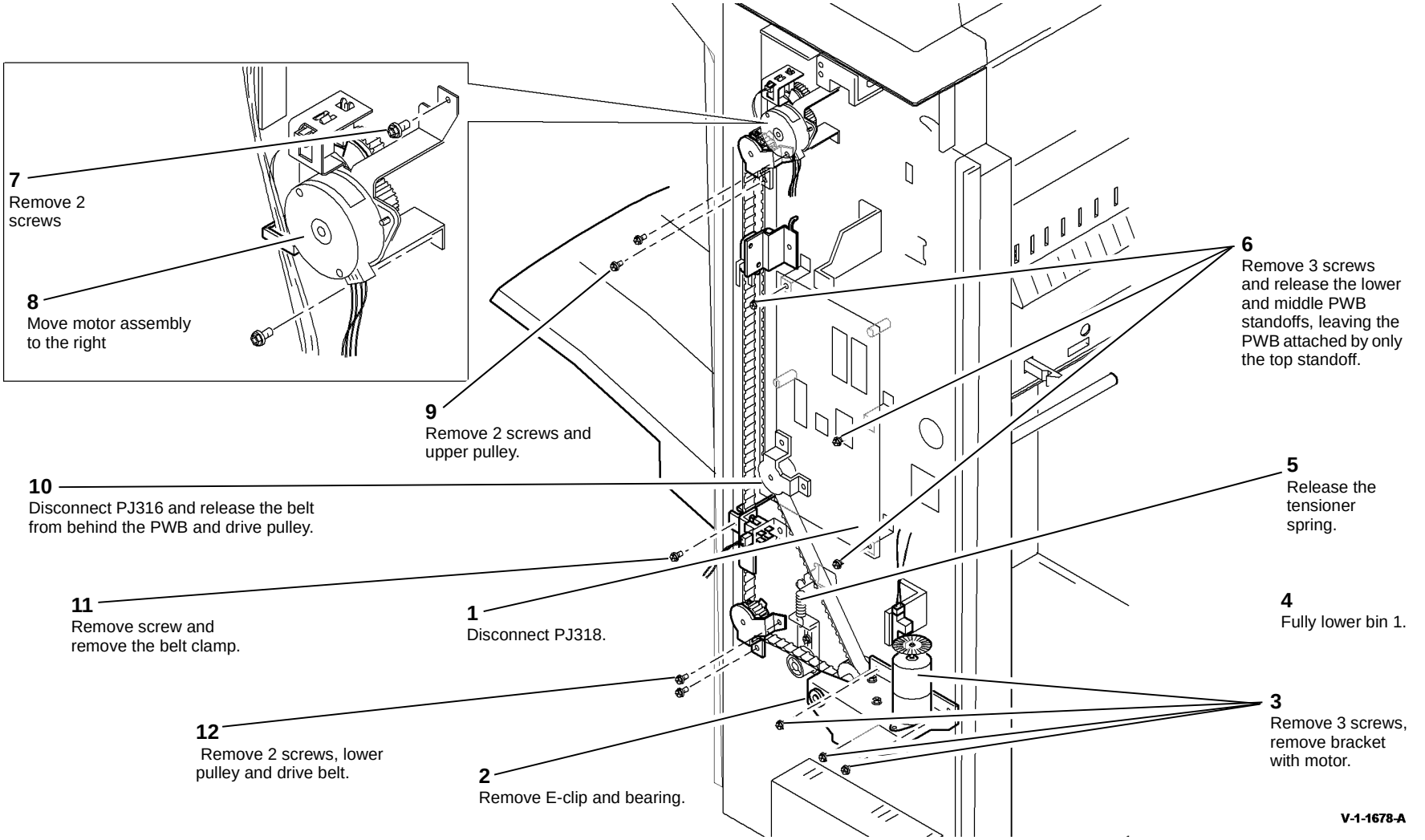


Figure 1 Bin 1 drive belt (rear)

3. Remove the bin 1 drive belt (front) Figure 2.

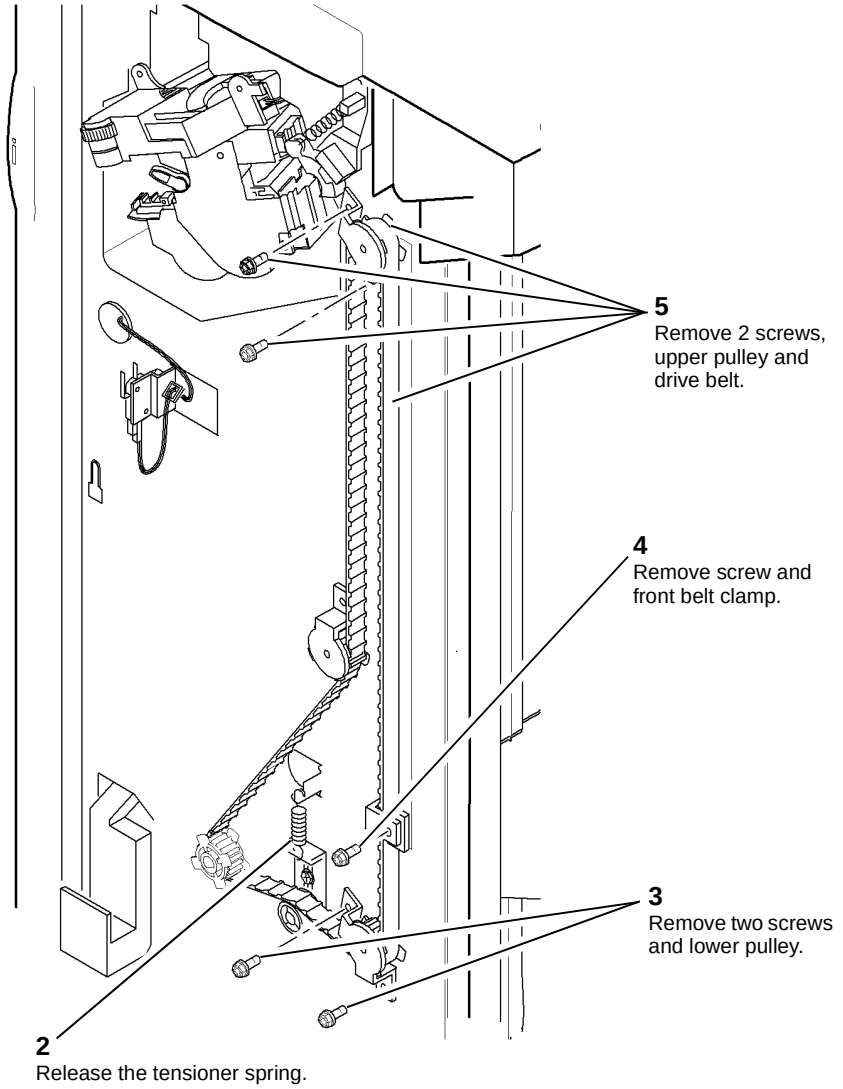


Figure 2 Bin 1 drive belt (front)

Replacement

NOTE: *Ensure the correct set of components are used for each side of the 2K LCSS.*

1. Reverse the removal procedure to replace the bin 1 drive belts.

   NOTE: *The bin 1 level can critically affect the overall stack registration. Refer to ADJ 11.1-110 if adjustment is necessary.*

2. Install the front and rear covers REP 11.1-110.

REP 11.6-110 Tamper Assembly

Parts List on PL 11.16.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS covers REP 11.1-110.
2. Prepare to remove the tamper assembly Figure 1.

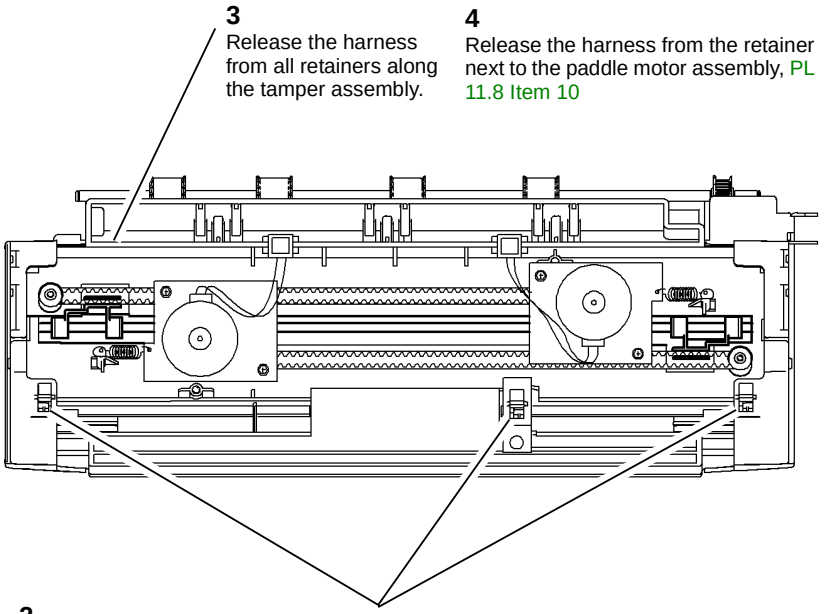


Figure 1 Preparing the tamper assembly

3. Remove the tamper assembly, Figure 2.

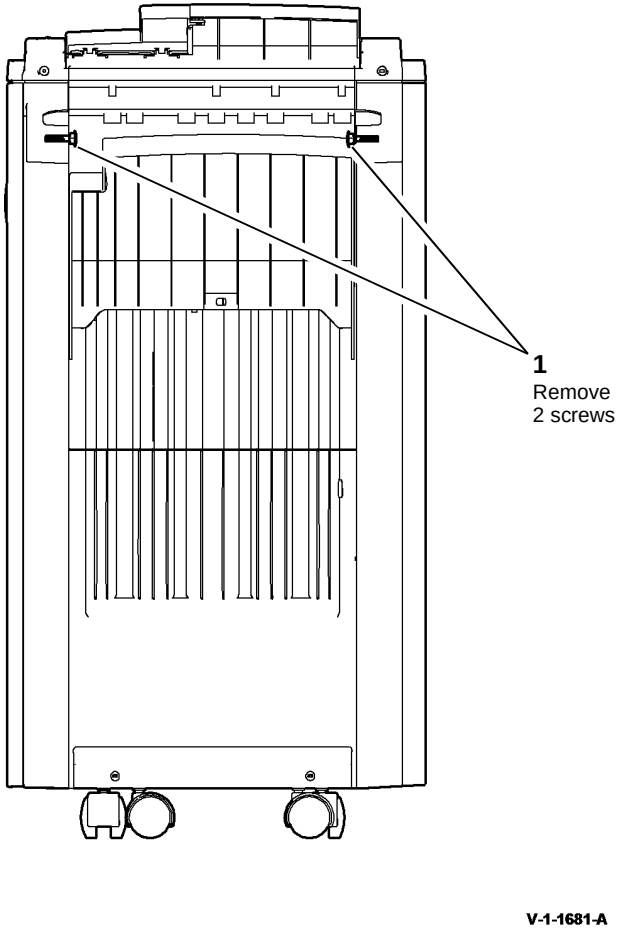


Figure 2 Removing the tamper assembly

Replacement

Reverse the removal procedure to replace the tamper assembly.

NOTE: *Ensure that:*

- *The slots in the tamper assembly locate correctly in the 2K LCSS frame.*
- *The sensors are correctly located in the tamper assembly, they are easily mis-located when being re-connected to the harnesses.*
- *All connectors in the harness over the tamper assembly are securely connected.*

REP 11.7-110 Hole Punch Unit, Motor and Sensors

Parts List on PL 11.6.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS covers, REP 11.1-110.
2. Remove and empty the chad bin, PL 11.6 Item 4.
3. Remove the hole punch unit, motor assembly and sensors, Figure 1.

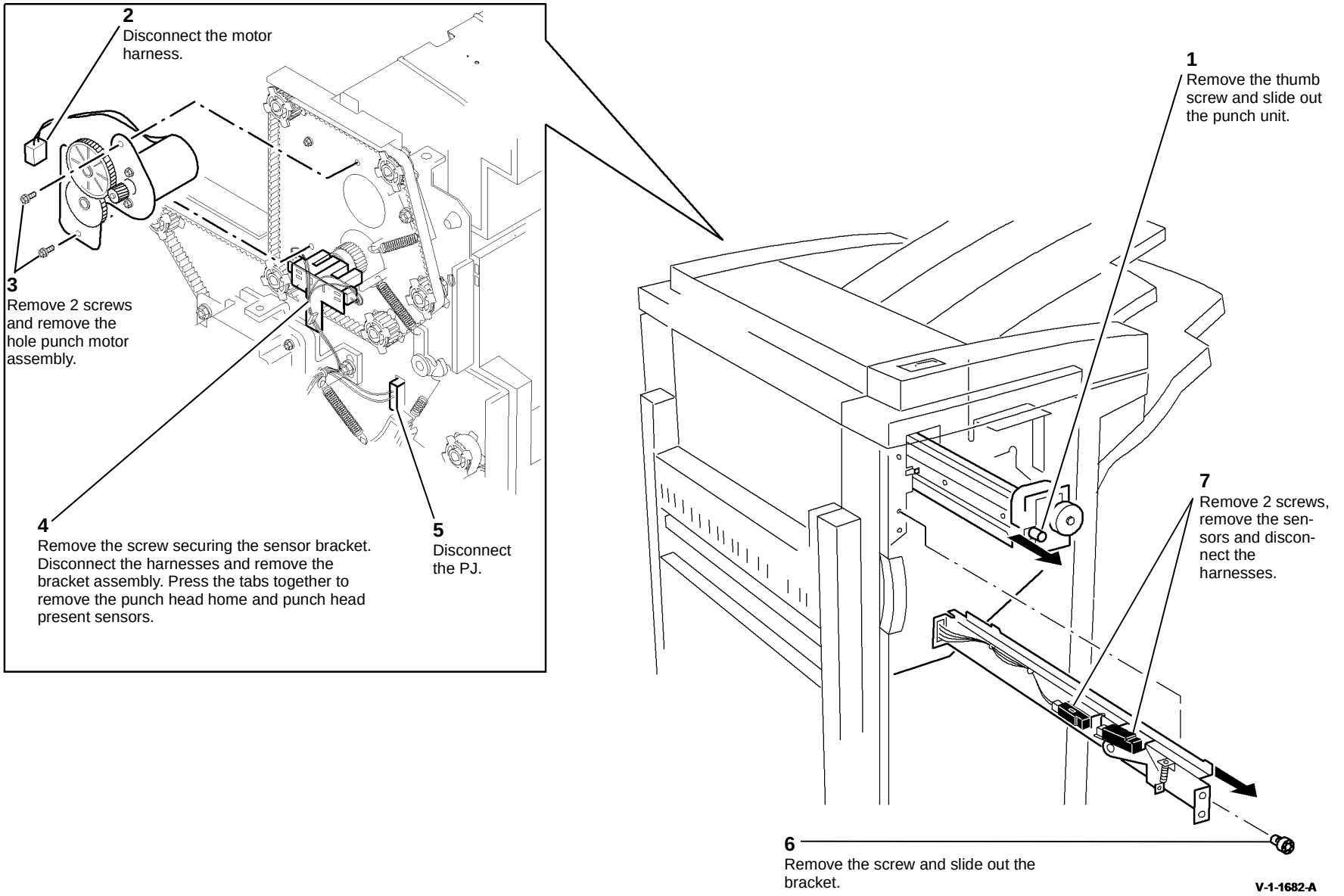


Figure 1 Hole punch unit, motor and sensors

Replacement

1. Reverse the removal procedure to replace the hole punch unit, motor assembly and sensors.
2. If necessary, perform ADJ 11.3-110 Hole Punch Position.

NOTE: *When installing the hole punch motor assembly, ensure that the belt tensioner arm does not get trapped behind the motor assembly plate.*

NOTE: *Refer to IQS 6 Copy / Print Defects for hole punch performance specifications.*

REP 11.8-110 Stapler Traverse Assembly

Parts List on PL 11.20.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the 2K LCSS. The 2K LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the 2K LCSS.

1. Un-dock the 2K LCSS, REP 11.13-110.
2. Remove the rear cover and front door cover assembly, REP 11.1-110.
3. Manually move the ejector, PL 11.18 Item 1 fully to the right.
4. Disconnect the harness, Figure 1.

NOTE: *For clarity, the entry guide cover, PL 11.2 Item 3 is omitted from Figure 1.*

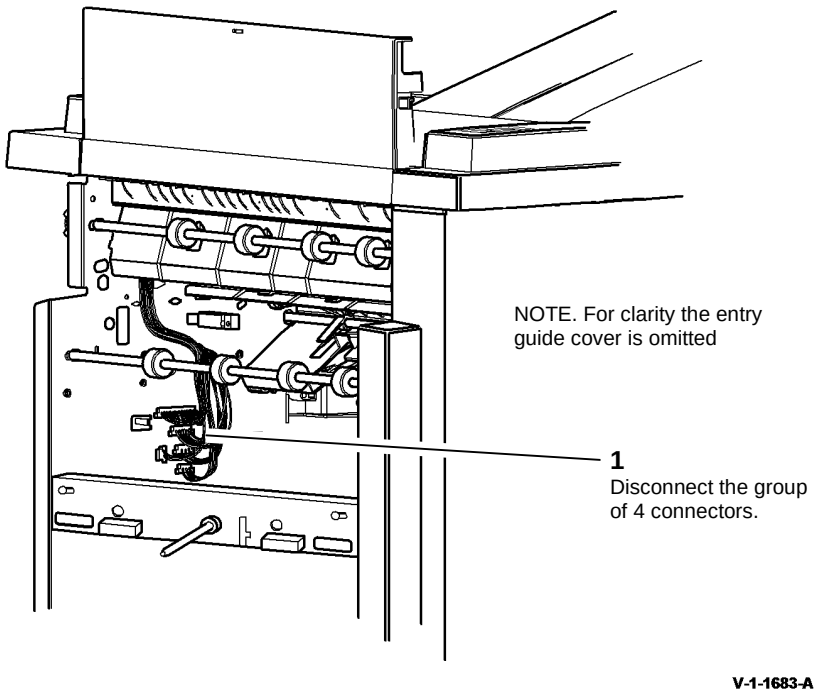


Figure 1 Harness disconnection

CAUTION

When removing and replacing the stapler traverse assembly, support the weight of the assembly underneath the stapler and take care not to damage wiring.

5. Remove the stapler traverse assembly, Figure 2.

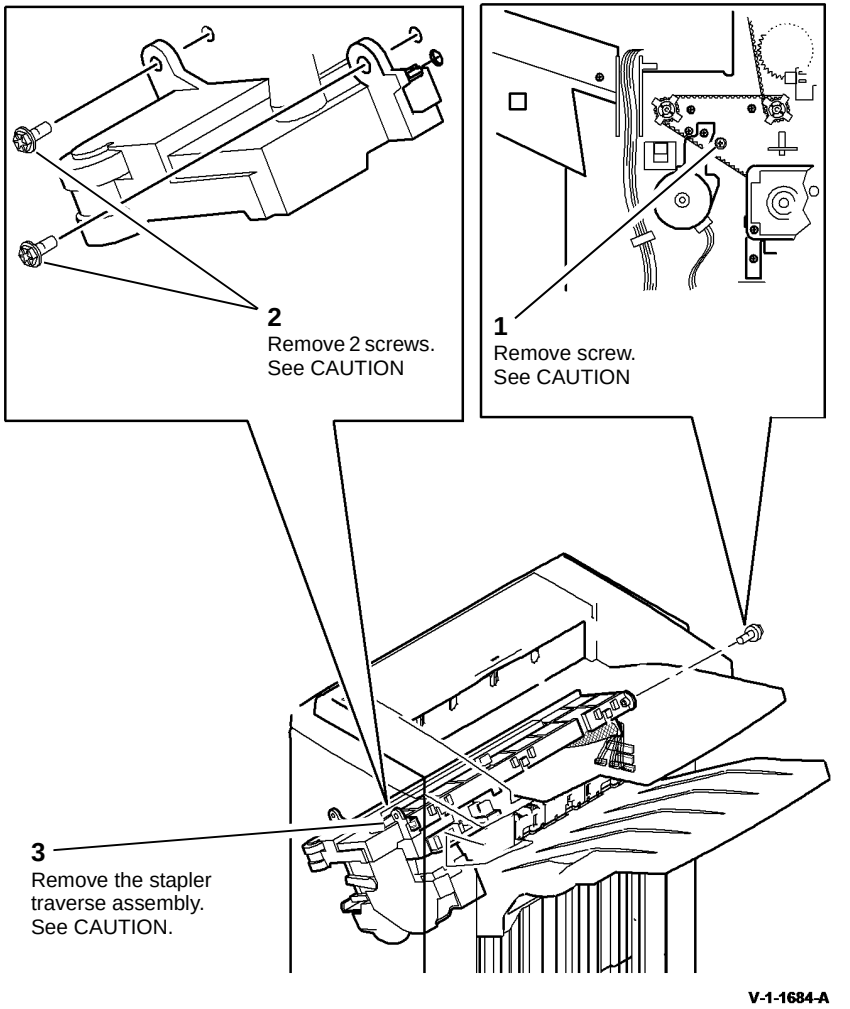


Figure 2 Removing the stapler traverse assembly

Replacement

1. Ensure the stapling traverse assembly is engaged on the front and rear locating dowels.
2. Reverse the removal procedure to replace the stapling unit.

REP 11.9-110 Staple Head Unit

Parts List on PL 11.20.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the stapler traverse assembly, REP 11.8-110.
2. Place the stapler traverse unit upside-down
3. Remove the staple head unit from the stapling unit Figure 1.

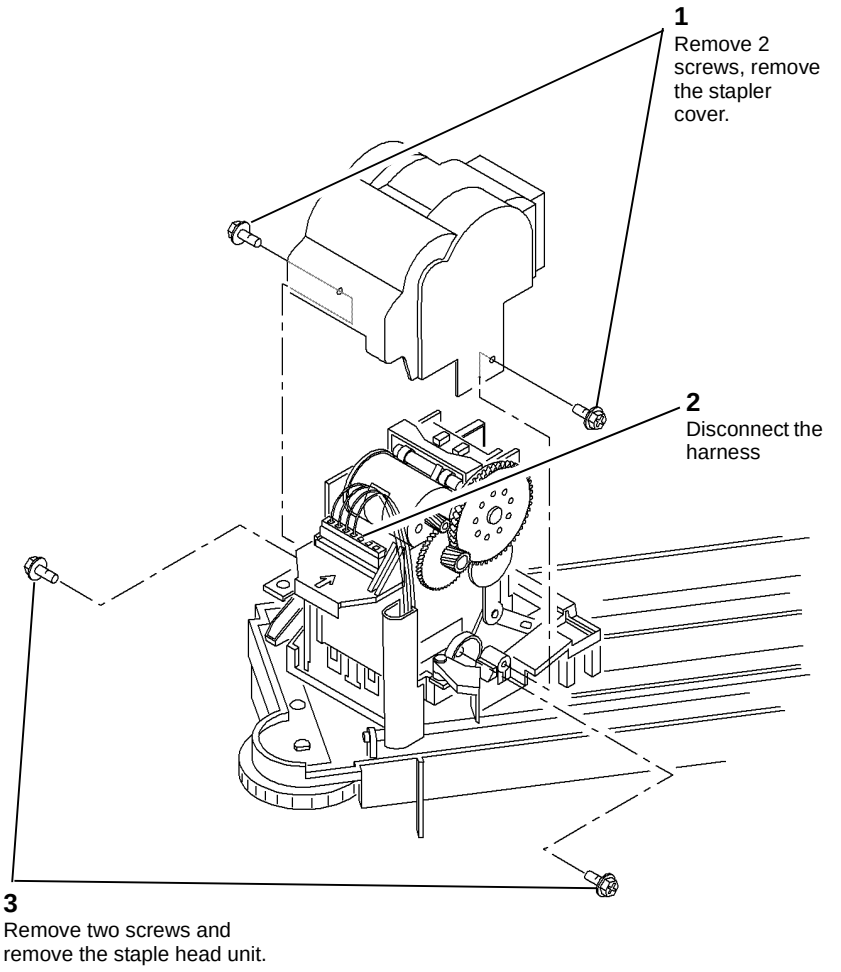


Figure 1 Removing the staple head unit

Replacement

Reverse the removal procedure to replace the staple head unit.

REP 11.10-110 Ejector Assembly Sensors

Parts List on PL 11.18.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the 2K LCSS. The 2K LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the 2K LCSS.

1. Disconnect the two harnesses between the 2K LCSS and the machine.
2. Un-dock the 2K LCSS, REP 11.13-110 and move it away from the machine.
3. Ensure the stapling unit is at the home position.
4. If necessary, manually move the ejector to the left position.
5. Remove the ejector assembly, Figure 1.

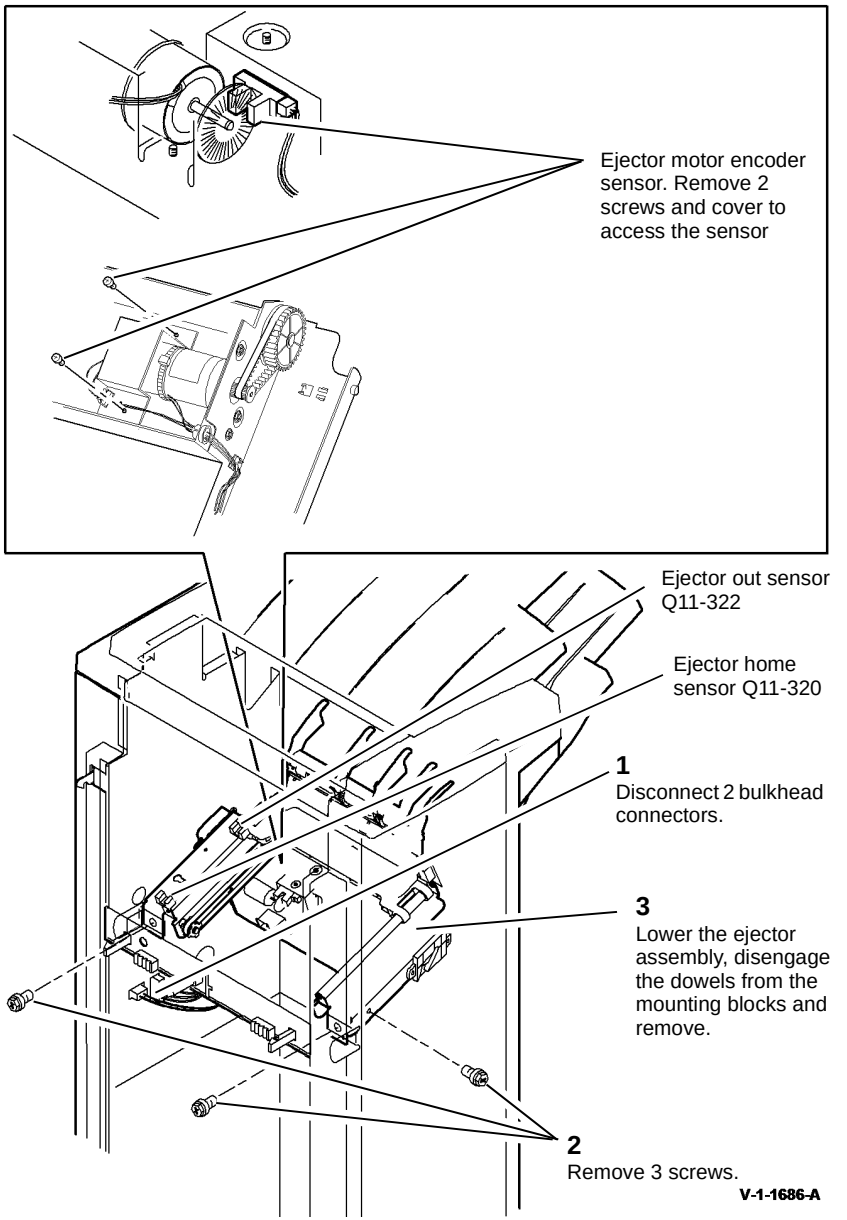


Figure 1 Removing the ejector assembly

6. Remove the appropriate sensor by releasing the sensor tabs and disconnecting the harness.

Replacement

CAUTION

When installing the ejector assembly onto the 2K LCSS, ensure that the ejector fingers do not damage the wiring to the staple head unit.

Reverse the removal procedure to replace the eject assembly or sensors.

REP 11.11-110 Bin 1 Level Sensors

Parts List on PL 11.12.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the ejector assembly, REP 11.10-110.
2. Remove the stacker level sensors Figure 1.

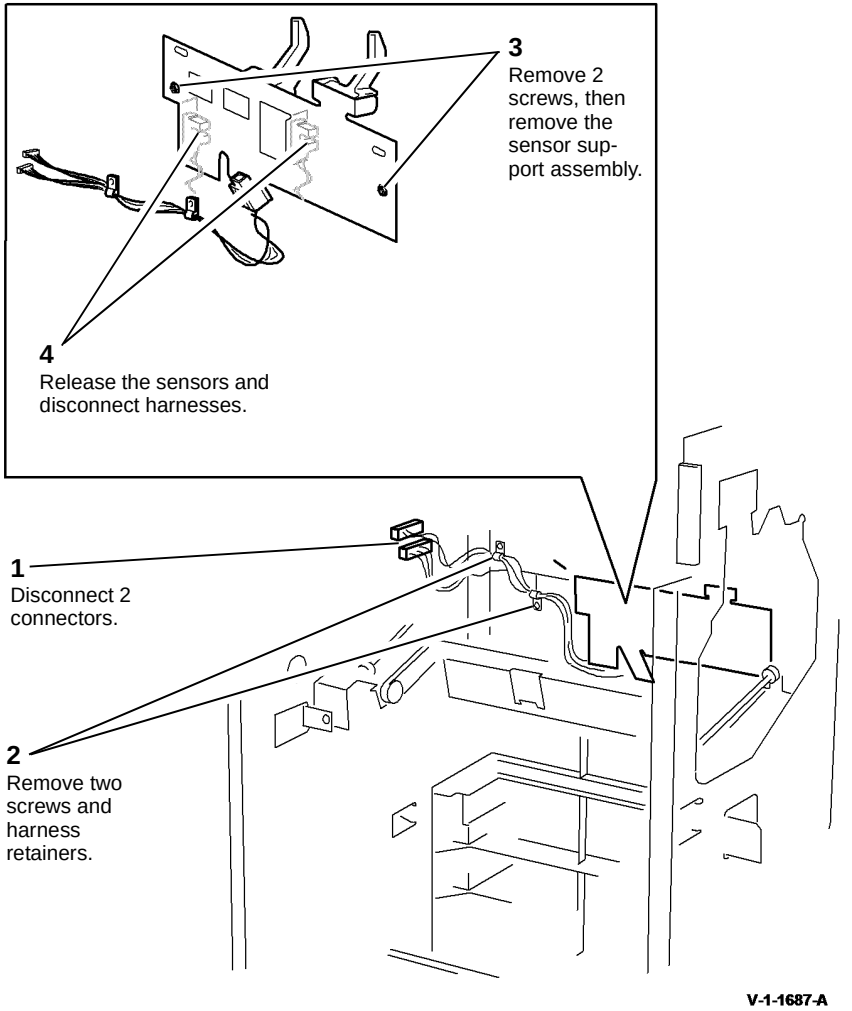


Figure 1 Removing the stacker level sensors

Replacement

Reverse the removal procedures to replace the bin 1 level sensors.

REP 11.12-110 Paddle Wheel Shaft Assembly

Parts List on PL 11.8.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the stapler traverse assembly, REP 11.8-110.
2. Remove the tamper assembly, REP 11.6-110.
3. Remove bin 1, PL 11.2 Item 10.

4. Remove the paddle motor assembly, Figure 1.

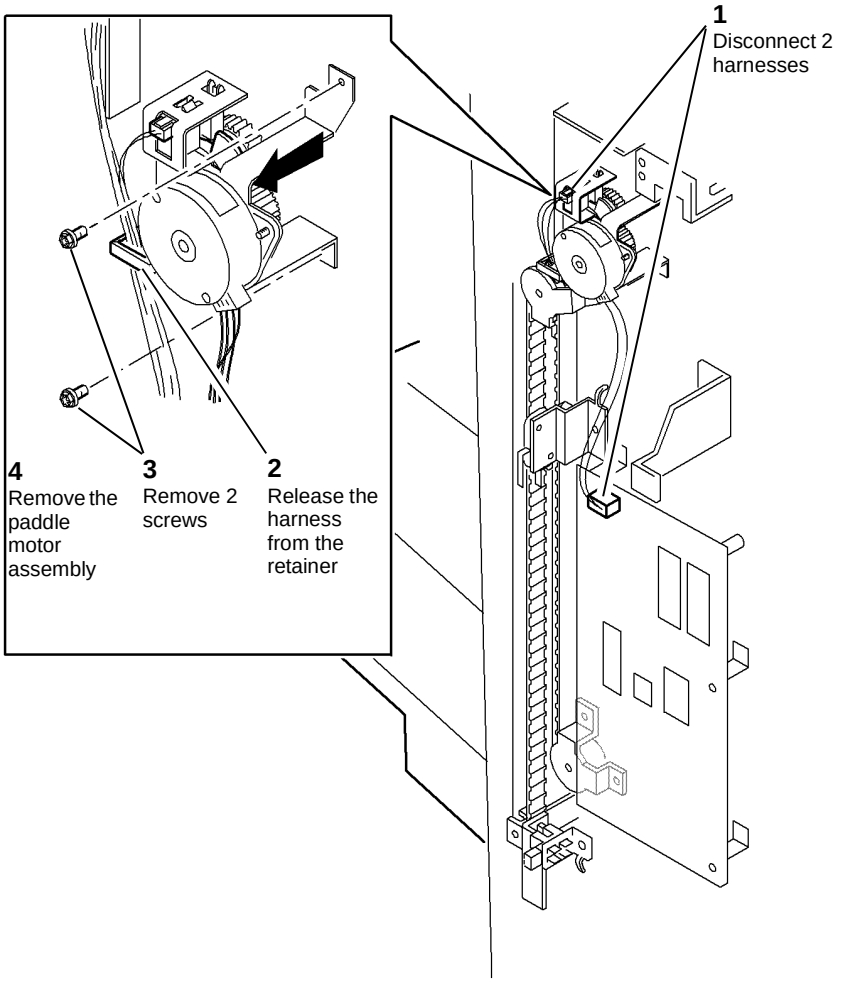


Figure 1 Paddle motor assembly

5. Prepare the rear components, Figure 2

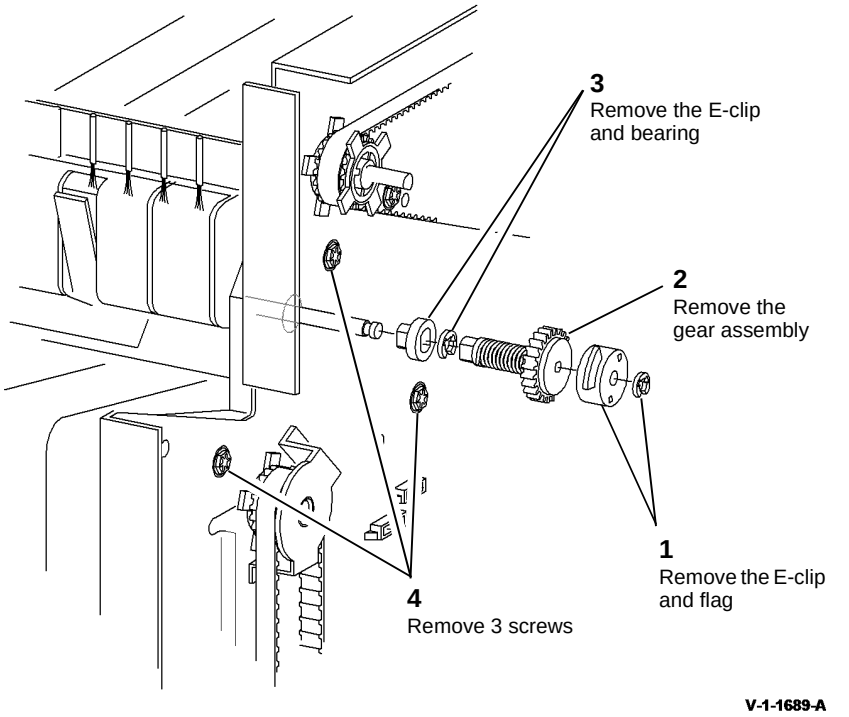


Figure 2 Rear preparation

6. Prepare the front components, Figure 3.

NOTE: *On later machines the switch, switch bracket, spring, harness and switch actuator may not be fitted.*

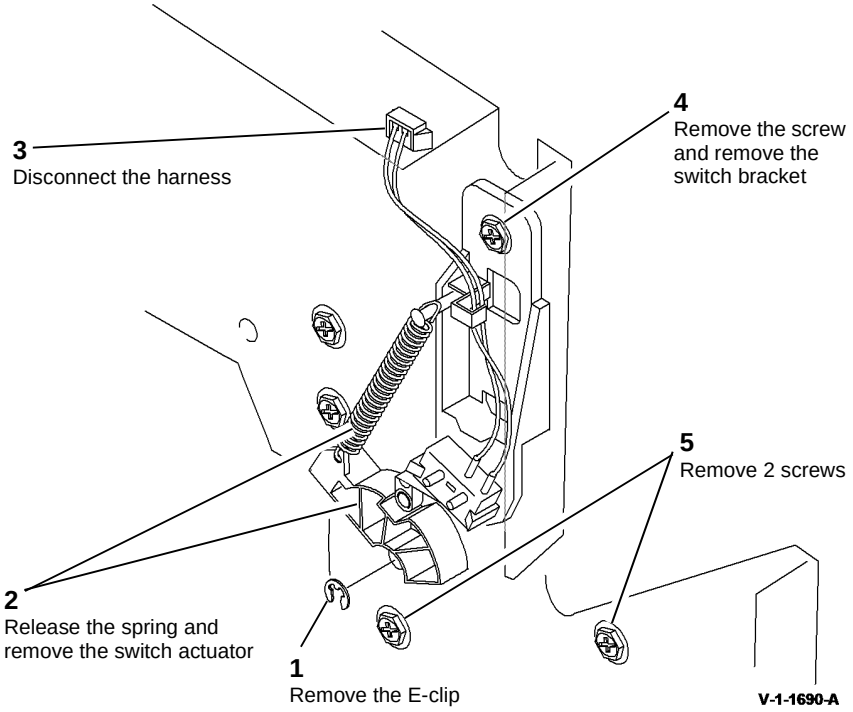


Figure 3 Front preparation

7. Ensure that the compiler ejector is in the home position (fully to the left).

8. Remove the paddle wheel shaft assembly, Figure 4

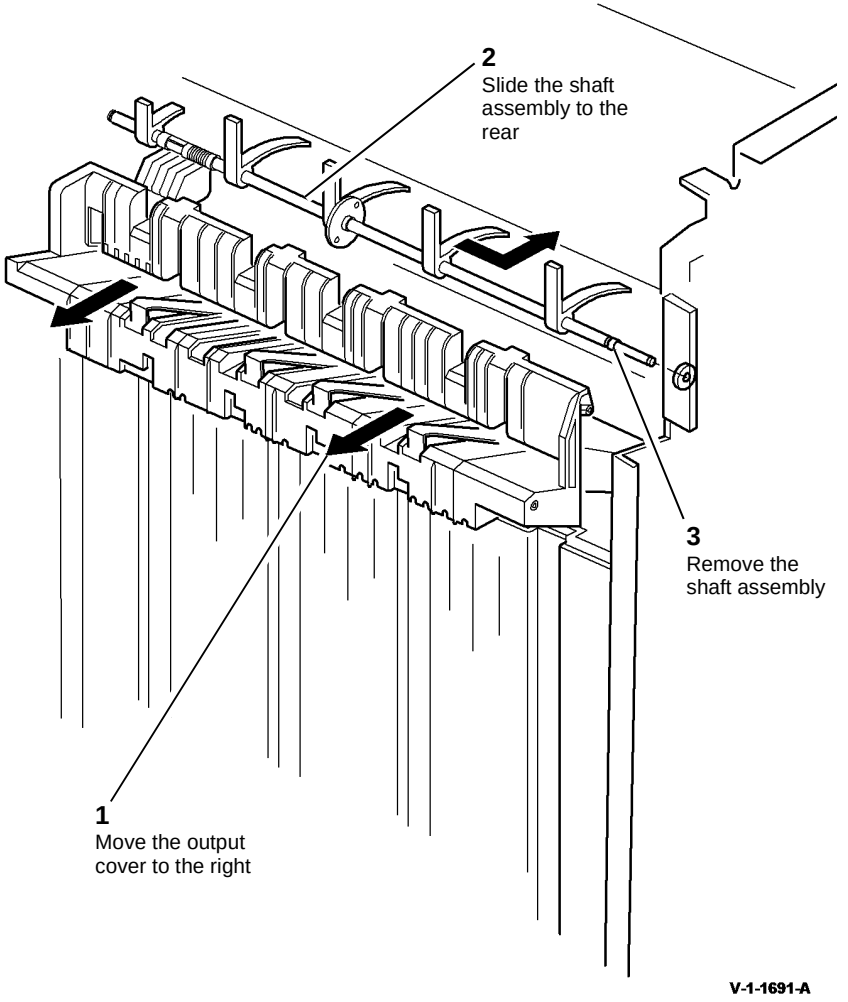


Figure 4 Paddle wheel shaft removal

Replacement

1. Install the paddle wheel shaft, ensure that the pin on the rear of the safety gate switch cam, Figure 3, locates in the safety gate. Install the front E-clip.
2. Install the output cover, Figure 4, ensuring that the safety gate is aligned with the slots in the output cover.
3. Install the rear bearing and E-clip.

4. Install the switch bracket, 1 screw, connect the harness, Figure 3.
5. Install the gear assembly, ensuring that it locates onto the large “D” flat, Figure 2.
6. Install the flag and E-clip, ensuring that the flag locates on the small “D” flat, Figure 2.
7. Ensure the paddles and flag are correctly aligned Figure 5. Install the motor assembly, Figure 1.

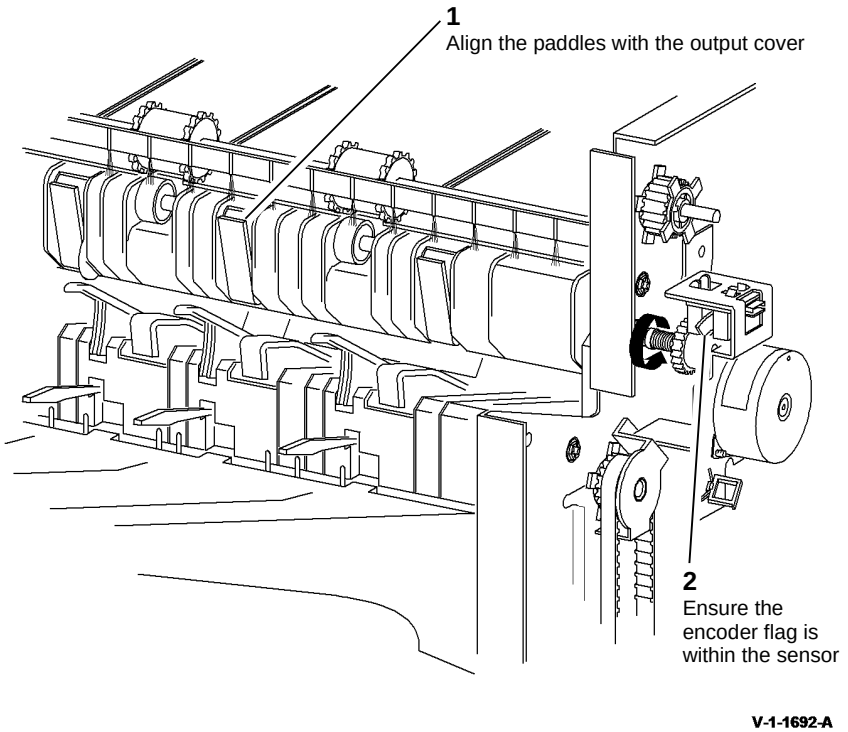


Figure 5 Paddle alignment

8. Test the operation of the paddle roll, enter dC330, output code 011-025. When the code is cancelled the paddles must stop with both rubber blades inside of the output cover. If necessary, check that the gear assembly and flag are correctly located on the “D” flats.

REP 11.13-110 2K LCSS Un-Docking

Parts List on PL 11.4

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the 2K LCSS. The 2K LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the 2K LCSS.

1. If necessary, disconnect the harnesses between the 2K LCSS and the machine.
2. Open the 2K LCSS front door.

3. Release the 2K LCSS docking latch assembly, Figure 1.

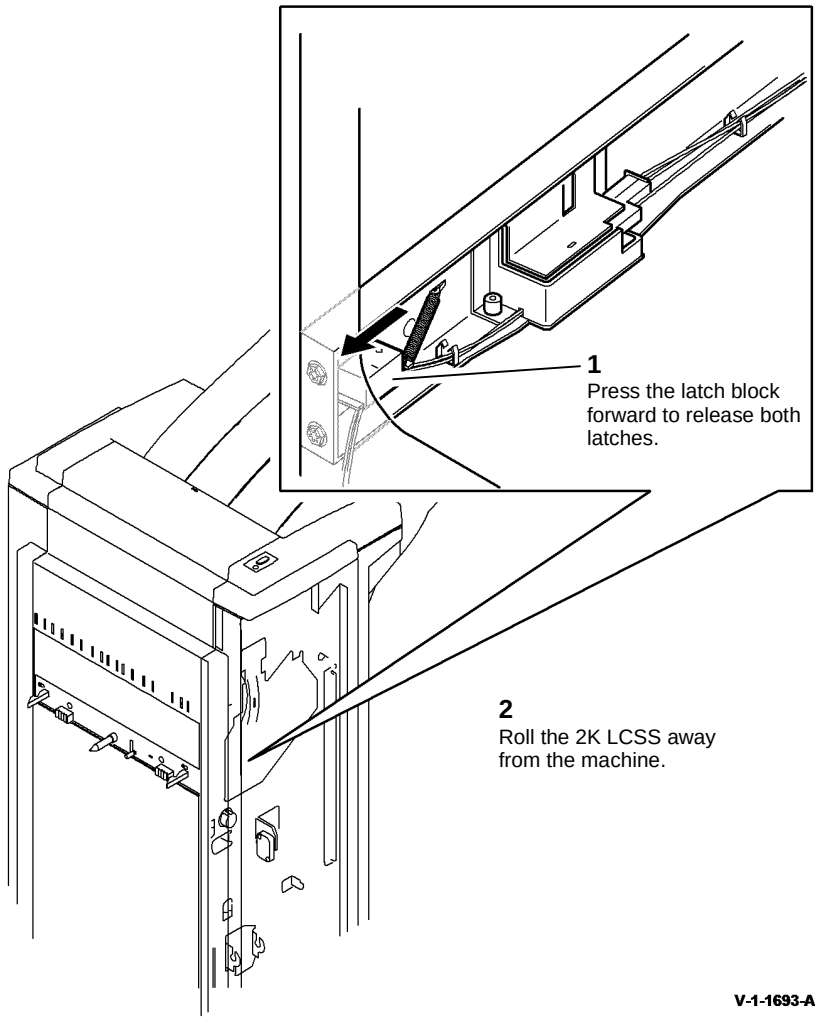


Figure 1 2K LCSS Docking latch assembly

Replacement

Line up the 2K LCSS latches to the machine apertures then push the two units firmly together until they latch.

REP 11.14-110 2K LCSS PWB

Parts List on PL 11.26

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS rear cover assembly, REP 11.1-110.
2. Disconnect all harness connectors from the 2K LCSS PWB.
3. Remove the three screws and release the three standoffs securing the 2K LCSS PWB.

Replacement

NOTE: *Before replacing the 2K LCSS rear cover assembly, perform 311F-110 2K LCSS PWB DIP Switch Settings RAP.*

Reverse the removal procedure to replace the 2K LCSS PWB.

REP 11.15-110 Entry Guide Cover

Parts List on PL 11.24

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the 2K LCSS. The 2K LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the 2K LCSS.

1. Remove the 2K LCSS front cover and 2K LCSS rear cover, REP 11.1-110.
2. Un-dock the 2K LCSS, REP 11.13-110.
3. Disconnect the harness to the entry sensor, PL 11.24 Item 3, at the rear frame.
4. Remove the entry guide cover, Figure 1

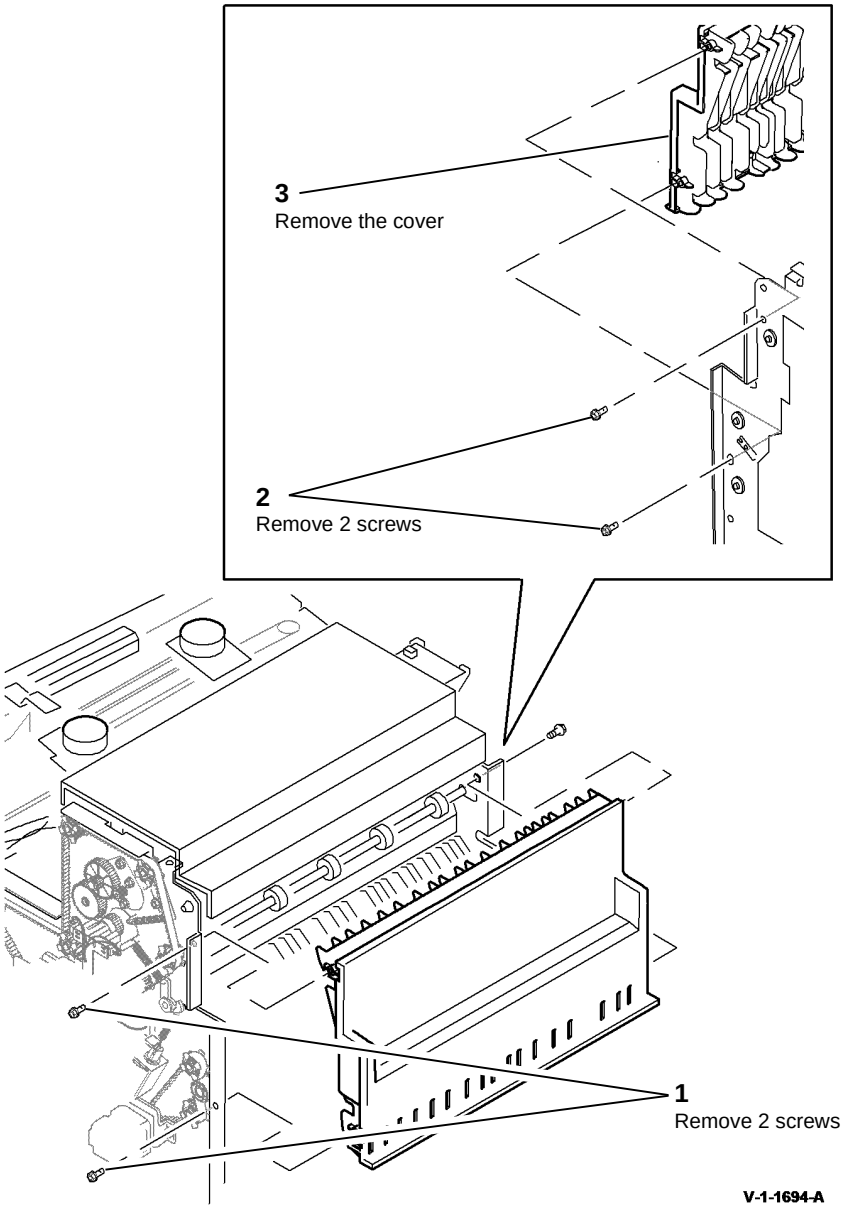


Figure 1 Entry guide cover removal

Replacement

Refer to GP 6 before refitting the screws.

1. Bias the entry guide cover away from the paper guide when you tighten the screws.
2. The clearance between the entry guide cover and the paper guide must be a minimum of 1mm. Refer to Figure 2.

   NOTE: *If the clearance is less than 1mm, then install a new entry guide cover.*

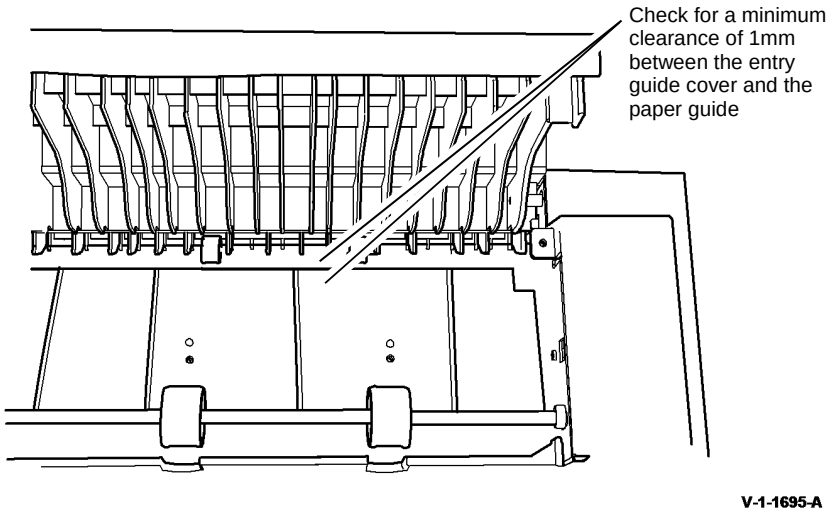


Figure 2 Entry guide cover clearance

3. Run copies through the output device, if possible use heavy weight paper or labels. Check for marks on the print and for damage to the paper. If there are no marks or damage then install the covers.

REP 11.16-110 Docking Latch Assembly

Parts List on PL 11.4.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the 2K LCSS. The 2K LCSS is unstable when un-docked from the machine. Do not show the customer how to un-dock the 2K LCSS.

1. Remove the front and rear covers, REP 11.1-110.
2. Un-dock the 2K LCSS, REP 11.13-110.

3. Prepare to remove the docking latch assembly, Figure 1.

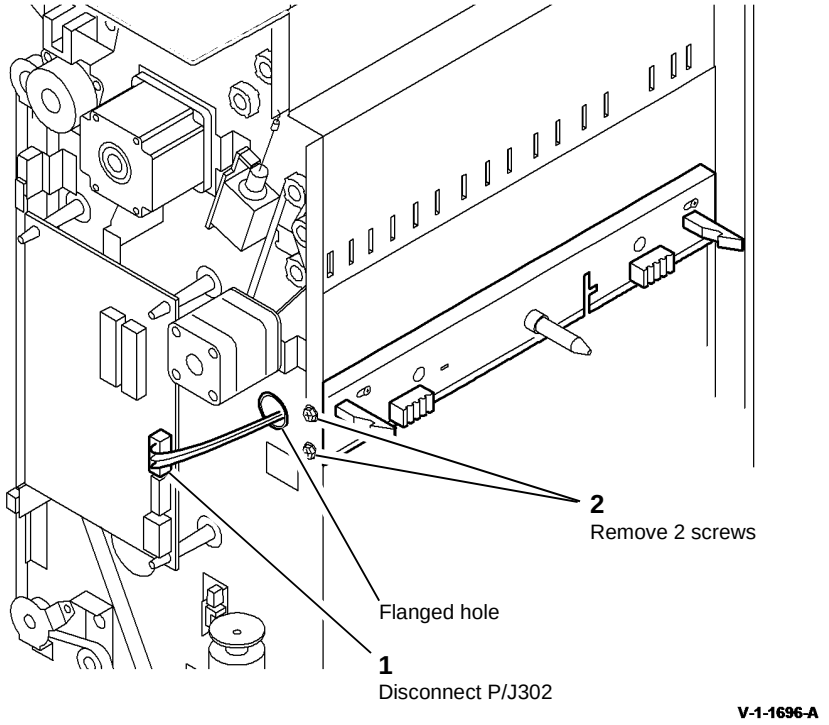


Figure 1 Prepare to remove the latch

4. Remove the docking latch assembly, Figure 2.

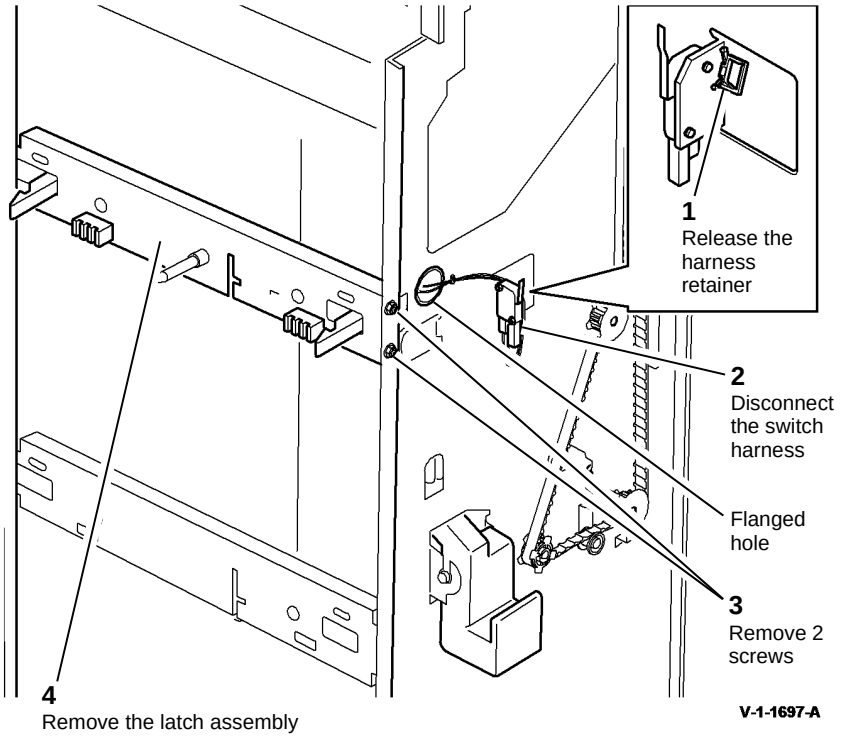


Figure 2 Latch assembly removal

Replacement

Reverse the removal procedure to replace the docking latch assembly.

CAUTION

Ensure that the front and rear harness are routed through the flanged holes, refer to Figure 1 and Figure 2.

REP 11.17-110 Ejector Belt

Parts List on PL 11.18.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the ejector assembly, refer to REP 11.10-110.
2. Remove the ejector belt, Figure 1.

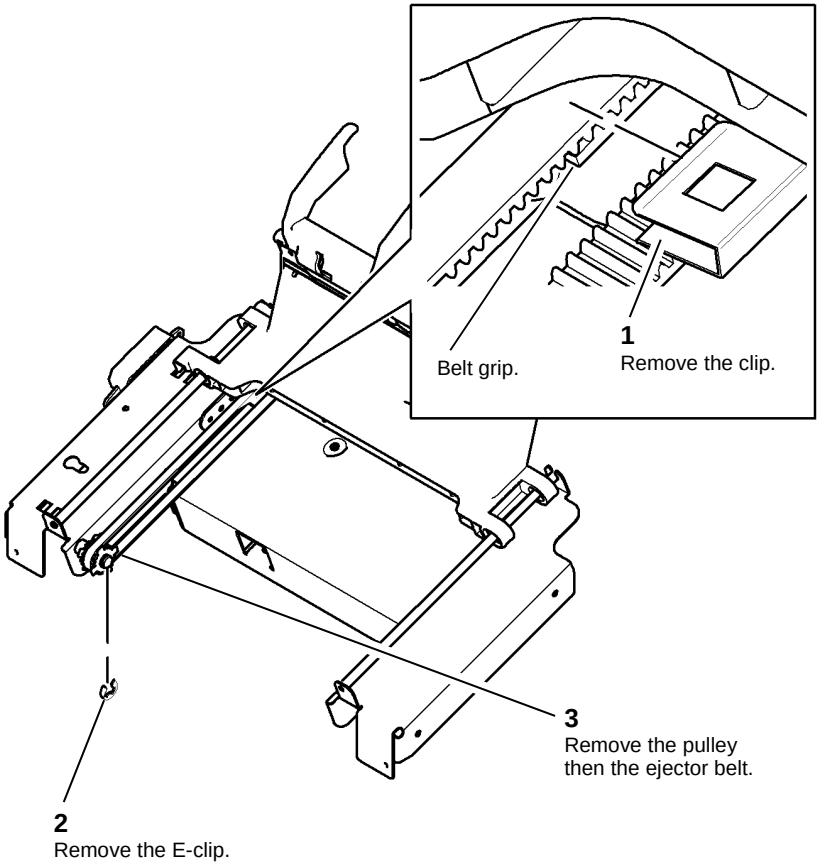


Figure 1 Remove the ejector belt

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the ejector belt is correctly engaged with the belt grip on the ejector assembly before the clip is reinstalled. Refer to Figure 1.

REP 11.18-110 Paper Guide and Top Exit Sensor

Parts List on PL 11.22

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS front door cover assembly, rear cover and top cover, REP 11.1-110.
2. Remove the hole punch motor assembly, REP 11.7-110.
3. Prepare to remove the paper guide Figure 1.

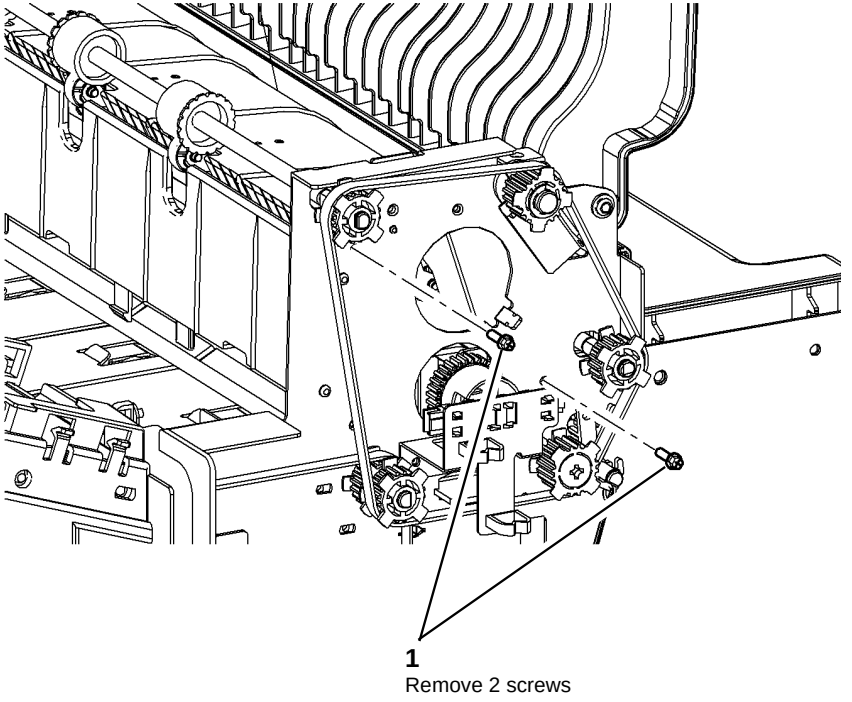


Figure 1 Preparation

4. Remove the paper guide and top exit sensor, Q11-130, Figure 2.

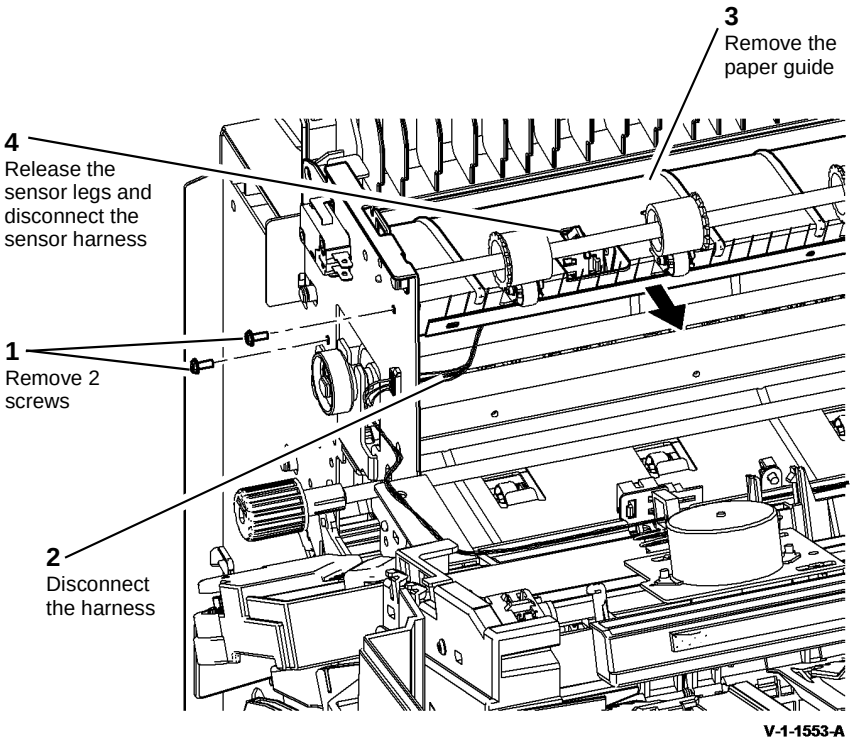


Figure 2 Guide and sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.19-110 Lower Right Paper Guide

Parts List on PL 11.23

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 2K LCSS top cover, rear cover and front door cover assembly, REP 11.1-110.
2. Remove the tamper assembly, REP 11.6-110.
3. Remove the paper output drive belt, REP 11.4-110.
4. Loosen the fixing screws on transport motor 2, PL 11.22 Item 5.
5. Prepare to remove the drive shafts Figure 1.

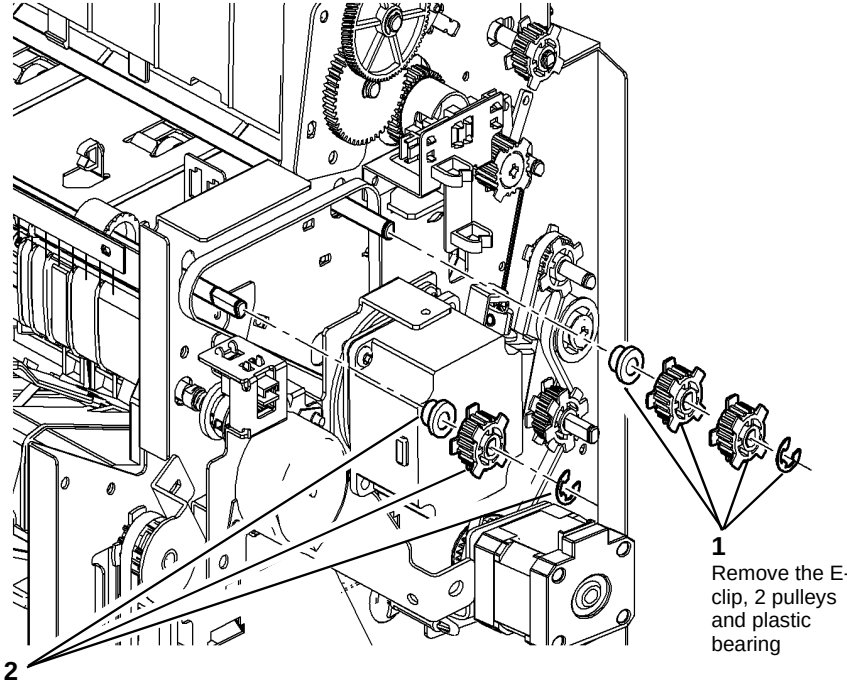


Figure 1 Preparation

6. Remove the drive shafts, Figure 2.

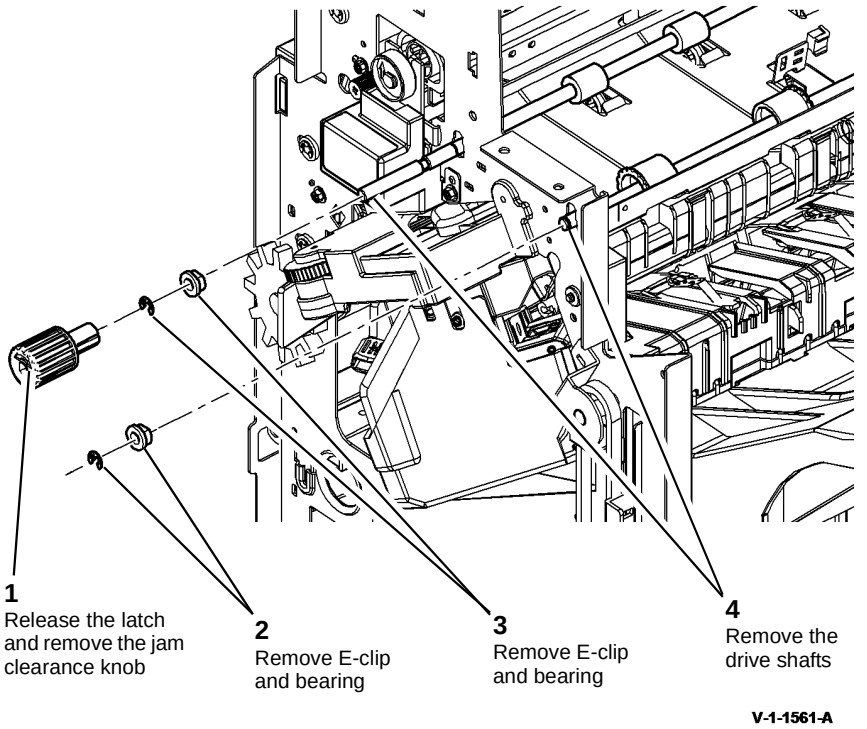


Figure 2 Drive shafts removal

7. Prepare to remove the upper right paper guide, Figure 3.

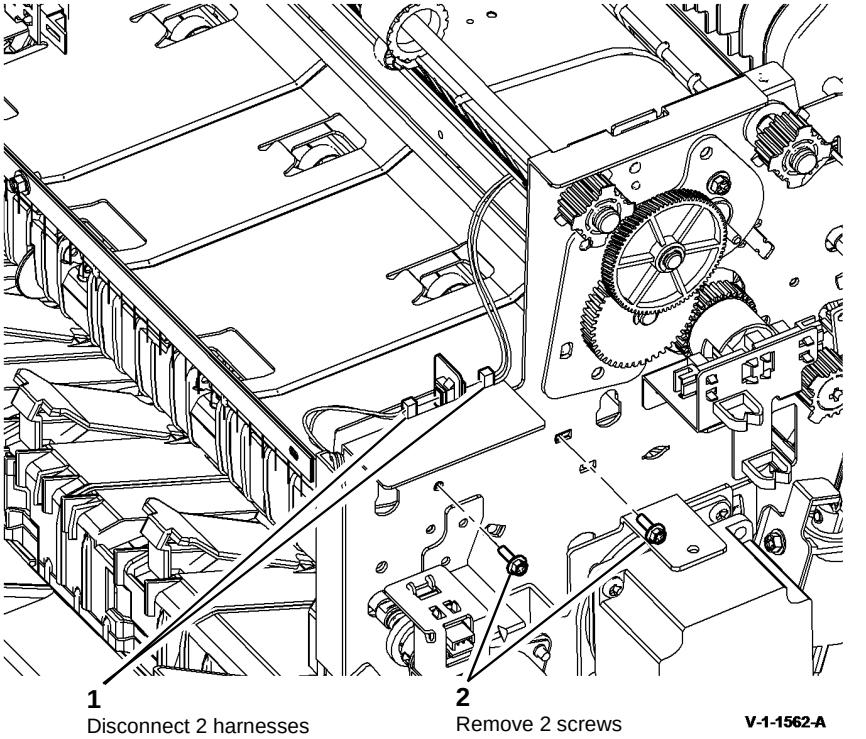


Figure 3 Preparation

8. Remove the upper right paper guide, Figure 4.

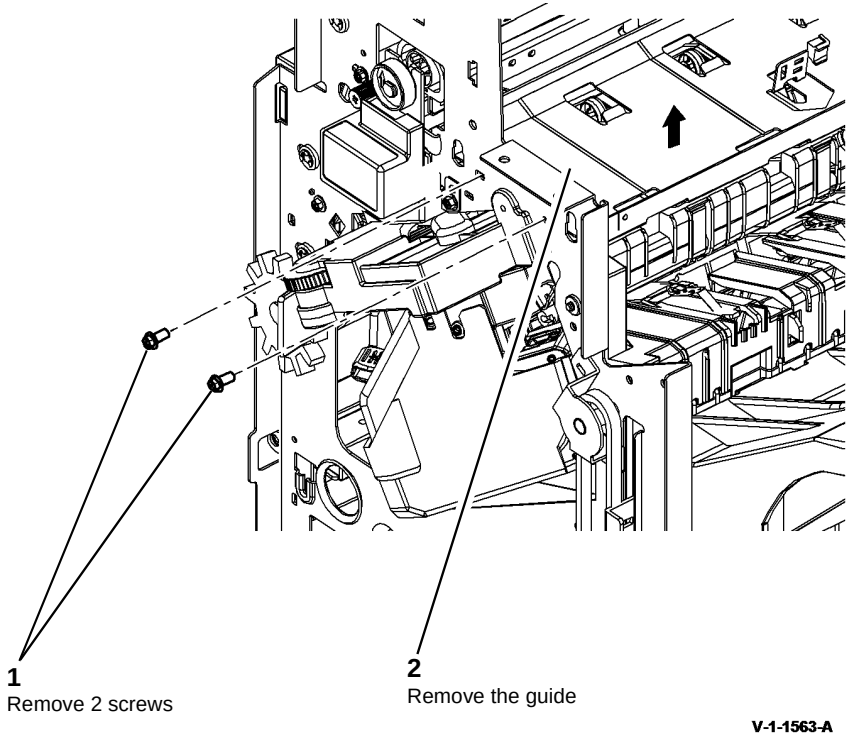


Figure 4 Upper right guide removal

9. Prepare to remove the lower right paper guide, Figure 5.

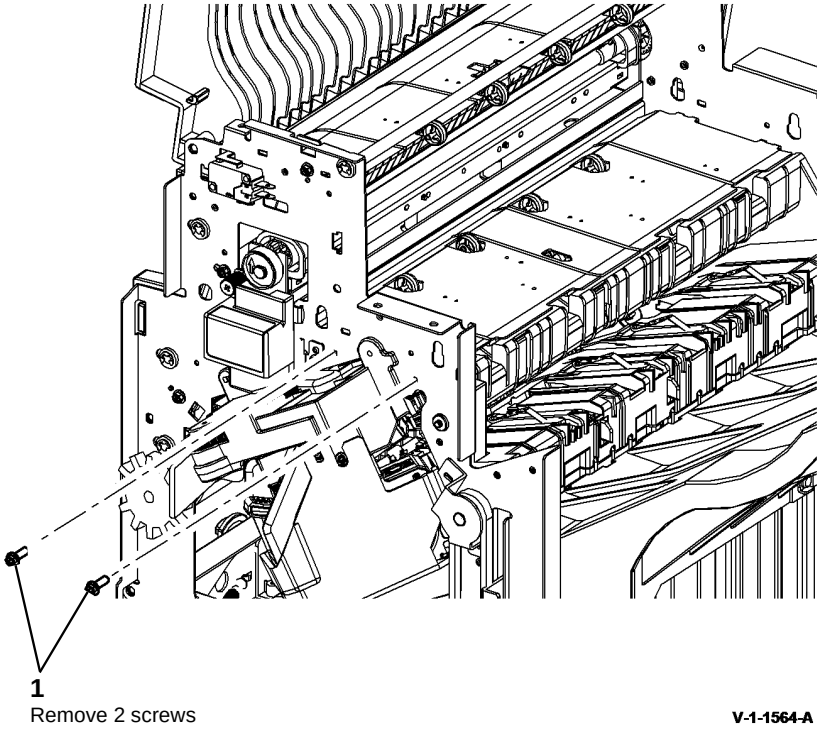


Figure 5 Preparation

10. Remove the lower right paper guide, Figure 6.

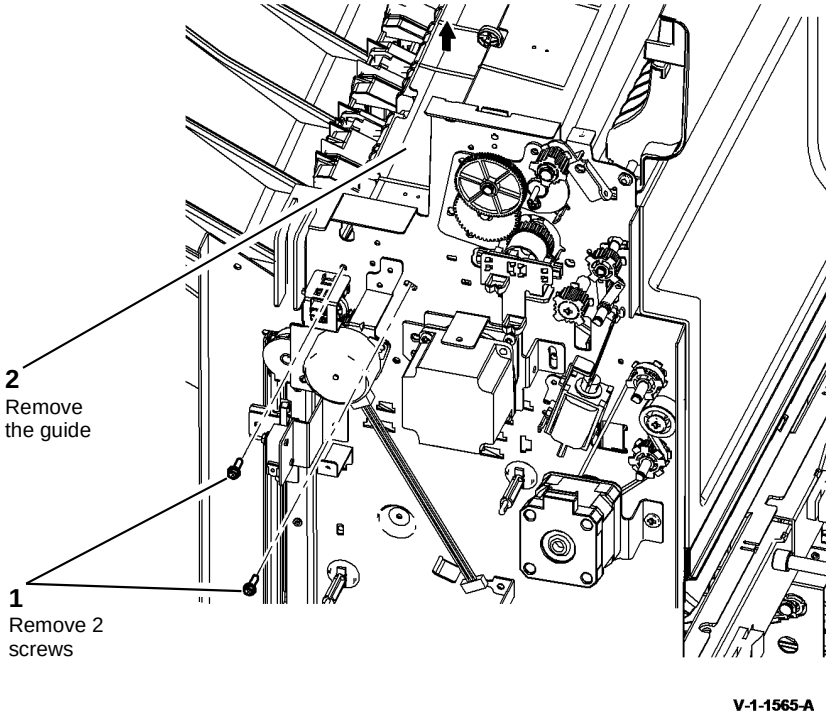


Figure 6 Lower right guide removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.1-120 1K LCSS Covers

Parts List on PL 11.100.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the covers, Figure 1.

NOTE: *Removing the top cover first will allow easy removal of the front and rear covers.*

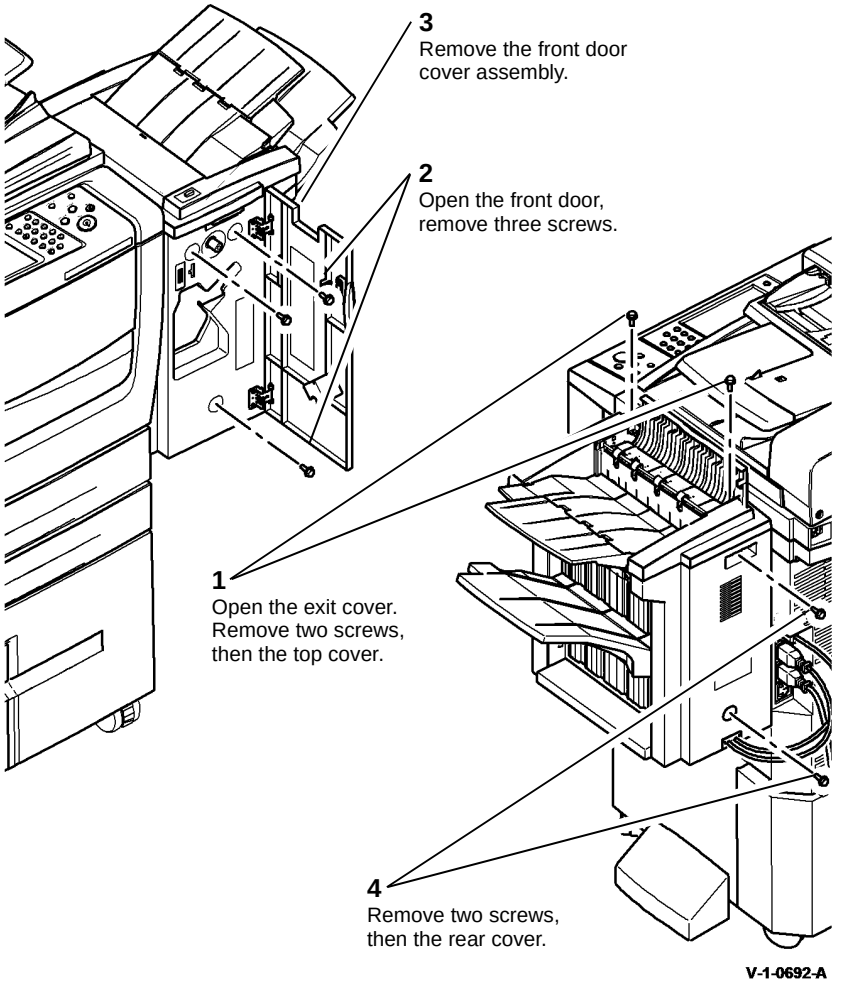


Figure 1 Removing the covers

Replacement

Reverse the removal procedure to replace the covers.

REP 11.2-120 Input Drive Belt and Transport Motor 1

Parts List on PL 11.110.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS rear cover, REP 11.1-120.
2. Remove transport motor 1 and the input drive belt, Figure 1.

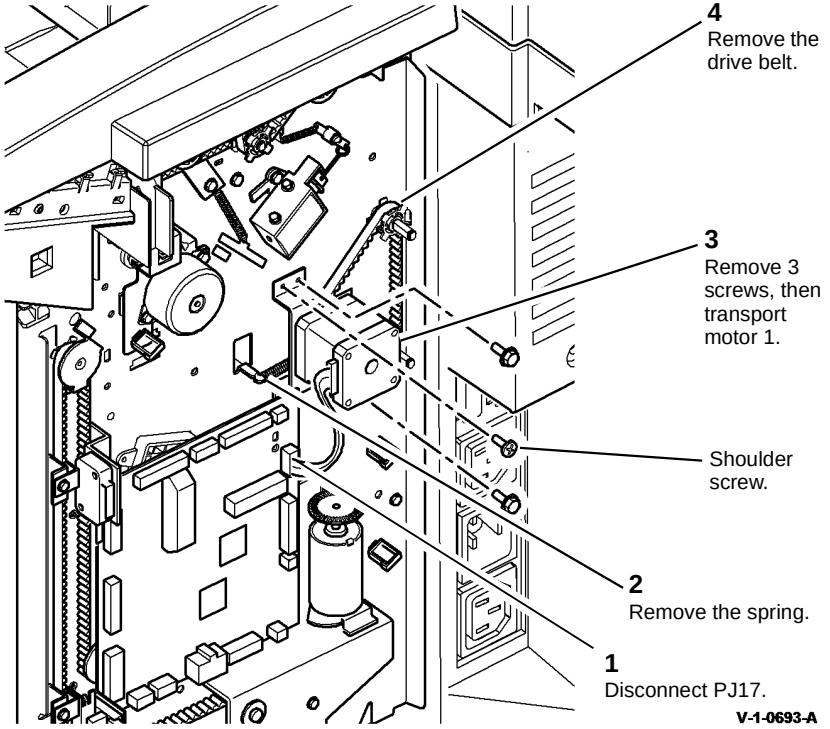


Figure 1 Motor and belt removal

Replacement

1. Place the belt around the pulleys.

   NOTE: *Ensure that the shoulder screw is installed in the correct position. Refer to Figure 1.*

2. Install the shoulder screw and tighten
3. Install the 2 motor screws, but do not tighten.
4. Install the spring.
5. Rotate the shaft by hand to ensure the belt runs smoothly over the pulleys and allow the spring to tension the belt, refer to ADJ 11.2-120.
6. Tighten the motor screws and re-connect the harness.
7. Install the 1K LCSS rear cover, REP 11.1-120.

REP 11.3-120 1K LCSS Stability Foot

Parts List on PL 11.100.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS, REP 11.11-120.
2. Remove the stability foot, Figure 1.

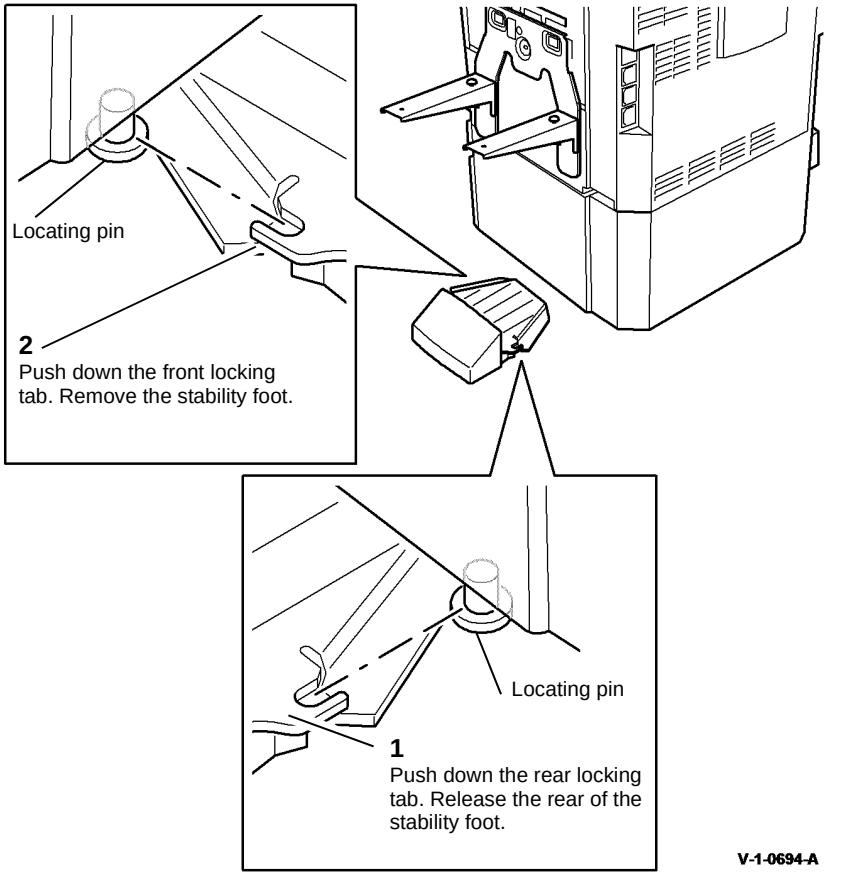


Figure 1 Removal

Replacement

Align the slots in the stability foot with the locating pins under the machine. Firmly push the stability foot into position.

REP 11.4-120 Paper Output Drive Belt and Transport Motor 2

Parts List on PL 11.120.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS top cover and rear cover, REP 11.1-120.
2. Remove the intermediate drive belt, PL 11.118 Item 4.
3. Remove the paper output drive belt, Figure 1.

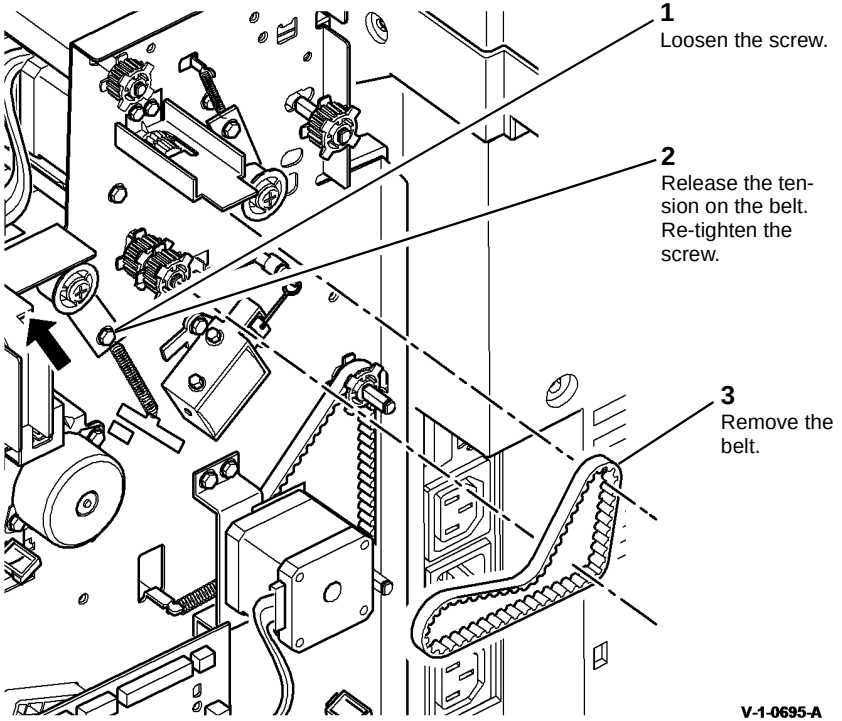


Figure 1 Belt removal

4. Remove transport motor 2, Figure 2.

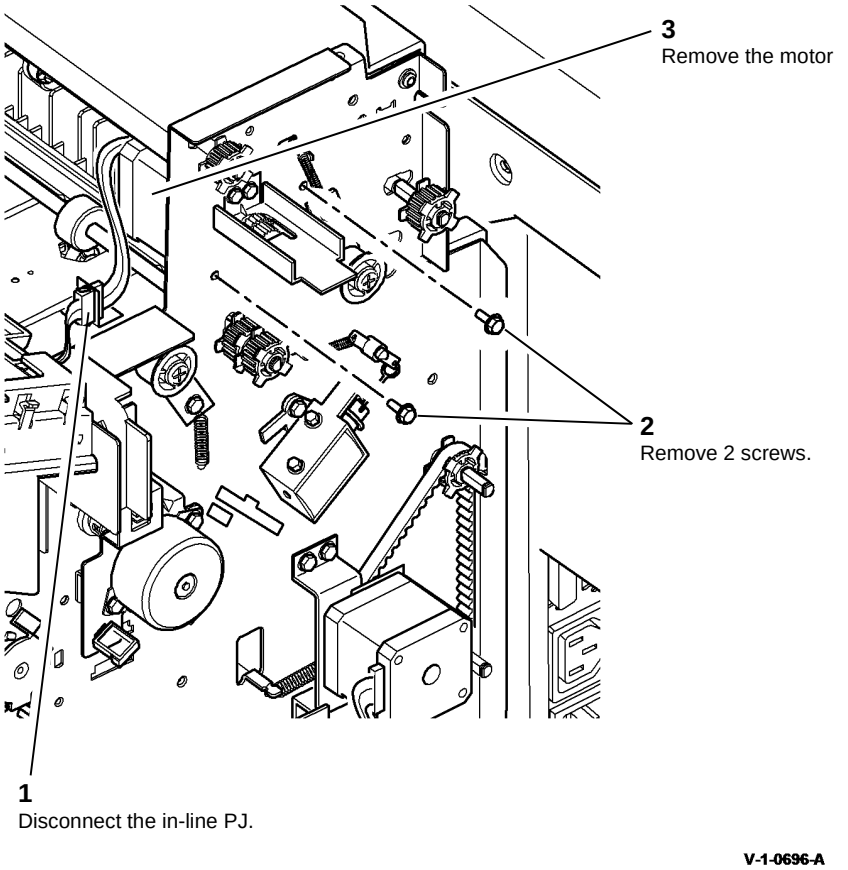


Figure 2 Motor removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Loosen the belt tensioner screw. Manually rotate the paper output drive belt to allow the spring to tension the belt, then tighten the belt tensioner screw.

REP 11.5-120 Bin 1 Drive Belts

Parts List on PL 11.106.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Enter dC330, code 011-032, bin 1 elevator motor down. Fully lower bin 1.
2. Switch off the machine, GP 14.
3. Remove the 1K LCSS rear cover and front door cover assembly, REP 11.1-120.

   NOTE: *Keep all of the components removed as a set. The set of rear frame components are different from the front frame set.*

4. Prepare to remove the rear bin 1 drive belt, Figure 1.

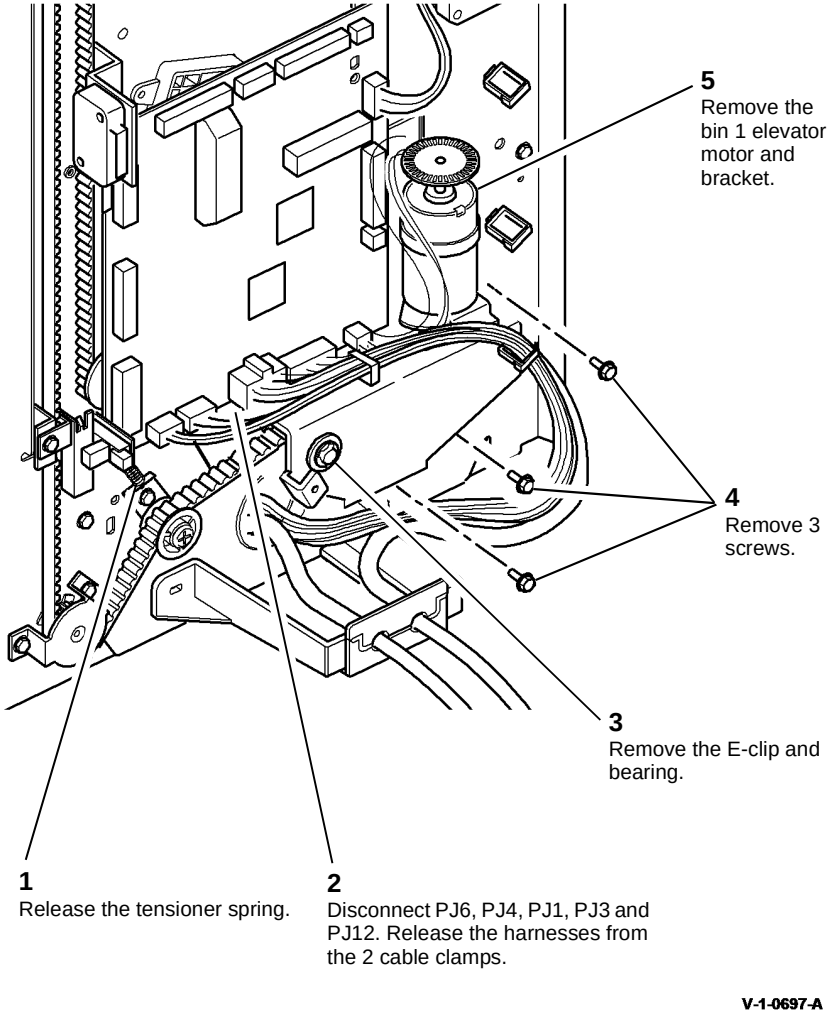


Figure 1 Preparation

5. Remove the re ar bin 1 drive belt, Figure 2.

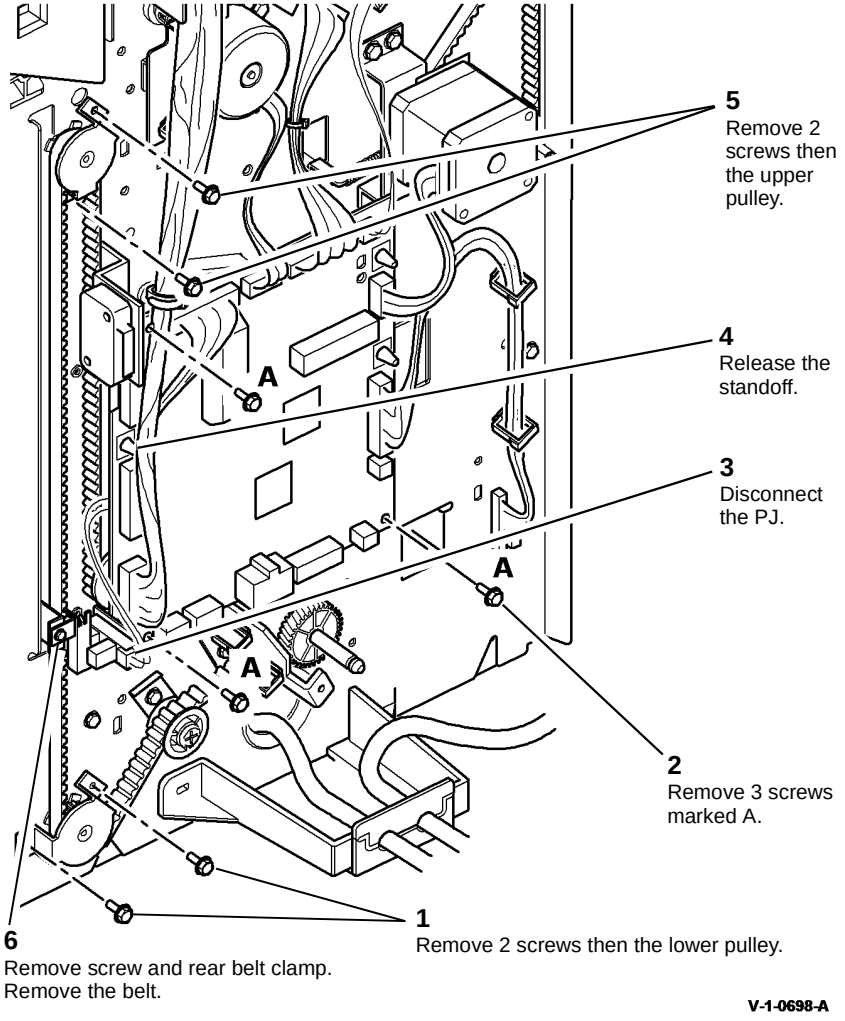


Figure 2 Bin 1 drive belt removal (rear)

6. Remove the bin 1 drive belt (front) Figure 3.

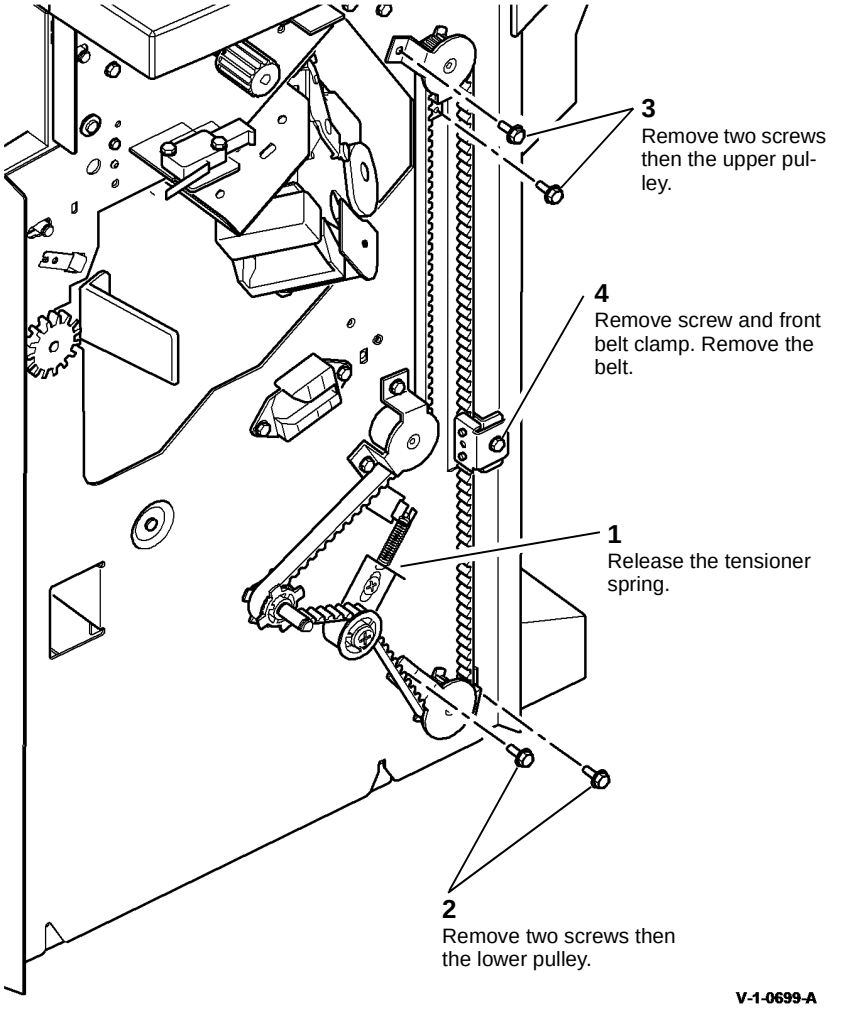


Figure 3 Bin 1 drive belt (front)

Replacement

NOTE: *Ensure the correct set of components are used for each side of the 1K LCSS.*

1. Reverse the removal procedure to replace the bin 1 drive belts.

   NOTE: *Bin 1 level can critically affect the overall stack registration. Refer to ADJ 11.1-120 if adjustment is necessary.*

REP 11.6-120 Tamper Assembly

Parts List on PL 11.112.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS covers REP 11.1-120.
2. Prepare to remove the tamper assembly, Figure 1.

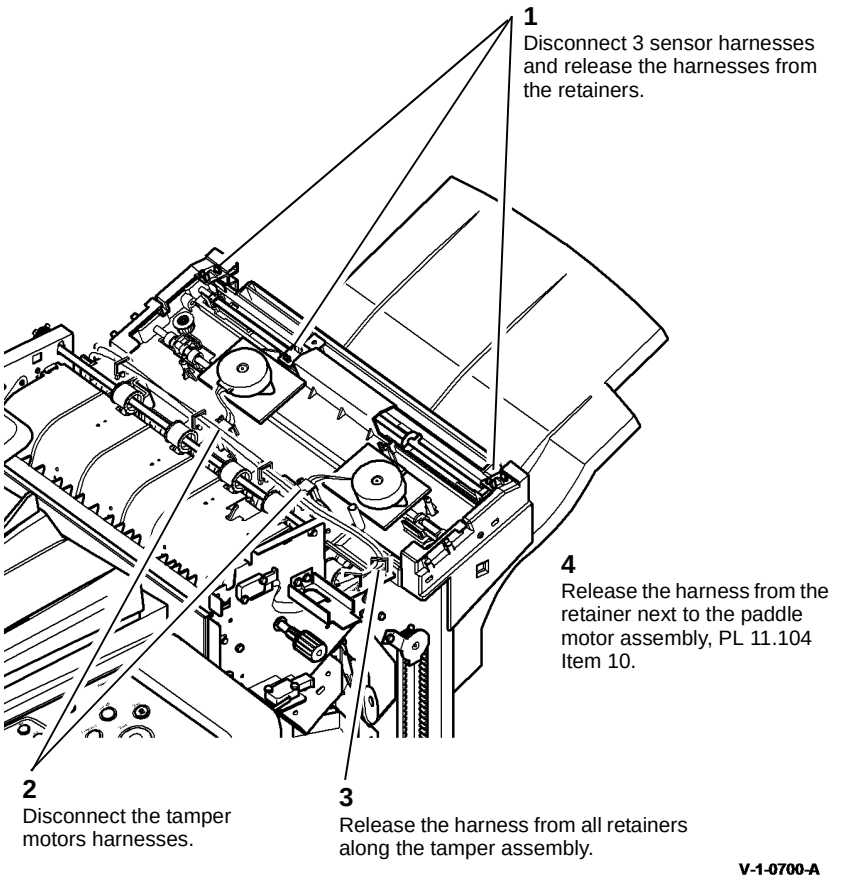


Figure 1 Preparing the tamper assembly

3. Figure 2, remove the tamper assembly.

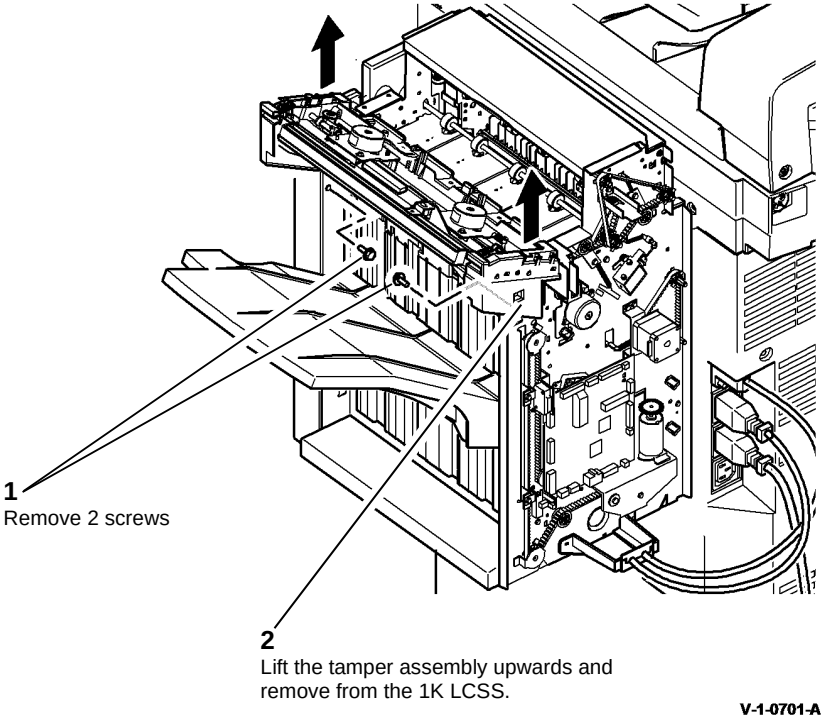


Figure 2 Removing the tamper assembly

Replacement

Reverse the removal procedure to replace the tamper assembly.

NOTE: *Ensure that:*

- *The slots in the tamper assembly locate correctly in the 1K LCSS frame.*
- *The sensors are correctly located in the tamper assembly, they are easily mis-located when being disconnected and re-connected to the harnesses.*
- *All connectors in the harness over the tamper assembly are securely connected.*

REP 11.7-120 Stapler Assembly and SH1 Paper Sensor

Parts List on PL 11.116.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS rear cover and front door cover assembly, REP 11.1-120.
2. Manually move the ejector, PL 11.114 Item 1 fully to the right (out position).
3. Prepare to remove the staple head unit and mounting bracket, Figure 1.

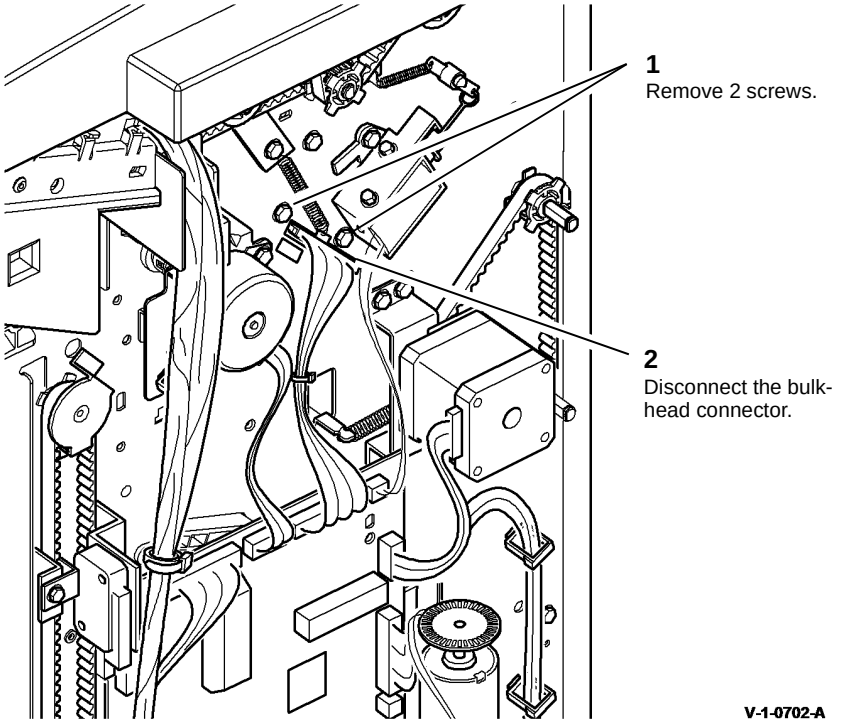


Figure 1 Preparation

CAUTION

When removing and replacing the stapler assembly, support the weight of the assembly underneath the stapler and take care not to damage wiring.

4. Remove the stapler assembly, Figure 2.

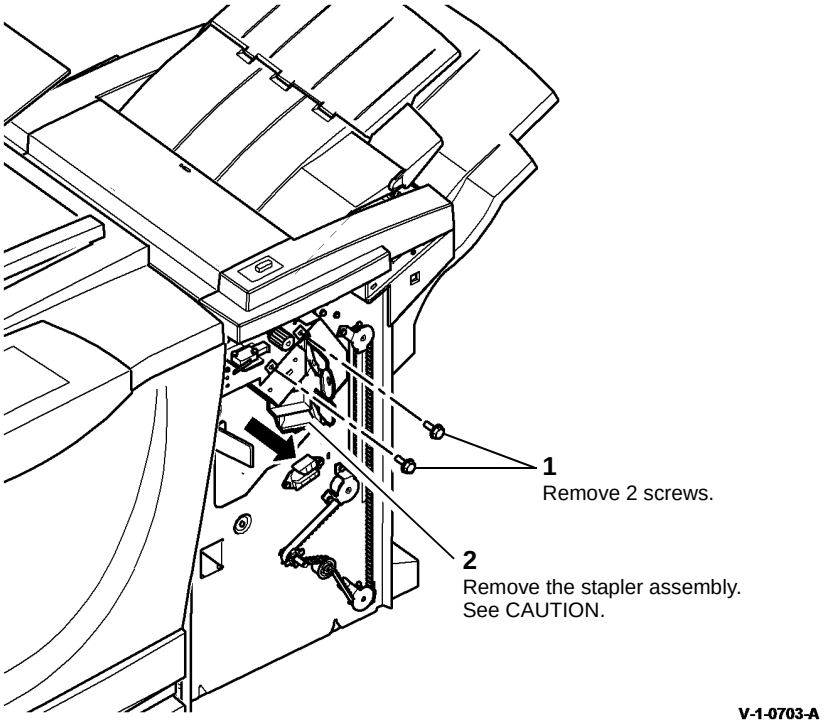


Figure 2 Removal

CAUTION

When removing the SH1 paper sensor, do not damage the actuator for the SH1 cartridge sensor, Figure 3.

5. Remove the SH1 paper sensor, Figure 3.

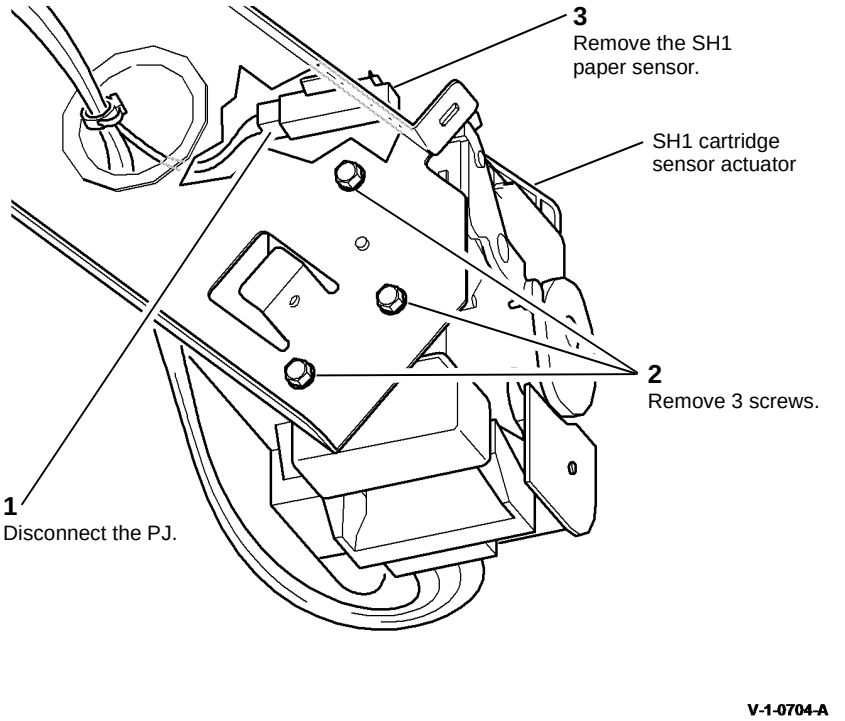


Figure 3 SH1 paper sensor removal

Replacement

Reverse the removal procedure to replace the staple head unit.

REP 11.8-120 Ejector Assembly and Sensors

Parts List on PL 11.114.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. If necessary, manually move the ejector to the right (out position).
2. Remove the docking latch, REP 11.14-120.

   NOTE: *Do not disconnect the docking interlock switch.*

3. Remove the ejector assembly, Figure 1

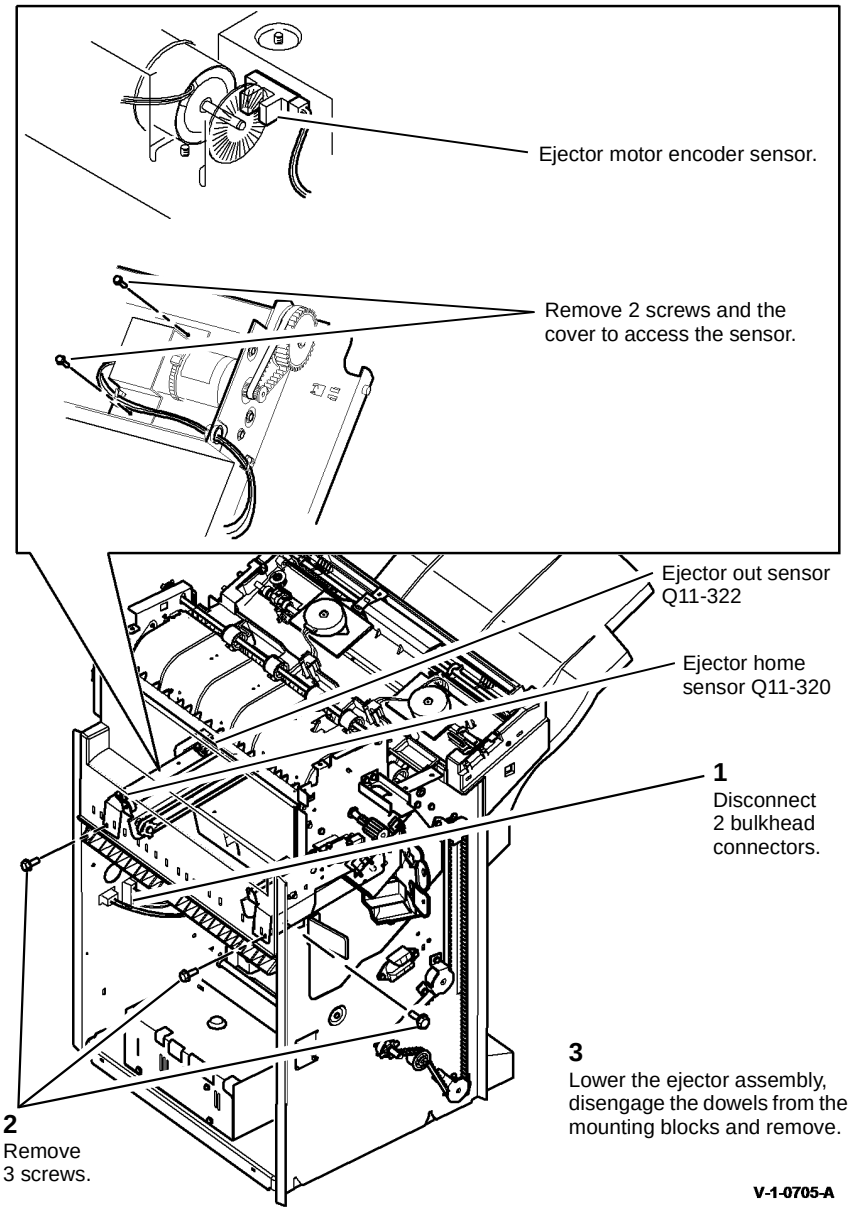


Figure 1 Ejector assembly removal

4. Remove the appropriate sensor by releasing the sensor tabs and disconnecting the harness.

Replacement

CAUTION

When installing the ejector assembly onto the 1K LCSS, ensure that the ejector fingers do not damage the wiring to the staple head unit.

Reverse the removal procedure to replace the eject assembly or sensors.

REP 11.9-120 Bin 1 Upper Level Sensor

Parts List on PL 11.106.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the stapler assembly, REP 11.7-120.
2. Remove the ejector assembly, REP 11.8-120.
3. Remove the bin 1 upper level sensor, Figure 1.

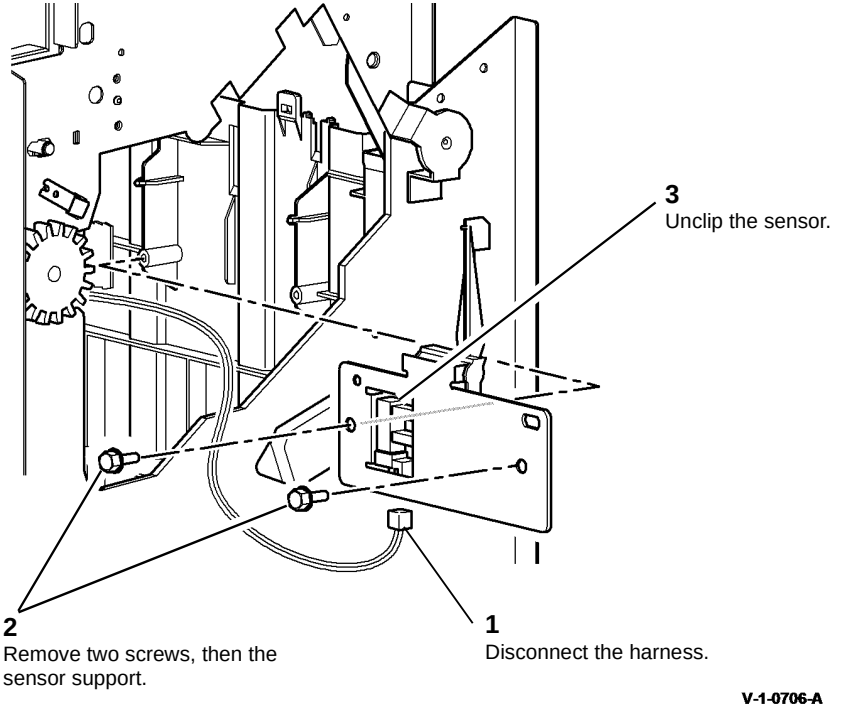


Figure 1 Sensor removal

Replacement

Reverse the removal procedures to replace the bin 1 upper level sensor.

REP 11.10-120 Paddle Wheel Shaft Assembly

Parts List on PL 11.104.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tamper assembly, REP 11.6-120.
2. Remove the paddle motor assembly, Figure 1.

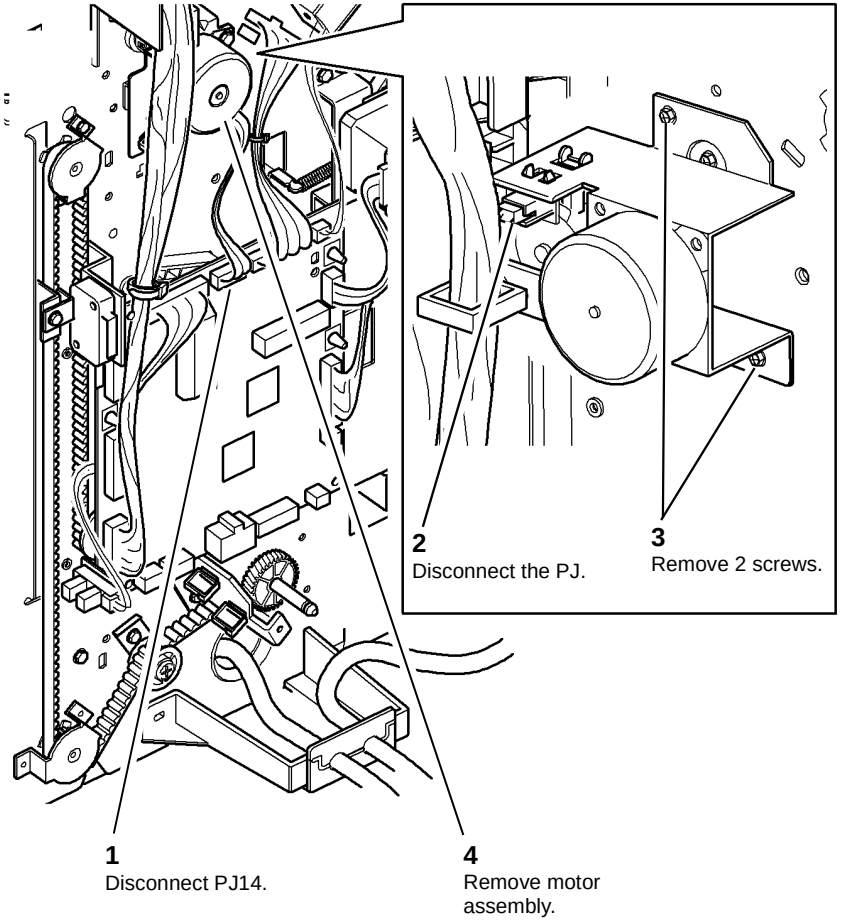


Figure 1 Paddle motor assembly

3. Prepare the rear components, Figure 2.

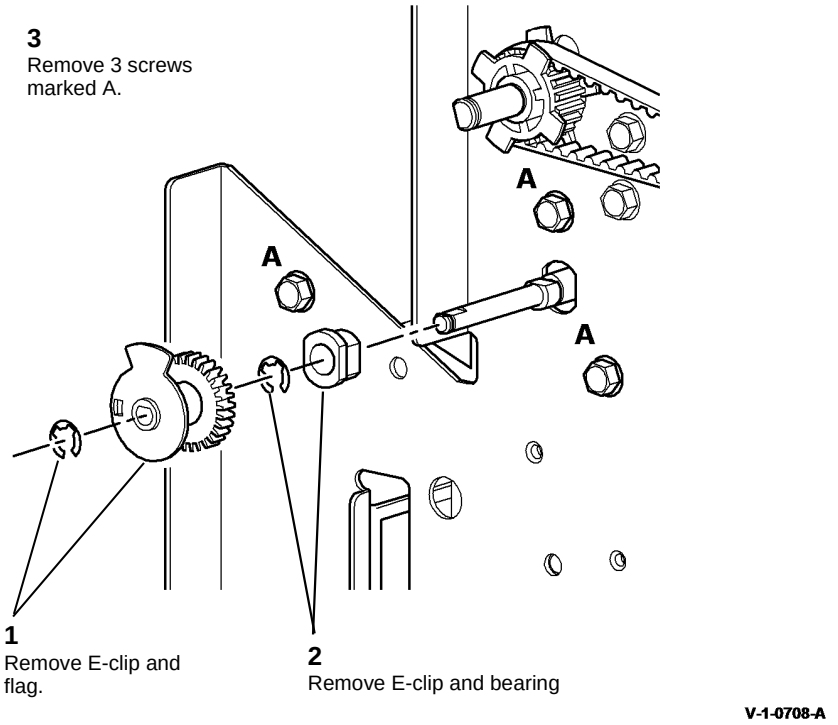


Figure 2 Rear preparation

4. Prepare the front components, Figure 3.

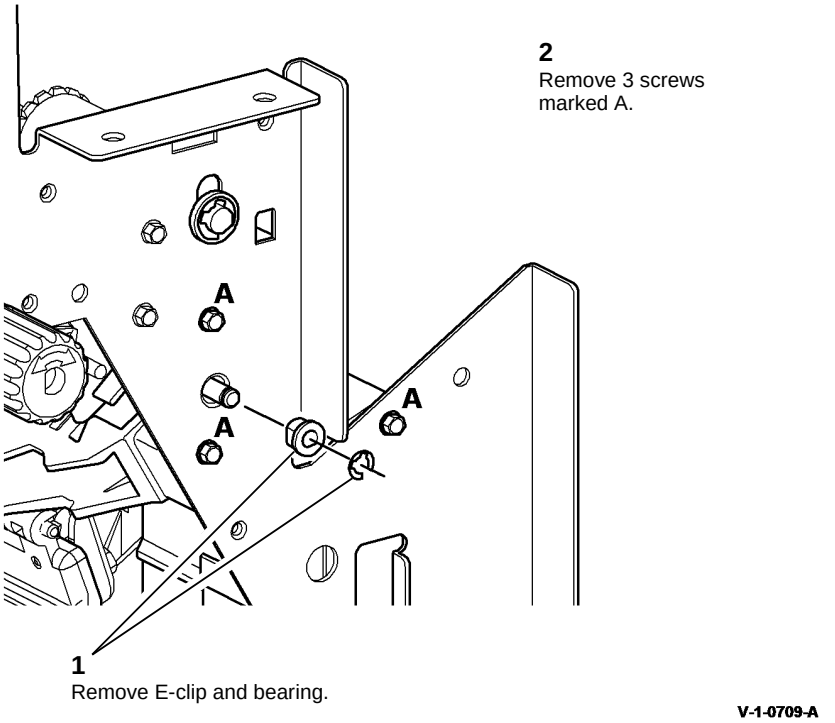


Figure 3 Front preparation

5. Ensure that the compiler ejector is fully to the left (home position).

6. Remove the paddle wheel shaft assembly, Figure 4.

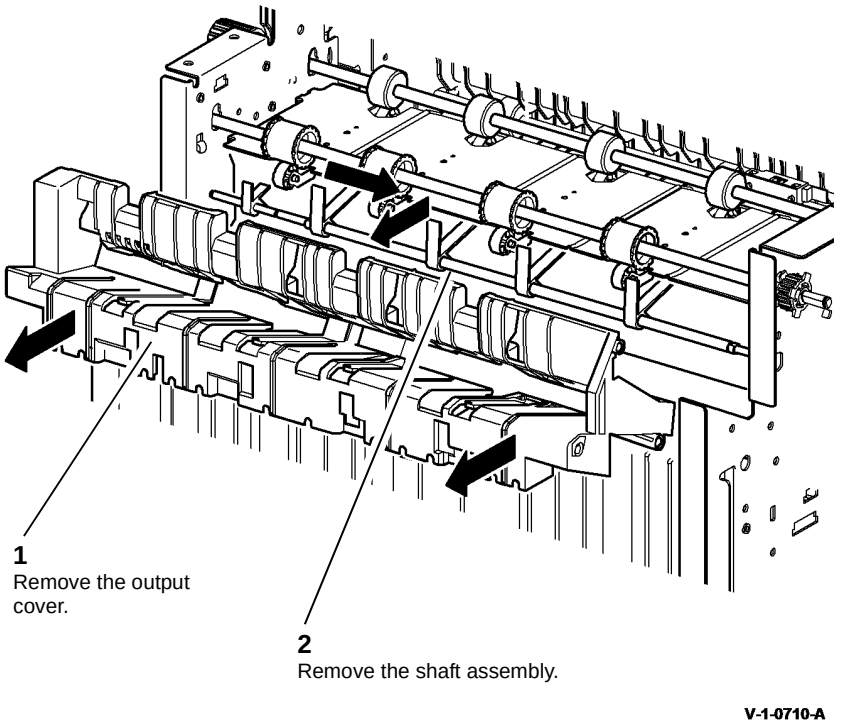


Figure 4 Paddle wheel shaft removal

Replacement

1. The replacement is the reverse of the removal procedure. Ensure the paddles and flag are correctly aligned, refer to Figure 5.

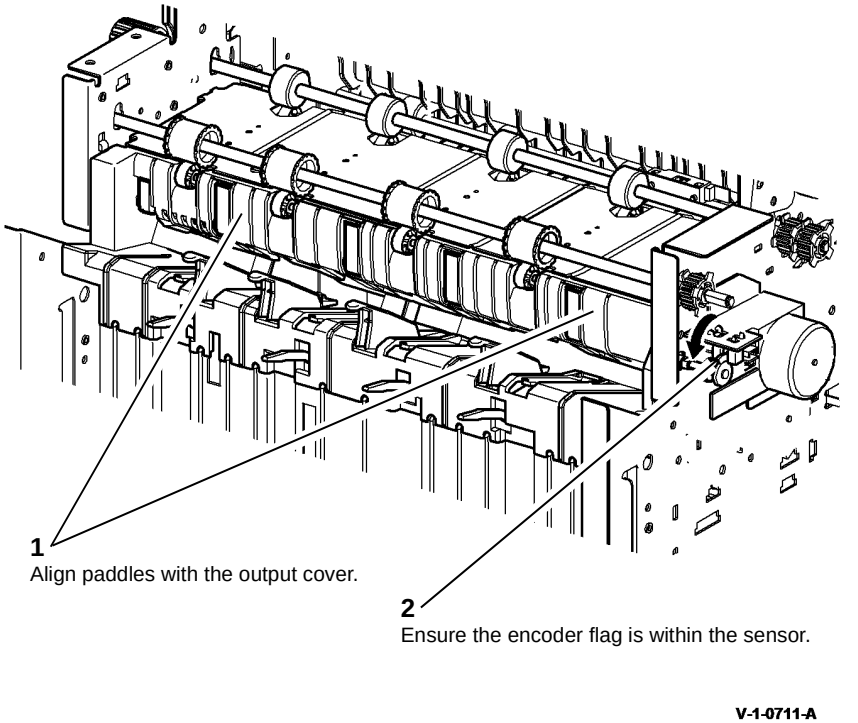


Figure 5 Paddle alignment

2. Test the operation of the paddle roll, enter dC330, output code 011-025. When the code is cancelled the paddles must stop with both rubber blades inside of the output cover. If necessary, check that the gear assembly and flag are correctly located on the “D” flats.

REP 11.11-120 1K LCSS Removal

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Use safe handling procedures when removing the module, GP 16. The module is heavy.

NOTE: *The 1K LCSS weight is 21Kg (46lb).*

1. Disconnect the harnesses between the 1K LCSS and the machine.
2. Remove the 1K LCSS bin 1, PL 11.100 Item 10.
3. Remove the 1K LCSS top cover, REP 11.1-120.
4. Open the 1K LCSS front door.
5. Prepare to remove the 1K LCSS, Figure 1.

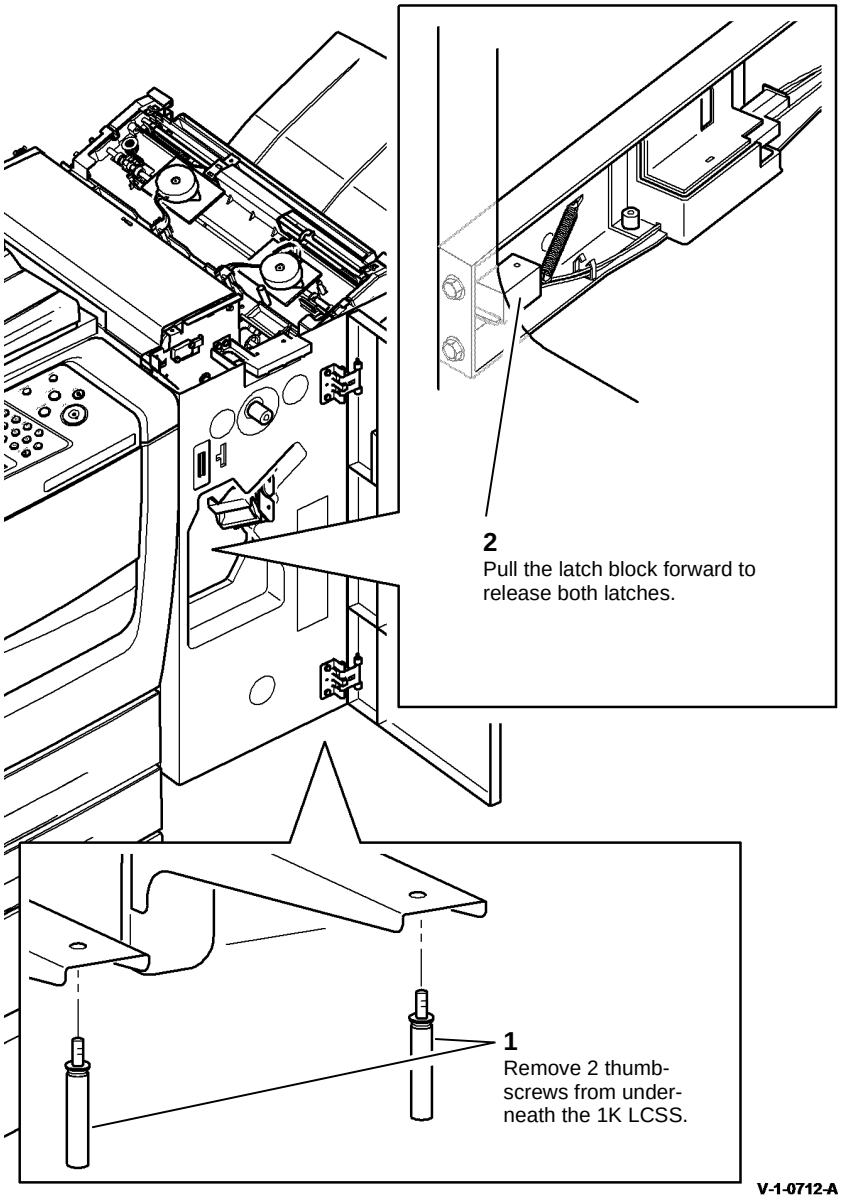


Figure 1 Preparation

6. Close the 1K LCSS front door.

7. Remove the 1K LCSS, Figure 2.

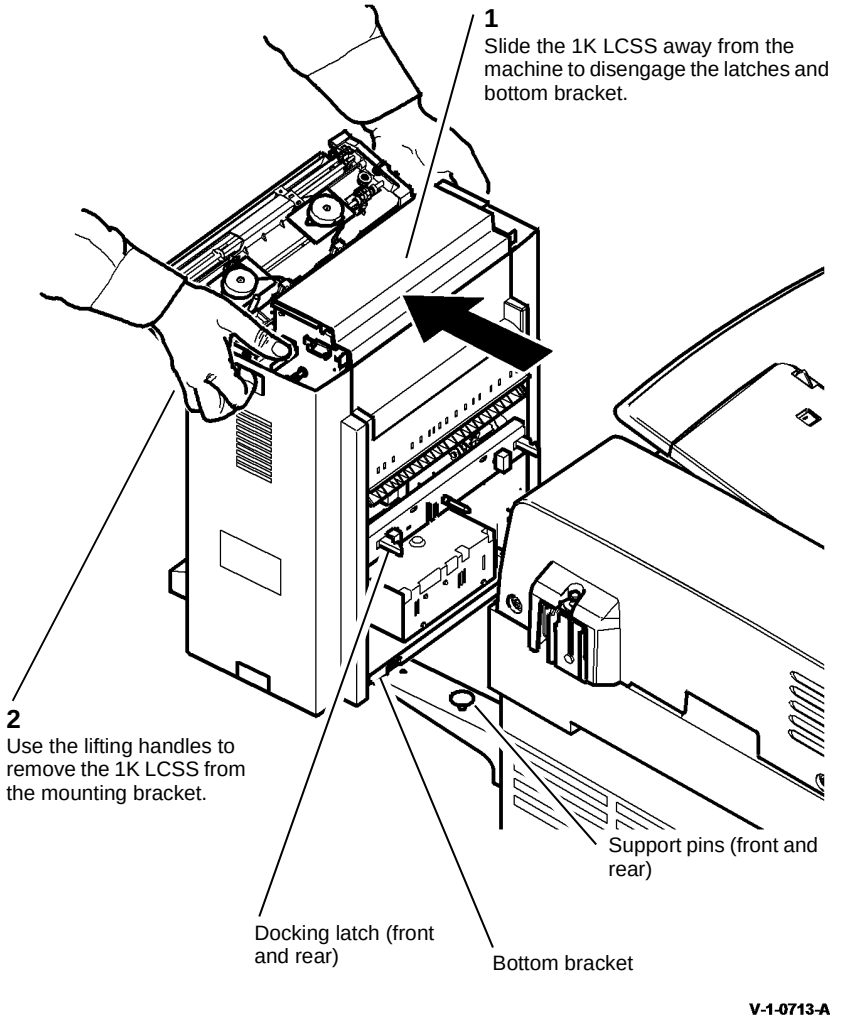


Figure 2 1K LCSS removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the bottom bracket on the 1K LCSS is located over the support pins. Line up the 1K LCSS latches to the machine apertures then push the two units firmly together until they latch.

REP 11.12-120 1K LCSS PWB

Parts List on PL 11.124.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS rear cover, REP 11.1-120.
2. Disconnect all harness connectors from the 1K LCSS PWB.
3. Remove the three screws and release the three standoffs securing the 1K LCSS PWB.

Replacement

1. Reverse the removal procedure to replace the 1K LCSS PWB.
2. Before replacing the 1K LCSS rear cover, perform the 311F-120 1K LCSS PWB DIP Switch Settings RAP.

REP 11.13-120 Entry Guide Cover

Parts List on PL 11.122.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS, REP 11.11-120.
2. Remove the 1K LCSS front door cover assembly and rear cover, REP 11.1-120.
3. Remove the entry guide cover, Figure 1.

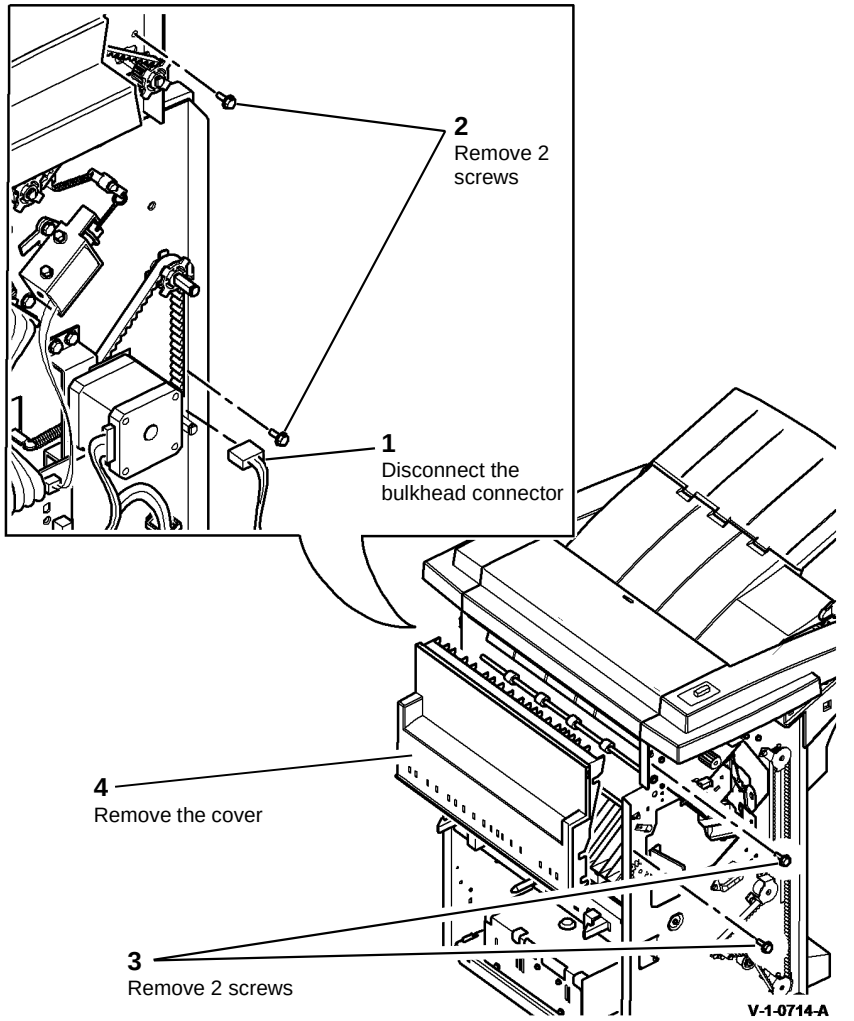


Figure 1 Entry guide cover removal

Replacement

Refer to GP 6 before refitting the screws.

1. Bias the entry guide cover away from the paper guide when you tighten the screws.
2. The clearance between the entry guide cover and the paper guide must be a minimum of 1mm. Refer to Figure 2.

NOTE: *If the clearance is less than 1mm, install a new entry guide cover.*

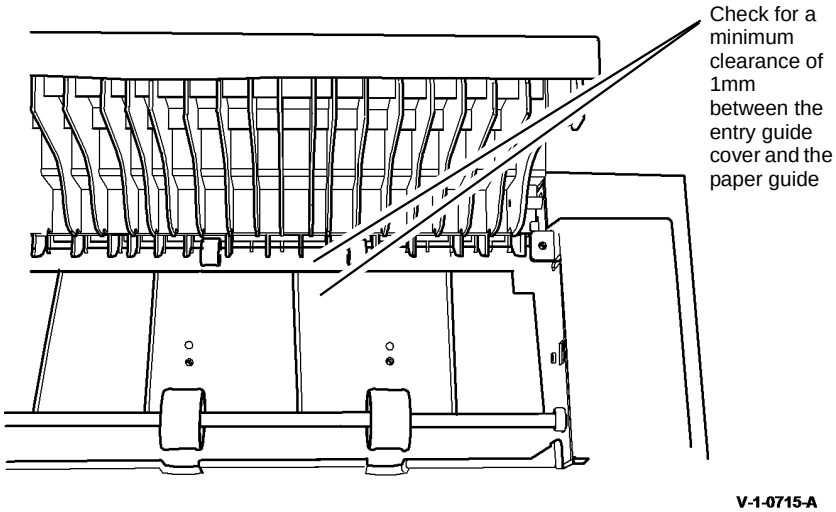


Figure 2 Entry guide cover clearance

3. Run copies through the 1K LCSS, if possible use heavy weight paper or labels. Check for marks on the print and for damage to the paper. If there are no marks or damage then install the covers.

REP 11.14-120 Docking Latch Assembly and Docking Interlock Switch

Parts List on PL 11.102.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS, REP 11.11-120.
2. Remove the 1K LCSS top cover, rear cover and front door cover assembly, REP 11.1-120.
3. Prepare to remove the docking latch assembly, Figure 1.

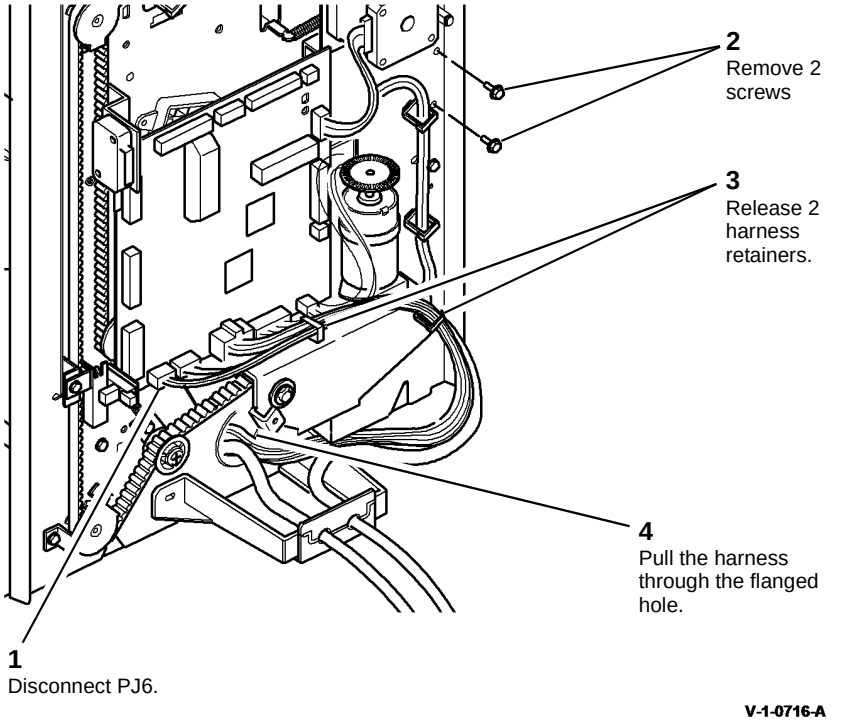


Figure 1 Preparation

4. Remove the docking latch assembly, Figure 2.

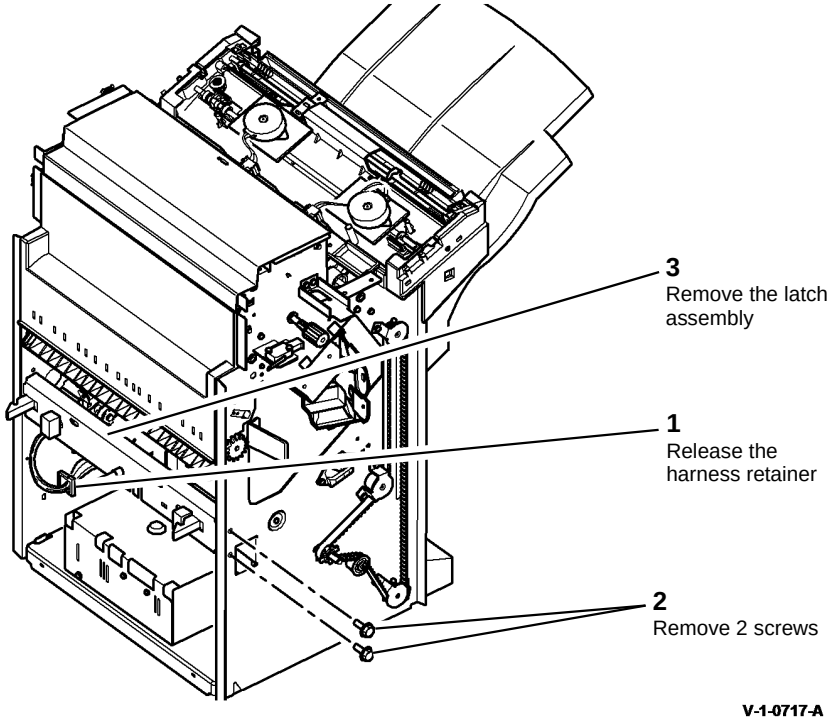


Figure 2 Latch assembly removal

5. Remove the sensor cover, PL 11.102 Item 1.
6. Release the docking interlock switch from the sensor cover.

Replacement

Reverse the removal procedure to replace the docking latch assembly.

CAUTION

Ensure that the harness is routed through the flanged hole, refer to Figure 1.

REP 11.15-120 Ejector Belt

Parts List on PL 11.114.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the ejector assembly, refer to REP 11.8-120.
2. Remove the ejector belt, Figure 1.

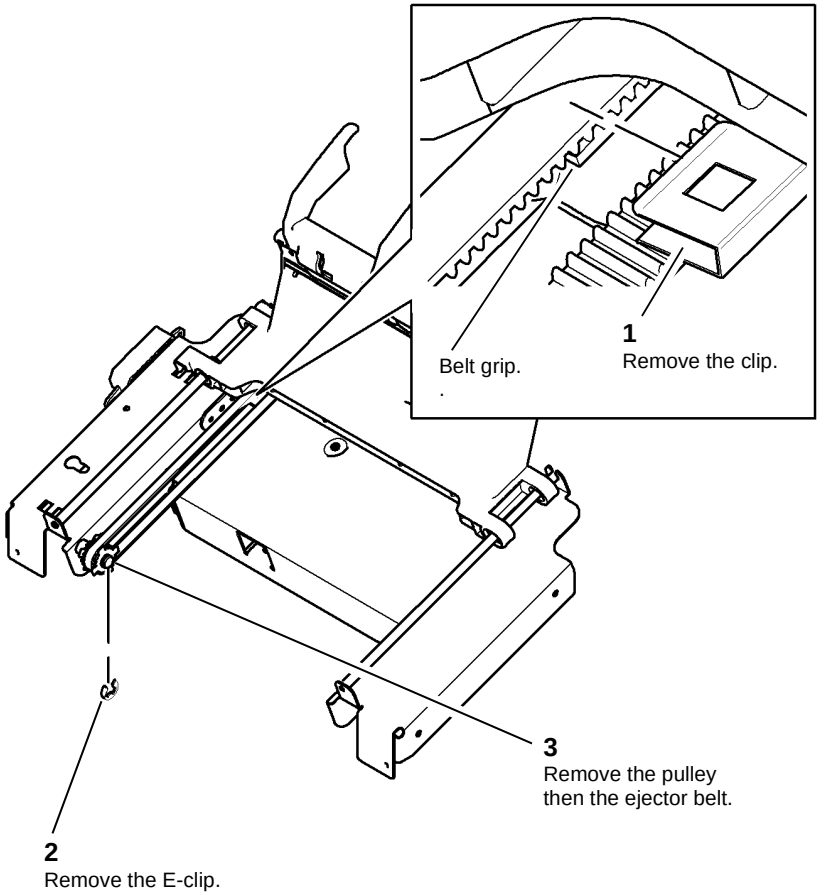


Figure 1 Remove the ejector belt

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the ejector belt is correctly engaged with the belt grip on the ejector assembly before the clip is reinstalled. Refer to Figure 1.

REP 11.16-120 Paper Guide and Top Exit Sensor

Parts List on PL 11.118

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS front door cover assembly, rear cover and top cover, REP 11.1-120.
2. Remove the paper output drive belt and transport motor 2, REP 11.4-120.
3. Prepare to remove the paper guide Figure 1.

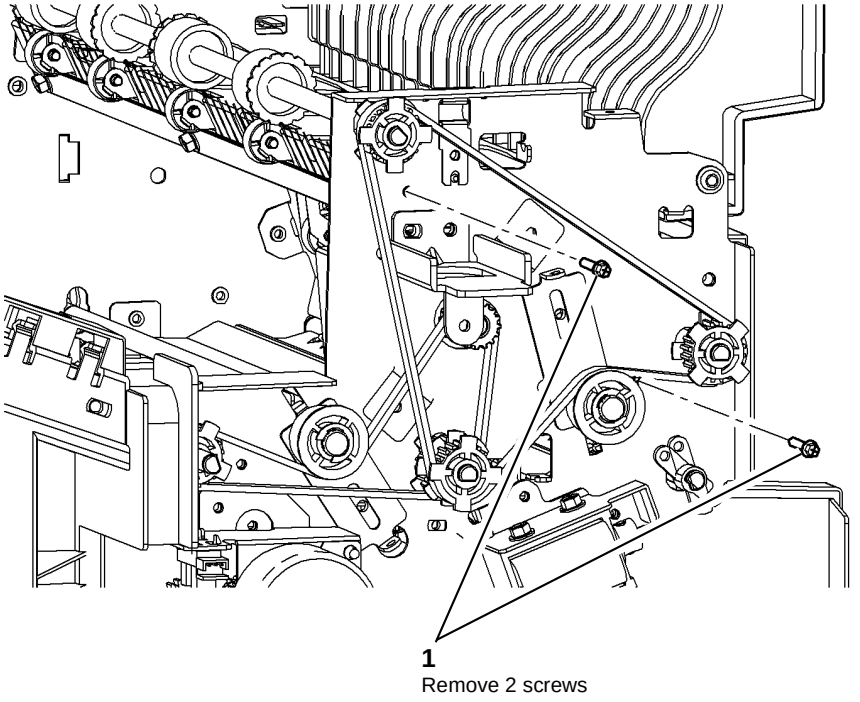


Figure 1 Preparation

4. Remove the paper guide and top exit sensor, Q11-130, Figure 2.

NOTE: *It is possible to remove the top exit sensor without removing the paper guide.*

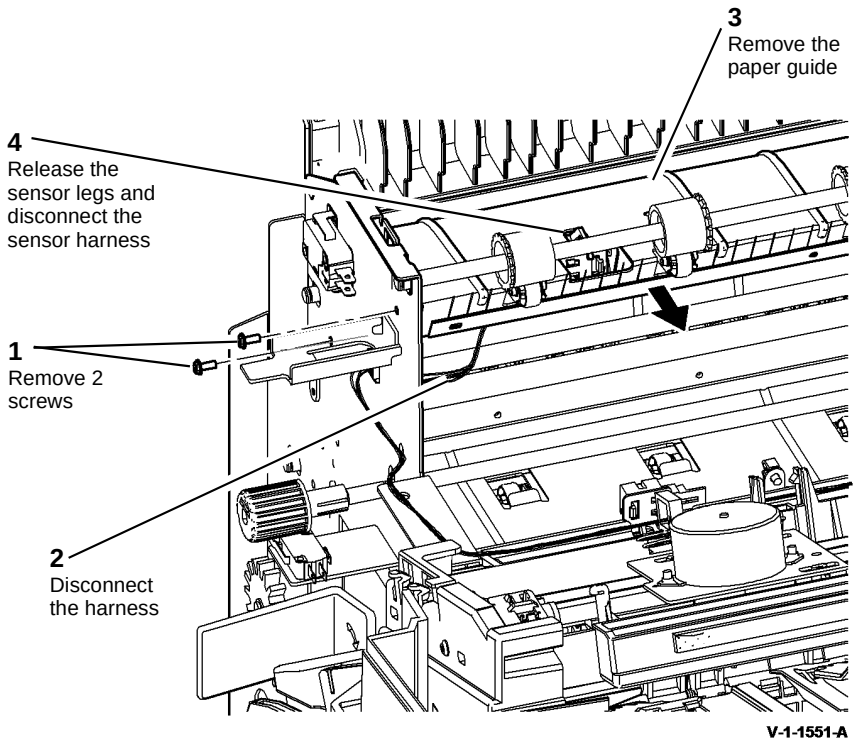


Figure 2 Guide and sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.17-120 Lower Right Paper Guide

Parts List on PL 11.120

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the 1K LCSS top cover, rear cover and front door cover assembly, REP 11.1-120.
2. Remove the tamper assembly, REP 11.6-120.
3. Remove the paper output drive belt, REP 11.4-120.
4. Prepare to remove the drive shafts Figure 1.

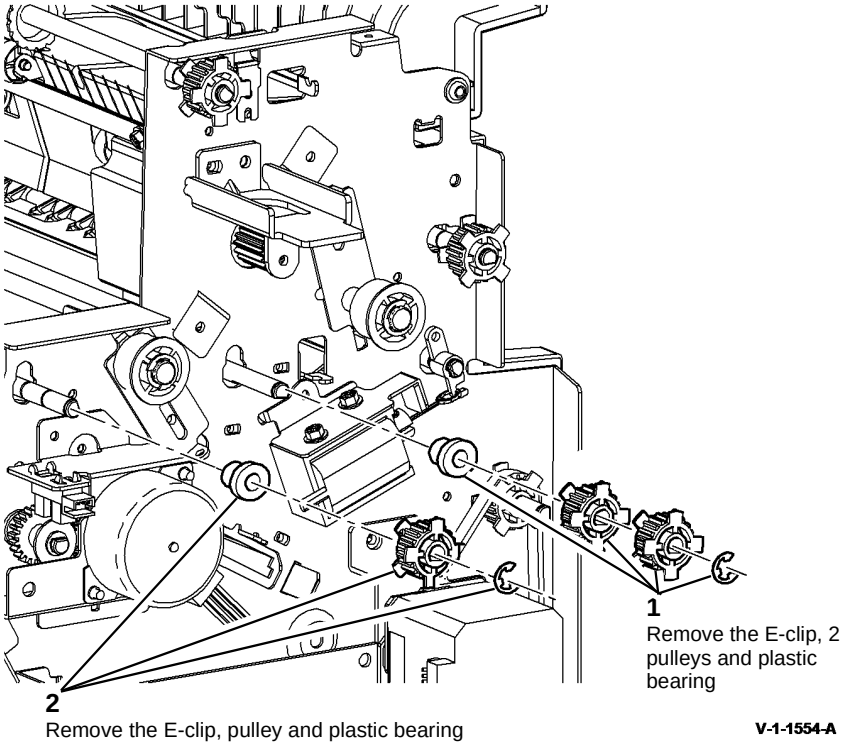


Figure 1 Preparation

5. Remove the drive shafts, Figure 2.

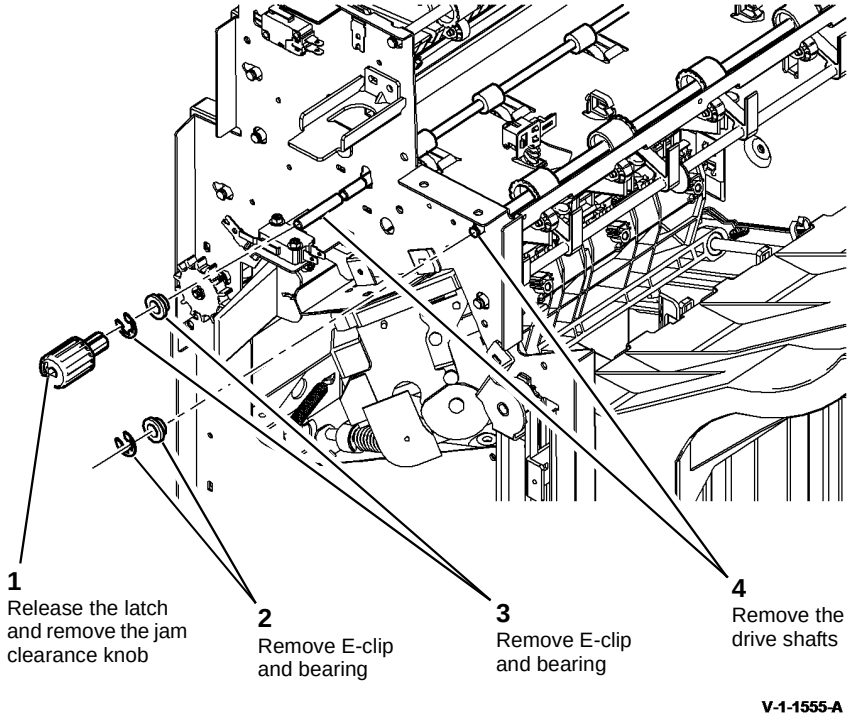


Figure 2 Drive shafts removal

6. Prepare to remove the upper right paper guide, Figure 3.

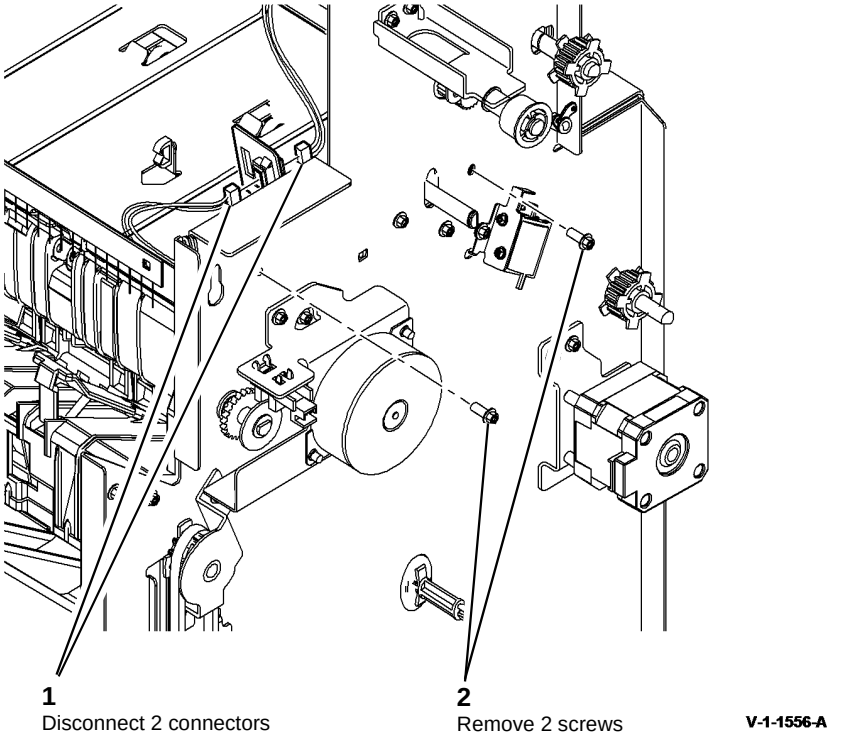


Figure 3 Preparation

7. Remove the upper right paper guide, Figure 4.

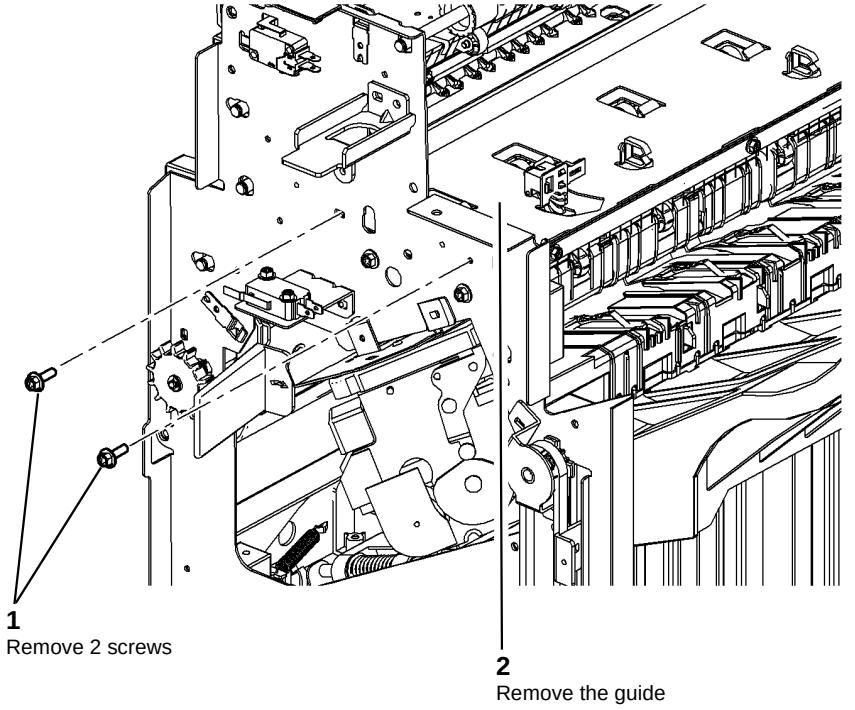


Figure 4 Upper right guide removal

8. Prepare to remove the lower right paper guide, Figure 5.

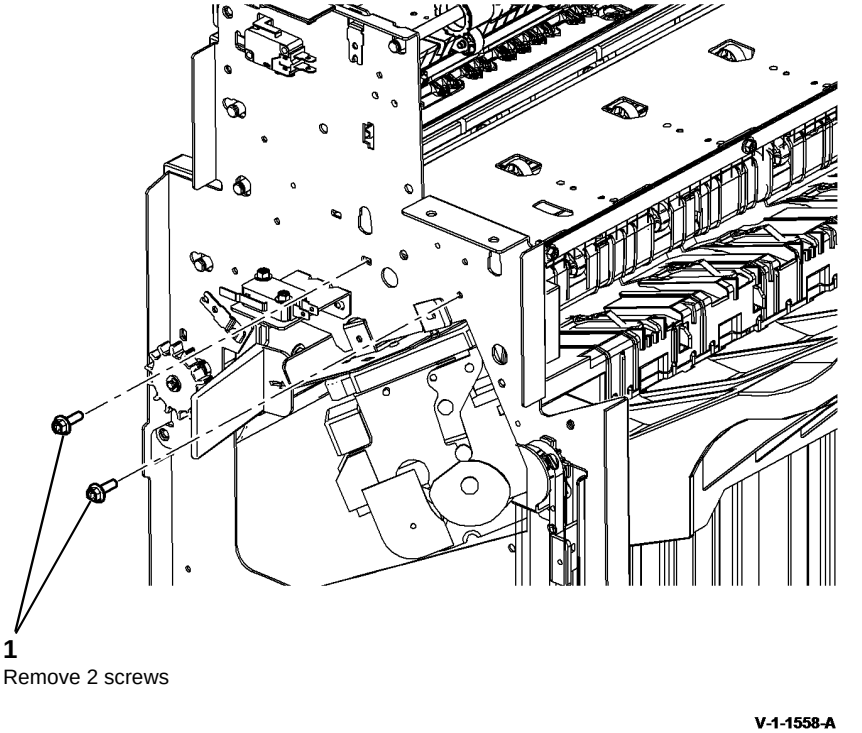


Figure 5 Preparation

9. Remove the lower right paper guide, Figure 6.

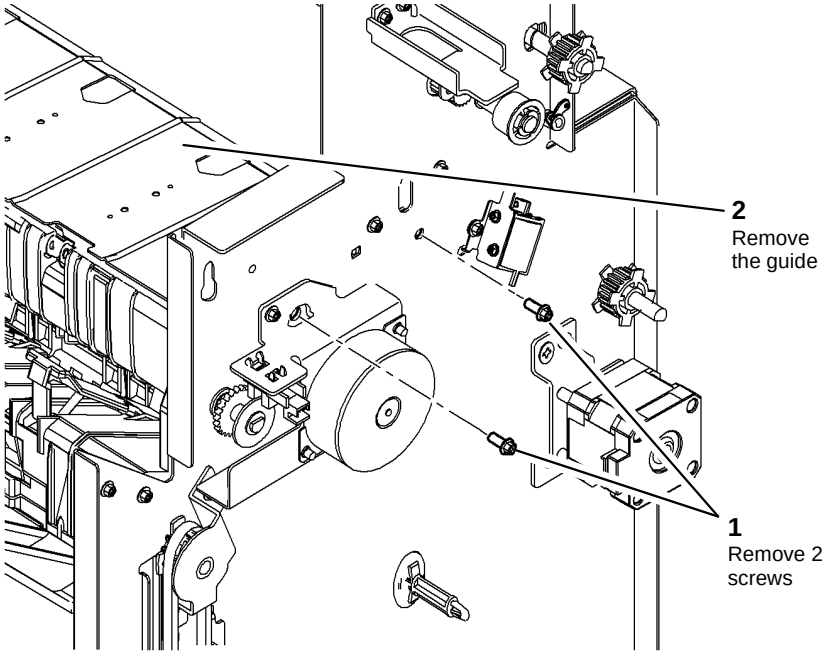


Figure 6 Lower right guide removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.1-150 LVF BM Covers

Parts List on PL 11.50, PL 11.78

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the covers, Figure 1 and Figure 2.

NOTE: *Removing the top cover first will allow easy removal of the front and rear covers.*

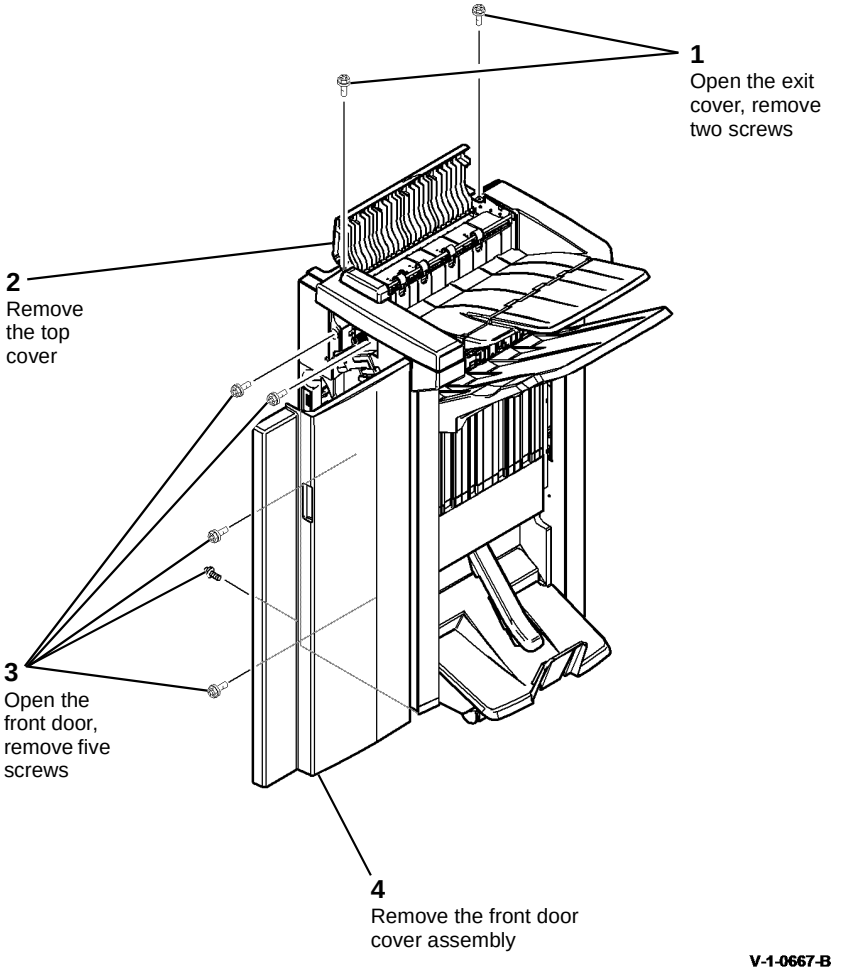


Figure 1 Top and front covers

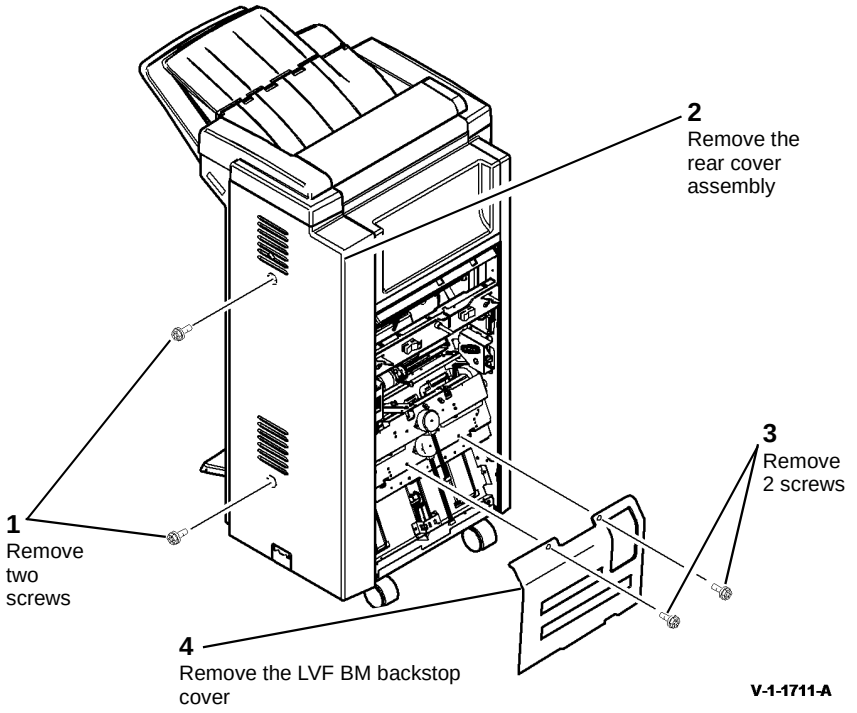


Figure 2 Rear and backstop covers

Replacement

Reverse the removal procedure to replace the covers.

REP 11.2-150 Input Drive Belt, Compiler Entrance Drive Belt 1 and Transport Motor 1 / Gearbox

Parts List on PL 11.62

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM rear cover, REP 11.1-150.
2. Remove the motor and drive belt, Figure 1.

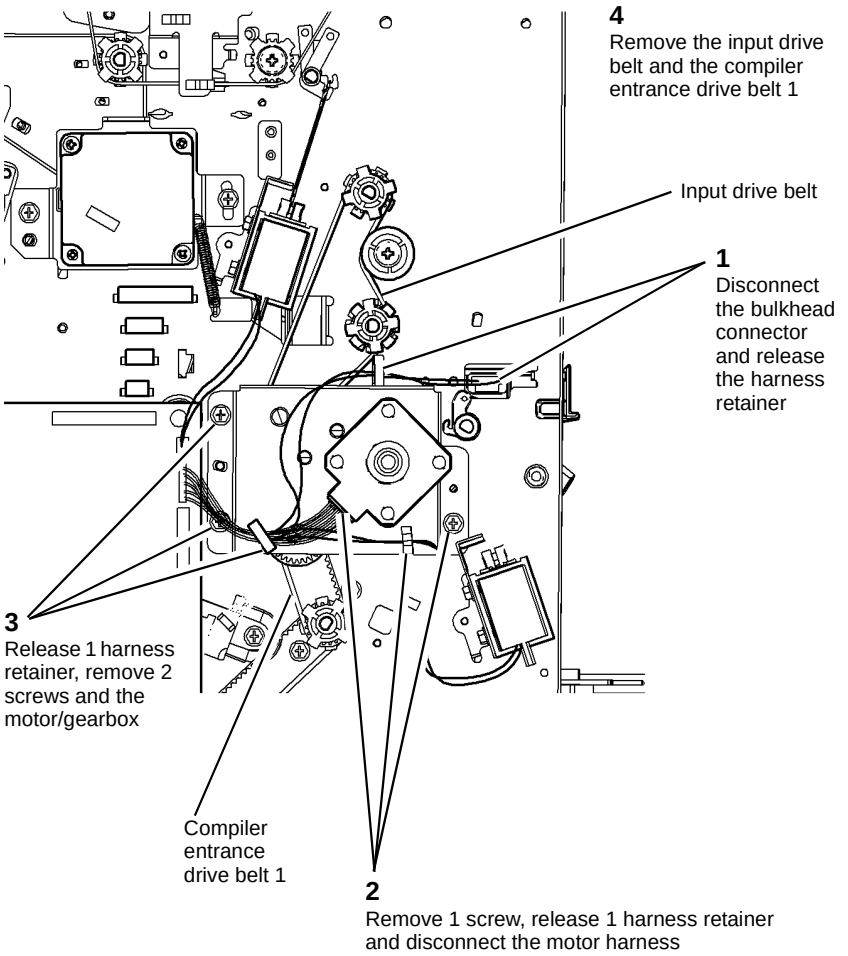


Figure 1 Motor and drive belt removal

3. If necessary, remove 2 screws to remove the motor from the gearbox.

Replacement

Replacement is the reverse of the removal procedure.

REP 11.3-150 Intermediate Paper Drive Belt

Parts List on PL 11.70

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM rear cover and top cover, REP 11.1-150.
2. Remove the intermediate paper drive belt, Figure 1.

REP 11.4-150 Paper Output Drive Belt and Transport Motor 2

Parts List on PL 11.70

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM rear cover, REP 11.1-150.
2. Remove the intermediate drive belt, REP 11.3-150.
3. Remove the output drive belt and motor, Figure 1.

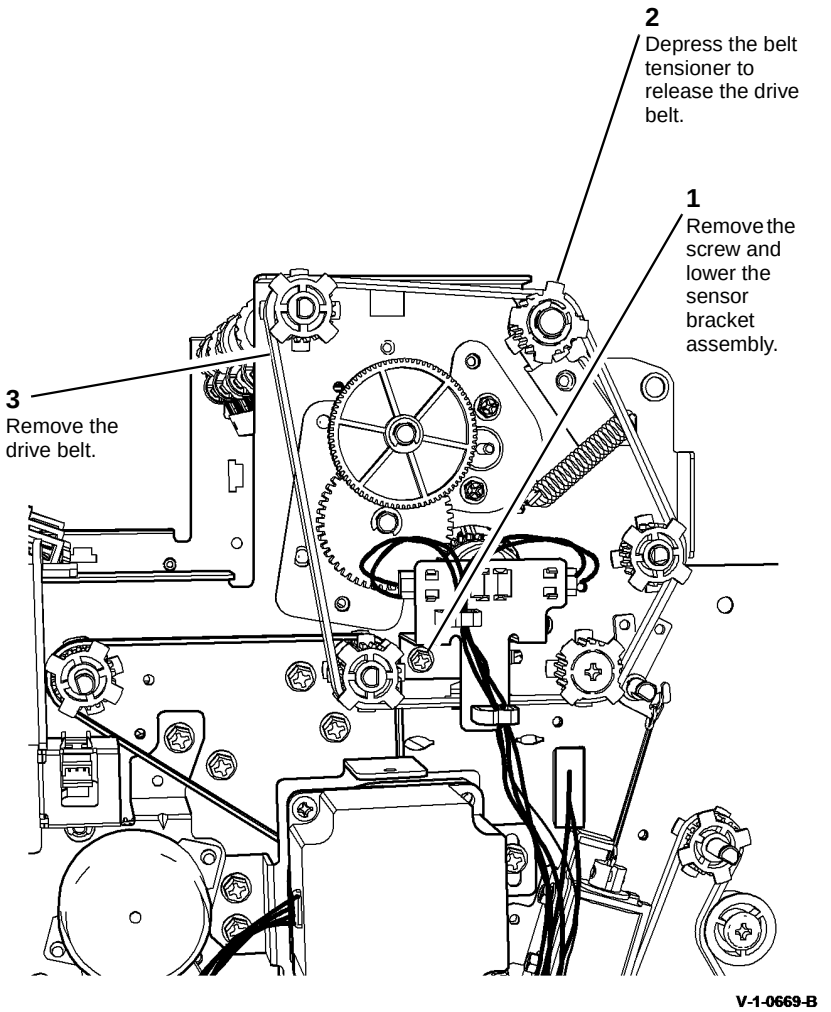


Figure 1 Removing the drive belt

Replacement

1. If necessary lubricate the belt tensioner, refer to ADJ 40.1.
2. Install the belt over the pulleys, ensuring that the belt is on all five pulleys.

   NOTE: *Two of the pulleys are free to slide along the shaft. Ensure the belt is correctly located on these pulleys.*

3. Reverse the removal procedure to install the remainder of the components.

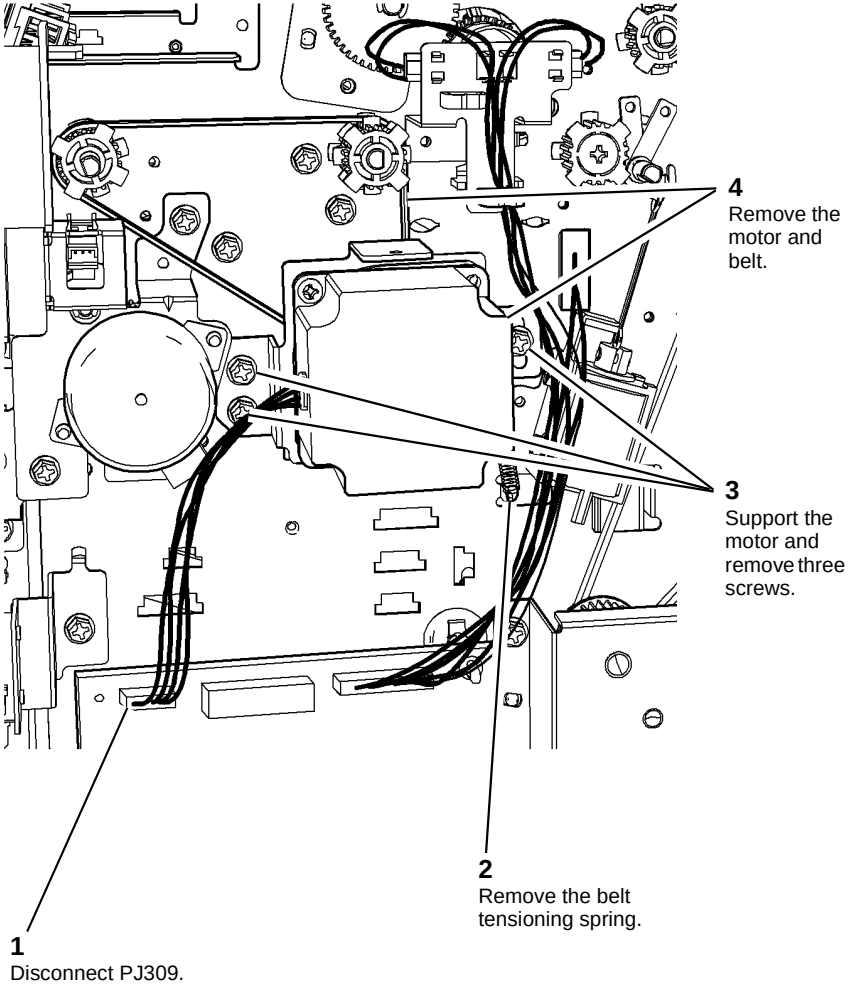


Figure 1 Removing the drive belt

Replacement

1. Install the belt over the pulleys.
2. Install the motor pivot shouldered screw and fully tighten.
3. Install the two motor mounting bracket securing screws but do not tighten them.
4. Install the belt tensioner spring.
5. Rotate the belt by hand to allow the spring to tension the belt, ADJ 11.4-110. Tighten the screws.
6. Install the intermediate drive belt, REP 11.3-150.
7. Install the LVF BM rear cover, REP 11.1-150.

REP 11.5-150 Bin 1 Drive Belts and Stacker Tray Drive and Motor Assembly

Parts List on PL 11.58.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Remove the bin 1 drive belt (rear) Figure 1.

NOTE: *Keep all of the components removed as a set. The set of rear frame components are different from the front frame set.*

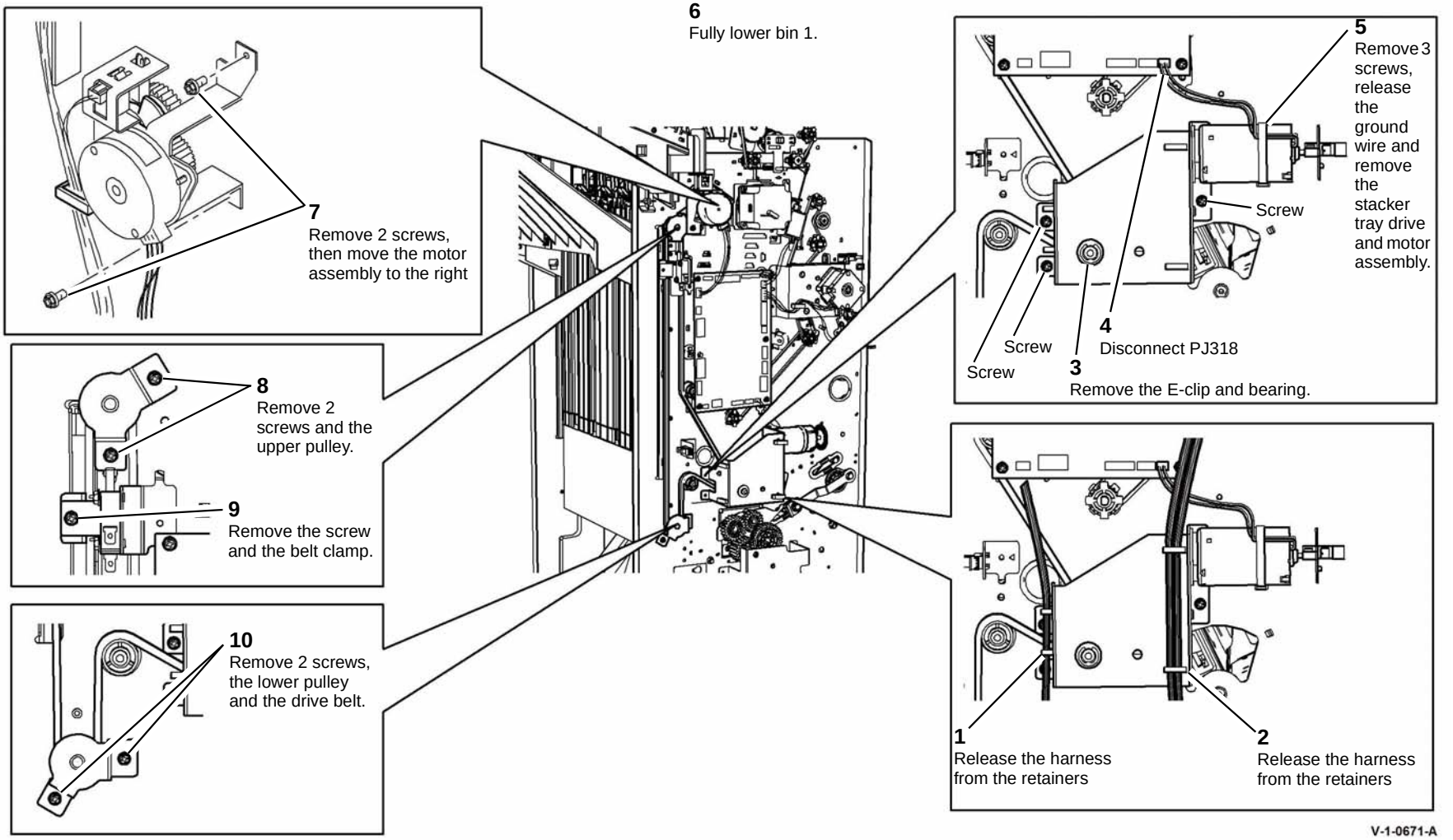


Figure 1 Bin 1 drive belt (rear)

3. Remove the bin 1 drive belt (front) Figure 2.

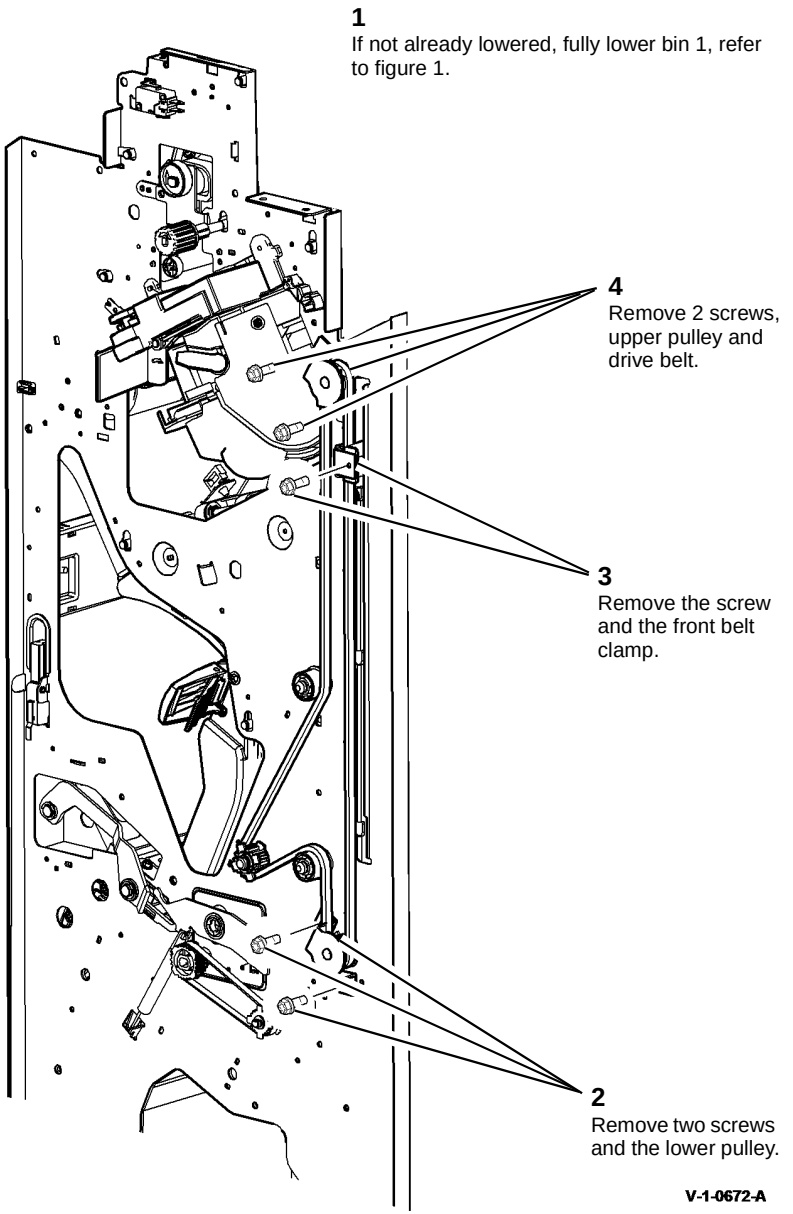


Figure 2 Bin 1 drive belt (front)

Replacement

NOTE: *Ensure the correct set of components are used for each side of the LVF BM.*

1. Reverse the removal procedure to replace the bin 1 drive belts.

   NOTE: *The bin 1 level can critically affect the overall stack registration. Refer to ADJ 11.1-110 if adjustment is necessary.*

2. Install the LVF BM front door cover assembly and rear cover. REP 11.1-150.

REP 11.6-150 Tamper Assembly and Sensors

Parts List on PL 11.64

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM covers REP 11.1-150.
2. Prepare to remove the tamper assembly Figure 1.

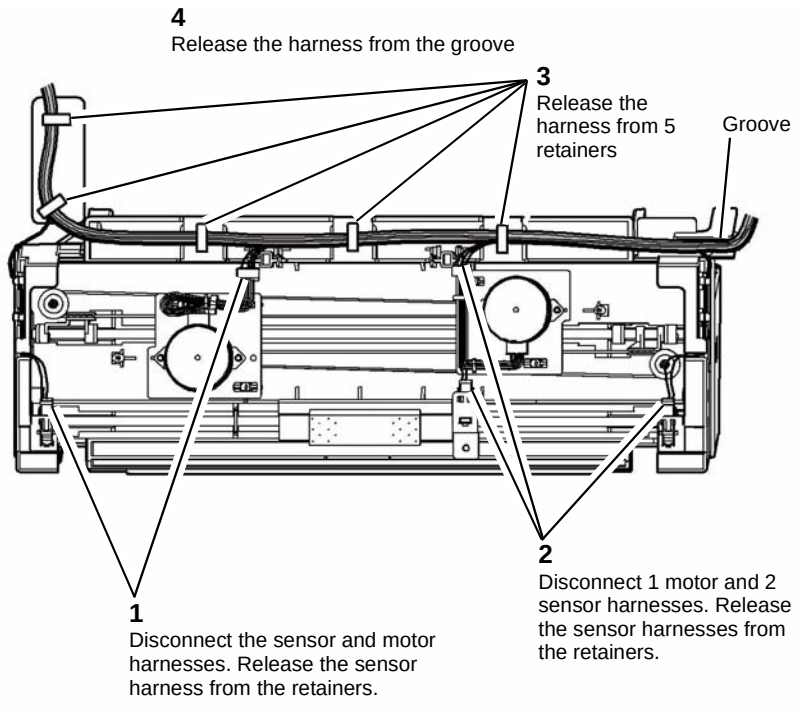


Figure 1 Preparing the tamper assembly

3. Remove the tamper assembly, Figure 2.

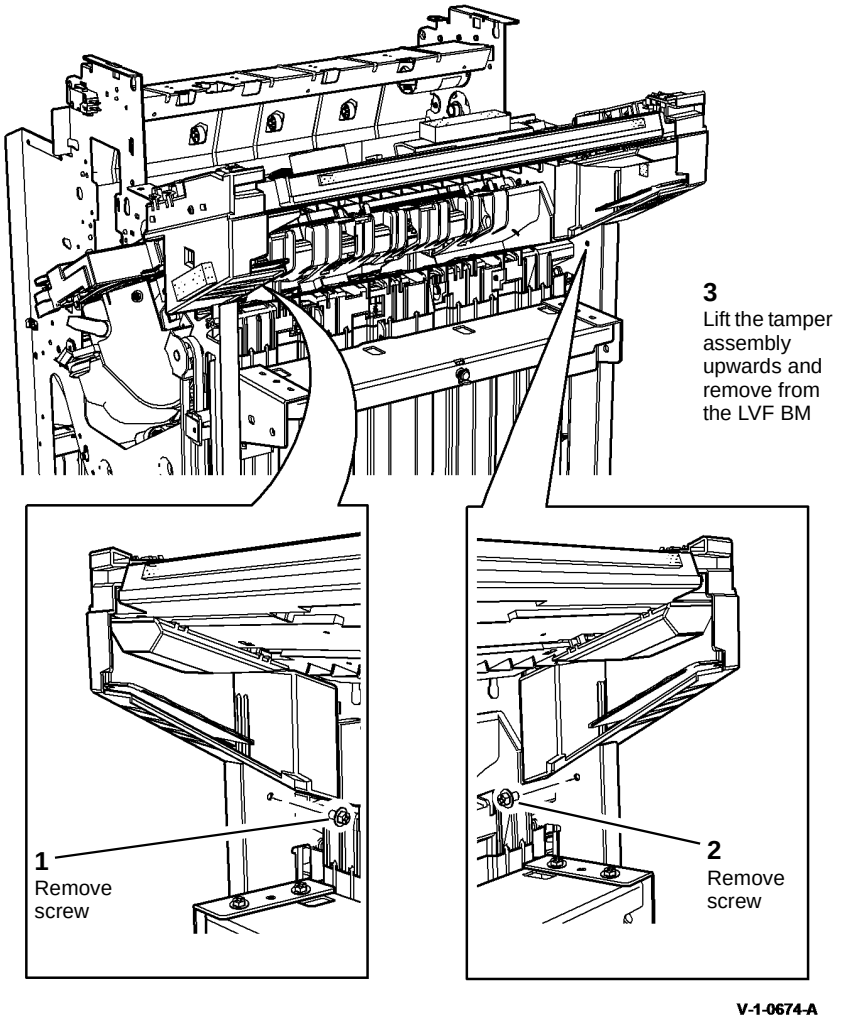


Figure 2 Removing the tamper assembly

4. To remove the front tamper home sensor, Q11-310, disconnect the harness and release the sensor legs.
5. To remove the rear tamper home sensor, Q11-311, disconnect the harness and release the sensor legs.
6. To remove the rear tamper away sensor, Q11-319, disconnect the harness and release the sensor legs.

Replacement

1. Refer to GP 6 before re-fitting the screws.
2. Reverse the removal procedure to replace the tamper assembly.

NOTE: *Ensure that:*

- *The slots in the tamper assembly locate correctly in the LVF BM frame.*
- *The sensors are correctly located in the tamper assembly, they are easily mis-located when being re-connected to the harnesses.*
- *All connectors in the harness over the tamper assembly are securely connected.*

REP 11.7-150 Hole Punch Unit, Motor and Sensors

Parts List on PL 11.54

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM covers, REP 11.1-150.
2. Remove and empty the chad bin, PL 11.54 Item 4.
3. Remove the hole punch unit, motor assembly and sensors, Figure 1.

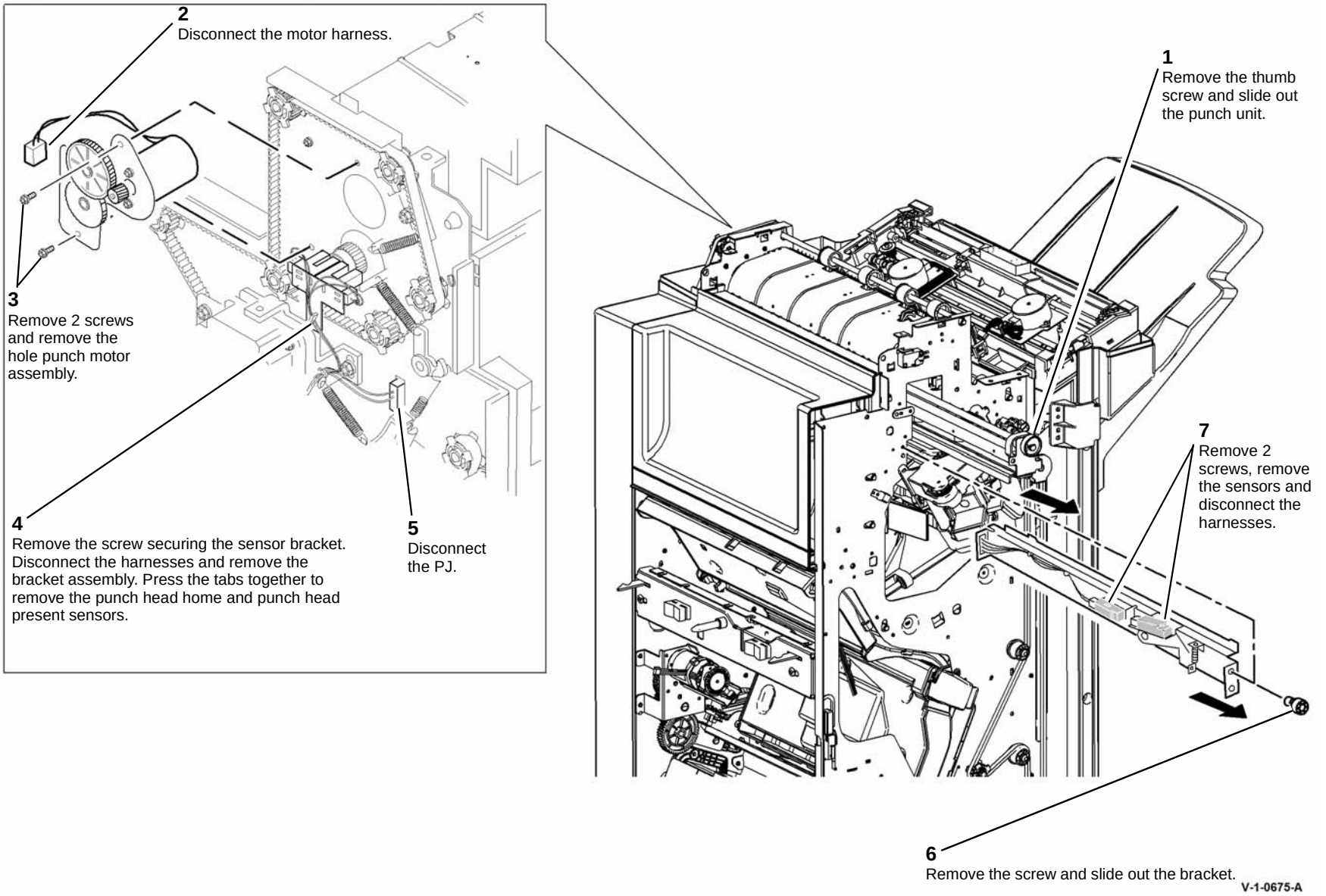


Figure 1 Hole punch unit, motor and sensors

Replacement

1. Reverse the removal procedure to replace the hole punch unit, motor assembly and sensors.
2. If necessary, perform ADJ 11.3-150 Hole Punch Position.

NOTE: *Refer to IQS 6 Copy / Print Defects for hole punch performance specifications.*

REP 11.8-150 Stapler Traverse Assembly and Sensors

Parts List on PL 11.68

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

1. Un-dock the LVF BM, REP 11.13-150.
2. Remove the rear cover and front door cover assembly, REP 11.1-150.
3. Remove the entry guide cover assembly, REP 11.15-150.

4. Remove the paper entry guide assembly, Figure 1.

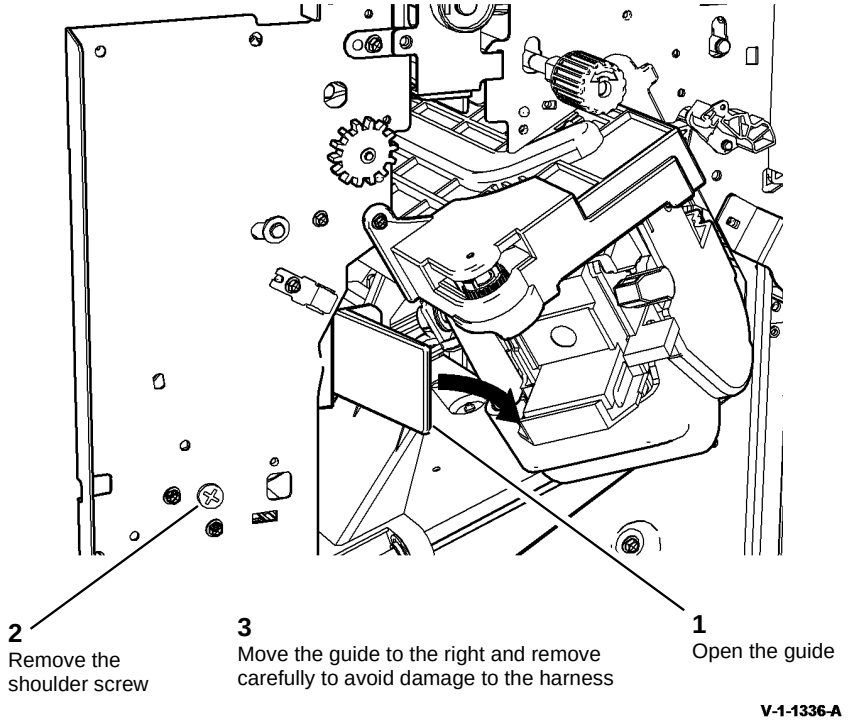


Figure 1 Paper entry guide removal

5. If necessary, manually move the ejector, PL 11.66 Item 1 fully to the right.

6. Disconnect the harness, Figure 2.

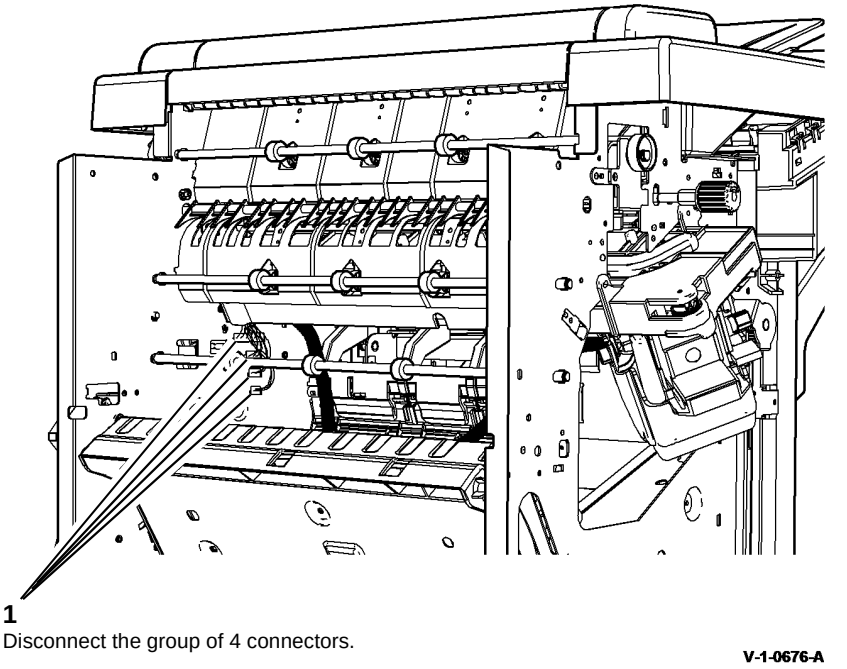


Figure 2 Harness disconnection

7. Release the stapler harness, Figure 3.

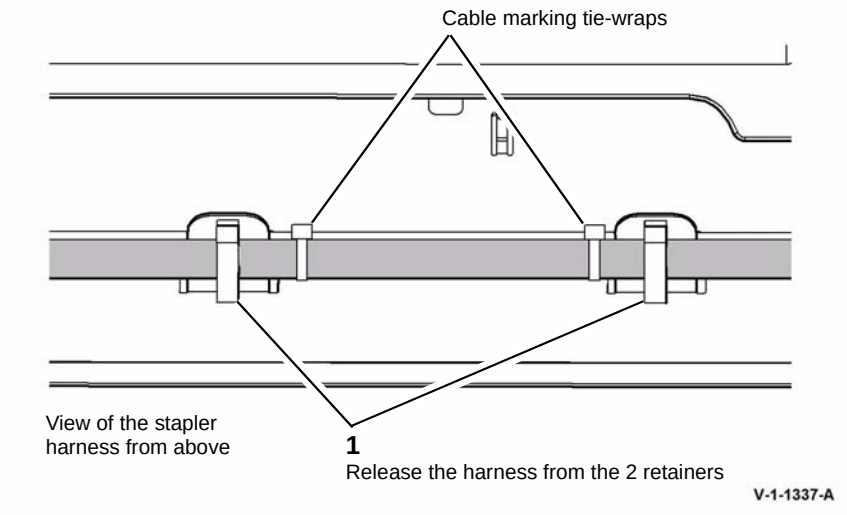


Figure 3 Harness release

CAUTION

When removing and replacing the stapler traverse assembly, support the weight of the assembly underneath the stapler and take care not to damage wiring.

8. Remove the stapler traverse assembly, Figure 4.

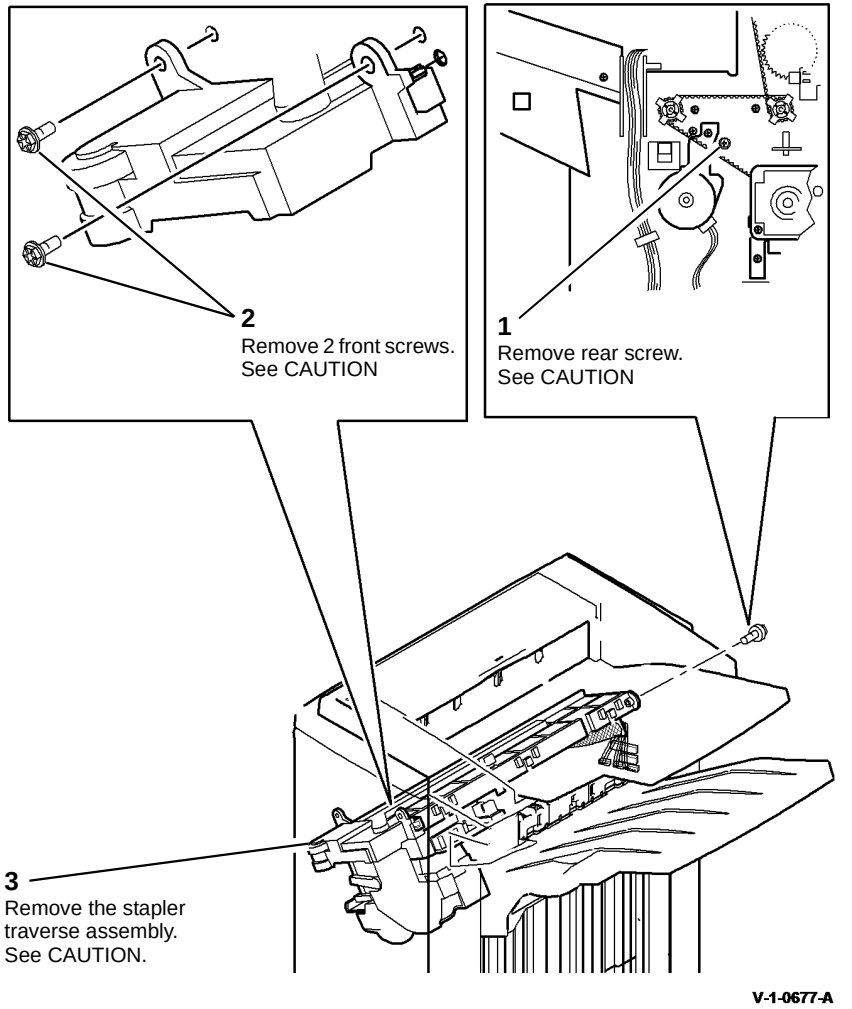


Figure 4 Removing the stapler traverse assembly

9. To remove the SU1 home sensor, Q11-370, disconnect the harness and release the sensor legs.
10. To remove the front index sensor, Q11-371, disconnect the harness and release the sensor legs.
11. To remove the SH1 paper sensor, Q11-319, disconnect the harness and release the sensor grips.

Replacement

1. Refer to GP 6 before re-fitting screws into plastic components.
2. When installing the stapler harness, ensure the cable marking tie-wraps are positioned between the two harness retainers, Figure 3.
3. Ensure the stapling traverse assembly is engaged on the front and rear locating dowels.
4. Reverse the removal procedure to replace the stapling unit.

REP 11.9-150 Staple Head Unit

Parts List on PL 11.68

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the stapler traverse assembly, REP 11.8-150.
2. Place the stapler traverse unit upside-down
3. Remove the staple head unit from the stapling unit Figure 1.

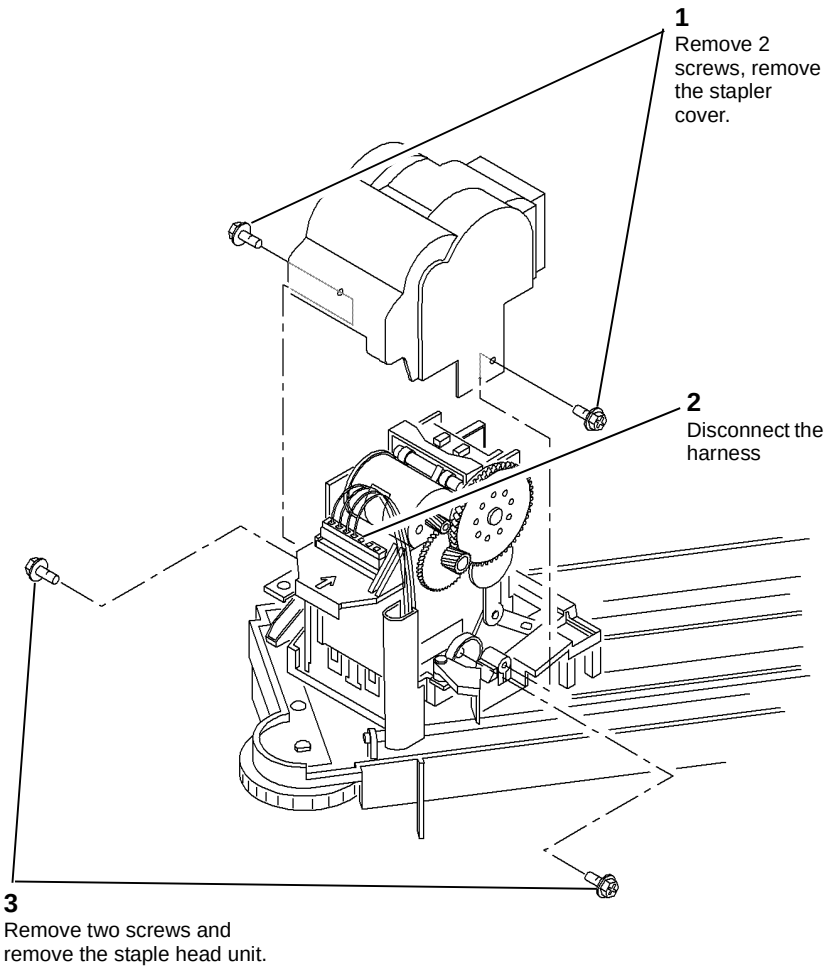


Figure 1 Removing the staple head unit

Replacement

1. Refer to GP 6 before re-fitting screws into plastic components.
2. Reverse the removal procedure to replace the staple head unit.

REP 11.10-150 Ejector Assembly, Support Finger and Sensors

Parts List on PL 11.66

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

1. Remove the stapler traverse assembly, REP 11.8-150.
2. Remove the output cover, PL 11.56 Item 9, but leave the paddle shaft assembly in the finisher, refer to REP 11.12-150 Paddle Shaft Assembly.
3. If necessary, manually move the ejector to the left position.

4. Prepare to remove the ejector assembly, Figure 1 and Figure 2.

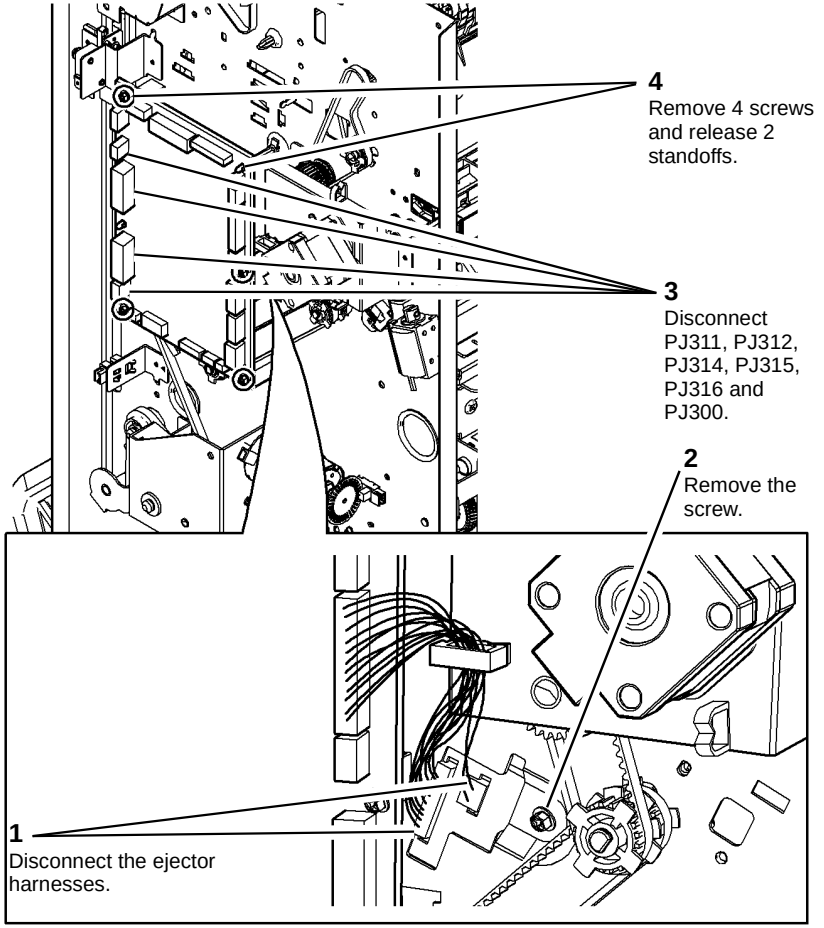


Figure 1 Preparation 1

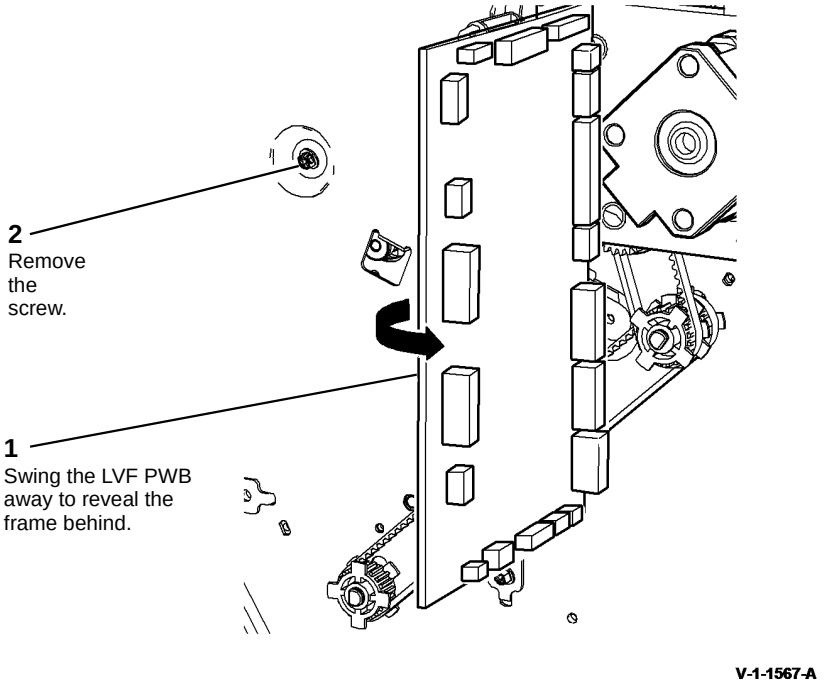


Figure 2 Preparation 2

5. Remove the front fixings, Figure 3.

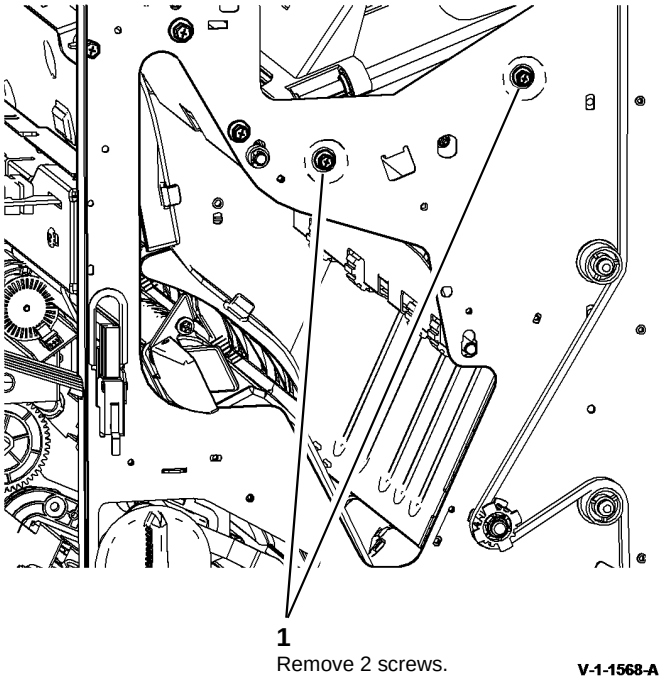


Figure 3 Front fixings removal

6. Remove the ejector assembly, Figure 4.

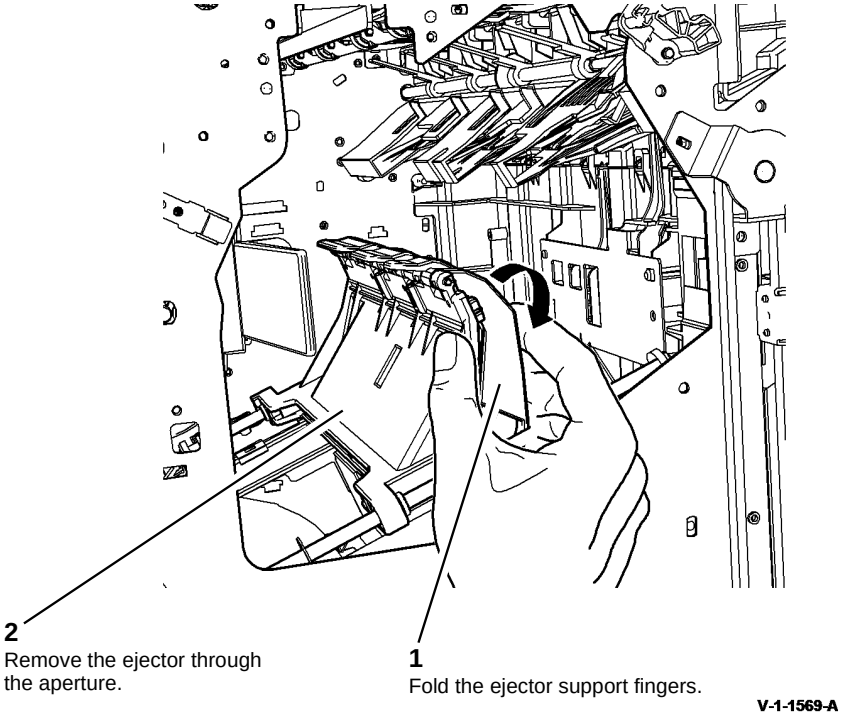


Figure 4 Ejector assembly removal

7. If required, remove the appropriate sensor, Figure 5.

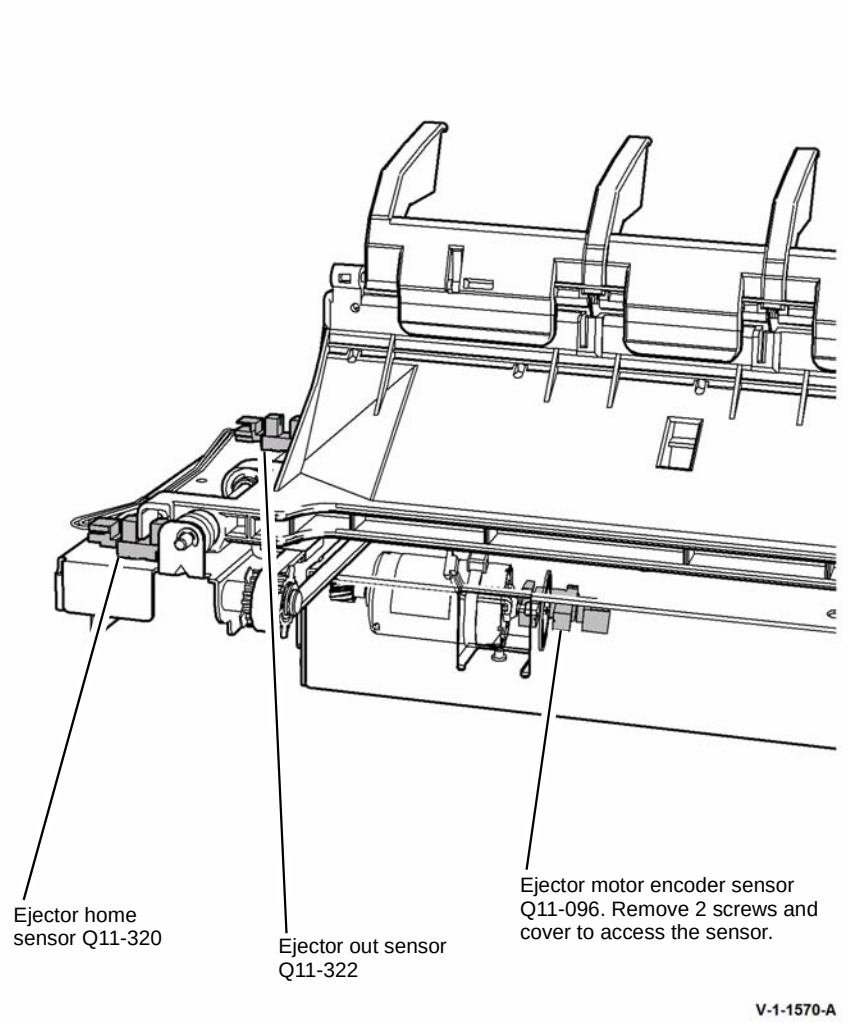


Figure 5 Sensor removal

8. If required, prepare to remove the support finger, Figure 7.

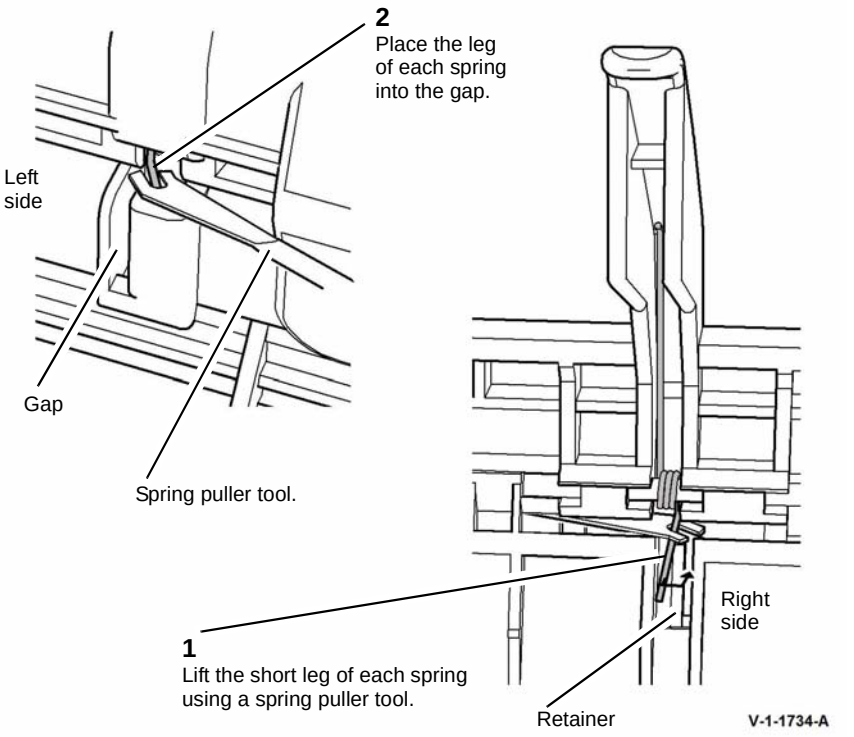


Figure 6 Preparation

9. Remove the support finger, Figure 7

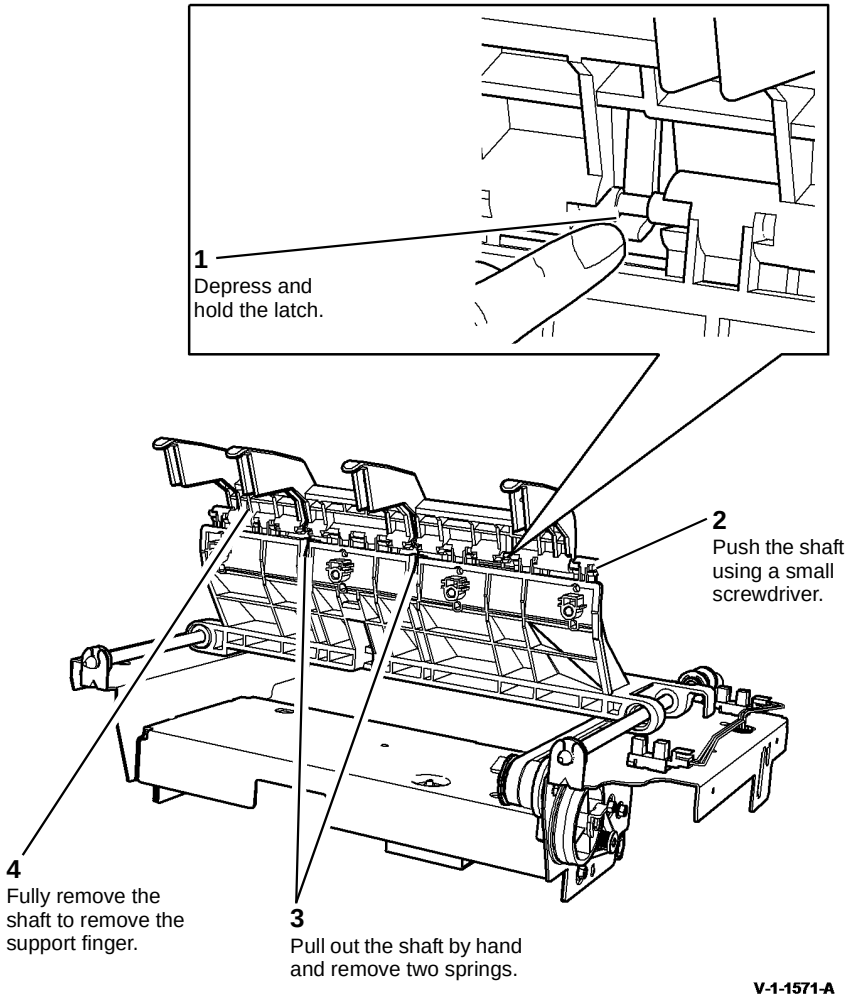


Figure 7 Support finger removal

Replacement

Reverse the removal procedure to replace the ejector assembly, support finger and sensors.

NOTE: *After replacing the support finger, springs and shaft, ensure that the spring legs are lifted back behind the retainers, Figure 6.*

REP 11.11-150 Bin 1 Level Sensors

Parts List on PL 11.60

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the ejector assembly, refer to REP 11.10-150.
2. Remove the stacker level sensors Figure 1.

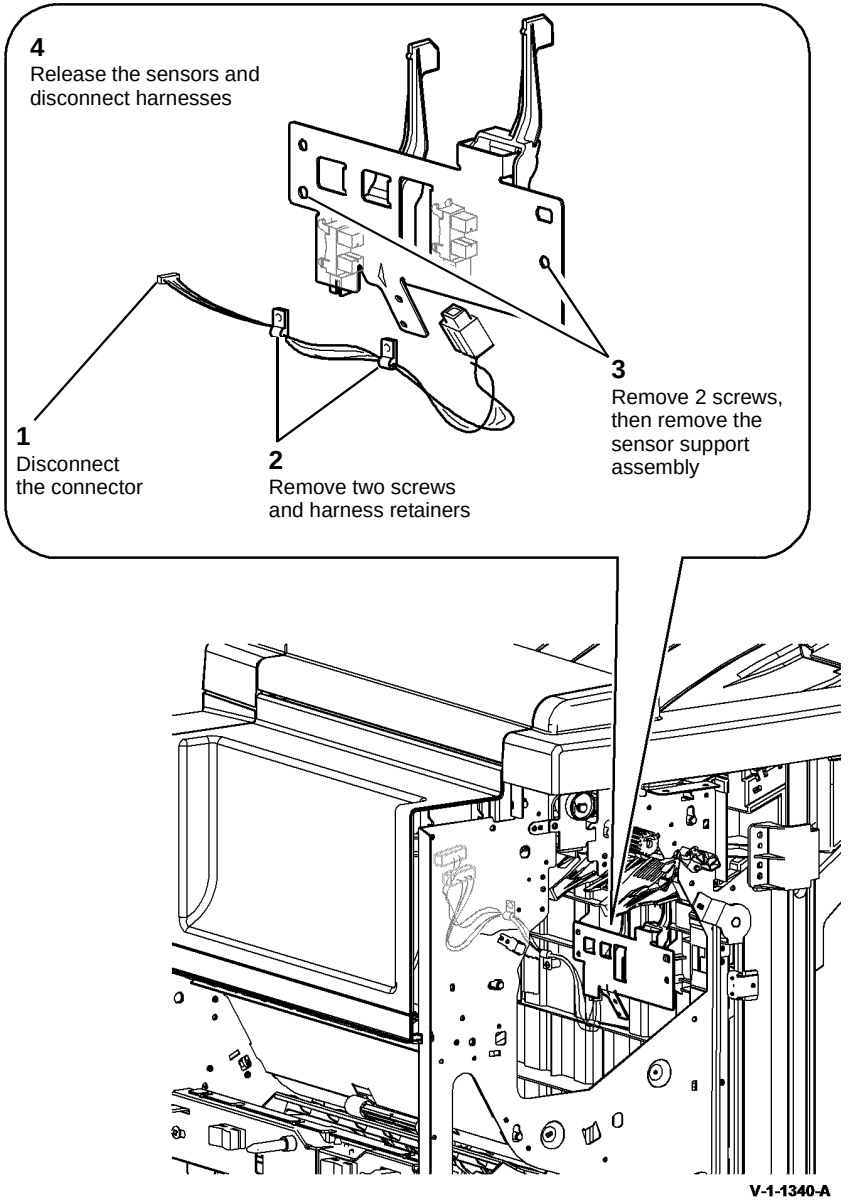


Figure 1 Bin 1 level sensors removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.12-150 Paddle Shaft Assembly and Paddle Motor Assembly

Parts List on PL 11.56

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tamper assembly, REP 11.6-150.
2. Remove bin 1, PL 11.50 Item 10.
3. Remove the paddle motor assembly, Figure 1.

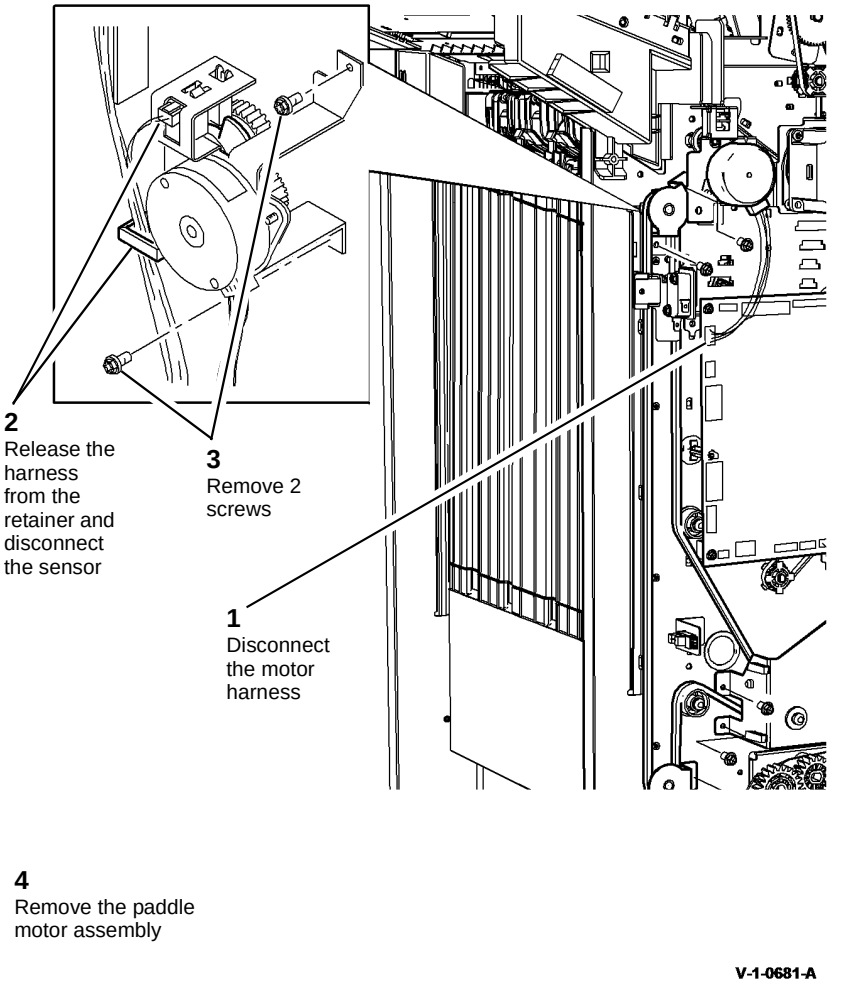


Figure 1 Paddle motor assembly

4. Prepare the rear components, Figure 2

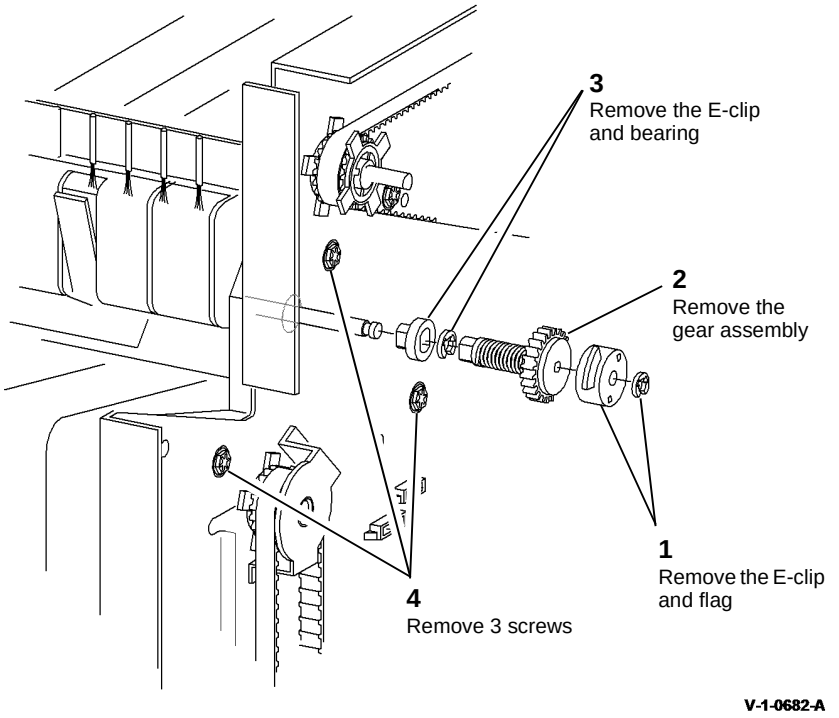


Figure 2 Rear preparation

5. Prepare the front components, Figure 3.

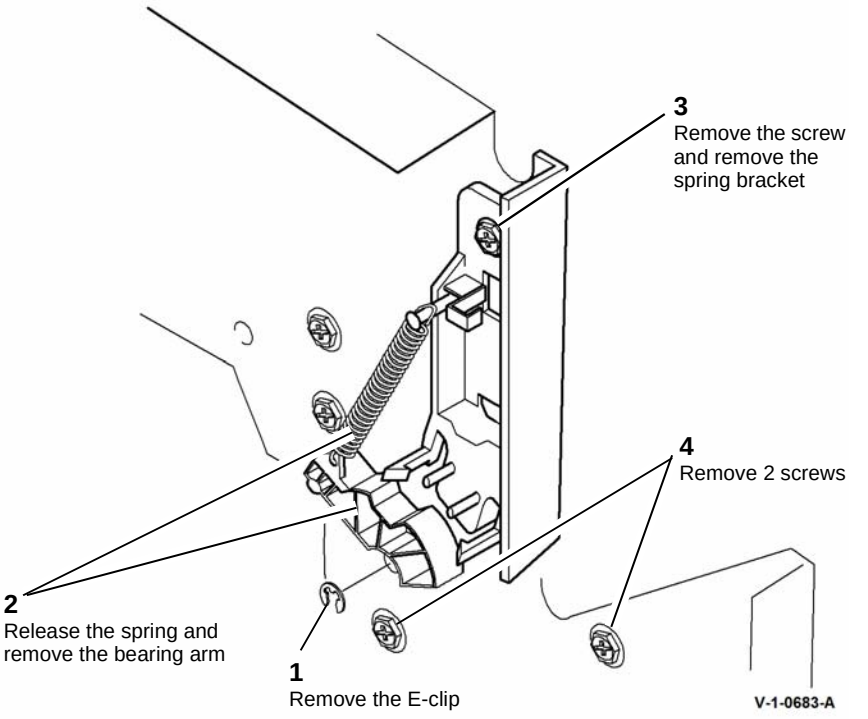


Figure 3 Front preparation

6. Remove the paddle wheel shaft assembly, Figure 4

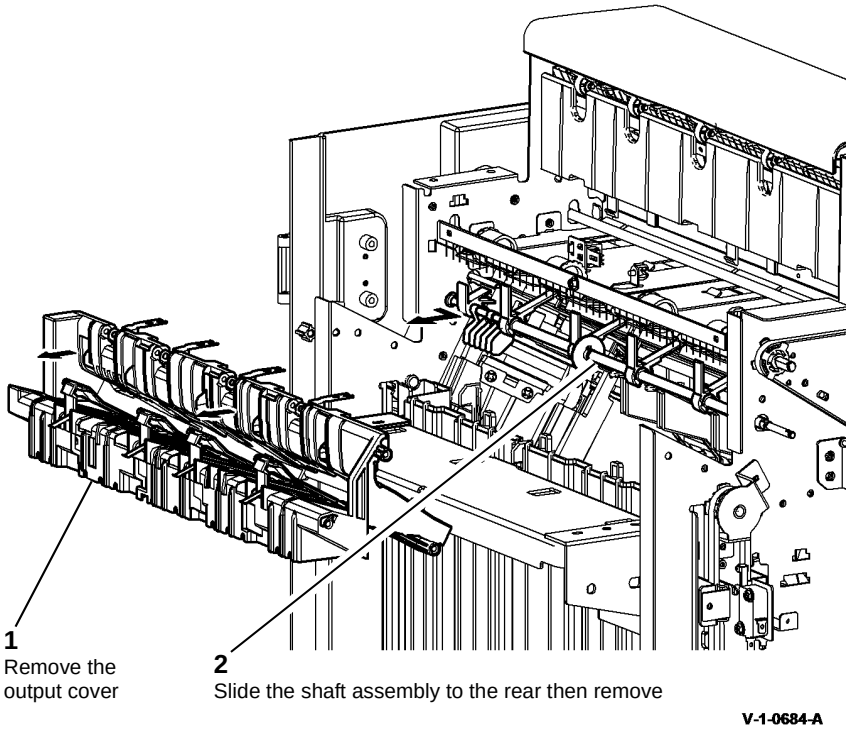


Figure 4 Paddle shaft removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. Install the paddle wheel shaft, ensure that the pin on the rear of the bearing arm, Figure 3, locates in the safety gate. Install the front E-clip.
3. Install the output cover, Figure 4, ensuring that the safety gate is aligned with the slots in the output cover.
4. Install the rear bearing and E-clip.
5. Install the spring bracket, 1 screw, connect the harness, Figure 3.
6. Install the gear assembly, ensuring that it locates onto the large “D” flat, Figure 2.
7. Install the flag and E-clip, ensuring that the flag locates on the small “D” flat, Figure 2.
8. Install the motor assembly, Figure 1.
9. Install the tamper assembly and bin 1.

10. Ensure the paddles and flag are correctly aligned Figure 5.

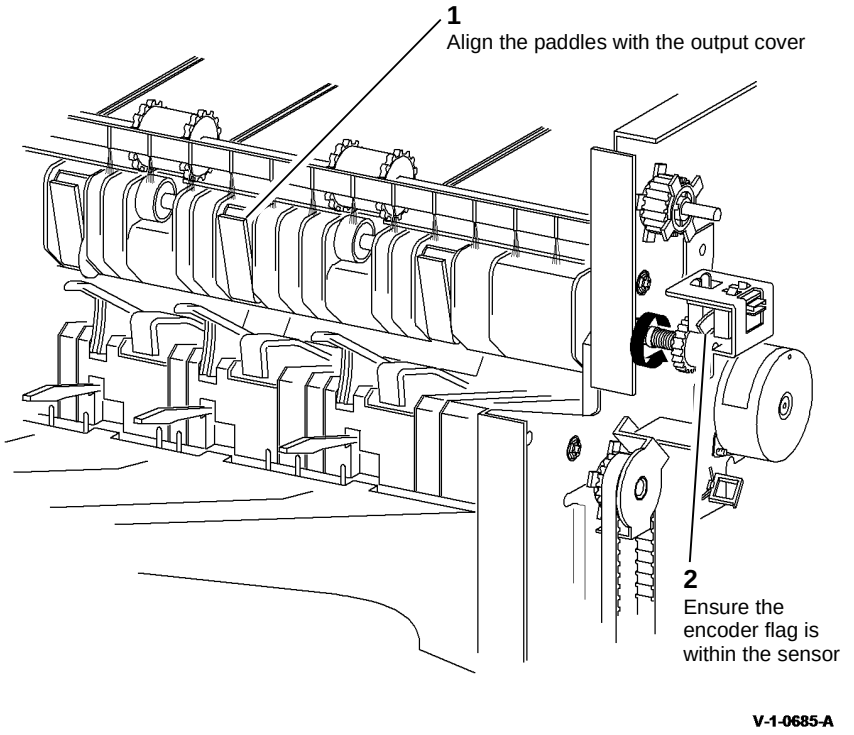


Figure 5 Paddle alignment

11. Test the operation of the paddle roll, enter dC330, output code 011-025. When the code is cancelled the paddles must stop with both rubber blades inside of the output cover. If necessary, check that the gear assembly and flag are correctly located on the “D” flats.

REP 11.13-150 LVF BM Un-Docking

Parts List on PL 11.52

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

1. If necessary, disconnect the harnesses between the LVF BM and the machine.
2. Open the LVF BM front door.
3. Release the LVF BM link bracket assembly, Figure 1.

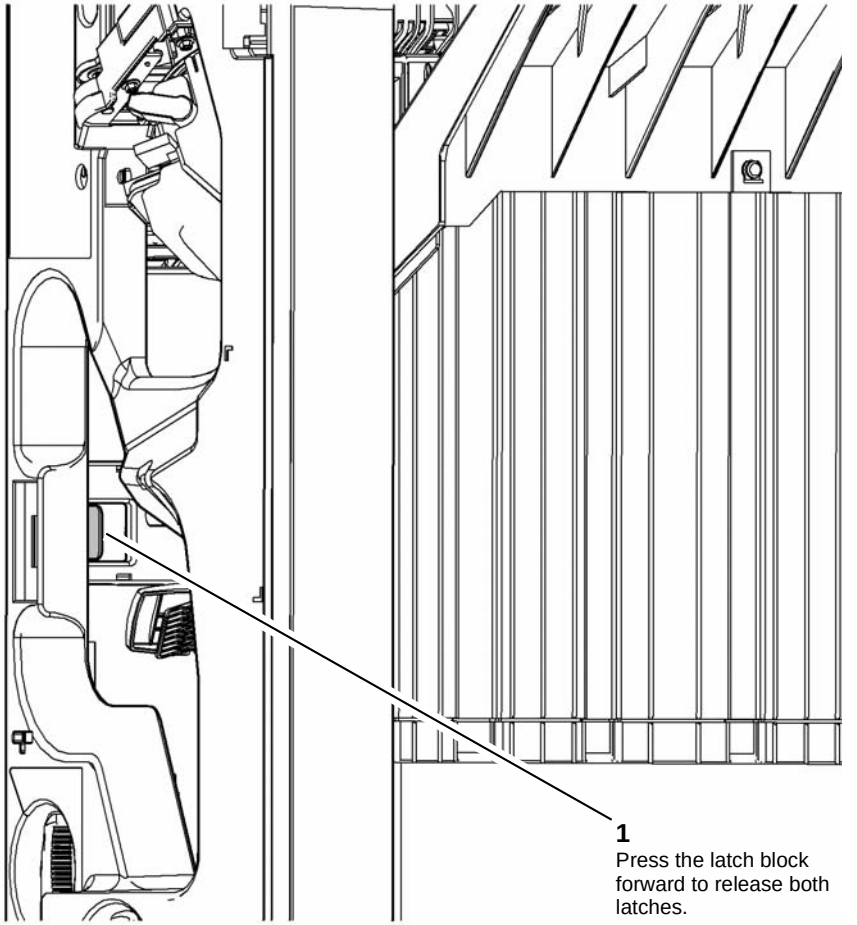


Figure 1 LVF BM link bracket assembly

Replacement

Line up the LVF BM latches to the machine apertures then push the two units firmly together until they latch.

REP 11.14-150 LVF PWB

Parts List on PL 11.90

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the LVF BM rear cover, REP 11.1-150.
2. Disconnect all harness connectors from the LVF PWB.
3. Remove the four screws and release the two standoffs securing the LVF PWB.

Replacement

1. Reverse the removal procedure to replace the LVF PWB.
2. Read the NVM values from the LVF BM NVM label, Figure 2 . Enter dC131 and enter the values from the label into locations 712-100, 712-101, 712-102 and 712-103.

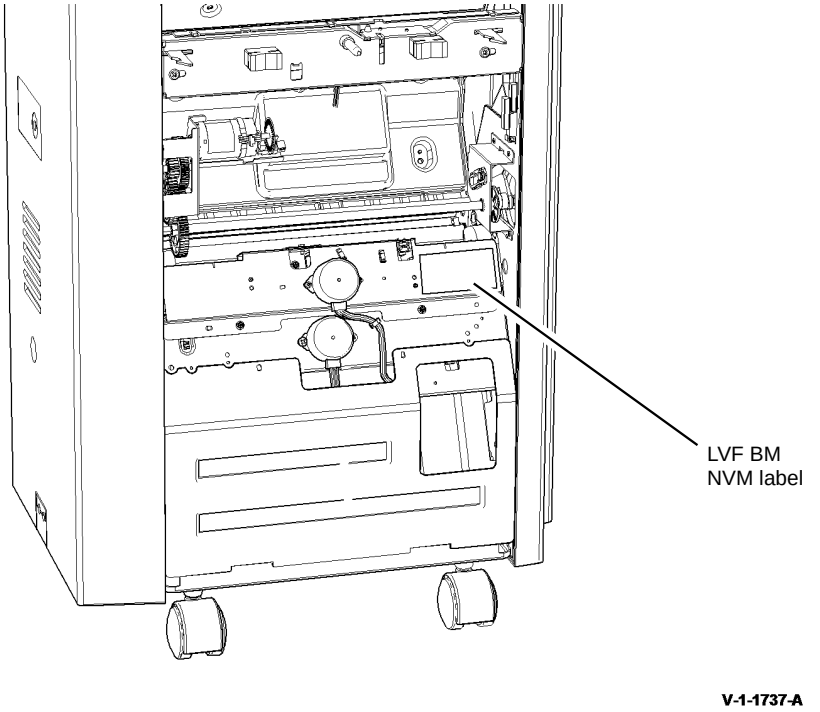


Figure 2 NVM label location

3. Perform 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.

REP 11.15-150 Entry Guide Cover Assembly

Parts List on PL 11.50

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the upper entrance guide, REP 11.31-150.
4. Remove the entry guide cover, Figure 1.

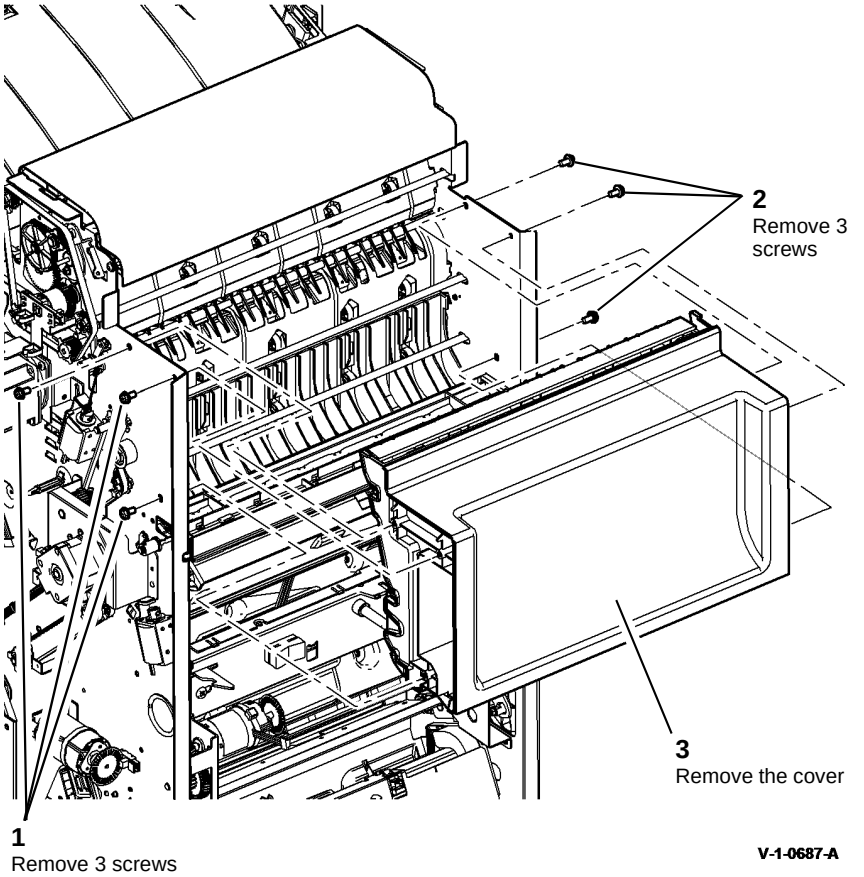


Figure 1 Entry guide cover removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement procedure is the reverse of the removal procedure.

REP 11.16-150 Docking Latch Assembly

Parts List on PL 11.52

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple the LVF BM. The LVF BM is unstable when un-docked from the machine. Do not show the customer how to un-dock the LVF BM.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Prepare to remove the docking latch assembly, Figure 1.

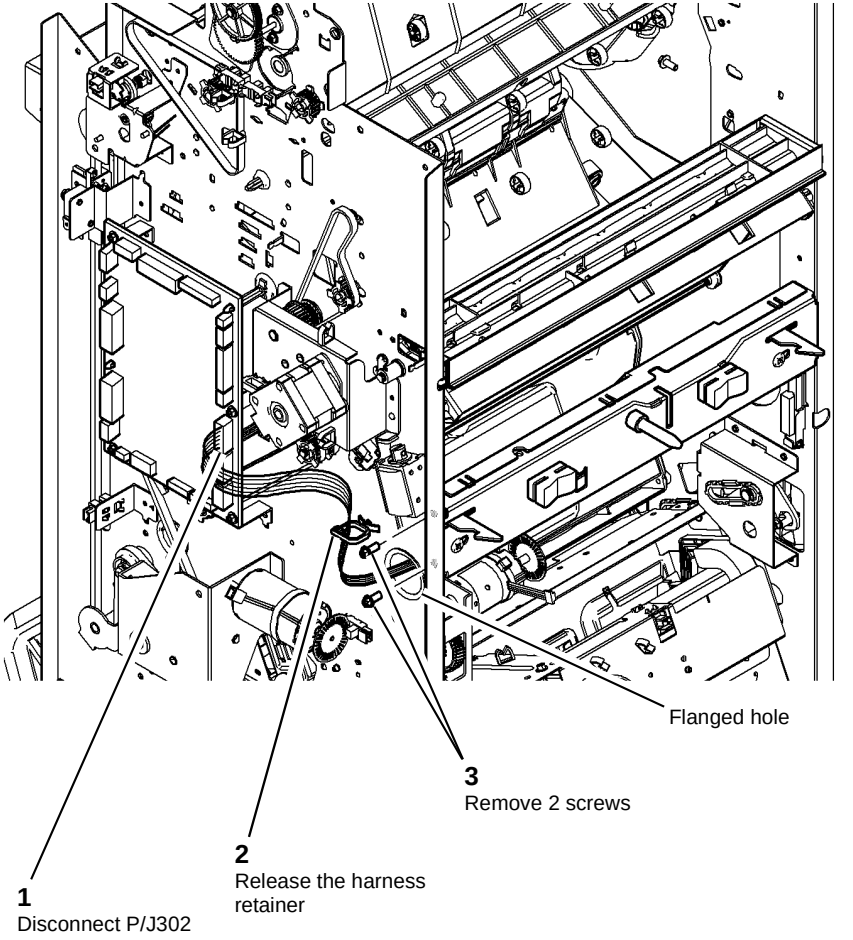


Figure 1 Prepare to remove the latch

4. Remove the docking latch assembly, Figure 2.

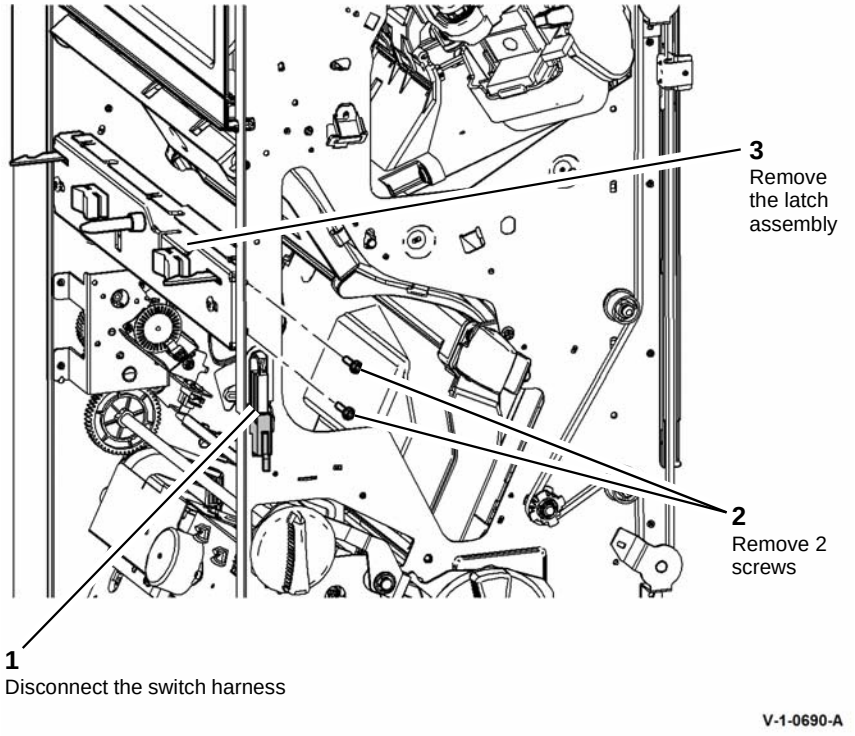


Figure 2 Latch assembly removal

Replacement

Reverse the removal procedure to replace the docking latch assembly.

CAUTION

Ensure that the front and rear harness are routed through the flanged holes, refer to Figure 1 and Figure 2.

REP 11.17-150 Ejector Belt

Parts List on PL 11.66

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the ejector assembly, refer to REP 11.10-150.

2. Remove the ejector belt, Figure 1.

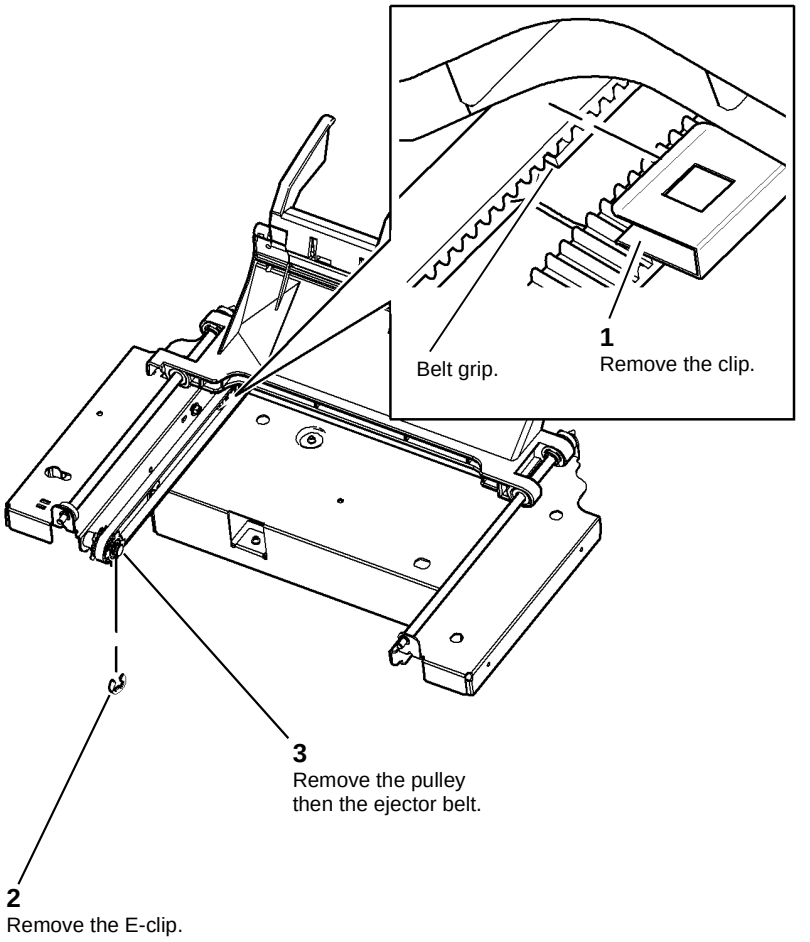


Figure 1 Remove the ejector belt

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the ejector belt is correctly engaged with the belt grip on the ejector assembly before the clip is reinstalled. Refer to Figure 1.

REP 11.18-150 BM Back Stop Motor

Parts List on PL 11.80

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the back stop motor, Figure 1

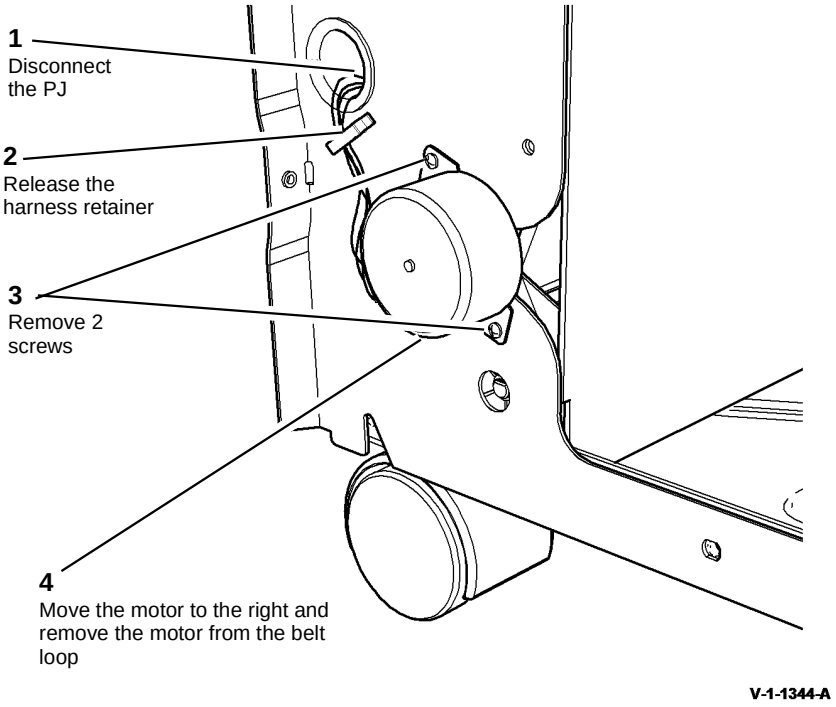


Figure 1 Back stop motor removal

Replacement

1. Install the back stop motor, Figure 2.

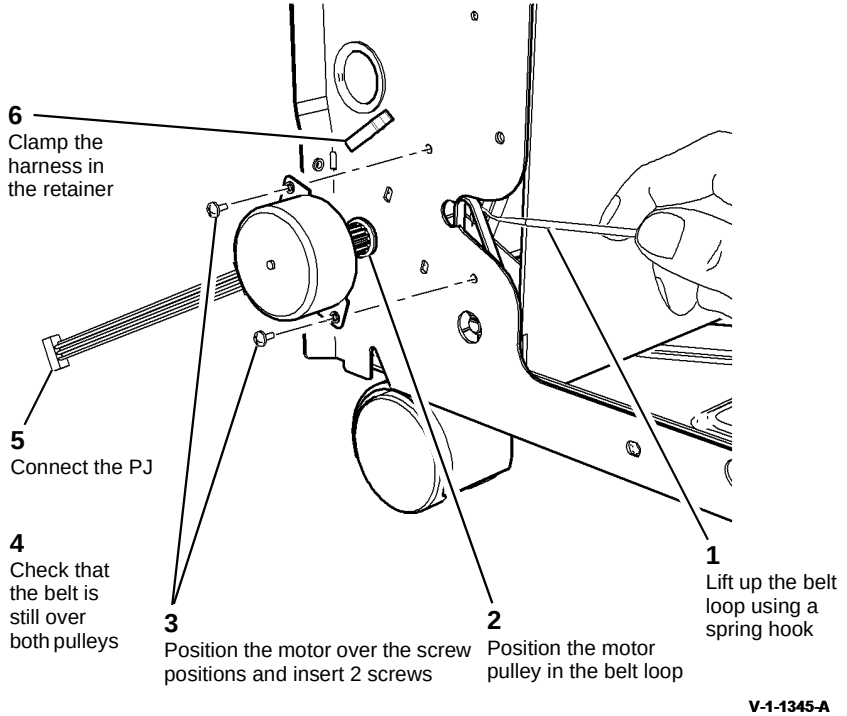


Figure 2 Back stop motor installation

2. Reverse the removal procedure to install remainder of the removed components.

REP 11.19-150 Back Stop Assembly

Parts List on PL 11.80

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Un-dock the LVF BM, REP 11.13-150.
2. Remove the LVF BM front door cover assembly, rear cover and backstop cover, REP 11.1-150.
3. Remove the BM stapler assembly and booklet tamper assembly, REP 11.38-150.
4. Remove the crease roll motor and gearbox assembly, REP 11.25-150.

5. Prepare to remove the left guide assembly, Figure 1.

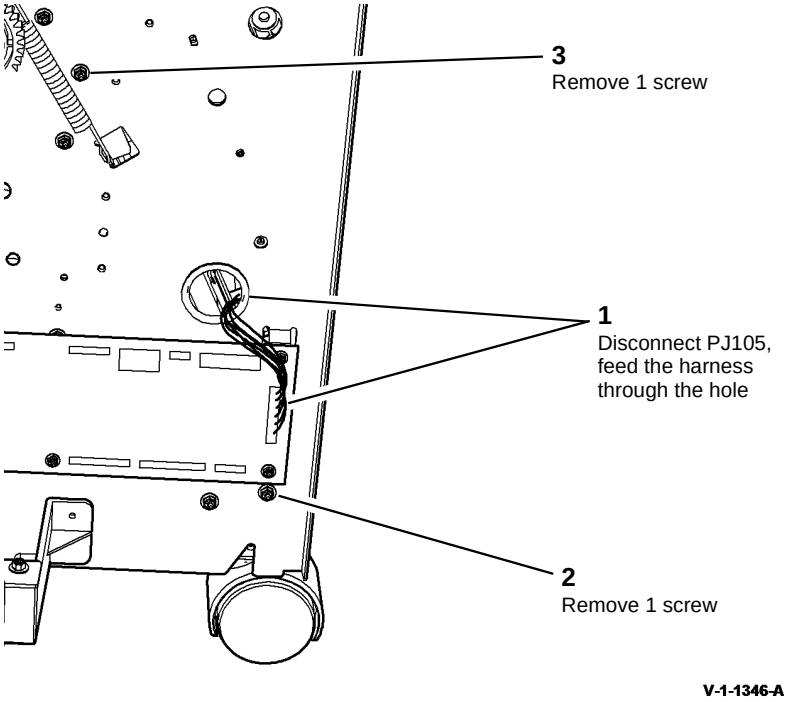


Figure 1 Preparation

6. Remove the left guide assembly, Figure 2.

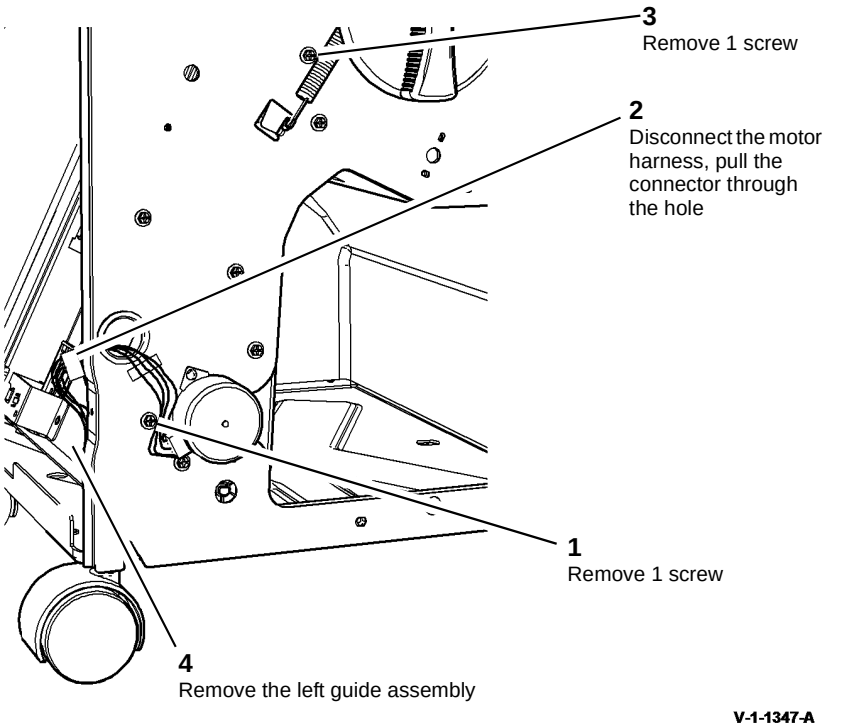


Figure 2 Left guide assembly removal

7. Prepare to remove the right guide assembly, Figure 3.

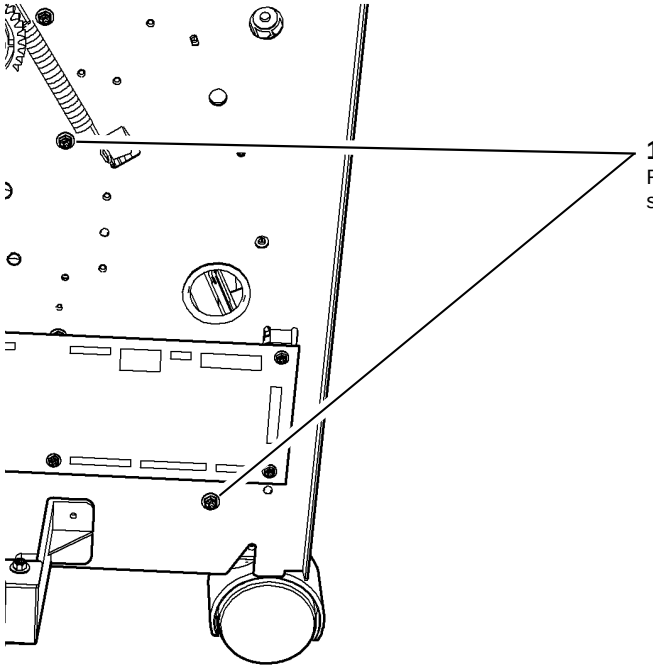


Figure 3 Preparation

8. Remove the right guide assembly, Figure 4.

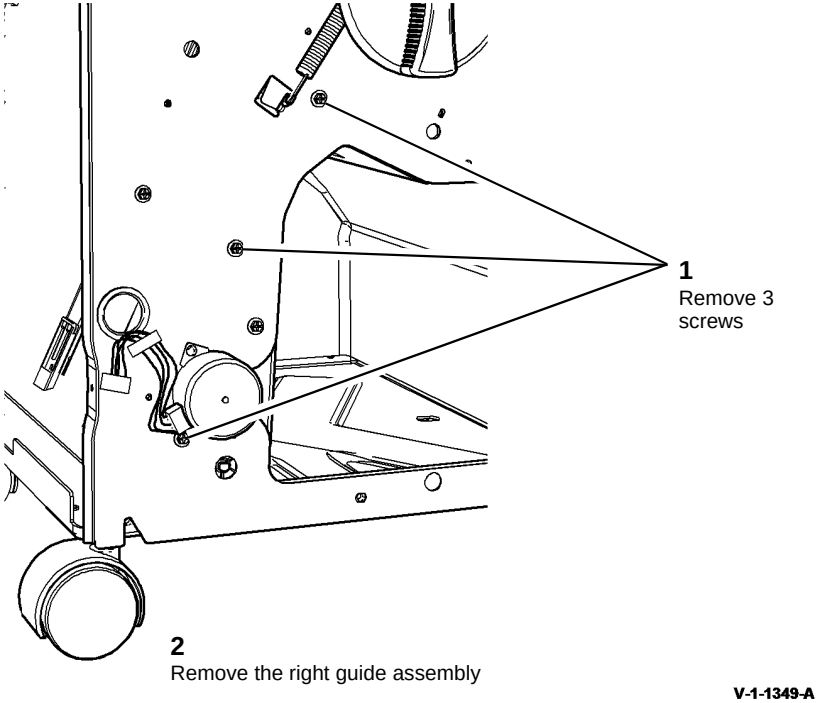


Figure 4 Right guide assembly removal

9. Remove the back stop assembly, Figure 5.

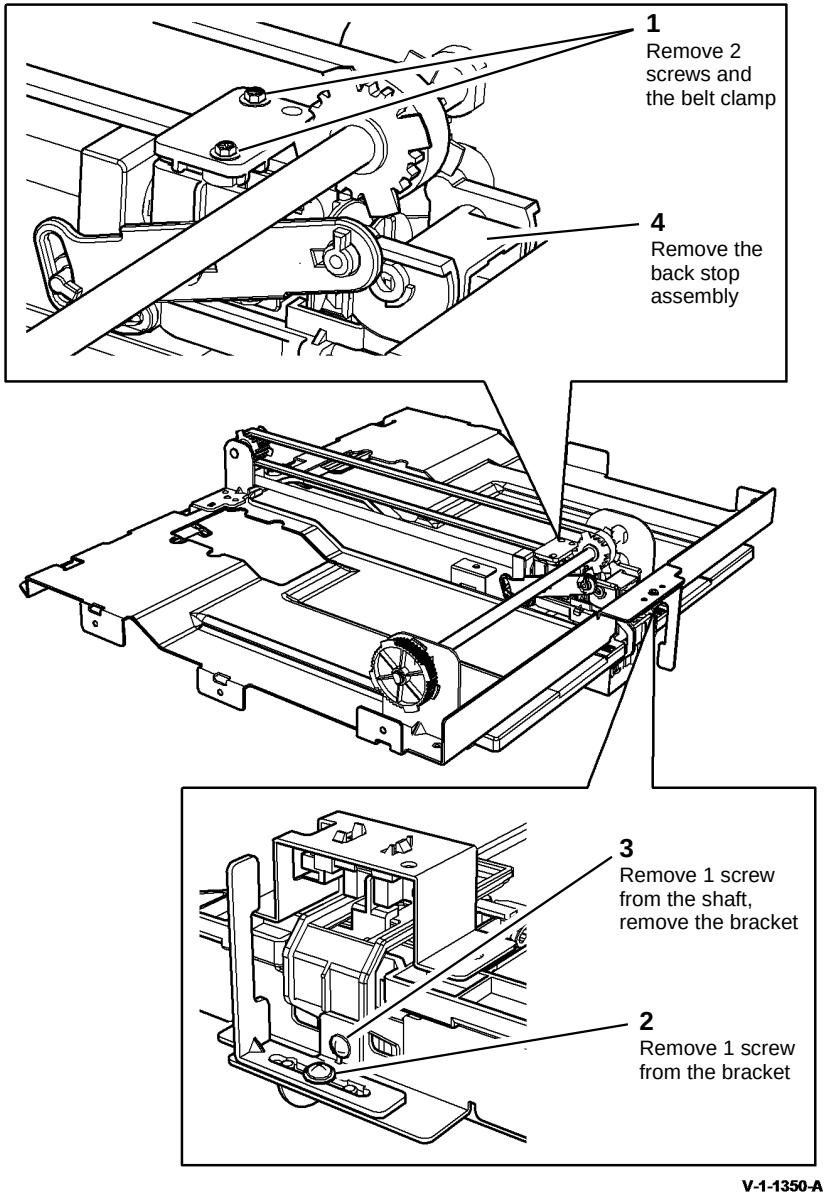


Figure 5 Back stop assembly removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. Install the back stop assembly by reversing the steps in Figure 5. Ensure that the bracket is correctly located, Figure 6. Ensure the belt clamp is correctly located, Figure 7.

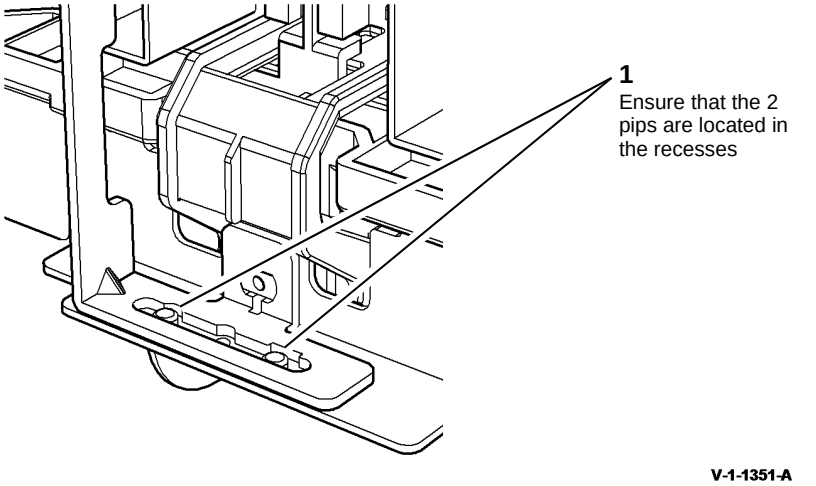


Figure 6 Bracket location

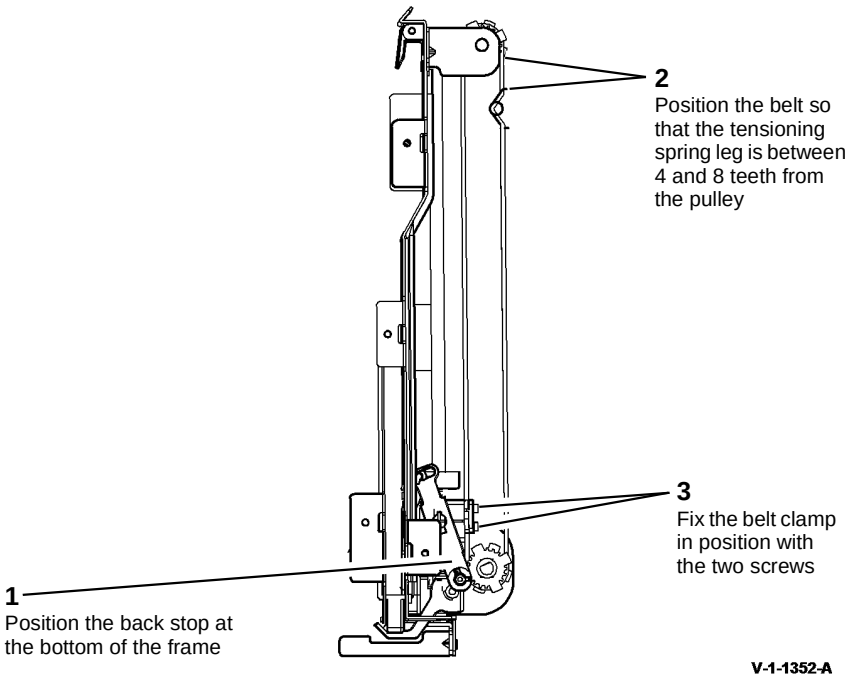


Figure 7 Belt clamp location

3. Manually move the back stop to both extremes of travel, ensure that the tensioner spring does not touch either pulley, if necessary re-position the belt clamp.
4. Reverse the removal procedure to install the remainder of the removed components.
5. Perform ADJ 11.5-150 Booklet Crease Position.

REP 11.20-150 BM Guide Home Sensor and BM End Stop Mid Home Sensor

Parts List on PL 11.80

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Un-dock the LVF BM, REP 11.13-150.
2. Remove the backstop cover, REP 11.1-150.
3. Remove the sensors, Figure 1.

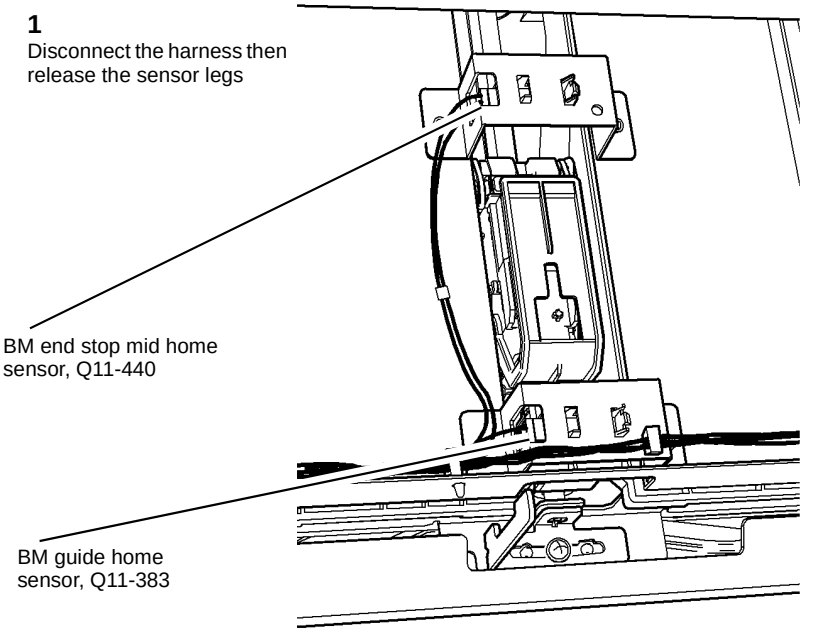


Figure 1 Sensors removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.21-150 Crease Blade Gearbox Assembly, Motor and Sensors

Parts List on PL 11.82

Removal

Use this procedure to remove the following:

- Crease blade motor, MOT11-061
- Crease blade gearbox assembly
- Crease blade home sensor, Q11-416
- Crease blade motor encoder sensor, Q11-418

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Prepare to remove the crease blade motor and gearbox, Figure 1.

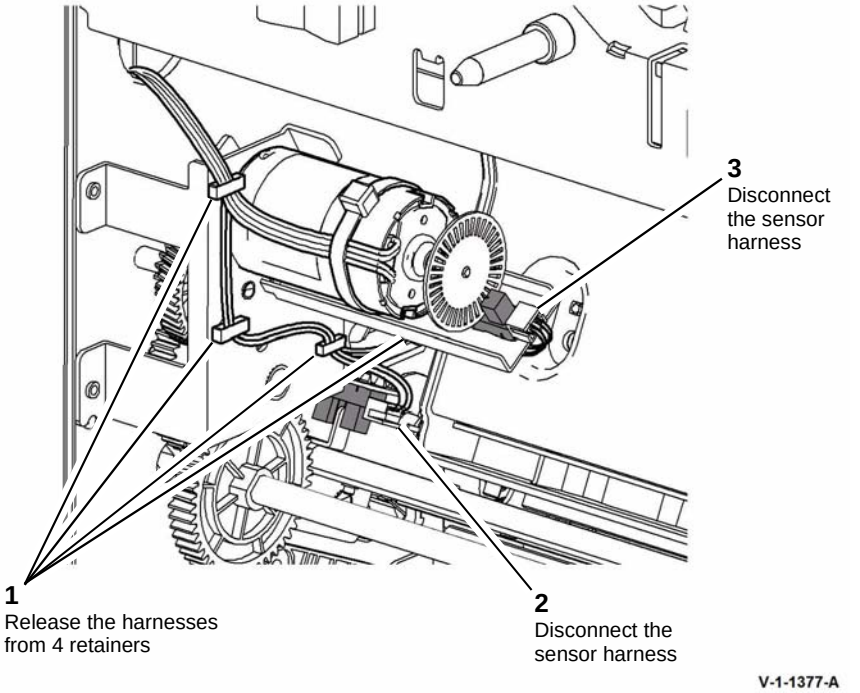


Figure 1 Preparation

4. Remove the crease blade gearbox assembly, Figure 2.

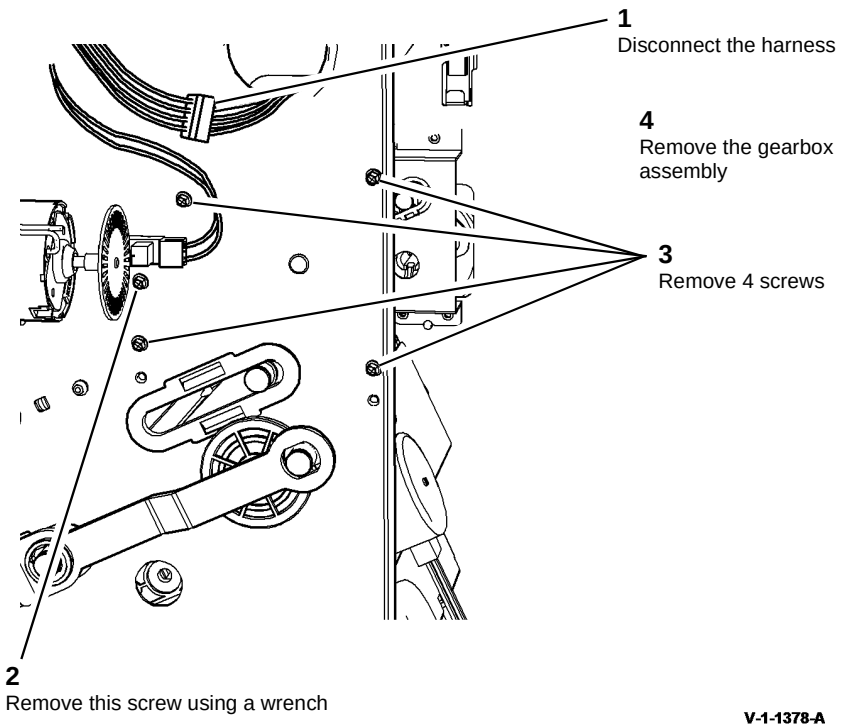


Figure 2 Gearbox assembly removal

5. Remove the crease blade motor, MOT11-061 by removing the 2 mounting screws.
6. Remove the crease blade home sensor, Q11-416 by releasing the sensor legs.
7. Remove the crease blade motor encoder sensor, Q11-418 by releasing the sensor legs.

Replacement

The replacement is the reverse of the removal procedure.

REP 11.22-150 Crease Blade Assembly and Guides

Parts List on PL 11.82

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the crease blade gearbox assembly, REP 11.21-150.
4. Remove the crease blade cranks, bearings, drive gear and handle, REP 11.23-150.
5. Prepare to remove the crease blade assembly, Figure 1.

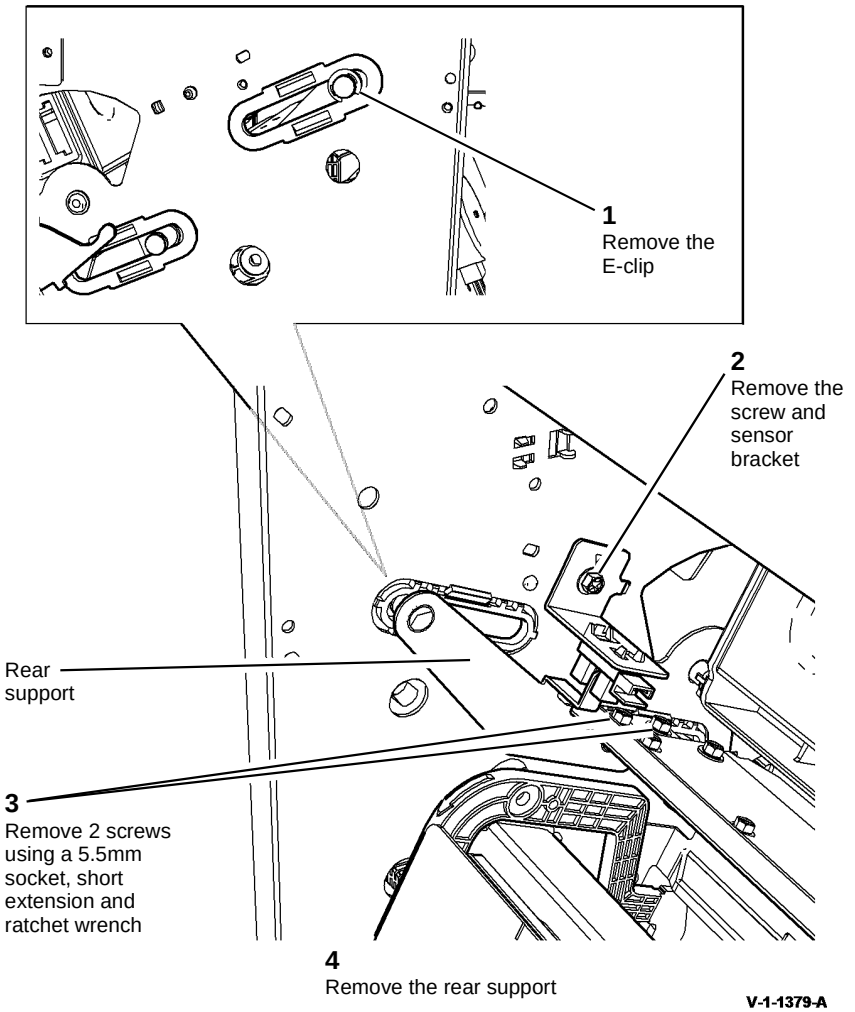


Figure 1 Preparation

6. Remove the crease blade assembly, Figure 2

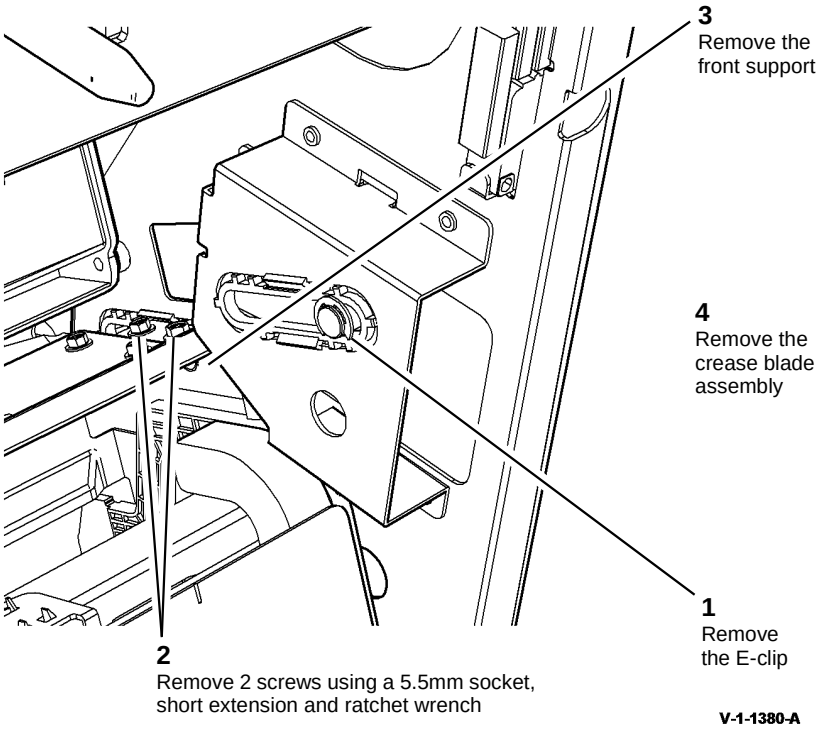


Figure 2 Crease blade assembly removal

7. Remove the rear crease blade guides, Figure 3.

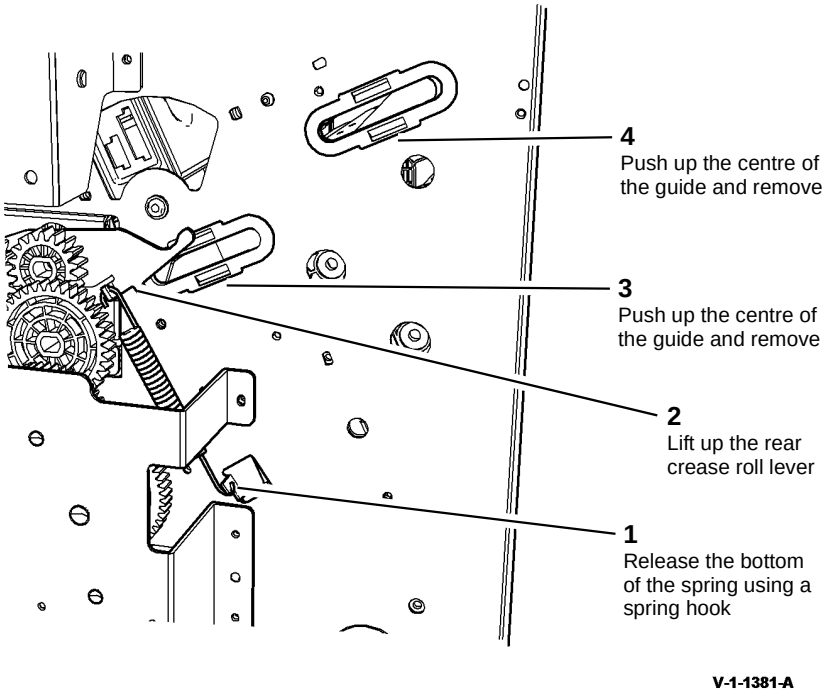


Figure 3 Rear guides removal

8. Remove the front crease blade guides, Figure 4.

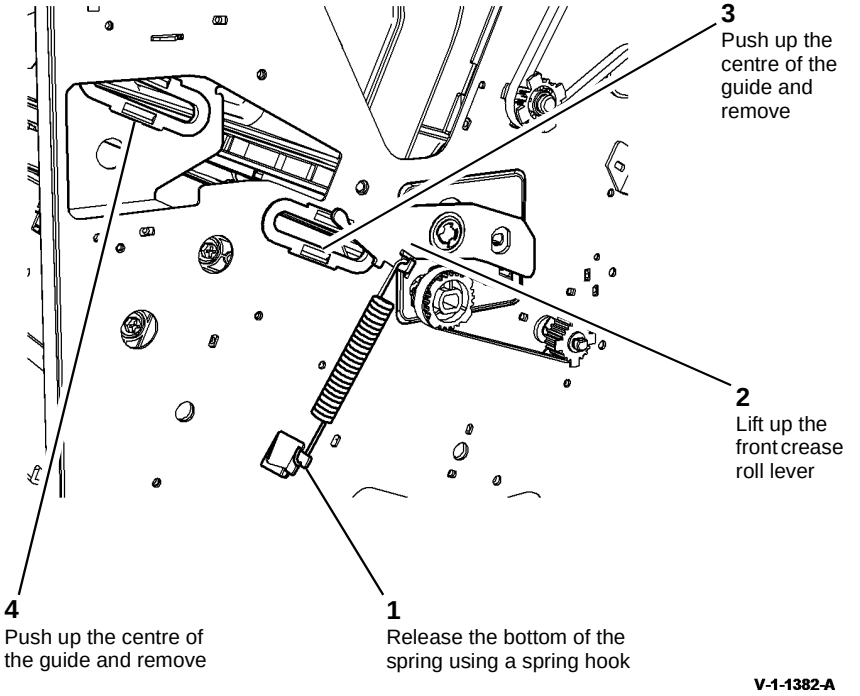


Figure 4 Front guides removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform ADJ 11.5-150 Booklet Crease Position.

REP 11.23-150 Crease Blade Cranks, Bearings, Gear and Handle

Parts List on PL 11.82

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the crease blade gearbox assembly, REP 11.21-150.
4. Remove the rear blade arm, Figure 1.

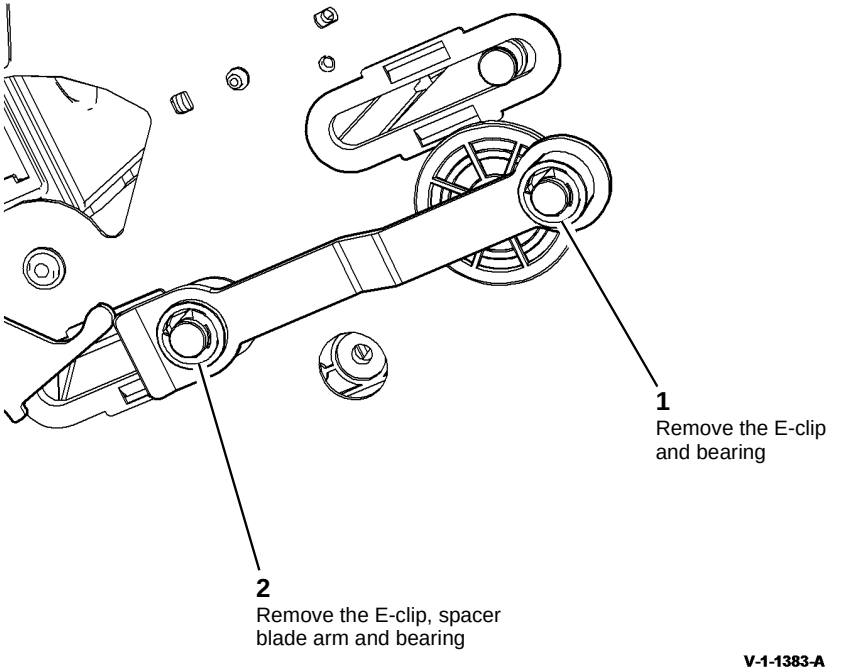


Figure 1 Rear blade arm removal

5. Remove the front blade arm, Figure 2.

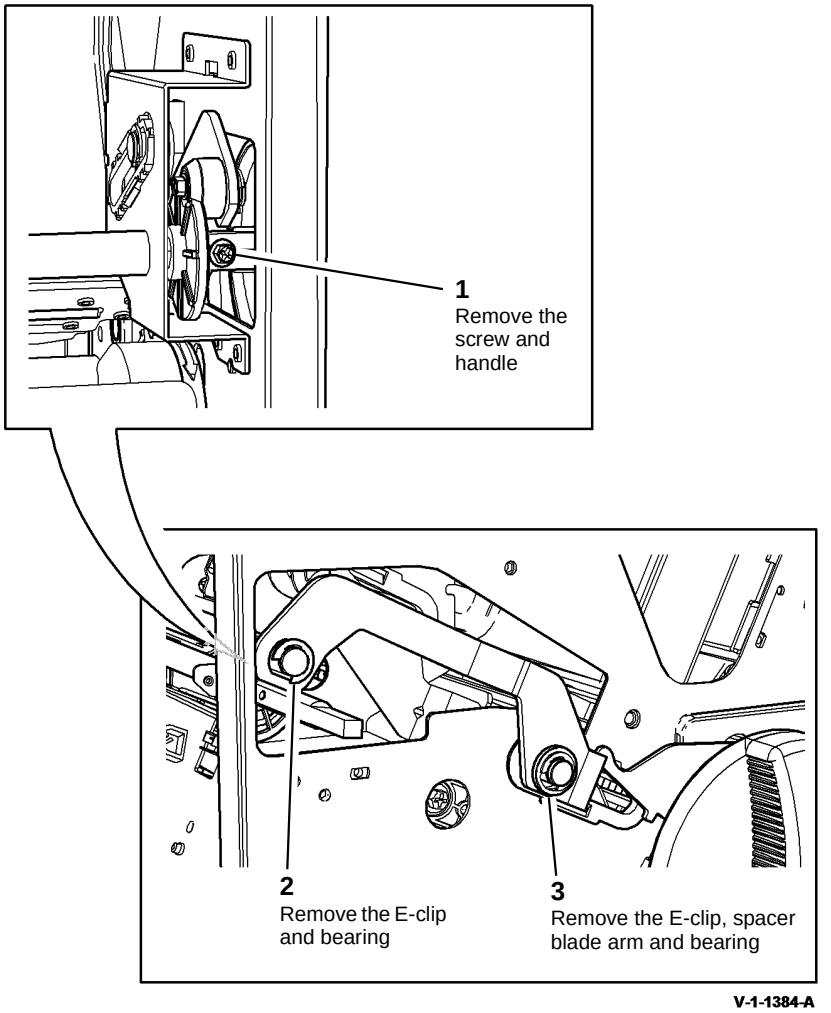


Figure 2 Front blade arm removal

6. Remove the crease blade shaft assembly, Figure 3.

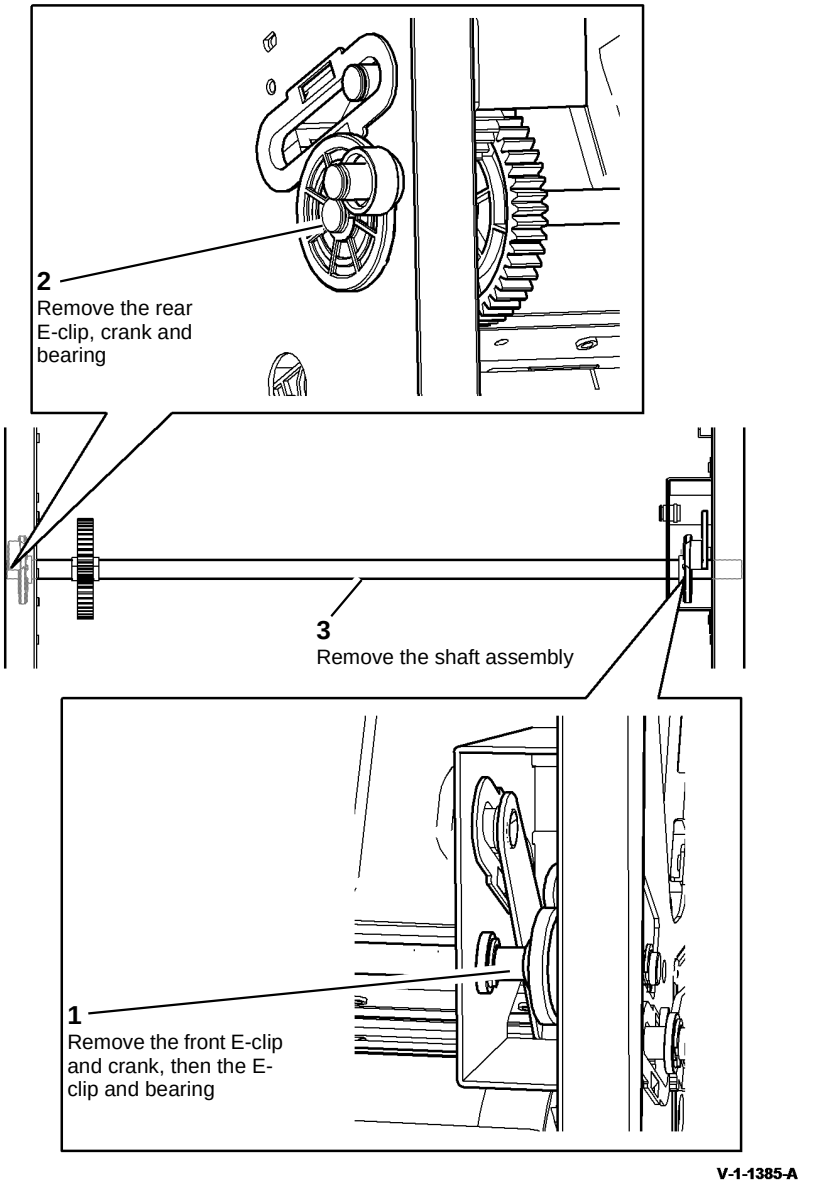


Figure 3 Crease blade shaft removal

7. Remove the crease blade drive gear, Figure 4.

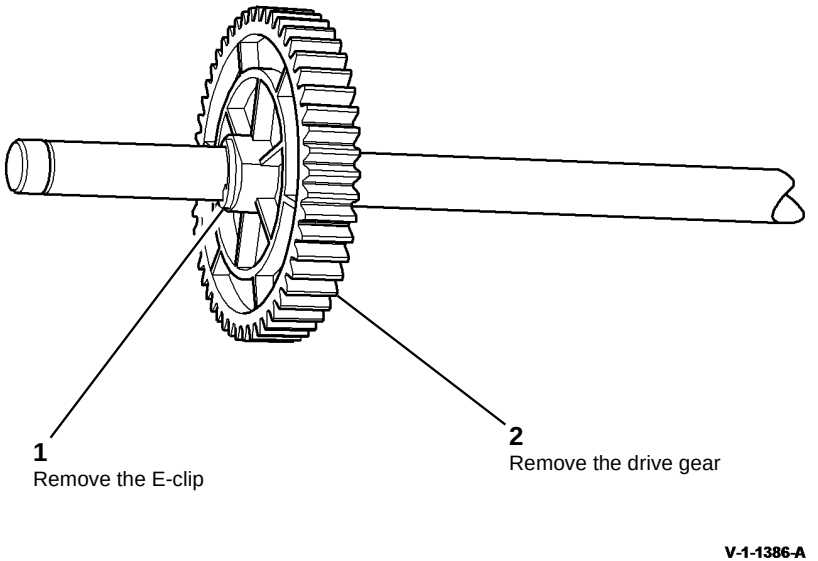


Figure 4 Drive gear removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.24-150 Crease Rolls and Associated Components

Parts List on PL 11.84, PL 11.86

Removal

Use this procedure to repair the following components:

- Crease roll handle pulley
- Crease roll handle
- Exit roll belt
- Upper crease roll
- Lower crease roll
- Crease roll spring
- Crease roll bearing
- Front crease roll lever
- Rear crease roll lever

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the crease roll motor and gearbox assembly, REP 11.25-150.
2. Remove the crease roll gears 1 to 4, REP 11.26-150.
3. Remove the LVF BM front door cover assembly, REP 11.1-150.

4. Remove the rear crease roll lever, Figure 1.

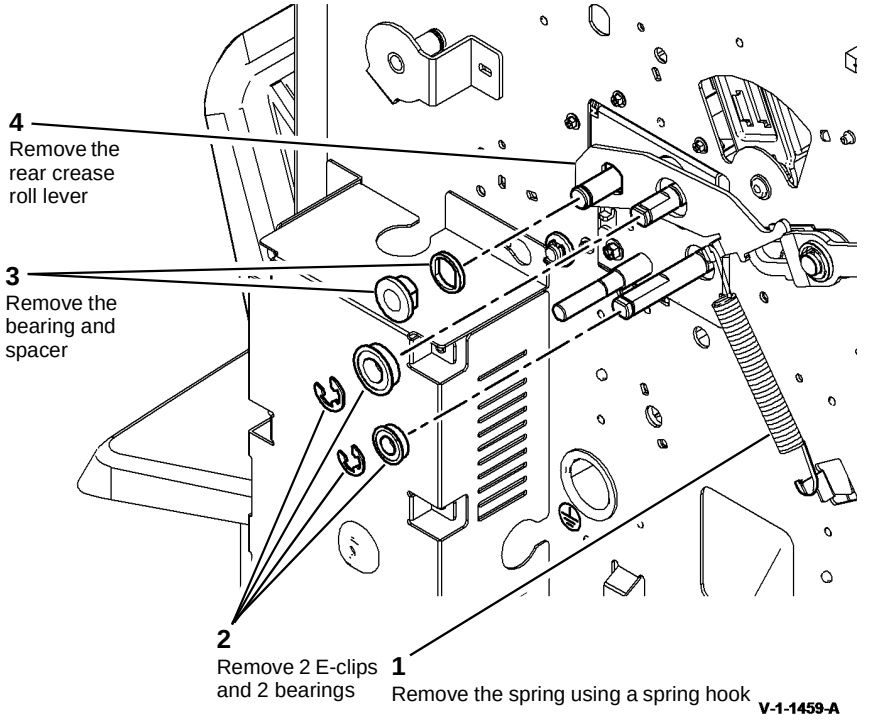


Figure 1 Rear crease roll lever removal

5. Remove the exit roll belt components, Figure 2.

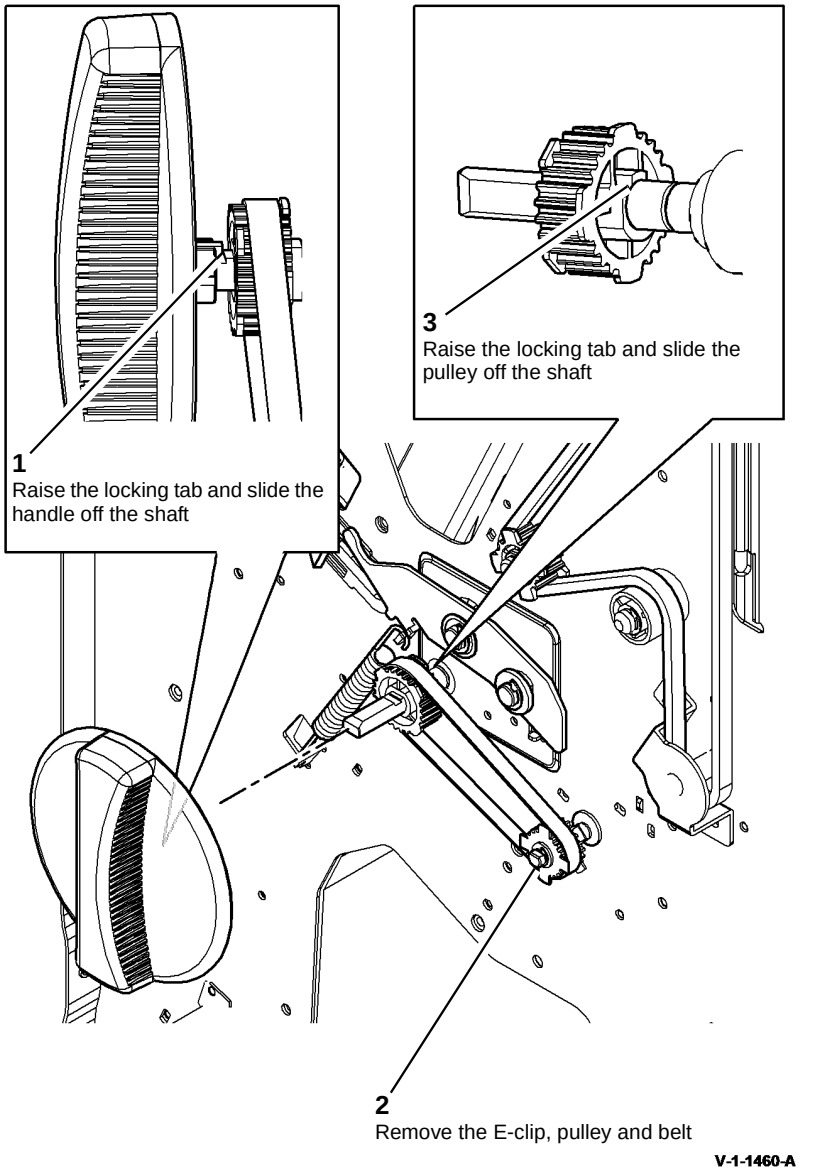


Figure 2 Exit roll belt removal

6. Remove the front crease roll lever, Figure 3.

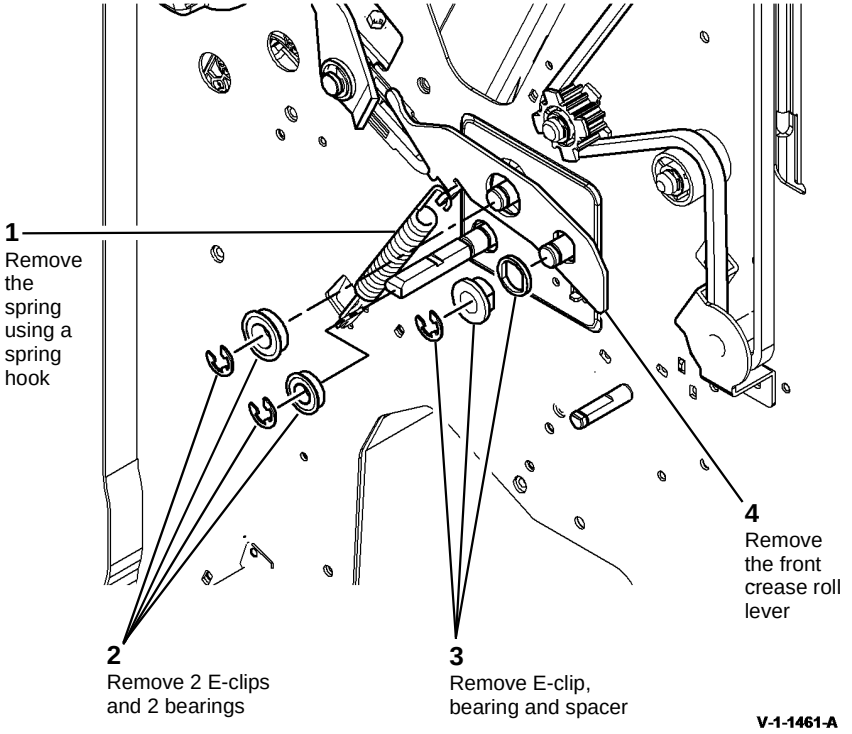


Figure 3 Front crease roll lever removal

7. Remove the bin 2 support, REP 11.44-150.
8. Remove the lower right cover, REP 11.45-150.
9. Remove the bail arm support bracket and bail arm, refer to REP 11.29-150.
10. Remove the exit upper guide assembly, REP 11.28-150.
11. Remove the exit lower guide, Figure 4.

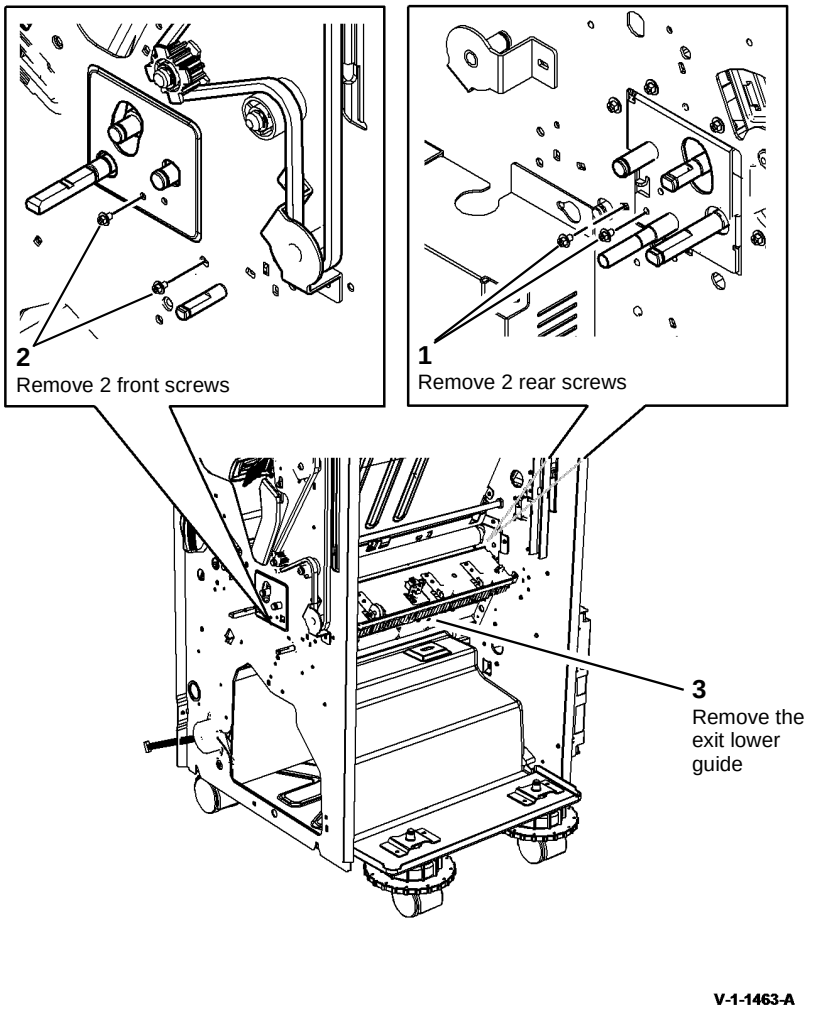


Figure 4 Exit lower guide removal

12. Remove the stacker tray drive and motor assembly, refer to REP 11.5-150.

13. Prepare to release the booklet compiler tray, Figure 5.

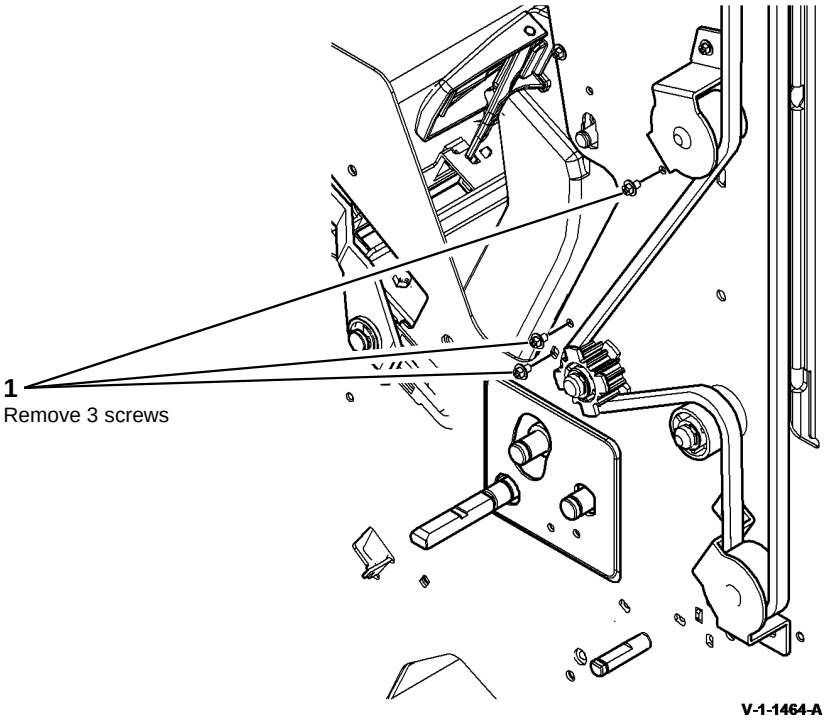


Figure 5 Preparation

14. Release the booklet compiler tray, Figure 6.

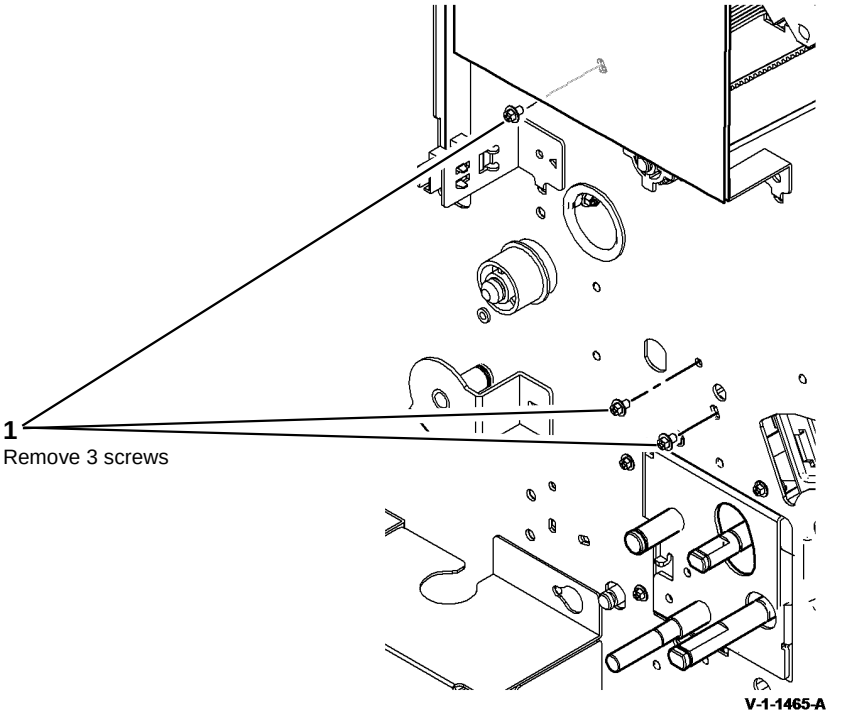


Figure 6 Tray release

15. Release the rear of the BM exit roll assembly, Figure 7.

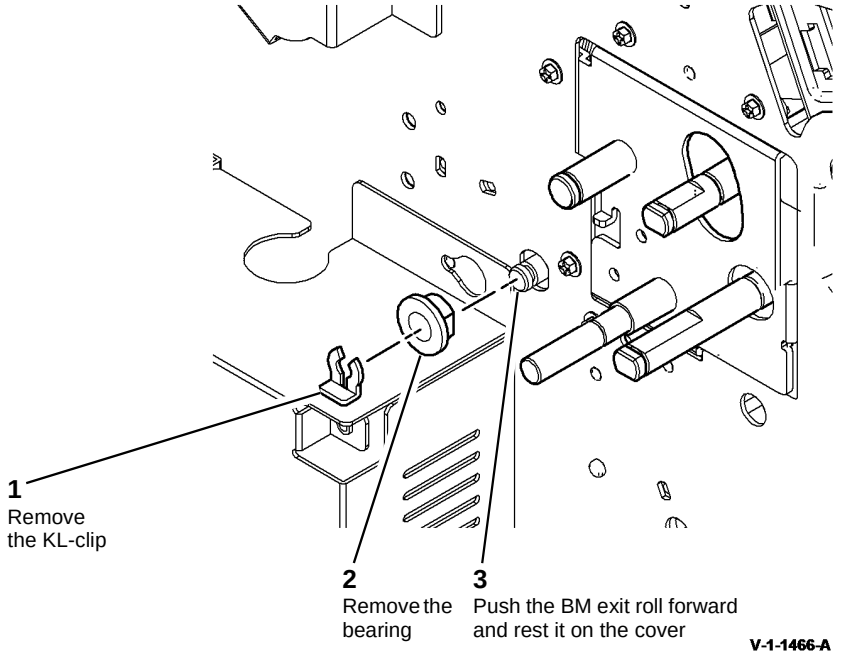


Figure 7 BM exit roll release

16. Remove the upper and lower crease roll, Figure 8.

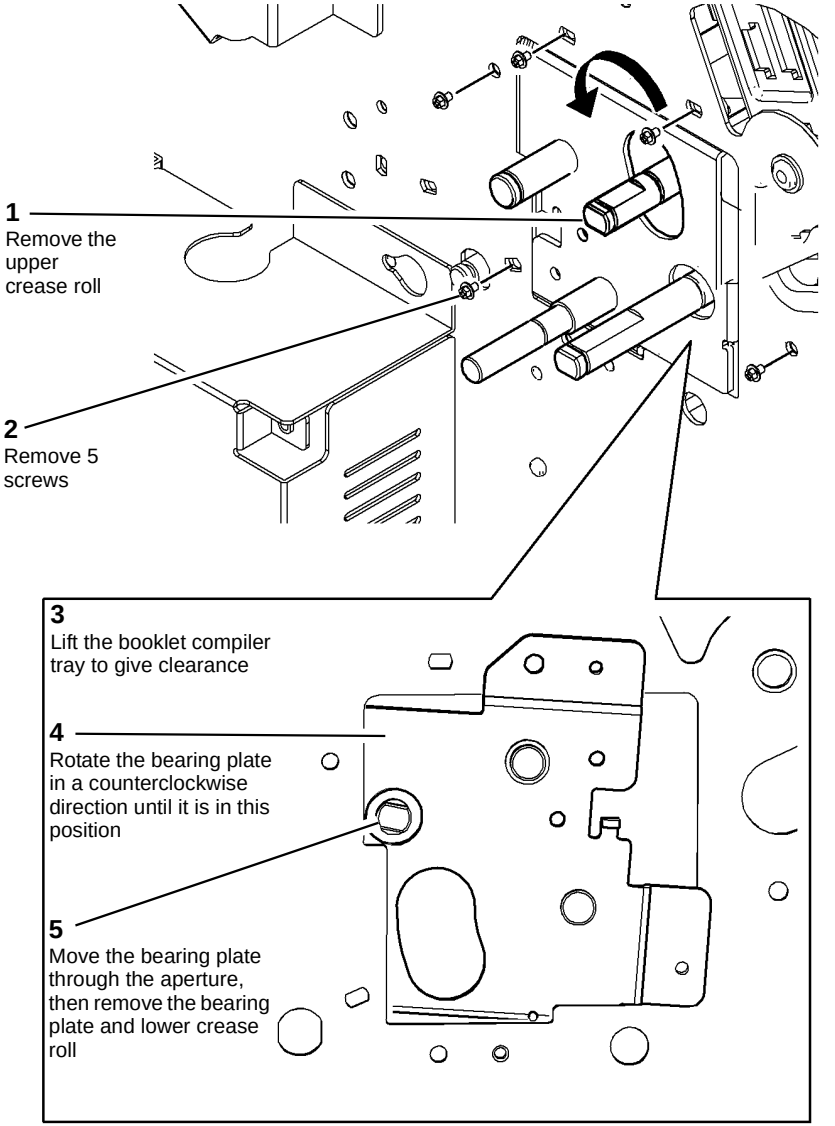


Figure 8 Crease rolls removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.25-150 Crease Roll Motor and Gearbox Assembly

Parts List on PL 11.86

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM rear cover, REP 11.1-150.
2. Remove the crease roll gearbox assembly, Figure 1.

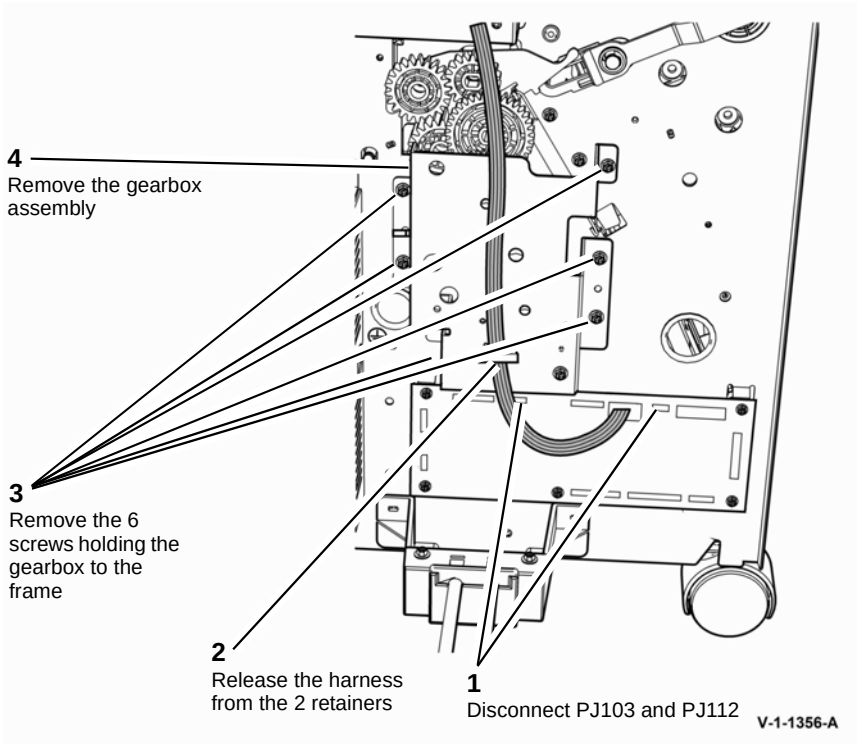


Figure 1 Gearbox removal

3. Remove the crease roll motor and sensor, Figure 2.

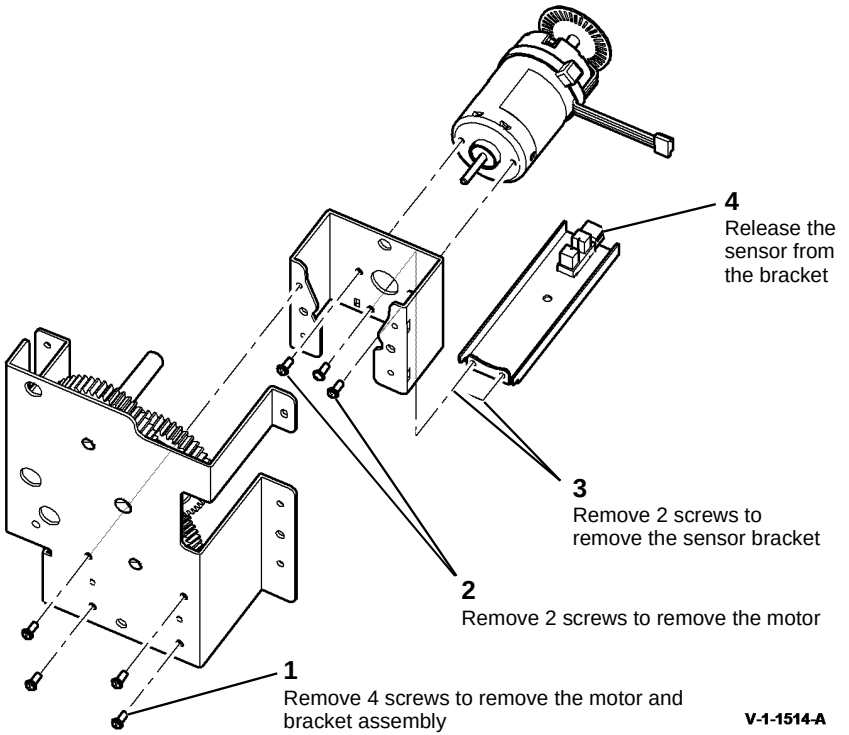


Figure 2 Crease roll motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.26-150 Crease Roll Gear Kit

Parts List on PL 11.86

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the crease roll motor and gearbox, REP 11.25-150.
2. Remove the crease roll gears, Figure 1.

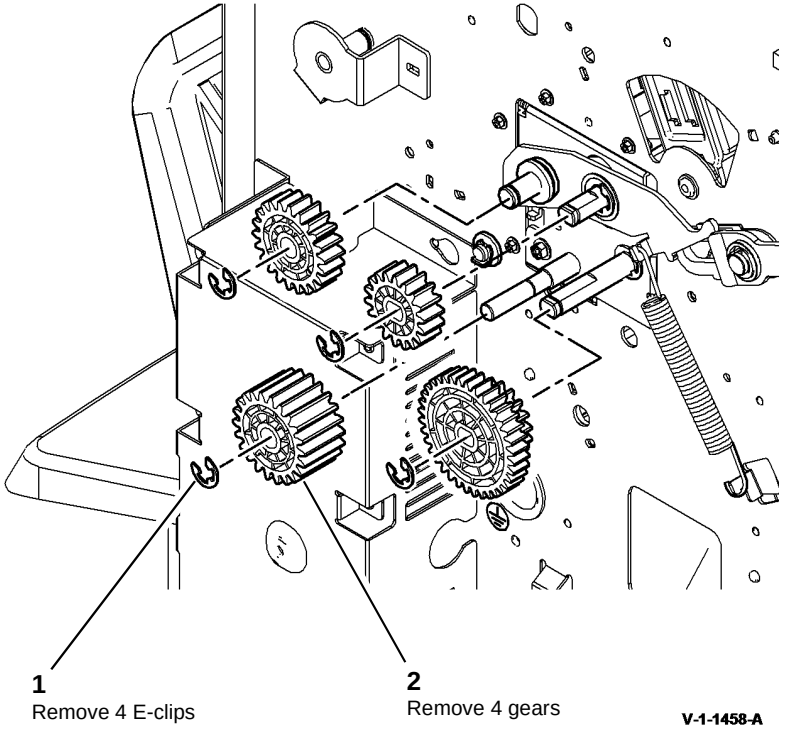


Figure 1 Gears removal

Replacement

1. Ensure the gears are located in their correct positions, refer to Figure 1.
2. Reverse the removal procedure to replace the remainder of the components.

REP 11.27-150 BM Exit Roll, Belt, Pulley, Bush and Paddle

Parts List on PL 11.84

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bin 2 support, REP 11.44-150.
2. Remove the lower right cover, REP 11.45-150.

NOTE: *If only the paddle is being repaired, do not perform removal steps 4 and 5.*

3. Remove the exit roll paddle, Figure 1.

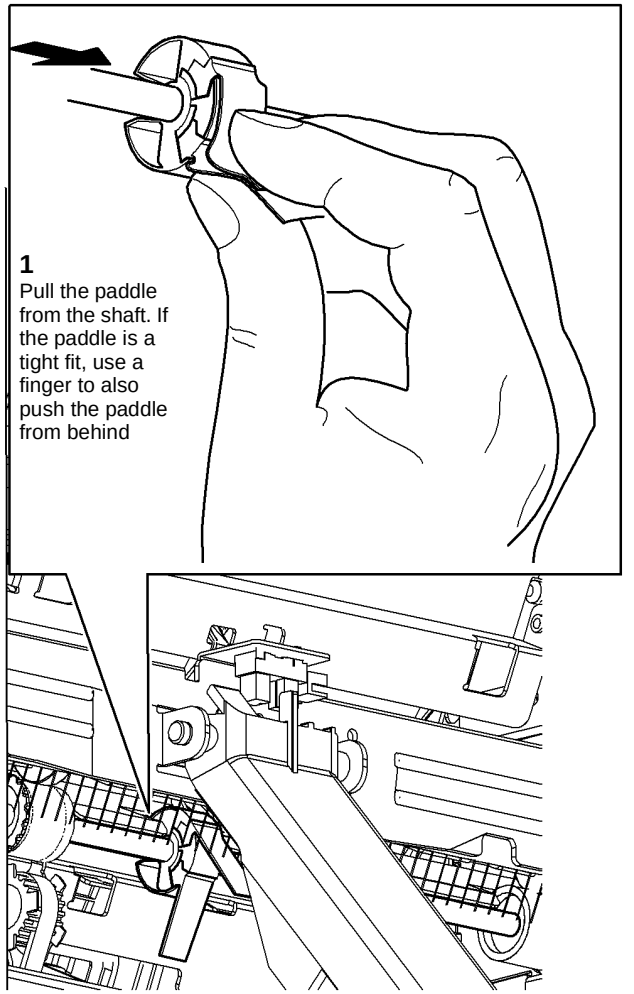


Figure 1 Exit roll paddle removal

4. Remove the belt pulley and bush, Figure 2.

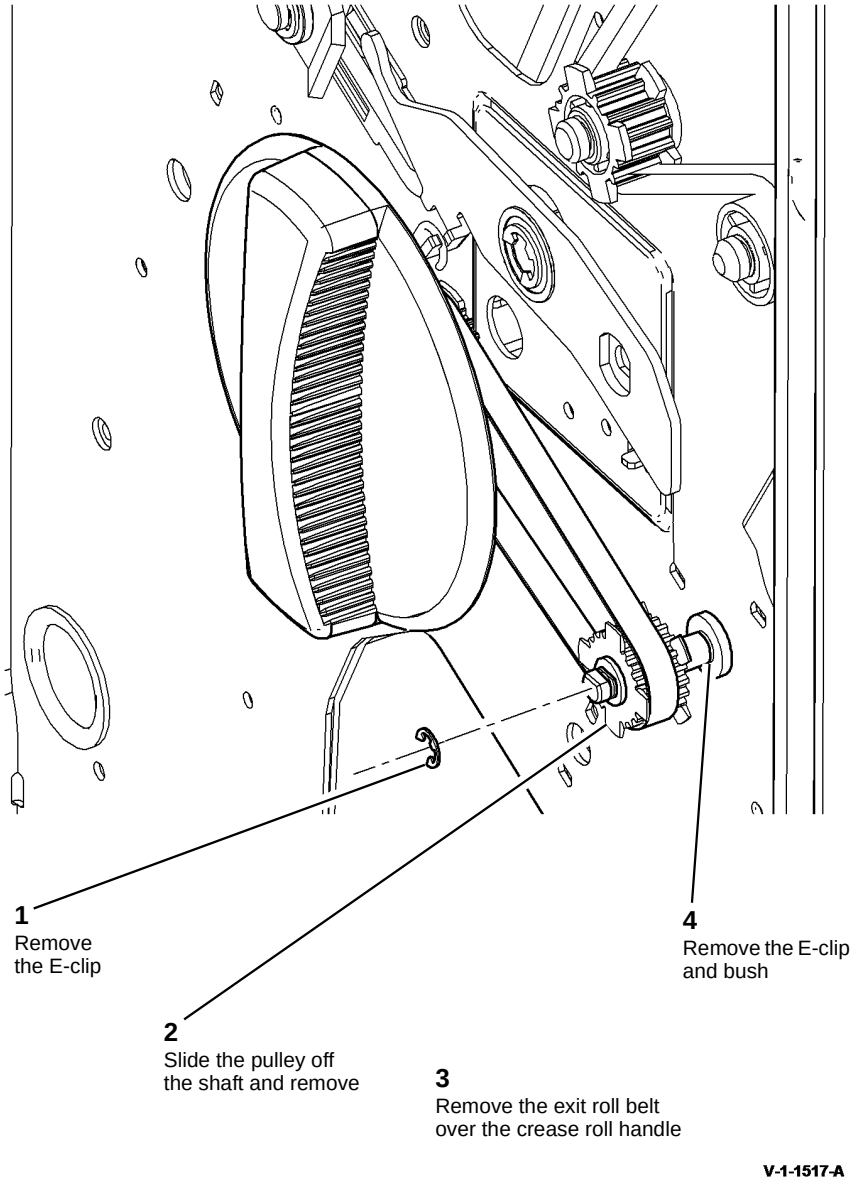


Figure 2 Belt pulley and bush removal

5. Remove the BM exit roll, Figure 3.

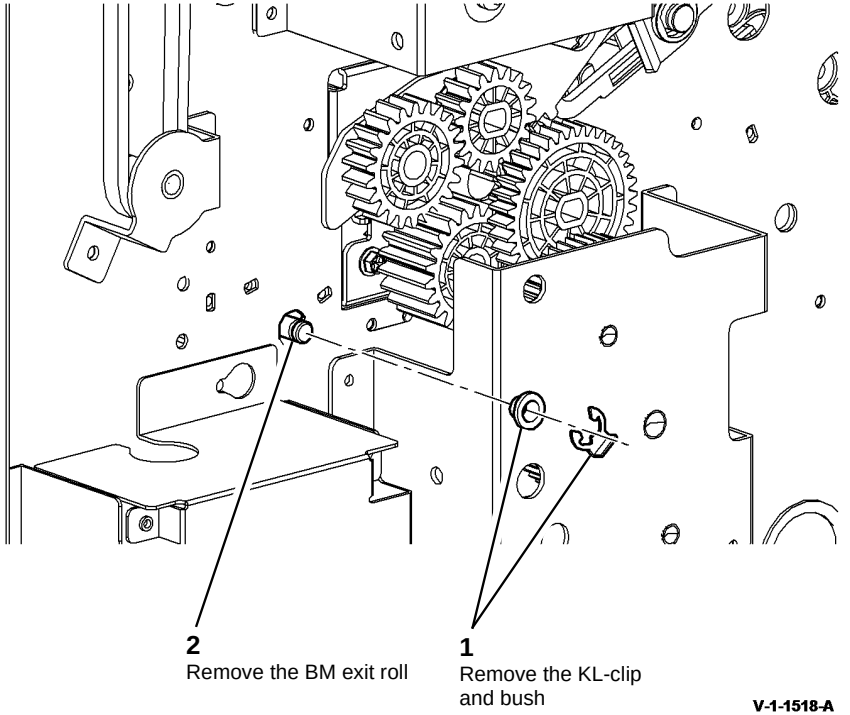


Figure 3 BM exit roll removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: *When replacing the paddle ensure it is correctly orientated, refer to Figure 1.*

REP 11.28-150 BM Exit Upper Guide Assembly and Exit Sensor

Parts List on PL 11.88

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the lower right cover, REP 11.45-150.
2. Remove the BM exit sensor, Figure 1.

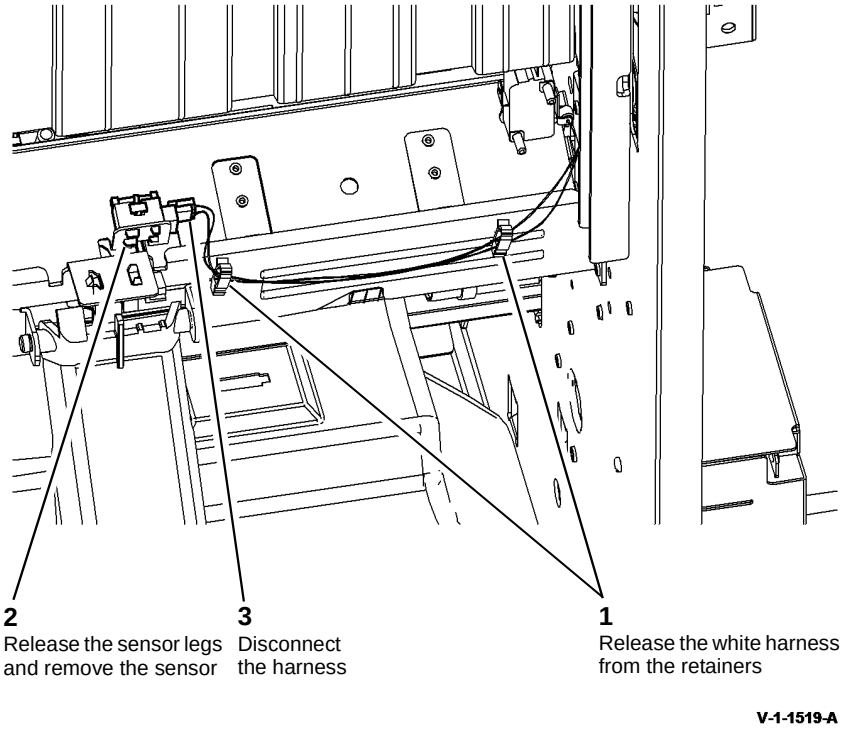


Figure 1 BM exit sensor removal

3. Remove the BM exit upper guide assembly, Figure 2.

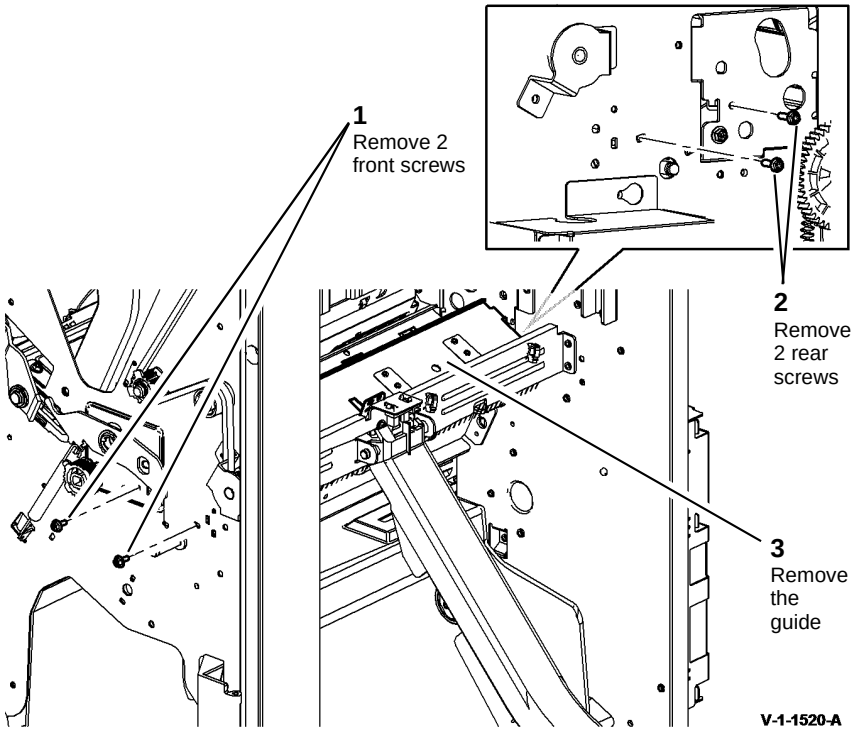


Figure 2 Upper guide removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: *Ensure the white harness is connected to the BM exit sensor and the black harness is connected to the bin 2 90% full sensor.*

REP 11.29-150 BM Bail Arm Assembly, Spring, Roller and Bin 2 90% Full Sensor

Parts List on PL 11.88

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the lower right cover, REP 11.45-150.
2. Remove the bin 2 90% full sensor, Figure 1.

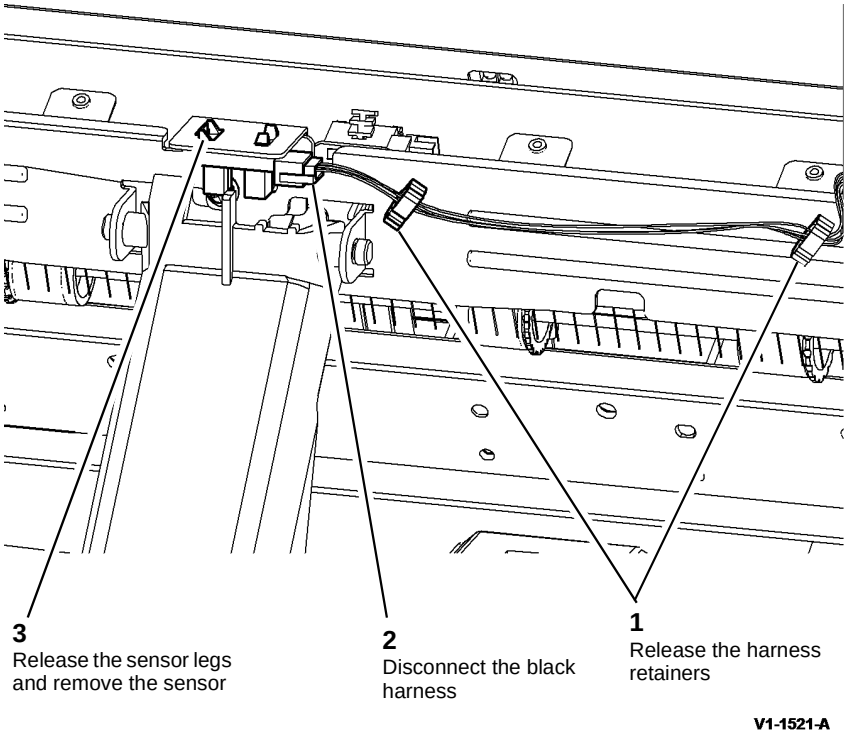


Figure 1 Sensor removal

3. Remove the bail arm support bracket and bail arm, Figure 2.

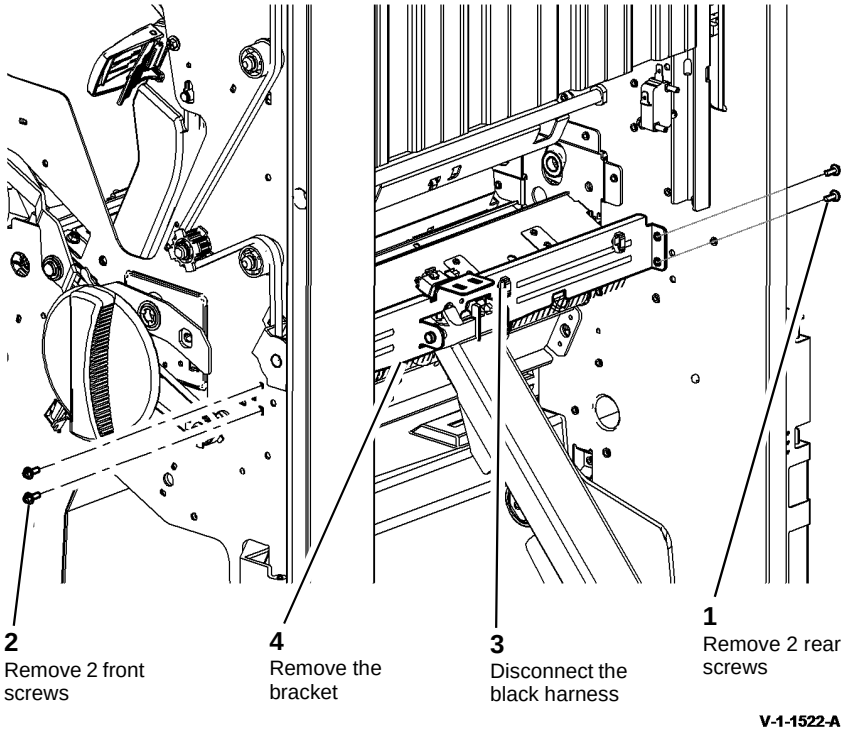


Figure 2 Support bracket removal

4. Remove the bail arm spring, Figure 3.

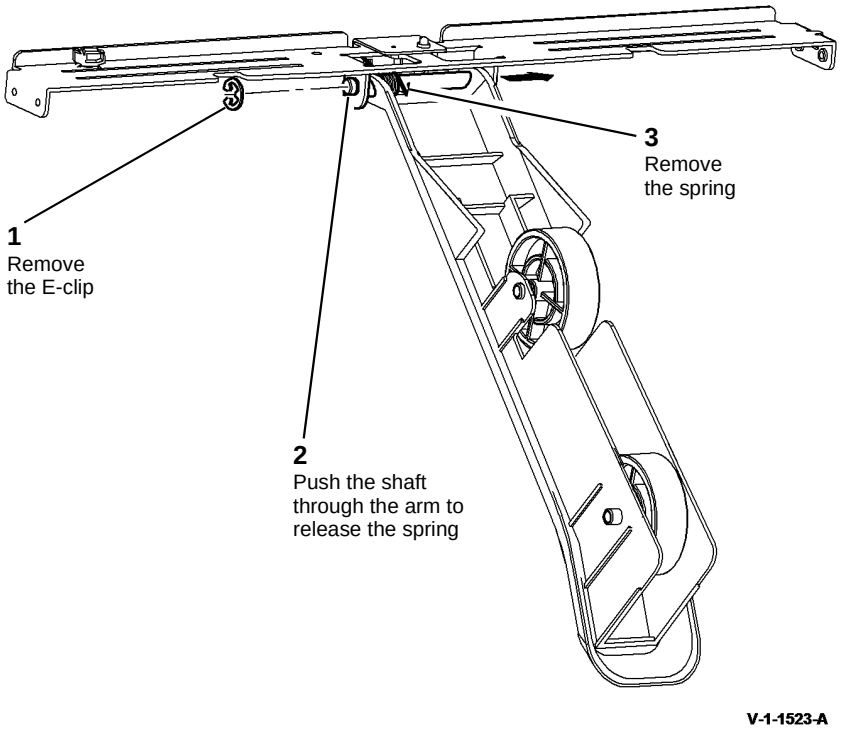


Figure 3 Bail arm spring removal

NOTE: *The bail arm rollers can be removed with the bail arm installed on the LVF BM.*

5. Remove the bail arm roller, Figure 4.

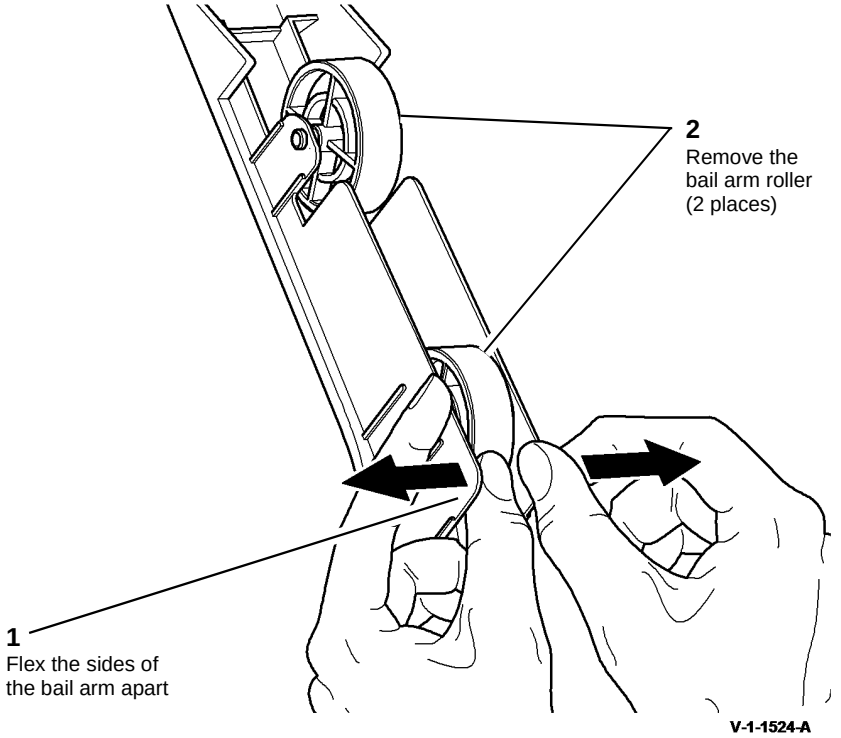


Figure 4 Bail arm roller removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: *Ensure the white harness is connected to the BM exit sensor and the black harness is connected to the bin 2 90% full sensor.*

REP 11.30-150 BM Compiler Guide Assembly, Flapper and Flapper Motor

Parts List on PL 11.76

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Disconnect the harnesses, Figure 1.

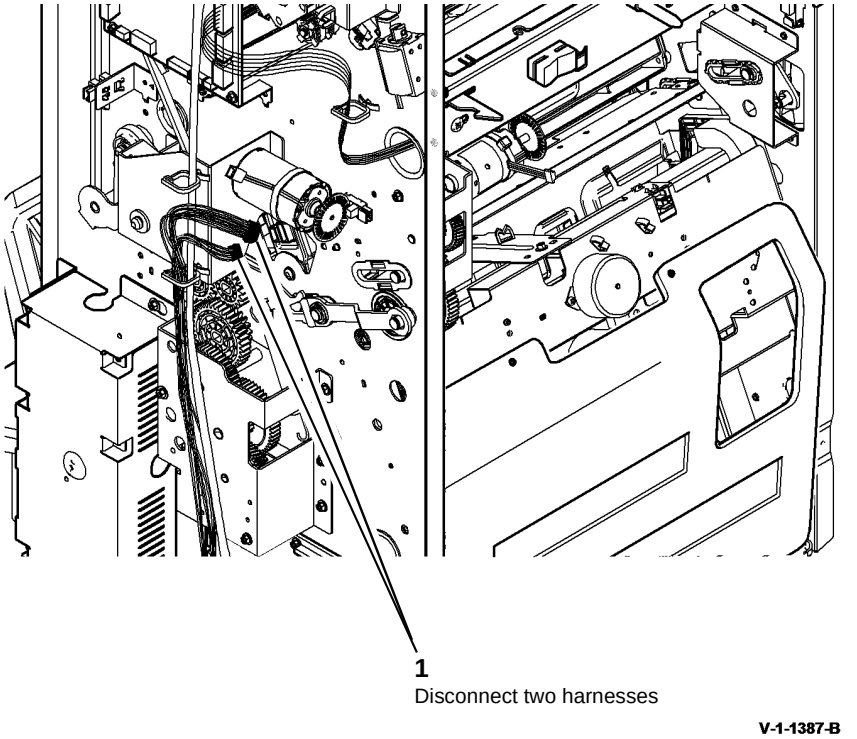


Figure 1 Disconnecting harnesses

3. Remove the BM compiler guide assembly, Figure 2.

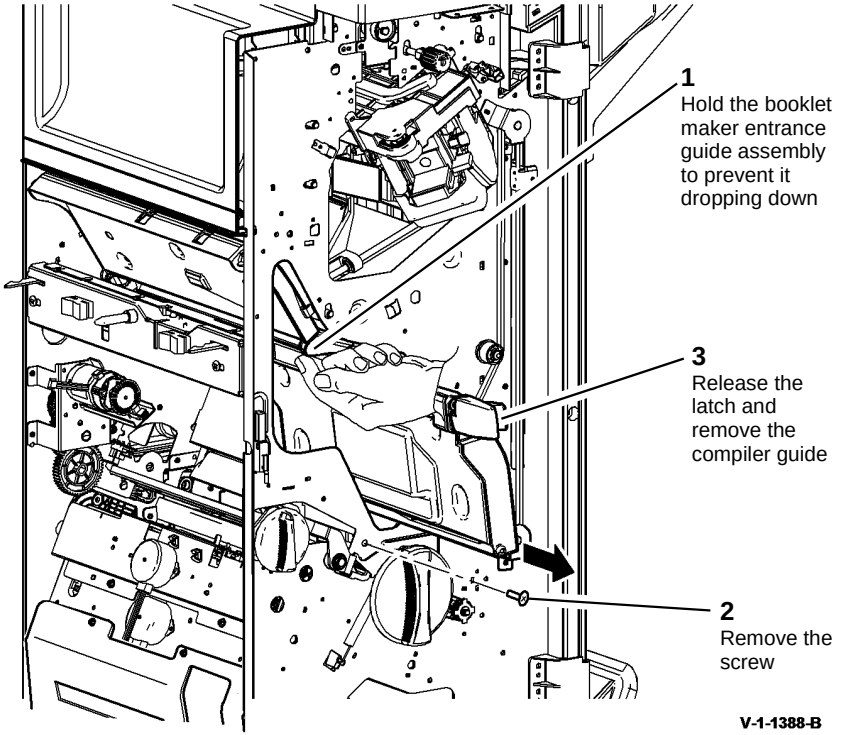


Figure 2 Compiler guide removal

4. Remove the BM compiler guide assembly cover, Figure 3.

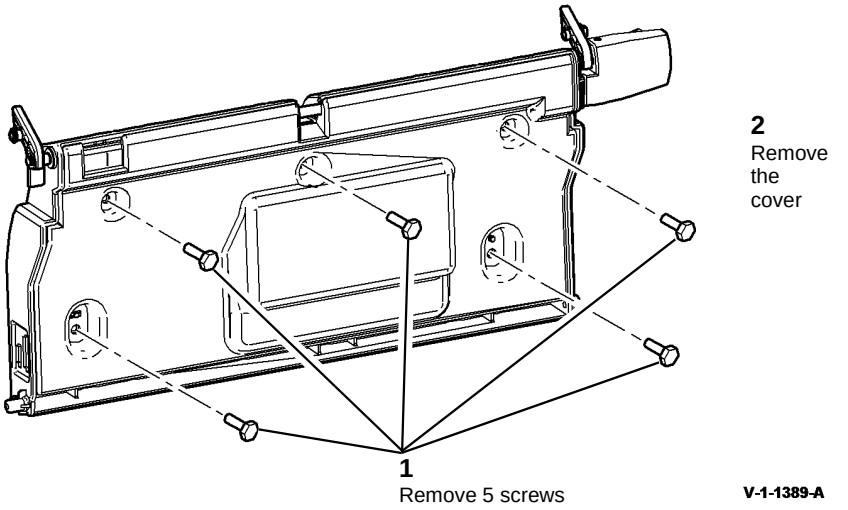


Figure 3 Cover removal

5. Remove the BM flapper motor assembly, Figure 4.

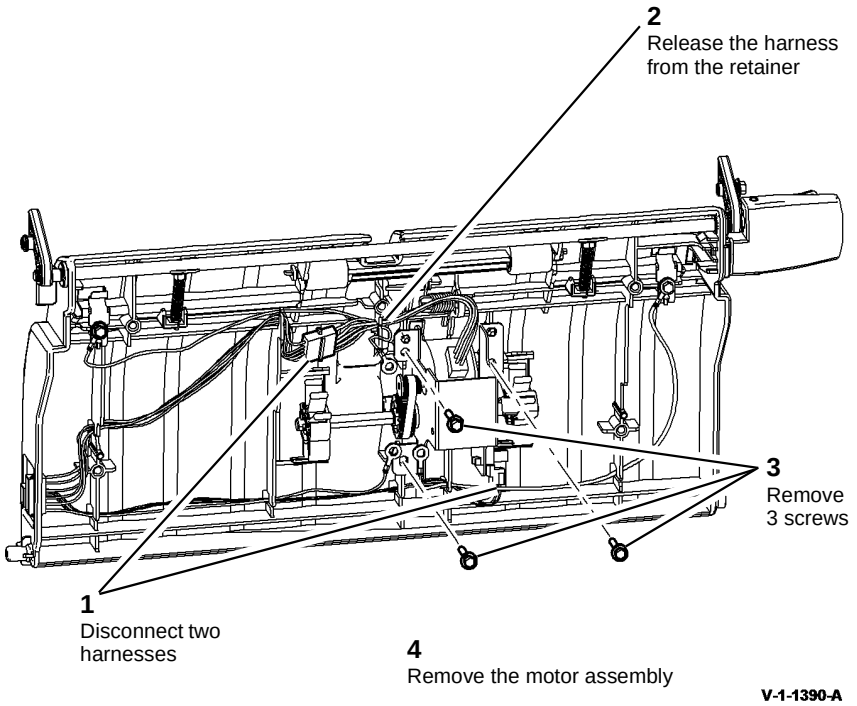


Figure 4 Motor assembly removal

6. Remove the BM compiler flappers, Figure 5.

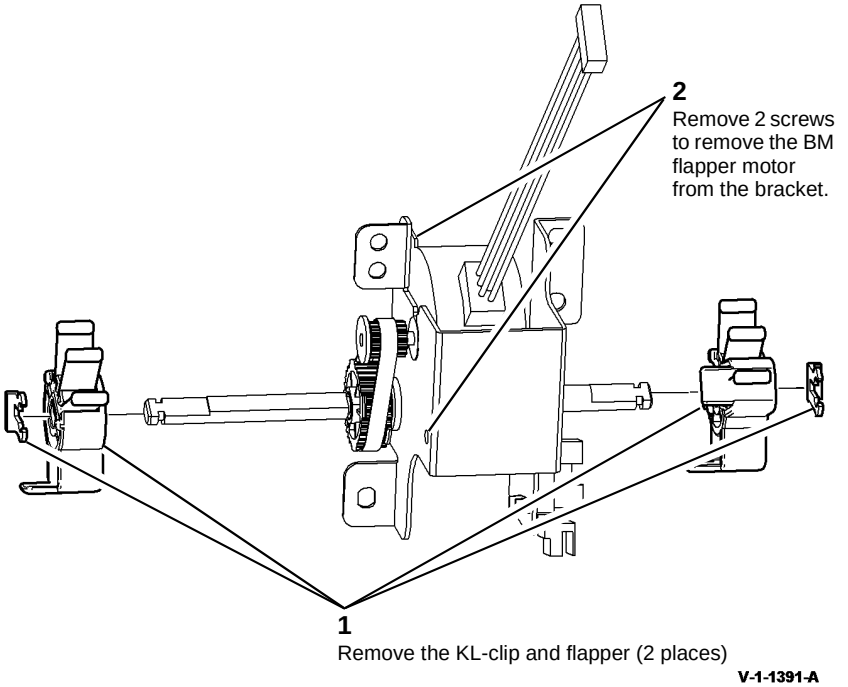


Figure 5 BM compiler flapper removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

NOTE: *Ensure that the flappers are orientated correctly, refer to Figure 5.*

REP 11.31-150 BM Upper Entrance Guide and Finisher Entry Sensor

Parts List on PL 11.75

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the upper entrance guide, Figure 1.

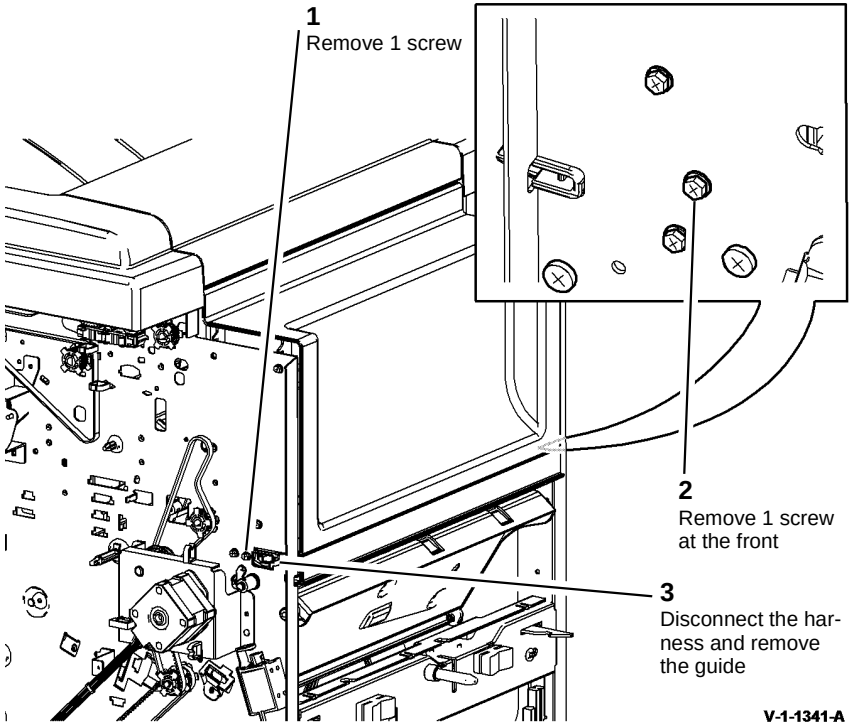


Figure 1 Upper entrance guide removal

4. Remove the finisher entry sensor, Q11-100 by disconnecting the harness then releasing the holding arms.

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.32-150 BM Lower Guide, BM Entry Sensor and BM Entrance Guide Assembly

Parts List on PL 11.75

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the BM entrance guide assembly, Figure 1.
4. Remove the BM compiler guide assembly, REP 11.30-150.
5. Prepare to remove the BM lower guide, Figure 2.

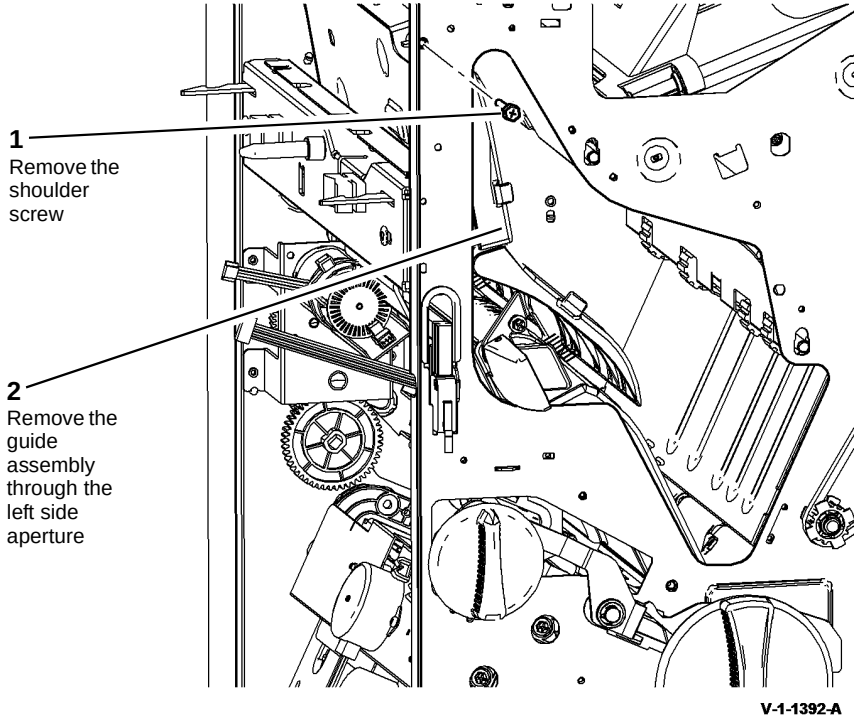


Figure 1 Entrance guide removal

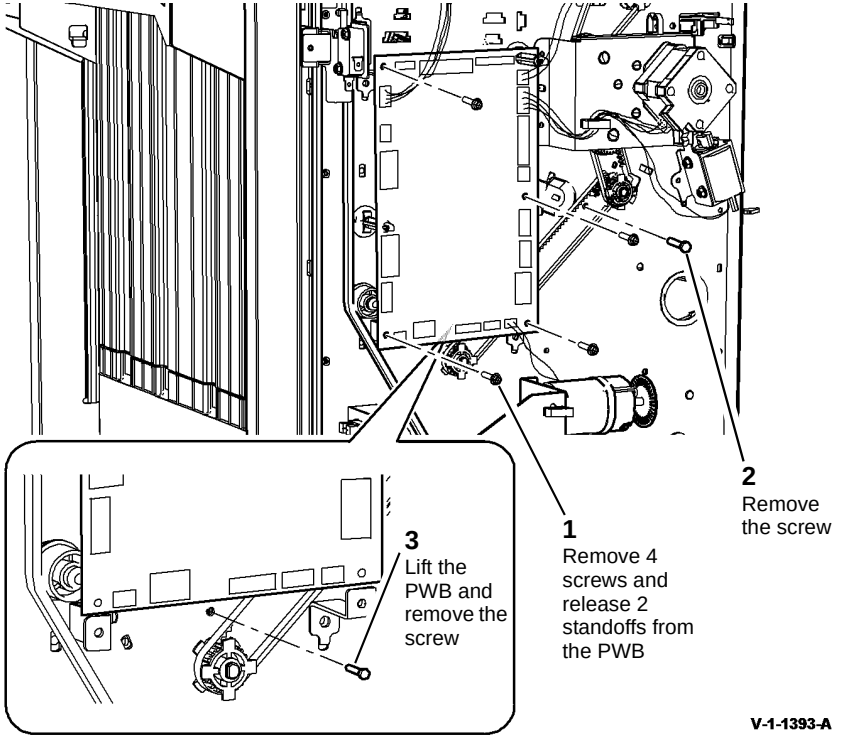


Figure 2 Preparation

6. Remove the BM lower guide, Figure 3.

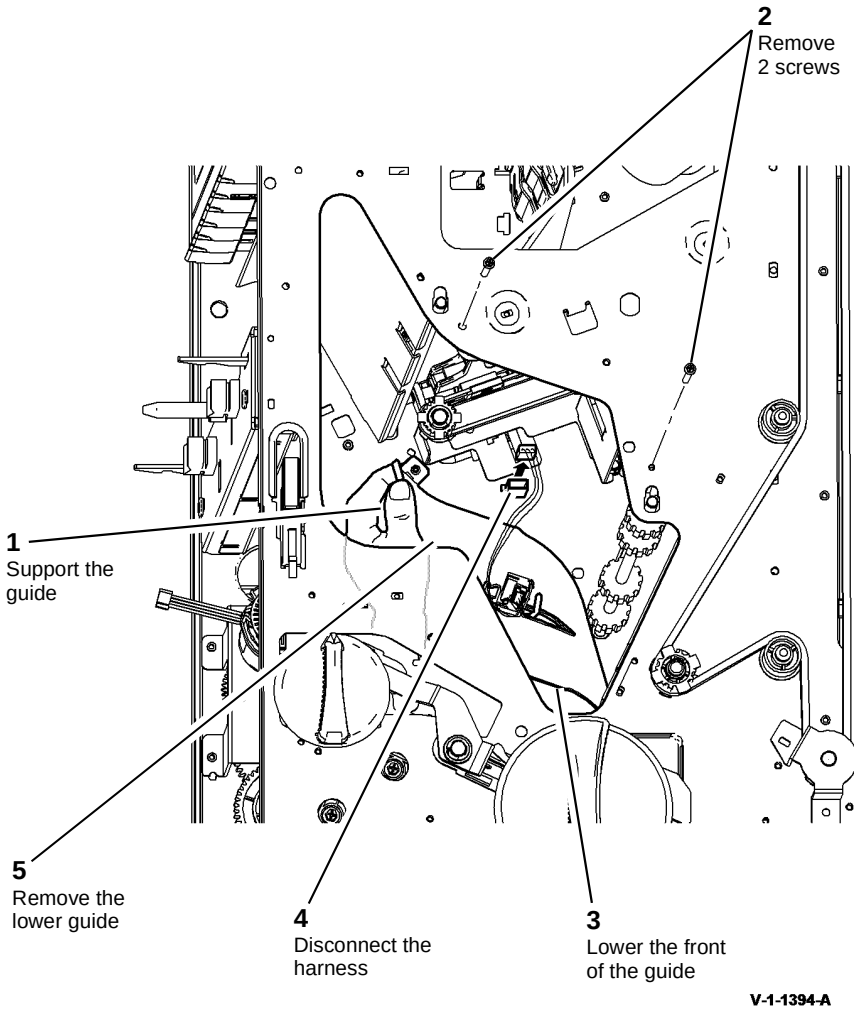


Figure 3 BM lower guide removal

7. Remove the BM entry sensor, Q11-160 by disconnecting the harness and then release the sensor legs from the guide.

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.33-150 Booklet Diverter Gate

Parts List on PL 11.75

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Remove the upper entrance guide, REP 11.31-150.
4. Remove the booklet diverter gate, Figure 1.

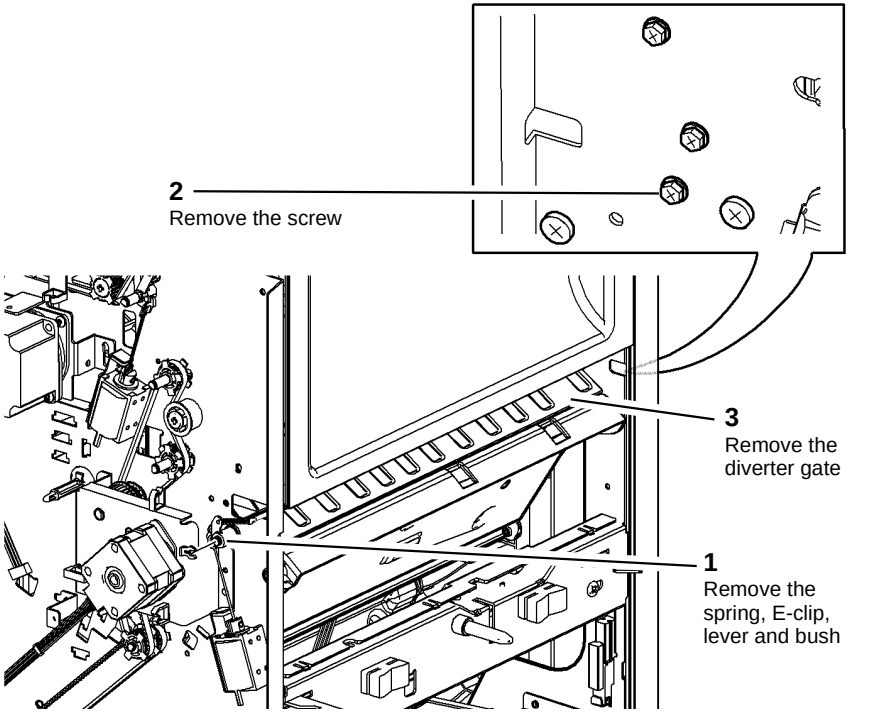


Figure 1 Diverter gate removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.34-150 BM 1st Feed Roll Assembly, Compiler Entrance Drive Belt 1 and 2

Parts List on PL 11.75

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Remove the transport motor 1 and gearbox assembly, REP 11.2-150.
3. Remove the rear components, Figure 1.

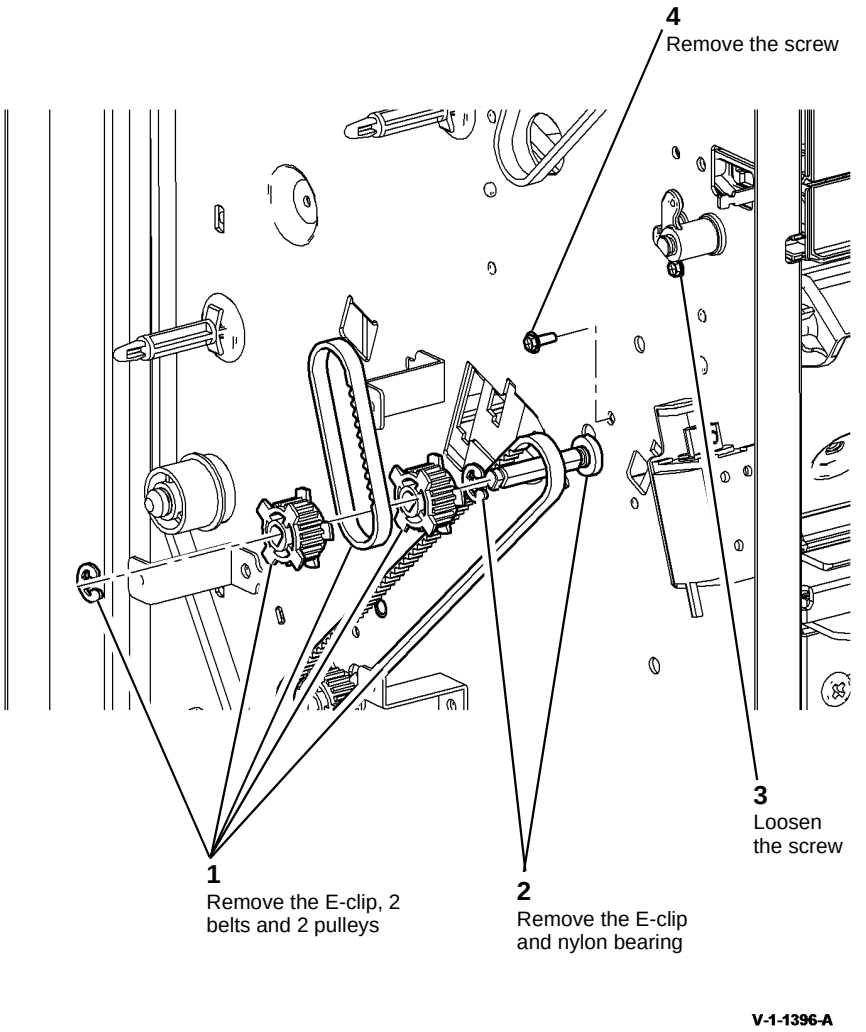


Figure 1 Rear components removal

4. Open the BM entrance guide assembly, PL 11.75 Item 3.
5. Remove the BM 1st feed roll assembly, Figure 2.

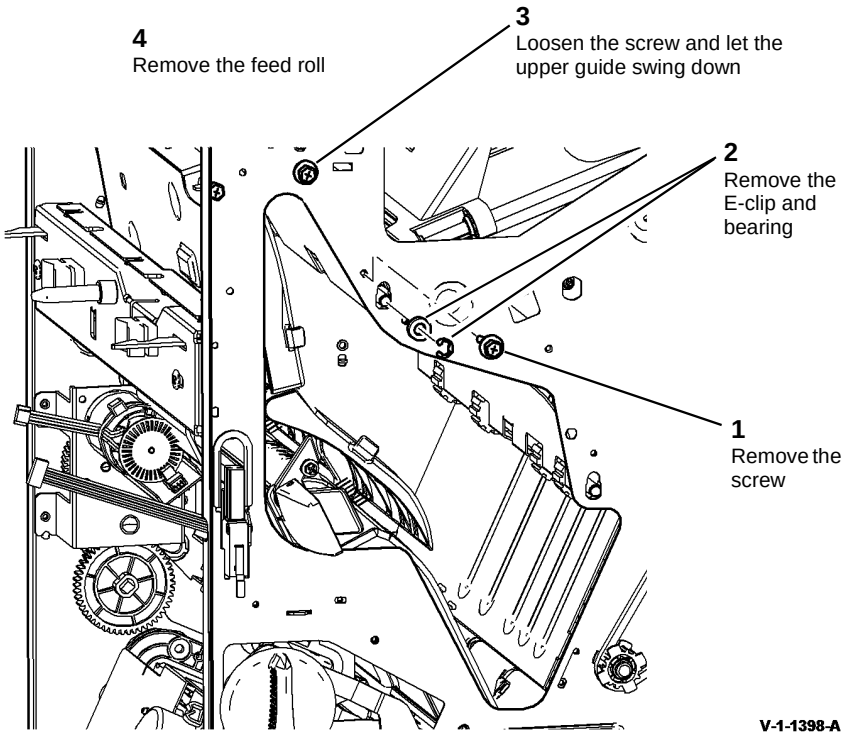


Figure 2 1st feed roll removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.35-150 BM 2nd Feed Roll Assembly

Parts List on PL 11.75

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Remove the rear components, Figure 1.

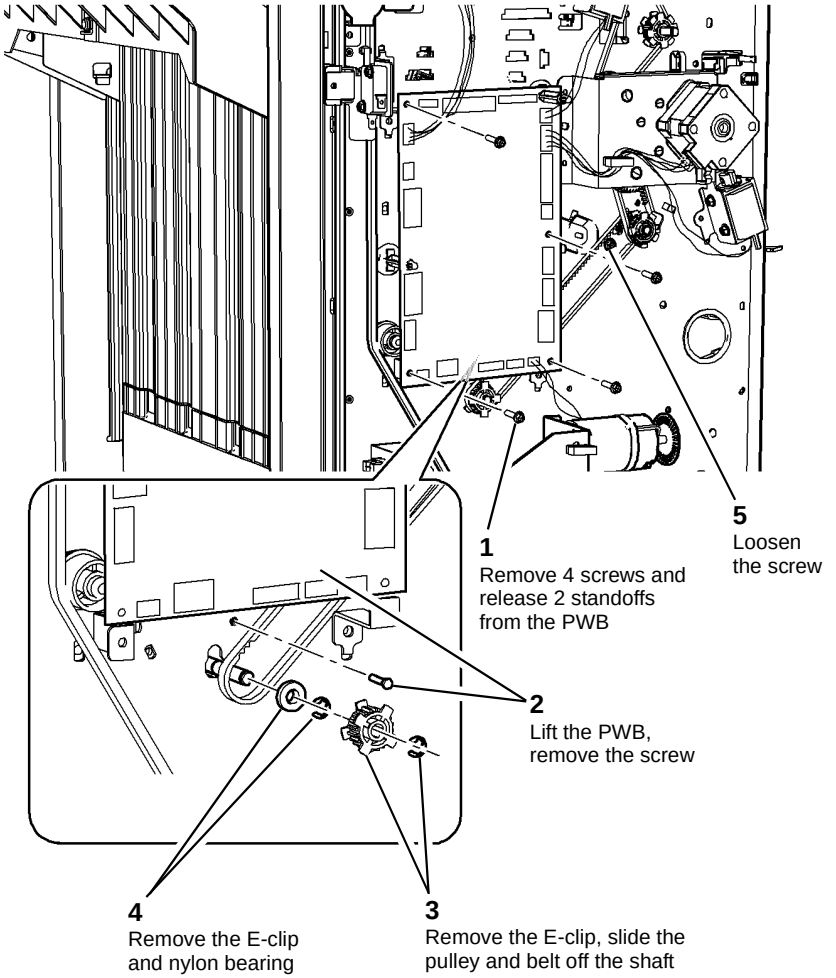


Figure 1 Rear components removal

3. Open the BM entrance guide assembly, PL 11.75 Item 3.

4. Remove the BM 2nd feed roll assembly, Figure 2.

NOTE: *Take care when lowering the guide in Figure 2, so that the harness to the BM entry sensor does not become disconnected.*

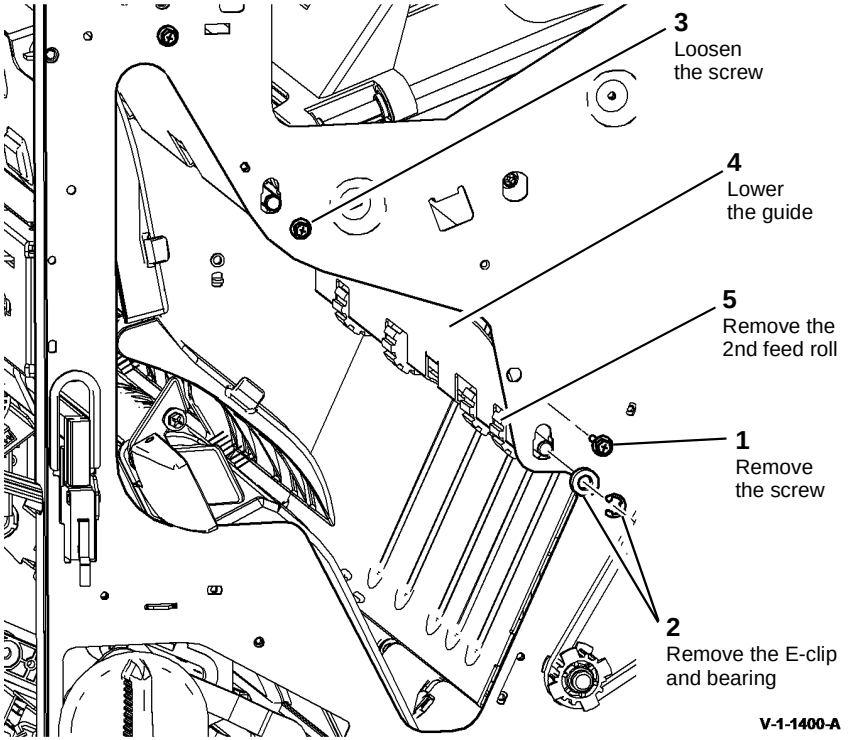


Figure 2 2nd feed roll removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.36-150 LVF BM PWB

Parts List on PL 11.90

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the LVF BM rear cover assembly, REP 11.1-150.
2. Disconnect all harness connectors from the LVF BM PWB.
3. Remove the six screws securing the LVF PWB.

Replacement

***NOTE:** Before replacing the LVF BM rear cover assembly, perform 311F-150 LVF PWB and LVF BM PWB DIP Switch Settings RAP.*

Reverse the removal procedure to replace the LVF BM PWB.

REP 11.37-150 BM Staple Cartridge Assembly

Parts List on PL 11.78

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the right guide assembly, refer to REP 11.19-150.
2. Prepare to remove the BM staple cartridge assembly, Figure 1.

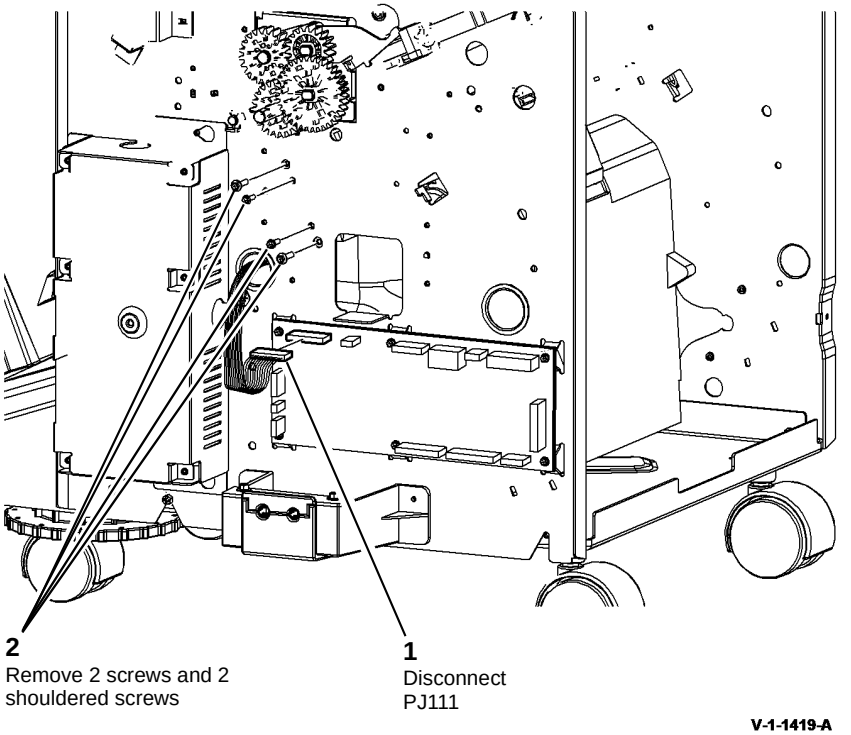


Figure 1 Preparation

3. Remove the BM staple cartridge assembly, Figure 2.

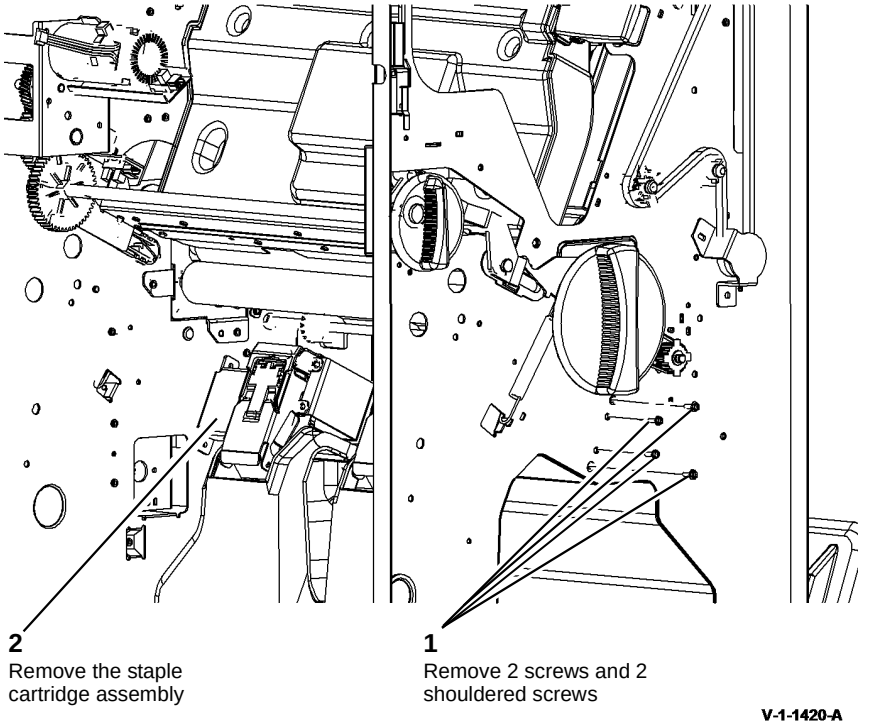


Figure 2 BM staple cartridge removal

Replacement

1. Insert and tighten the four shouldered screws, Figure 1 and Figure 2.
2. The remainder of the replacement is the reverse of the removal procedure.

REP 11.38-150 BM Stapler Assembly and Booklet Tamper Assembly

Parts List on PL 11.78 and PL 11.74

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly, rear cover and backstop cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.
3. Prepare to remove the BM stapler assembly and booklet tamper assembly, Figure 1.

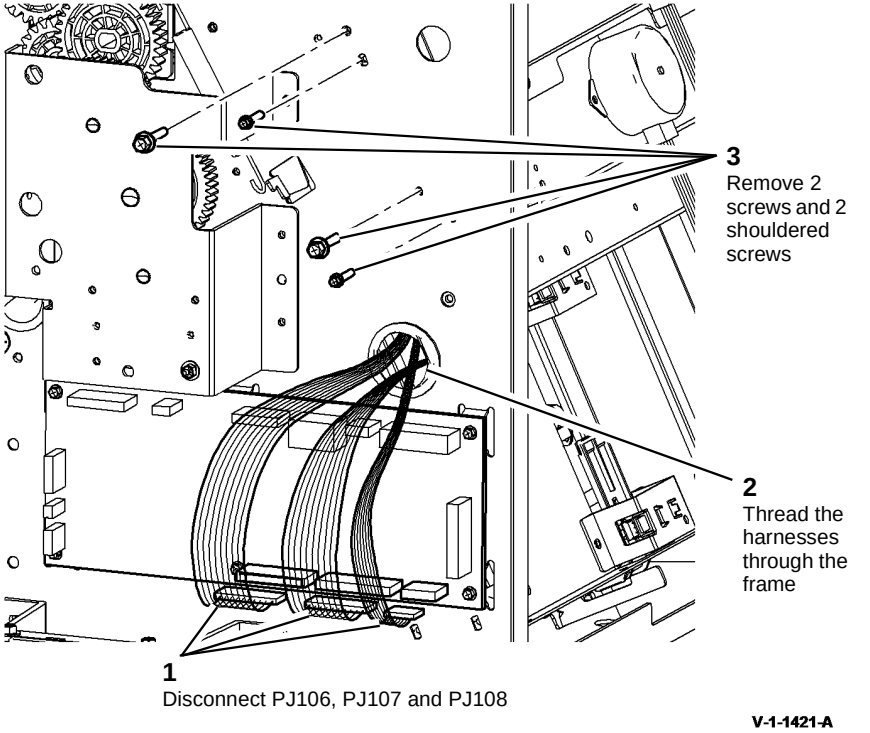


Figure 1 Preparation

4. Remove the BM stapler assembly and booklet tamper assembly, Figure 2.

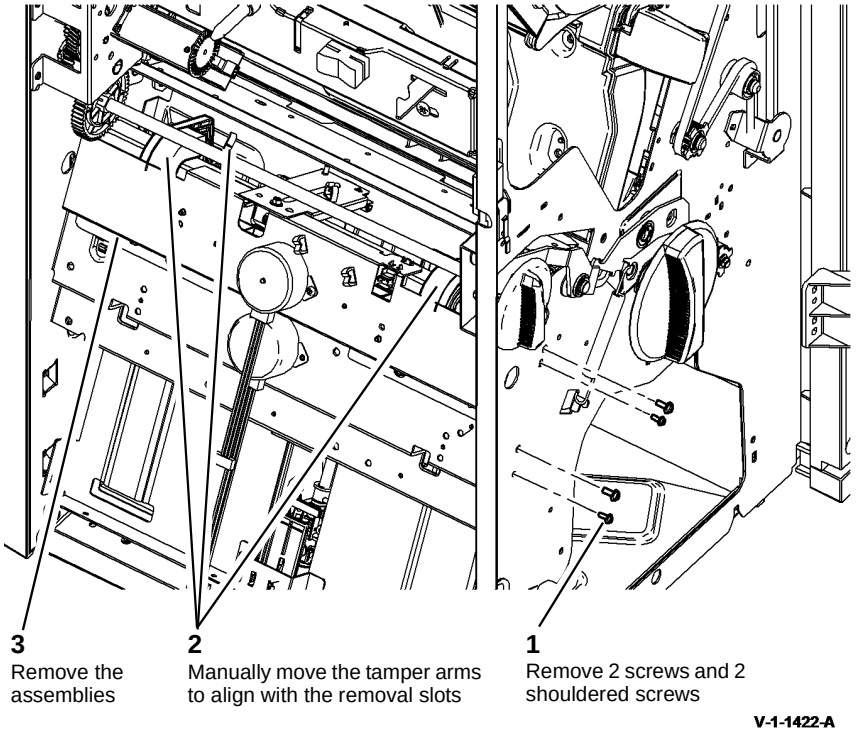


Figure 2 Assemblies removal

5. Separate the BM stapler assembly from the booklet tamper assembly, Figure 3.

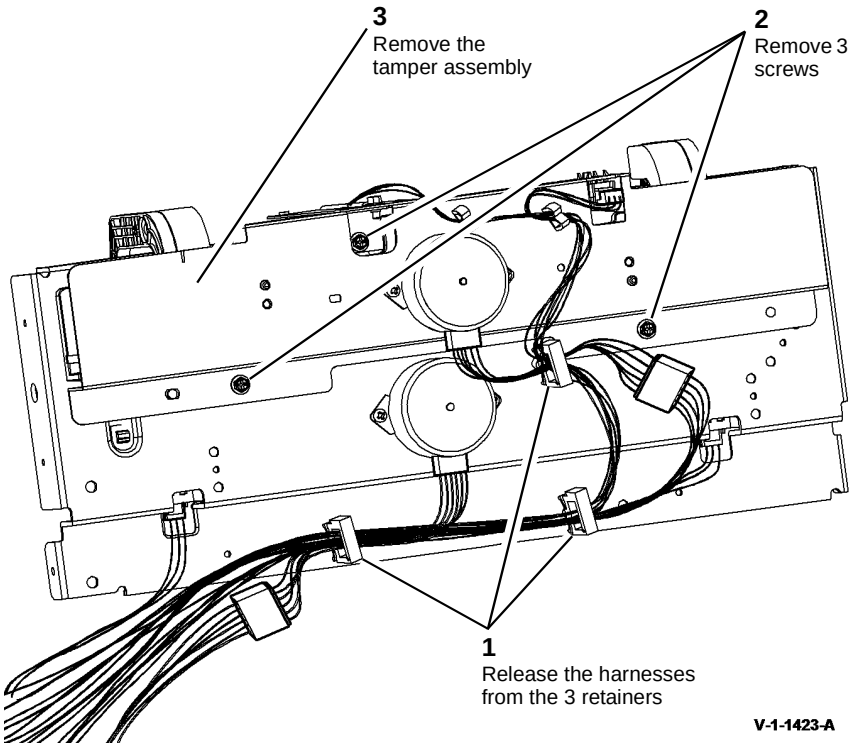


Figure 3 Stapler assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the BM stapler assembly and booklet tamper assembly, first insert and tighten the four shouldered screws, Figure 1 and Figure 2, then continue with the remainder of the installation.
3. Perform ADJ 11.6-150 Booklet Staple Position.

REP 11.39-150 BM Staple Cartridge LED

Parts List on PL 11.78

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bin 2 support, REP 11.44-150.
2. Remove the BM staple cartridge LED, Figure 1.

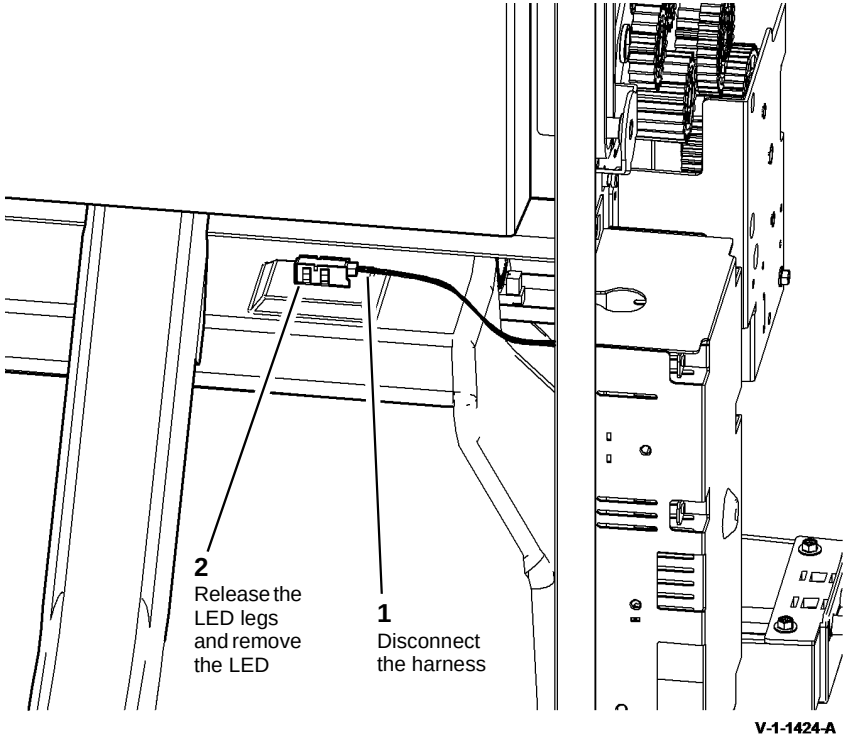


Figure 1 Staple cartridge LED removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.40-150 Booklet Tamper Home Sensor

Parts List on PL 11.74

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the booklet tamper home sensor, Figure 1.

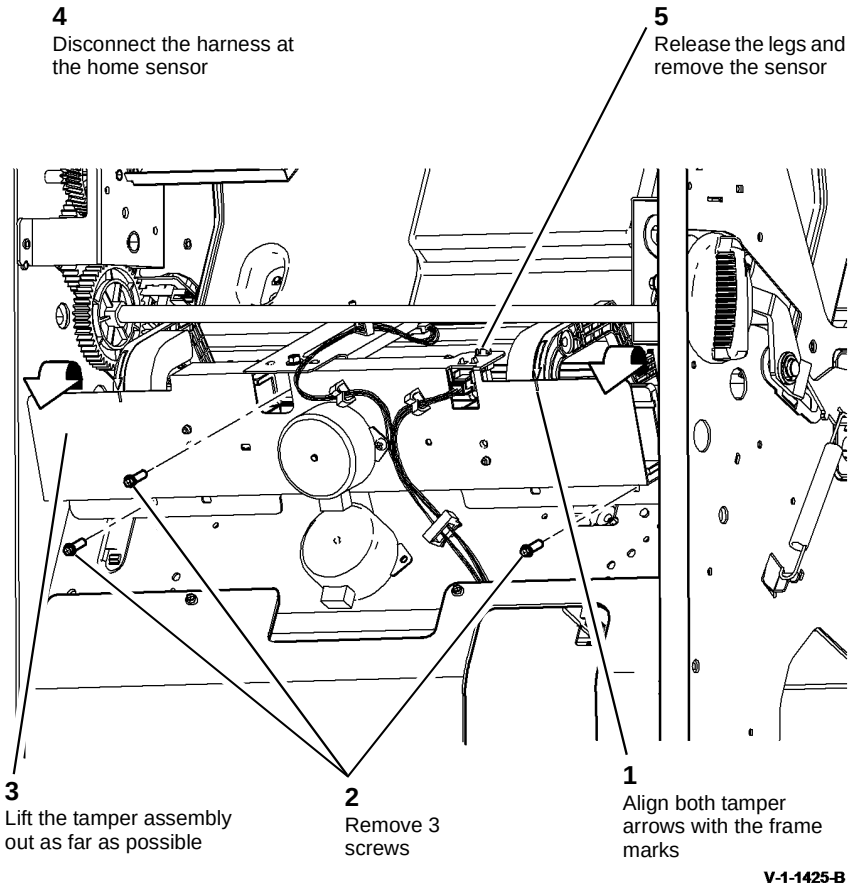


Figure 1 Home sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.41-150 Booklet Tamper Motor

Parts List on PL 11.74

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Un-dock the LVF BM, REP 11.13-150.
2. Prepare to remove the booklet tamper motor, Figure 1.

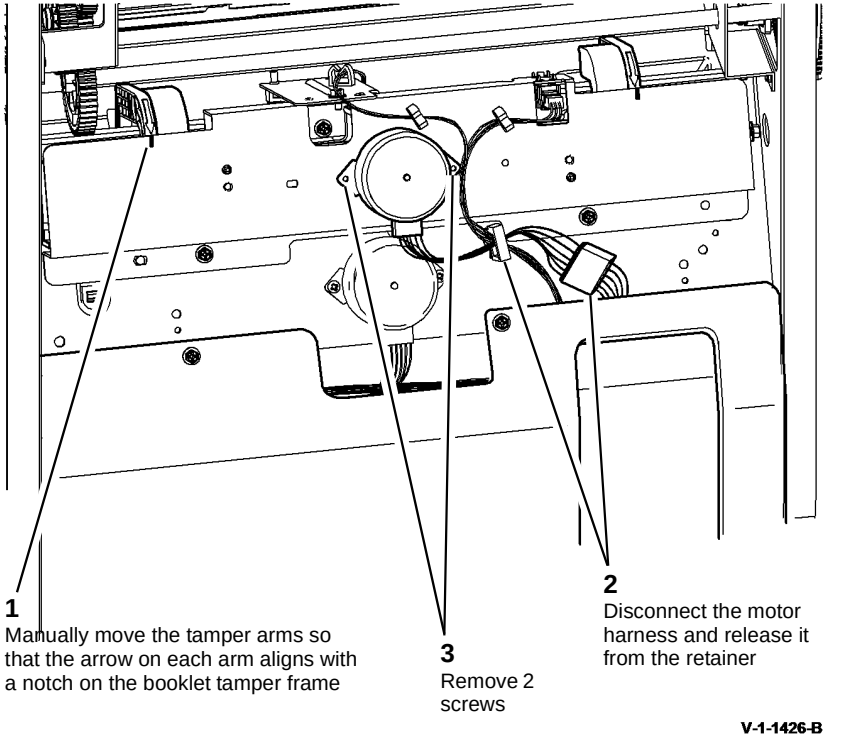


Figure 1 Preparation

3. Remove the booklet tamper motor, Figure 2.

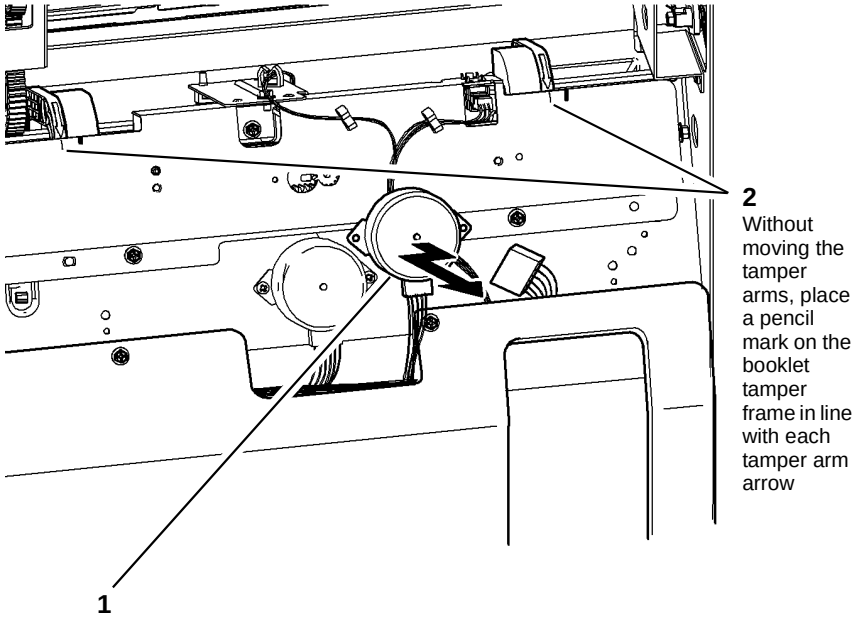


Figure 2 Tamper motor removal

Replacement

1. Prepare to install the booklet tamper motor, Figure 3.

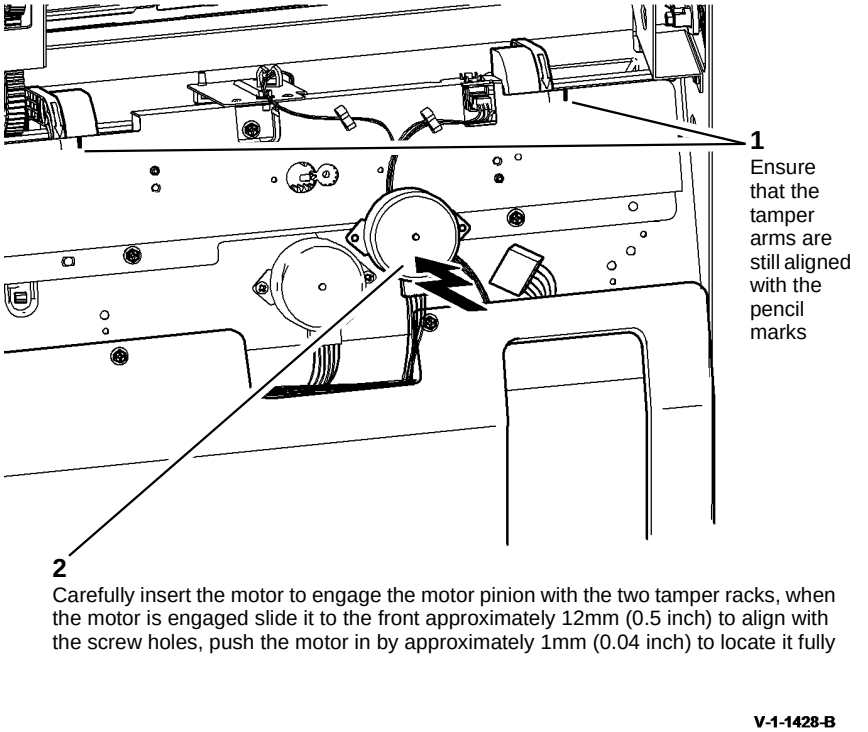


Figure 3 Preparation

2. Install the booklet tamper motor, Figure 4.

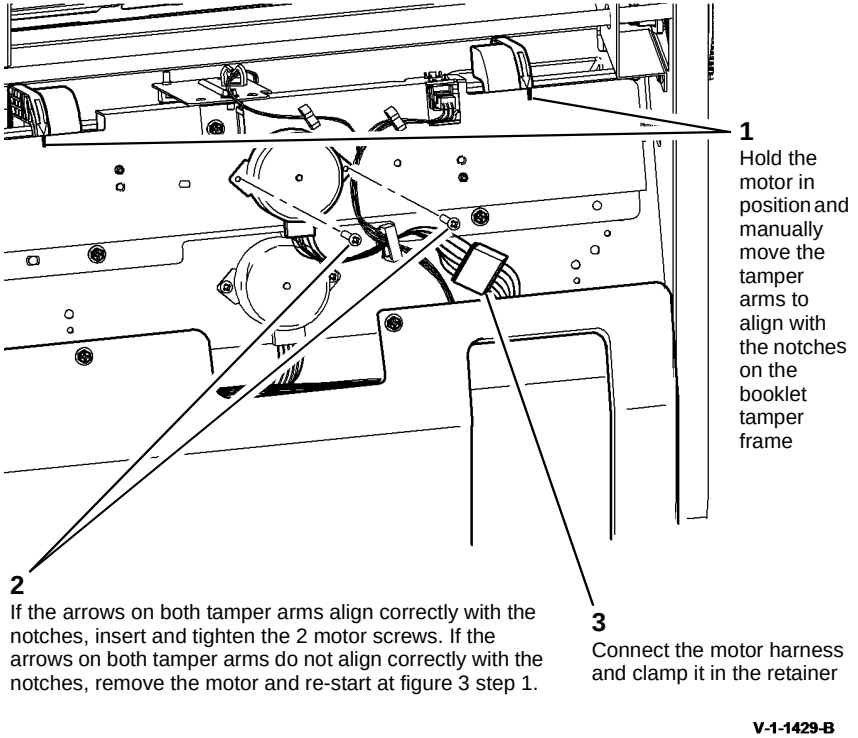


Figure 4 Tamper motor installation

3. Dock the LVF BM, REP 11.13-150.

REP 11.42-150 Booklet Tamper Arms

Parts List on PL 11.74

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Un-dock the LVF BM, REP 11.13-150.

3. Remove the front booklet tamper arm, Figure 1.

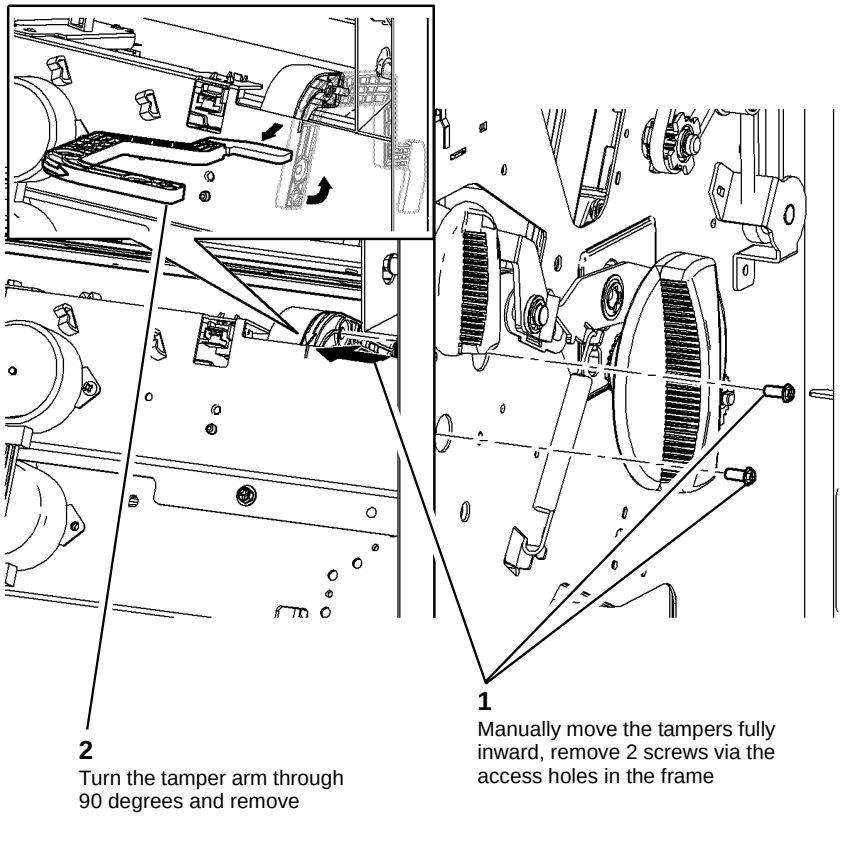


Figure 1 Front tamper arm removal

4. Remove the rear booklet tamper arm, Figure 2.

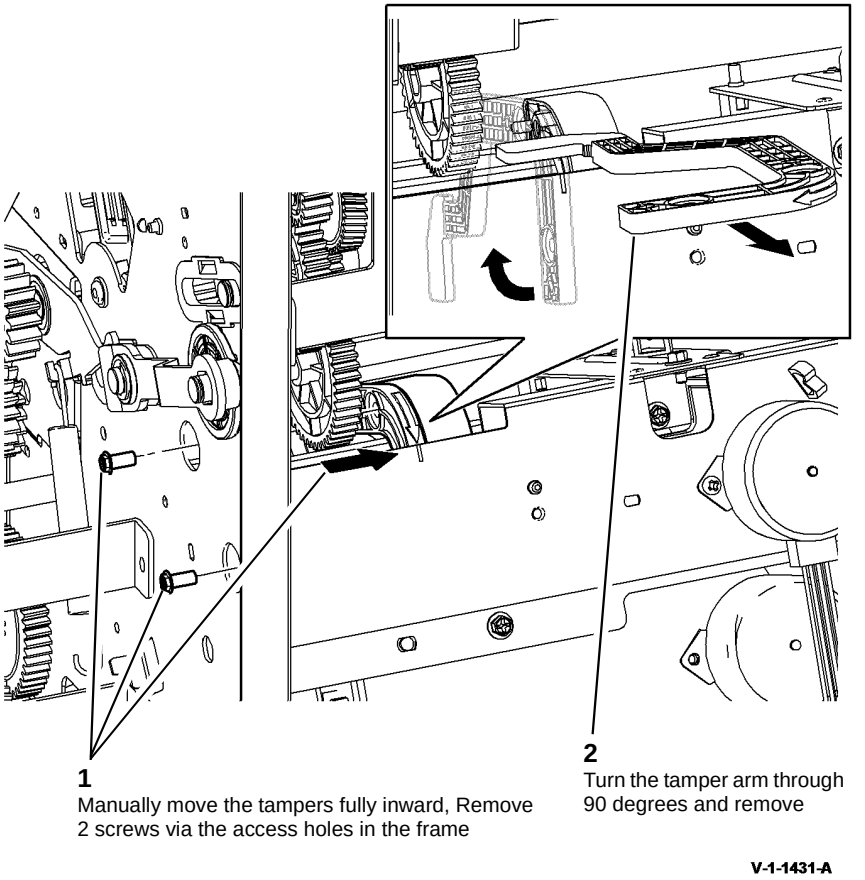


Figure 2 Rear tamper arm removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.43-150 Booklet Staple Paper Detect Sensor

Parts List on PL 11.74

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Un-dock the LVF BM, REP 11.13-150.
2. Remove the sensor bracket, Figure 1.

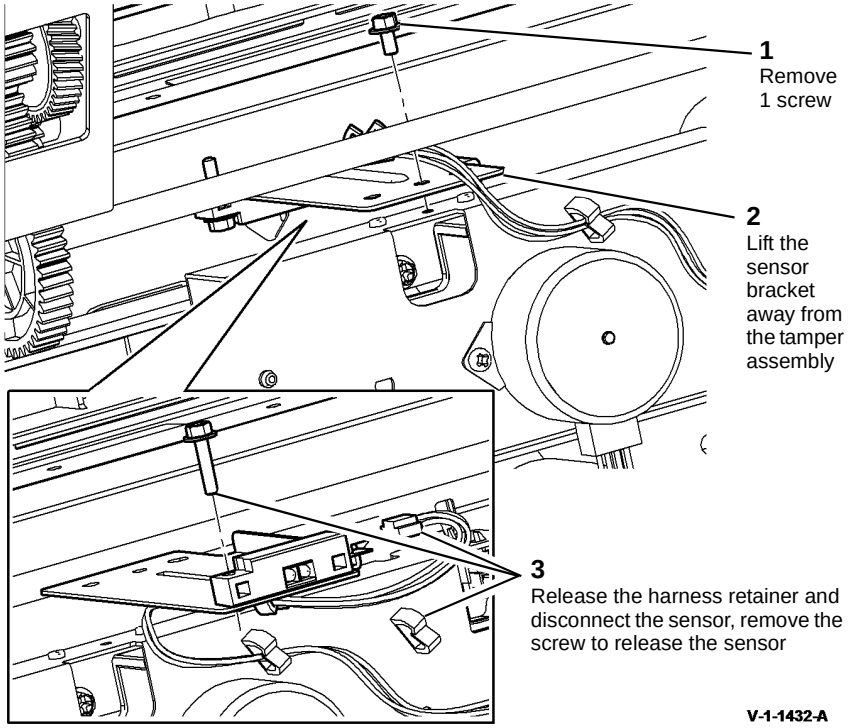


Figure 1 Sensor bracket removal

3. Remove the screw to release the booklet staple paper detect sensor,

Replacement

The replacement is the reverse of the removal procedure.

REP 11.44-150 Bin 2 Support

Parts List on PL 11.84

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly and rear cover, REP 11.1-150.
2. Remove bin 2, PL 11.50 Item 18.
3. Prepare to remove the bin 2 support, Figure 1.

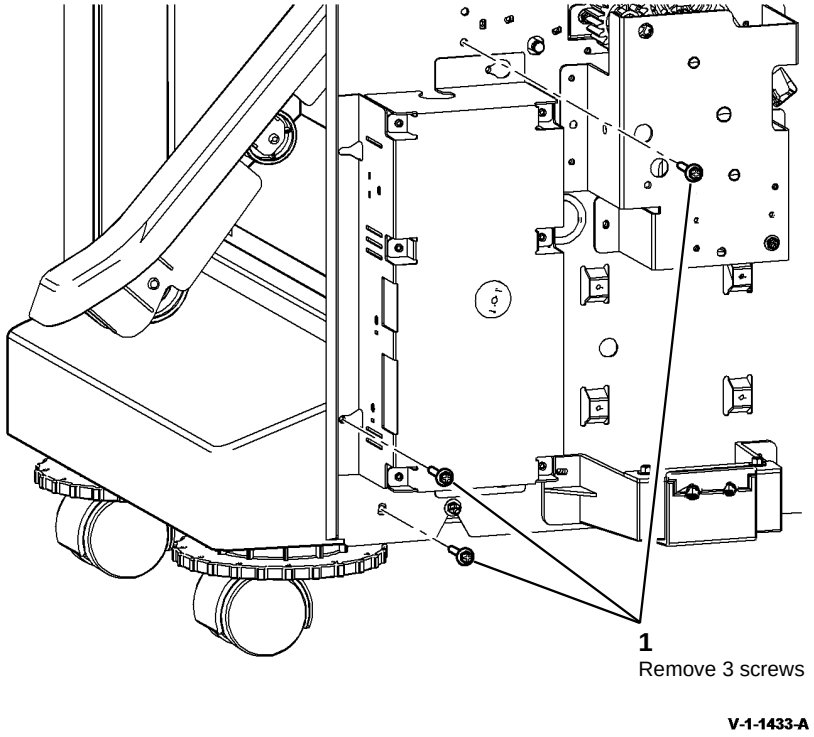


Figure 1 Preparation

4. Remove the bin 2 support, Figure 2.

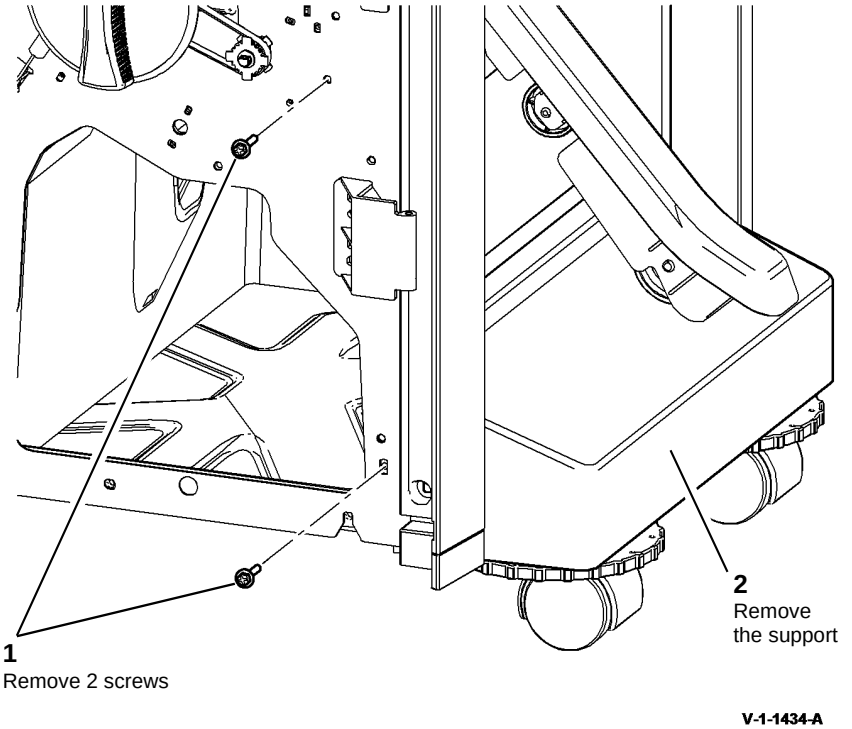


Figure 2 Bin 2 support removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.45-150 Lower Right Cover and Bin 1 Lower Limit Switch

Parts List on PL 11.50 and PL 11.60

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bin 2 support, REP 11.44-150.
2. Prepare to remove the lower right cover, Figure 1.

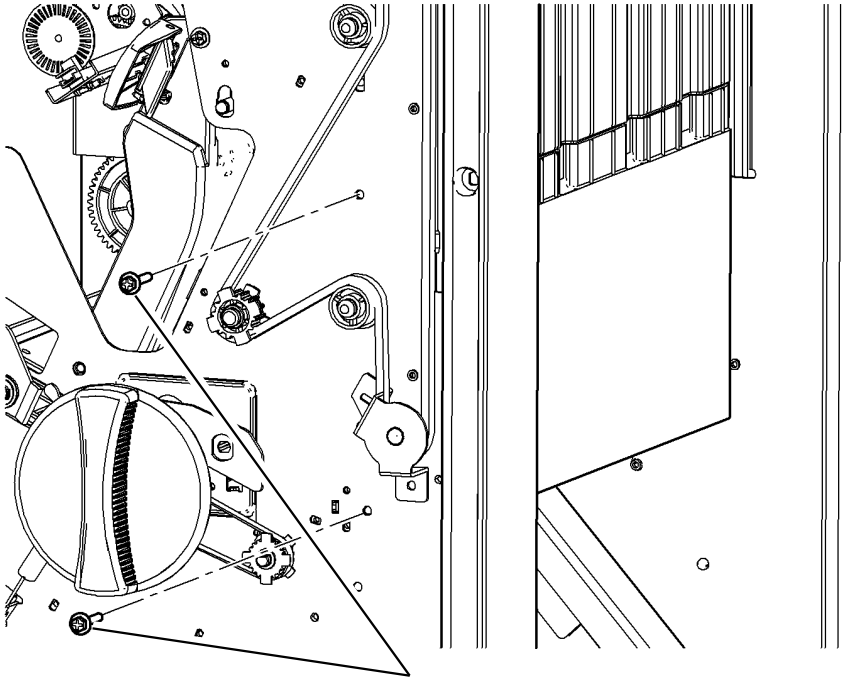


Figure 1 Preparation

3. Remove the lower right cover and bin 1 lower limit switch, Figure 2.

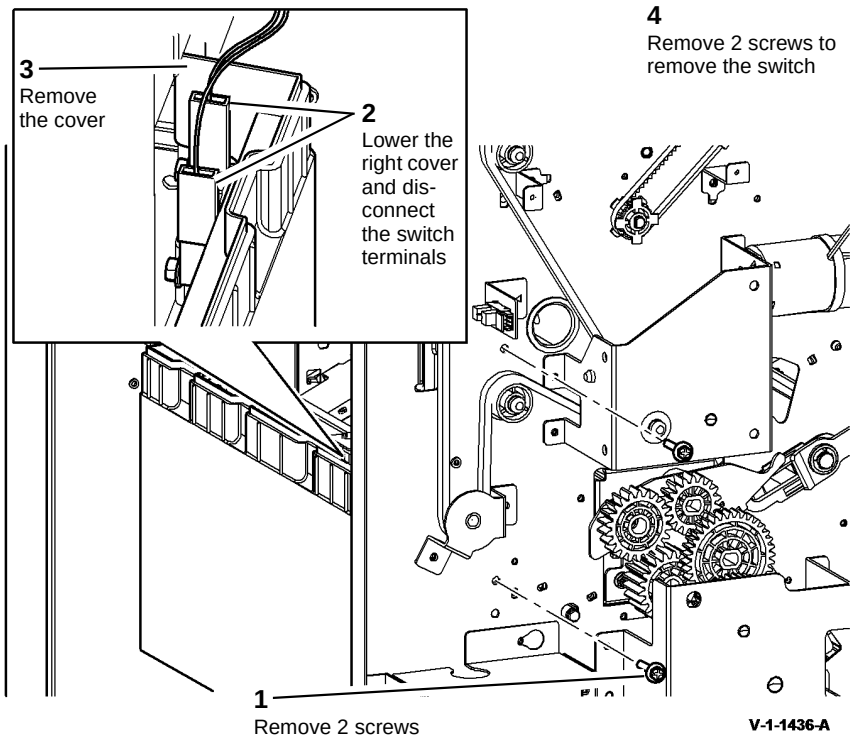


Figure 2 Cover and switch removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.

REP 11.46-150 Paper Guide and Top Exit Sensor

Parts List on PL 11.70

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVF BM front door cover assembly, rear cover and top cover, REP 11.1-150.
2. Remove the hole punch motor assembly, REP 11.7-150.
3. Prepare to remove the paper guide Figure 1.

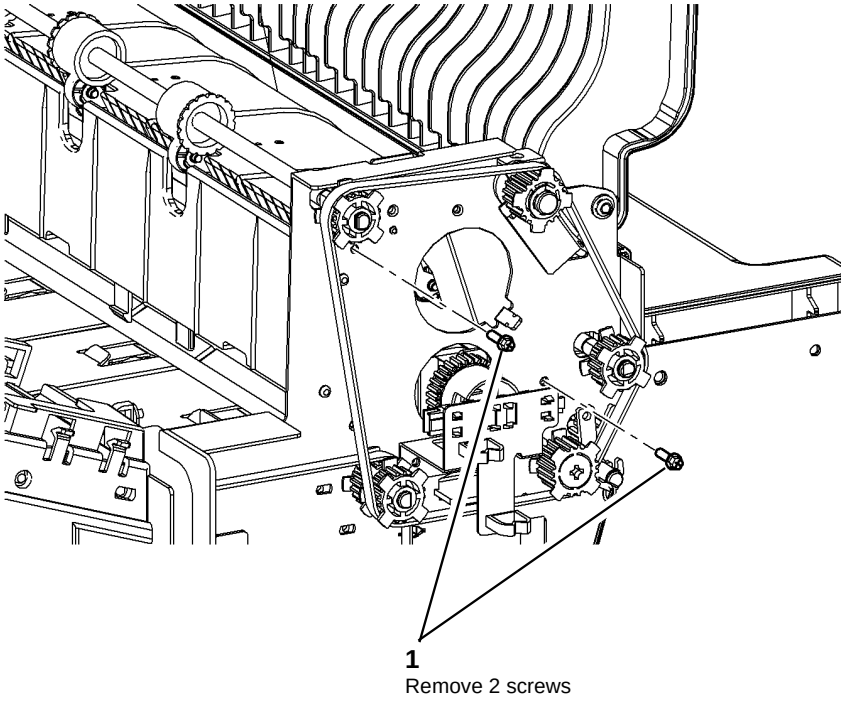


Figure 1 Preparation

4. Remove the paper guide and top exit sensor, Q11-130, Figure 2.

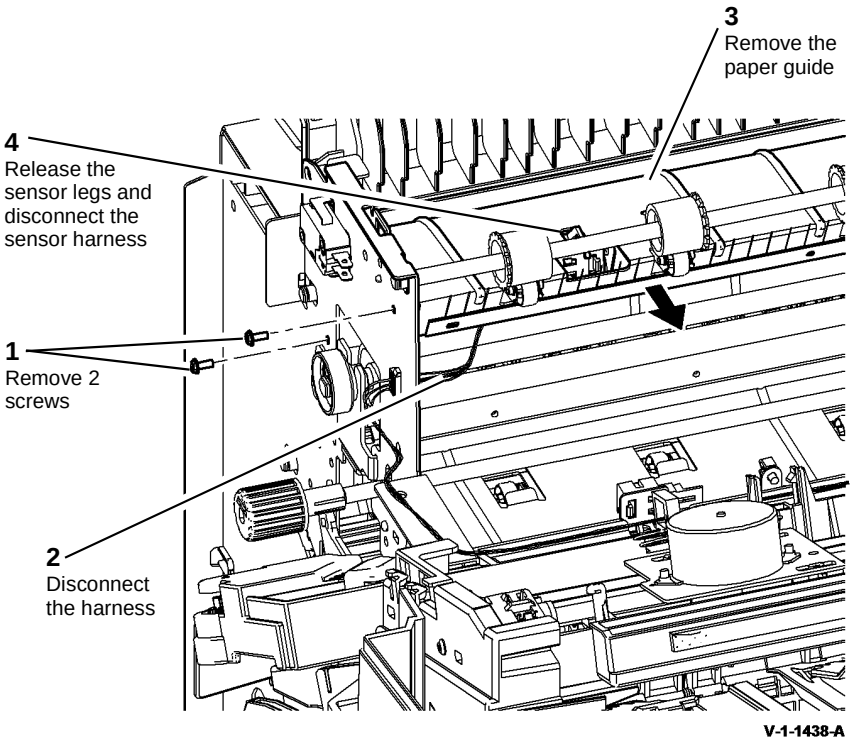


Figure 2 Guide and sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.47-150 Lower Right Paper Guide

Parts List on PL 11.72

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the LVFBM top cover, rear cover and front door cover assembly, REP 11.1-150.
2. Remove the tamper assembly, REP 11.6-150.
3. Remove the paper output drive belt, REP 11.4-150.
4. Prepare to remove the drive shafts Figure 1.

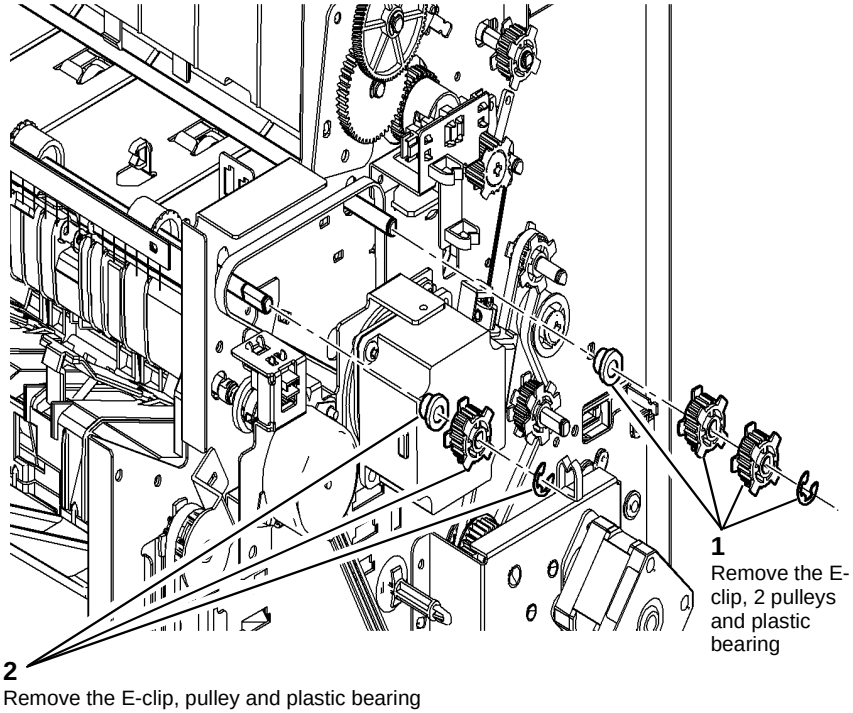


Figure 1 Preparation

5. Remove the drive shafts, Figure 2.

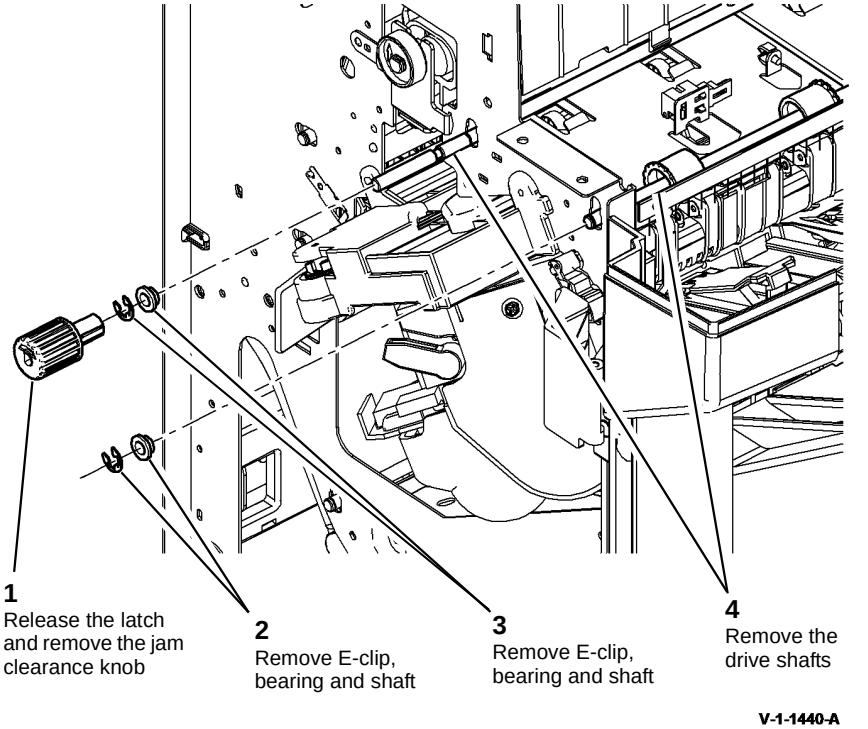


Figure 2 Drive shafts removal

6. Prepare to remove the upper right paper guide, Figure 3.

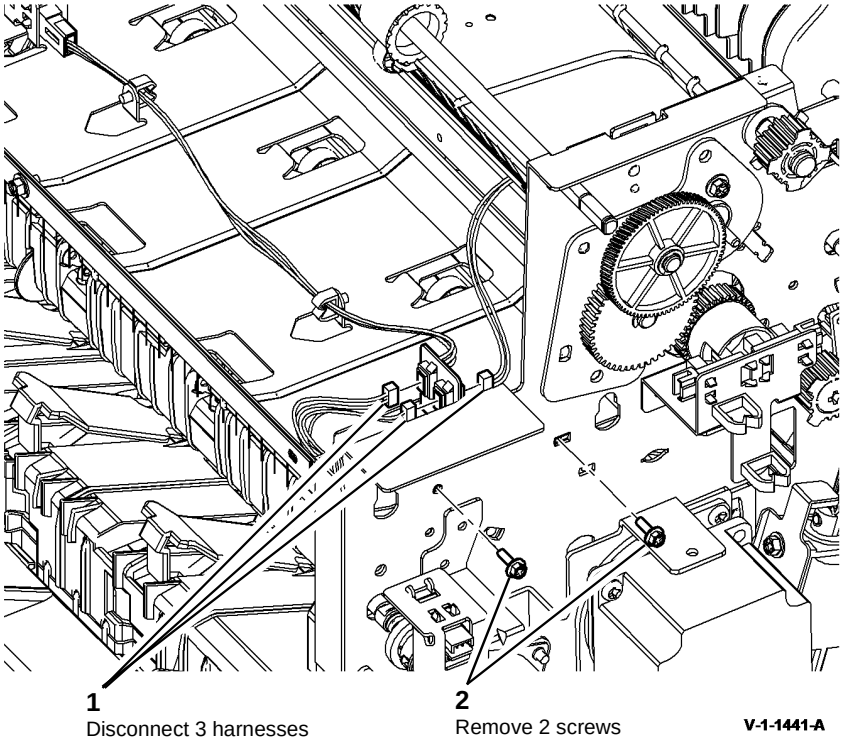


Figure 3 Preparation

7. Remove the upper right paper guide, Figure 4.

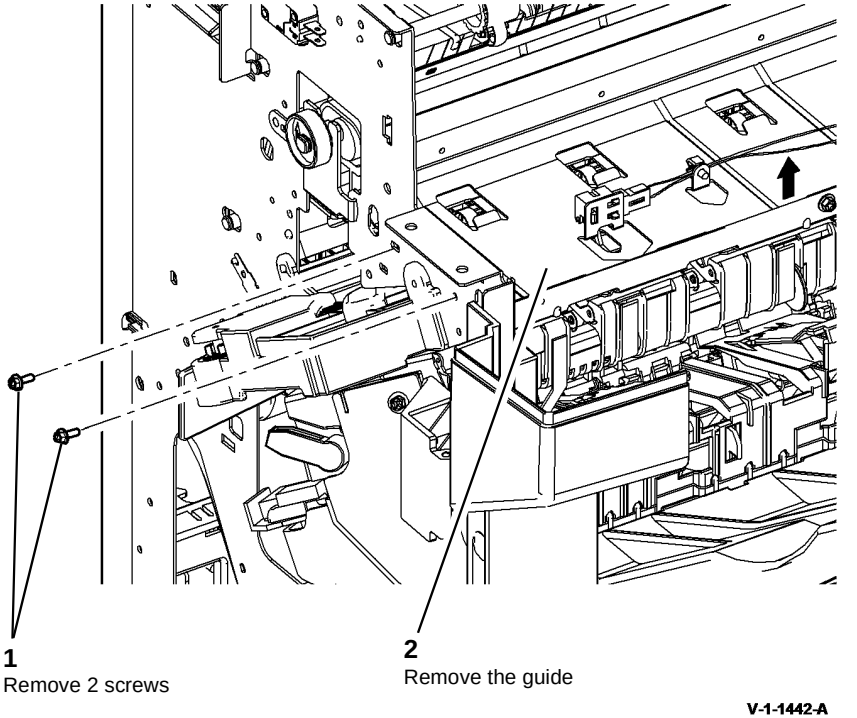


Figure 4 Upper right guide removal

8. Prepare to remove the lower right paper guide, Figure 5.

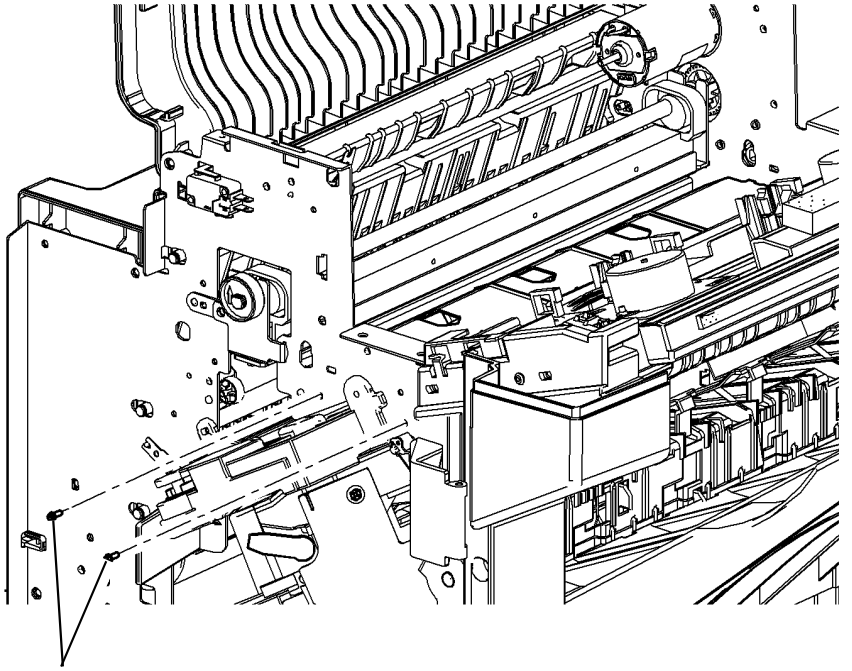


Figure 5 Preparation

9. Remove the lower right paper guide, Figure 6.

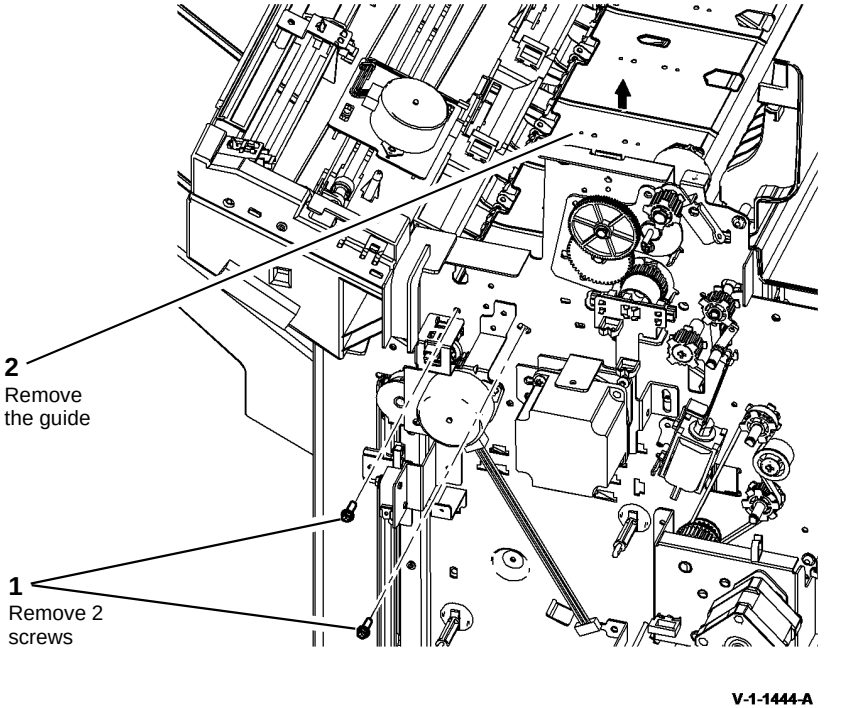


Figure 6 Lower right guide removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.48-150 BM Staple Head and Sensors

Parts List on PL 11.78

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the BM stapler assembly and booklet tamper assembly, REP 11.38-150.
2. If required, remove the staple unit home sensor, Q11-438 or staple unit away sensor, Q11-439, Figure 1.

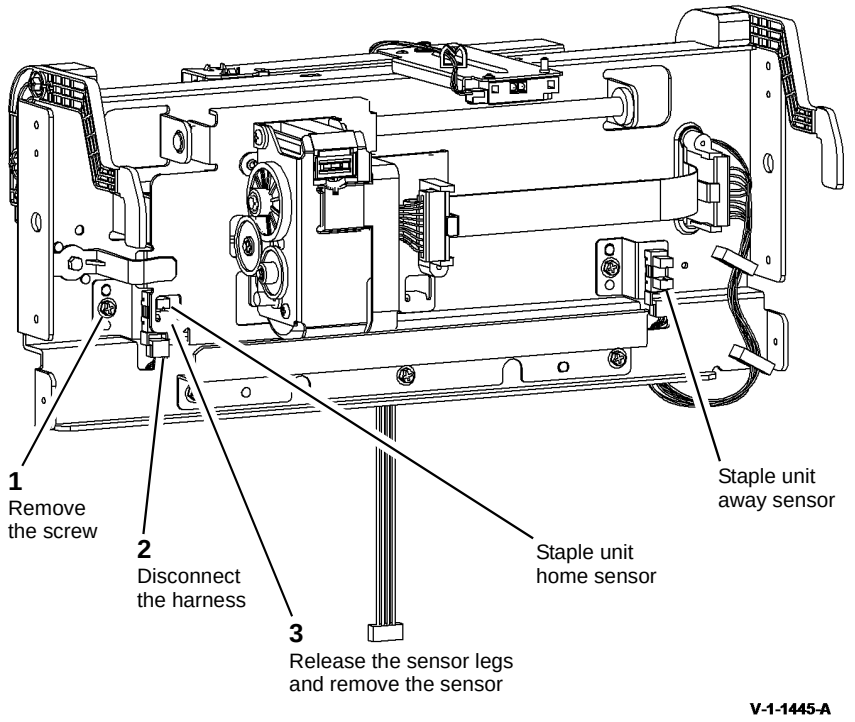


Figure 1 Sensor removal

3. Prepare to remove the stapler carriage assembly, Figure 2.

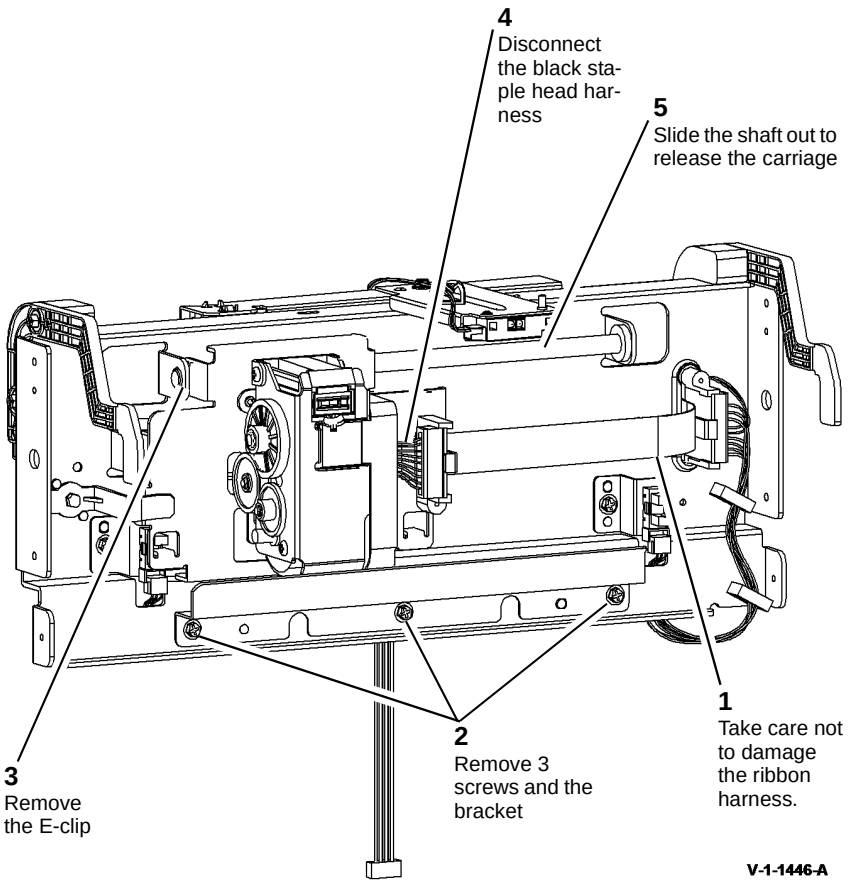


Figure 2 Preparation

4. Remove the stapler carriage assembly, Figure 3.

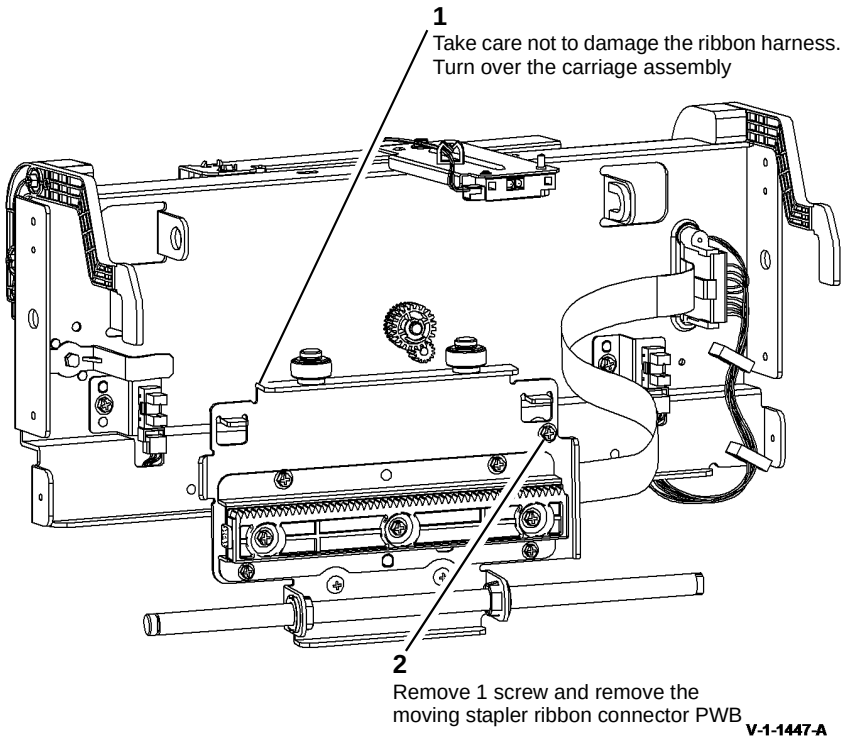


Figure 3 Carriage removal

5. Remove the rack bracket, Figure 4.

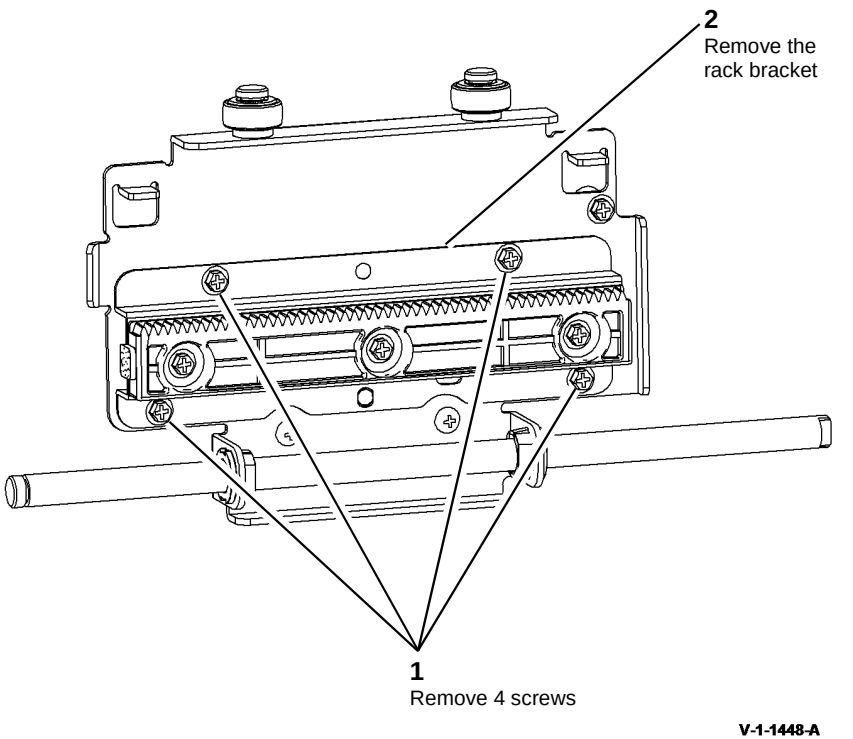


Figure 4 Rack bracket removal

6. Remove the BM stapler head assembly, Figure 5.

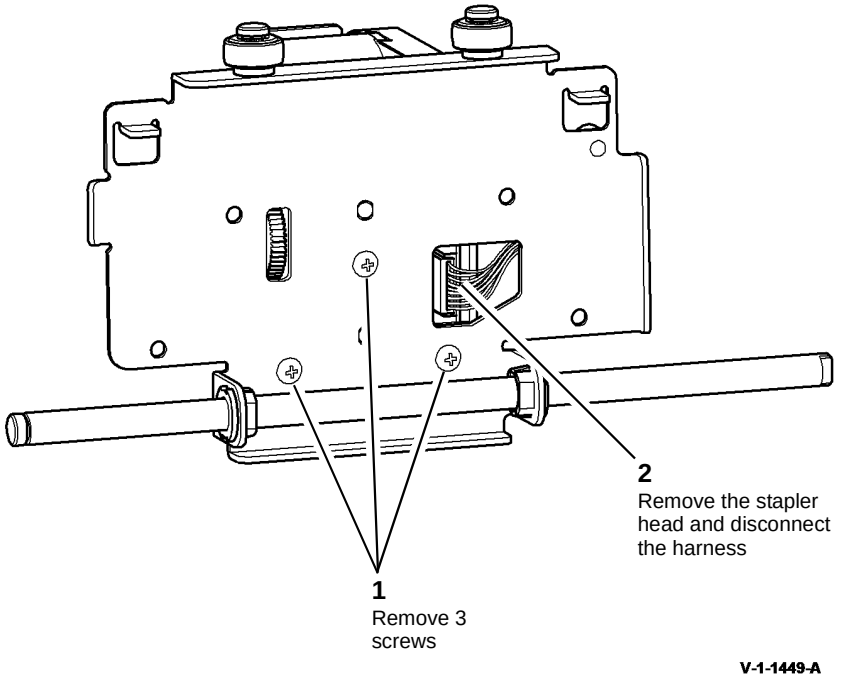


Figure 5 Head assembly removal

Replacement

1. Refer to GP 6 before refitting the screws.
2. The replacement is the reverse of the removal procedure.
3. Perform the adjustments that follow:
   - ADJ 11.7-150 Booklet Stapler Anvil Position - Front.
   - ADJ 11.8-150 Booklet Stapler Anvil Position - Rear.

REP 11.1-171 HVF Covers

Parts List on PL 11.130

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *All major HVF covers are dealt with in this procedure, only remove the covers listed for the procedure that you are performing.*

Remove the HVF covers as follows:

1. Remove the HVF front door, Figure 1. If required, remove 5 screws to separate the door support from the front door.

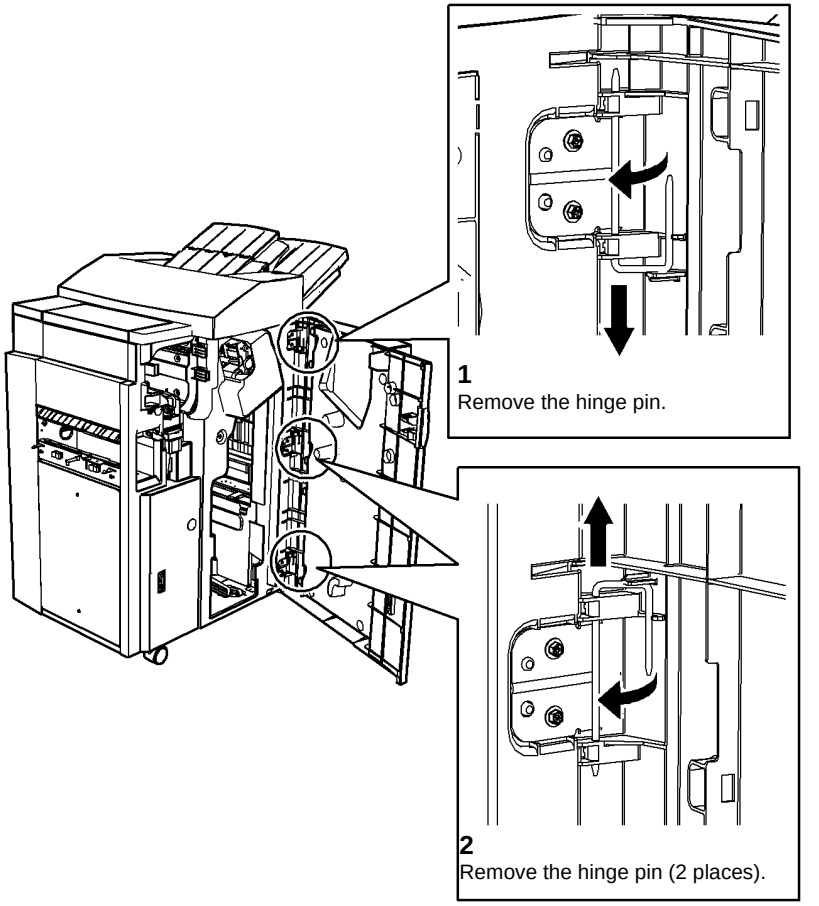


Figure 1 HVF front door removal

2. Remove the HVF top cover, Figure 2.

NOTE: *If an inserter is installed, remove the inserter, REP 11.82-171.*

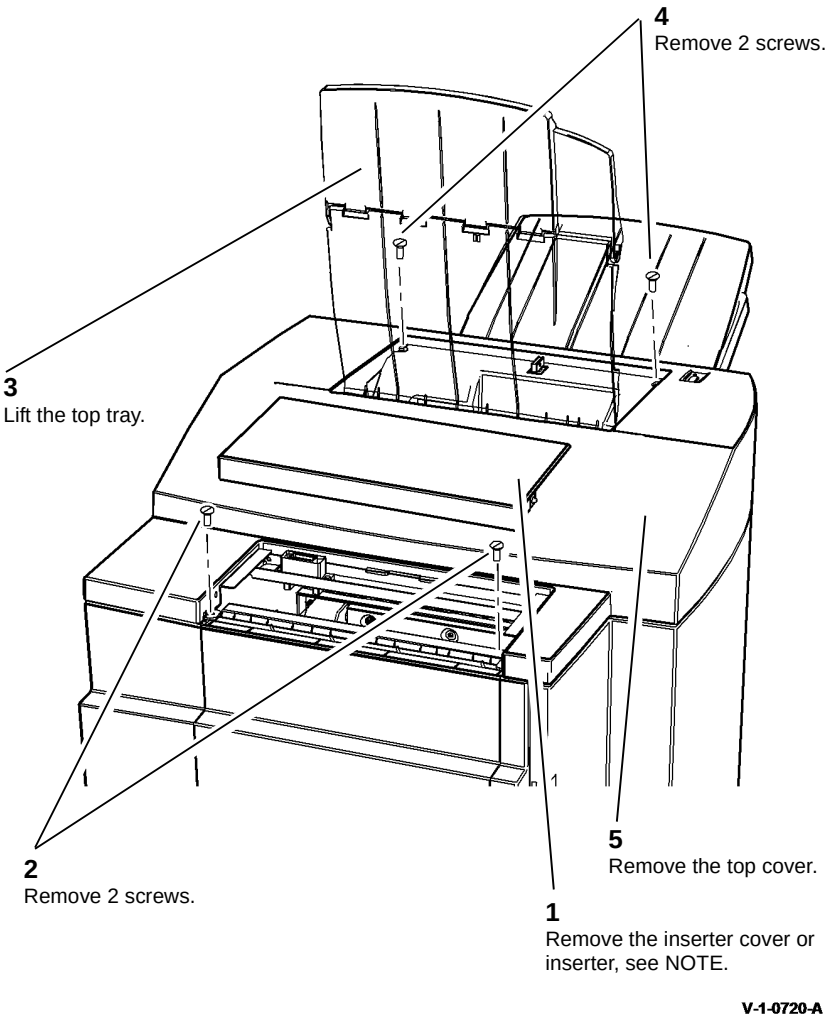


Figure 2 HVF top cover removal

3. Remove the HVF front cover, Figure 3.

NOTE: *The HVF top cover must be removed before removing the HVF front cover.*

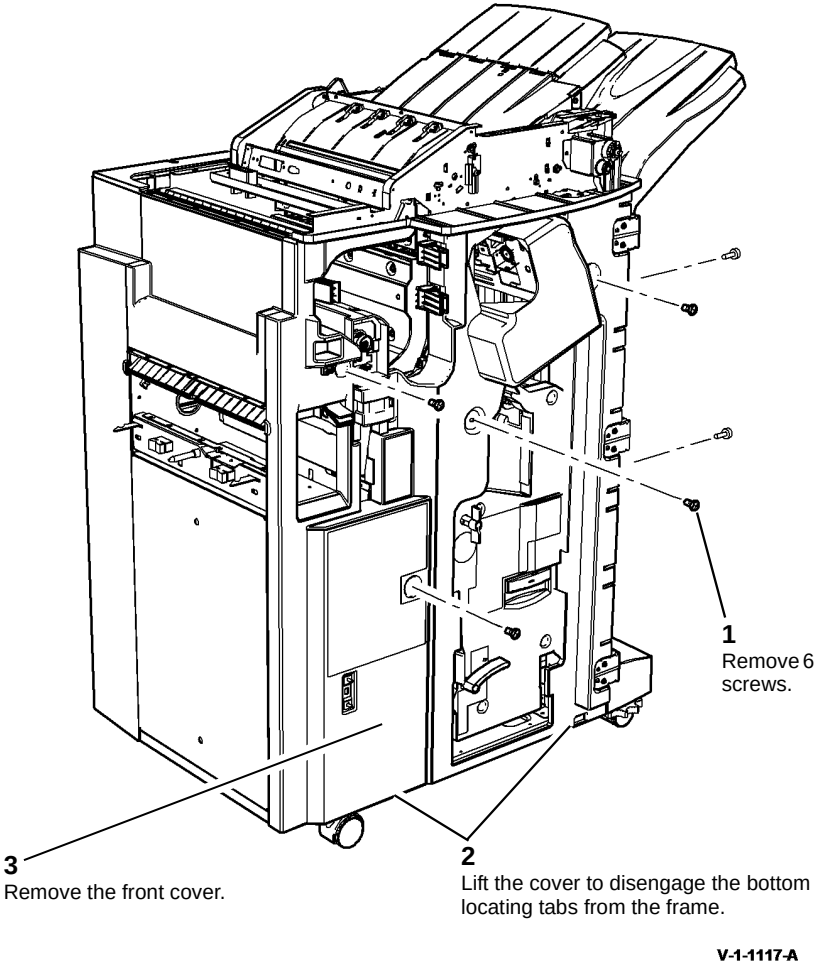


Figure 3 HVF front cover removal

4. Remove the HVF rear cover, Figure 4.

NOTE: *The HVF top cover must be removed before removing the HVF rear cover.*

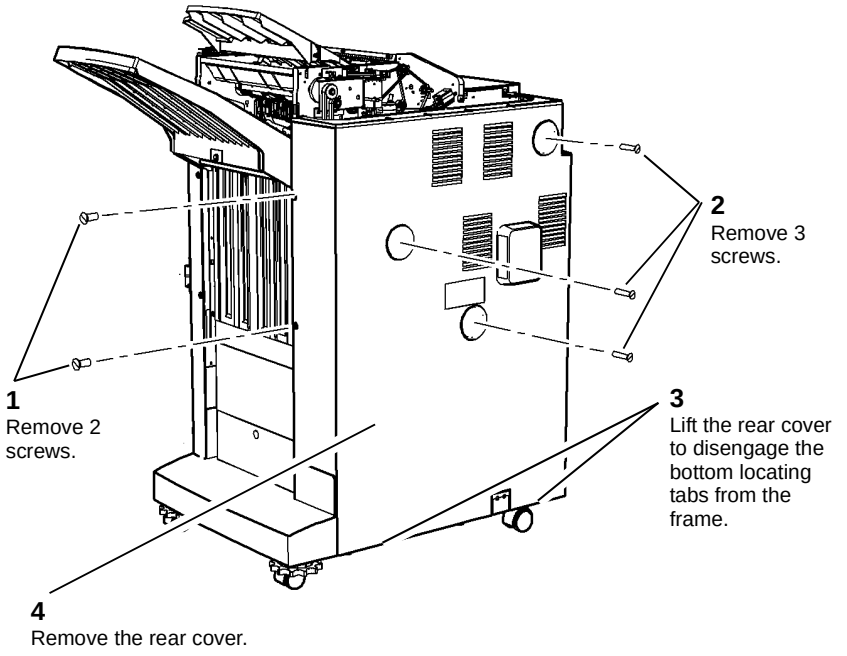


Figure 4 HVF rear cover removal

5. Remove the HVF vent cover and HVF foot cover, Figure 5. To provide enough room to remove the HVF vent cover, undock the HVF, REP 11.13-171.

NOTE: *The HVF top front cover and HVF rear cover must be removed before removing the HVF vent cover and HVF foot cover.*

NOTE: *The HVF foot cover is not installed if a tri-folder is installed.*

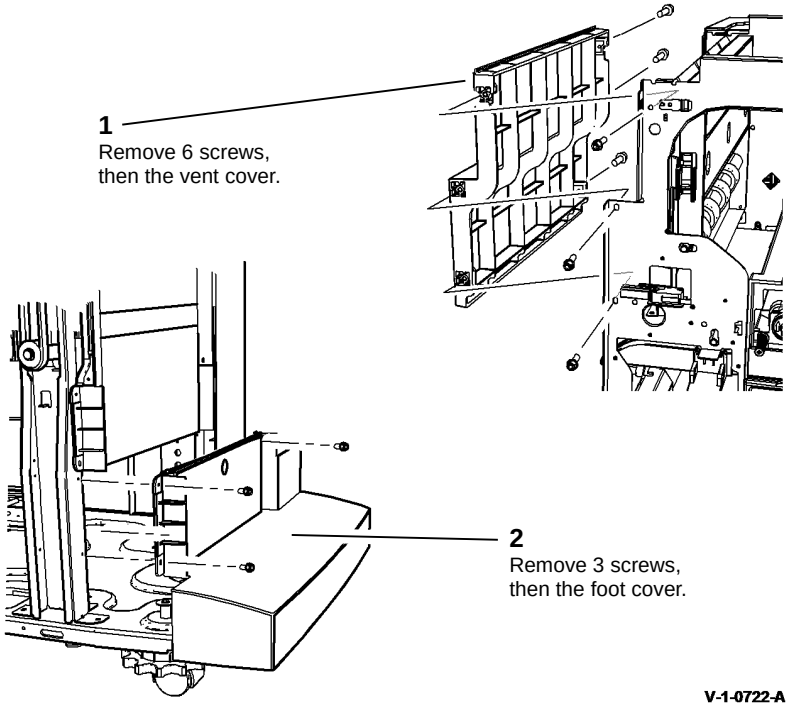


Figure 5 HVF vent and foot covers removal

Replacement

1. Reverse the removal procedure to reinstall the HVF covers.
2. Depending on the installed options and the covers removed, install the covers in the following sequence:
   a. HVF vent cover.
   b. HVF foot cover (if a tri-folder is not installed).
   c. HVF rear cover.
   d. HVF front cover.
   e. HVF top cover.
   f. HVF inserter cover (if an inserter is not installed).
   g. HVF front door.

REP 11.2-171 HVF Stapler Assembly

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Un-dock the HVF, REP 11.13-171.
2. Remove the HVF front door, REP 11.1-171.
3. Remove the HVF top cover, REP 11.1-171.
4. Remove the HVF front cover, REP 11.1-171.
5. Remove the rear cover, REP 11.1-171.
6. Figure 1. Disconnect the harnesses at the rear of the HVF.

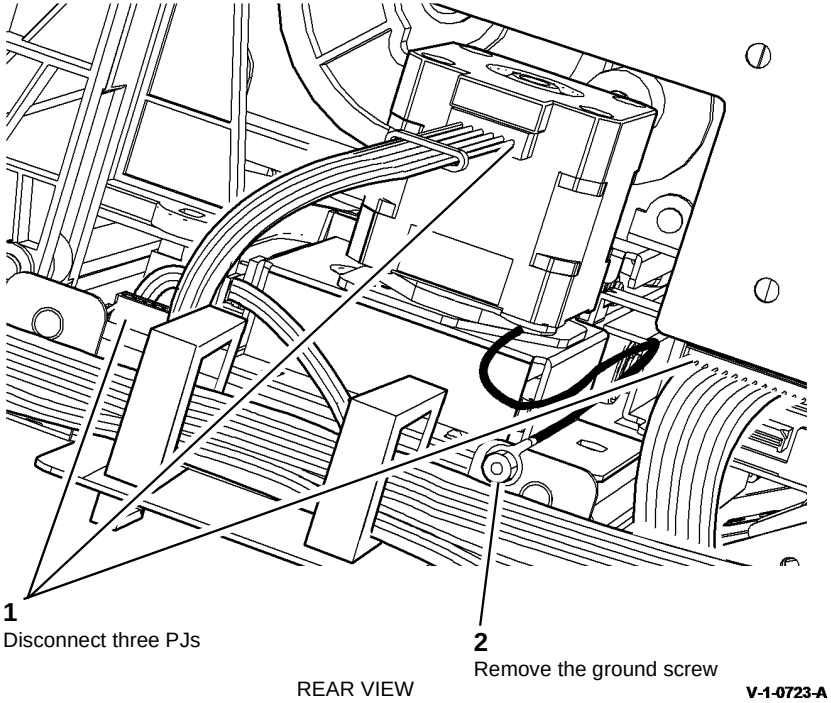


Figure 1 Harnesses disconnection

7. Figure 2. Move the ejector unit to the out position.

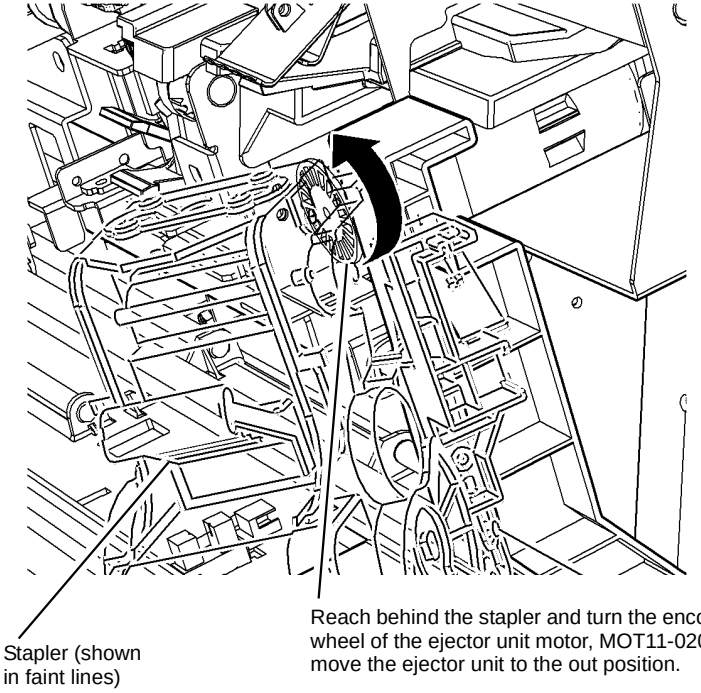


Figure 2 Ejector move

8. Figure 3. Release the back stop.

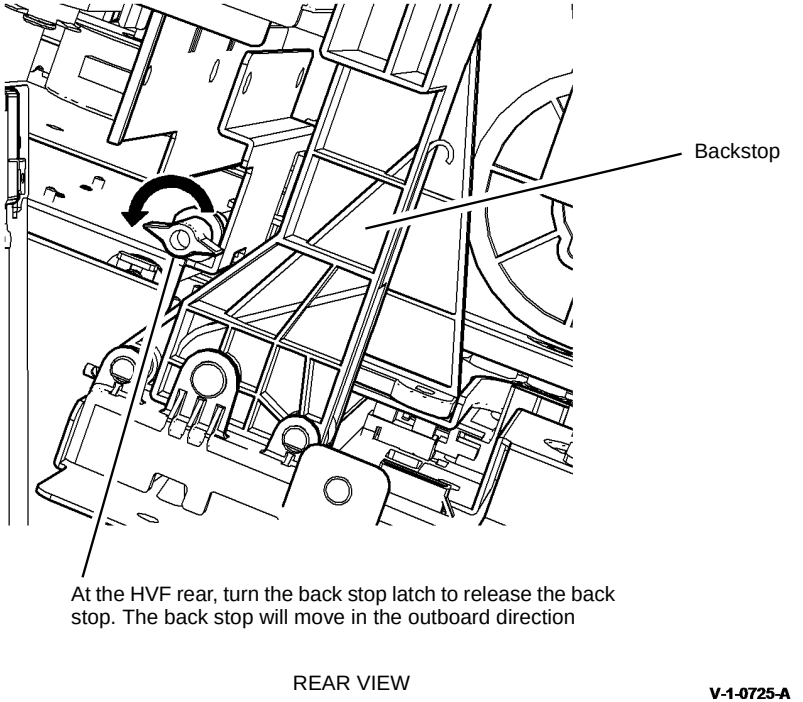


Figure 3 Back stop release

9. Remove the stapler assembly, Figure 4.

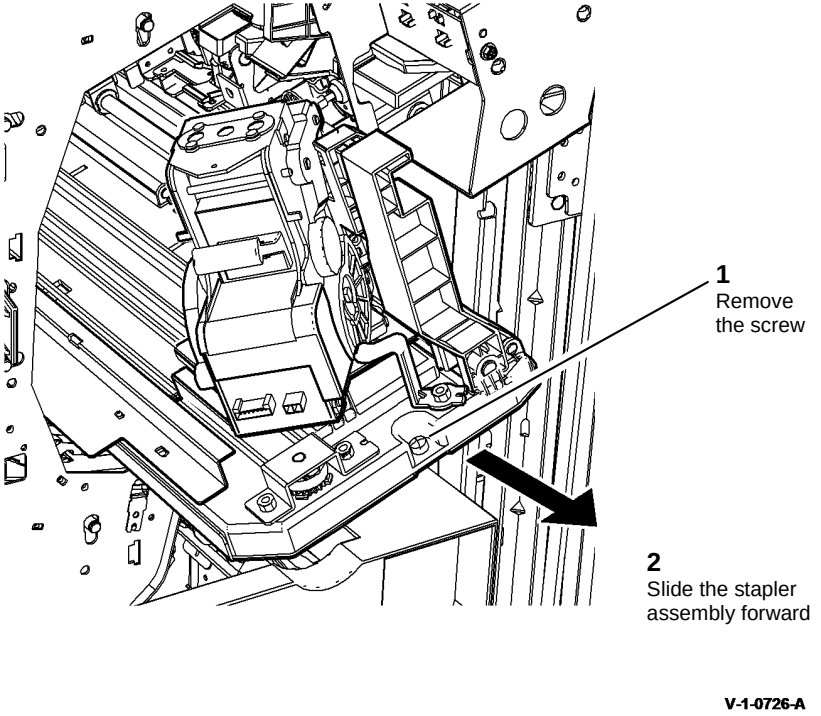


Figure 4 Stapler assembly removal

Replacement

NOTE: *The ejector unit returns to the home position when the HVF is initialized.*

1. Slide the stapler assembly into the tray, taking care not to trap the earth wire at the rear.
2. At the HVF rear, pull the back stop to the rear and hold it there while turning the back stop latch clockwise. Release the back stop, which should slide forward until stopped by the latch.
3. Reconnect all PJs and re-install the screws.
4. Reverse the removal procedure to reinstall the remainder of the components.

REP 11.3-171 HVF Top Tray

Parts List on PL 11.130

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Remove the top tray as follows:

1. If fitted, undock the inserter, REP 11.82-171.
2. Remove the HVF top cover and HVF rear cover REP 11.1-171.
3. Prepare to remove the top tray, Figure 1.

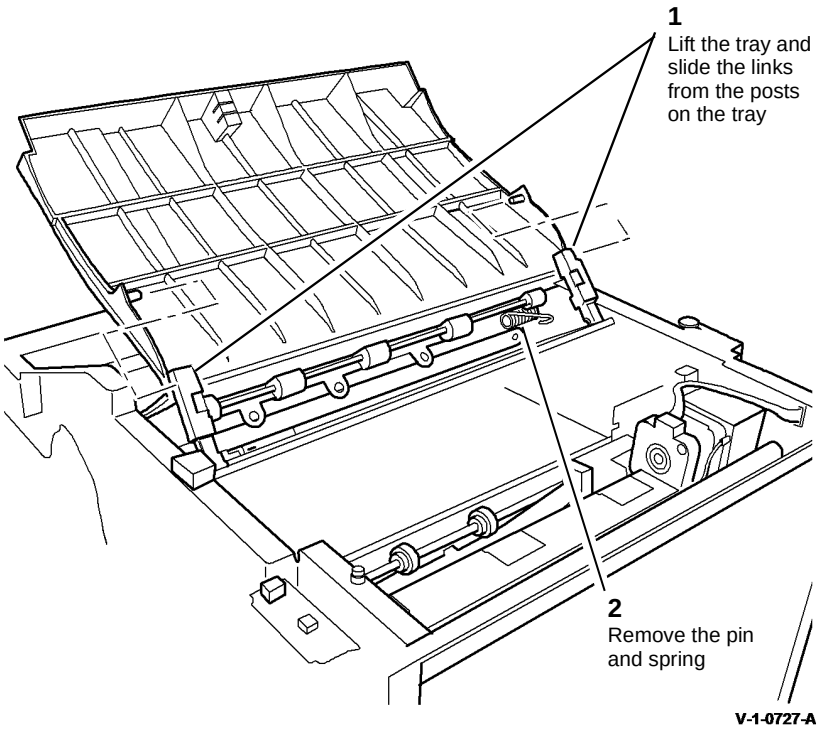


Figure 1 Preparation

4. Figure 2, remove the top tray.

NOTE: *Remove the idler pulley to avoid straining the inner drive belt when removing the inner pulley.*

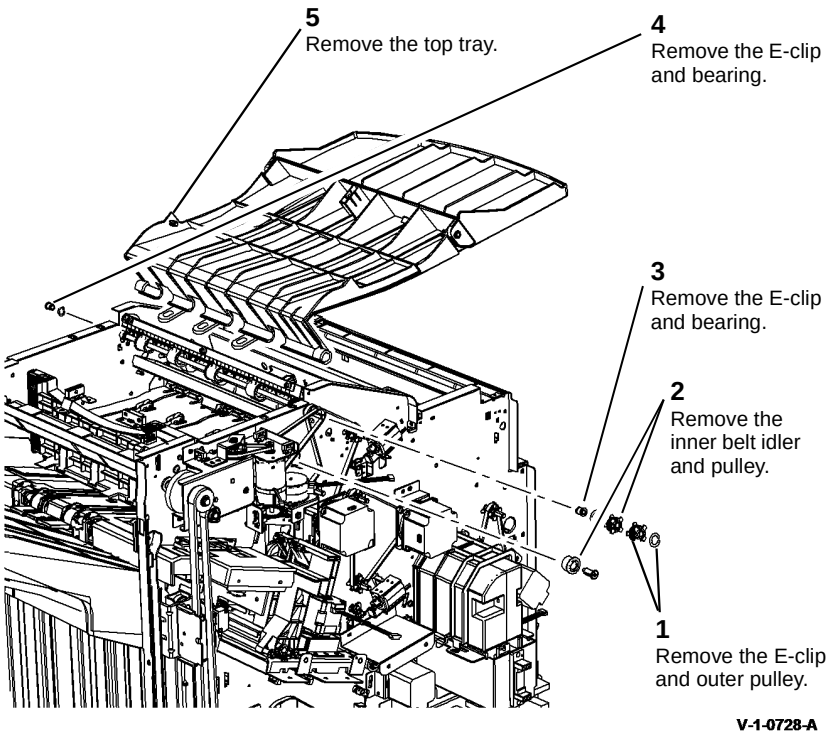


Figure 2 Top tray removal

Replacement

Reverse the removal procedure to reinstall the top tray.

REP 11.4-171 HVF Bin 1 Removal

Parts List on PL 11.135

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove bin 1, Figure 1.

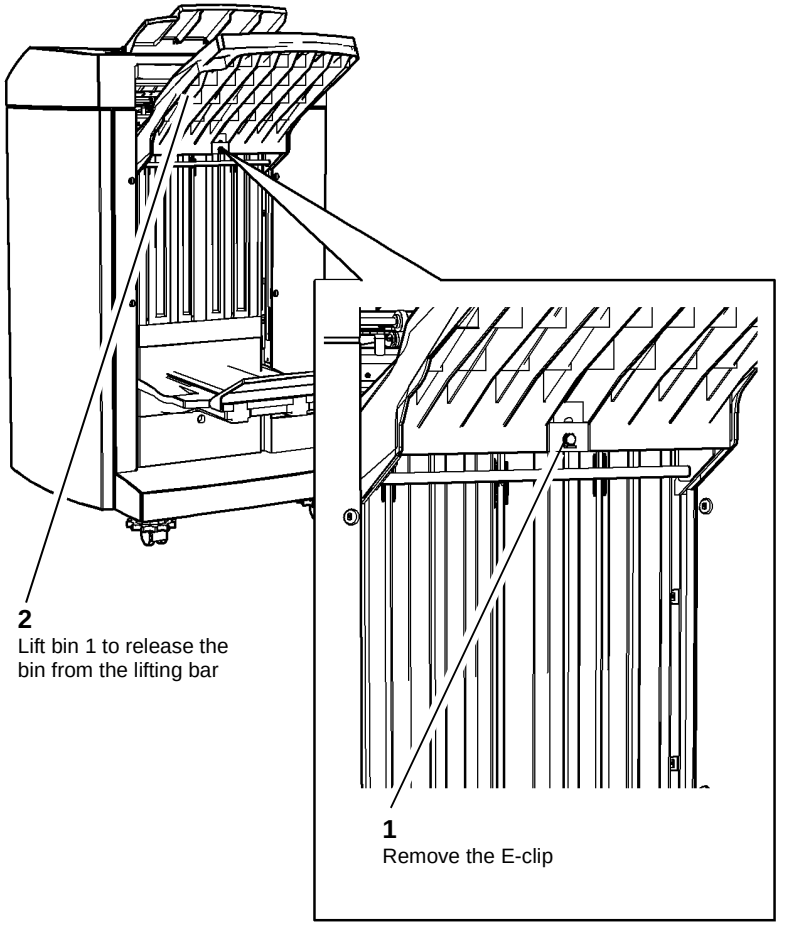


Figure 1 Bin 1 removal

Replacement

Reverse the removal procedures to reinstall bin 1.

REP 11.5-171 HVF Upper Right Side Cover Removal

Parts List on PL 11.135

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. With the machine powered, use the PTU or dC330 code 011-032 to lower Bin 1.
2. Remove bin 1, REP 11.4-171.
3. Remove the HVF upper right side cover, Figure 1.

REP 11.6-171 HVF Ejector Assembly Removal

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove bin 1, REP 11.4-171.
2. Remove the HVF upper right side cover REP 11.5-171.
3. Remove the HVF rear cover REP 11.1-171.
4. Remove the front and rear pressing plate fingers, REP 11.7-171.
5. Remove the front tamper motor assembly, REP 11.11-171.
6. Remove the front tamper arm, PL 11.153 Item 5.

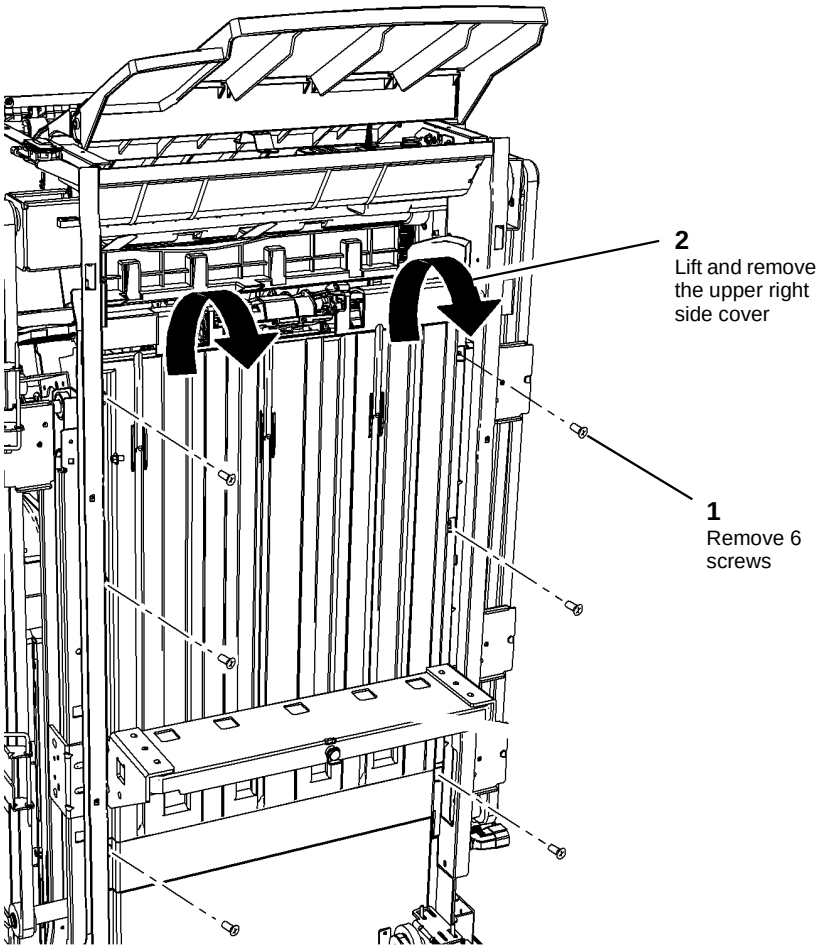


Figure 1 Cover removal

Replacement

Reverse the removal procedures to install the HVF upper right side cover.

7. Remove the ejector front cover, Figure 1.

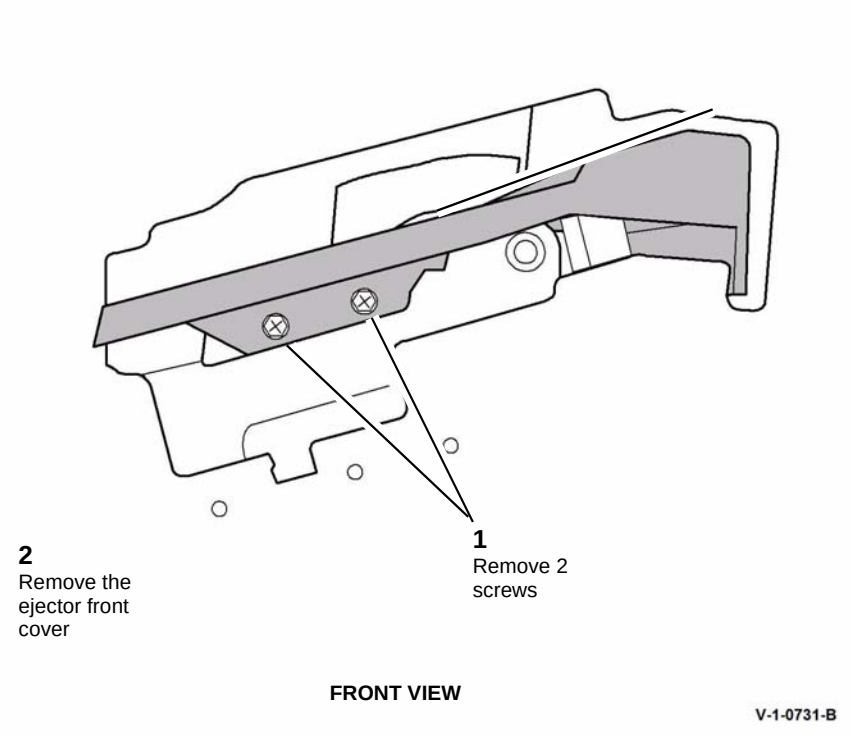


Figure 1 Ejector front cover

8. Prepare to remove the belt cover, Figure 2.

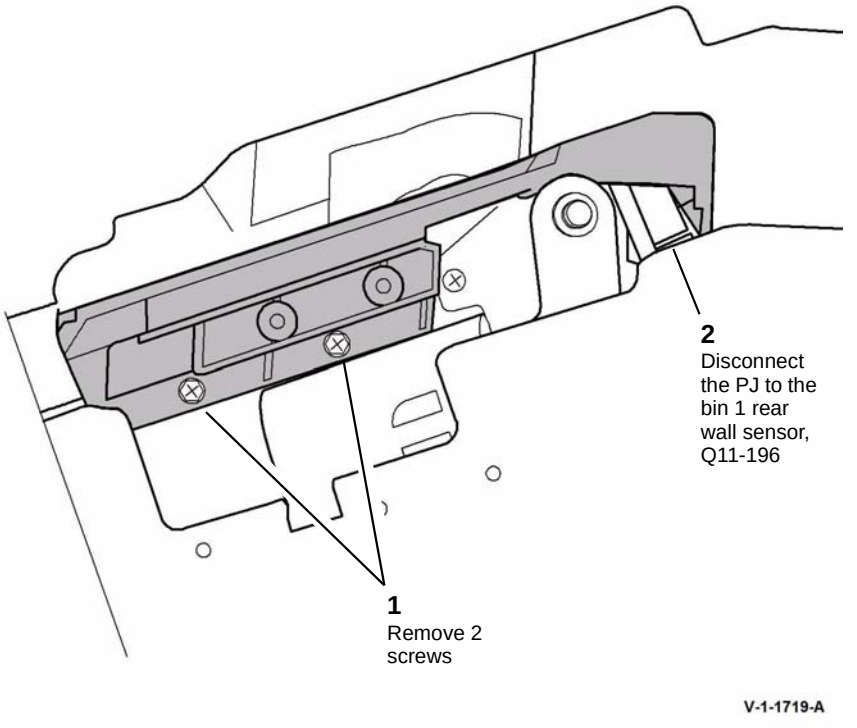


Figure 2 Belt cover

9. Remove the belt cover and pressing plate bracket, Figure 3.

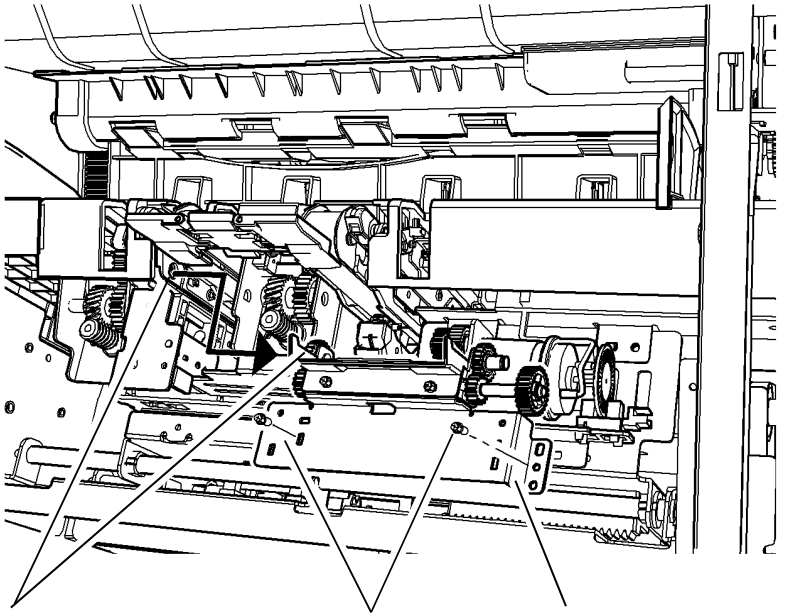


Figure 3 Ejector assembly

10. Disconnect the harness, Figure 4.

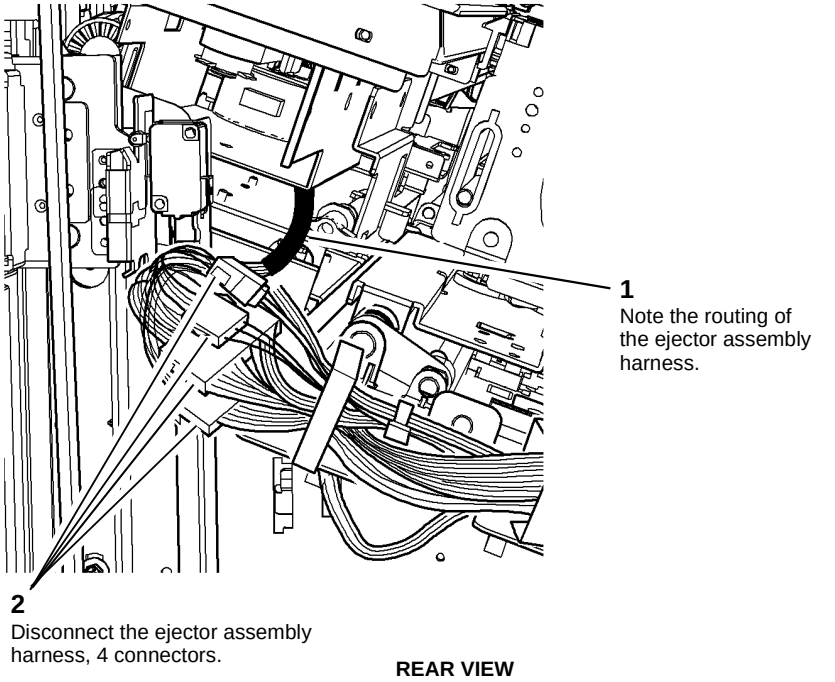


Figure 4 Harness disconnection

11. Remove the ejector assembly, Figure 5.

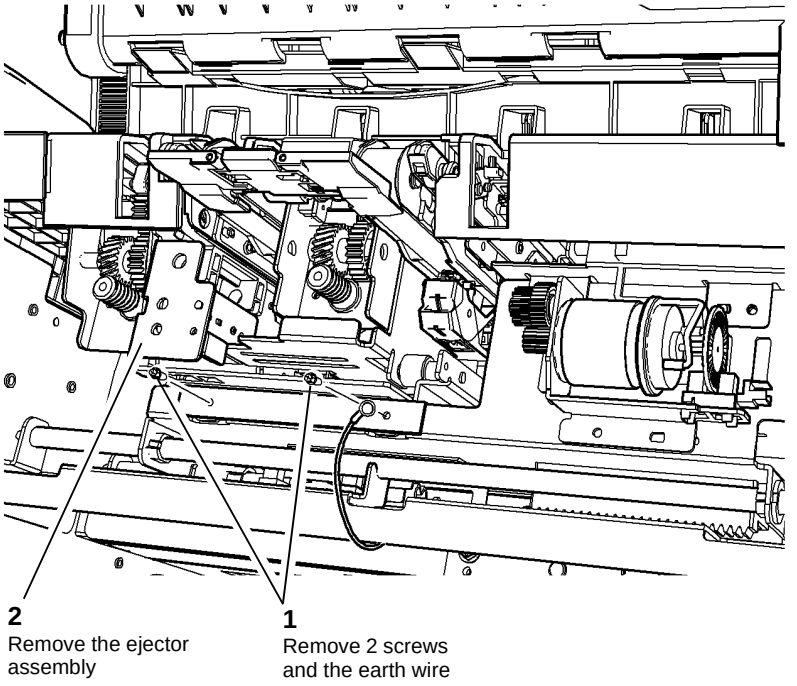


Figure 5 Ejector assembly removal

Replacement

1. Prepare to reinstall the ejector assembly, Figure 6.

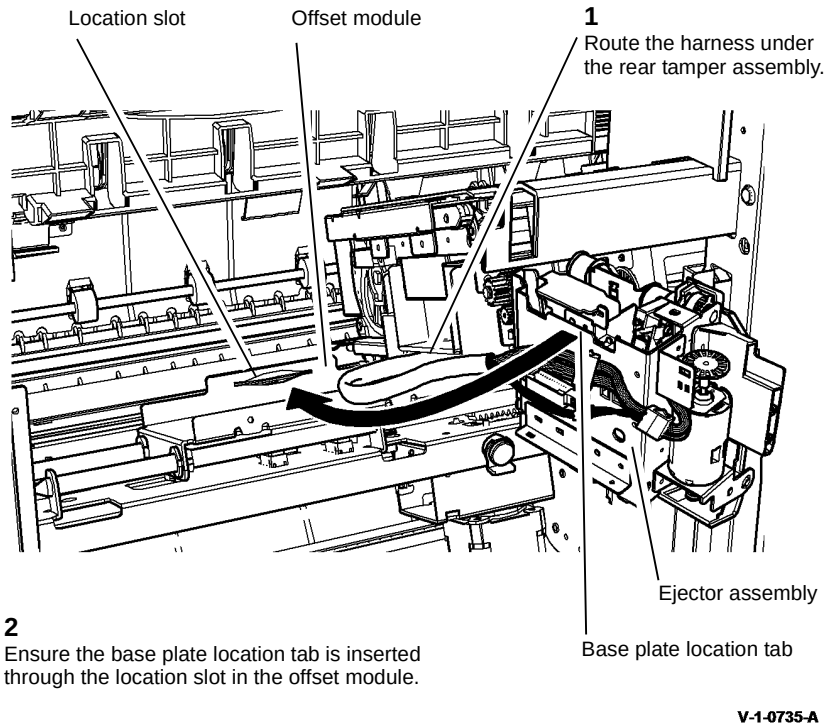


Figure 6 Reinstall the ejector assembly

2. Reverse the removal procedures to reinstall the ejector assembly.
3. When reinstalling the front tamper and the ejector front cover make sure that the correct screws are used and that the screws are not overtightened GP 6.
4. When refitting the pressing plate, the shaft of the front support finger drive gear must fit into the ejector assembly cover, refer to Figure 3.
5. Set the front and rear support fingers so that their ends are aligned when extended. Refer to REP 11.8-171.

REP 11.7-171 HVF Pressing Plate Fingers

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF upper right side cover REP 11.5-171.
2. Remove the pressing plate fingers, Figure 1.

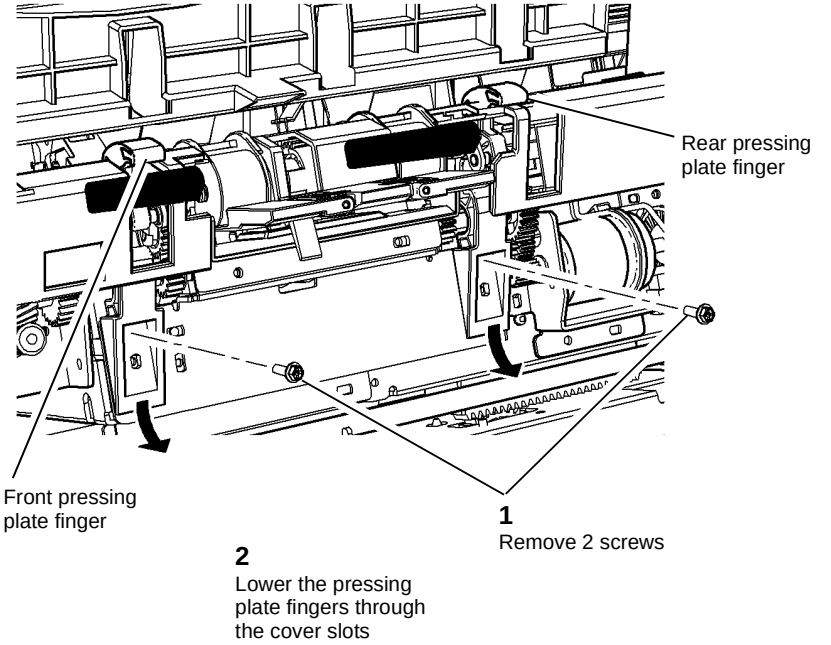


Figure 1 Pressing plate fingers

Replacement

Reverse the removal procedures to replace the front and rear pressing plate fingers.

REP 11.8-171 HVF Front and Rear Support Fingers

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF upper right side cover REP 11.5-171.
2. Remove the ejector assembly REP 11.6-171.
3. Remove the ejector front plate and support finger assembly, Figure 1.

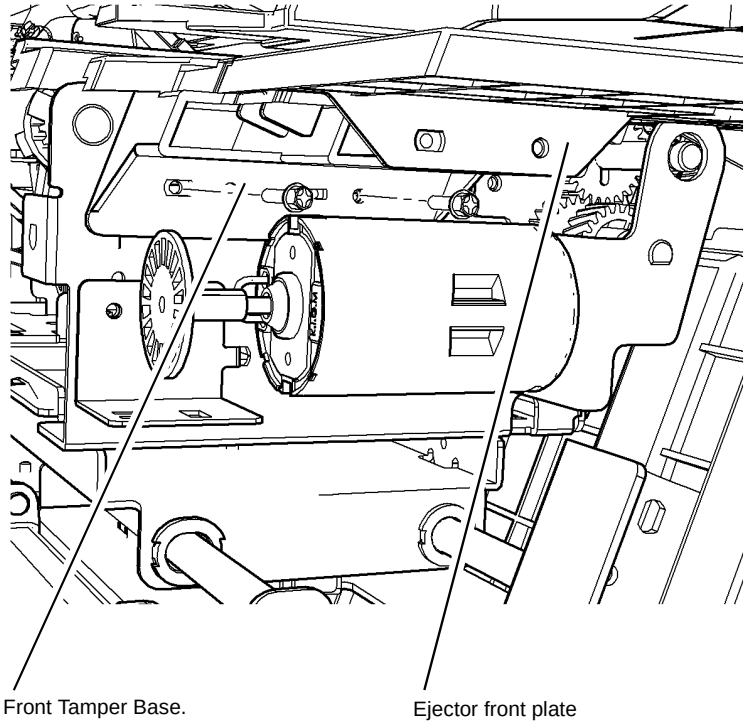


Figure 1 Ejector front plate

4. Remove the front tamper base and front support finger, Figure 2.

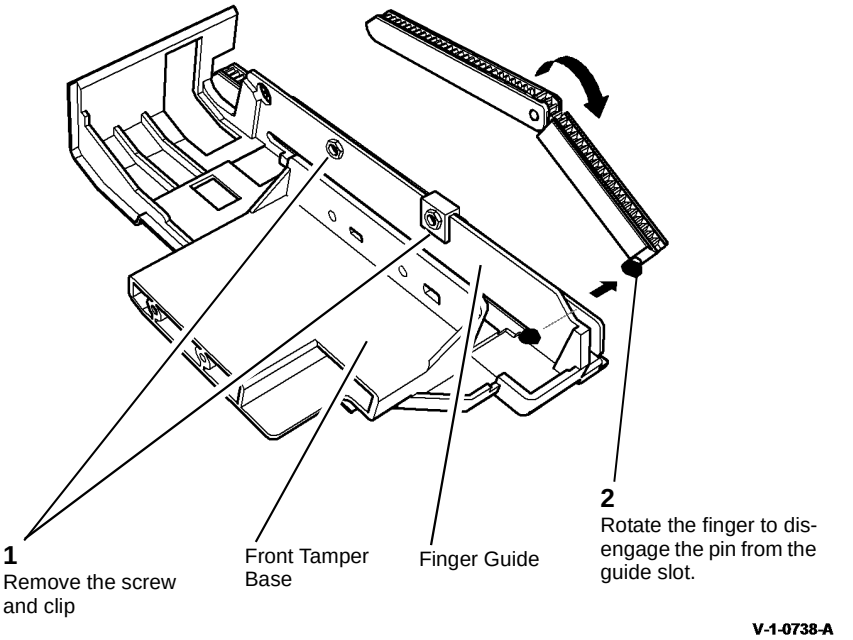


Figure 2 Front support finger

5. Remove the guide and the rear support finger, Figure 3.

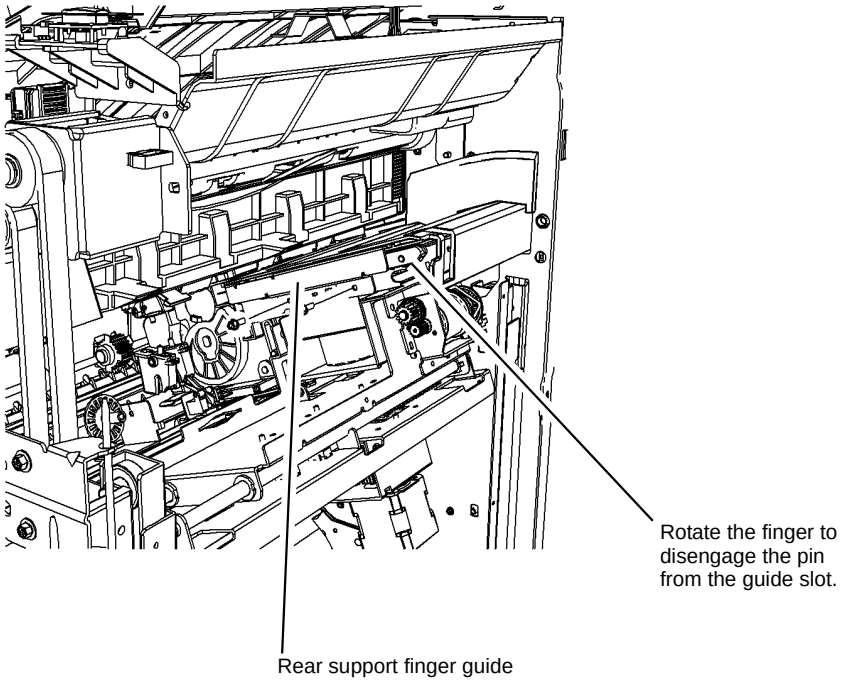


Figure 3 Rear support finger

Replacement

1. Reverse the removal procedure to replace the front or rear support fingers.

NOTE: *Set the front and rear support fingers so that their ends are aligned when extended. Refer to Figure 4.*

2. With the pressing plate installed, set the front and rear support finger alignment, Figure 4. If the fingers are not aligned, the compiler output will be uneven and cause exit jams.

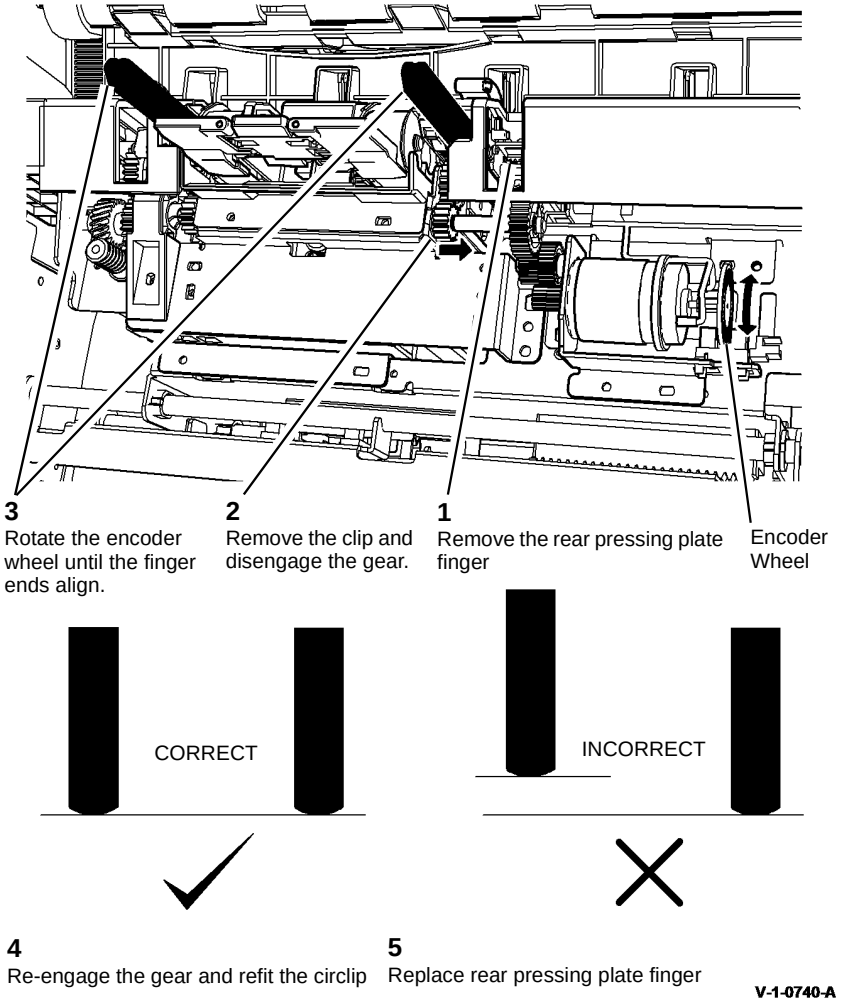


Figure 4 Support finger end alignment

REP 11.9-171 HVF Offset Motor Assembly

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF upper right side cover REP 11.5-171.
2. Remove the offset motor assembly, Figure 1.

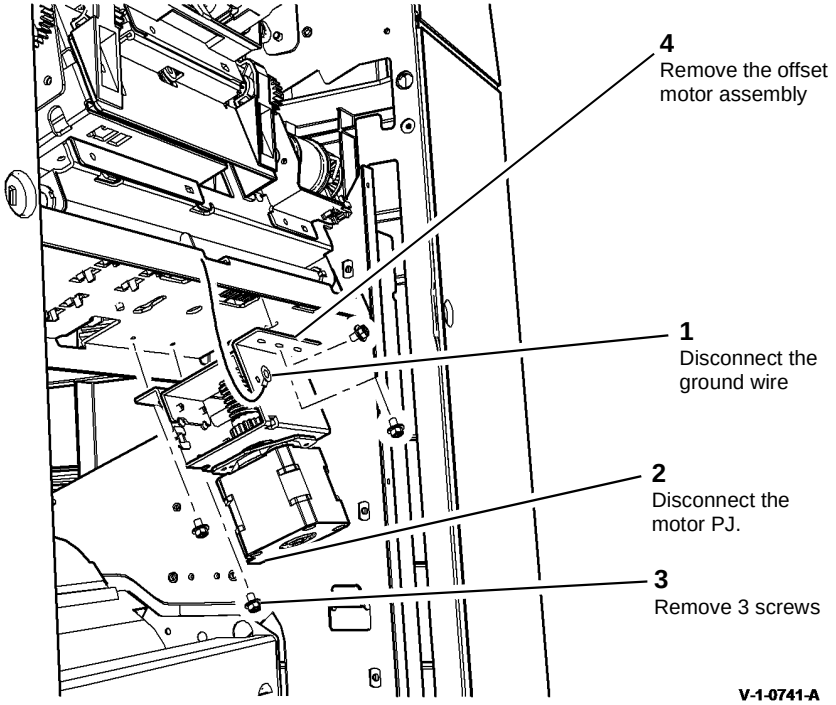


Figure 1 Offset motor and gears

Replacement

Reverse the removal procedures to reinstall the offset motor assembly.

REP 11.10-171 HVF Stacker Idler Rolls

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Lift the top tray.
2. Figure 1, Remove the four stacker idler rolls.

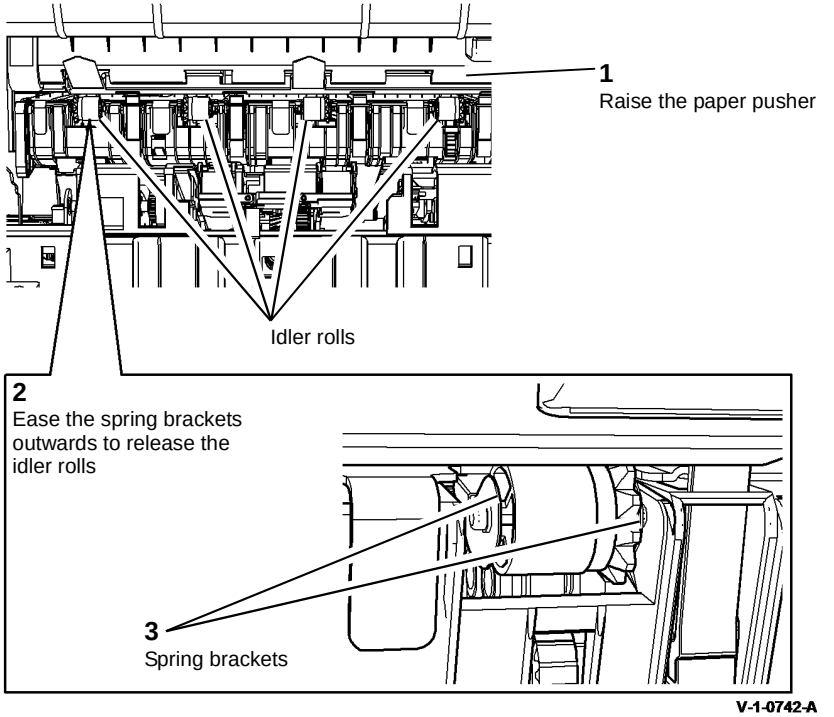


Figure 1 Idler rolls removal

Replacement

1. Refer to Figure 2. Ensure the spring brackets are parallel and re-install the idler rolls in the spring brackets.

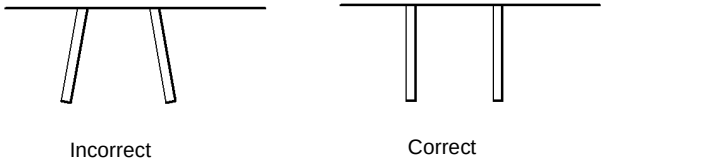


Figure 2 Correct spring bracket shape

2. Check that the idler rolls are held securely.

REP 11.11-171 HVF Front Tamper Motor Assembly

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door and HVF front cover REP 11.1-171.
2. Remove the front tamper motor assembly, Figure 1.

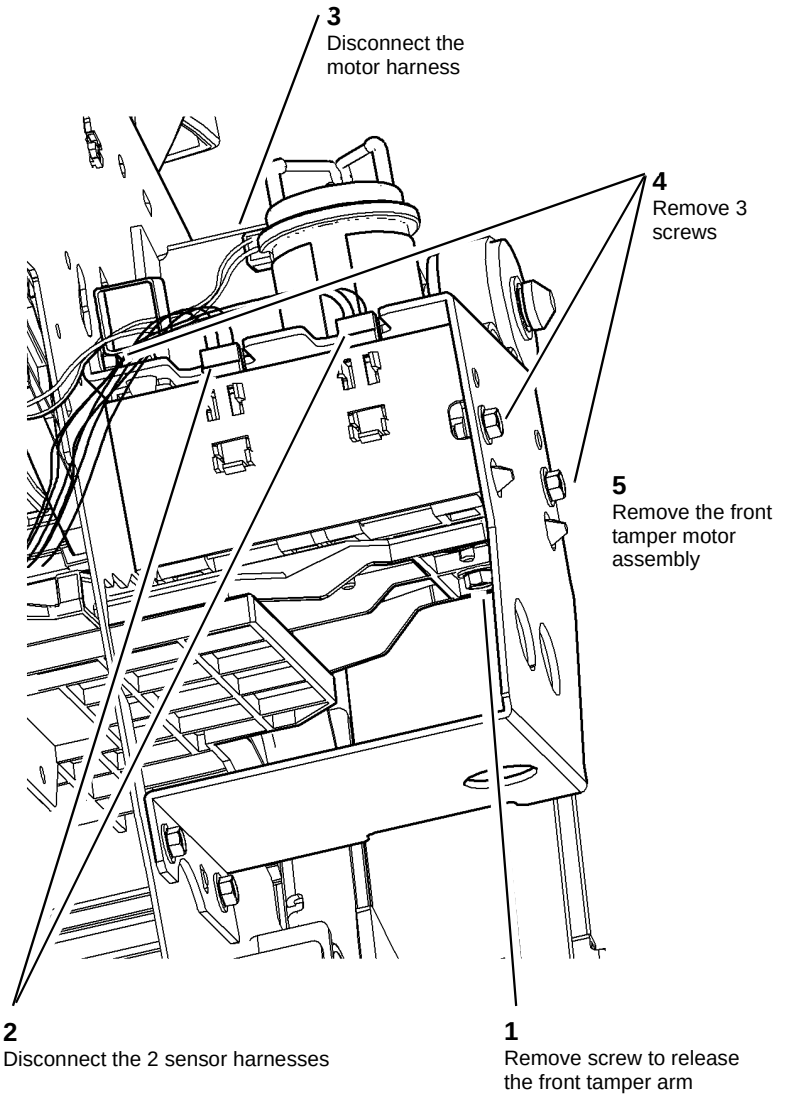


Figure 1 Front tamper drive assembly

Replacement

Reverse the removal procedures to reinstall the front tamper motor assembly.

REP 11.12-171 HVF Stacker Motor Gearbox

Parts List on PL 11.135

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front and rear covers, REP 11.1-171.
2. Remove the rear drive belt lower pulley to relieve the belt tension.
3. Remove the stacker motor gearbox, Figure 1.

NOTE: *The pulley pin may fall when the pulley is removed.*

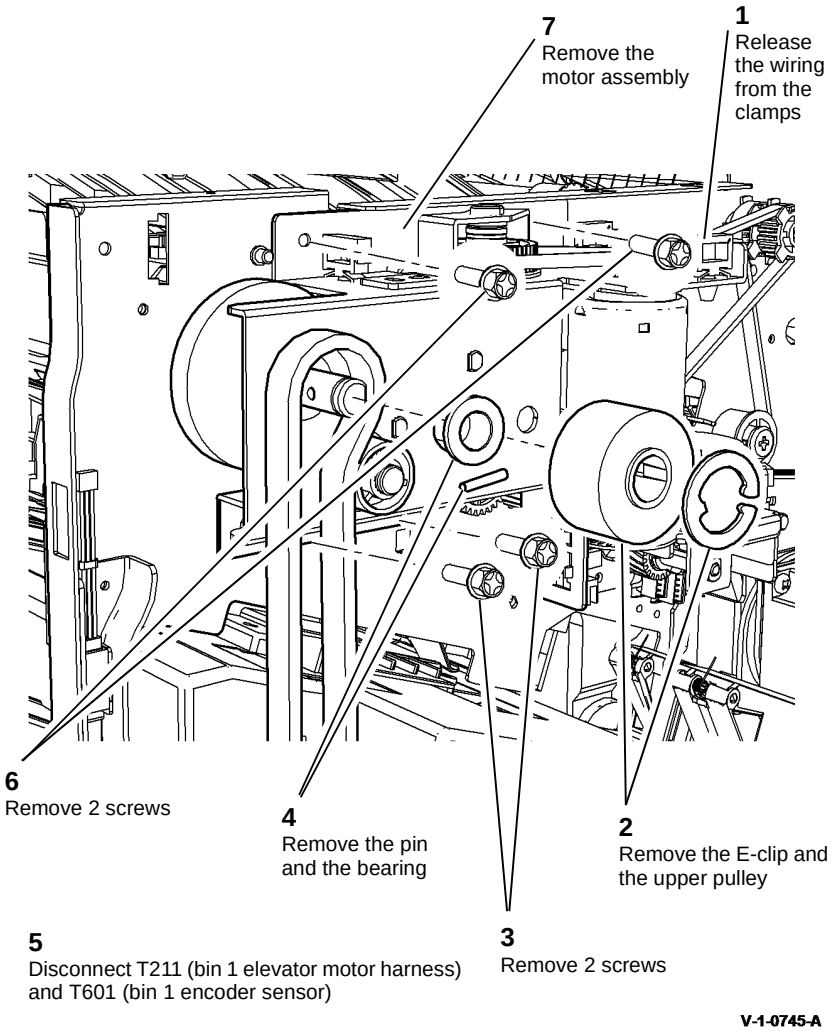


Figure 1 Stacker motor gearbox removal

Replacement

1. Reverse the removal procedures to reinstall the stacker motor gearbox.

NOTE: *Check that the 'flats' on the shaft bearing align with the cut-outs in the bracket.*

2. Check that the bin 1 lift bar is level before refitting the stacker belt lower pulley.

REP 11.13-171 HVF and HVF BM Un-Docking

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Do not show the customer how to un-dock the HVF or HVF BM.

1. Open the HVF front door.
2. Release the docking latch and move the HVF or HVF BM to the right, away from the IOT, Figure 1.

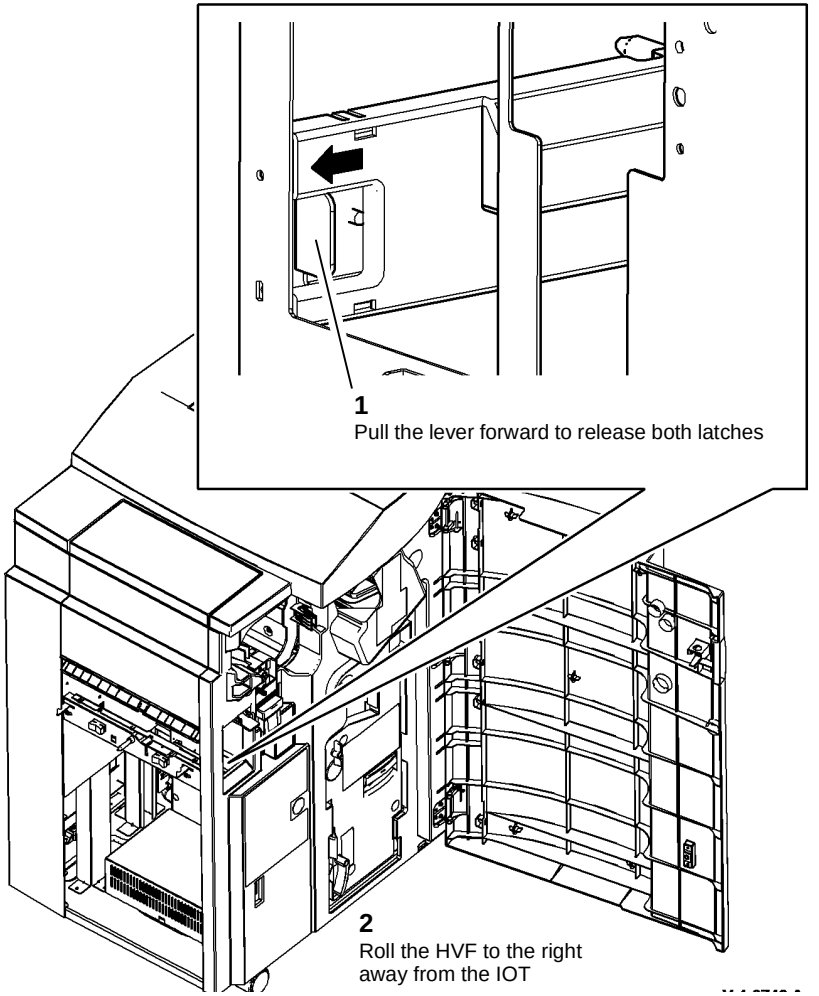


Figure 1 Docking latch location

NOTE: *Where fitted, the tri folder may remain docked to, and moved with, the HVF.*

3. Disconnect the harnesses between the IOT and the HVF or HVF BM if necessary.

Replacement

CAUTION

Take care to align the HVF to the right side of the IOT before rolling the HVF into position. Mis-alignment will damage or break the interlock actuator.

Reverse the removal procedure to dock the HVF or HVF BM.

REP 11.14-171 HVF Top Jam Clearance Guide Assembly

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Remove the outboard pivot screw, Figure 1.

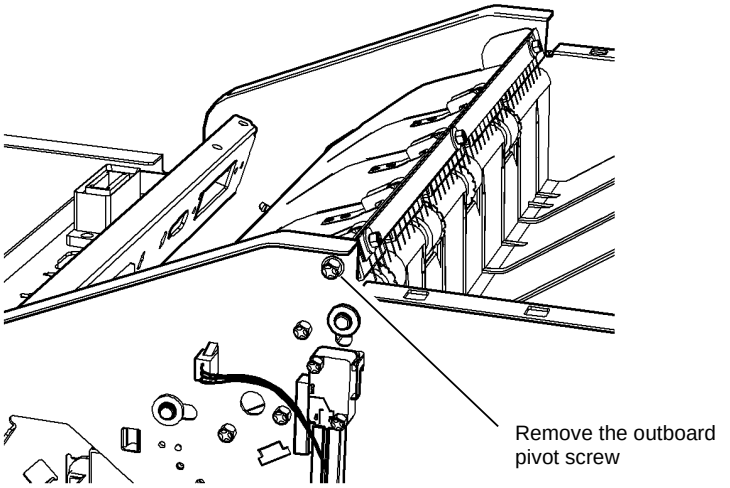


Figure 1 Outboard pivot screw

3. Remove the inboard pivot screw, Figure 2.

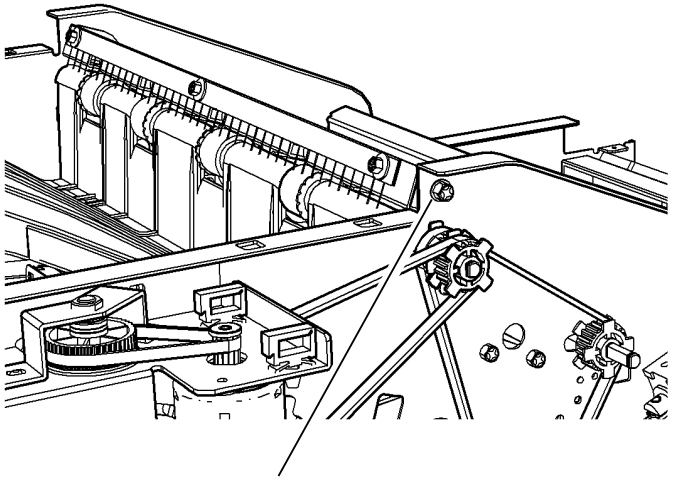


Figure 2 Inboard pivot screw

4. Remove the jam clearance assembly, Figure 3.

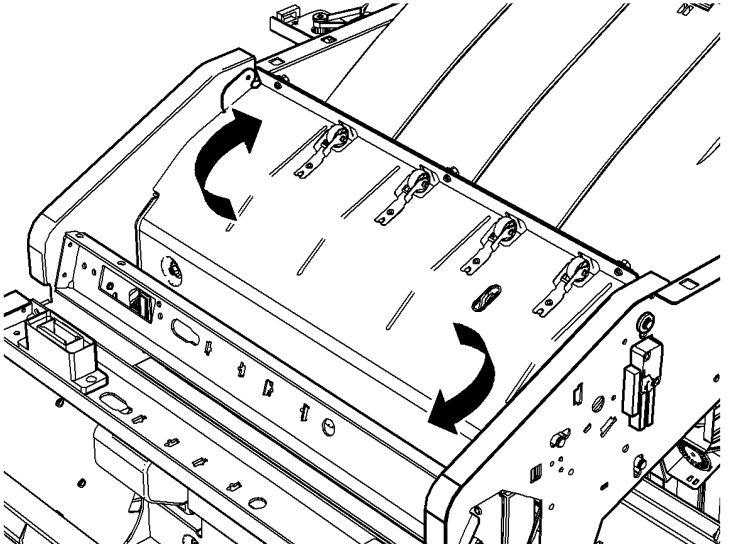


Figure 3 Assembly removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.15-171 HVF Rear Tamper Assembly

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove the HVF upper right side cover REP 11.5-171.
3. Remove the ejector assembly REP 11.6-171.
4. Remove the support finger motor assembly, PL 11.140 Item 9.
5. Remove the rear tamper assembly, Figure 1.

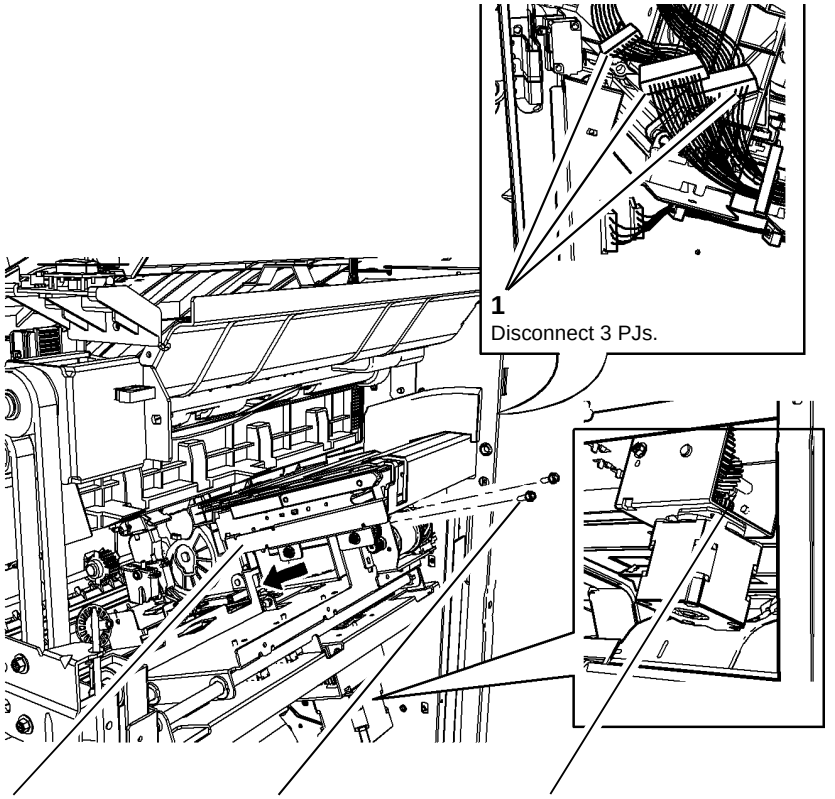


Figure 1 Rear tamper assembly

NOTE: *To ease the removal of the rear tamper assembly, remove the cable clamps that secure the pressing and support encoder sensor harness to the rear tamper assembly. Also, turn the offset motor gear to move the offset carriage to the rear.*

Replacement

CAUTION

Check that the Ejector cable harnesses are routed below rear tamper assembly and do not obstruct any moving parts.

1. Reverse the removal procedures to reinstall the rear tamper assembly.
2. Turn the offset drive gear to position the offset carriage so that the rear tamper assembly can be positioned on the locating pins.

REP 11.16-171 BM Flapper

Parts List on PL 11.161

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the BM flapper assembly, Figure 1.

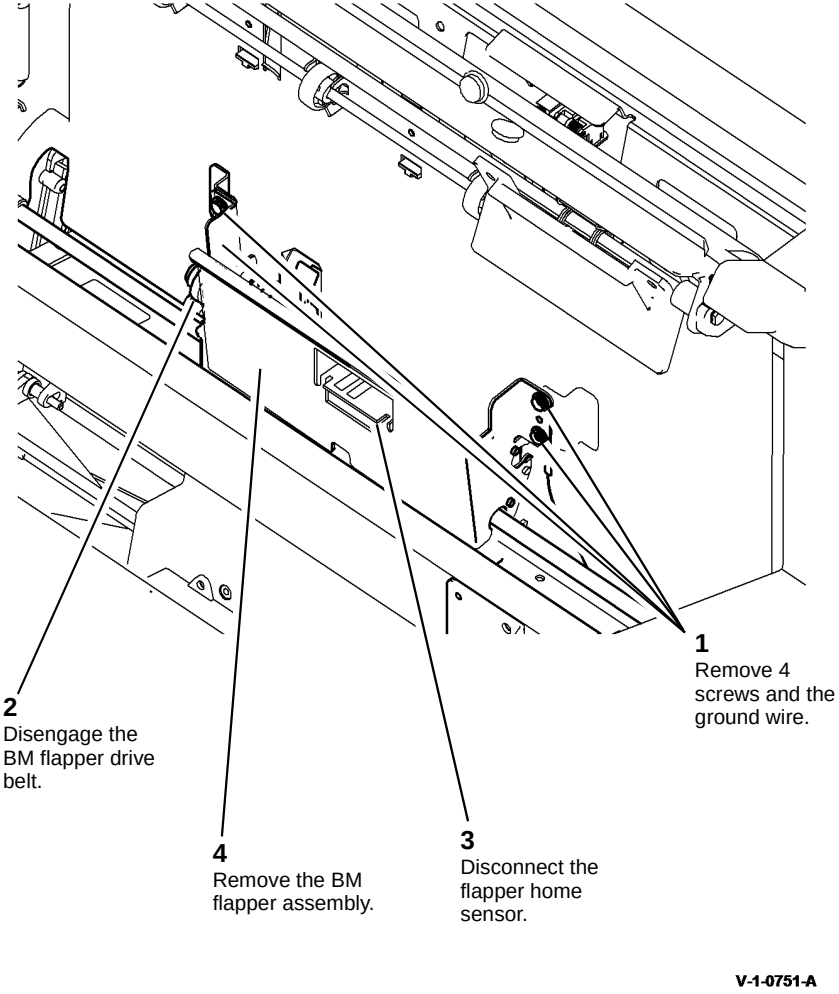


Figure 1 Remove the BM flapper assembly

3. Remove the BM flapper, Figure 2.

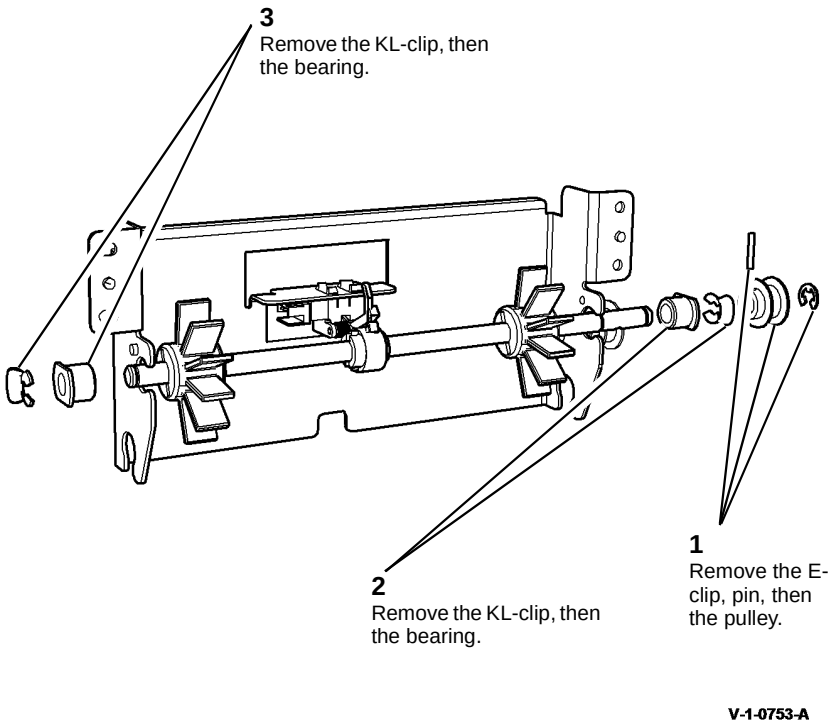


Figure 2 BM flapper removal

Replacement

The replacement is the reverse of the removal procedure.

REP 11.17-171 BM PWB

Parts List on PL 11.166

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

Figure 1 ESD Symbol

CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Remove the BM PWB, Figure 2.

Replacement

CAUTION

Figure 2, ensure the BM harness and bin 2 harness are correctly positioned in the retainers to prevent damaged when the BM is moved to the extremities of its travel.

1. Reverse the removal procedures to replace the BM PWB.
2. The booklet maker PWB is supplied with a label with the customized NVM values for the new BM PWB. Enter the values into dC131.
3. Check and perform the adjustments that follow:
   - ADJ 11.5-171 Booklet Tamping
   - ADJ 11.6-171 Booklet Compiling Position.
   - ADJ 11.7-171 Booklet Crease Position
   - ADJ 11.8-171 Booklet Staple Position

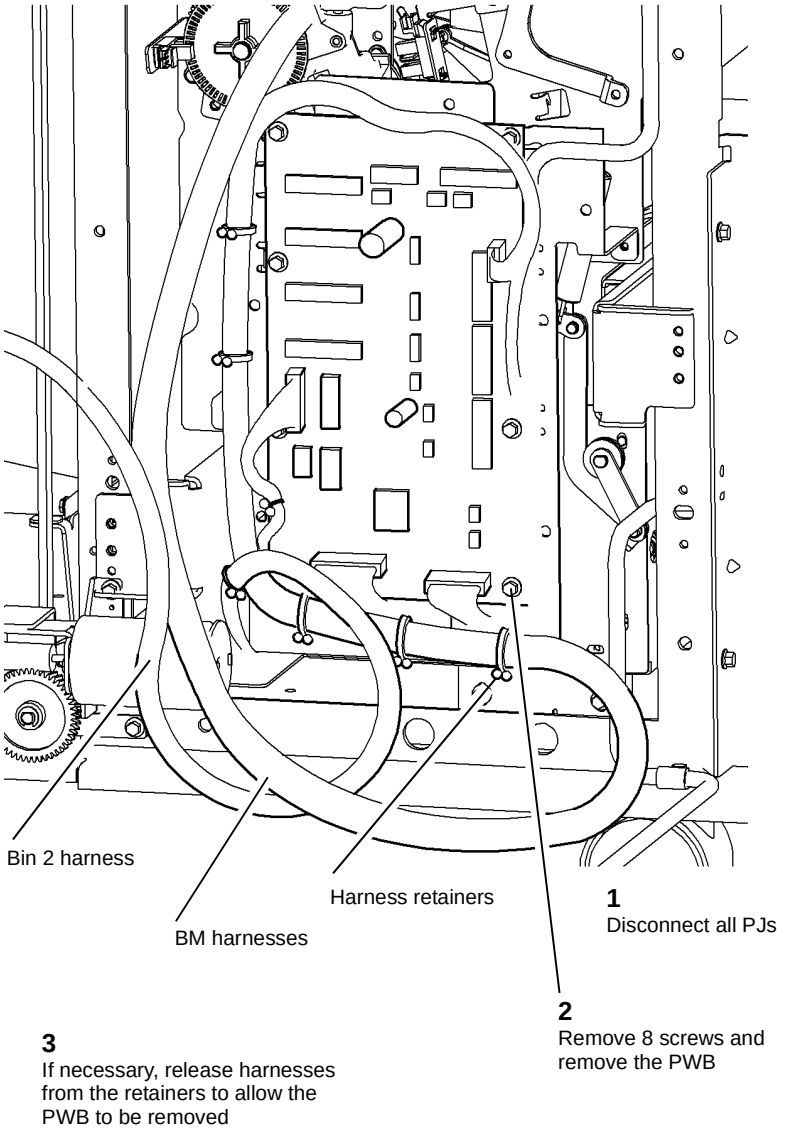


Figure 2 PWB removal

REP 11.18-171 BM Crease Blade Motor

Parts List on PL 11.165

Purpose

This procedure is used to repair the following components:

- BM crease blade motor encoder sensor, PL 11.165 Item 1.
- BM crease blade motor, PL 11.165 Item 3.
- Motor encoder, PL 11.165 Item 4.
- Bearing, PL 11.165 Item 7.
- Crank, PL 11.165 Item 8.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the left frame plate, PL 11.162 Item 2.
6. Remove the motor cover, PL 11.165 Item 11. It is easier to remove the screw using an open ended spanner, this means the removal of the BM PWB is not necessary.
7. Remove the BM crease blade motor assembly, Figure 1.

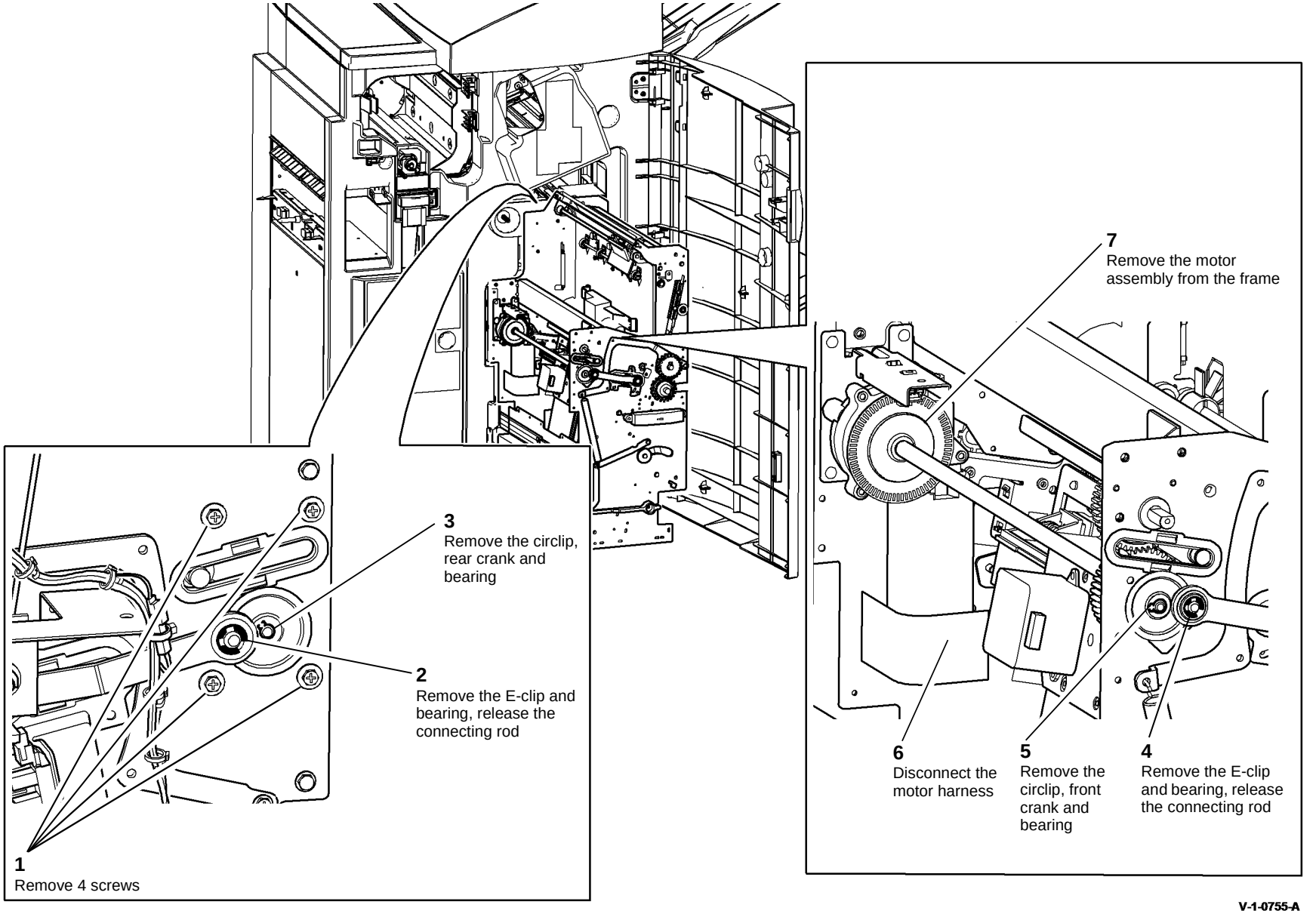


Figure 1 Removing the motor assembly

8. Remove the BM crease blade motor, Figure 2.

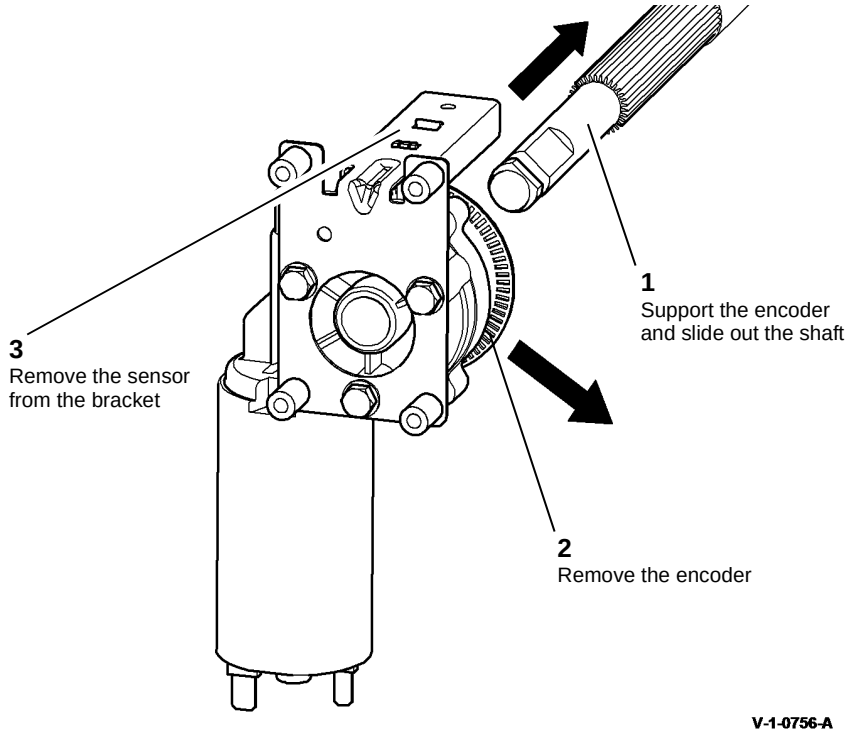


Figure 2 Removing the motor

Replacement

Reverse the removal procedure to replace the BM crease blade motor.

NOTE: *Ensure that the mark on the crease blade knob aligns with the arrow on the front infill cover when the crease blade is fully withdrawn.*

NOTE: *As necessary, cut any tie wraps securing the crease roll motor harness.*

REP 11.19-171 BM Crease Roll Motor

Parts List on PL 11.166

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Remove 4 screws securing the BM PWB mounting plate to the frame, allow the PWB and mounting plate to hang down, giving access to the BM crease roll motor.
3. Remove the motor assembly, Figure 1.

REP 11.20-171 BM Backstop Motor Assembly

Parts List on PL 11.163

Purpose

This procedure is used to repair the following components:

- Ground wire, PL 11.163 Item 1.
- Motor damper, PL 11.163 Item 3.
- BM backstop motor, PL 11.163 Item 4.
- BM backstop drive belt, PL 11.163 Item 11.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the BM backstop motor, Figure 1.

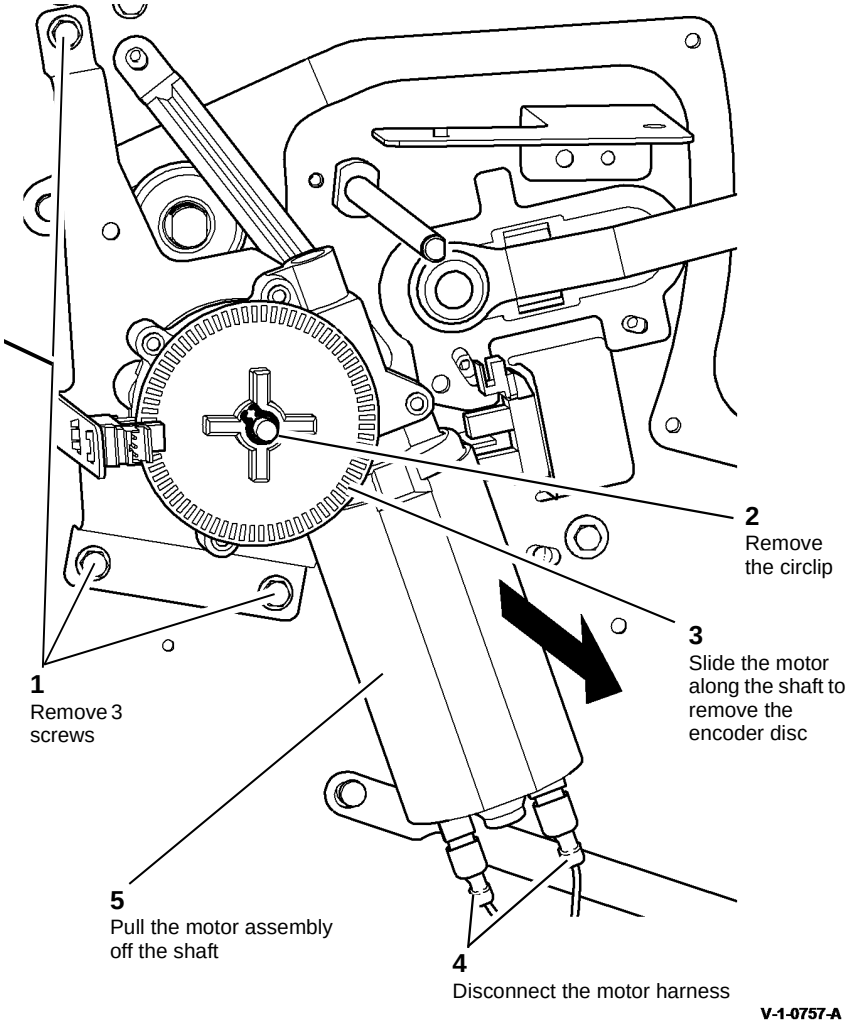


Figure 1 Motor assembly removal

Replacement

Reverse the removal procedure to replace the BM crease roll motor.

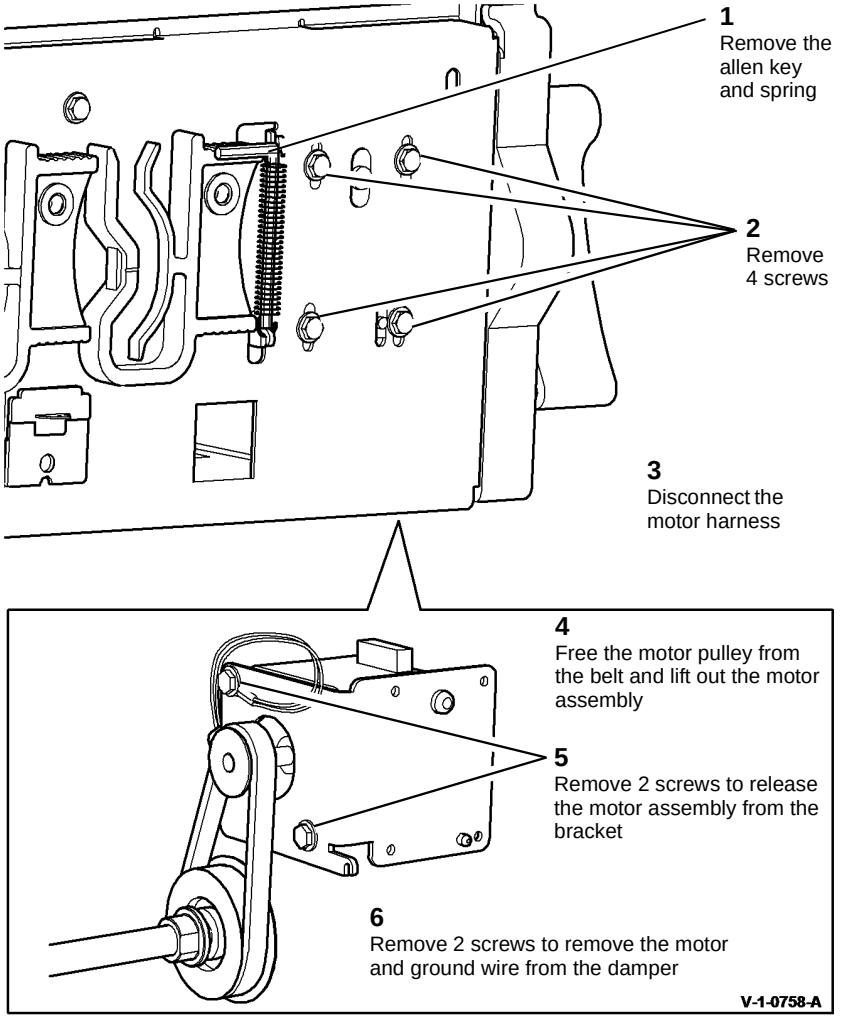


Figure 1 Motor removal

Replacement

Reverse the removal procedure to replace the BM backstop motor.

NOTE: *Allow the spring to tension the drive belt while the screws are still loose, then tighten the 4 screws.*

REP 11.21-171 BM Backstop Assembly

Parts List on PL 11.164

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the booklet maker, REP 11.61-171.
2. Rotate the crease roll handle (6c), fully counter clockwise.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the crease blade knob (6d), PL 11.161 Item 4.
5. Remove the BM front cover, PL 11.161 Item 3.

CAUTION

The BM harnesses and the backstop assembly harnesses are connected with a catch. Ensure the catch is released when disconnecting the solenoid harnesses.

6. Remove the two harness clamps, Figure 1.

Lay down the BM assembly to access the backstop assembly.

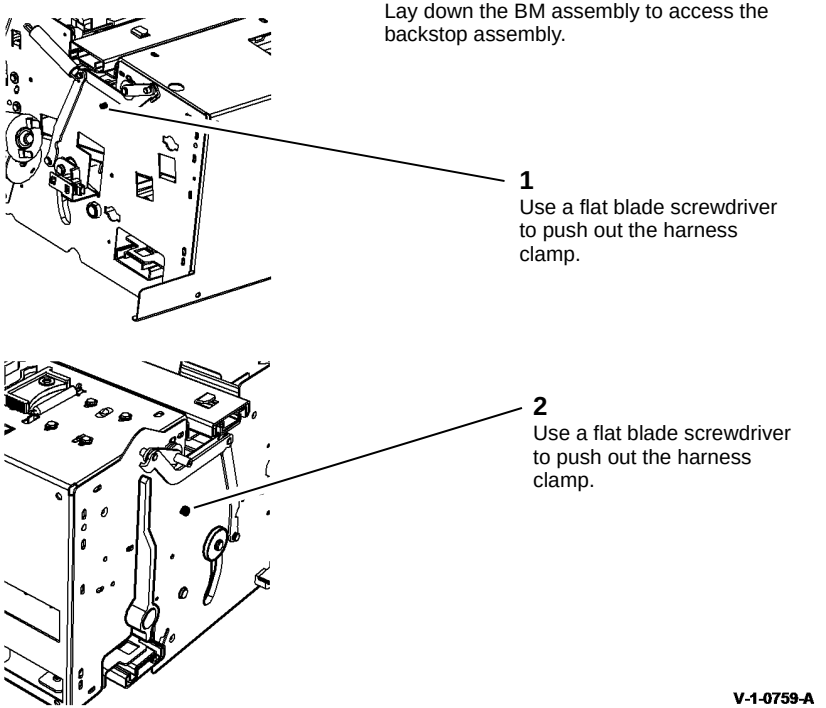


Figure 1 Remove the two harness clamps

7. Remove the belt clamp, Figure 2.

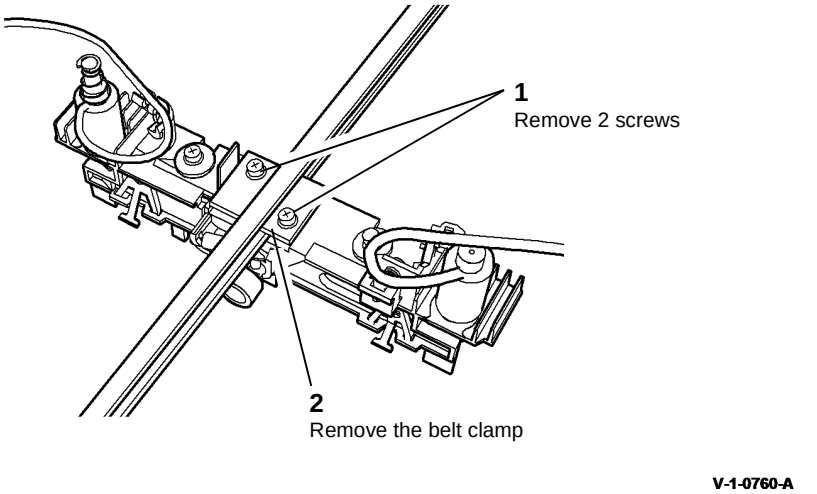


Figure 2 Belt clamp

8. Use the allen key, PL 11.163 Item 9 to remove the 2 screws and remove shaft support, PL 11.164 Item 10.
9. Prepare to remove the shaft from the frame, Figure 3.

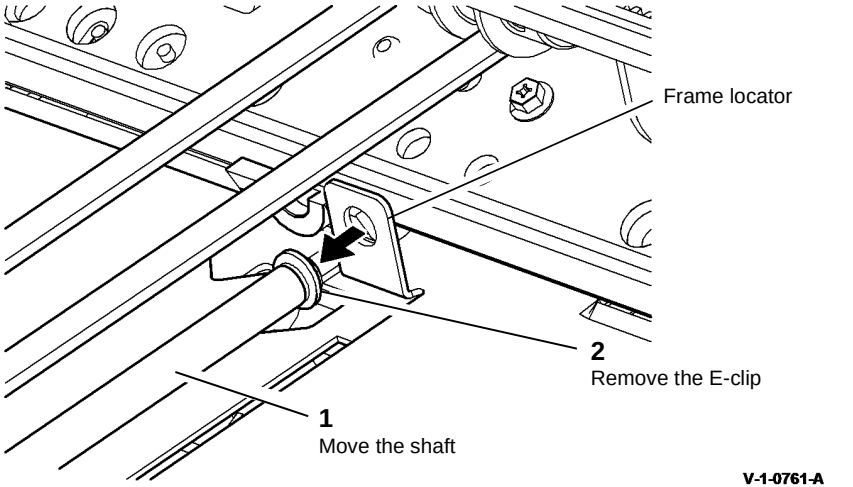


Figure 3 Preparation

10. Move the backstop assembly to the bottom of the BM assembly.

11. Remove the shaft from the BM backstop assembly, Figure 4.

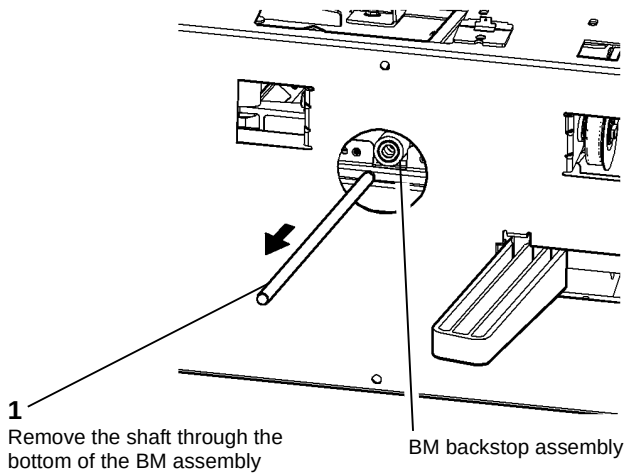


Figure 4 Remove the shaft

12. Remove the BM backstop assembly, Figure 5.

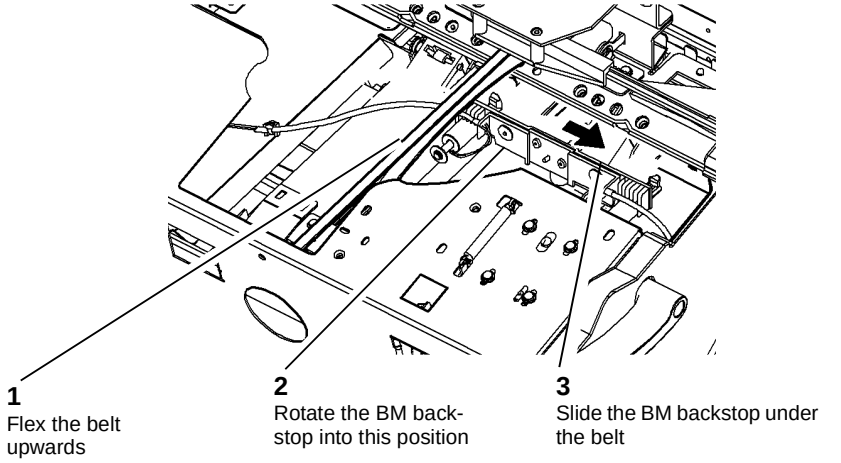


Figure 5 Remove the backstop assembly

Replacement

1. Reverse the removal procedure to replace the backstop assembly.
2. When installing the shaft ensure that the anti-play shoe has not moved out of position, Figure 6.

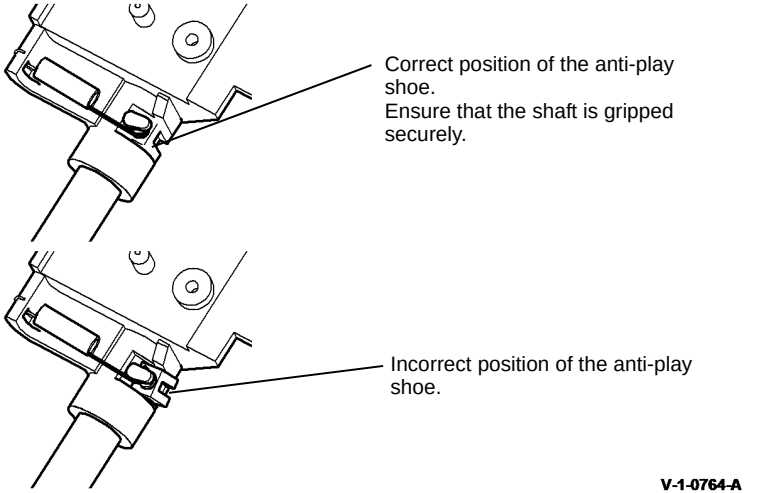


Figure 6 Location of the anti-play shoe

3. Ensure that all of the cable ties are installed and that the harnesses are in the correct position.
4. Check that all of the PJ connections on the BM PWB are connected.
5. Return the allen key to the storage position inside the drive belt tensioner spring, PL 11.163 Item 9.
6. Perform ADJ 11.9-171.

REP 11.22-171 BM Entry Roll

Parts List on PL 11.161

Purpose

This procedure is used to repair the following components:

- BM entry roll pulley, PL 11.161 Item 14.
- BM entry roll, PL 11.161 Item 15.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the BM Entry Roll, Figure 1.

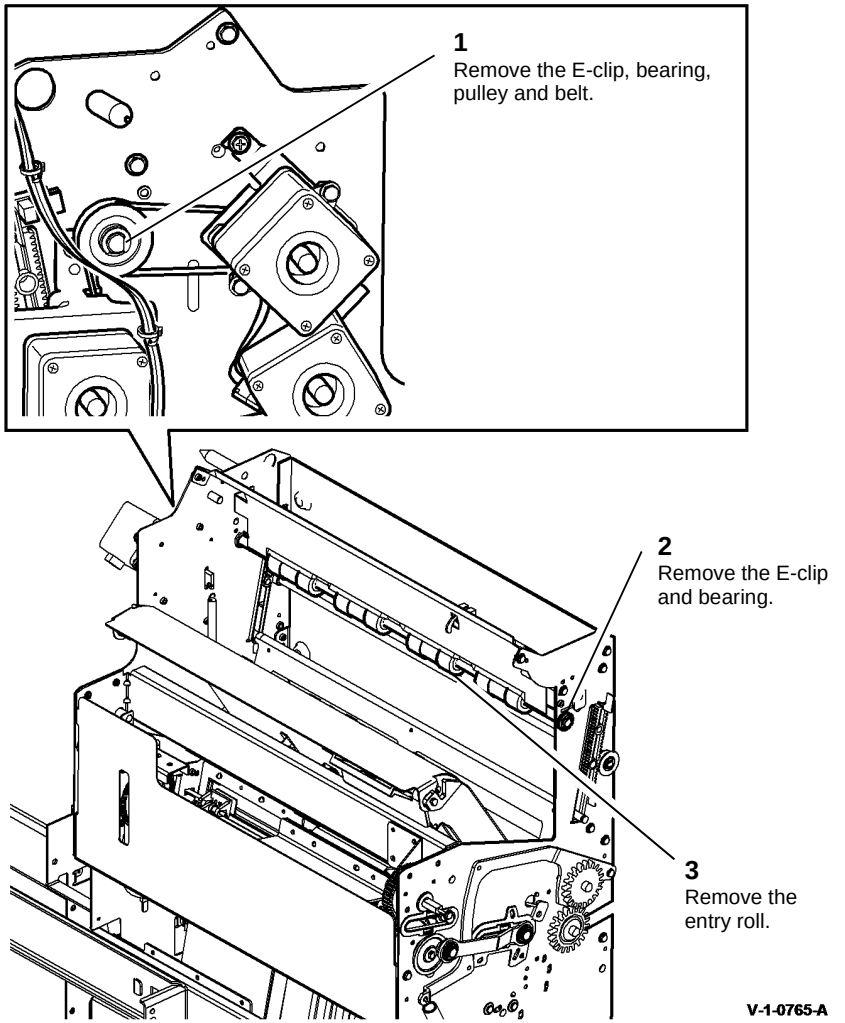


Figure 1 Roll removal

Replacement

Reverse the removal procedure to replace the BM entry roll.

NOTE: *Tension the drive belt by loosening then tightening the screw, ADJ 11.10-171.*

REP 11.23-171 BM Entry Sensor

Parts List on PL 11.161

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the BM entry sensor, Figure 1.

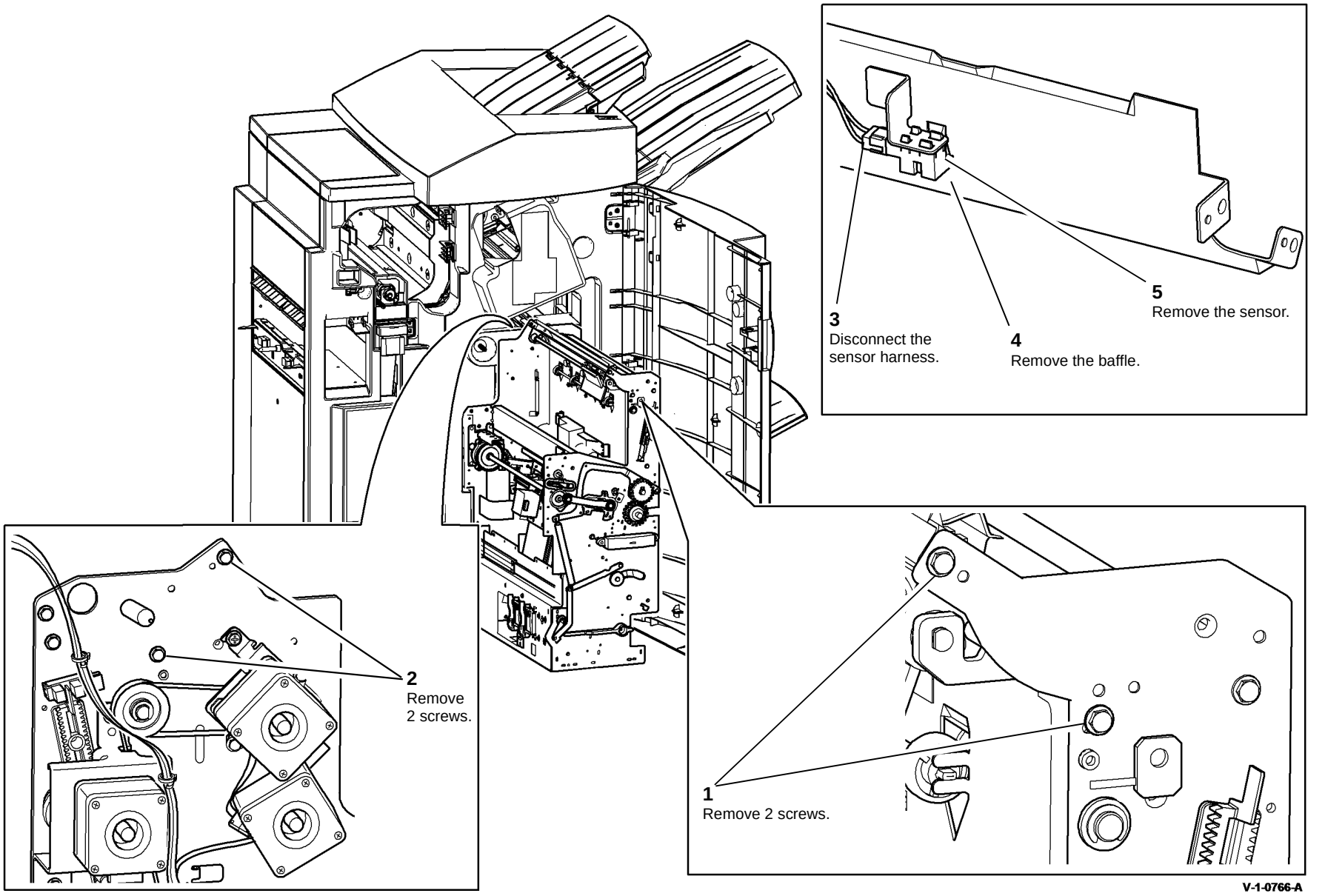


Figure 1 Sensor removal

Replacement

Reverse the removal procedure to replace the BM entry sensor.

REP 11.24-171 BM Crease Roll Gate Motor

Parts List on PL 11.166

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Figure 1, remove the motor assembly

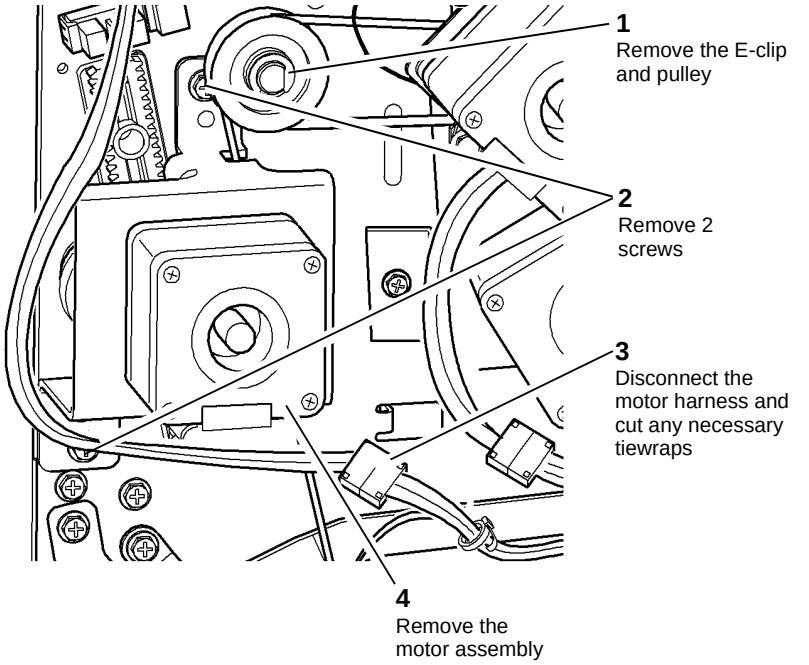


Figure 1 Motor assembly removal

3. Remove 3 nuts to release the motor from the bracket.

Replacement

Reverse the removal procedure to replace the BM crease roll gate motor.

REP 11.25-171 BM Compiler Motor and BM Flapper Motor

Parts List on PL 11.166

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Figure 1, remove the motor assembly.

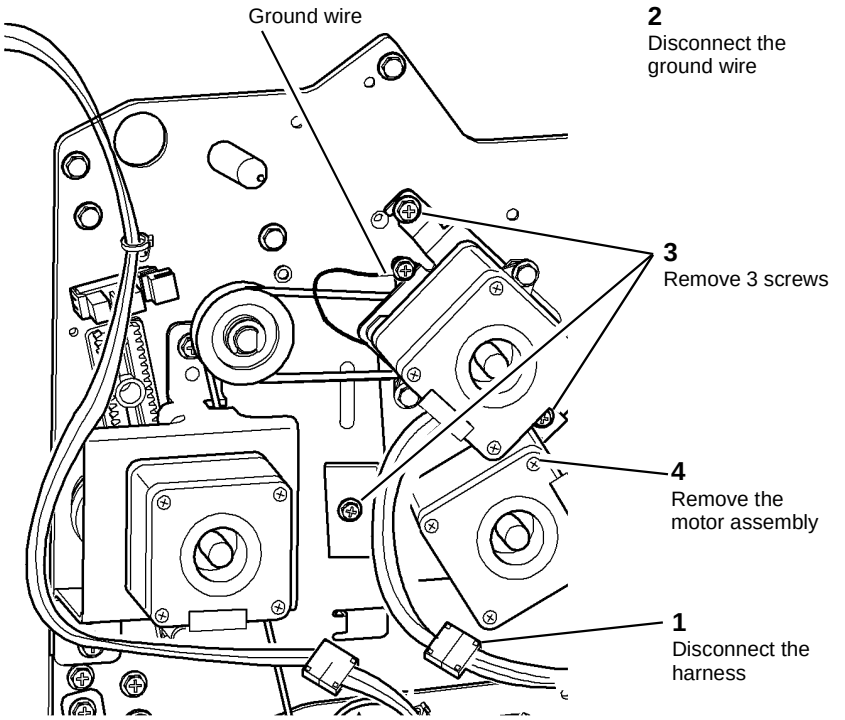


Figure 1 Motor assembly removal

3. Remove 2 screws to remove the relevant motor from the bracket.
4. Remove 2 screws to remove the motor from the damper.

Replacement

Reverse the removal procedure to replace the BM compiler motor or BM flapper motor.

REP 11.26-171 BM Back Stop Drive Assembly

Parts List on PL 11.163, PL 11.164

Purpose

This procedure is used to repair the following components:

- BM backstop link springs, PL 11.163 Item 15.
- BM backstop link, PL 11.163 Item 16.
- BM backstop drive shaft, PL 11.164 Item 14.
- BM backstop belt, PL 11.163 Item 7.
- BM back stop bearing, PL 11.163 Item 11.
- BM back stop idler bracket, PL 11.163 Item 12.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the LH frame plate, PL 11.162 Item 2.
6. Remove the BM tamper assembly, REP 11.30-171.
7. Remove the backstop motor assembly, REP 11.20-171.
8. Remove the backstop assembly, REP 11.21-171.
9. Remove the crease blade assembly, REP 11.36-171.
10. Figure 1, remove the BM backstop drive shaft and bearings.

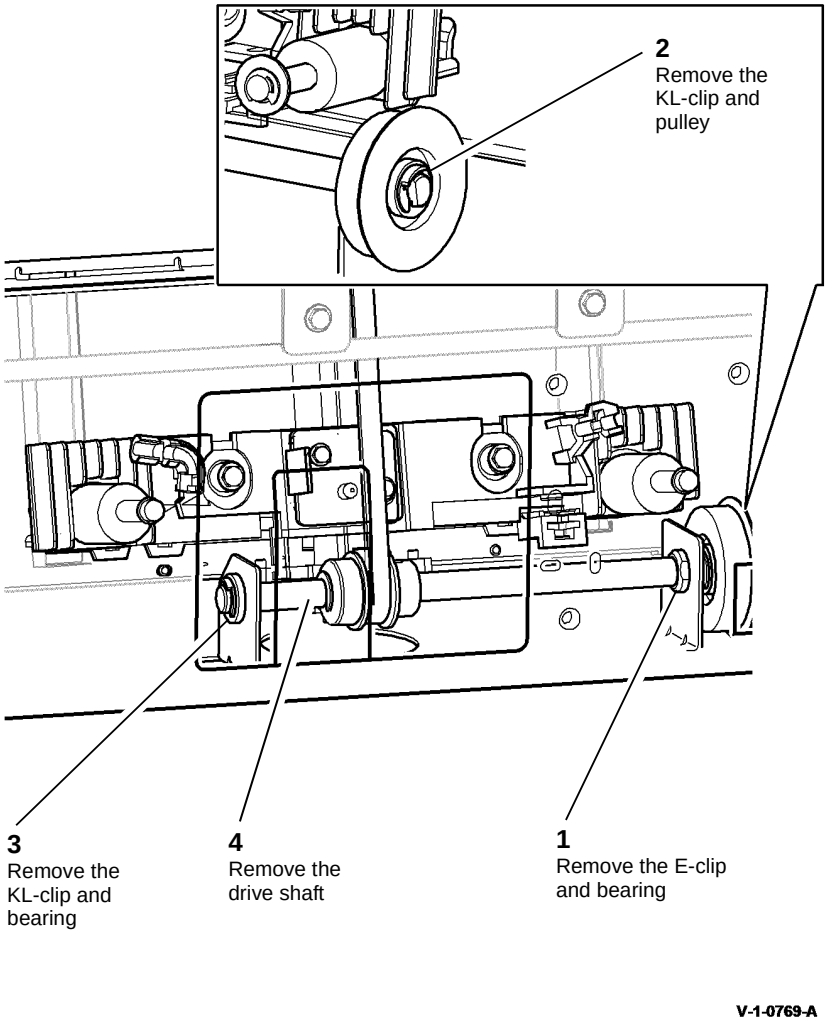


Figure 1 Drive shaft removal

11. Figure 2, remove the backstop link.

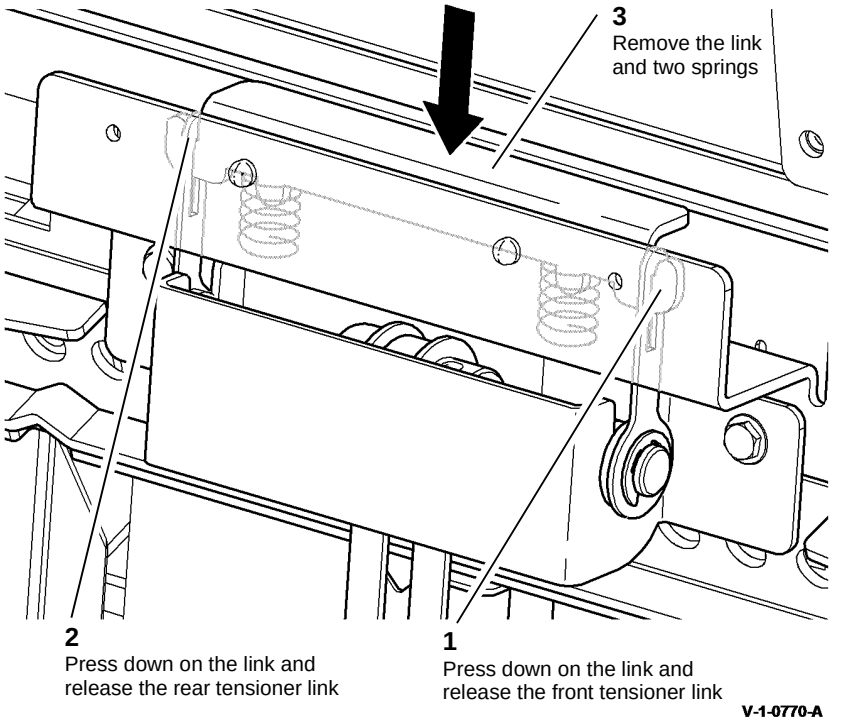


Figure 2 Backstop link removal

12. Figure 3, remove the BM backstop idler bracket assembly.

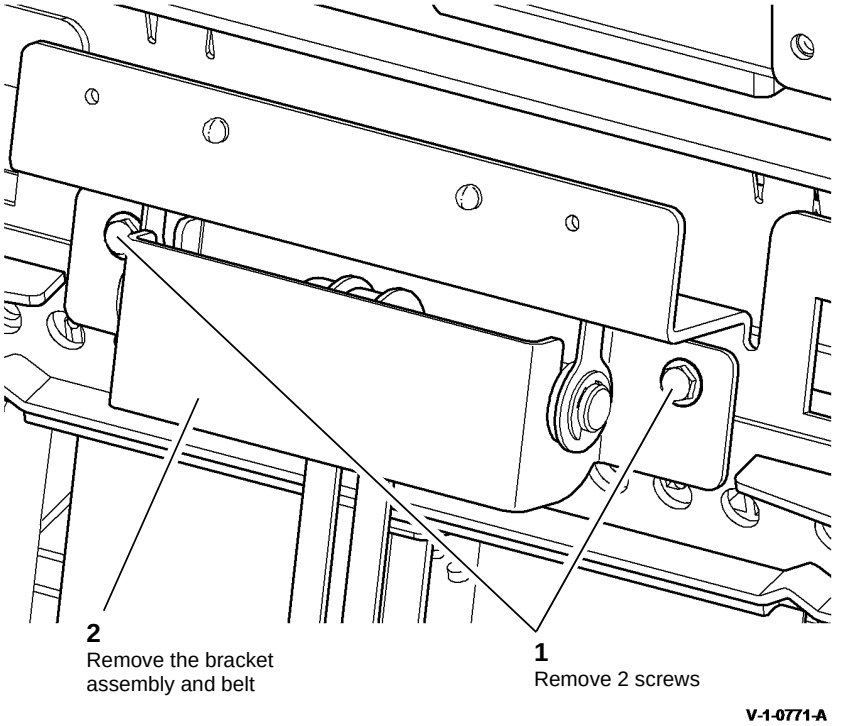


Figure 3 Idler bracket assembly removal

13. Figure 4, remove the BM backstop belt.

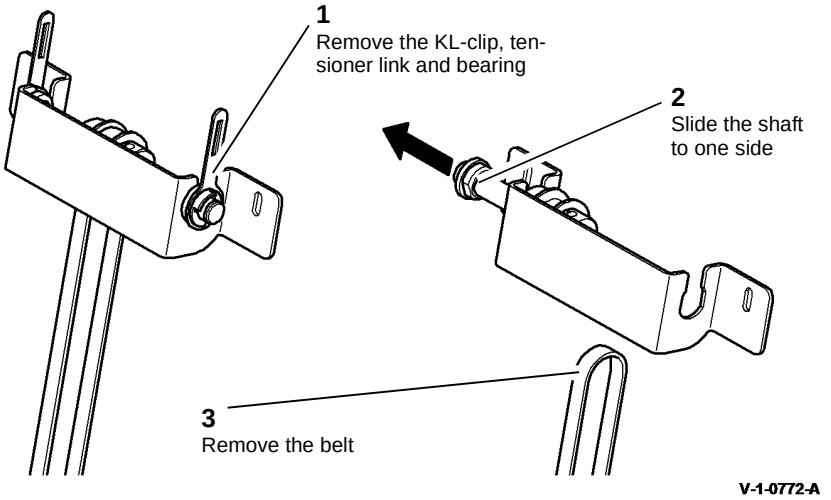


Figure 4 Backstop belt removal

Replacement

1. Reverse the removal procedure to replace the removed components.
2. Allow the BM backstop belt to be tensioned correctly before the bracket assembly securing screws are tightened. Refer to Figure 3.

REP 11.27-171 BM Staple Heads

Parts List on PL 11.168

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Fully pull out the BM module.
2. Remove the relevant staple head cover, PL 11.168 Item 14.
3. Pull the stapler bracket handle, PL 11.168 Item 9. Open the staplers fully.

NOTE: *If a 5.5 mm socket and short extension is not available or access to the staple head securing screws is difficult, remove the BM stapler bracket assembly, REP 11.28-171, then remove the relevant staple head.*

4. Figure 1, remove the relevant staple head.

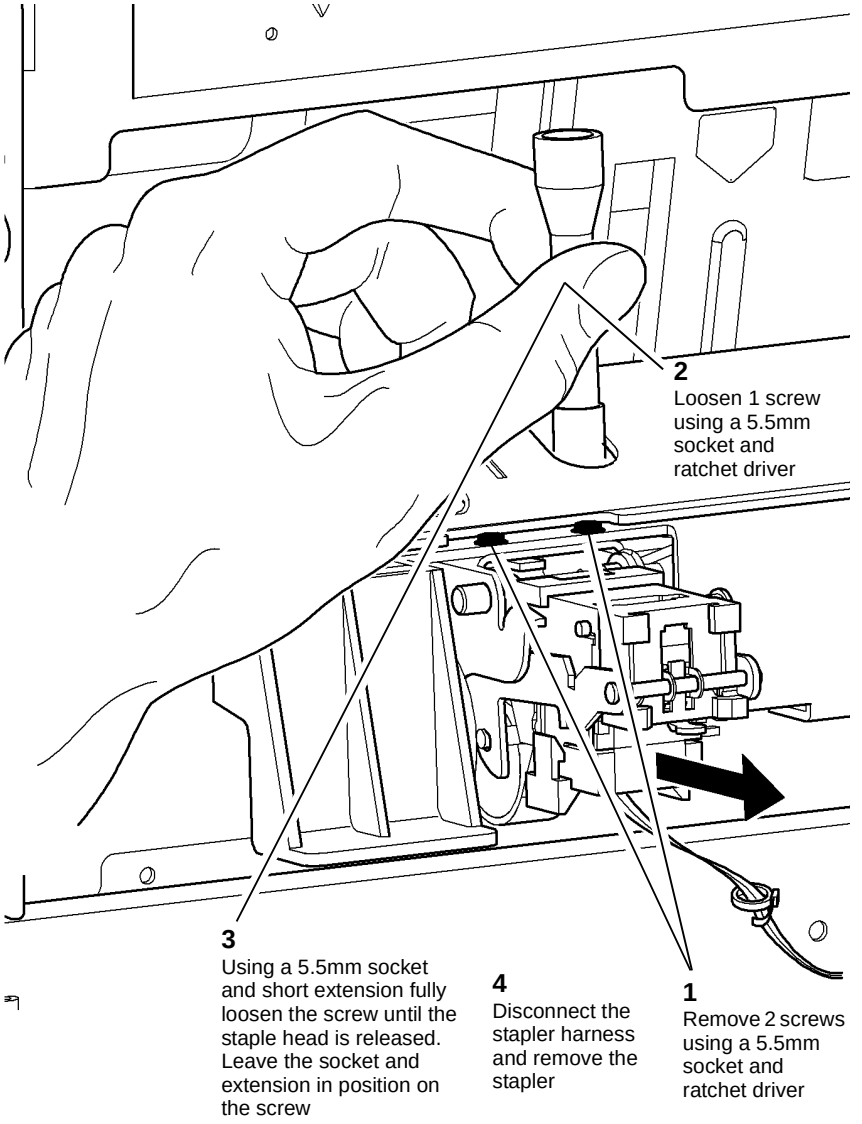


Figure 1 Staple head removal

Replacement

1. Reverse the removal procedure to replace the BM staple heads.
2. Perform ADJ 11.3-171 Stapler Anvil Alignment.

REP 11.28-171 BM Stapler Bracket Assembly

Parts List on PL 11.168

Purpose

This procedure is used to repair the following parts:

- Front follower, PL 11.168 Item 1.
- Actuator, PL 11.168 Item 2.
- Rear follower, PL 11.168 Item 3.
- Spring, PL 11.168 Item 4.
- BM paper present sensor Q11-190, PL 11.168 Item 5.
- Latch slide, PL 11.168 Item 6.
- Staple bracket handle, PL 11.168 Item 9.
- Stapler bracket assembly, PL 11.168 Item 10.
- Torsion spring, PL 11.168 Item 11.
- Bearing, PL 11.168 Item 12.
- Spring, PL 11.168 Item 13.
- BM stapler head carrier closed sensor Q11-421, PL 11.168 Item 18.
- Lower shaft, PL 11.168 Item 19.
- Upper shaft, PL 11.168 Item 20.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover, then the HVF rear cover, REP 11.1-171.
2. Remove 4 screws securing the BM PWB mounting plate to the frame, allow the PWB and mounting plate to hang down, giving access to the BM staple head carrier closed sensor.

3. Figure 1, remove the BM staple head carrier closed sensor actuator.

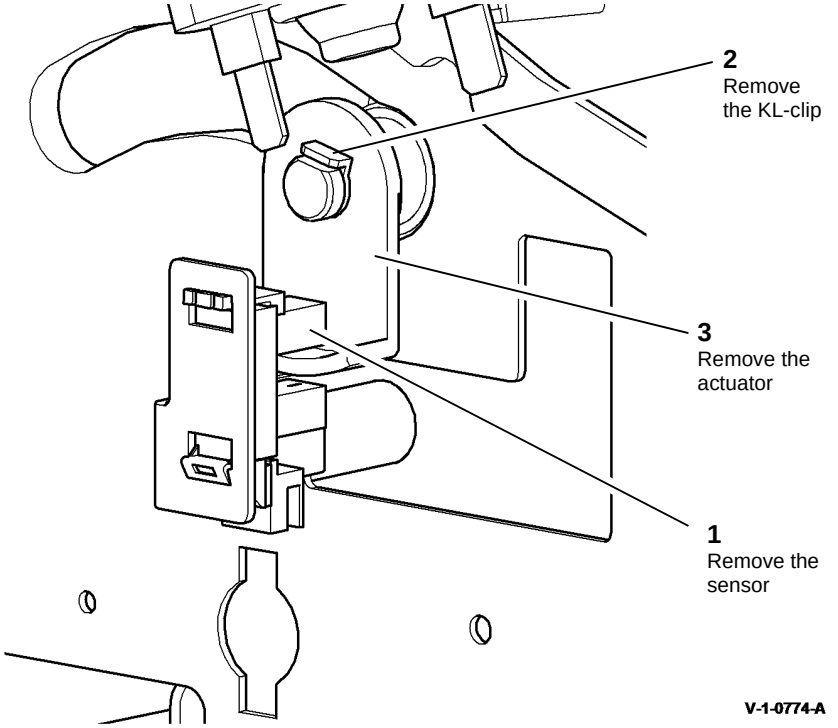


Figure 1 Actuator removal

10. Figure 2, lower the stapler bracket.

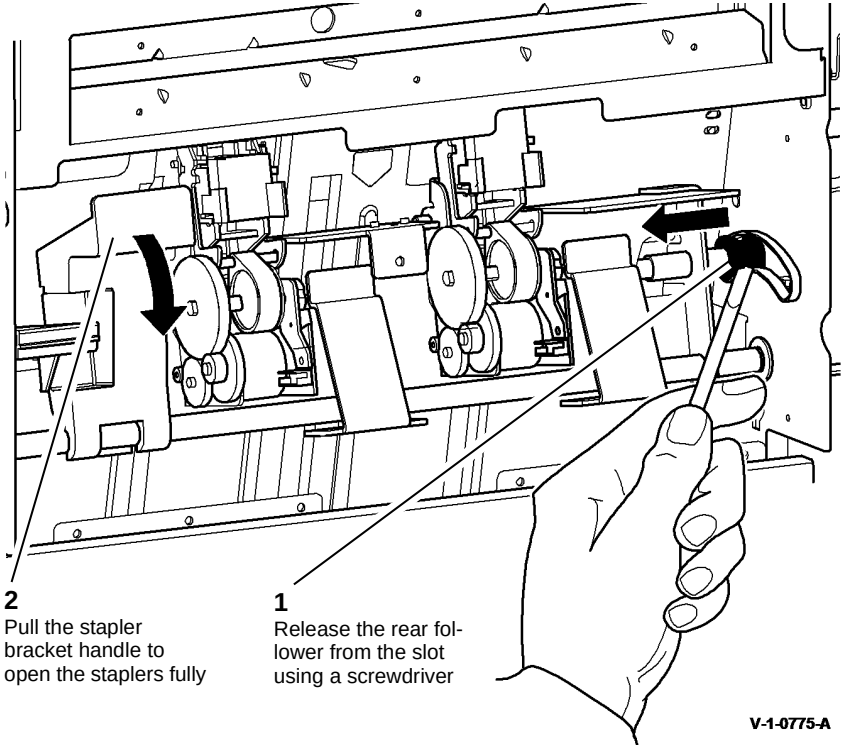


Figure 2 Lowering stapler bracket

4. Temporarily attach the PWB mounting plate using only the top two screws.
5. Open the HVF BM front door and fully pull out the BM module.
6. Remove the crease blade knob (6d), PL 11.161 Item 4.
7. Remove the crease roll handle (6c), PL 11.161 Item 5.
8. Remove the BM front cover, PL 11.161 Item 3.
9. Remove both staple head covers, PL 11.168 Item 14.

11. Figure 3, remove the latch shaft.

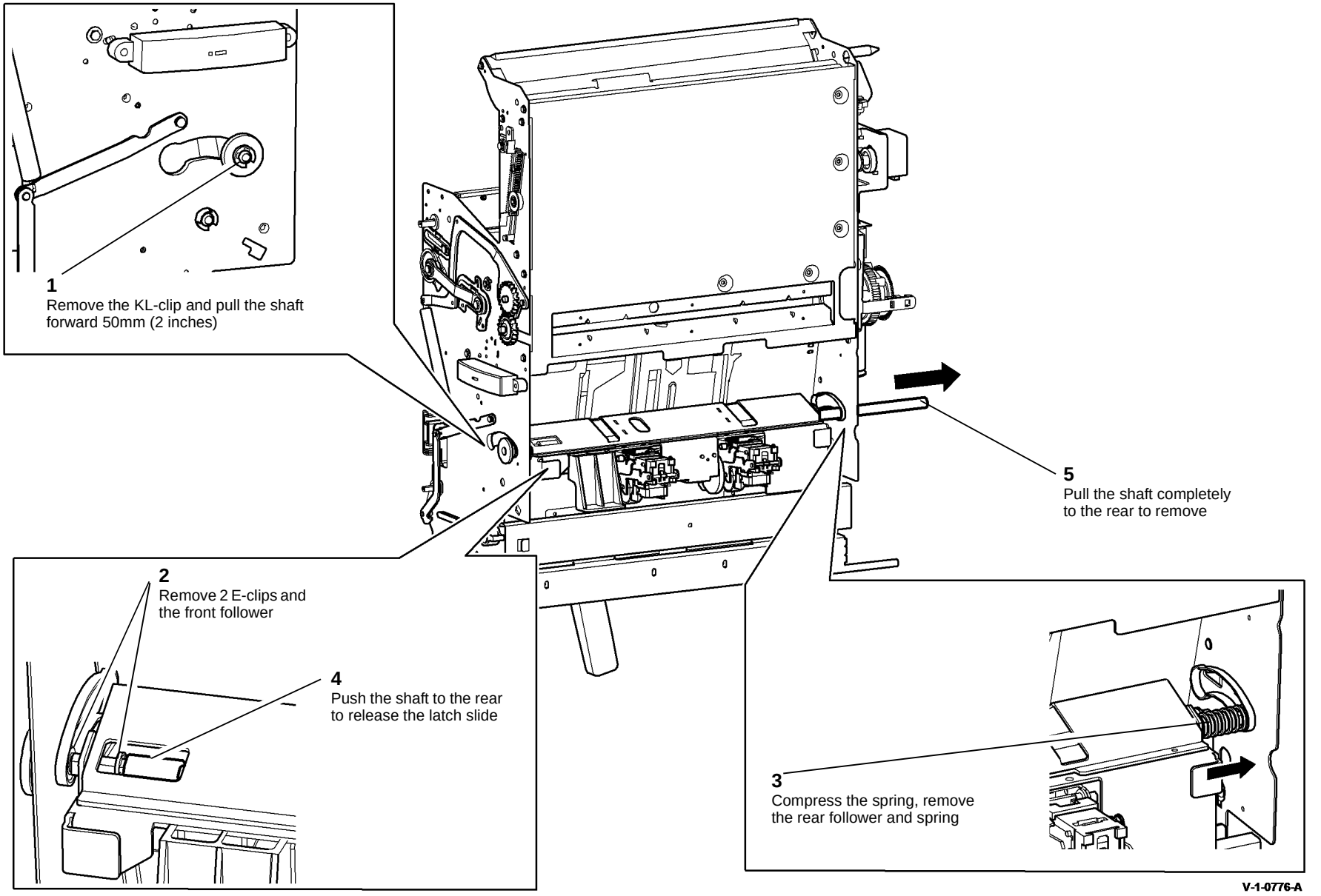


Figure 3 Latch shaft removal

12. Figure 4, prepare to remove the BM stapler bracket assembly.

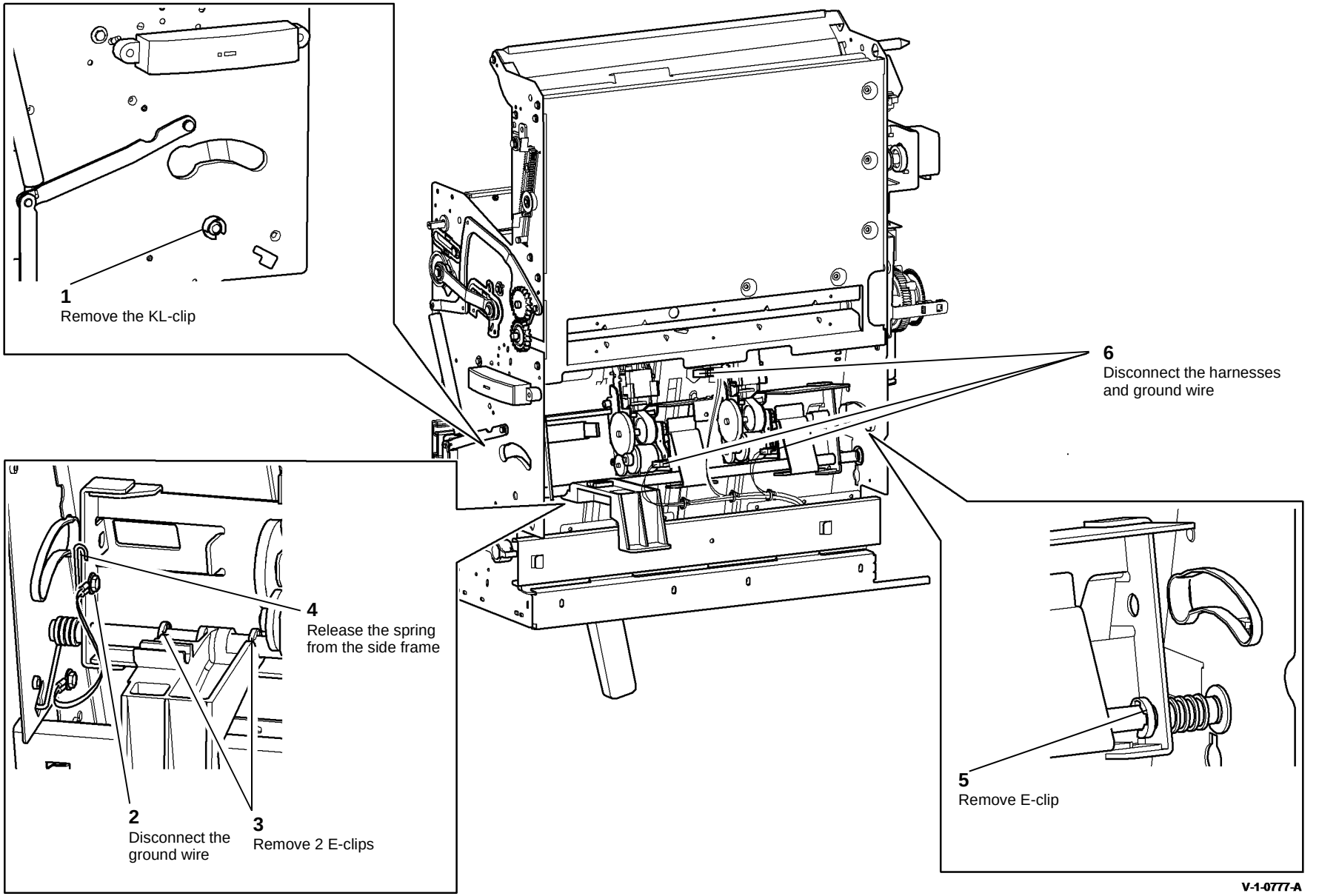


Figure 4 Preparation

13. Figure 5, remove the BM stapler bracket assembly.

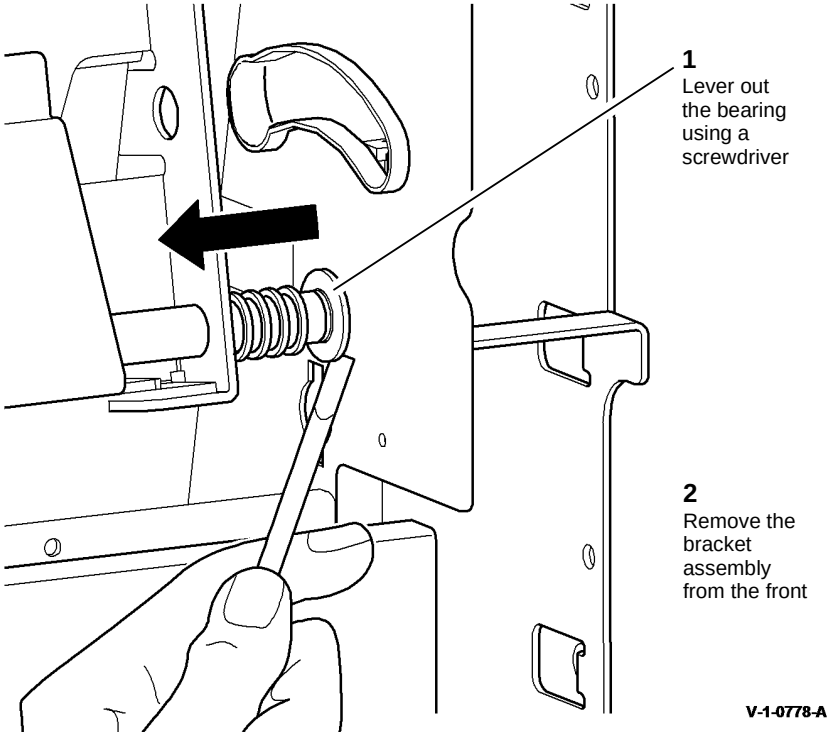


Figure 5 Assembly removal

Replacement

Reverse the removal procedure to replace the BM stapler bracket assembly and components.

REP 11.29-171 BM Conveyor Belts

Parts List on PL 11.169

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The removal procedure illustrates how to remove the rear conveyor belt. The procedure for the front conveyor belt is similar.*

1. Remove bin 2 by disconnecting the harness, removing the thumb screw then lifting the bin upwards to release.
2. Remove the BM bin 2 extension by aligning the pivot pins with the cutouts and snapping the extension out of engagement.
3. Turn over bin 2 and remove the base pan, 3 screws.
4. Remove the BM bin 2 connector from the base pan, 1 screw.

5. Figure 1, remove the idler roller.

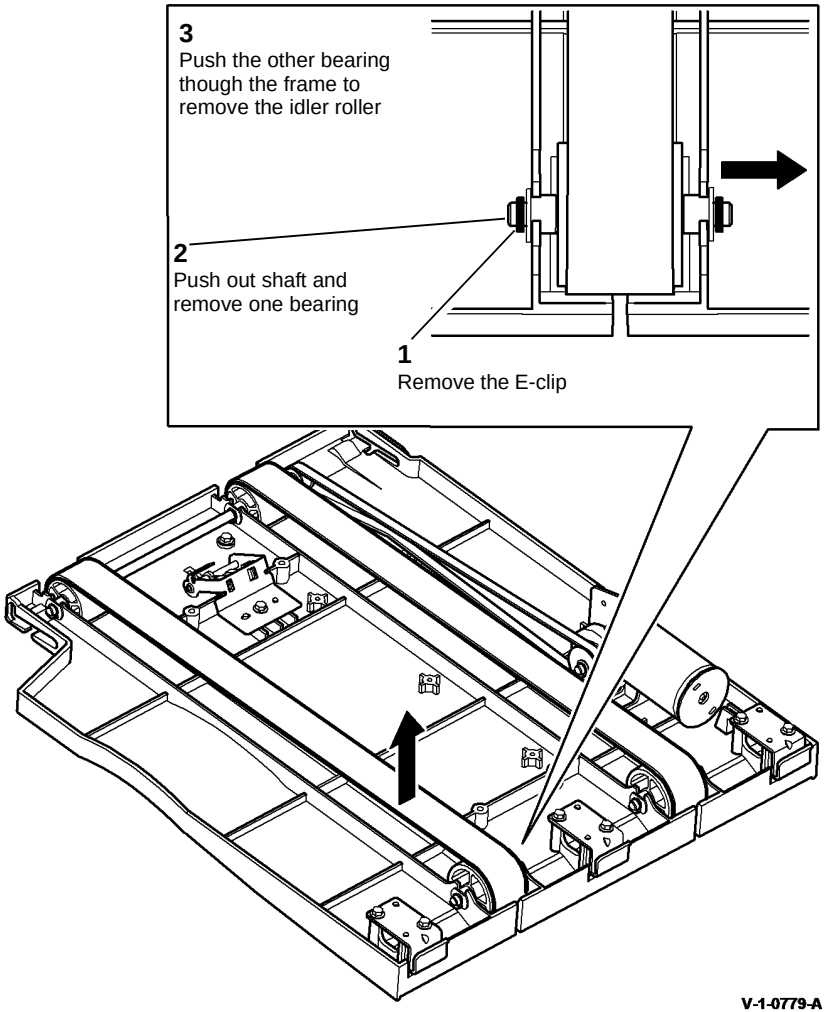


Figure 1 Idler roller removal

6. Figure 2, remove the BM conveyor belt.

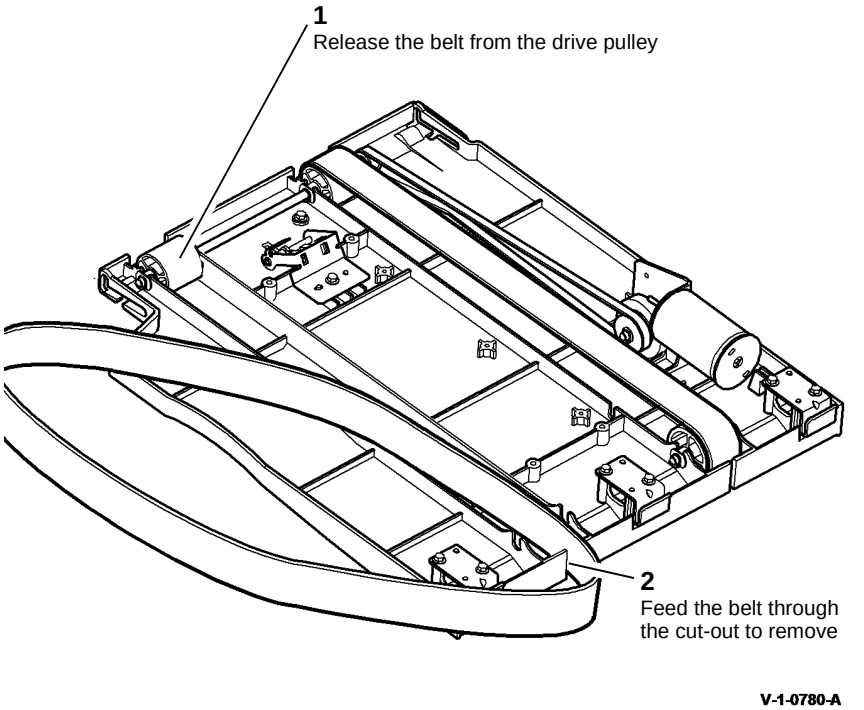


Figure 2 Belt removal

Replacement

Reverse the removal procedure to replace the BM conveyor belts.

REP 11.30-171 BM Tamper Assembly and Tamper 1 Motor

Parts List on PL 11.162

Purpose

This procedure is used to repair the following components:

- BM tamper 1 motor, PL 11.162 Item 3.
- BM rear tamper arm, PL 11.162 Item 5.
- BM front tamper arm, PL 11.162 Item 6.
- BM rear tamper rack, PL 11.162 Item 7.
- BM front tamper rack, PL 11.162 Item 8.
- BM rear tamper assembly, PL 11.162 Item 9.
- BM front tamper assembly, PL 11.162 Item 10.
- BM tamper gear,PL 11.162 Item 11.
- BM tamper bracket, PL 11.162 Item 12.
- BM tamper rack guide, PL 11.162 Item 13.
- BM tamper guide plate, PL 11.162 Item 15.
- BM rear tamper finger, PL 11.162 Item 16.
- BM front tamper finger, PL 11.162 Item 17.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the left frame plate, PL 11.163 Item 17.
6. Figure 1, remove the tamper assembly.

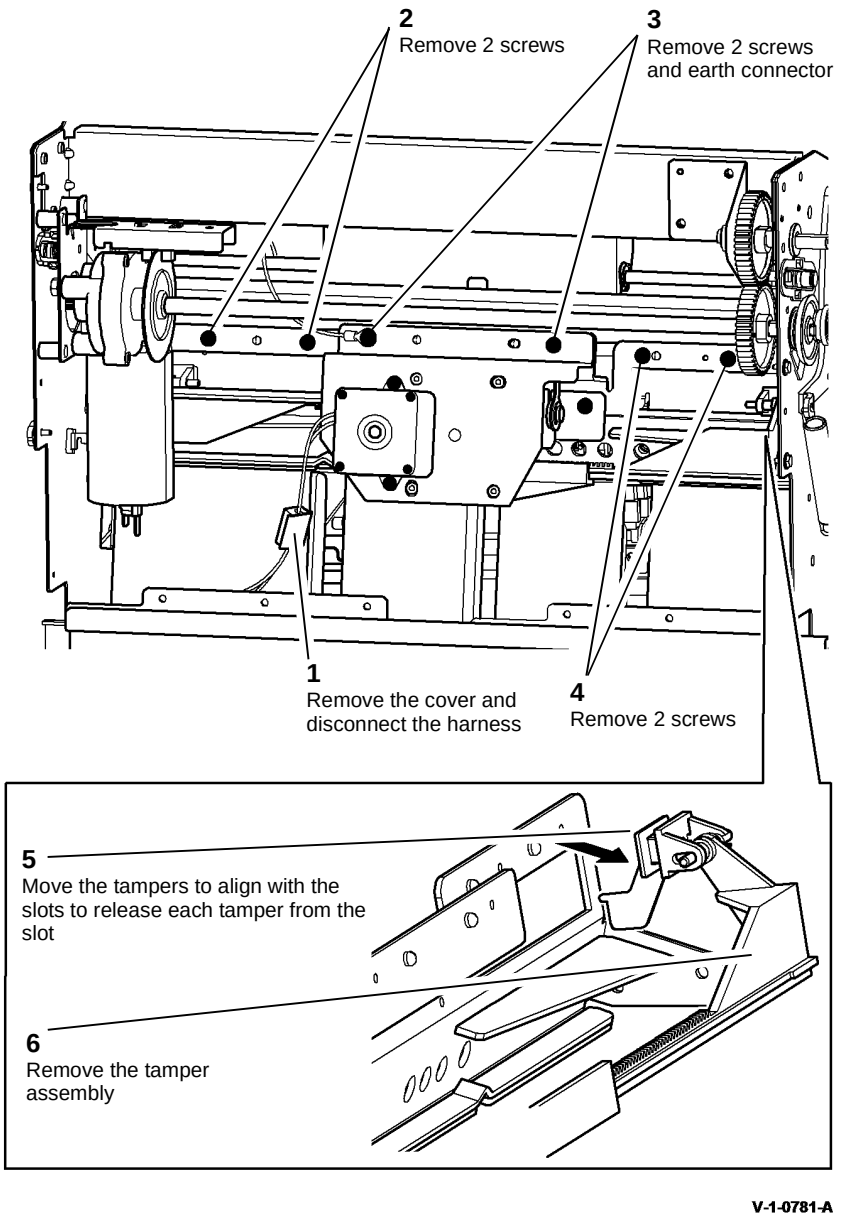


Figure 1 Tamper assembly removal

7. Figure 2, remove the front and rear tamper assemblies. Also remove the tamper gear and tamper motor.

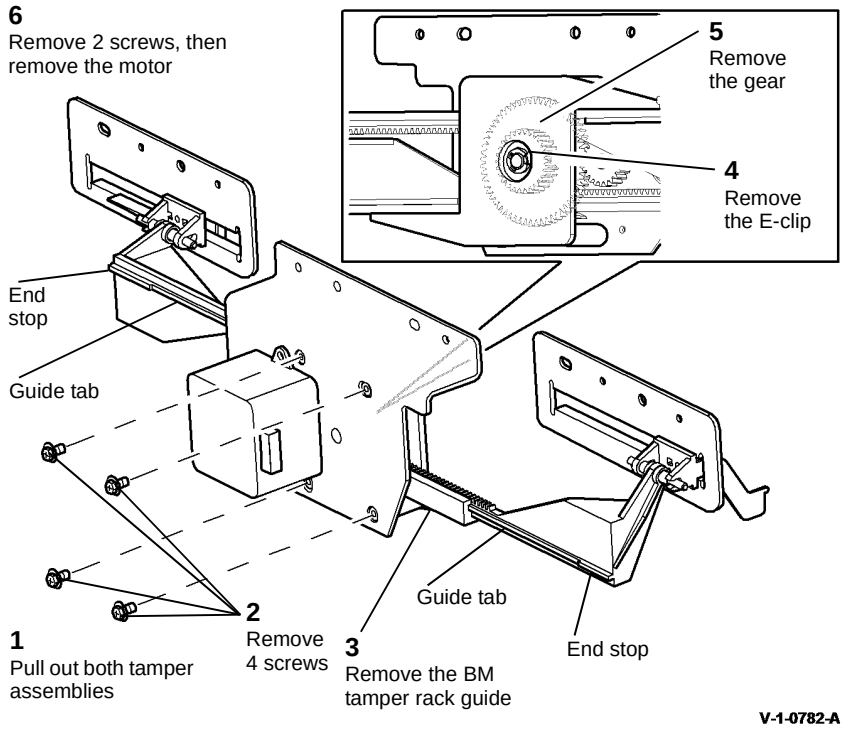


Figure 2 Dismantling the tamper assembly

8. Figure 3, remove the tamper guide plate from each of the tamper assemblies.

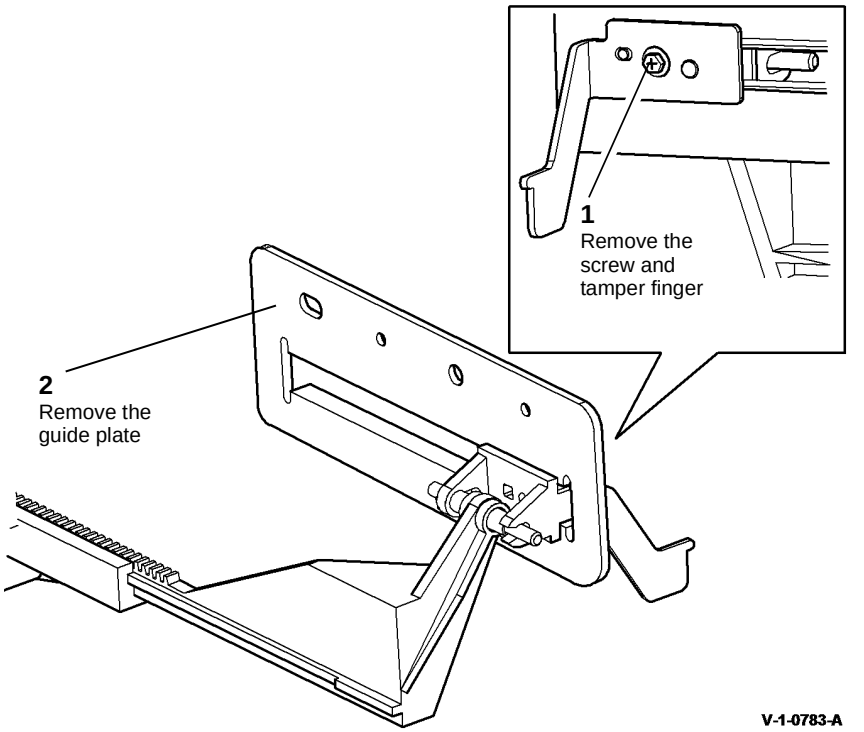


Figure 3 Guide plate removal

Replacement

1. If the tamper racks were removed from the BM tamper rack guide, perform the following:
   a. Align the guide tabs on both tamper racks with the slots in the BM tamper rack guide. Refer to Figure 2.
   b. Start both tamper racks into the BM tamper rack guide at the same time. Both tamper racks must engage with the BM tamper gear simultaneously. To check that the front and rear tampers are correctly aligned, perform the following:
      - Fully push in the tampers.
      - The distance between the end stop on each tamper and the ends of the BM tamper rack guide should be equal. Refer to Figure 2.
      - If the distances are different by more than 1mm (0.040 inches). Perform again step B.
2. Reverse the removal procedure to replace the BM tamper assembly and tamper 1 motor.
3. Perform ADJ 11.5-171 Booklet Tamping.

REP 11.31-171 HVF Buffer Guide Assembly

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, REP 11.1-171.
2. Remove the HVF top cover, REP 11.1-171.
3. Remove the HVF front cover, REP 11.1-171.
4. Remove the HVF rear cover, REP 11.1-171.
5. Figure 1. At the rear of the finisher, disconnect the two PJs.

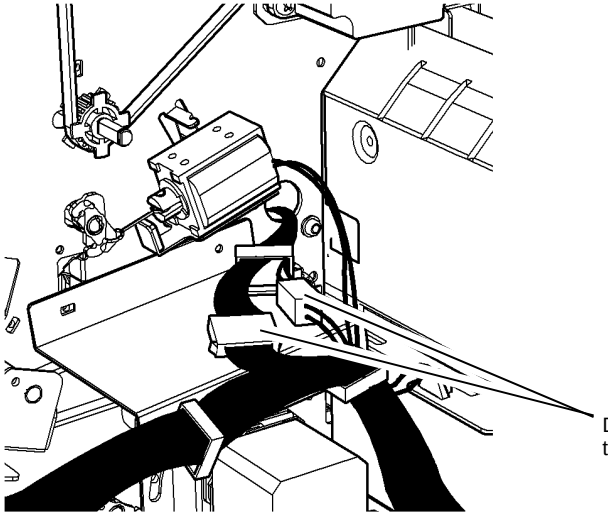


Figure 1 PJs disconnection

6. Figure 2. Remove the pivot screw.

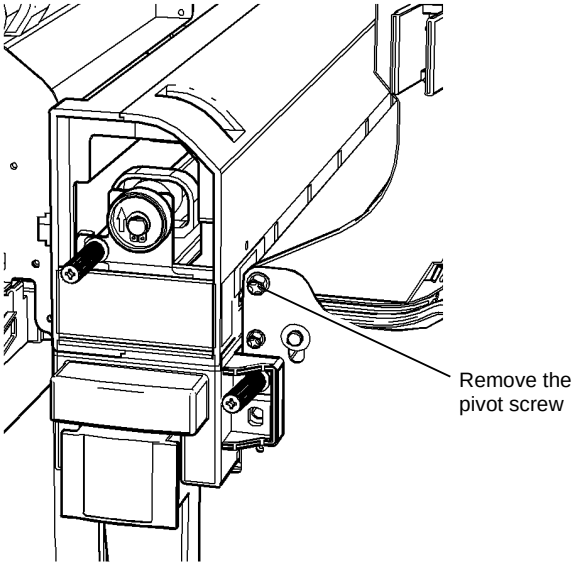


Figure 2 Pivot screw removal

7. Pass the PJs through the cut-out in the rear frame.
8. Withdraw the guide through the front opening.

Replacement

Position the spigot at the guide rear in the hole in the rear frame. The rest of the replacement procedure is the reverse of the removal procedure.

REP 11.32-171 HVF Input Jam Clearance Guide

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, REP 11.1-171.
2. Remove the HVF top cover, REP 11.1-171.
3. Remove the HVF front cover, REP 11.1-171.
4. Figure 1. Remove the pivot screw at the front of the input guide.

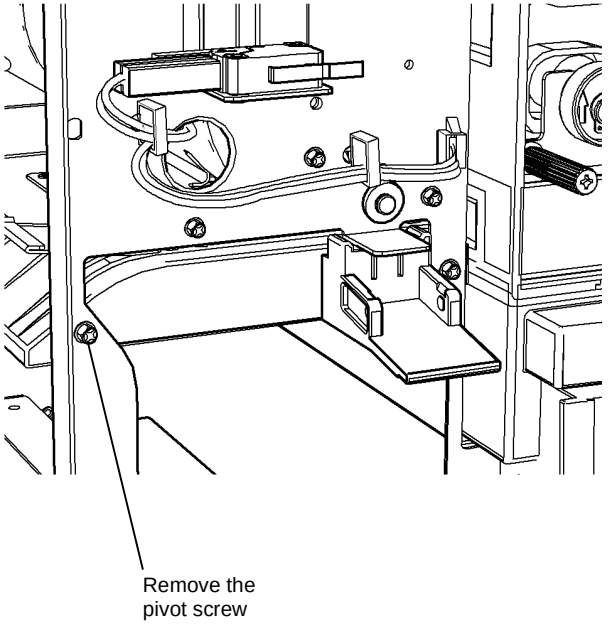


Figure 1 Pivot screw removal

5. Remove the guide through the front opening.

Replacement

Position the spigot at the guide rear in the hole in the rear frame. The rest of the replacement procedure is the reverse of the removal procedure.

REP 11.33-171 HVF Buffer Pocket Jam Clearance Guide Assembly

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, REP 11.1-171.
2. Remove the HVF top cover, REP 11.1-171.
3. Remove the HVF front cover, REP 11.1-171.
4. Remove the HVF rear cover, REP 11.1-171.
5. Remove the buffer pocket roll, REP 11.42-171.
6. Figure 1. At the rear of the HVF, prepare to remove the buffer pocket jam clearance guide.

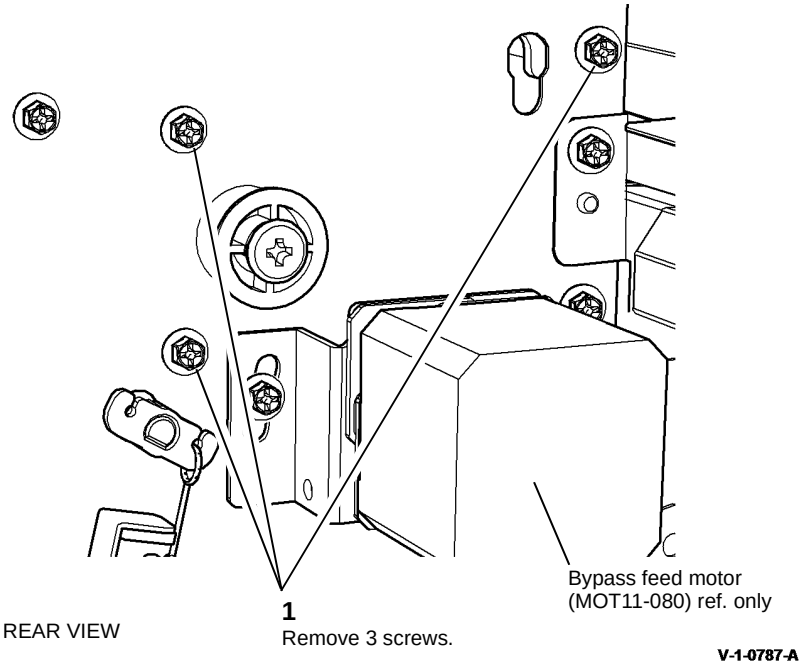


Figure 1 Rear screw removal

7. Figure 2. At the front of the HVF, remove the buffer pocket jam clearance guide.

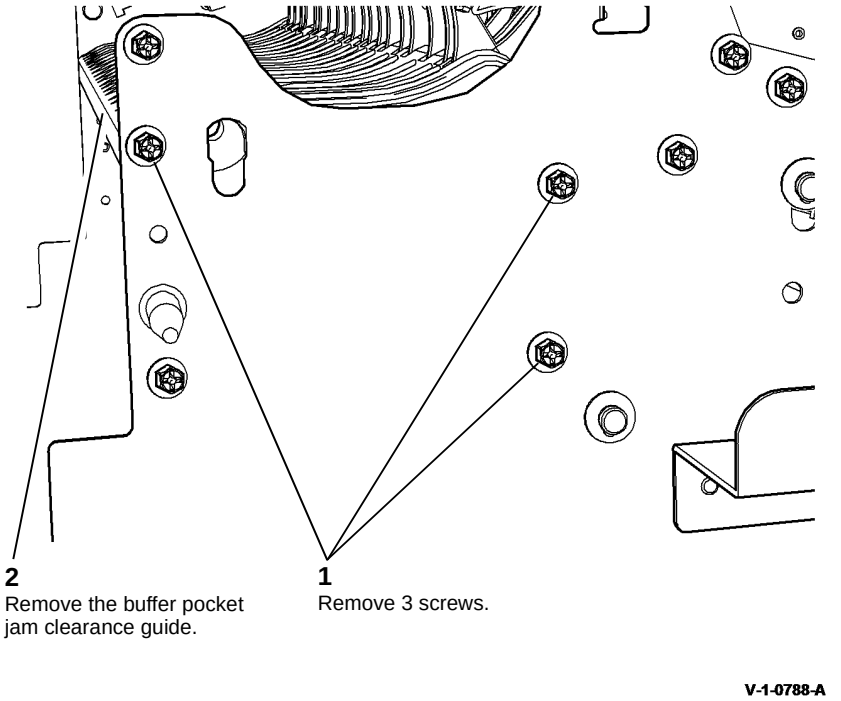


Figure 2 Guide removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.34-171 Inserter Jam Clearance Guide Assembly

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover and front cover, REP 11.1-171.
2. Figure 1. Remove the pivot screw from the front end of the inserter jam clearance guide.

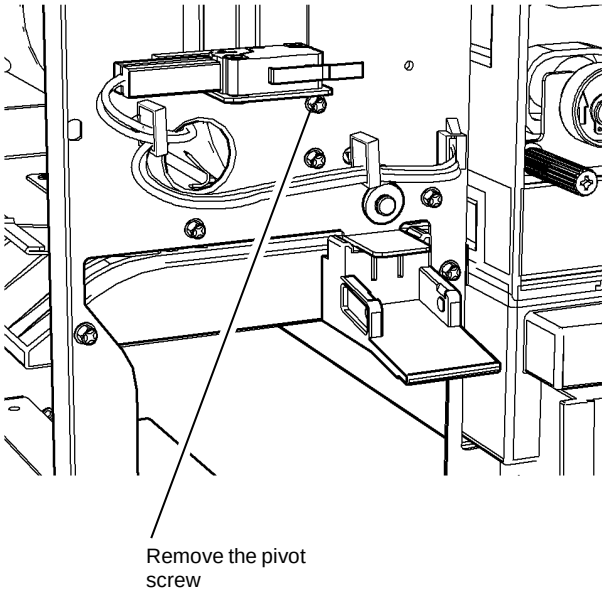


Figure 1 Pivot screw removal

3. Remove the guide through the front opening.

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.35-171 HVF Diverter Exit Gate

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Figure 1. At the rear of the HVF, remove the solenoid arm, the K-L clip and the bush from the diverter shaft.

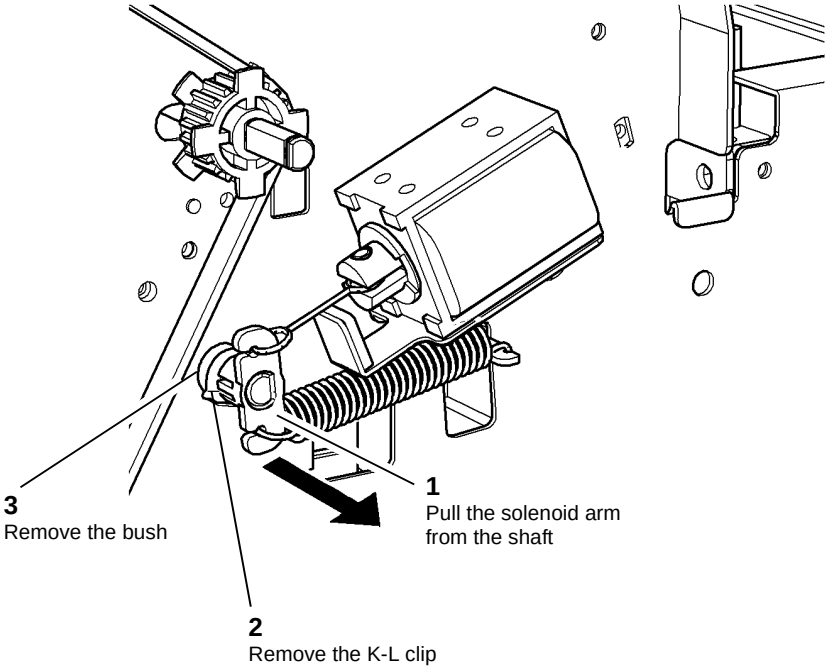


Figure 1 Removal preparation

3. Figure 2. Remove the diverter exit gate.

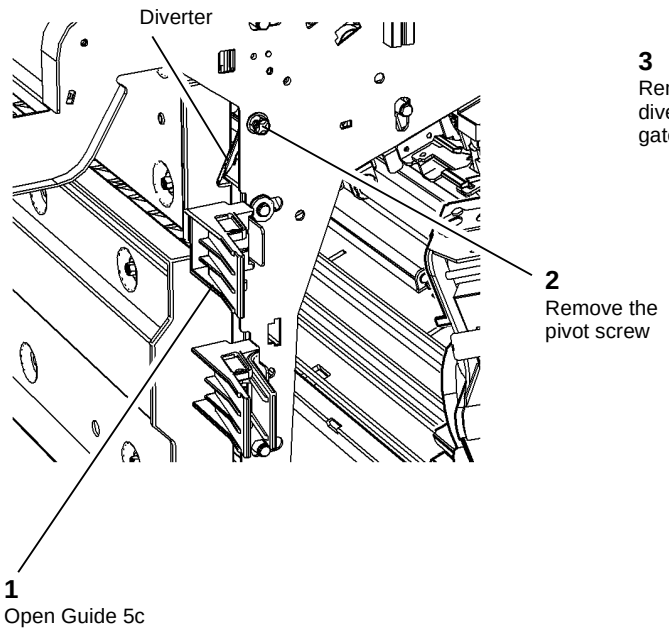


Figure 2 Diverter exit gate removal

Replacement

The replacement procedure is the reverse of the removal procedure.

CAUTION

After replacement, check the K-L clip is in the correct groove, and the bush cannot be pulled from the frame.

REP 11.36-171 BM Crease Blade Assembly

Parts List on PL 11.165

Purpose

This procedure is used to repair the following components:

- Connecting rod, PL 11.165 Item 9.
- Crease blade assembly, PL 11.165 Item 13.
- Crease blade support guide, PL 11.165 Item 14.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.

5. Figure 1, remove the crease blade.

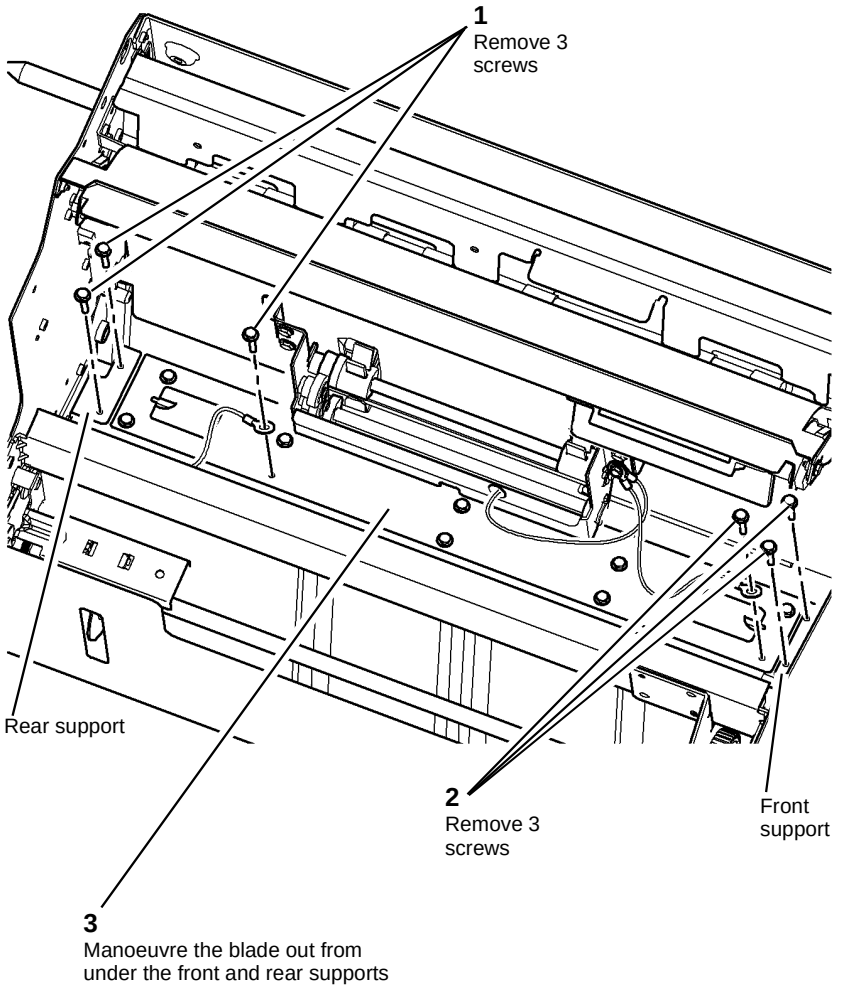


Figure 1 Crease blade removal

6. Figure 2, remove the front blade support.

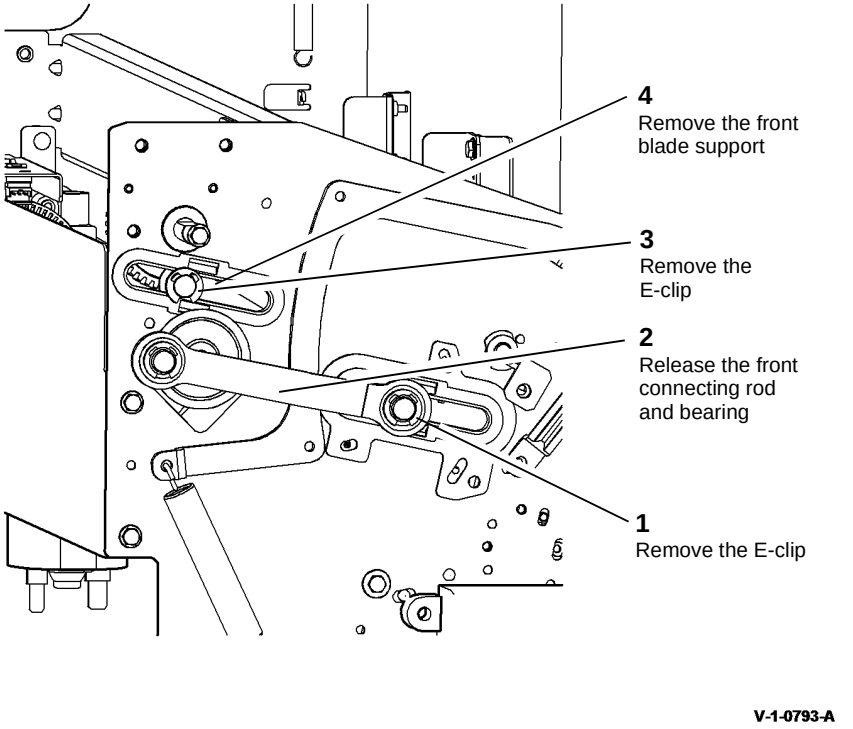


Figure 2 Front support removal

7. Figure 3, remove the rear blade support.

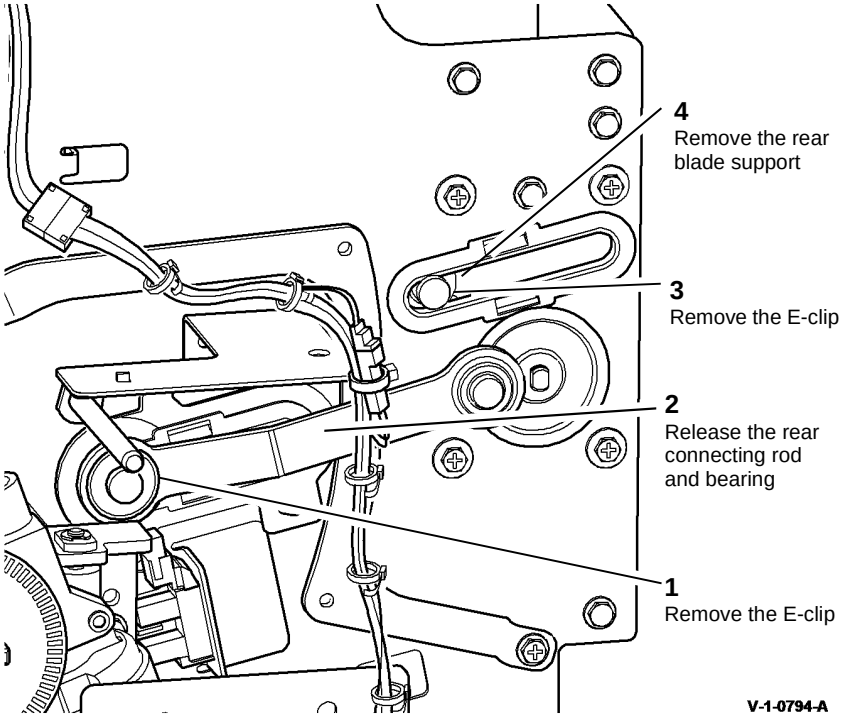


Figure 3 Rear support removal

CAUTION

Do not loosen the three red screws that surround the lower support guides

8. Figure 4, remove the support guides (4 places).

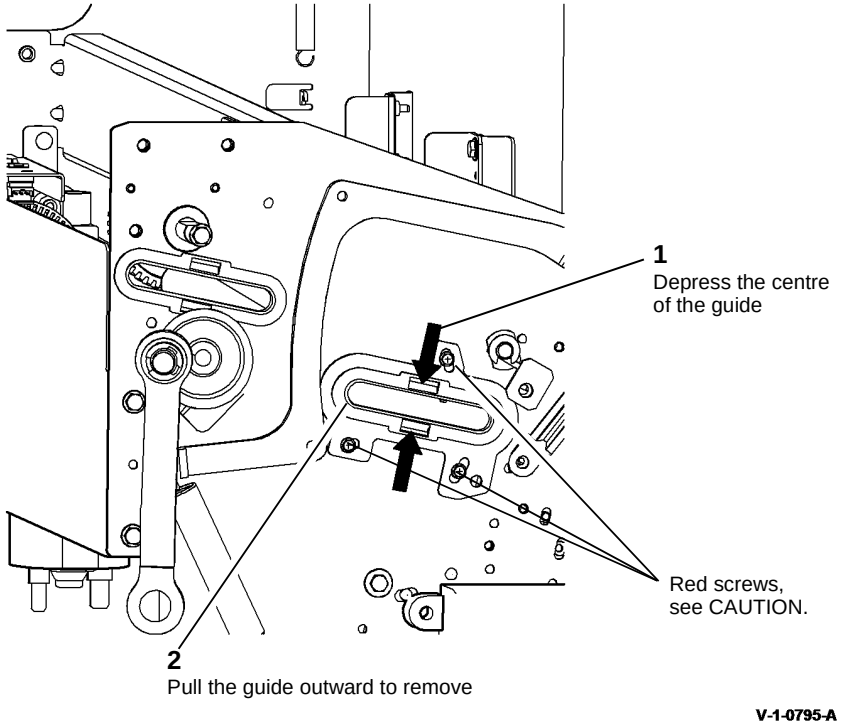


Figure 4 Support guide removal

Replacement

Reverse the removal procedure to replace the crease blade assembly.

REP 11.37-171 HVF Stacker Driving Shaft Bearings

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front and rear covers REP 11.1-171.
2. Remove the stacker motor and gear assembly REP 11.12-171.
3. Remove the shaft rear bearing, Figure 1.

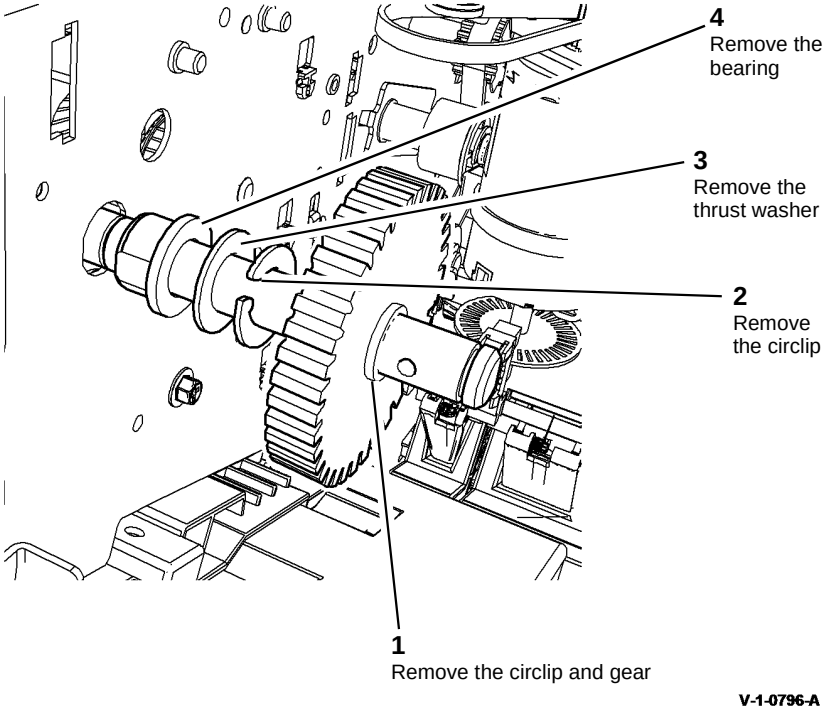


Figure 1 Stacker shaft rear bearing

4. Remove the stacker shaft front bearings, Figure 2.

NOTE: *The upper pulley pin may fall when the pulley is removed.*

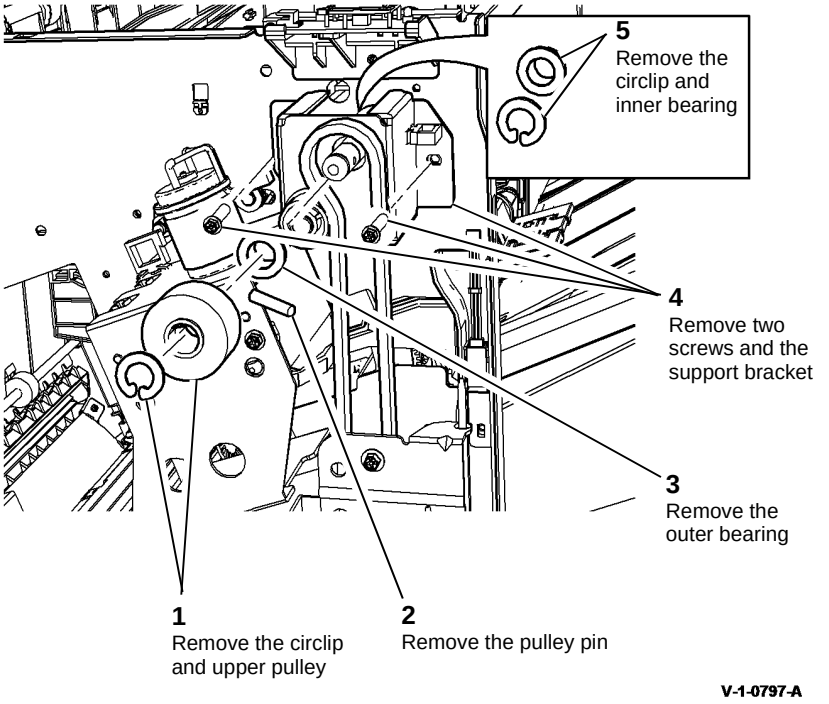


Figure 2 Stacker shaft front bearings

Replacement

Reverse the removal procedures to reinstall the stacker driving shaft front and rear bearings.

NOTE: *Make sure that the 'flats' on the bearing align with the cut-outs in the bracket or frame.*

REP 11.38-171 HVF Stacker Bin 1 Main Drive Belts

Parts List on PL 11.135

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The removal and replacement procedure for the front and rear stacker driving belts is the same. Support the Bin 1 lift bar if removing the front and rear belts at the same time*

1. Remove the HVF front or HVF rear cover to access the front or rear driving belt, REP 11.1-171.
2. Remove the stacker bin 1 tray, REP 11.4-171.
3. Remove the driving belt from the upper pulley and idler, Figure 1.

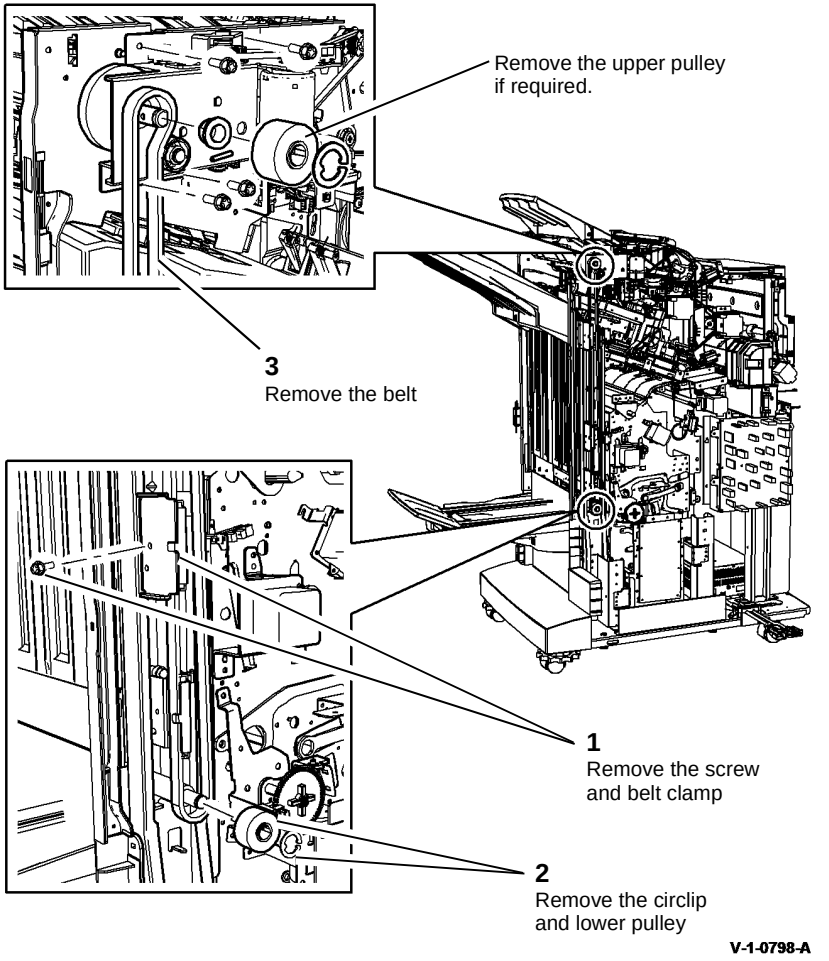


Figure 1 Main drive belt removal

Replacement

Reverse the removal procedures to reinstall the front and rear stacker driving belts.

NOTE: *Check that the bin 1 lift bar is level before fitting the belt clamp.*

REP 11.39-171 HVF BM Diverter Gate

Parts List on PL 11.153

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Remove the rear components, Figure 1.

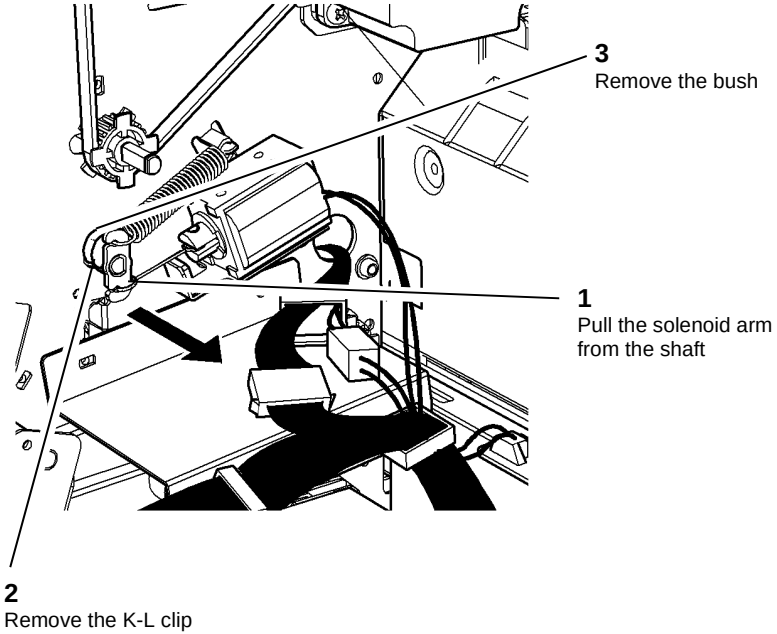


Figure 1 Rear components removal

3. Figure 2. Remove the BM diverter gate.

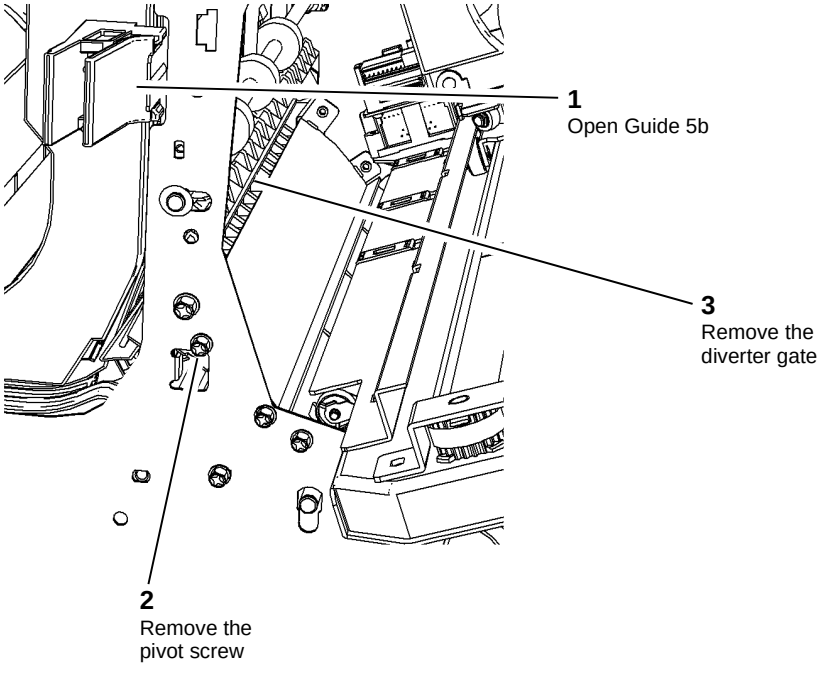


Figure 2 Diverter gate removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.40-171 HVF Input Roll

Parts List on PL 11.155

Removal

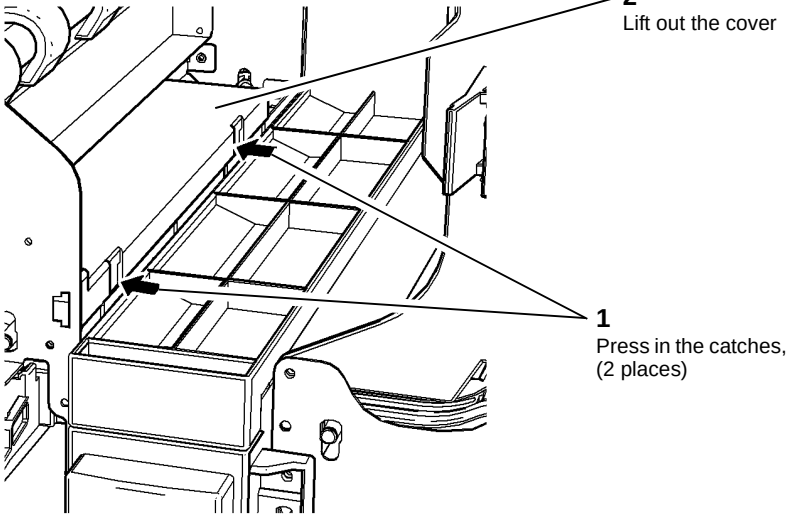
WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

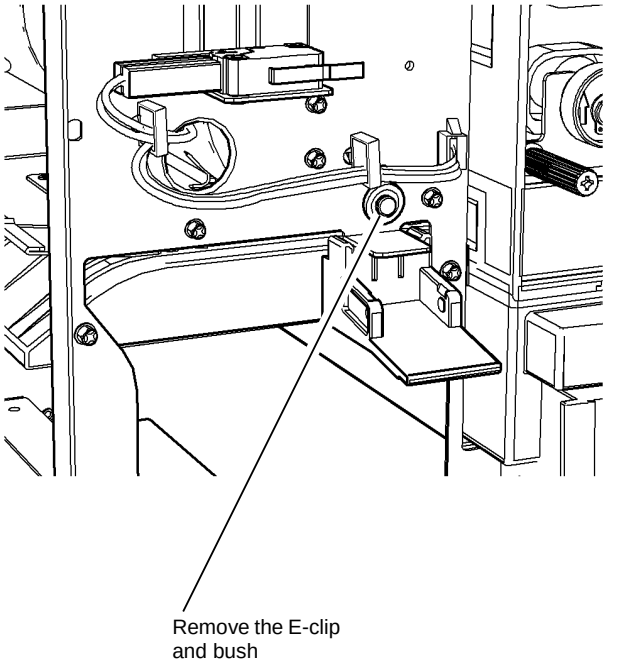
1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Figure 1. Remove the black plastic cover.



V-1-0801-A

Figure 1 Cover removal

3. Figure 2. At the front of the HVF, remove the E-clip and bush.



V-1-0802-A

Figure 2 E-clip and bush removal

4. Figure 3. At the rear of the HVF, remove the input roll.

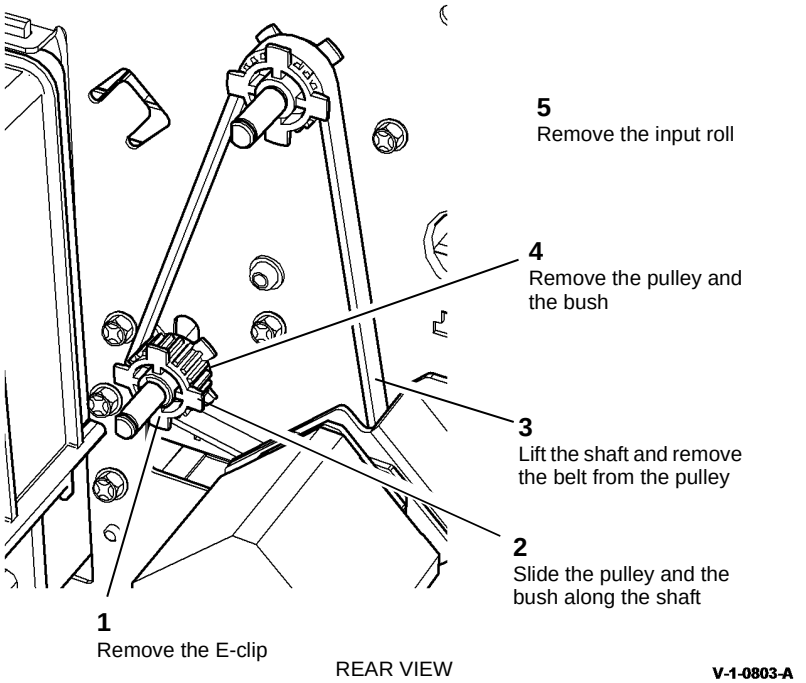


Figure 3 Input roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.41-171 HVF Inserter Guide Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Open guide 8a.
3. Figure 1. At the front of the HVF, remove the E-clip and the bush.

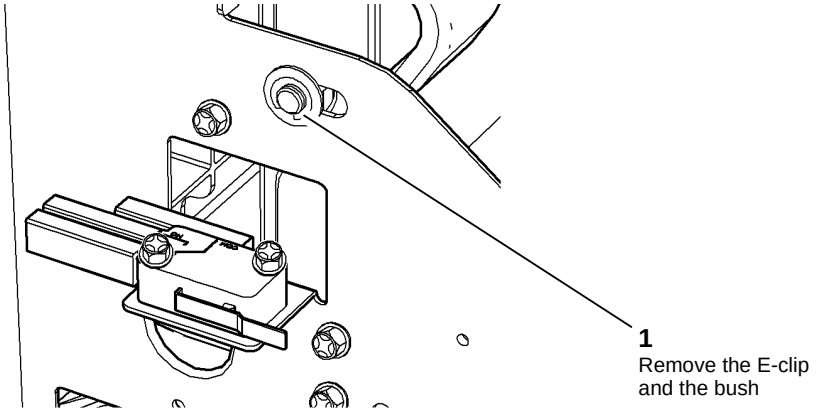


Figure 1 E-clip and bush removal

4. Figure 2. At the rear of the HVF, remove the inserter guide roll.

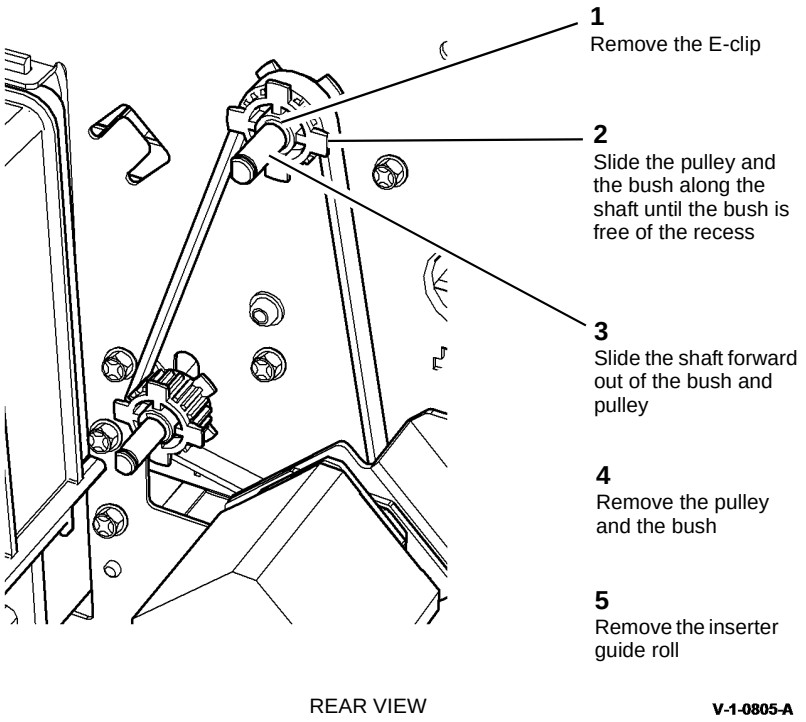


Figure 2 Inserter guide roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.42-171 HVF Buffer Pocket Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Remove the punch unit, or the punch unit guide, as appropriate.
3. Figure 1. At the front of the HVF, remove the E-clip and bush.

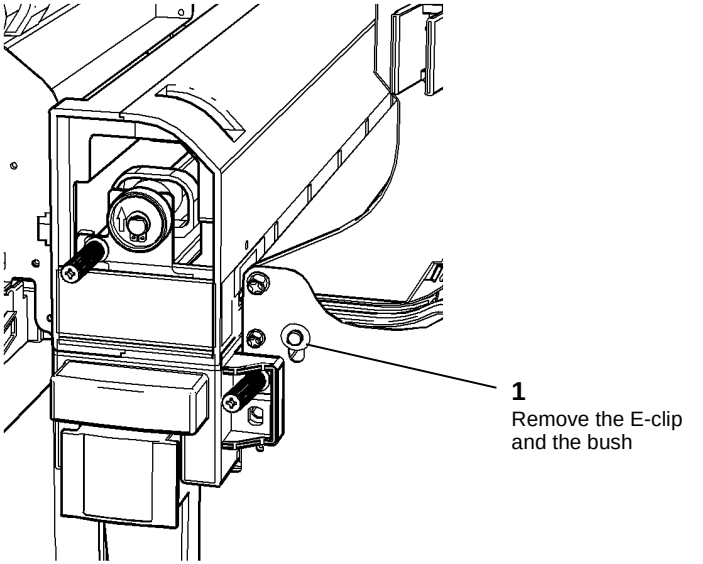


Figure 1 E-clip and bush removal

4. At the rear of the HVF, remove the buffer pocket roll. The bracket can be moved if necessary, to improve access, (two screws), Figure 2.

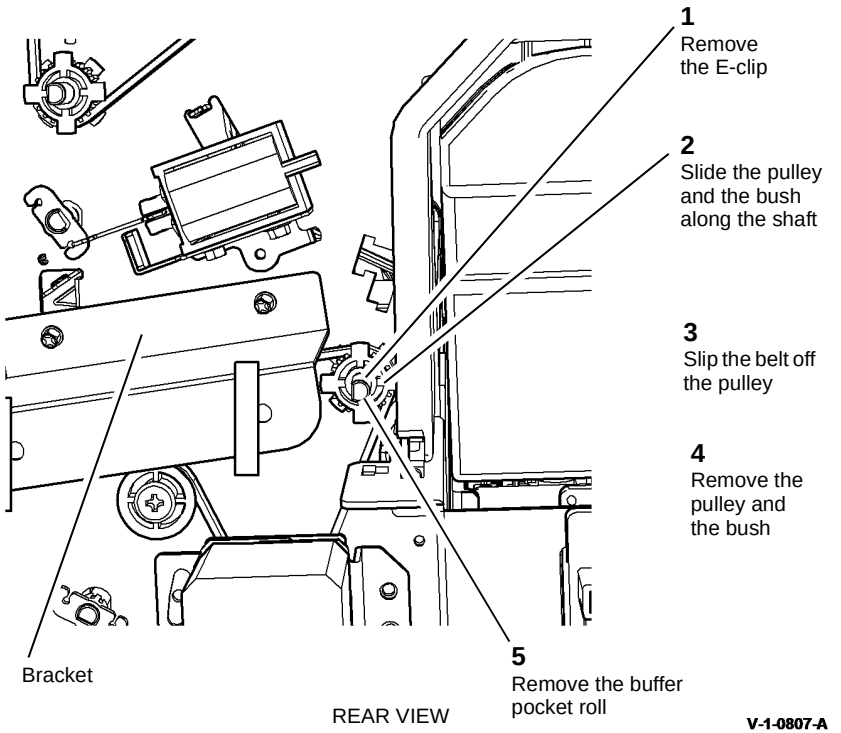


Figure 2 Buffer pocket roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.43-171 HVF Booklet Entrance Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover front cover and rear cover, REP 11.1-171.
2. Figure 1. Remove the E-clip and bush at the outboard end of the roll.

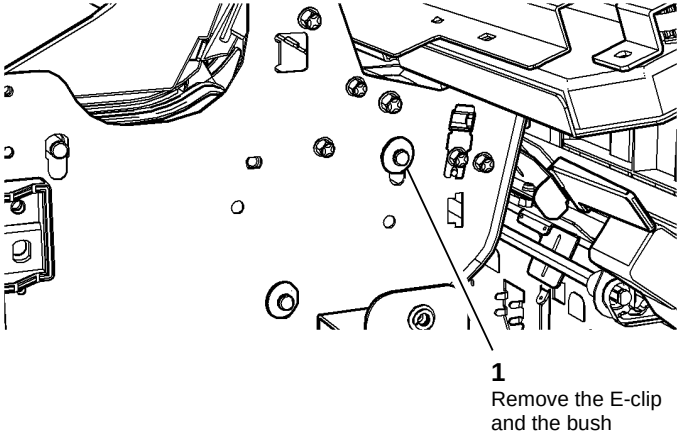


Figure 1 E-clip and bush removal

3. Figure 2. At the rear of the HVF, remove the booklet entrance roll.

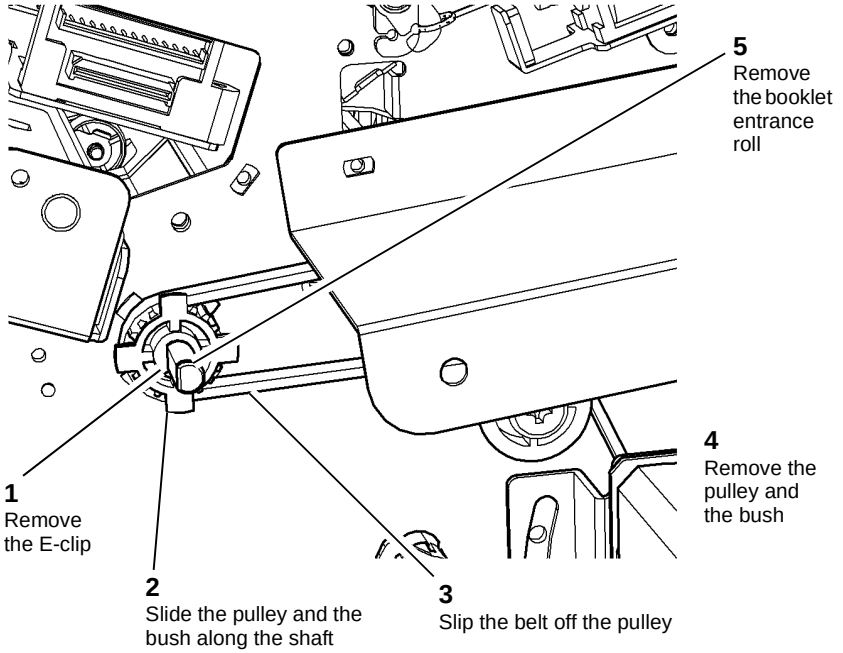


Figure 2 Booklet entrance roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.44-171 HVF Buffer Lower Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Open jam clearance guide 5b.
3. Figure 1. Remove the E-clip and the bush from the outboard end of the roll.

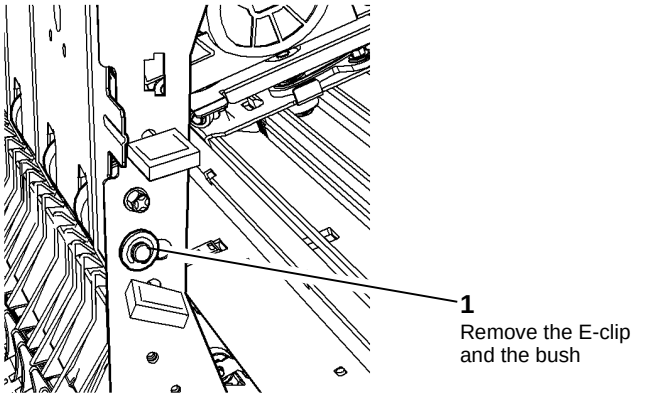


Figure 1 E-clip and bush removal

4. Figure 2. At the rear of the HVF, remove the buffer lower roll.

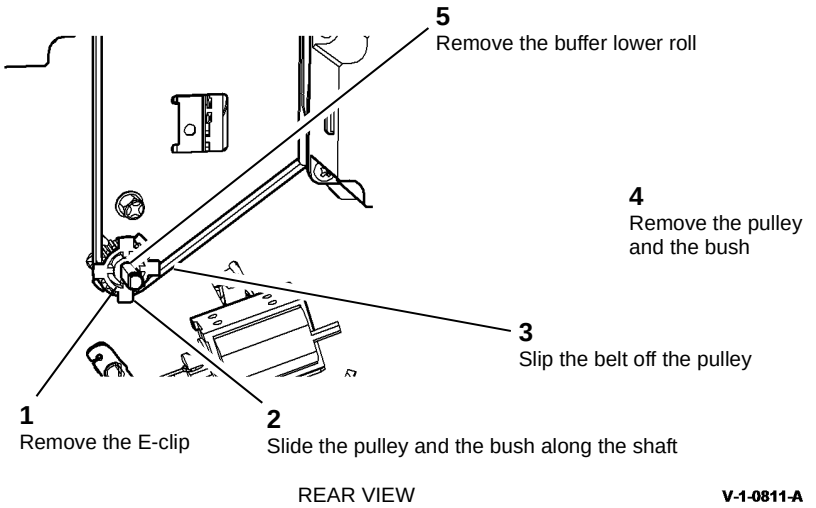


Figure 2 Buffer lower roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.45-171 HVF Buffer Upper Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Figure 1. Remove the E-clip and the bush.

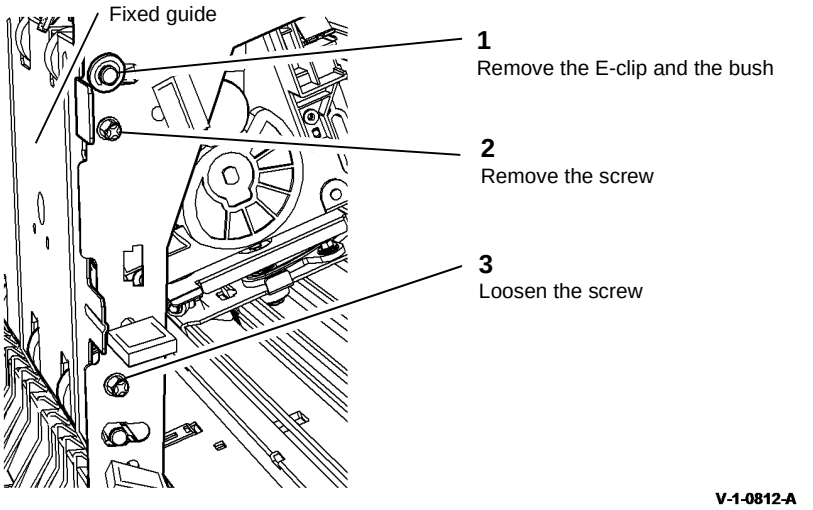


Figure 1 E-clip and bush removal

3. Figure 2. Remove the buffer upper roll.

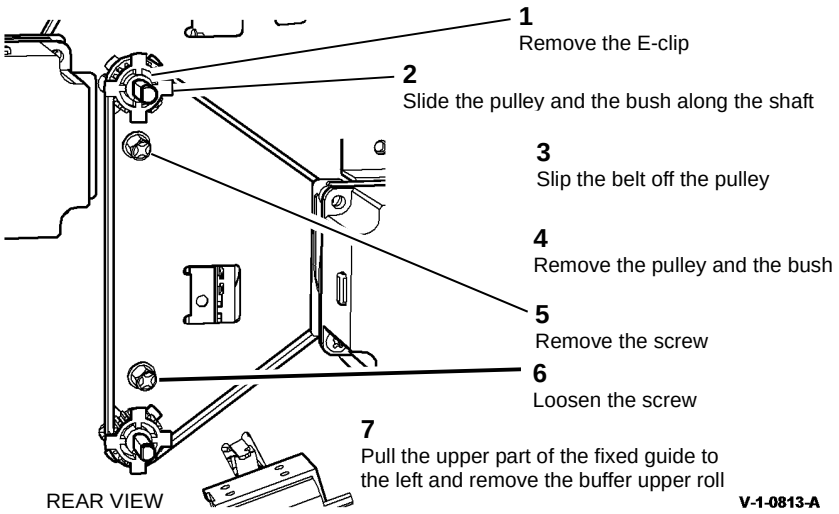


Figure 2 Buffer upper roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.46-171 HVF Stacker Exit Feed Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
2. Figure 1. Remove the E-clip and bush

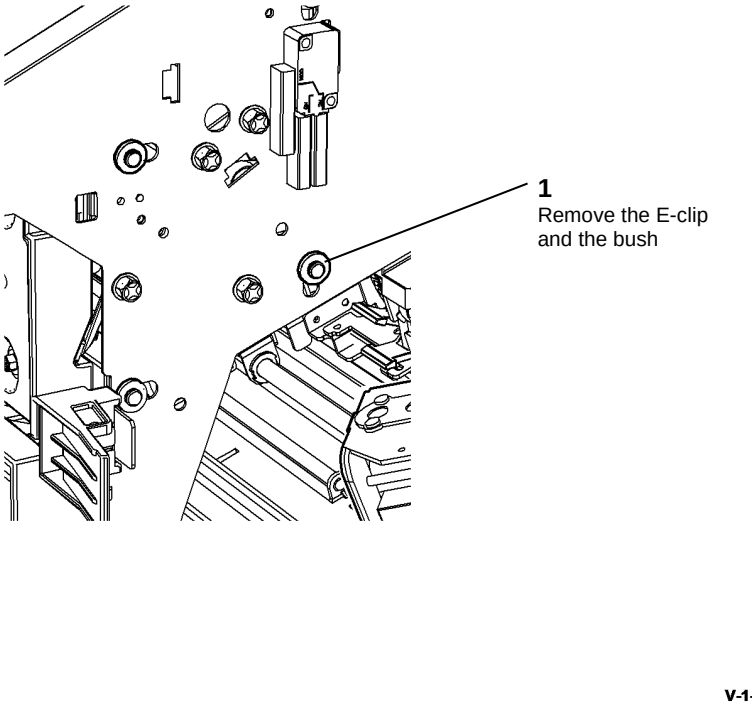


Figure 1 E-clip and bush removal

3. Figure 2. Remove the stacker exit feed roll.

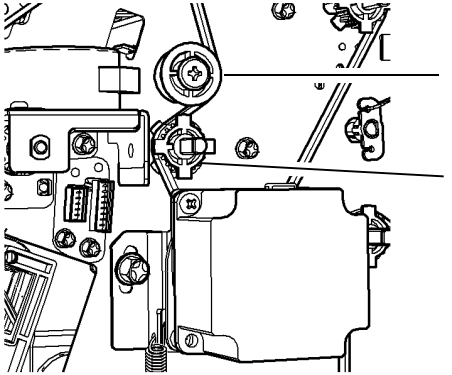


Figure 2 Stacker exit feed roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.47-171 HVF Top Exit Feed Roll

Parts List on PL 11.155

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. If fitted, undock the inserter, REP 11.82-171.
2. Remove the HVF front door, top cover, front cover and rear cover, REP 11.1-171.
3. Figure 1. Raise the top tray and lower the plate beneath it.

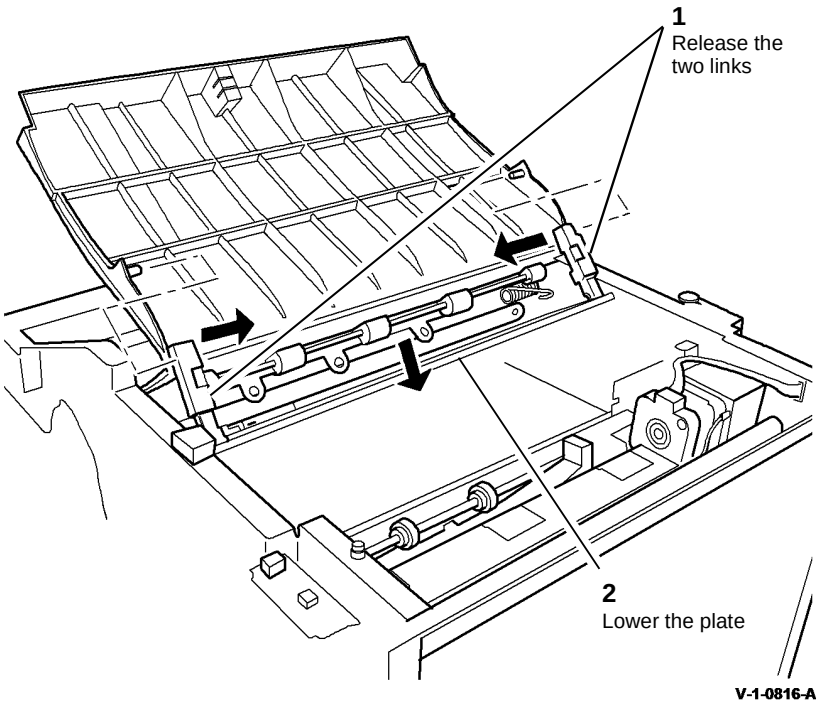


Figure 1 Lowering the plate

4. Figure 2. Remove the E-clip and bush. Remove the front magnet bracket screws.

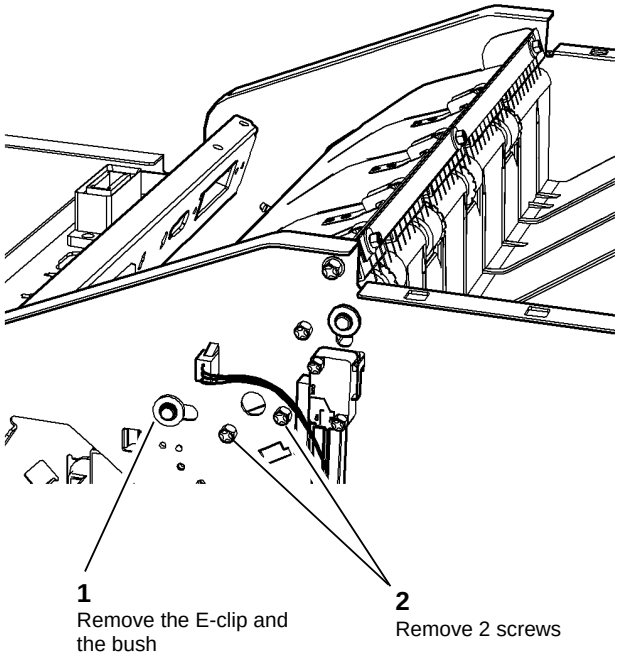


Figure 2 Feed roll front fasteners

5. Figure 3. At the rear of the HVF, remove the E-clip, bush, pulley and the rear screws from the magnet bracket.

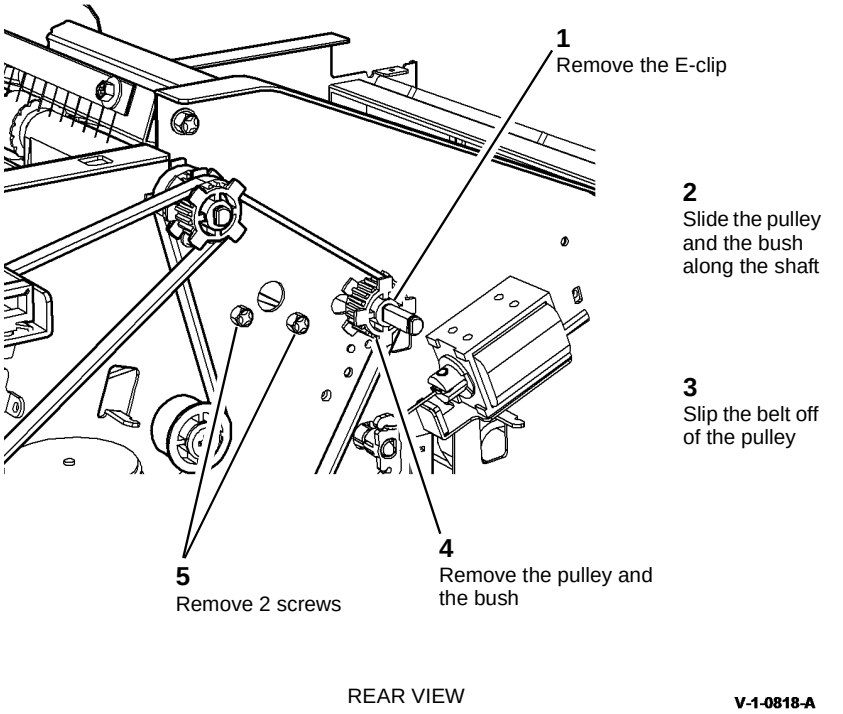


Figure 3 Rear component removal

6. Figure 4. Remove the top exit feed roll.

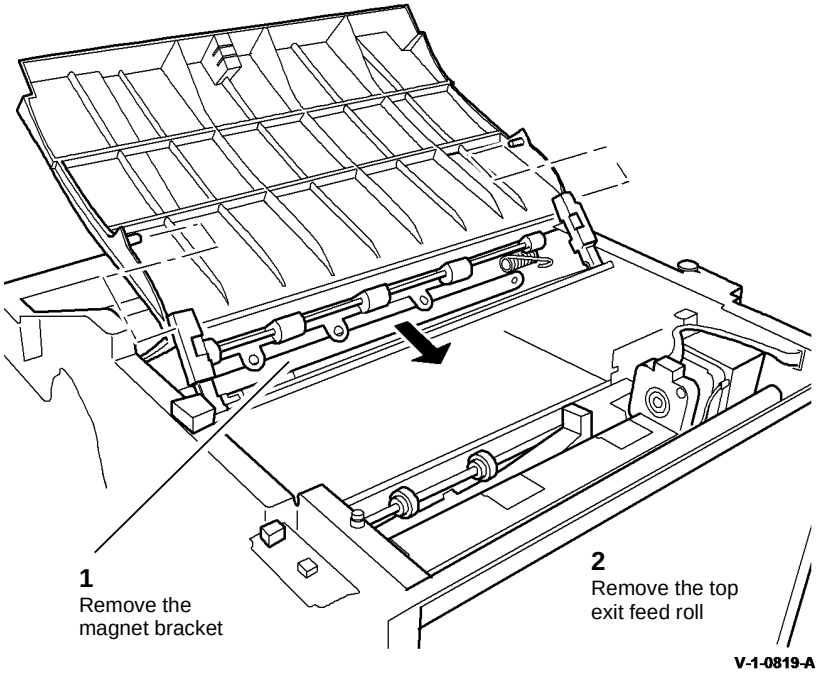


Figure 4 Top exit feed roll removal

Replacement

The replacement procedure is the reverse of the removal procedure.

REP 11.48-171 HVF Paddle Unit Motor Assembly

Parts List on PL 11.150

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove the paddle motor assembly, Figure 1.

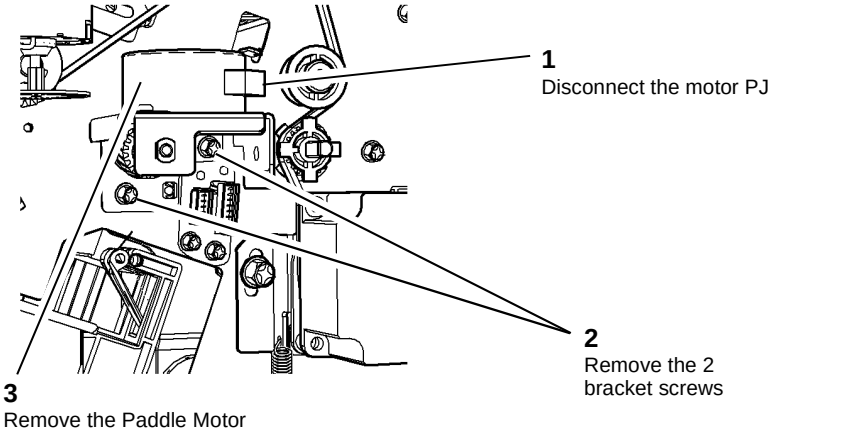


Figure 1 Paddle motor assembly

Replacement

Reverse the removal procedures to replace the compiler paddle motor assembly.

REP 11.49-171 HVF Compiler Paddle Module

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front, rear and top covers REP 11.1-171.
2. Remove the HVF stapler assembly, REP 11.2-171.
3. Remove the paddle unit motor assembly, REP 11.48-171.

   NOTE: *The motor coupler should detach with the motor assembly. If the coupler fails to detach, remove the coupler from the paddle module assembly.*

4. Remove the compiler paddle module, Figure 1.

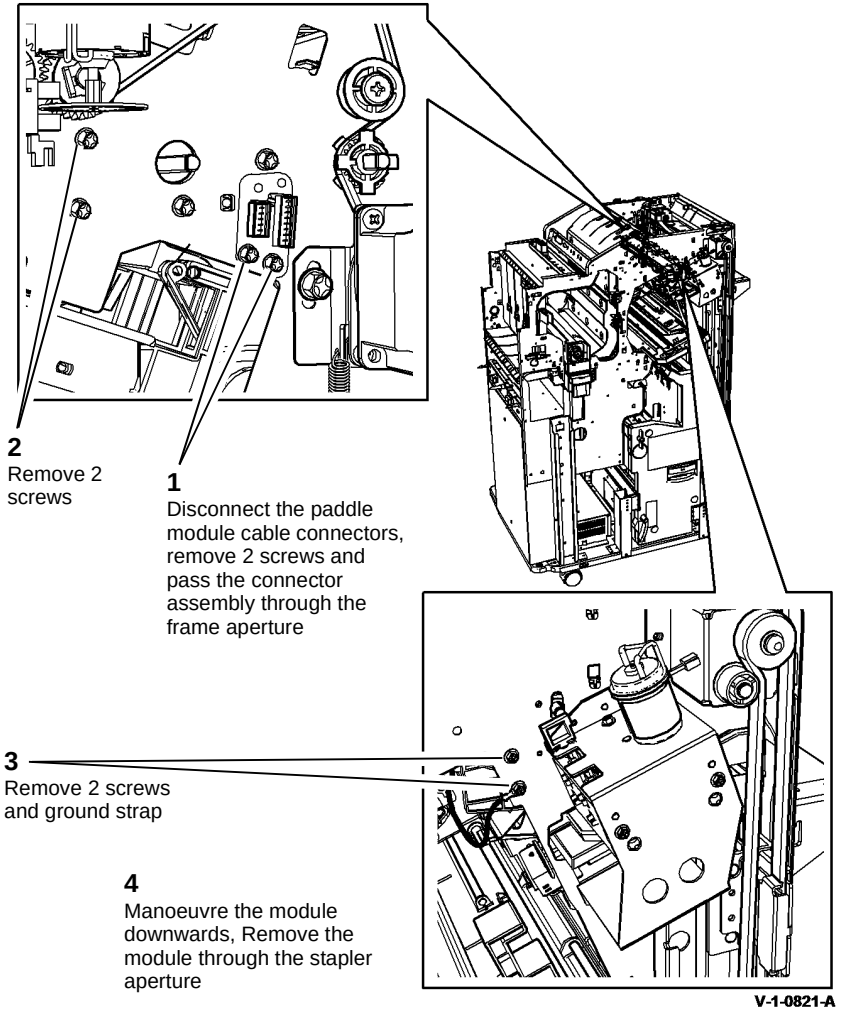


Figure 1 Paddle module attachment

Replacement

CAUTION

Do not damage or strain the paddle module ribbon cables or connectors

1. Reverse the removal procedures to replace the compiler paddle module.
2. Use the correct screws to secure the compiler paddle module; do not overtighten GP 6.

REP 11.50-171 BM Exit Sensor

Parts List on PL 11.168

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the BM right cover, REP 11.56-171.
2. Remove the upper static eliminator (3 screws), PL 11.168 Item 18.
3. Figure 1, remove the BM exit sensor.

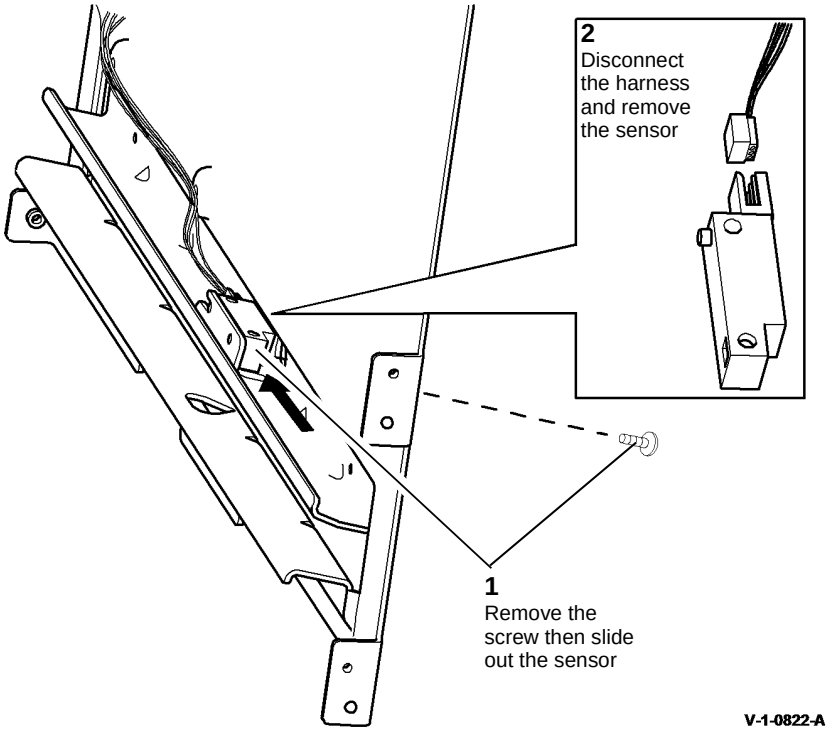


Figure 1 Sensor removal

Replacement

Reverse the removal procedure to replace the BM exit sensor.

REP 11.51-171 HVF Compiler Paper Pusher Motor Assembly

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top and HVF rear covers REP 11.1-171.
2. Remove the paper pusher motor assembly, Figure 1.

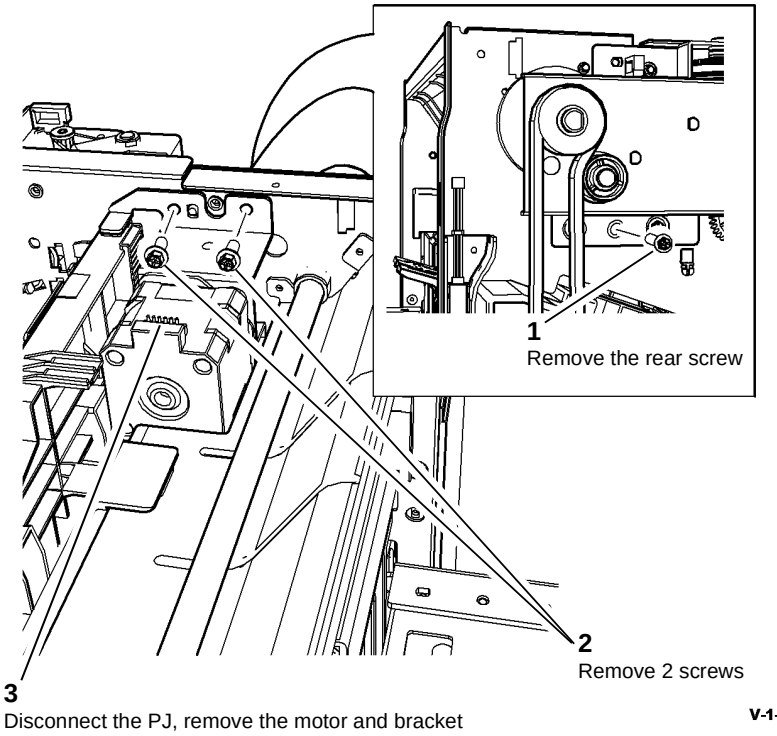


Figure 1 Paper pusher motor assembly

Replacement

Reverse the removal procedures to reinstall the compiler paper pusher motor assembly.

REP 11.52-171 BM Crease Rolls, Gears, Clutch and Bearings

Parts List on PL 11.167

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Release the crease roll nip pressure by fully rotating the crease roll handle (6c) counter-clockwise.
3. Remove the crease blade knob (6d), PL 11.161 Item 4.
4. Remove the crease roll handle (6c), PL 11.161 Item 5.
5. Remove the BM front cover, PL 11.161 Item 3.
6. Remove the BM right cover, REP 11.56-171.
7. Remove the BM crease roll motor, REP 11.19-171, but do not disconnect the motor harness or remove the motor from the mounting plate.
8. Figure 1, remove the rear bearings.

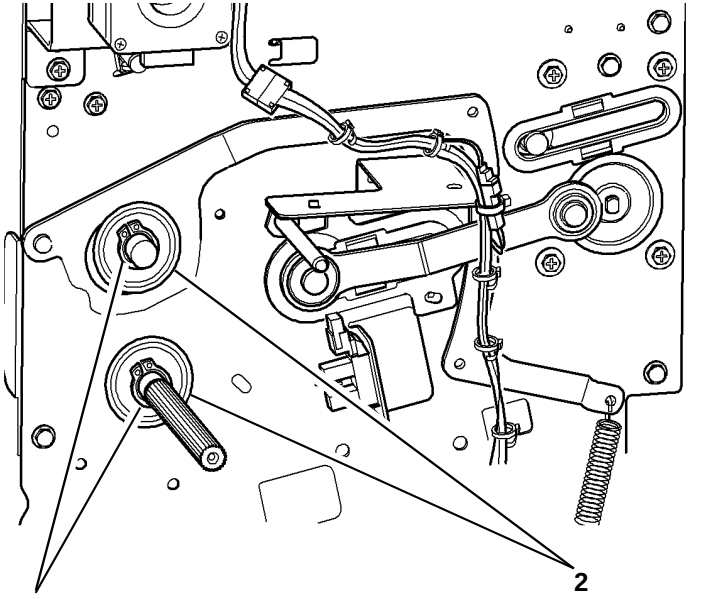


Figure 1 Rear bearing removal

9. Temporarily attach the BM crease roll motor using only the top screw.
10. Temporarily attach the PWB mounting plate using only the top two screws.
11. Fully pull out the BM module.

12. Figure 2, prepare to remove the upper crease roll.

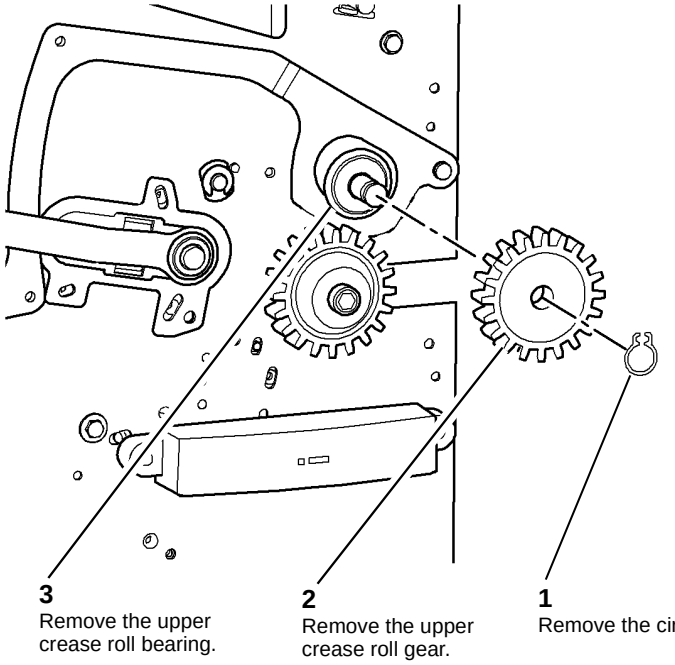


Figure 2 Preparation

13. Figure 3, remove the upper crease roll.

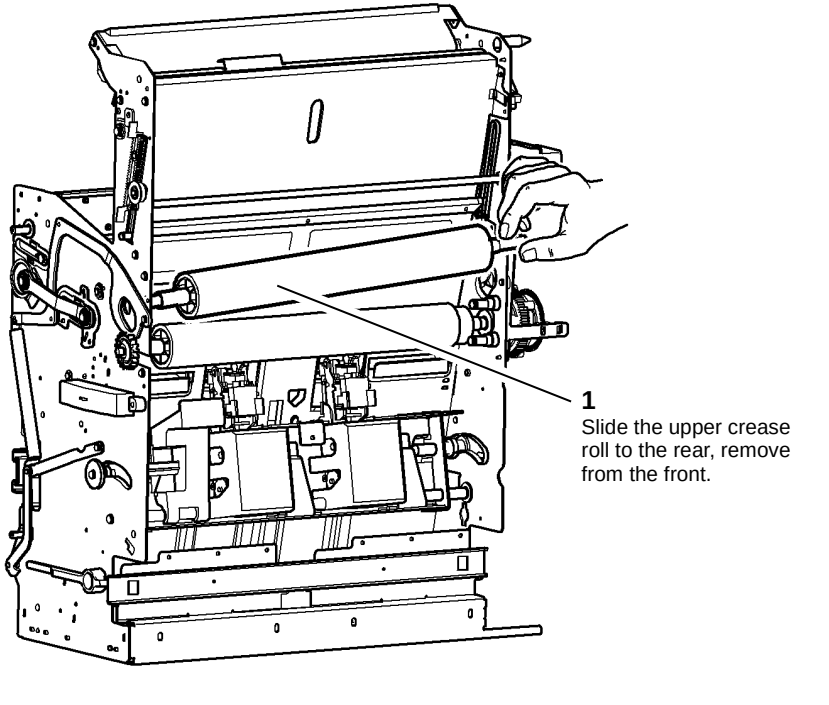


Figure 3 Upper crease roll removal

14. Figure 4, remove the lower crease roll and clutch assembly.

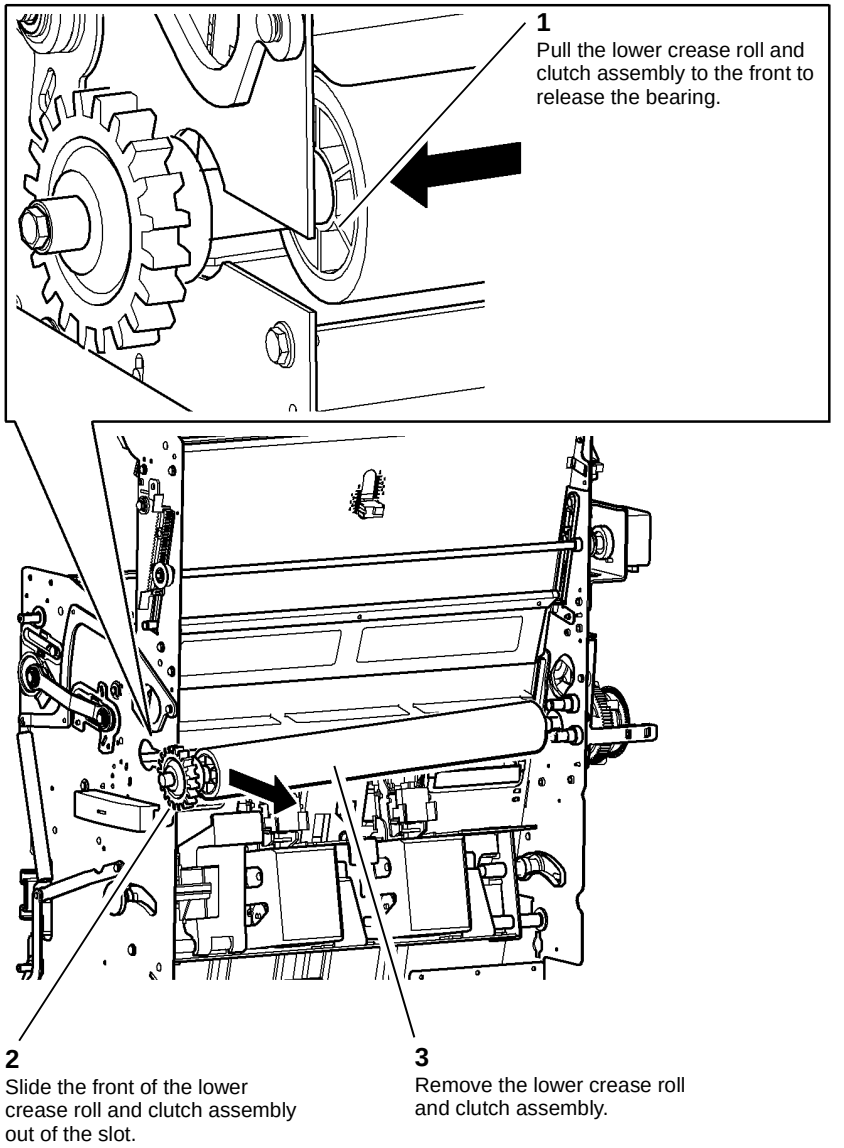


Figure 4 Lower crease roll and clutch assembly

Replacement

CAUTION

Do not remove the crease roll and clutch assembly if they are secure on the shaft.

1. Install the lower crease roll and clutch assembly and bearings.
2. Check if the lower crease roll gear and clutch assembly are secure on the shaft. If the lower crease roll gear and clutch assembly wobble, perform the following:
   a. Figure 5, remove the clutch.

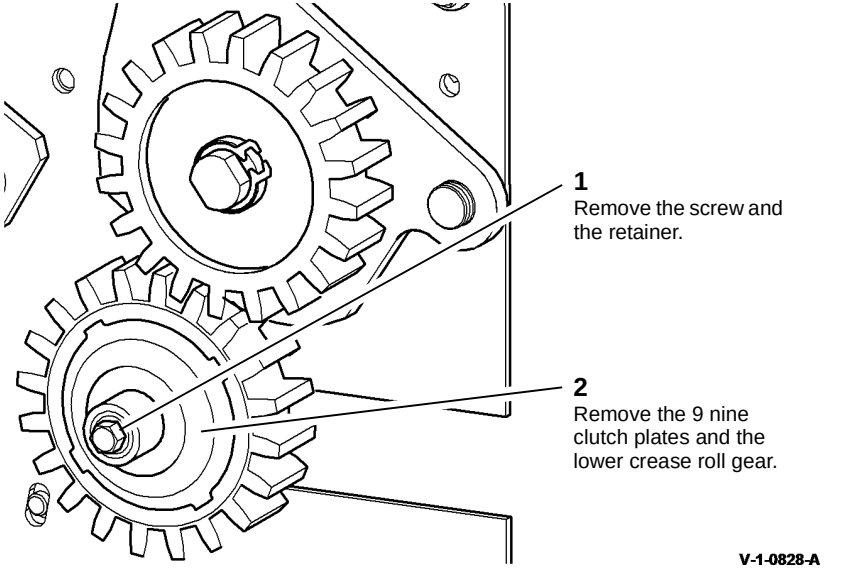


Figure 5 Clutch removal

   b. Figure 6, carefully identify the lower crease roll gear and clutch assembly components. Reassemble the components on the lower crease roll shaft in sequence from 1 to 12. Ensure the following points are followed:
      - Components are orientated correctly as shown in Figure 6.
      - The shallow grooves in the bore of the gear face towards the rear and mate with the teeth of the clutch plate installed on the shaft.
      - The deep grooves in the bore of the gear face towards the front and mate with the teeth of the clutch plates subsequently installed on the shaft.
      - The spring retainer is installed over the end the shaft.

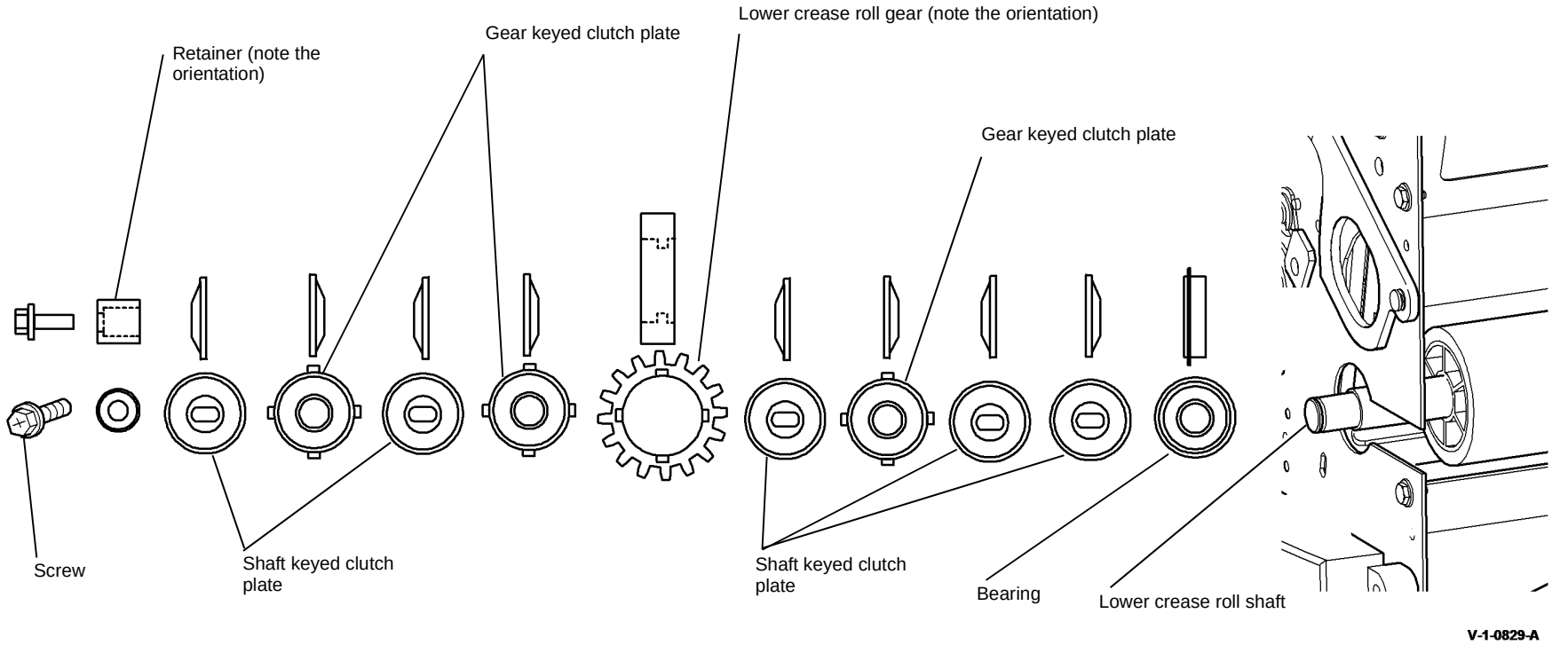


Figure 6 Clutch components

c. Figure 7, Ensure that the tabs of the outer gear keyed clutch plate are not outside of the grooves in the gear.

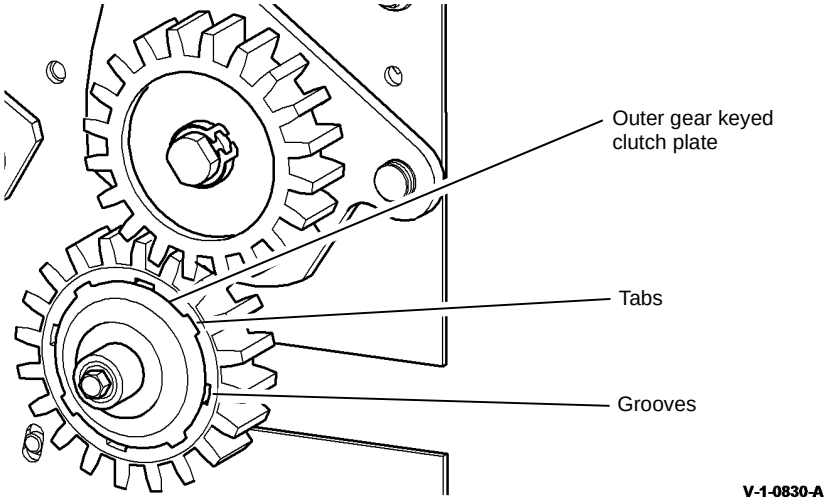


Figure 7 Outer gear keyed clutch plate

d. Figure 8, ensure that the final shaft keyed clutch plate does not come off of the shaft during installation.

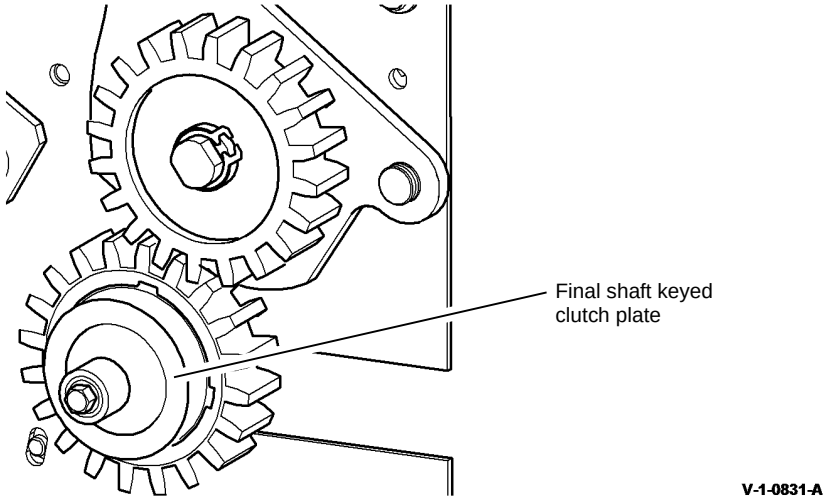


Figure 8 Outer gear keyed clutch plate

e. Tighten the screw on the front end of the shaft until it reaches a hard stop.

f. Check that the lower crease roll gear and clutch assembly is secure on the shaft. If necessary, repeat steps A to D.

3. Install the remainder of the removed components by reversing the removal procedure.

REP 11.53-171 HVF Compiler Paper Pusher

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front, rear and top covers REP 11.1-171.
2. Remove the stacker motor gearbox, REP 11.12-171.
3. Remove components, Figure 1.

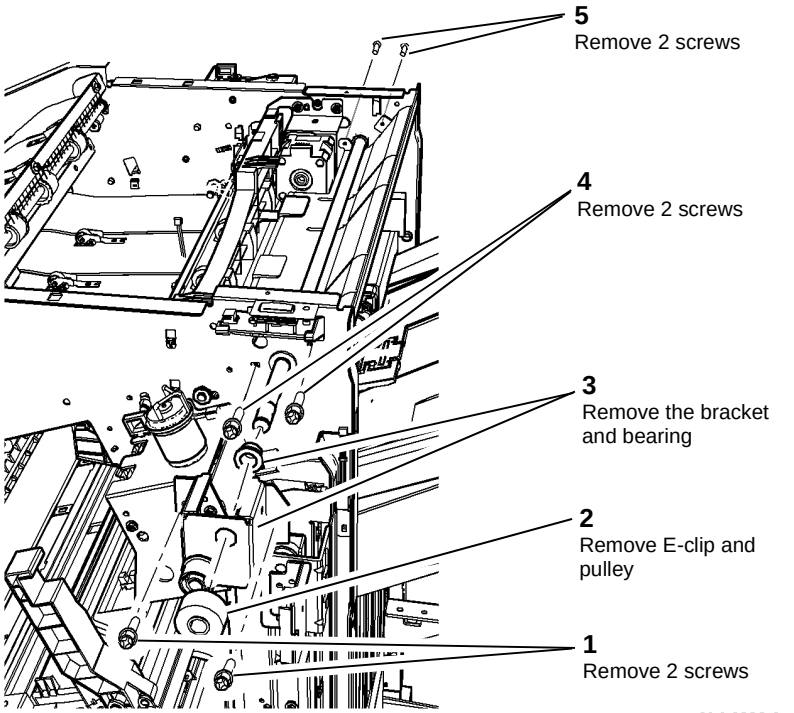


Figure 1 Components removal

4. Remove the compiler paper pusher motor assembly, REP 11.51-171.
5. Remove the sensor assembly, REP 11.54-171.
6. Remove the pusher module, Figure 2. The mylar strips and dampers are attached to the pusher module.

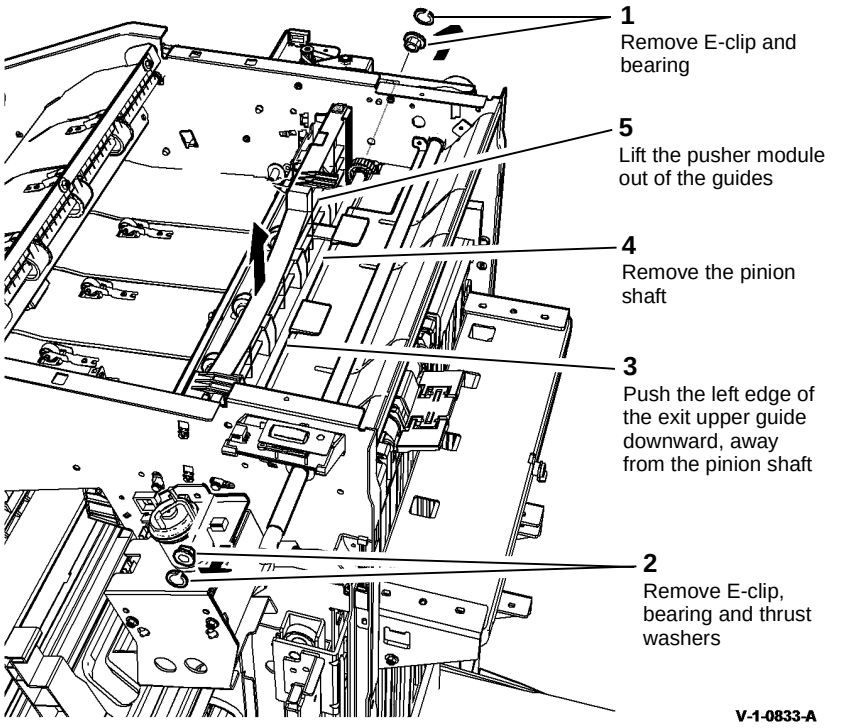


Figure 2 Pusher module removal

Replacement

Reverse the removal procedures to reinstall the compiler paper pusher.

REP 11.54-171 HVF Paper Pusher Sensor Assembly

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top cover REP 11.1-171.
2. Remove the sensor assembly, Figure 1.

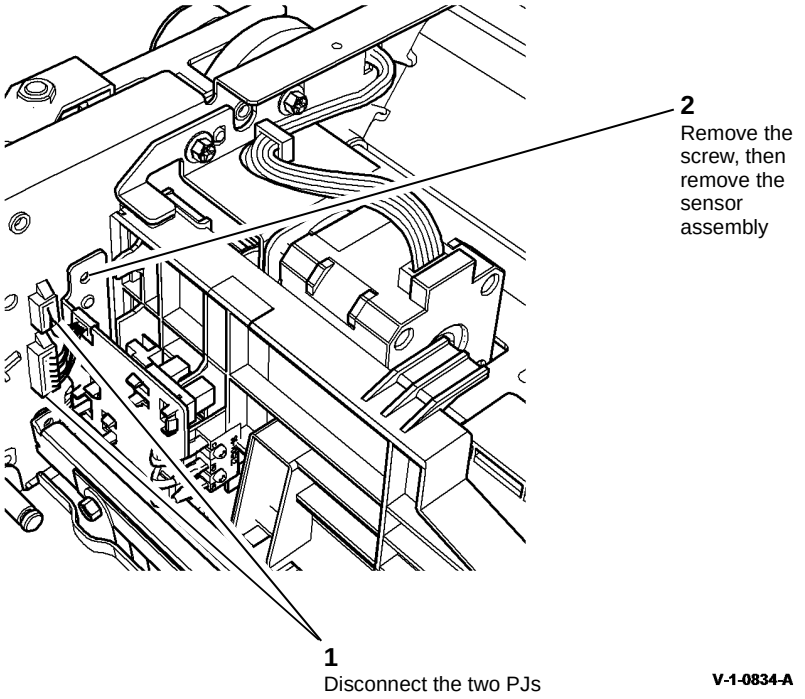


Figure 1 Sensor assembly

Replacement

Reverse the removal procedures to replace the sensor assembly.

REP 11.55-171 HVF Power Supply Unit

Parts List on PL 11.157

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front and rear covers REP 11.1-171.
2. Remove the HVF power supply unit, Figure 1.

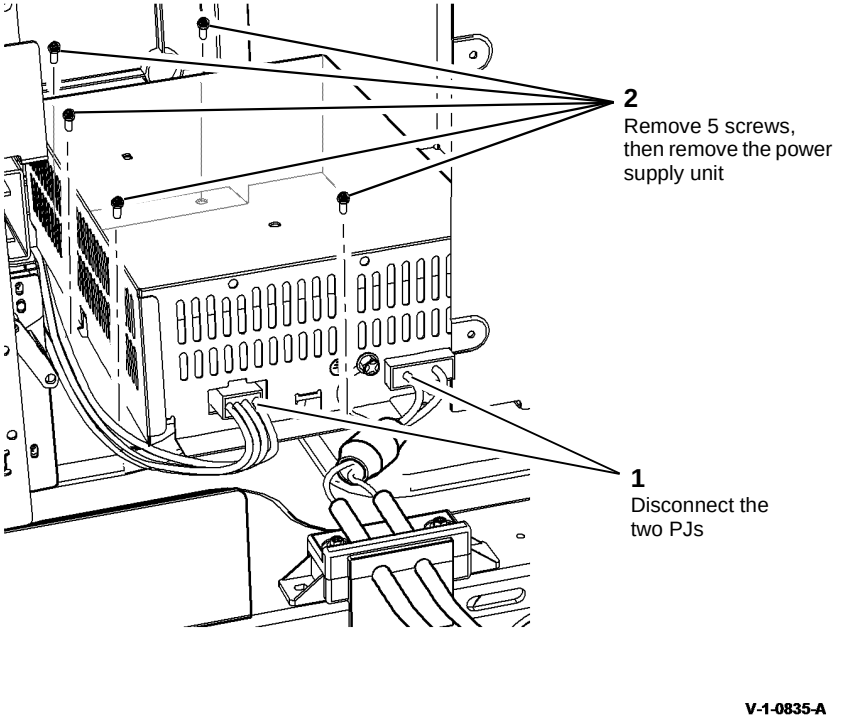


Figure 1 HVF PSU

Replacement

Reverse the removal procedures to replace the HVF power supply unit.

REP 11.56-171 BM Right Cover

Parts List on PL 11.168

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Open the BM front door and fully pull out the BM module.
3. Remove the crease blade knob (6d), PL 11.161 Item 4.
4. Remove the crease roll handle (6c), PL 11.161 Item 5.
5. Remove the BM front cover, PL 11.161 Item 3.
6. Figure 1, Prepare to remove the BM right cover.

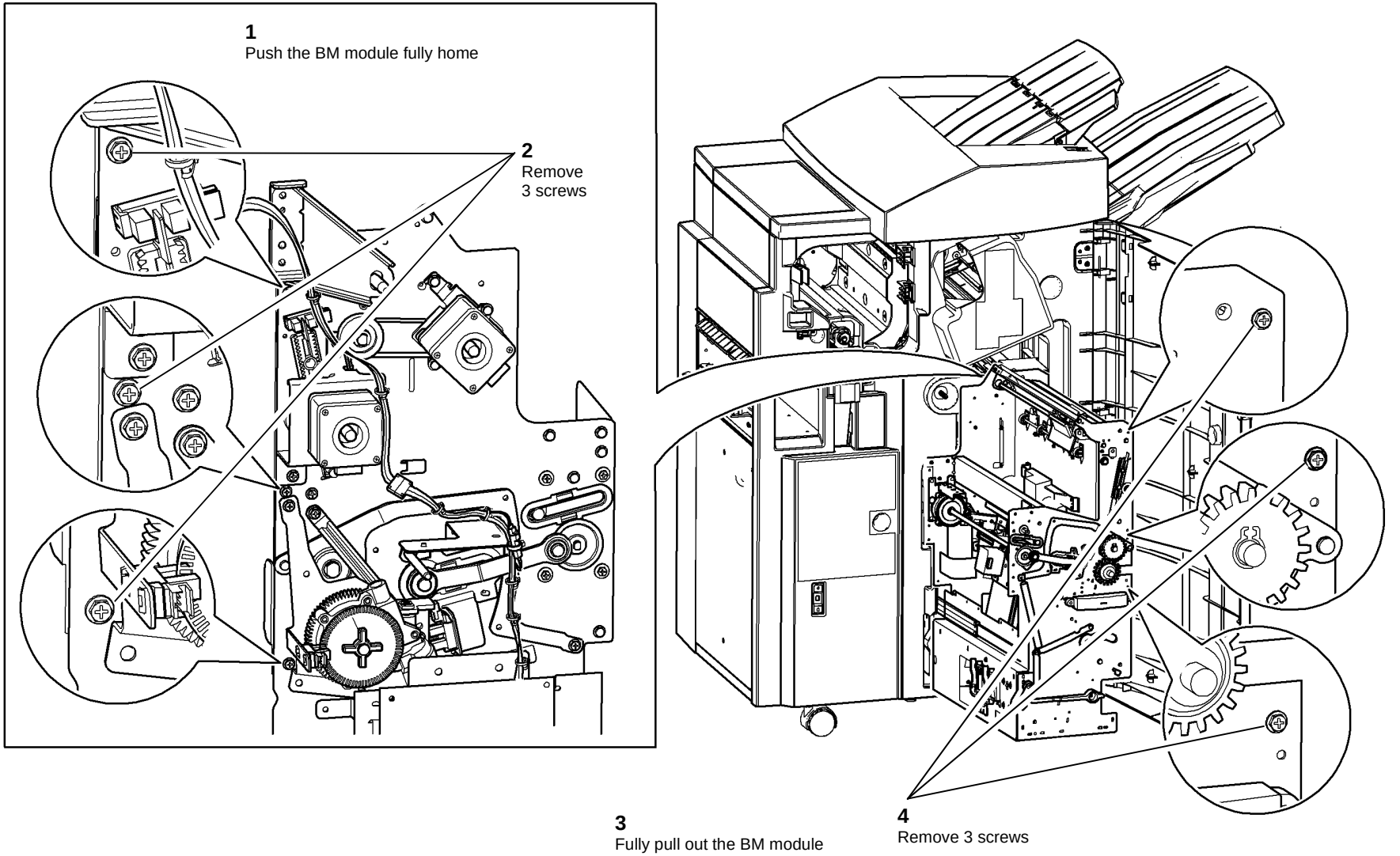


Figure 1 Preparation

7. Figure 2, remove the BM right cover.

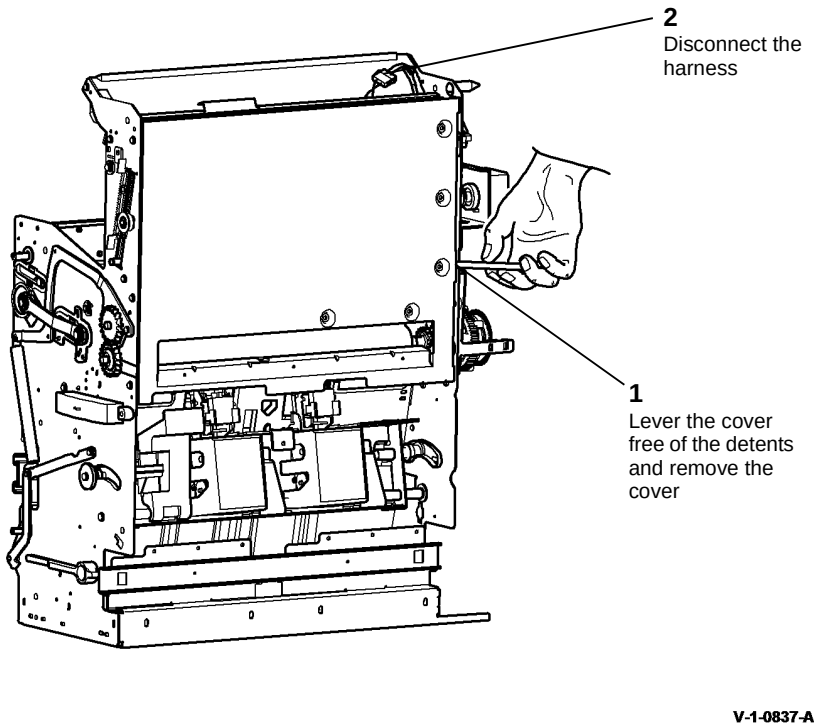


Figure 2 Cover removal

Replacement

Reverse the removal procedure to replace the BM right cover.

REP 11.57-171 HVF Control PWB

Parts List on PL 11.157

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove the PWB assembly, Figure 1.

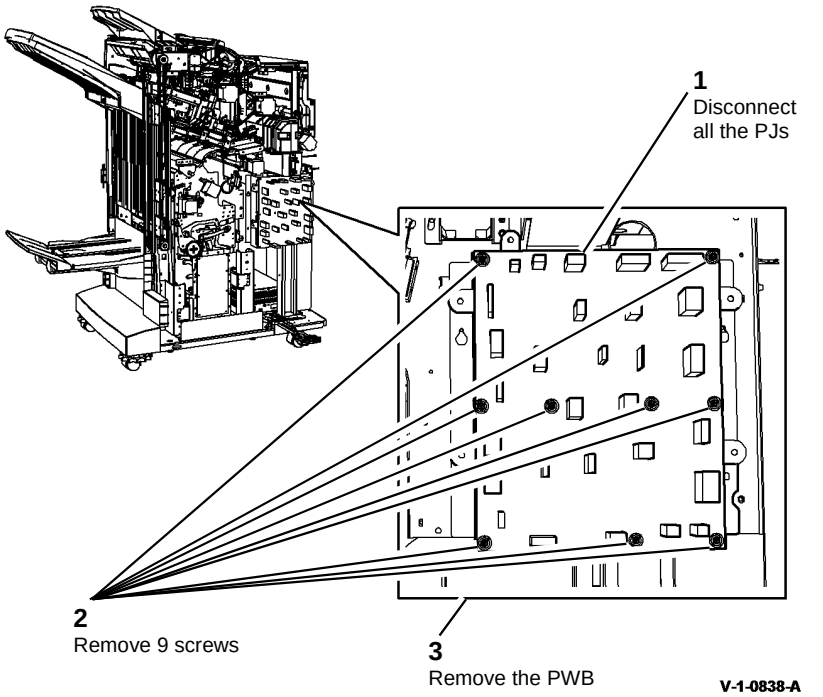


Figure 1 HVF control PWB

Replacement

Reverse the removal procedures to replace the HVF main PWB.

REP 11.58-171 BM Crease Nip Springs

Parts List on PL 11.165

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the BM front door and fully pull out the BM.
2. Rotate the crease roll handle (6c) fully counterclockwise.
3. Remove the crease blade knob (6d), PL 11.161 Item 4.
4. Remove the crease roll handle (6c), PL 11.161 Item 5.
5. Remove the BM front cover, PL 11.161 Item 3.
6. Figure 1, remove the front lower linkage.

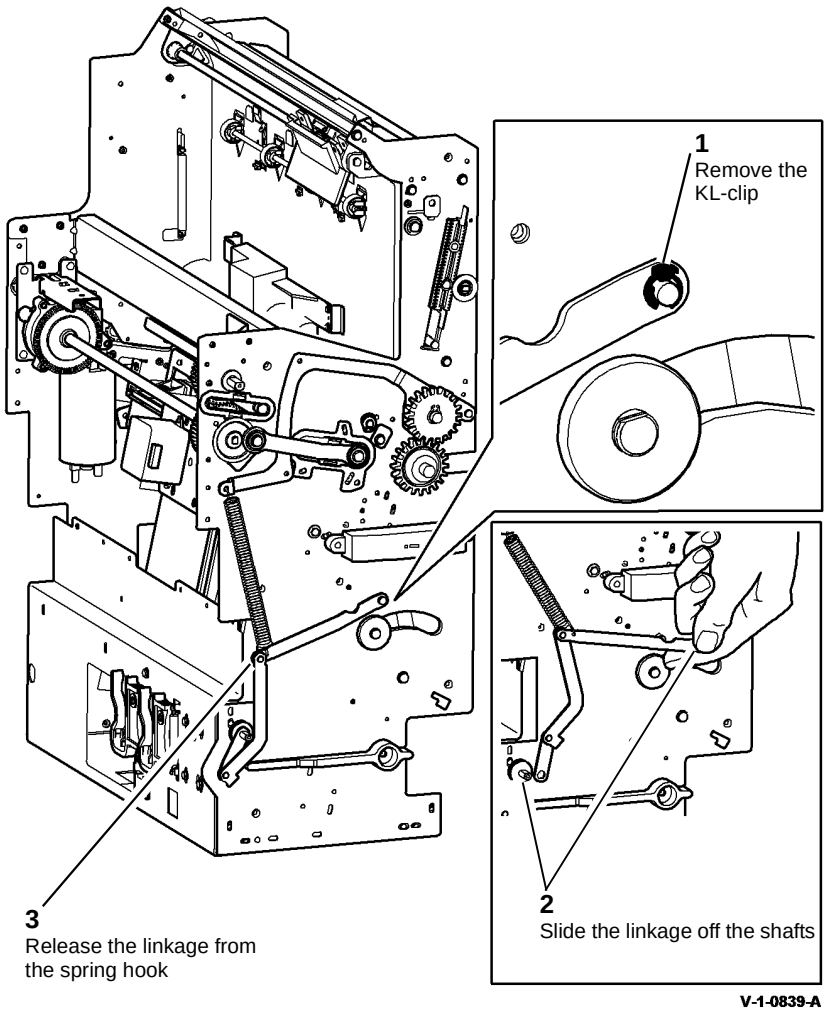


Figure 1 Front linkage removal

7. Figure 2, remove the front spring.

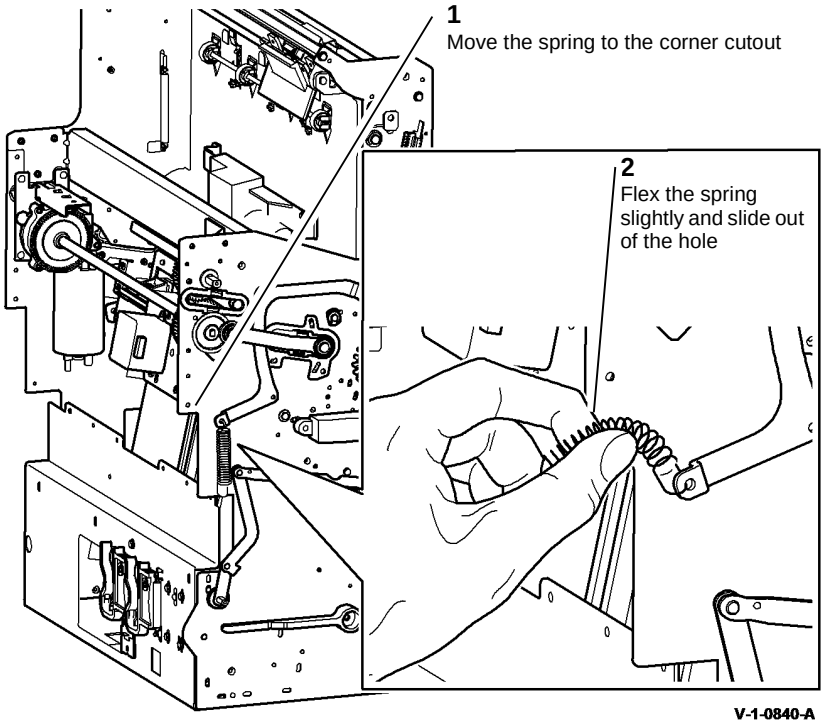


Figure 2 Front spring removal

8. Remove the top cover, then the rear cover, REP 11.1-171.
9. Fully push in the BM.
10. Remove 4 screws securing the BM PWB mounting plate to the frame, allow the PWB and mounting plate to hang down, giving access to the rear nip spring and linkage.

11. Figure 3, remove the rear lower linkage.

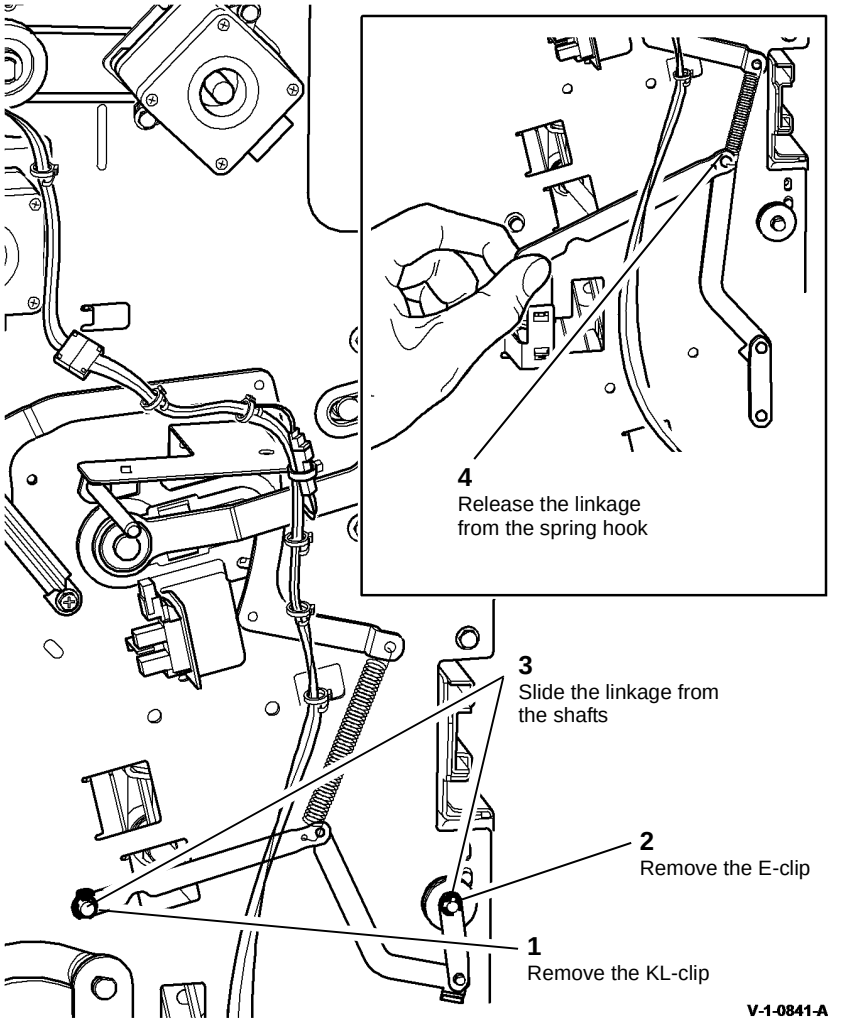


Figure 3 Rear linkage removal

12. Figure 4, remove the rear spring.

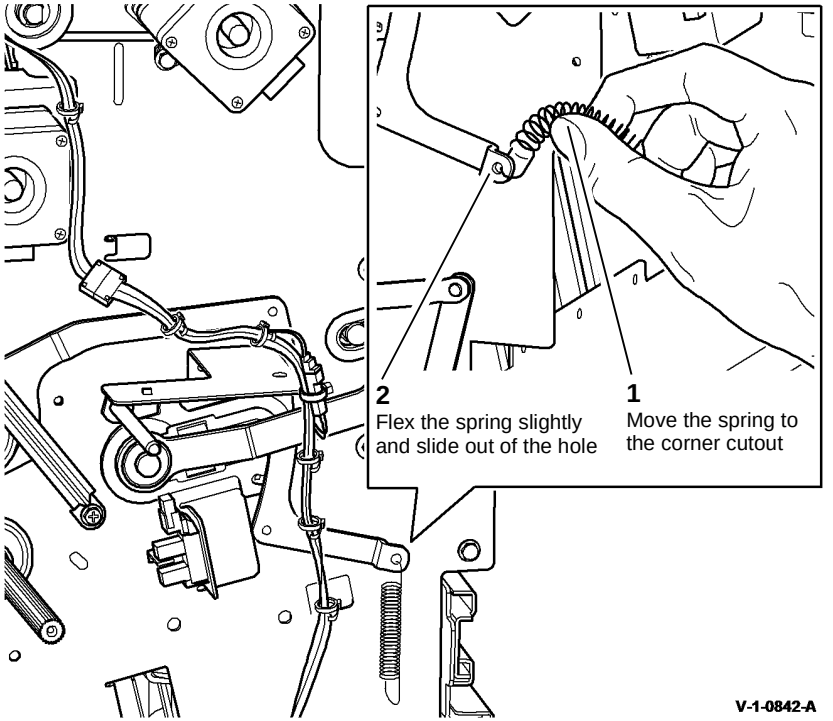


Figure 4 Rear spring removal

Replacement

Reverse the removal procedure to replace the BM crease roll nip front spring.

REP 11.59-171 BM Crease Roll Gate Assembly

Parts List on PL 11.167

Purpose

This procedure is used to repair the following components:

- Crease roll gate rack gear, PL 11.167 Item 8.
- Crease roll gate rack drive gear, PL 11.167 Item 13.
- Crease roll gate rack, PL 11.167 Item 14.
- Crease roll gate front guide, PL 11.167 Item 15.
- Crease roll gate rear guide, PL 11.167 Item 16.
- Crease roll gate, PL 11.167 Item 19.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Remove the BM right cover, REP 11.56-171.
6. Remove the crease roll gate motor, REP 11.24-171.

7. Figure 1, remove the crease roll gate rack drive gear and both crease roll gate rack gears.

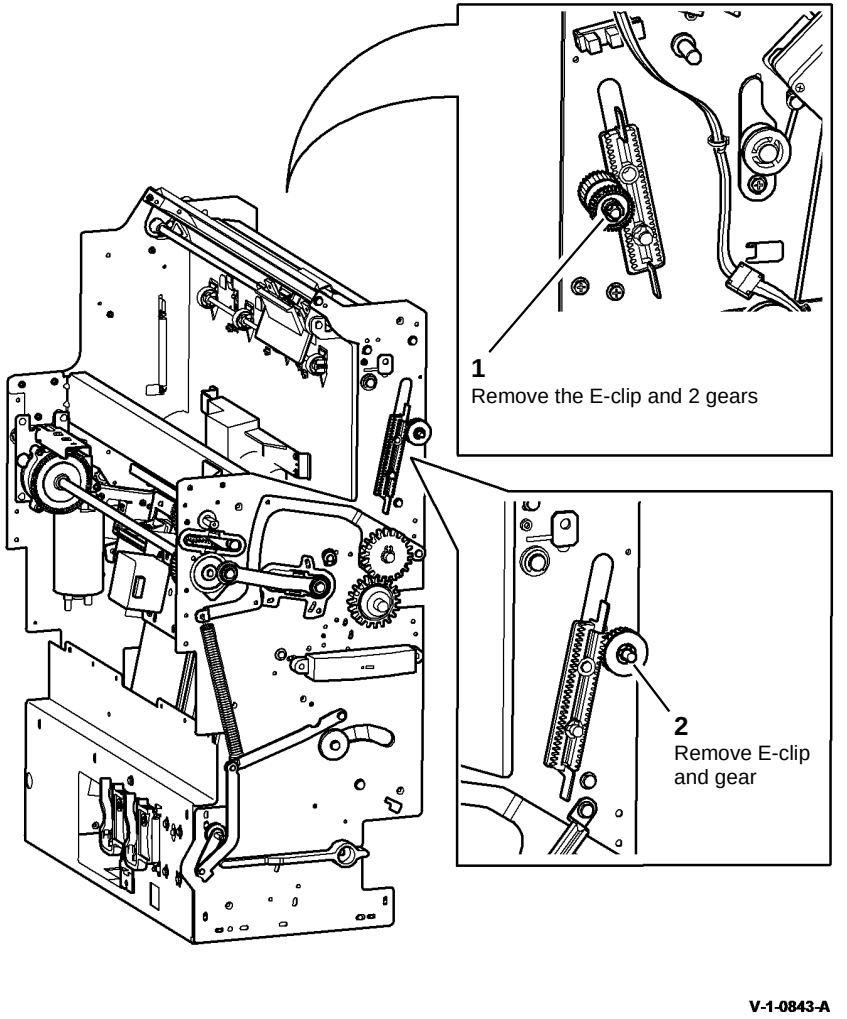


Figure 1 Removing gears

8. Figure 2, remove the front and rear crease roll gate racks.

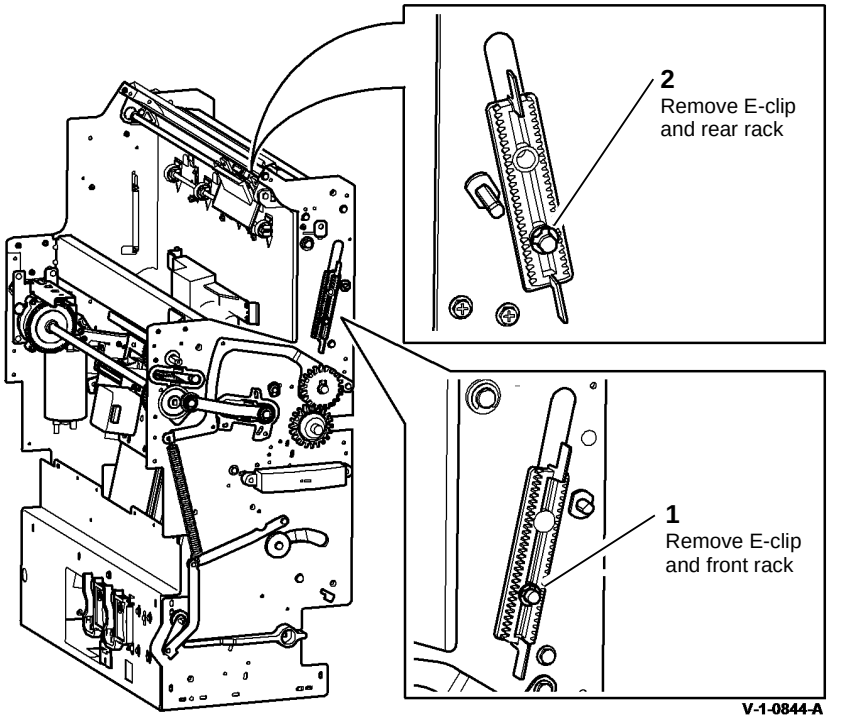


Figure 2 Removing the racks

9. Figure 3, remove the crease roll gate.

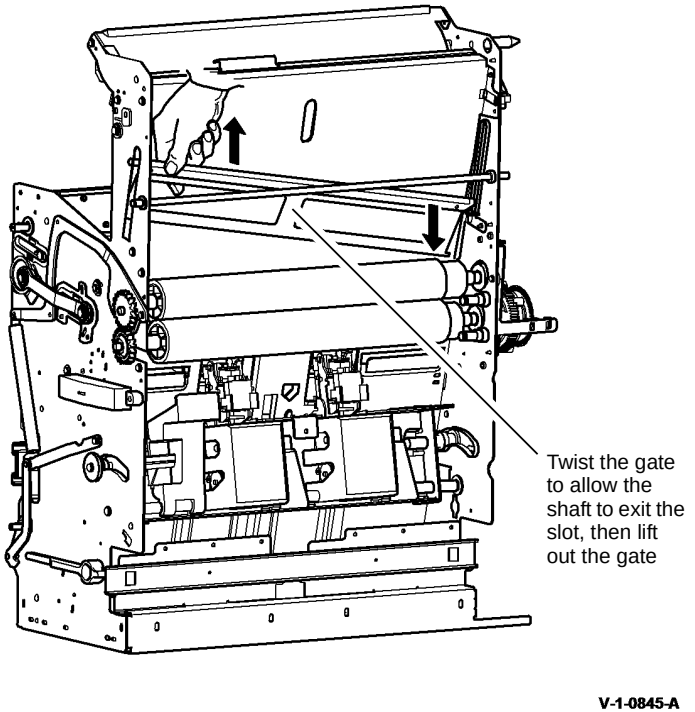


Figure 3 Gate removal

10. Figure 4, remove the grease roll gate front guide.

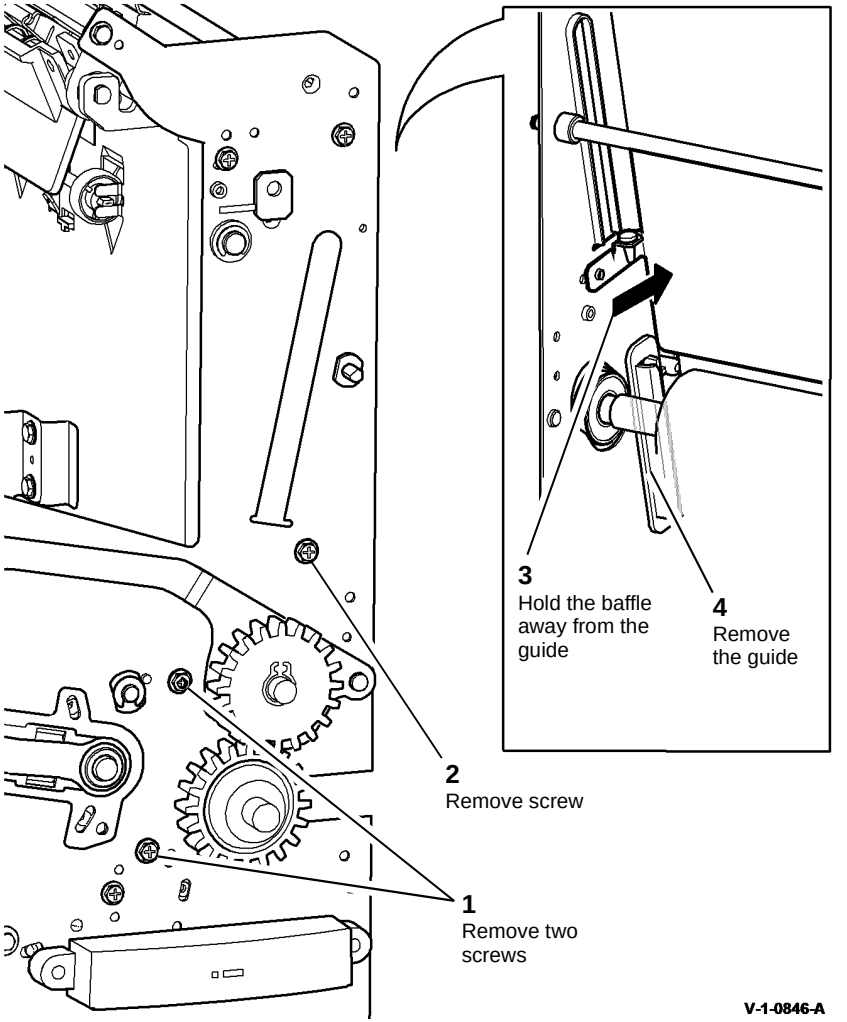


Figure 4 Front guide removal

11. Figure 5, remove the grease roll gate rear guide.

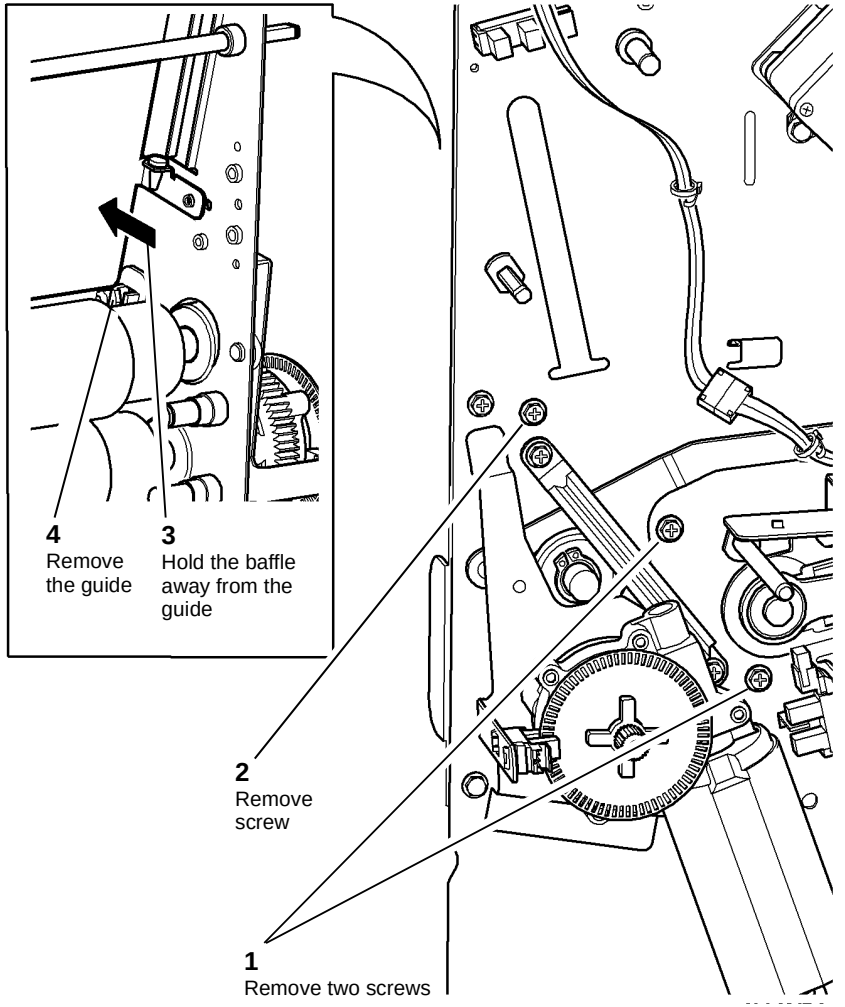


Figure 5 Rear guide removal

12. Loosen 3 screws to remove the crease roll gate shaft from the crease roll gate.

Replacement

Reverse the removal procedure to replace the crease roll gate assembly.

CAUTION

Ensure that the crease roll gate shaft is positioned centrally within the crease roll gate.

REP 11.60-171 BM Paper Guide Assembly

Parts List on PL 11.161

Purpose

This procedure is used to repair the following components:

- Paper guide, PL 11.161 Item 7.
- Nip spring, PL 11.161 Item 9.
- Nip roll, PL 11.161 Item 10.
- Nip shaft, PL 11.161 Item 11.

***NOTE:** If only new nip components are being installed, the BM paper guide assembly does not need to be removed.*

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the BM front door and fully pull out the BM.
2. Rotate the crease roll handle (6c) fully counterclockwise.
3. Remove the crease blade knob (6d), PL 11.161 Item 4.
4. Remove the crease roll handle (6c), PL 11.161 Item 4.
5. Remove the BM front cover, PL 11.161 Item 3.

6. Figure 1, remove the front bearing.

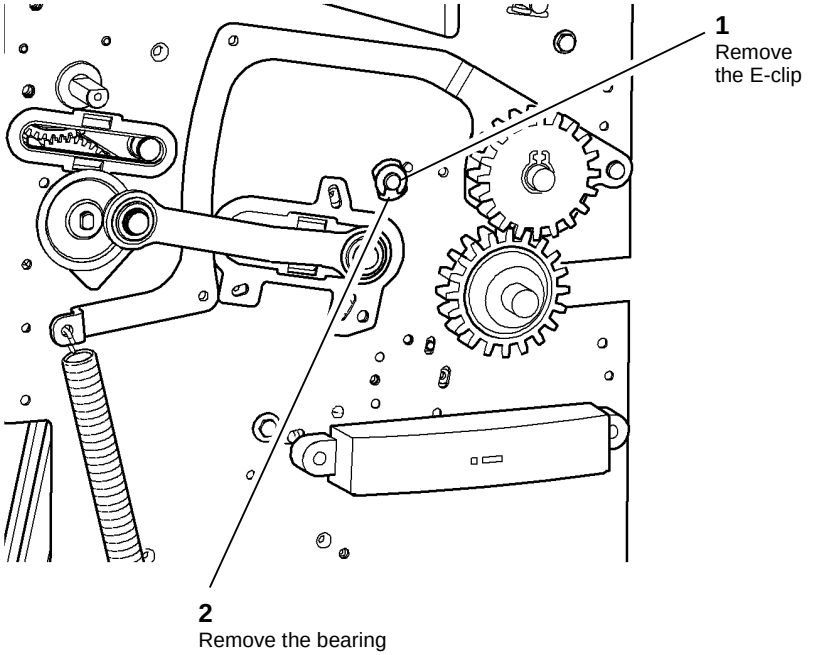


Figure 1 Front bearing removal

7. Figure 2, remove the rear bearing.

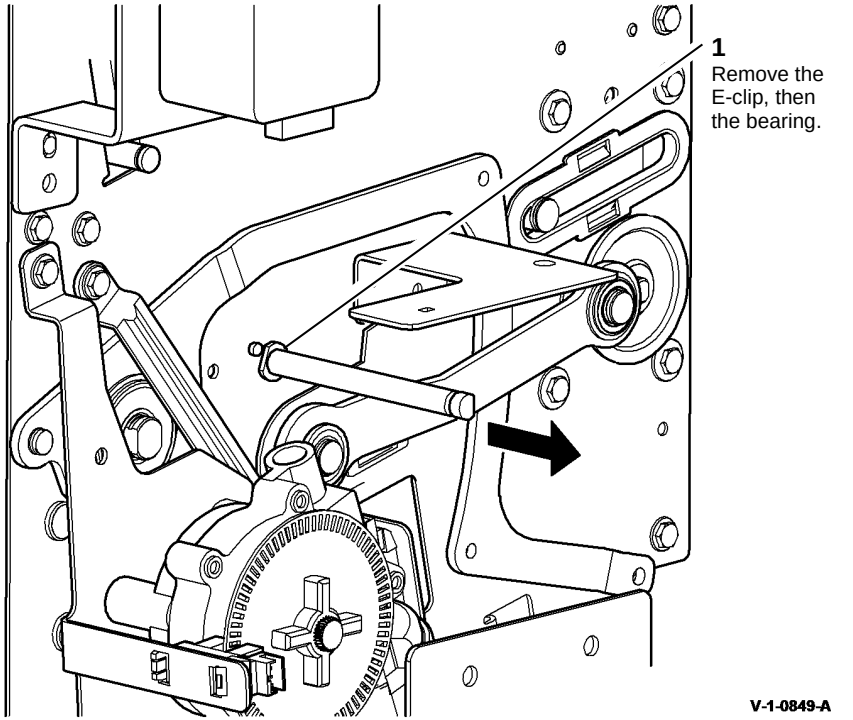


Figure 2 Rear bearing removal

8. Figure 3, remove the BM paper guide assembly.

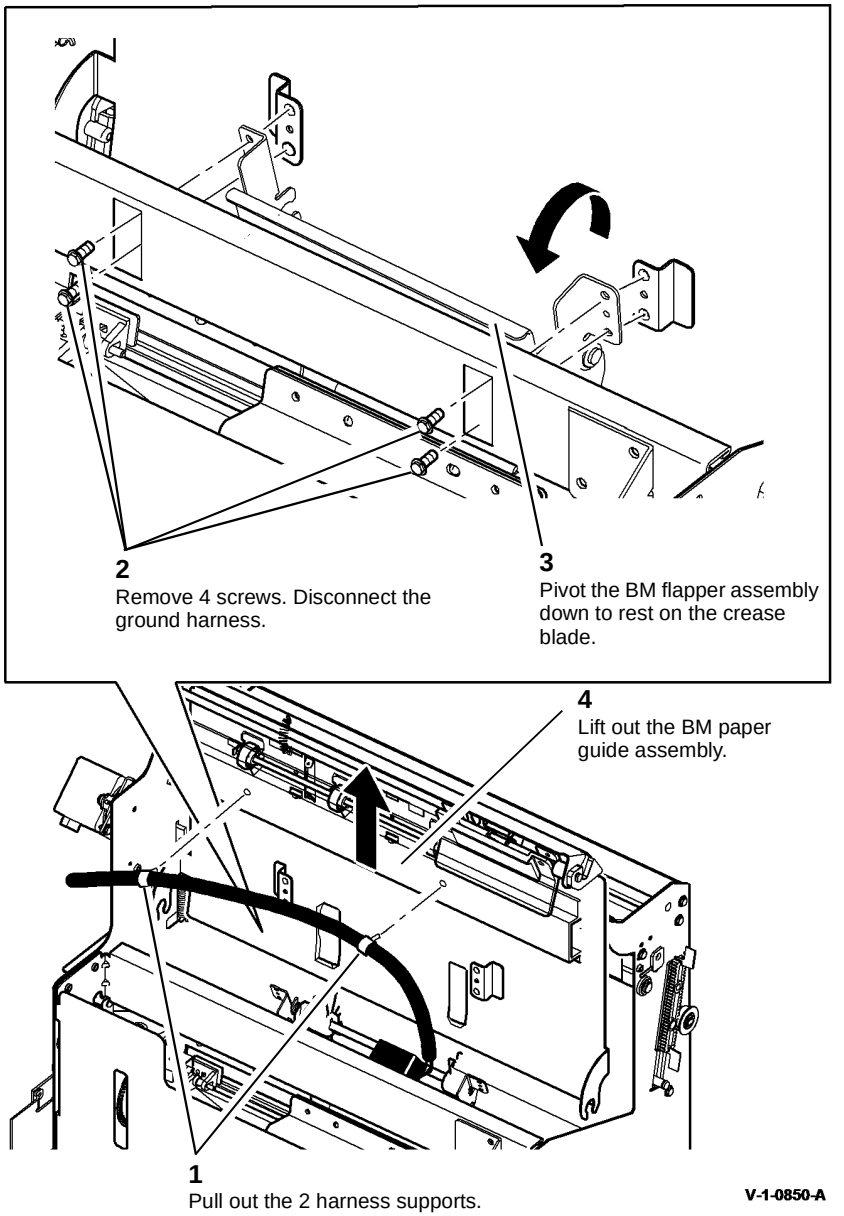


Figure 3 Paper guide assembly removal

9. Figure 4, remove the components from the BM paper guide assembly.

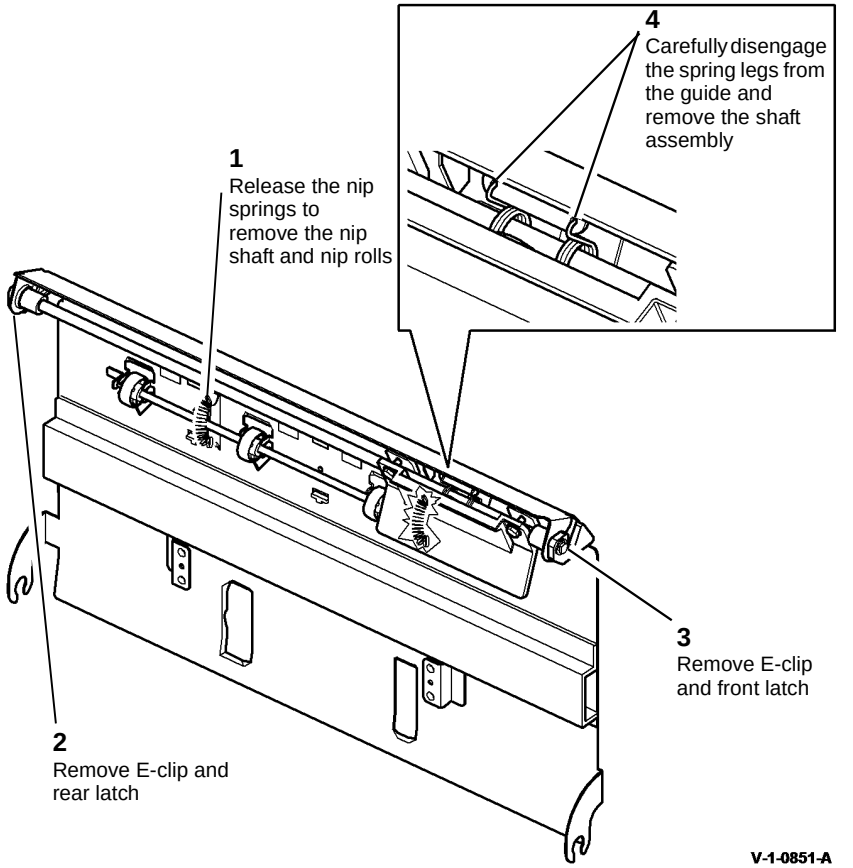


Figure 4 Paper guide dismantling

Replacement

Reverse the removal procedure to replace the BM paper guide assembly.

REP 11.61-171 BM Module

Parts List on PL 11.160

Removal

WARNING

Mandatory safety warning. This procedure must be performed by two people. The module is heavy.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Do not undock the HVFBM from the machine. The machine maintains the stability of the HVFBM.

1. Remove the HVF top cover, then the HVF rear cover, REP 11.1-171.
2. Figure 1, disconnect PJ562 and PJ559 from the BM PWB.

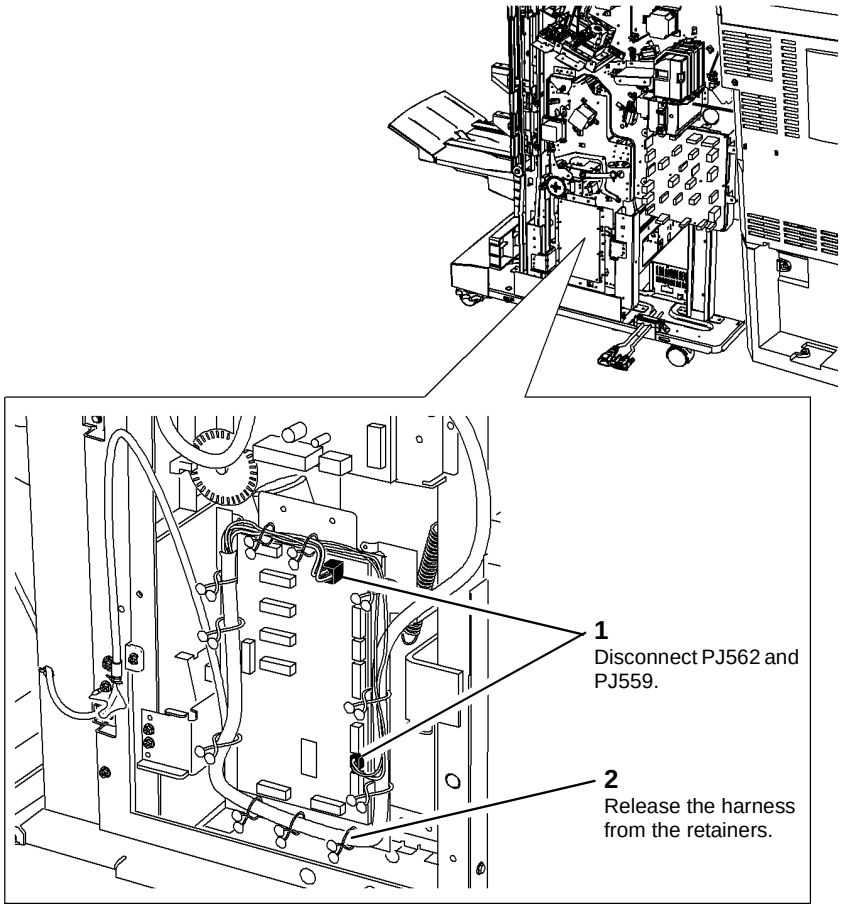


Figure 1 Disconnect the PJs

3. Figure 2, disconnect the harness from bin 2.

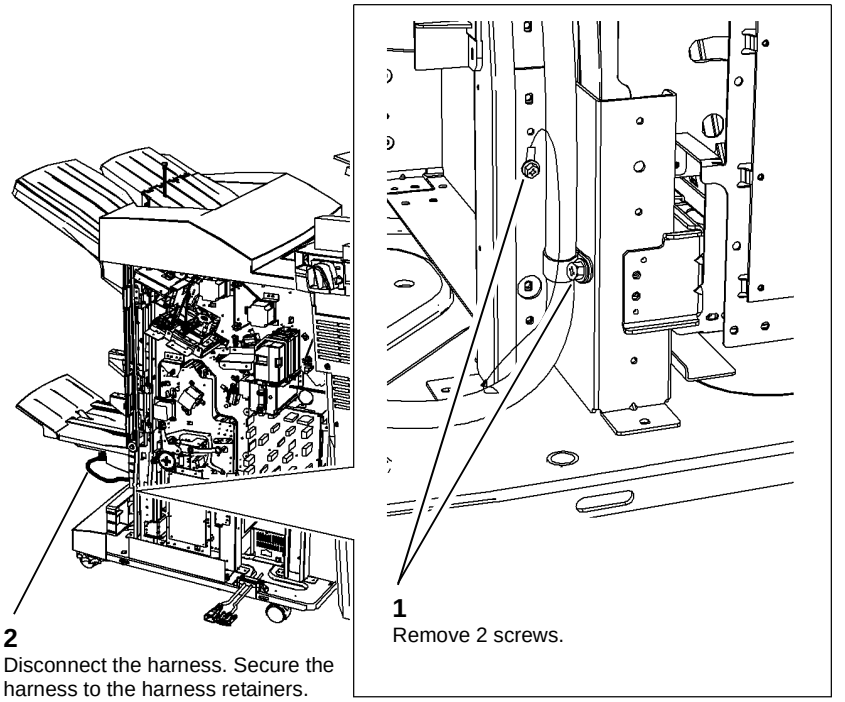


Figure 2 Disconnect the harness

4. Figure 3, prepare to remove the BM module.

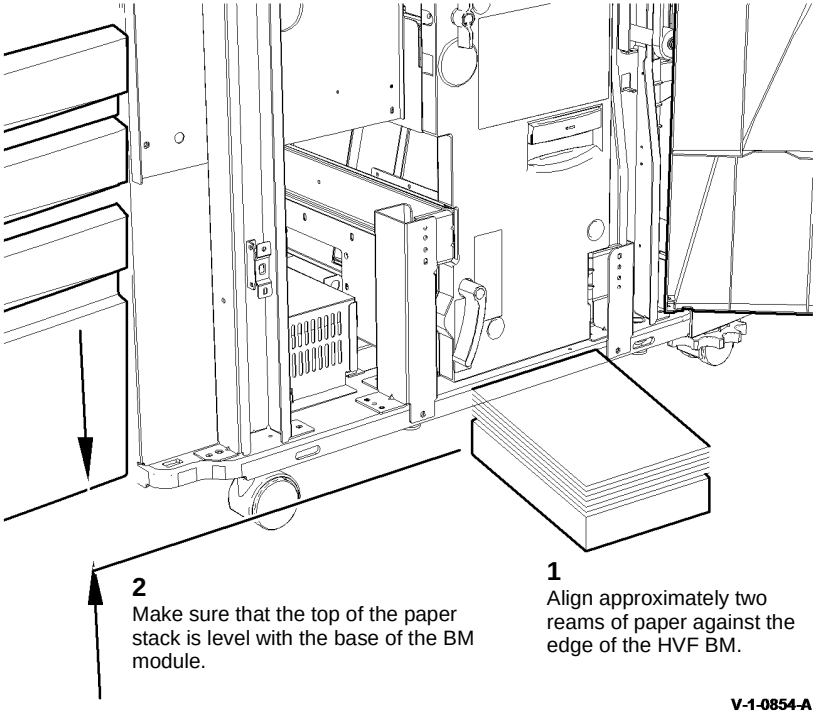


Figure 3 Preparation

5. Figure 4, prepare to remove the BM module.

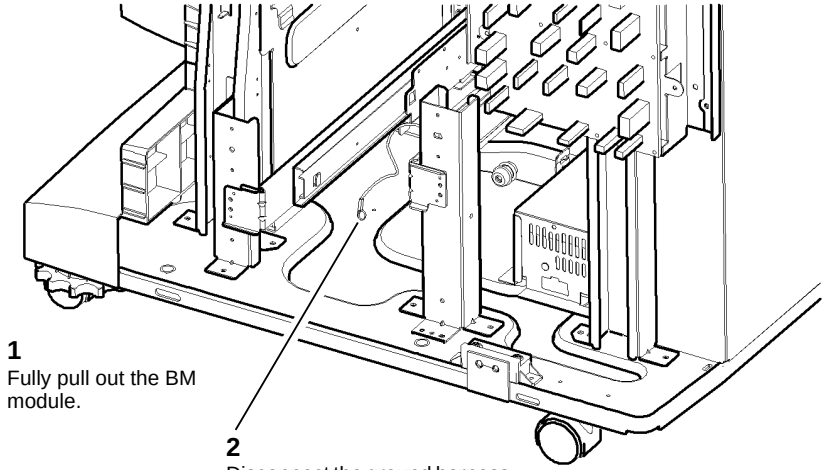


Figure 4 Preparation

6. Figure 5, release the latches.

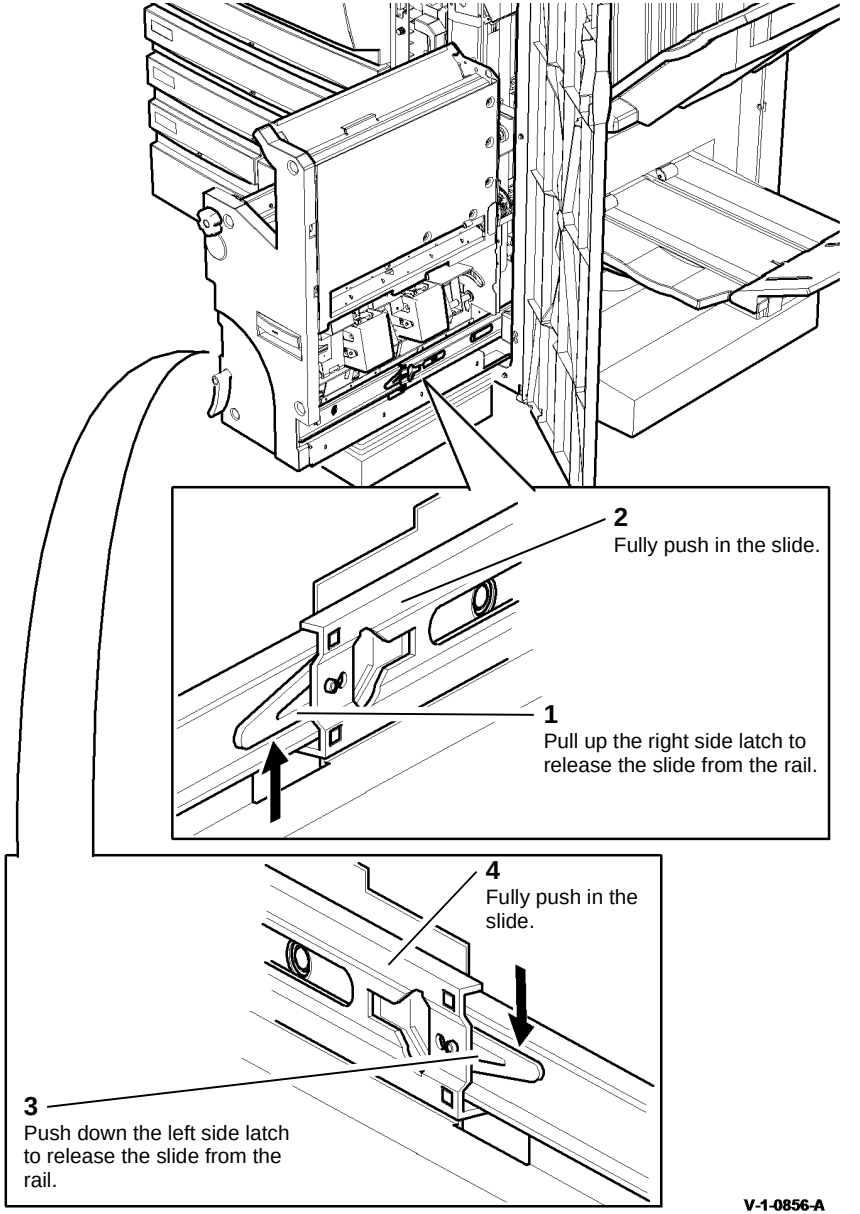


Figure 5 Releasing the slides

WARNING

Use safe handling procedures, GP 16 when removing this module. The module is heavy.

CAUTION

Do not damage the BM front cover when the BM module is removed.

NOTE: *The BM module weight is 27 Kg (59.5 lb.).*

NOTE: *The BM catch will spring to the rear when the BM module is removed. Refer to Figure 7.*

7. Figure 6, remove the BM module.

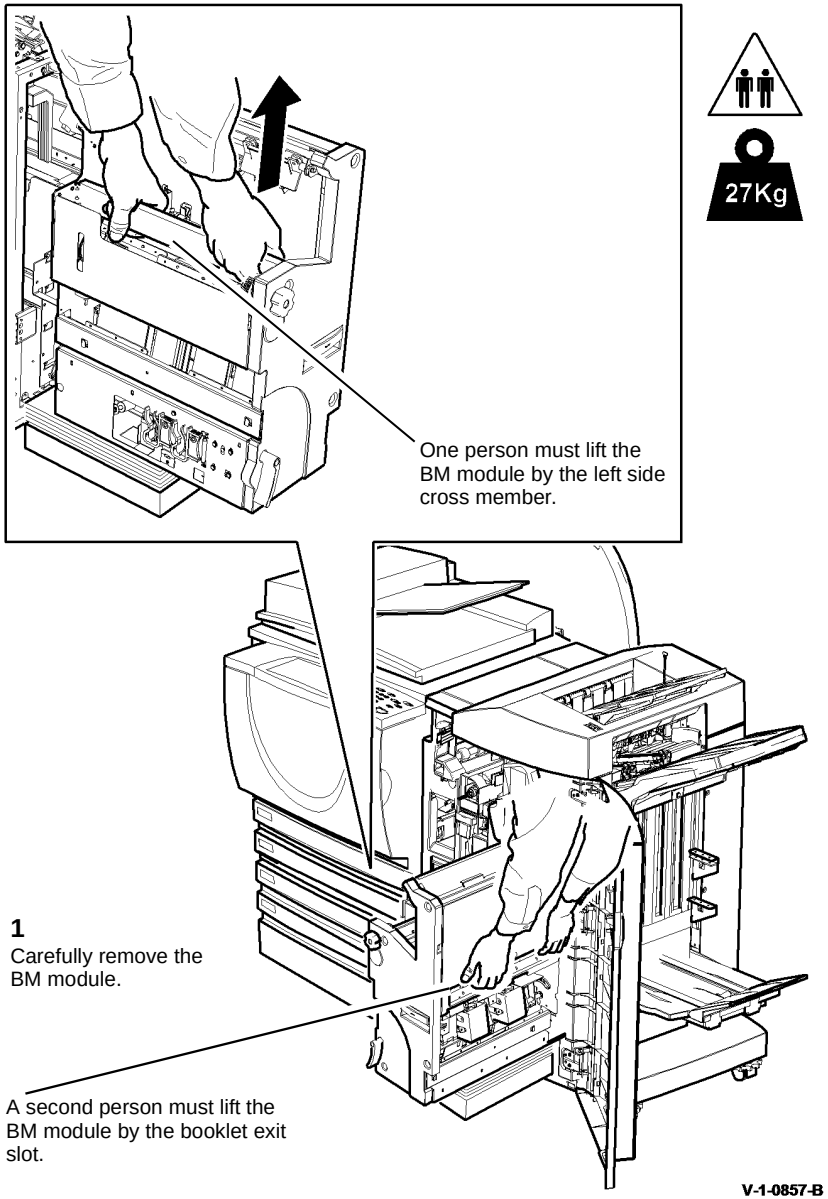


Figure 6 Remove the BM module

Replacement

CAUTION

Do not damage the harnesses when the BM module is installed. Ensure that the rails are correctly aligned with the slides.

1. Put the BM module on the paper stack in front of the HVF BM.
2. Route the bin 2 harness and the ground harness to the rear of the HVF BM.
3. If a new BM is to be installed, perform the following:
   a. Unlatch the slides from the new BM module. Refer to Figure 5.
   b. Install the new BM module onto the existing rails in the HVF BM.
4. Figure 7, prepare to install the BM module.

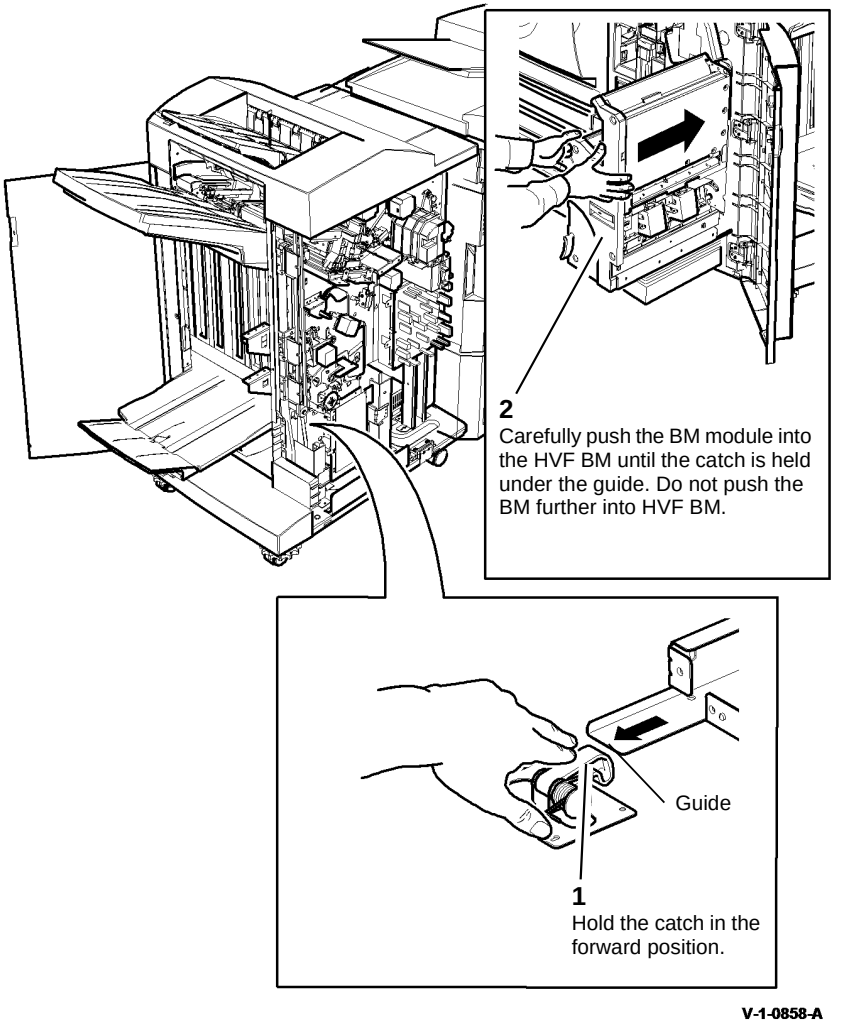


Figure 7 Position of the catch

5. Reverse the removal procedure to replace the BM module.

CAUTION

Ensure the BM harness and bin 2 harness are correctly positioned in the harness retainers so that harnesses are not damaged when the BM is moved to the extremities of its travel.

6. Perform the 311D-171 Booklet Quality RAP.

REP 11.62-171 BM Slide Assembly

Parts List on PL 11.160

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the BM module, REP 11.61-171.
2. Remove the BM front cover, PL 11.161 Item 3.
3. Figure 1, Remove the slide assembly from the HVF BM frame.

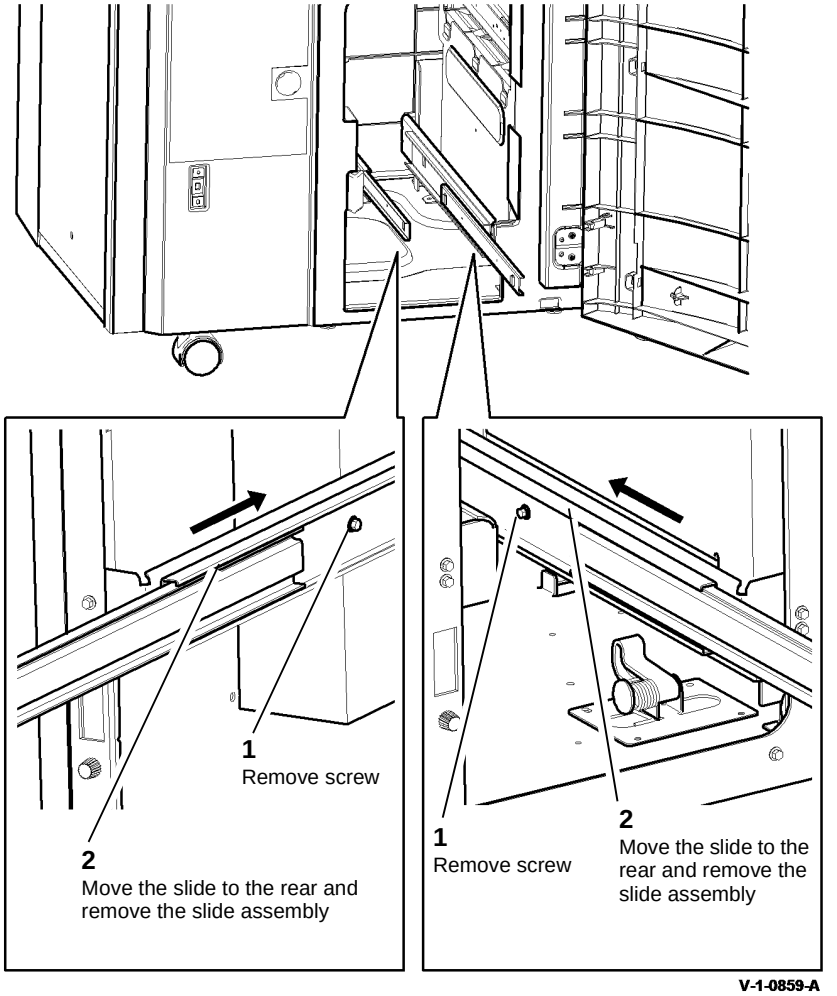


Figure 1 Remove the slide assembly

4. Figure 2. Remove the bracket and the slide rail from the right side of the BM module.

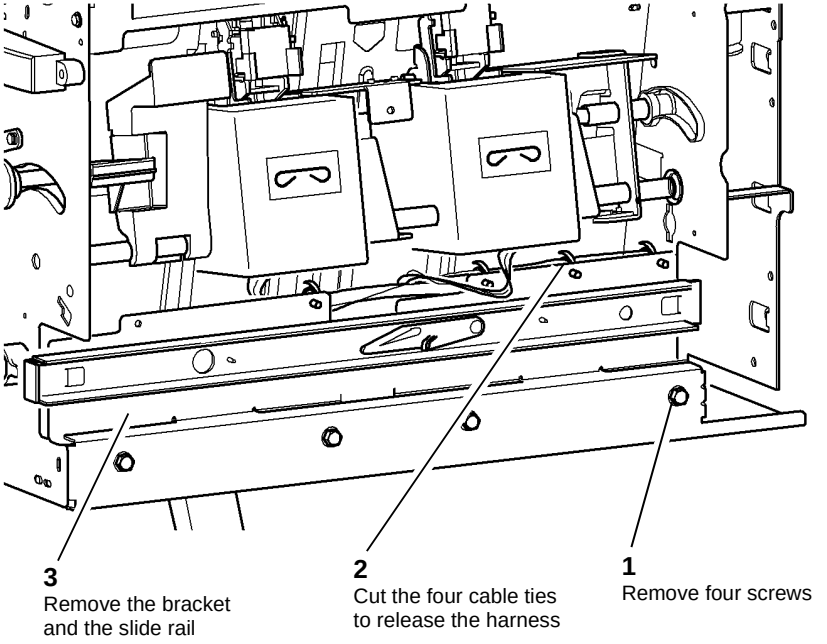


Figure 2 Remove the bracket and the slide rail

5. Figure 3. Remove the two brackets from the slide rail.

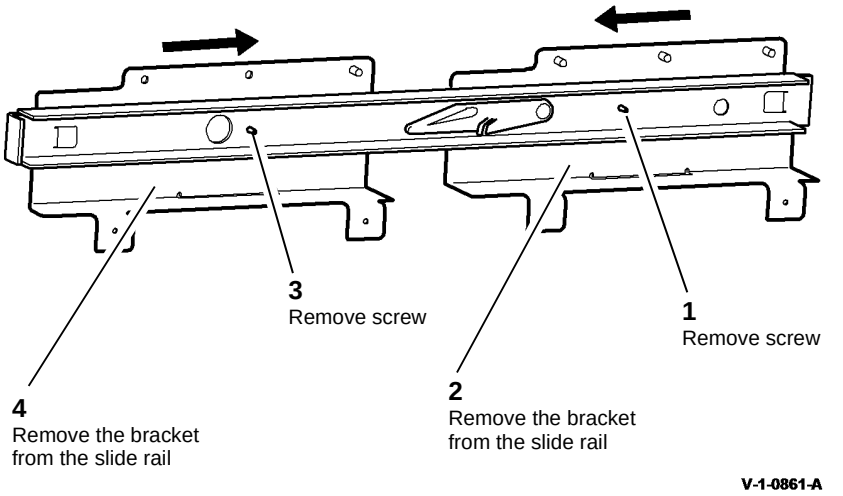


Figure 3 Remove the bracket from the slide rail

6. Figure 4. Remove the bracket and the slide rail from the left side of the BM module.

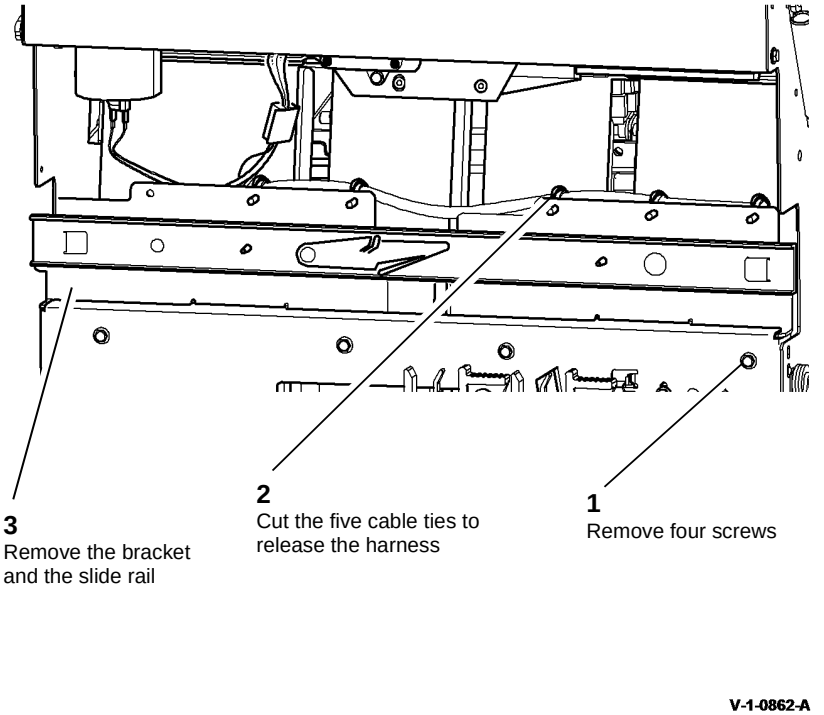


Figure 4 Remove the bracket and slide rail

7. Figure 5. Remove the two brackets from the slide rail

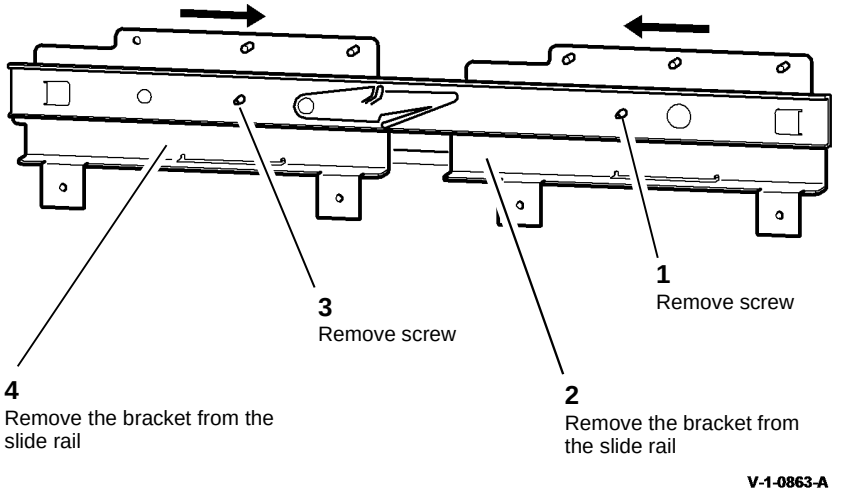


Figure 5 Remove the bracket from the slide rail

Replacement

1. Reverse the removal procedure to replace the slide assembly.
2. Ensure that all of the cable ties are installed and the harness are in the correct position.
3. Check that all of the PJ connections are connected.

REP 11.63-171 HVF Transport Motor 1

Parts List on PL 11.150

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove transport motor 1 and bracket assembly, Figure 1.

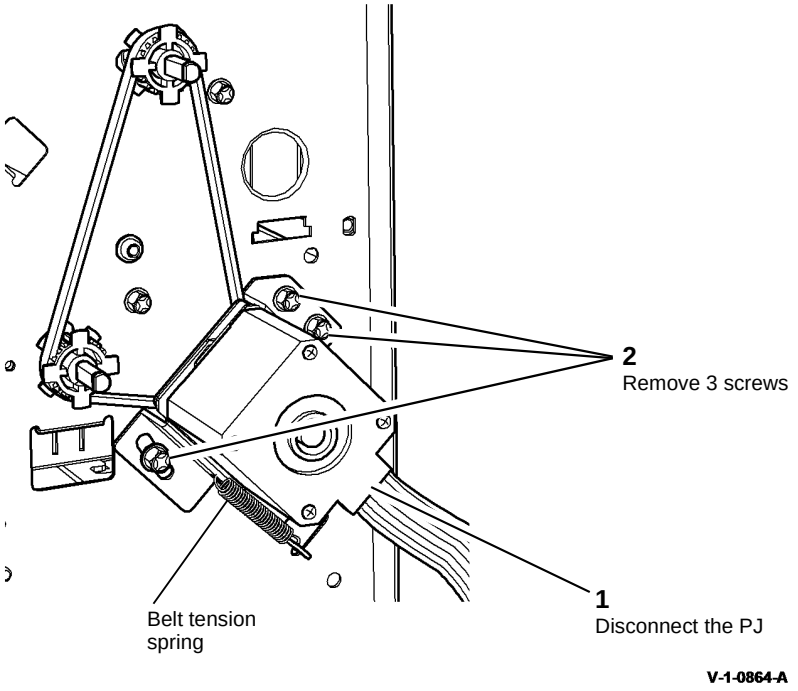


Figure 1 Transport motor 1 and bracket

3. Remove 2 screws and the grounding wire to remove the motor and damper from the bracket.

Replacement

1. Reverse the removal procedures to replace transport motor 1.
2. Set the belt tension ADJ 11.10-171.

REP 11.64-171 HVF Bypass Feed Motor

Parts List on PL 11.150

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove the bypass feed motor and bracket assembly, Figure 1.

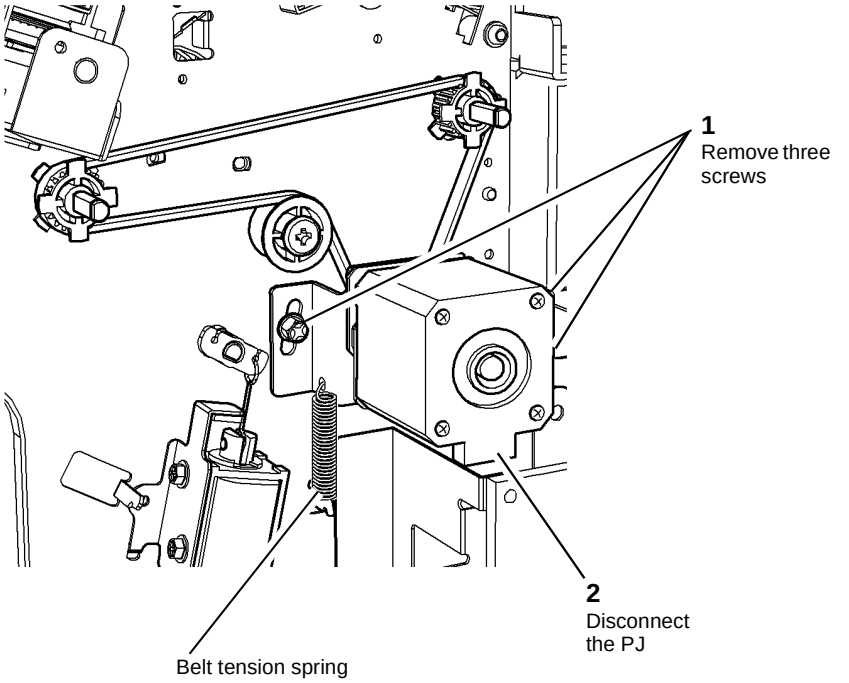


Figure 1 Bypass feed motor and bracket

3. Remove 2 screws and the grounding wire to remove the motor and damper from the bracket.

Replacement

1. Reverse the removal procedures to replace the bypass feed motor.
2. Set the belt tension, ADJ 11.10-171.

REP 11.65-171 HVF Buffer Feed Motor

Parts List on PL 11.150

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover REP 11.1-171.
2. Remove the buffer feed motor and bracket assembly, Figure 1.

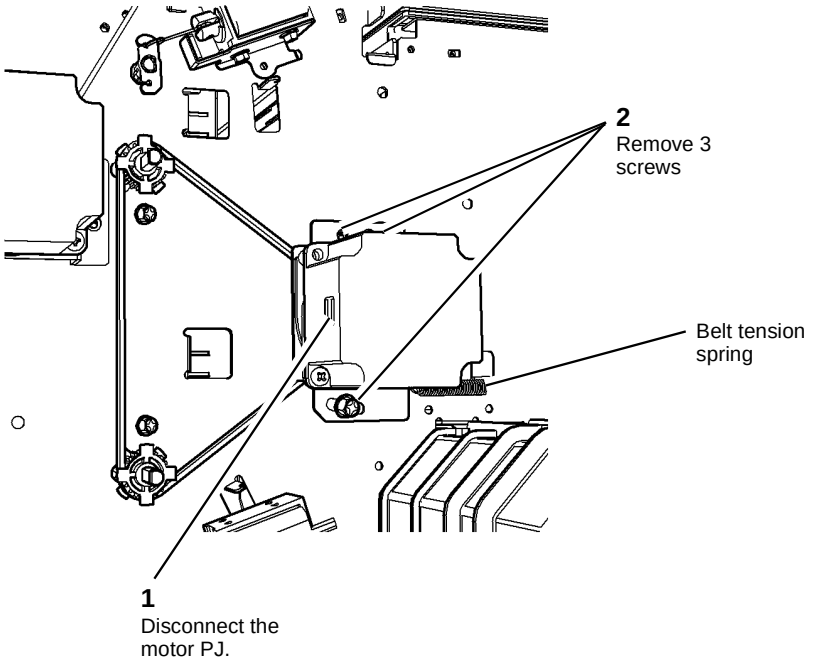


Figure 1 Buffer feed motor and bracket

3. Remove 2 screws and the grounding wire to remove the motor and damper from the bracket.

Replacement

1. Reverse the removal procedures to replace the buffer feed motor.
2. Set the belt tension, ADJ 11.10-171.

REP 11.66-171 HVF Transport Motor 2

Parts List on PL 11.150

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover, REP 11.1-171.
2. Remove transport motor 2 and bracket assembly, Figure 1.

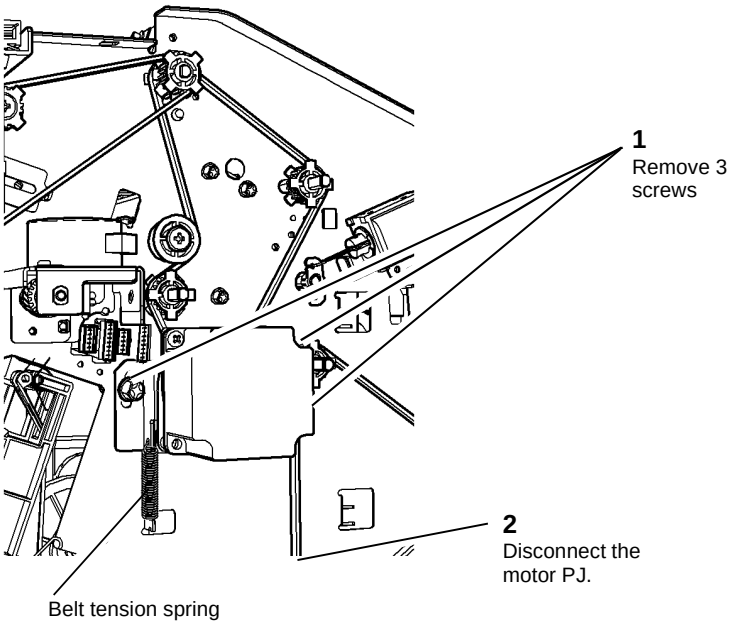


Figure 1 Transport motor 2 and bracket

3. Remove 2 screws and the grounding wire to remove the motor and damper from the bracket.

Replacement

1. Reverse the removal procedures to replace transport motor 2.
2. Set the belt tension, ADJ 11.10-171.

REP 11.67-171 Tri-Folder Covers

Parts List on PL 11.190

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *It is not necessary to remove the front door and front cover to remove the top cover.*

NOTE: *Open the top cover and remove the rear cover to access to the top cover rear fasteners and the top cover interlock sensor connector.*

1. Remove the tri-folder front door then the tri-folder front cover, Figure 1.

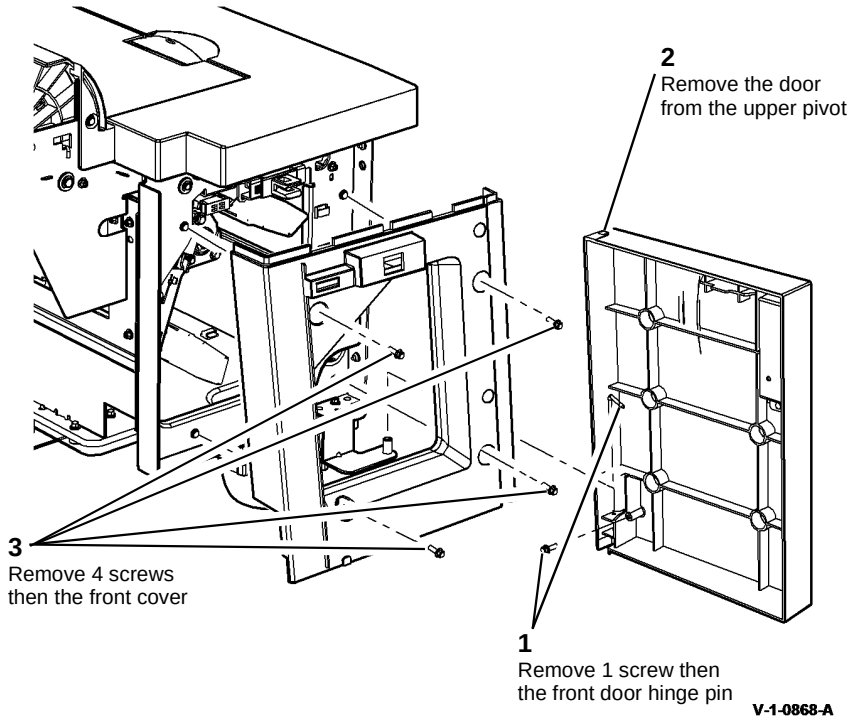


Figure 1 Front door and cover removal

2. Remove the tri-folder rear cover, the tri-folder top cover and the tri-folder right side cover as necessary, Figure 2.

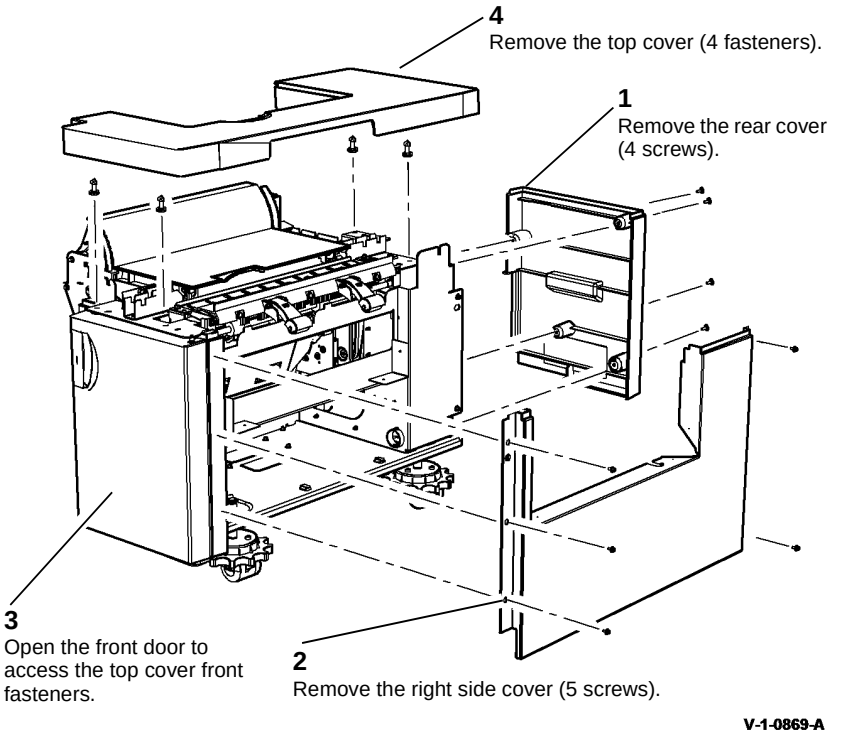


Figure 2 Top, rear and right side covers

Replacement

Reverse the removal procedures to reinstall the tri-folder covers.

REP 11.68-171 Tri-Folder Drive Assembly

Parts List on PL 11.193

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover, REP 11.1-171.
2. Remove the tri-folder rear cover REP 11.67-171.
3. Remove the tri-folder drive assembly, Figure 1.

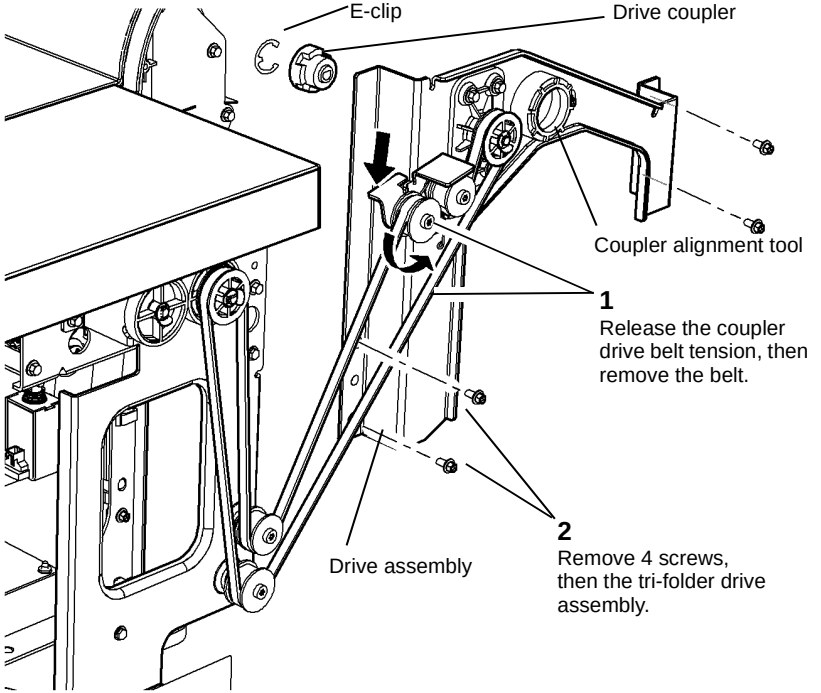


Figure 1 Drive assembly

4. If necessary, remove the circlip then remove the drive coupler, refer to Figure 1.

Replacement

1. Detach the coupler alignment tool from the drive unit, refer to Figure 1.
2. Install the drive assembly, Figure 2.

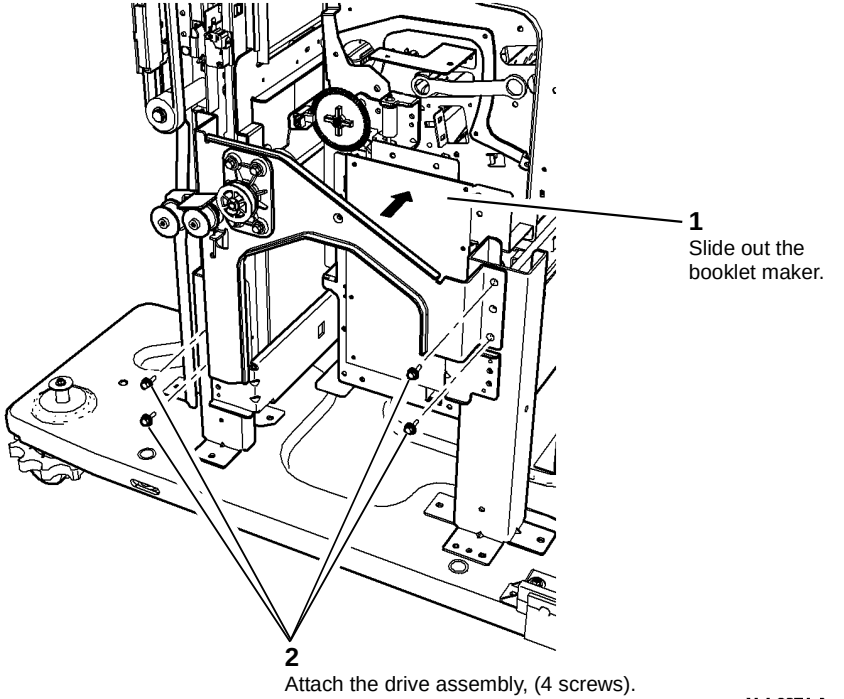


Figure 2 Attach the drive assembly

3. Centralise the coupler alignment tool onto the crease roll encoder disc, PL 11.166 Item 13 and Figure 3.

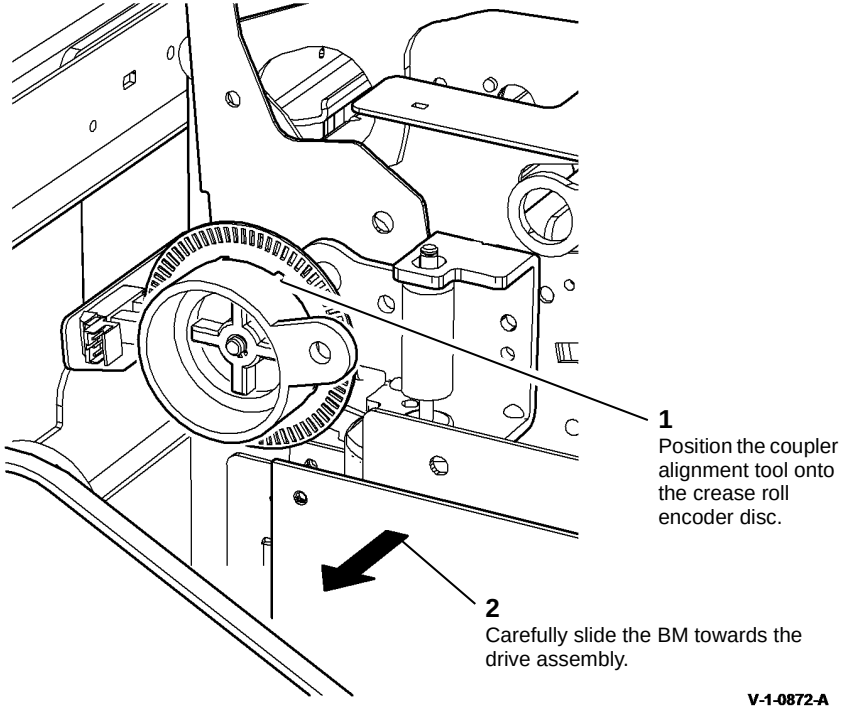


Figure 3 Centralise the alignment tool

4. Prepare to centralise the drive coupler, refer to Figure 1, with the HVF BM crease roll encoder disc, Figure 3.

5. Slacken off the drive unit retaining screws, Figure 4.

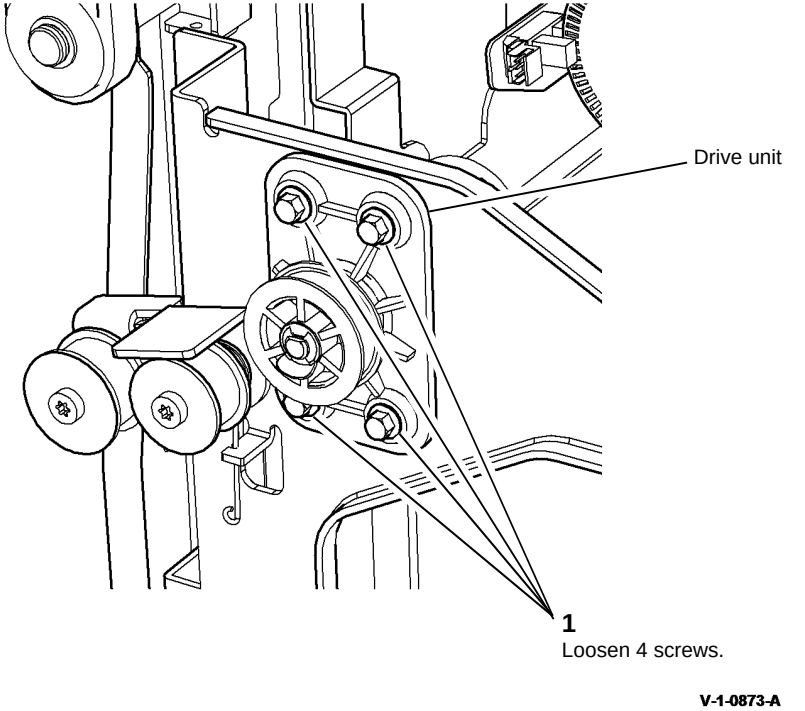


Figure 4 Loosen the drive unit

6. Centralise the coupler alignment tool with the drive unit coupler, Figure 5.

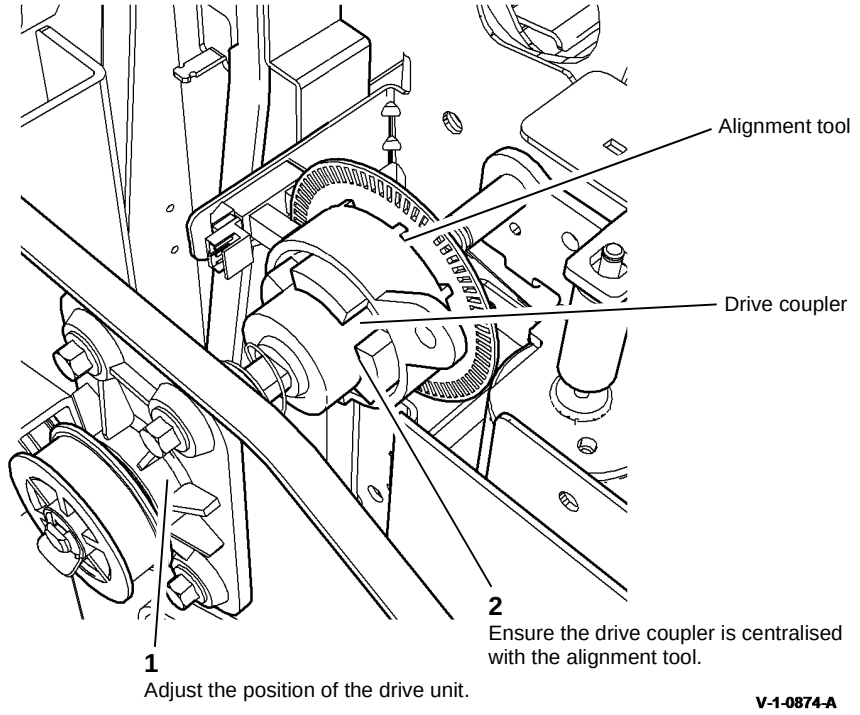


Figure 5 Centralise the drive coupler

7. Secure the drive unit in the centralised position, Figure 6.

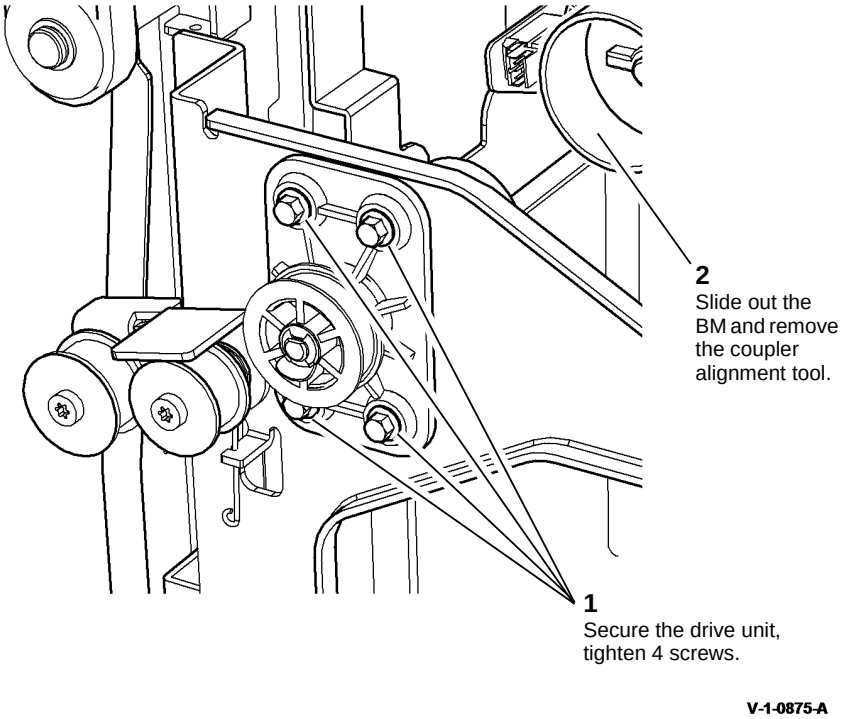


Figure 6 Secure the drive unit

8. Attach the alignment tool onto the drive assembly for future use.
9. Carefully slide back the BM and engage the drive unit coupler.
10. Check that the harnesses do not obstruct the BM crease roll motor encoder disc.
11. Reverse the removal procedures to replace the tri-folder

REP 11.69-171 Tri-Folder Drive Coupling Assembly

Parts List on PL 11.193

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder rear cover, REP 11.67-171.

   NOTE: *Access is improved if the top cover is removed also.*

2. Remove the drive coupling assembly bracket, Figure 1.

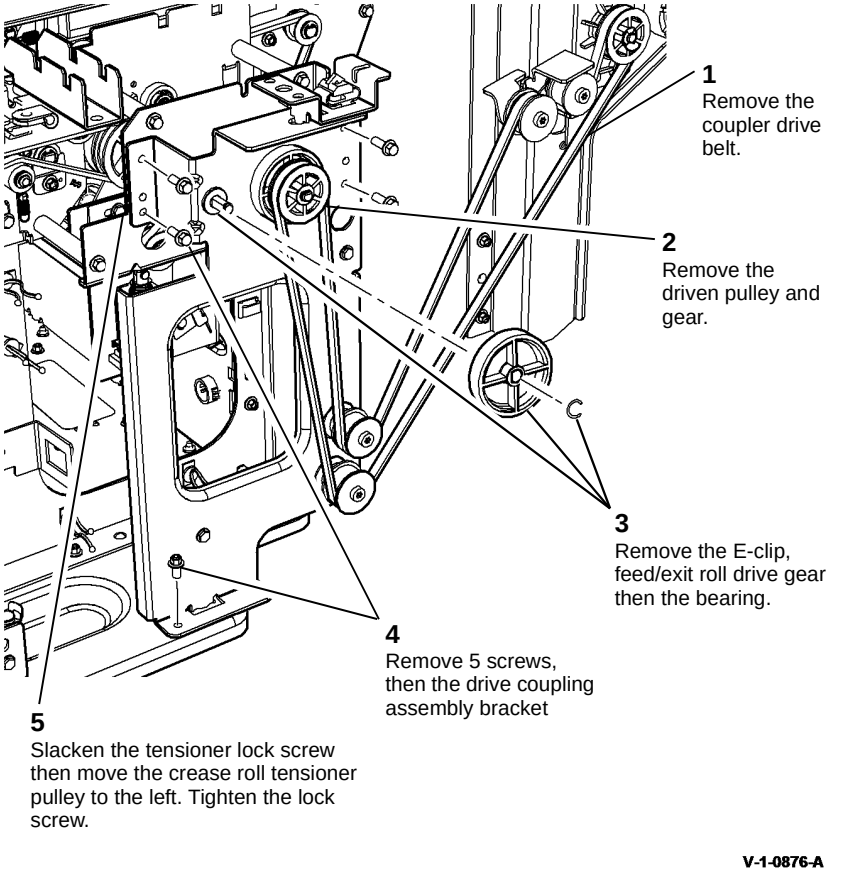


Figure 1 Drive coupling assembly

3. Remove the clutch and bearing from the idler bracket, Figure 2.

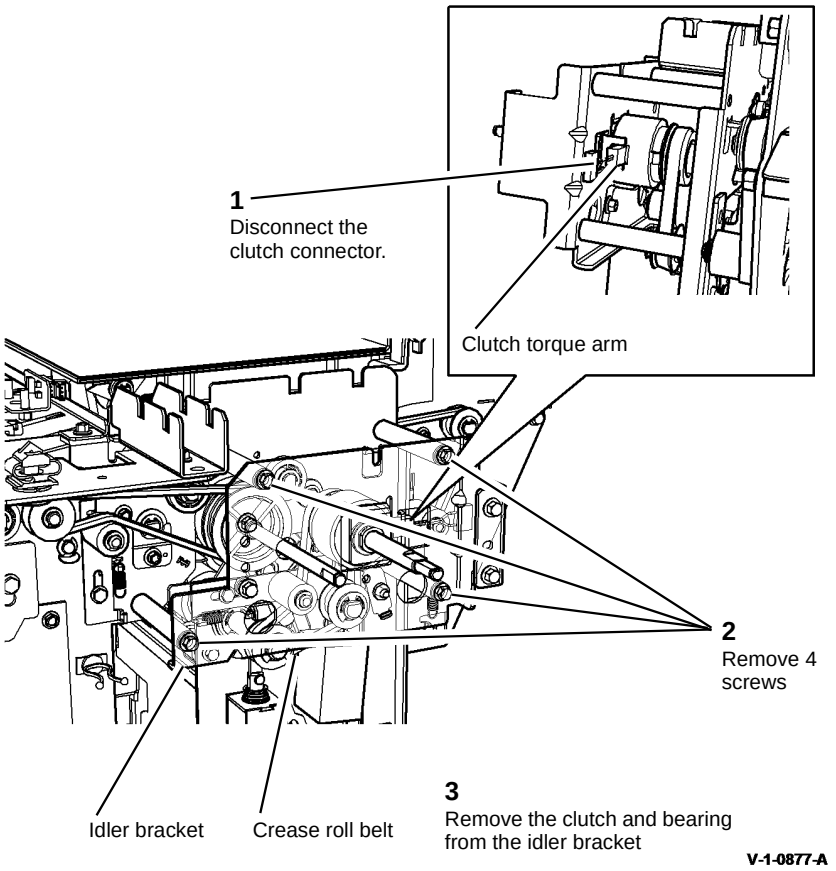


Figure 2 Idler assembly and crease roll clutch

Replacement

1. Reverse the removal procedures to reinstall the crease roll clutch and drive coupling assembly.
2. Replace the idler assembly with the smooth side of the crease roll belt towards the idler, then fit the drive belt over the clutch gear. Refer to Figure 2.
3. Position the clutch torque arm in the slot in the idler bracket. Refer to Figure 2.
4. Perform ADJ 11.10-171 Motor Drive Belt Tensioning.

REP 11.70-171 Tri-Folder Feed Roller and Drive Belt

Parts List on PL 11.193, PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the tri-folder from the HVF then move the unit to the right to access the left side of the frame, refer to REP 11.73-171.
2. Remove the tri-folder top cover, front cover and rear cover, REP 11.67-171.
3. Remove the feed roller and drive belt, Figure 1.

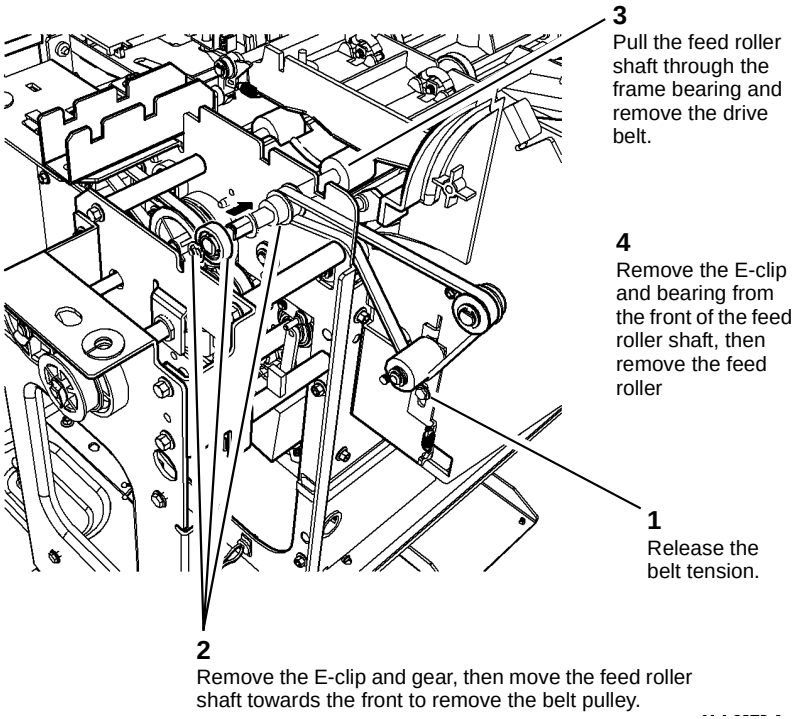


Figure 1 Drive belt removal

Replacement

1. Reverse the removal procedures to replace the feed roller and drive belt.
2. Before docking the tri-folder unit to the HVF, perform ADJ 11.10-171 Motor Drive Belt Tensioning.

REP 11.71-171 Tri-Folder Assist Gate Solenoid

Parts List on PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the tri-folder front door, or remove the bin 2 assembly. Remove the tri-folder rear cover, REP 11.67-171.
2. Remove the assist gate solenoid, Figure 1.

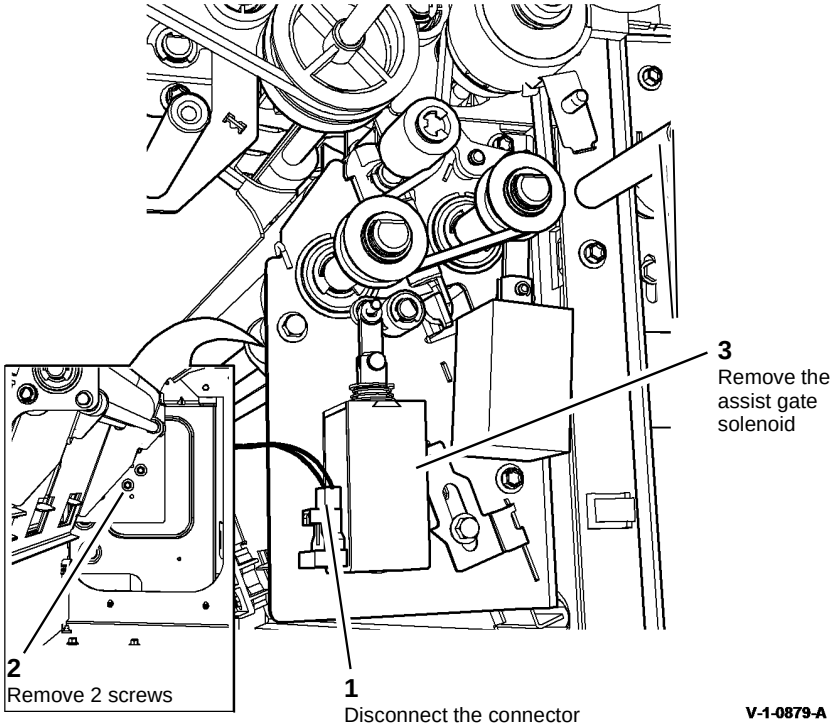


Figure 1 Assist gate solenoid

Replacement

Reverse the removal procedures to replace the assist gate solenoid.

REP 11.72-171 Tri-Folder Crease Roll Springs

Parts List on PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder front door, front cover and rear cover, REP 11.67-171.
2. Remove the front and rear springs, Figure 1.

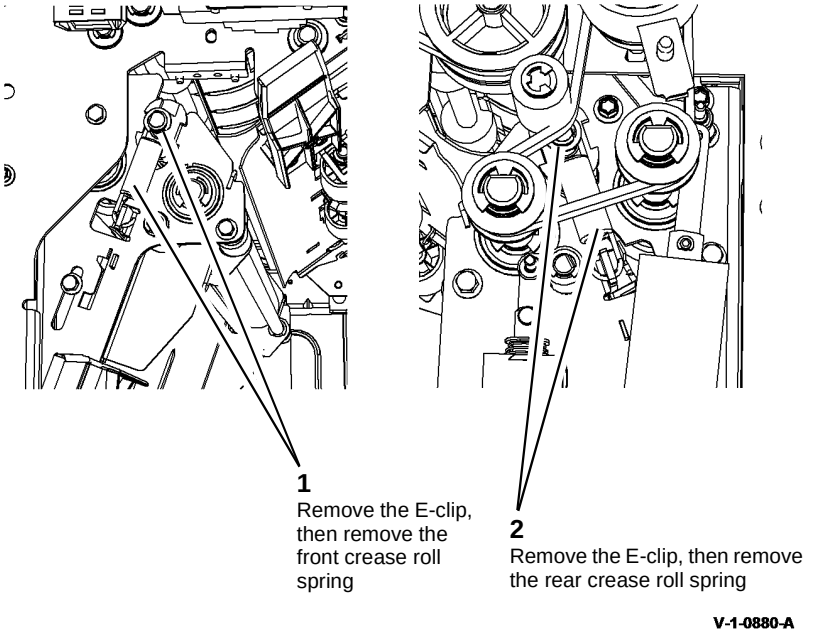


Figure 1 Crease roll springs

Replacement

Reverse the removal procedures to replace the front or rear crease roll spring.

REP 11.73-171 Tri-Folder Top Door Cover and Idler Assemblies

Parts List on PL 11.195

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the tri-folder from the HVF, then move it to the right to gain access to the left side of the tri-folder frame,REP 11.99-171.

   NOTE: *The wiring harnesses to the HVF do not need to be disconnected.*

2. Remove the tri-folder top door cover assembly, Figure 1.

NOTE: *Control the movement of the torsion spring.*

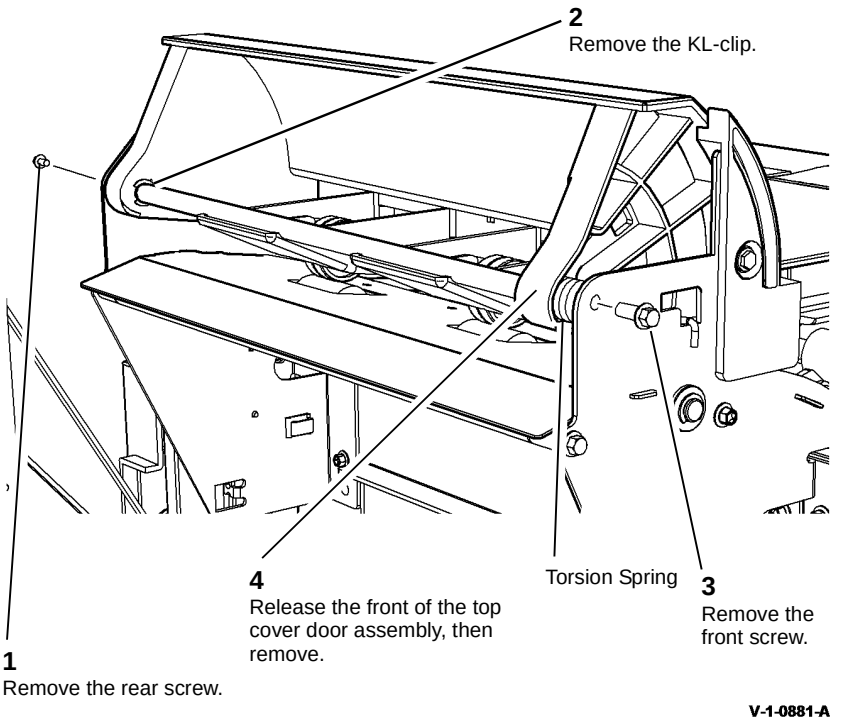


Figure 1 Top cover removal

3. Remove the idler assemblies, Figure 2.

   NOTE: *There are four idler assemblies, they are all removed in the same way as shown in Figure 2.*

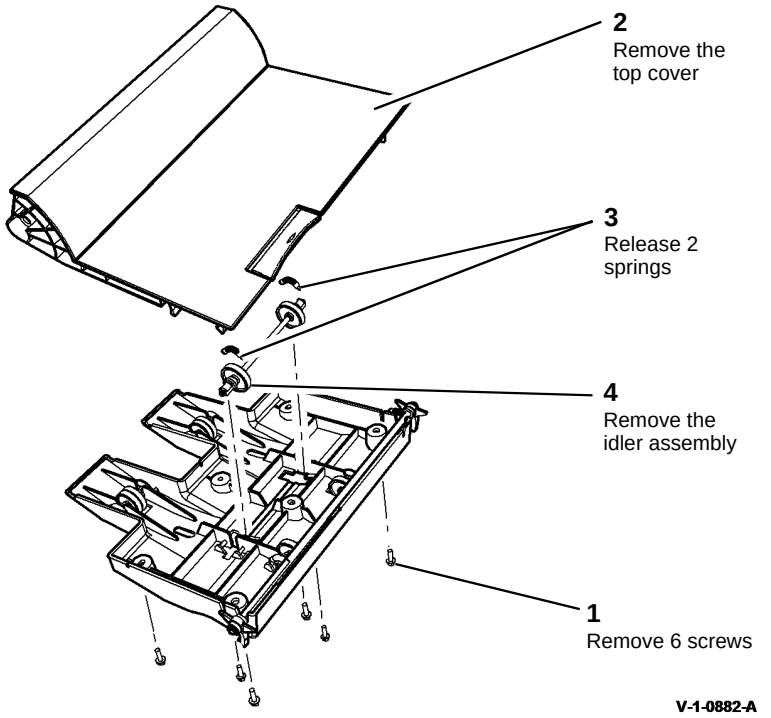


Figure 2 Idler assembly removal

Replacement

1. Reverse the removal procedures to reinstall the idler assembly and top door cover assembly.
2. Make sure that the correct self-tapping screws are used to replace the cover base. Do not overtighten the screws, refer to GP 6.
3. Replace, but do not tighten, the rear pivot shaft screw. Position the cover and torsion spring then fit the front of the pivot shaft in the frame. Replace then tighten both front and rear pivot shaft screws.
4. Check that the cable harnesses are not obstructed or touching moving parts when the tri-folder is docked to the HVF.

REP 11.74-171 Tri-Folder Roller Assembly and Diverter Solenoid

Parts List on PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the tri-folder assembly from the HVF, REP 11.73-171. Position and support the tri-folder so that it is safely accessible from the front, rear and left side.
2. Release the crease roll drive belt tension, REP 11.69-171. Disconnect the harness from the diverter and assist gate solenoids.
3. Remove the tri-folder roller assembly, Figure 1.

NOTE: *If not supported, the roller assembly will fall inside the tri-folder frame.*

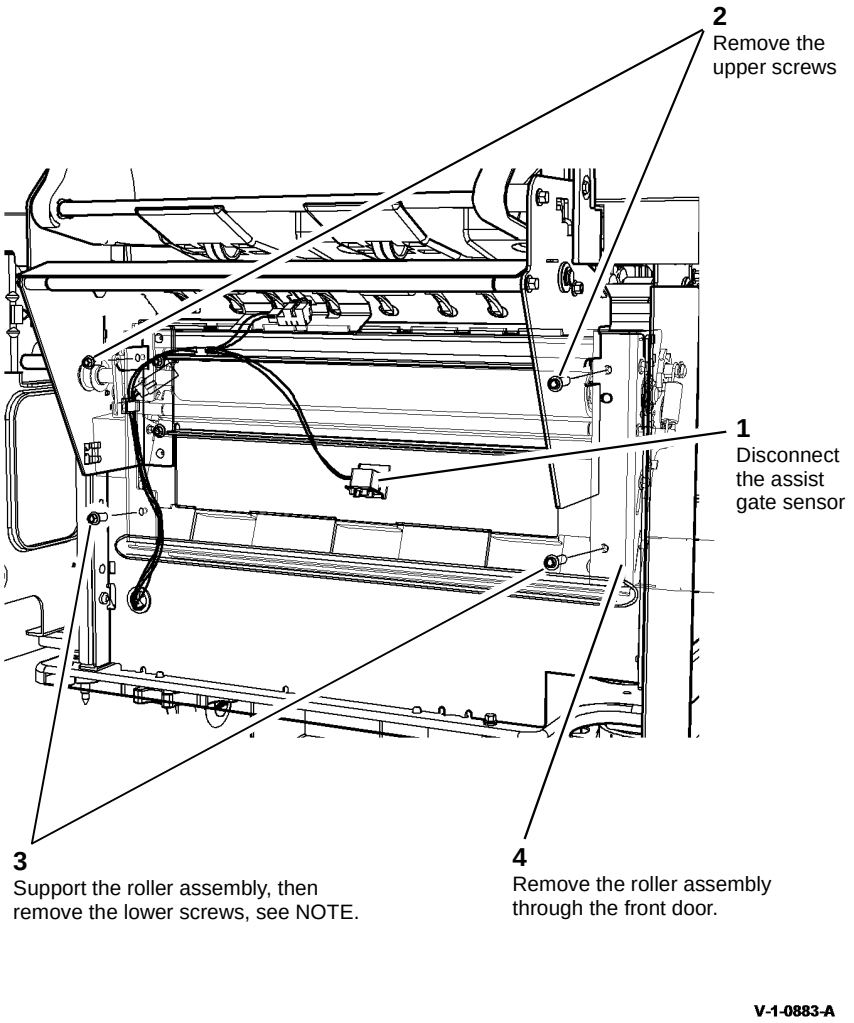


Figure 1 Roller assembly removal

4. Remove the diverter gate solenoid or crease roll pulleys as necessary, Figure 2.

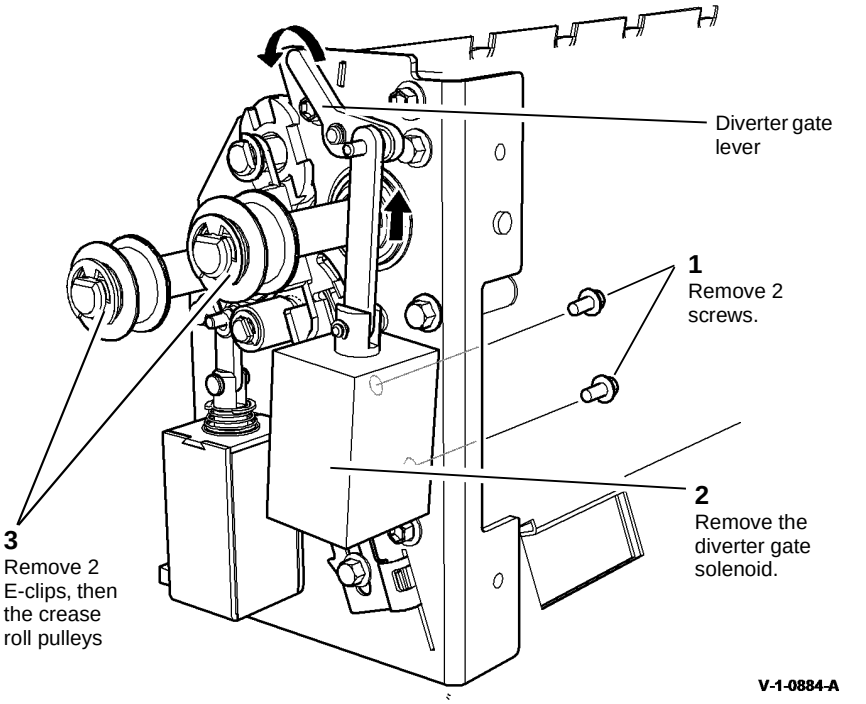


Figure 2 Solenoid and pulleys removal

Replacement

1. Reverse the removal procedures to reinstall the pulleys, diverter gate solenoid and tri-folder roller assembly.
2. Before replacing the roller assembly set the diverter operating lever to the forward position (solenoid armature extended) to engage with the right side of the diverter shaft lever. Refer to Figure 2.
3. Check that the diverter gate operates correctly before tensioning the crease roll drive belt.

REP 11.75-171 HVF Bin 1 Limit Switches

Parts List on PL 11.135

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover, REP 11.1-171.
2. Remove the relevant limit switch, Figure 1.

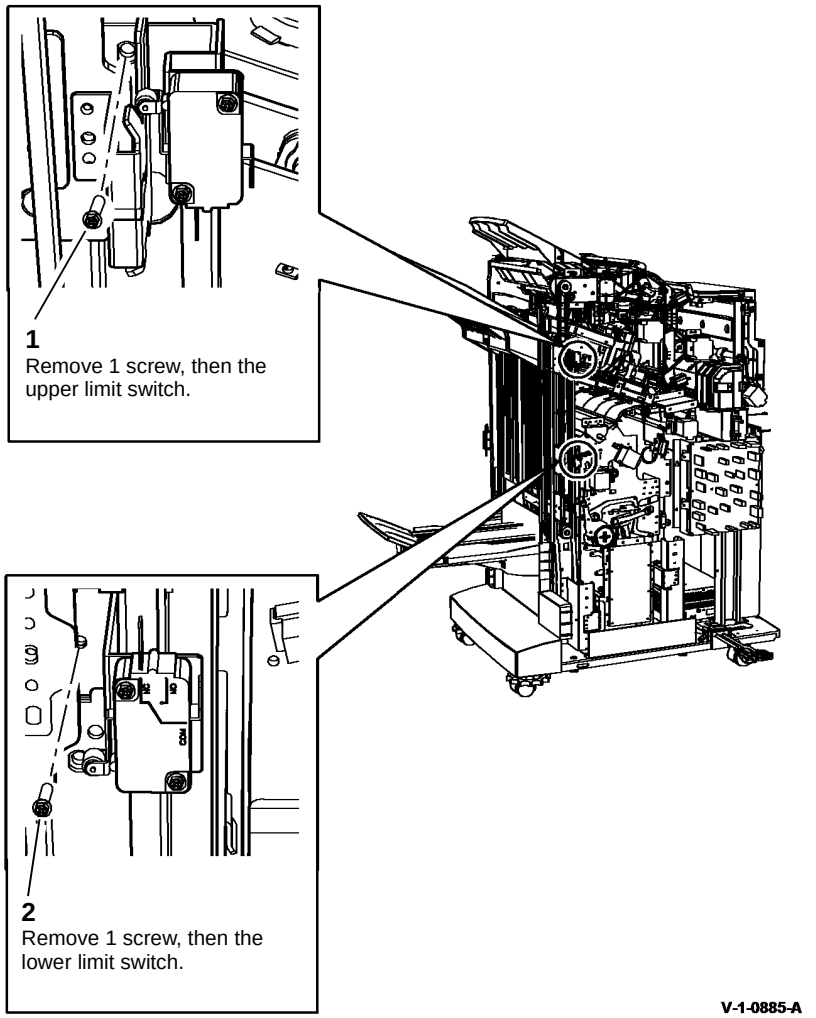


Figure 1 Bin 1 limit switches

Replacement

Reverse the removal procedures to replace the Bin 1 upper and lower limit switches.

REP 11.76-171 HVF Bin 1 Upper Level Sensor

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF front and rear covers, REP 11.1-171.
2. Remove the bin 1 upper level sensor, Figure 1.

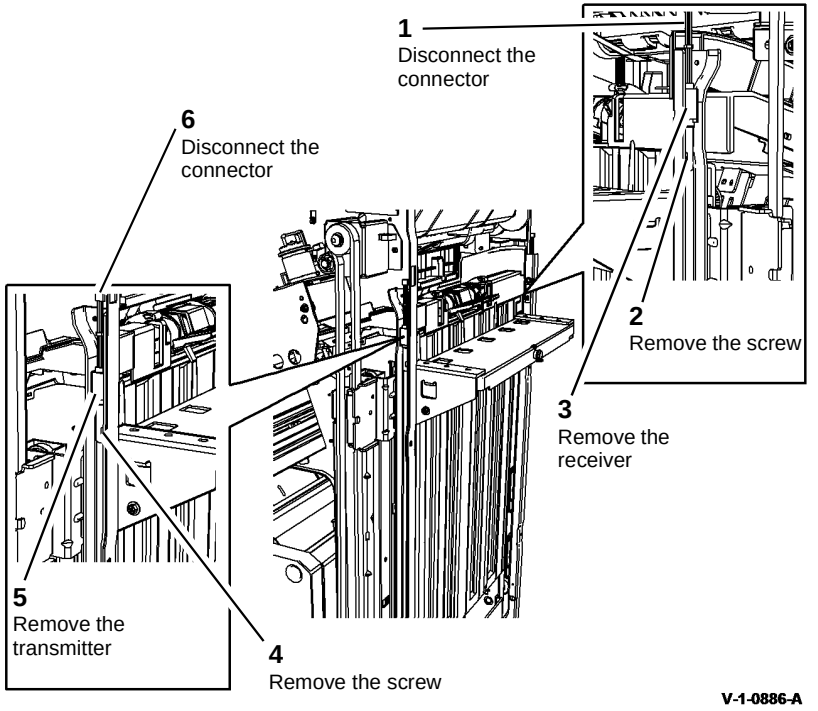


Figure 1 Bin 1 upper level sensor removal

Replacement

Reverse the removal procedures to replace the transmitter or receiver of the bin 1 upper level sensor.

REP 11.77-171 Tri-Folder Door Interlock Switches and Sensor

Parts List on PL 11.190, PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder front and top covers, REP 11.67-171.
2. Disconnect, then remove the relevant interlock switch or top cover sensor, Figure 1.

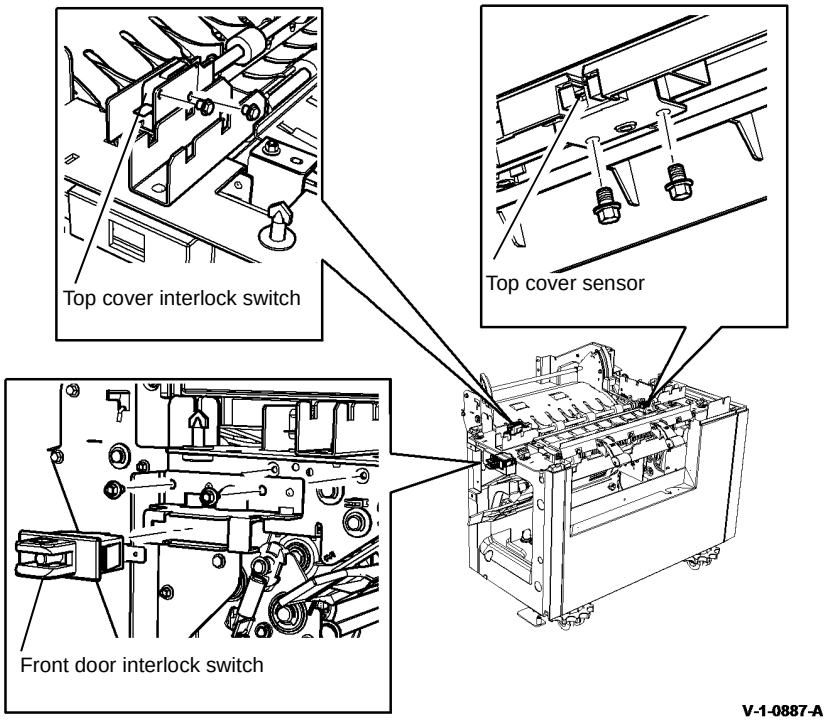


Figure 1 Switches and sensor removal

Replacement

Reverse the removal procedures to replace the front door and top cover interlock switches and the top access cover sensor.

REP 11.78-171 Tri-Folder Entry and Assist Gate Sensors

Parts List on PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the tri-folder unit from the HVF, refer to REP 11.73-171.
2. Disconnect, then remove the relevant sensor, Figure 1.

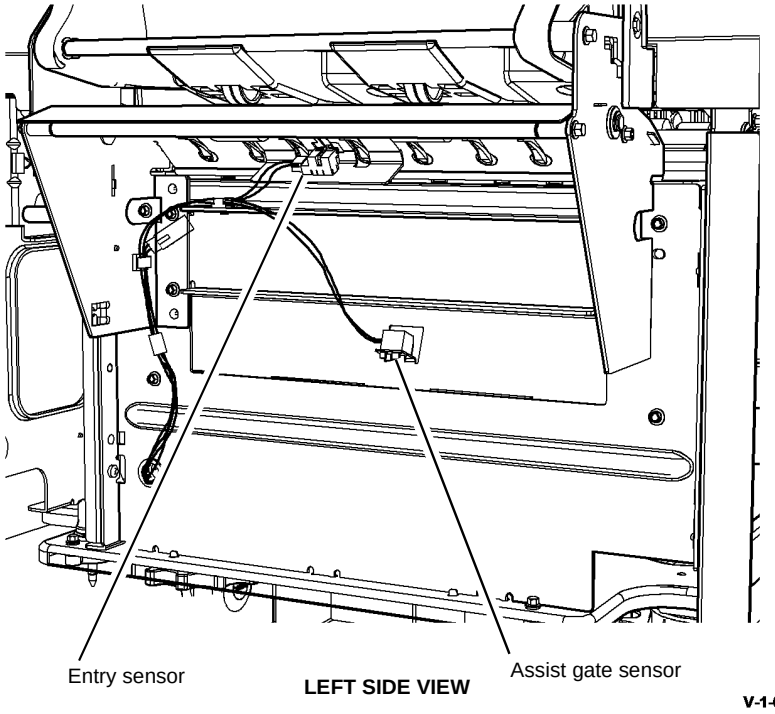


Figure 1 Sensor removal

Replacement

Reverse the removal procedures to replace the entry and assist gate sensors.

REP 11.79-171 Tri-Folder Exit Sensor

Parts List on PL 11.197

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder top cover, REP 11.67-171.
2. Remove the exit sensor, Figure 1.

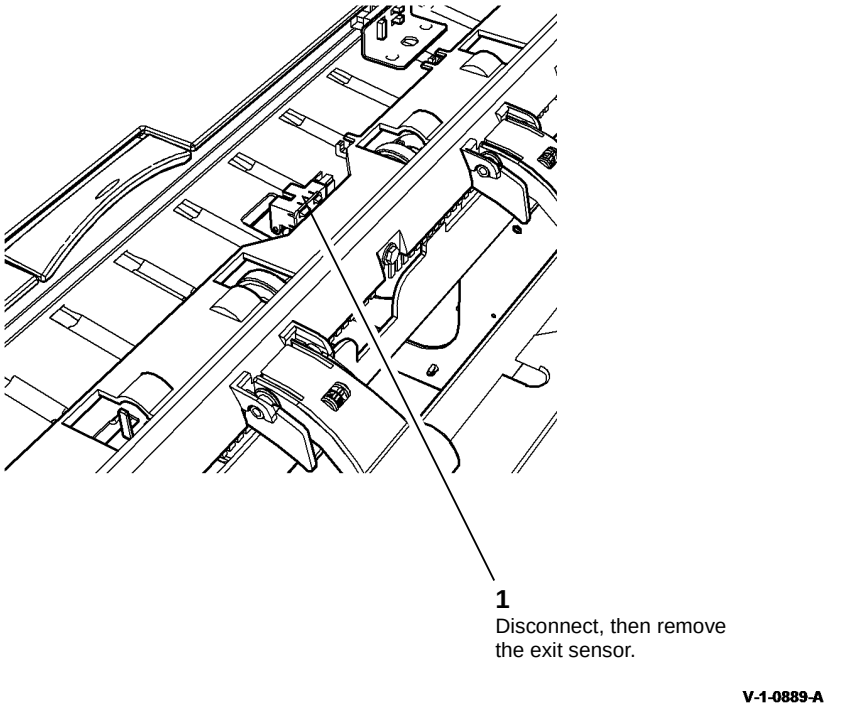


Figure 1 Exit sensor removal

Replacement

Reverse the removal procedures to replace the exit sensor.

REP 11.80-171 Tri-Folder Control PWB

Parts List on PL 11.193

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder rear cover, REP 11.67-171.
2. Remove the tri-folder control PWB, Figure 1.

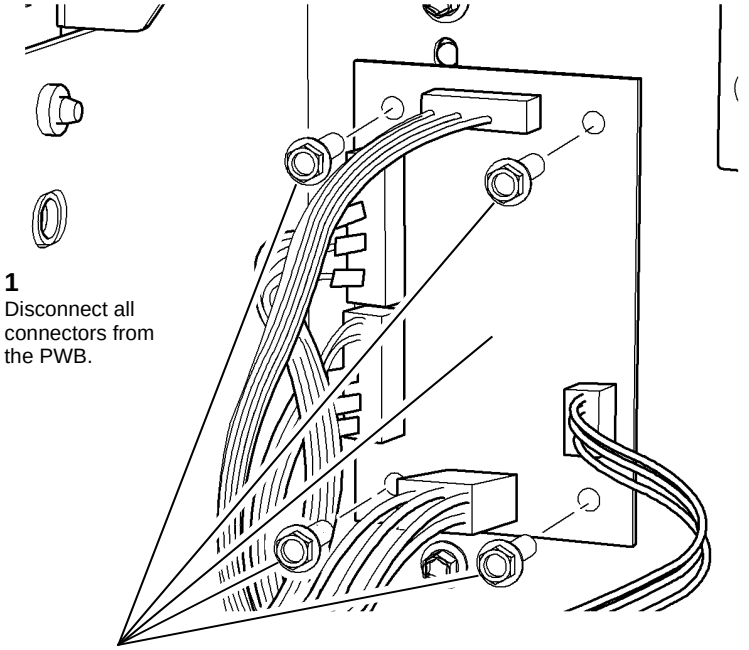


Figure 1 PWB removal

Replacement

Reverse the removal procedures to replace the tri-folder control PWB.

REP 11.81-171 Tri-Folder and Bin 2 Tray Harnesses

Parts List on PL 11.193

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tri-folder rear cover, REP 11.67-171. If removing the tri-folder harness, remove the HVF rear cover, REP 11.1-171.
2. Disconnect, then remove the relevant harness, Figure 1.

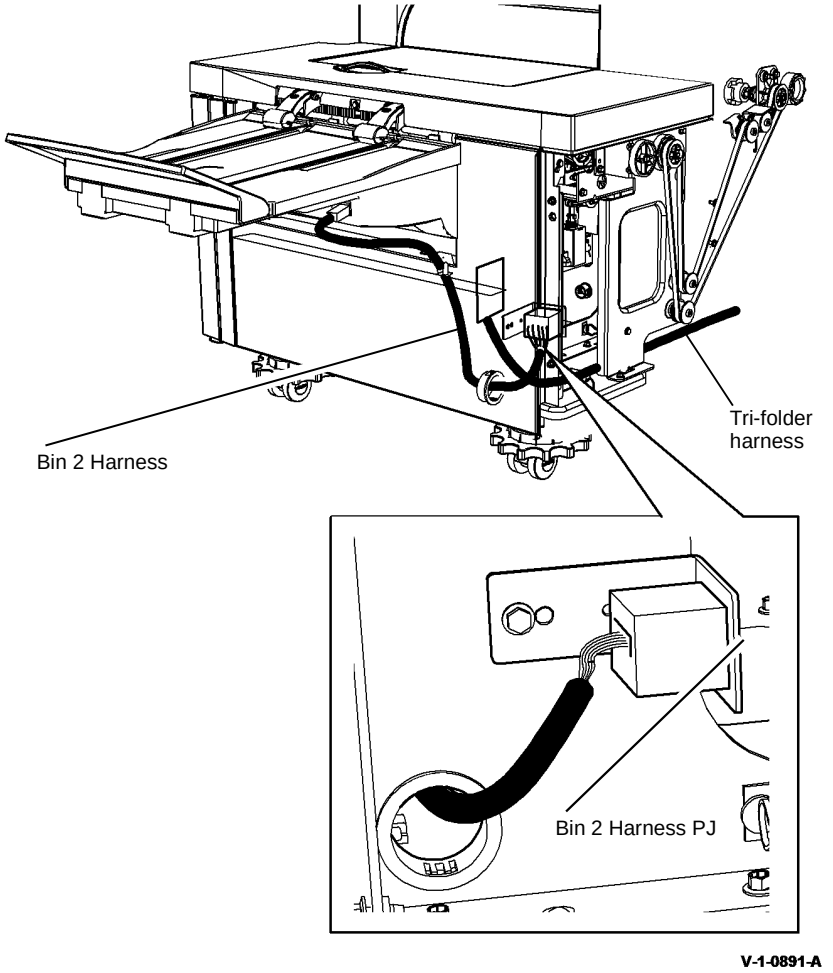


Figure 1 Harness removal

Replacement

Reverse the removal procedures to replace the main and bin 2 tray harnesses.

REP 11.82-171 Inserter Undocking

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Place the inserter on a suitable surface. Do not damage the inserter locating pins.

CAUTION

Do not show the customer how to undock the inserter.

1. Open the HVF front door.
2. Undock the inserter, Figure 1.

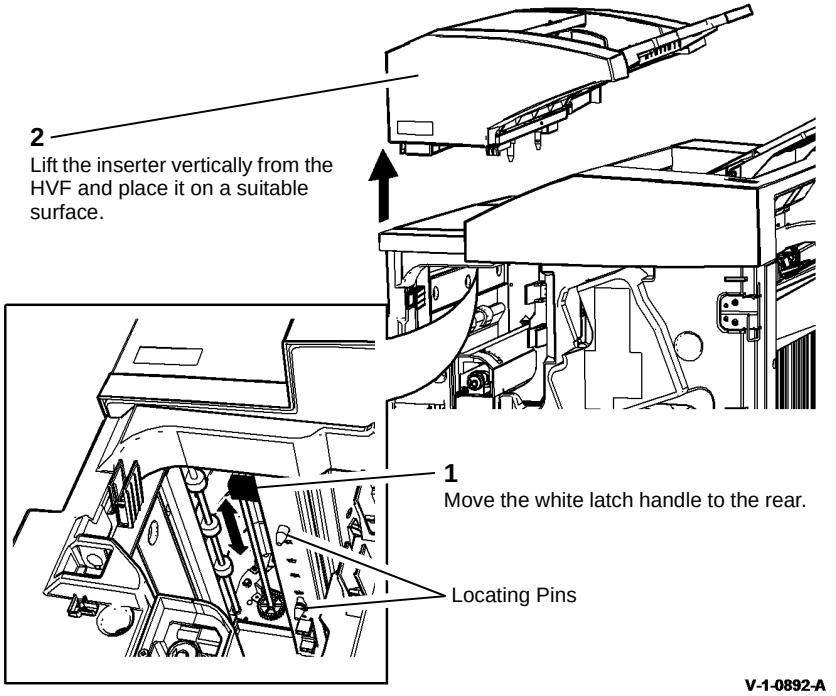


Figure 1 Inserter undocking

Replacement

1. Reverse the removal procedures to dock the inserter.
2. Lock the inserter onto the HVF by sliding the latch handle towards the front, Figure 1.

REP 11.83-171 Inserter Front and Rear Covers

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the inserter and put it on a suitable surface, REP 11.82-171.
2. Remove the inserter front and rear covers, Figure 1.

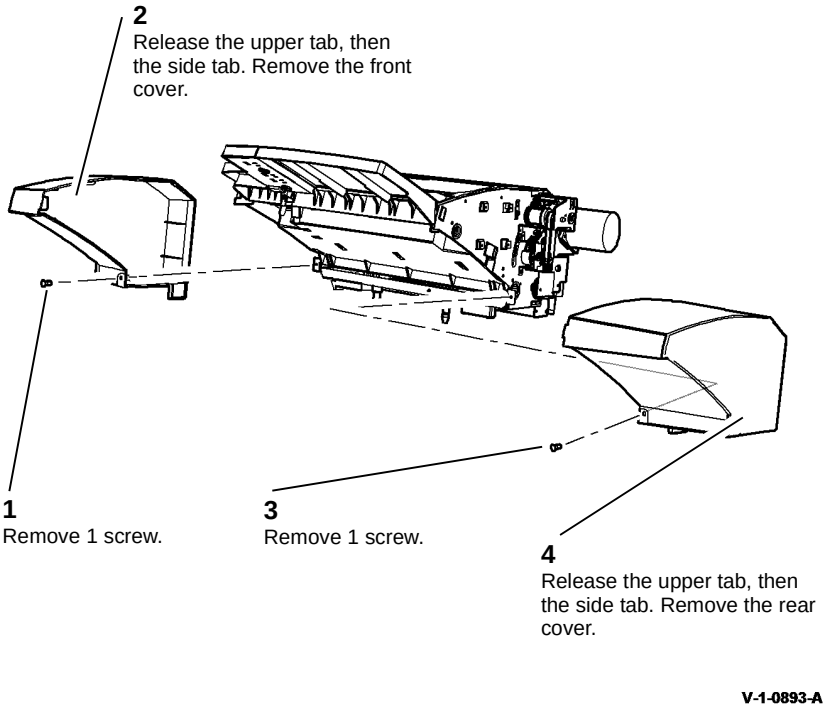


Figure 1 Covers removal

Replacement

Reverse the removal procedures to replace the inserter front and rear covers.

REP 11.84-171 Inserter Motor

Parts List on PL 11.181

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter rear cover, REP 11.83-171.
2. Remove the inserter motor and bracket, Figure 1.

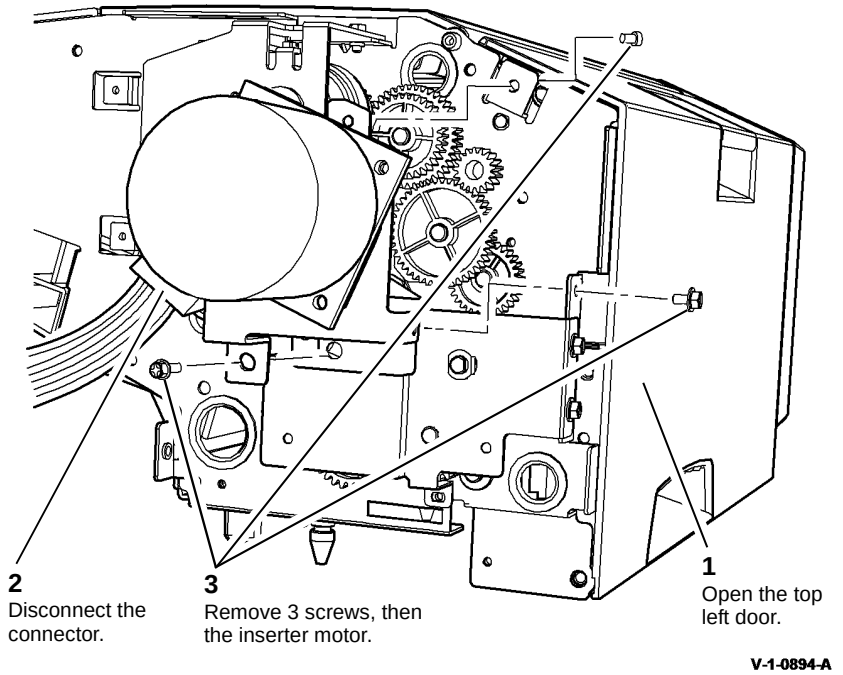


Figure 1 Inserter motor removal

Replacement

1. Reverse the removal procedures to replace the inserter motor.
2. Make sure that the correct screws are used to replace the inserter motor, GP 6.

REP 11.85-171 Inserter PWB

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter rear cover, REP 11.83-171.
2. Remove the inserter PWB, Figure 1.

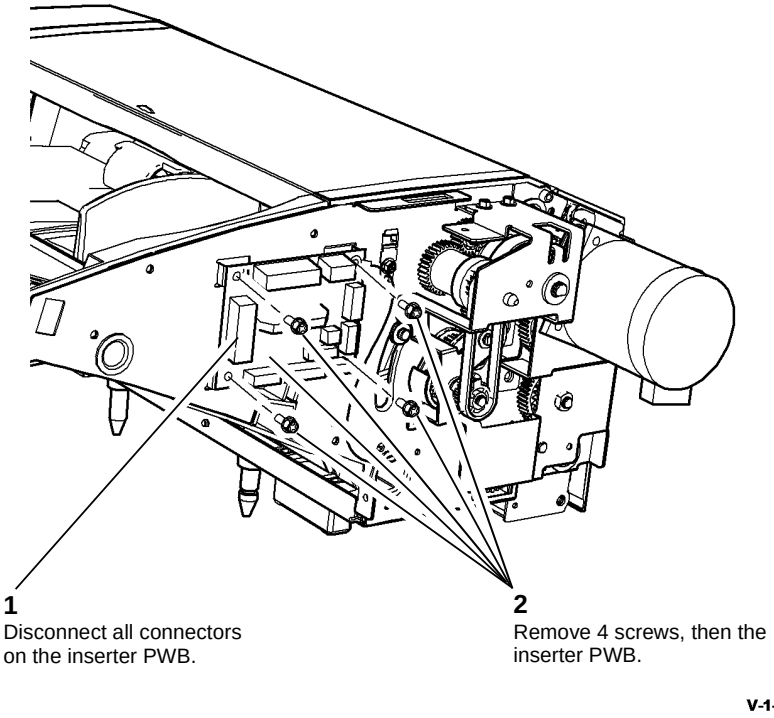


Figure 1 Inserter PWB

Replacement

Reverse the removal procedures to replace the inserter PWB.

REP 11.86-171 Inserter Clutch

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter rear cover, REP 11.83-171.
2. Remove the clutch, Figure 1.

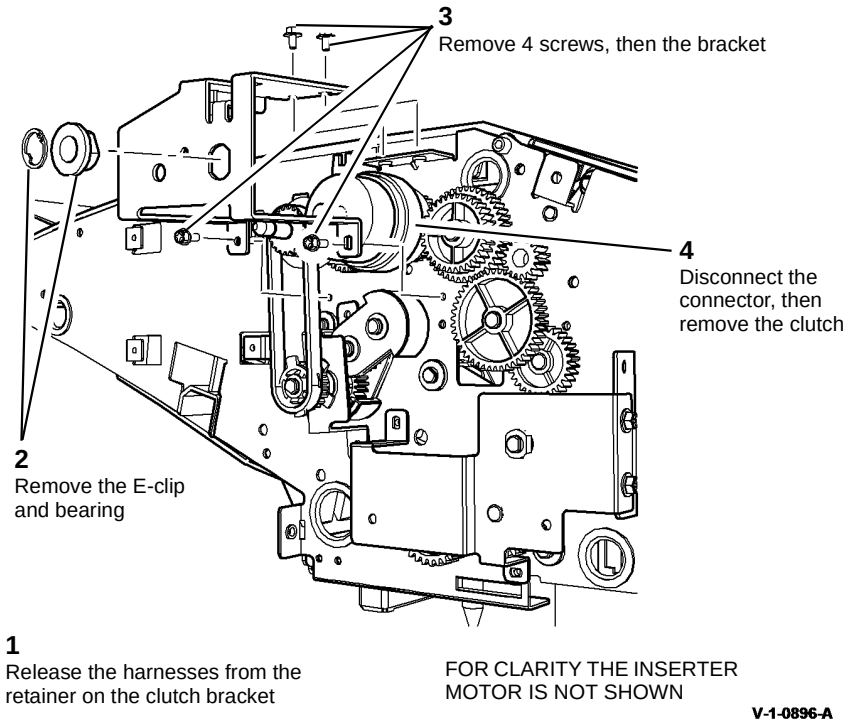


Figure 1 Inserter clutch removal

Replacement

1. Reverse the removal procedures to replace the inserter clutch.
2. When replacing the bracket, check that the clutch torque arm locates in the locating tab.

REP 11.87-171 Inserter Top Cover Interlock Switch

Parts List on PL 11.177

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter front cover, REP 11.83-171.
2. Disconnect the PJs and remove the 2 screws securing the top cover interlock switch, Figure 1.

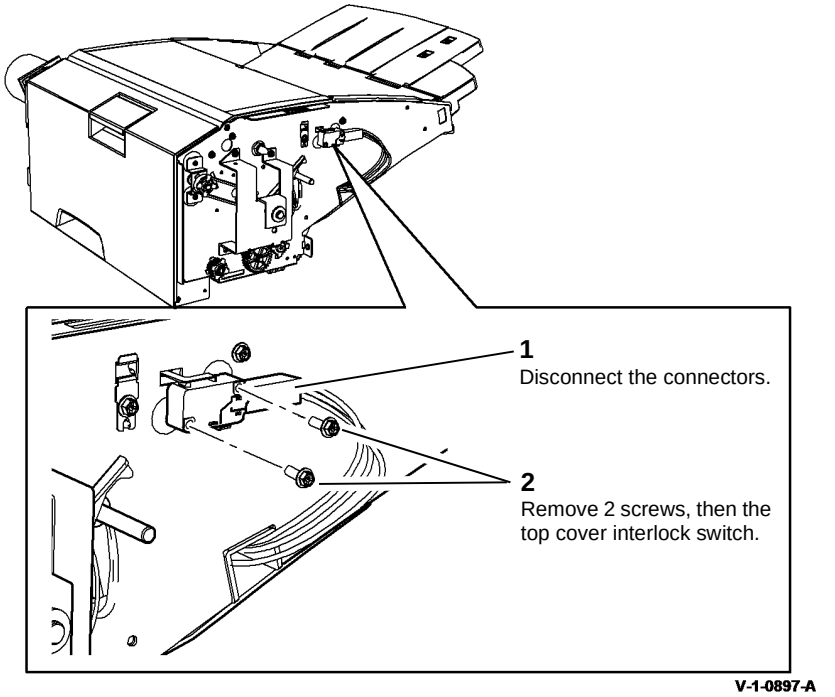


Figure 1 Switch removal

Replacement

Reverse the removal procedures to replace the inserter top cover interlock switch.

REP 11.88-171 Inserter Left Door Interlock Switch

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter front and rear covers, REP 11.83-171.
2. Remove the inserter motor, REP 11.84-171.
3. Remove the left door interlock switch, Figure 1.

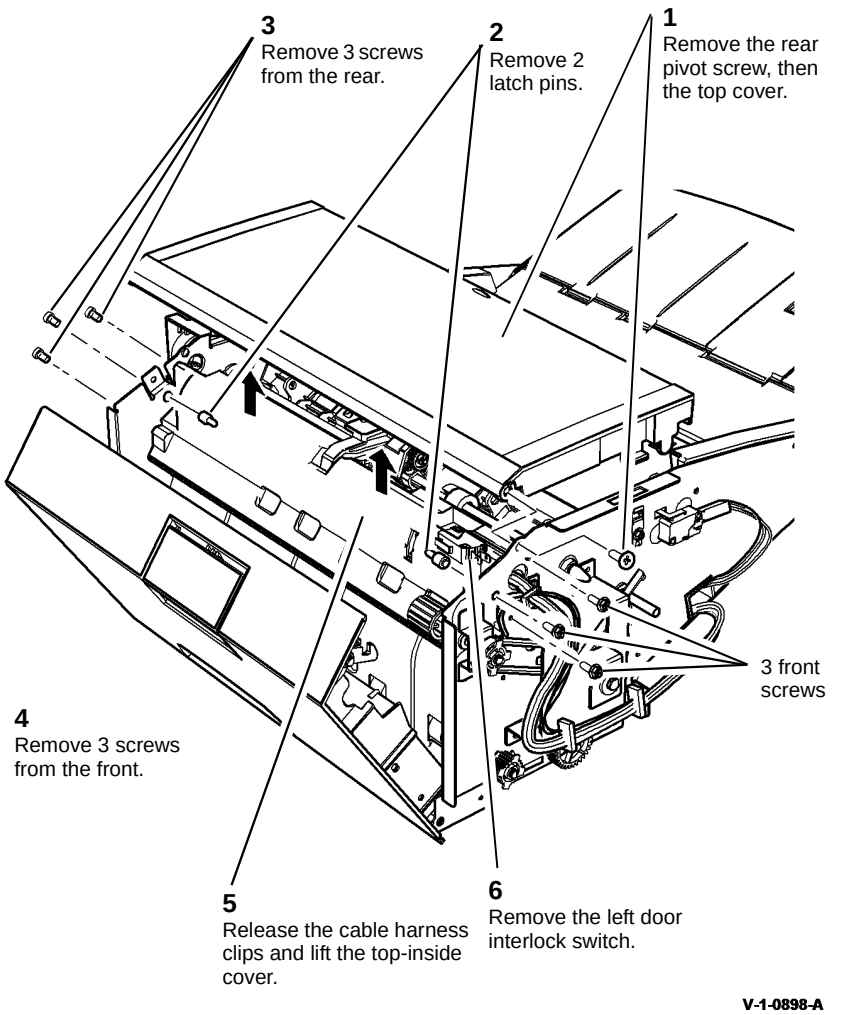


Figure 1 Switch removal

Replacement

1. Reverse the removal procedures to replace the left cover interlock switch.
2. When reinstalling the inside top cover and the top cover make sure that the correct screws are used and that the screws are not overtightened GP 6

REP 11.89-171 Inserter Main Tray and Paper Size Sensors

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the main tray or relevant sensor, Figure 1

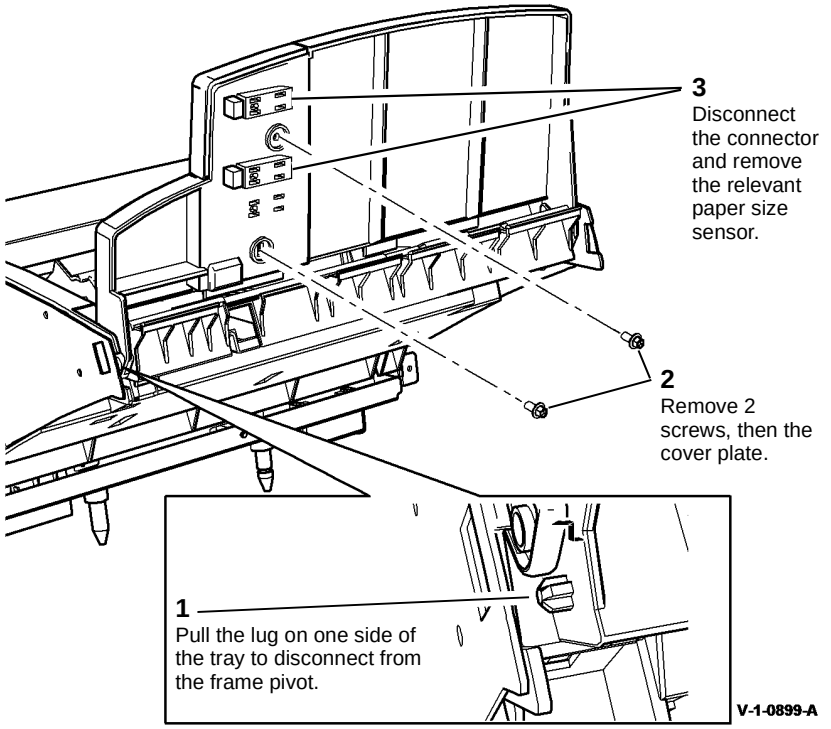


Figure 1 Main tray assembly removal

Replacement

Reverse the removal procedures to replace the inserter main tray and paper length sensors.

REP 11.90-171 Inserter Bottom Tray and Paper Sensors

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the inserter, REP 11.82-171.
2. Remove the inserter front and rear covers, REP 11.83-171.
3. Remove the bottom tray and relevant sensor, Figure 1.

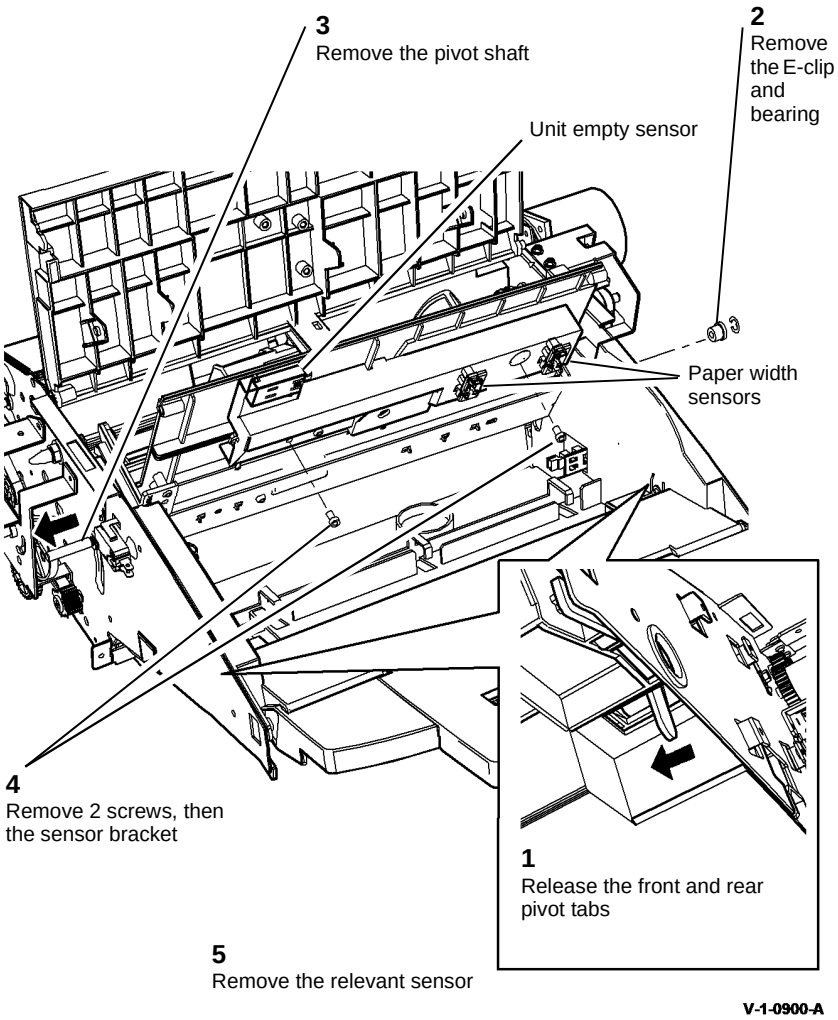


Figure 1 Bottom tray and sensors removal

Replacement

1. Reverse the removal procedure to replace the bottom tray and paper sensors.
2. Check that the loading levers are at the same angle and that the tray pivot shaft passes below the front and rear loading levers. Check that the bottom tray is supported horizontally in the frame.
3. Make sure that the bottom tray springs are correctly aligned before engaging the front and rear pivot tabs.

REP 11.91-171 Inserter Top Cover and IDG Pickup Sensor

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter front cover, REP 11.83-171.
2. Remove the inserter top cover and IDG pickup sensor, Figure 1.

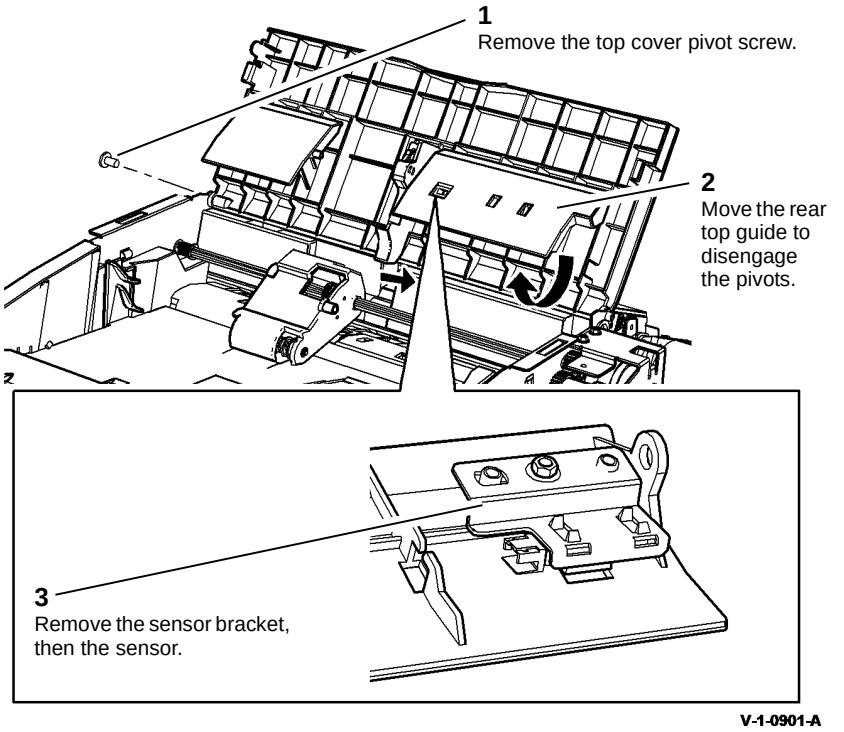


Figure 1 Top cover and sensor removal

Replacement

Reverse the removal procedure to replace the IDG pickup sensor and top cover.

REP 11.92-171 Inserter Top Left Door and Acceleration Sensor

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the Inserter front and rear covers, REP 11.83-171.
2. Remove the acceleration sensor, Figure 1.

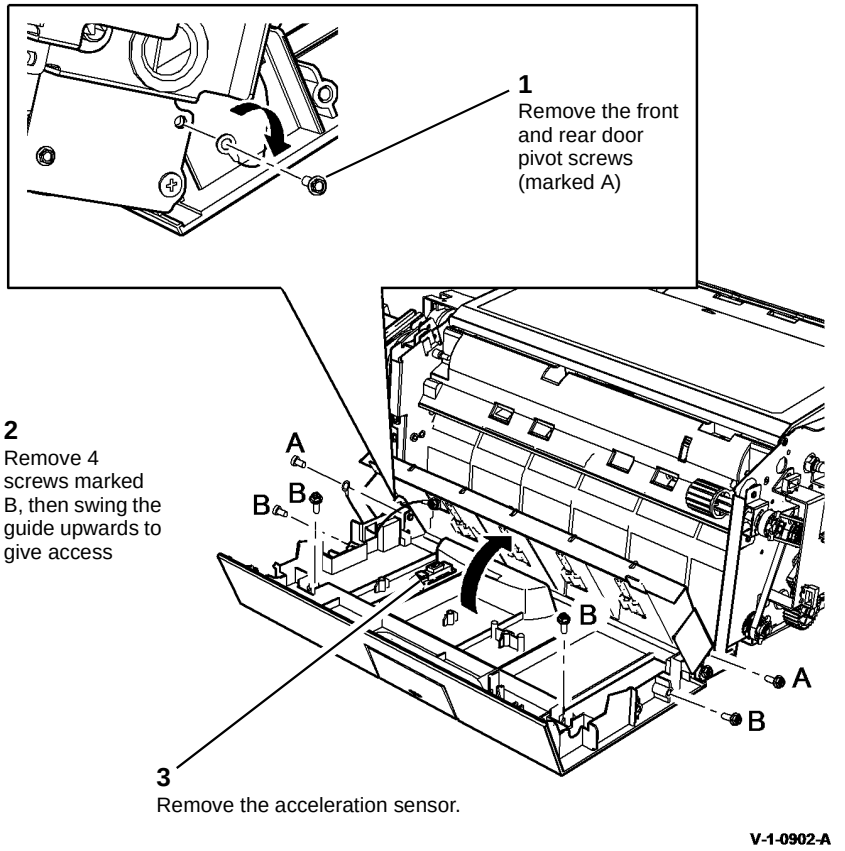


Figure 1 Sensor removal

Replacement

Reverse the removal procedure to replace the inserter top left door and the acceleration sensor.

REP 11.93-171 Inserter LE and TE Sensors

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter front and rear covers, REP 11.83-171.
2. Remove the inserter motor, REP 11.84-171.
3. Remove the pickup roll assembly, REP 11.95-171.
4. Remove the inserter top cover, REP 11.91-171.
5. Remove the top inside cover, refer to REP 11.88-171.
6. Remove the relevant sensor, Figure 1.

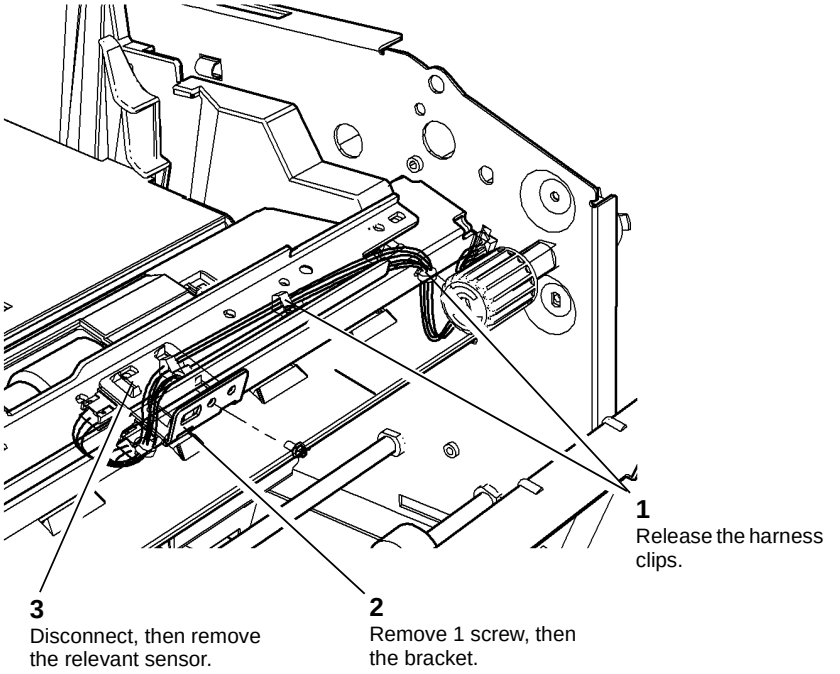


Figure 1 Sensor removal

Replacement

1. Reverse the removal procedure to replace the LE and TE sensors.
2. When replacing the top inside cover, and the top cover make sure that the correct screws are used and that the screws are not overtightened, GP 6

REP 11.94-171 Inserter Bottom Plate Sensor

Parts List on PL 11.175

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Undock the inserter, REP 11.82-171.
2. Release the front and rear pivot tabs, then lift the bottom tray. Control the movement of the bottom tray springs.
3. Remove the sensor from the bracket, Figure 1.

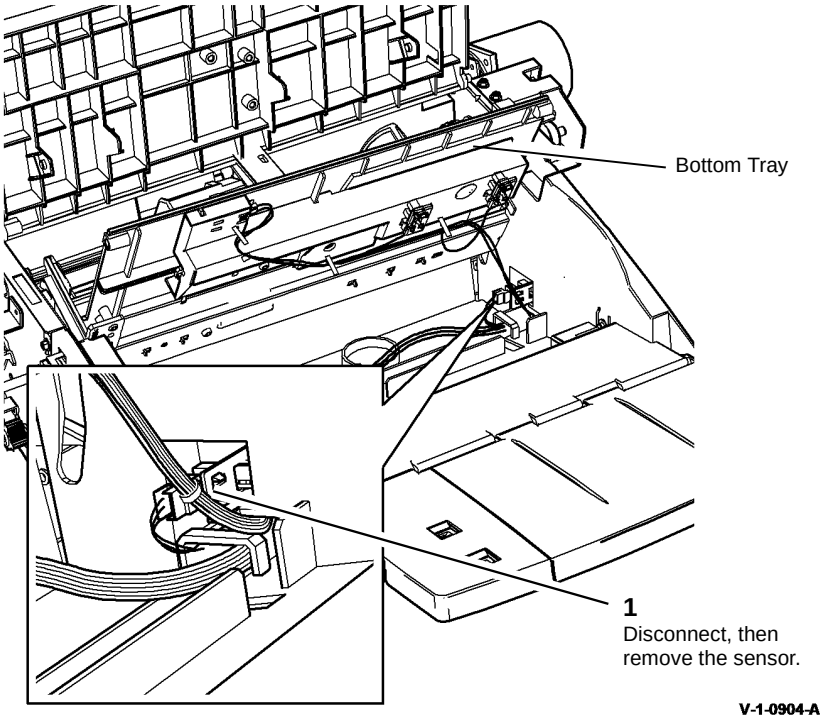


Figure 1 Sensor removal

Replacement

Reverse the removal procedure to replace the inserter bottom plate sensor.

REP 11.95-171 Inserter Pickup Assembly and Reverse Feed Roller

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the pickup assembly from the inserter, Figure 1.

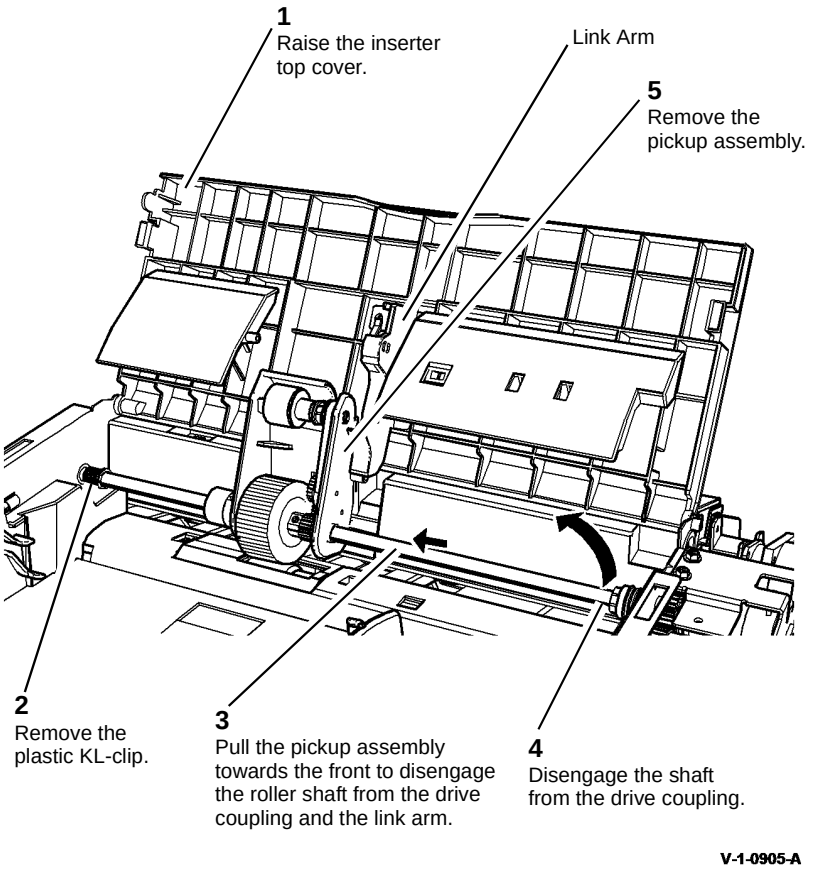


Figure 1 Pickup assembly removal

2. Remove the reverse feed roller, Figure 2.

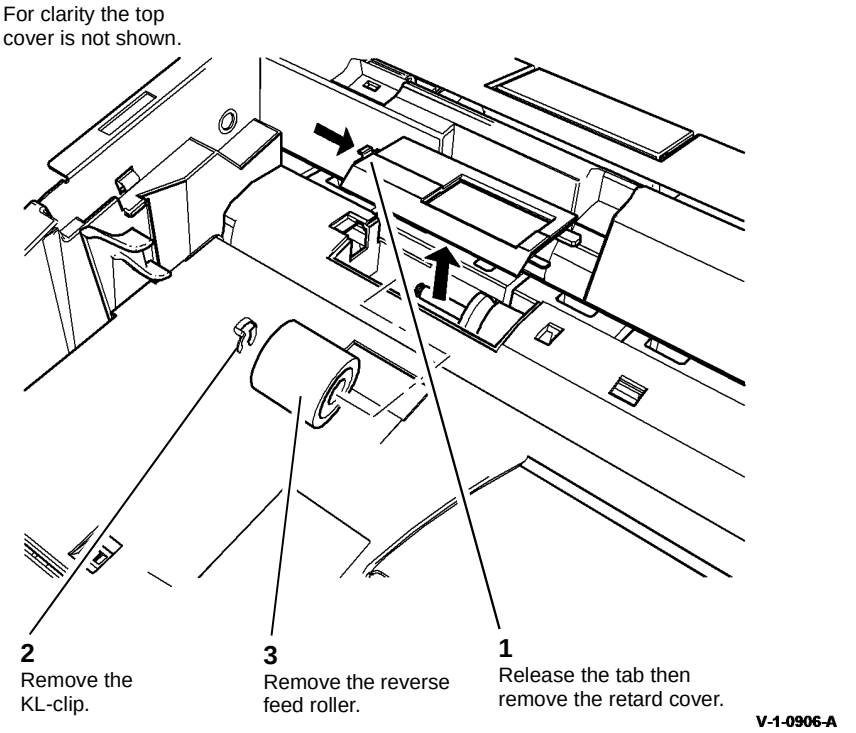


Figure 2 Reverse feed roller removal

Replacement

1. Reverse the removal procedure to replace the reverse feed roller and the pickup assembly.
2. After replacing the pickup assembly, close the inserter top cover fully to engage the link arm with the pickup roller.

REP 11.96-171 HVF Fixed and Adjustable Casters

Parts List on PL 11.130

Removal

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Do not remove more than one castor at a time unless the HVF frame is properly supported and stable.

NOTE: *The HVF weight is 82 kg (181 lbs.), the HVF BM weight is 109 kg (240 lbs.).*

1. If installed, undock the tri-folder from the HVF, REP 11.82-171.
2. If installed, undock the inserter from the HVF, REP 11.82-171.
3. Undock the HVF, REP 11.13-171.
4. Remove the HVF front and rear covers, REP 11.1-171.
5. Lift and support the HVF frame securely at a position close to where the castor is to be removed, GP 16. Support the frame approximately 4 inches (approximately 2 reams of paper) above the floor so that the castor is not supporting the unit.
6. Remove the fixed castor, Figure 1.

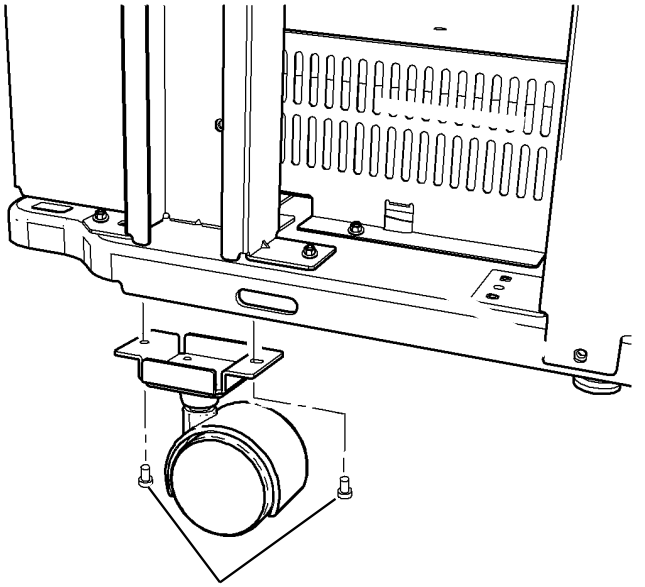


Figure 1 Fixed castor removal

7. Support the HVF frame. Remove the adjustable castor from the frame, Figure 2.

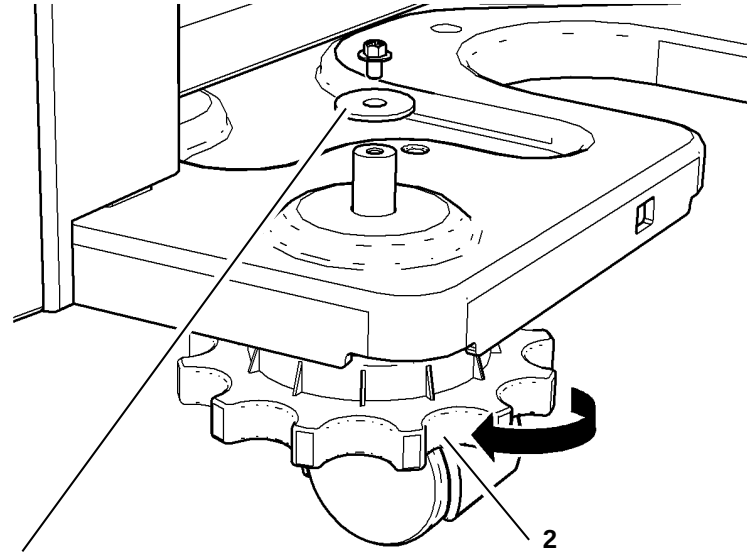


Figure 2 Adjustable castor removal

Replacement

Reverse the removal procedure to replace the HVF fixed and adjustable casters.

REP 11.97-171 HVF Pause to Unload PWB

Parts List on PL 11.157

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF Front door, front cover and top cover, REP 11.1-171.
2. Remove the pause to unload PWB and bracket, Figure 1.

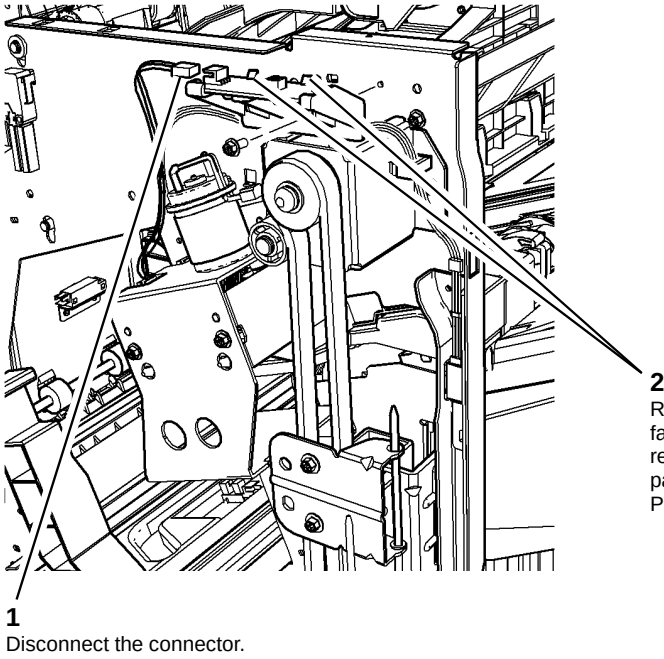


Figure 1 PWB removal

Replacement

Reverse the removal procedure to replace the pause to unload PWB.

REP 11.98-171 Inserter Idle Roller Assembly

Parts List on PL 11.179

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the inserter front and rear covers, REP 11.83-171.
2. Remove the inserter motor, REP 11.84-171.
3. Remove the inserter clutch, REP 11.86-171.
4. Remove the top cover assembly, REP 11.91-171.
5. Remove the inside top cover and top left door interlock switch, REP 11.88-171.
6. Prepare to remove the idle roller assembly, Figure 1.

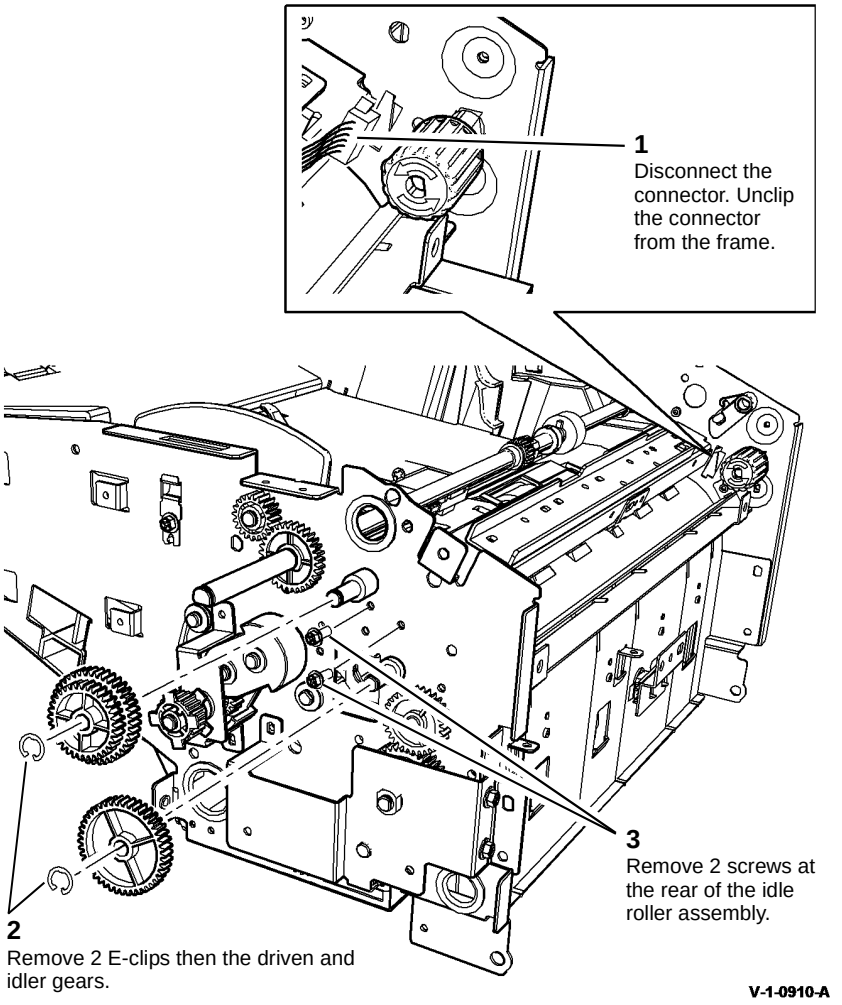


Figure 1 Preparation

7. Remove the idle roller assembly from the frame, Figure 2.

NOTE: *Check that the loading gear remains engaged with the loading shaft gear.*

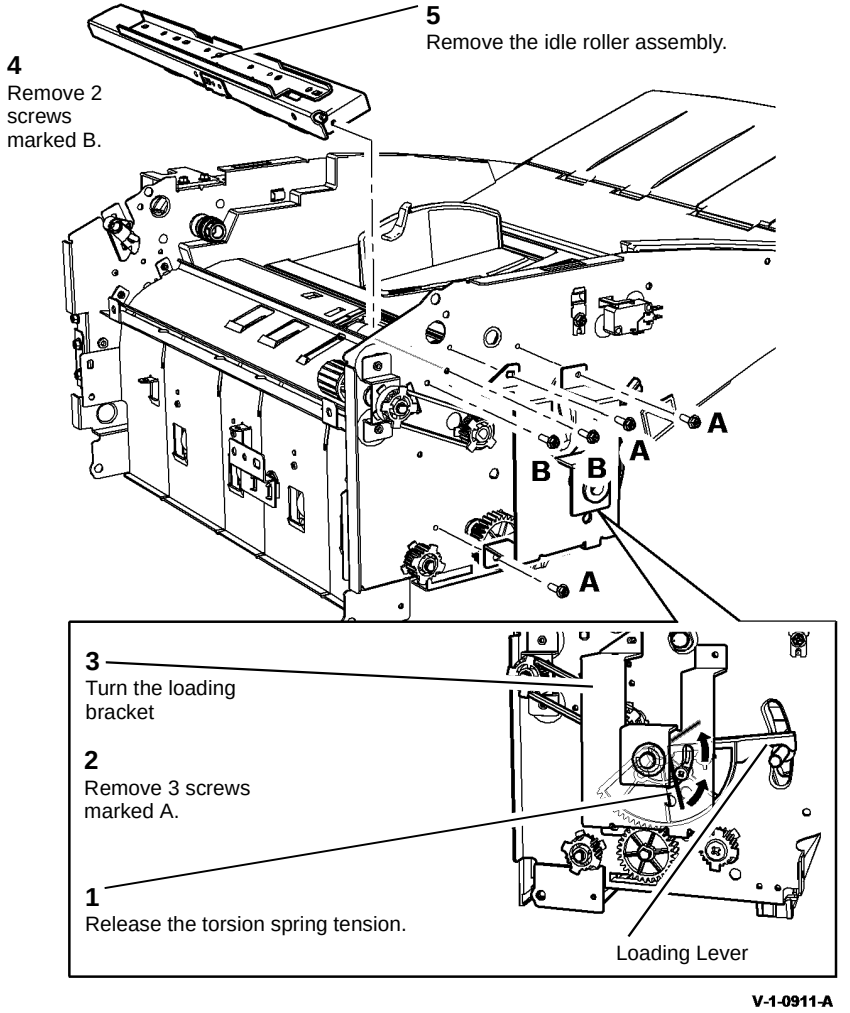


Figure 2 Idle roller assembly

Replacement

1. Reverse the removal procedure to replace the Idle roller assembly.
2. Replace the loading bracket screws and check that the front loading lever is at the same angle as the rear loading lever, then tension the torsion spring. The loading tray will not operate correctly if it is not supported horizontally in the inserter frame.

REP 11.99-171 Tri-Folder Removal

Parts List on PL 11.190, PL 11.193

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the HVF rear cover, REP 11.1-171.
2. Remove the tri-folder rear cover, REP 11.67-171.
3. Remove the coupler drive belt, REP 11.68-171.
4. Open the tri-folder front door, then remove the front and rear thumb screws, Figure 1.

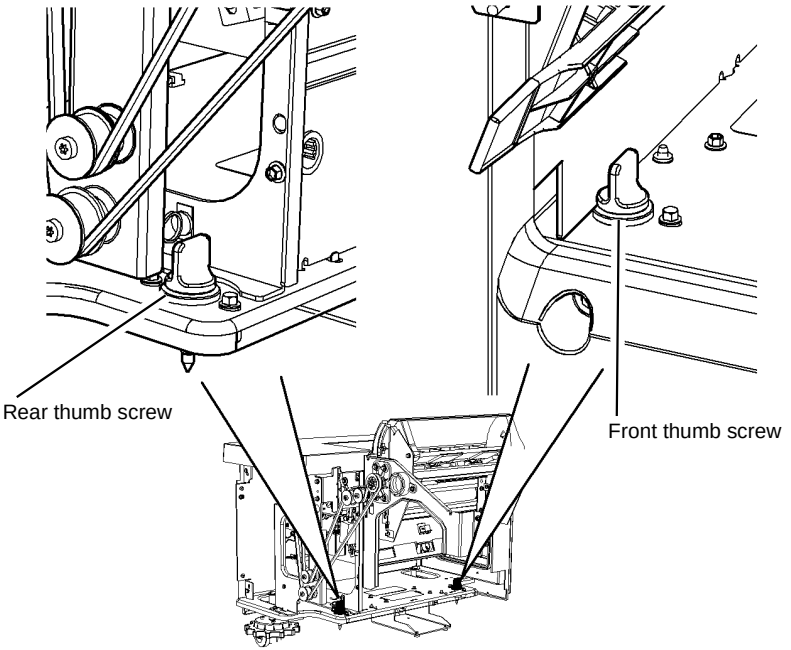


Figure 1 Thumb screw removal

5. Disconnect the HVF to tri-folder bin 2 tray harness from the tri-folder module, REP 11.81-171.
6. Disconnect the tri-folder harness from PJ553 and PJ563 on the BM PWB, PL 11.166 Item 10.
7. Undock the tri-folder from the HVF

Replacement

Reverse the removal procedures to replace the tri-folder module.

REP 11.100-171 HVF Ejector Paddle Assembly

Parts List on PL 11.140

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Rotate the ejector paddle assembly until the two short tabs are visible.
2. Remove the ejector paddle assembly, Figure 1.

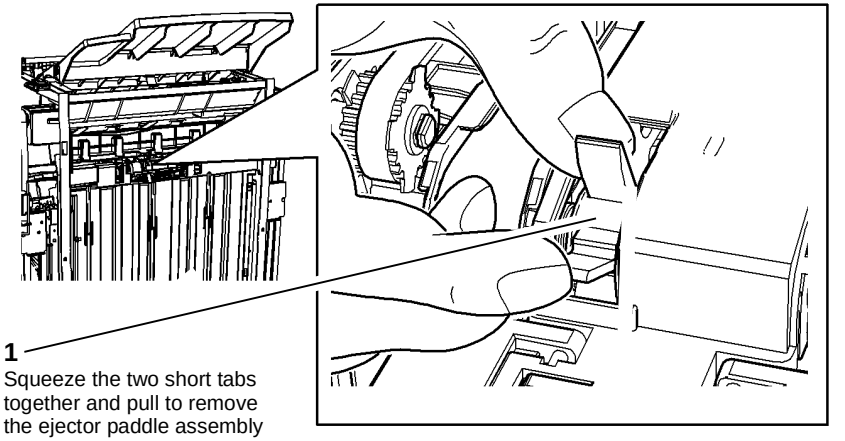


Figure 1 Ejector paddle assembly

Replacement

1. Position the paddle shaft, Figure 2.
2. Hold the paddle assembly by the two short tabs and clip onto the shaft.

NOTE: *Ensure that the paddle assembly is correctly oriented to fit onto the plastic locating tab.*

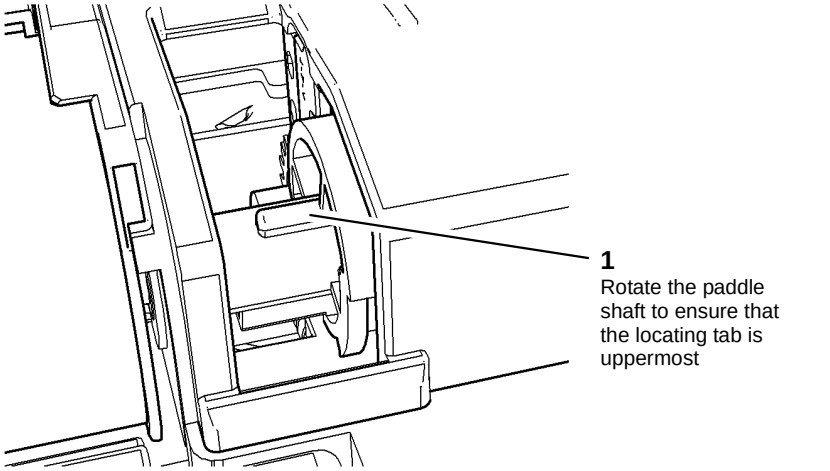


Figure 2 Paddle locating tab

REP 11.101-171 Paddle Wheel

Parts List on PL 11.145

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *This procedure shows the replacement of the paddle wheels with the paddle module assembly installed. If necessary, remove the paddle unit assembly before replacing the paddle wheels. Refer to REP 11.49-171.*

1. Rotate the paddle until the two rubber blades are visible.

CAUTION

To ensure that the correct home position of the paddle wheel shaft is maintained, install the new paddle wheels one at a time.

2. Remove one paddle wheel at a time from the shaft, Figure 1.

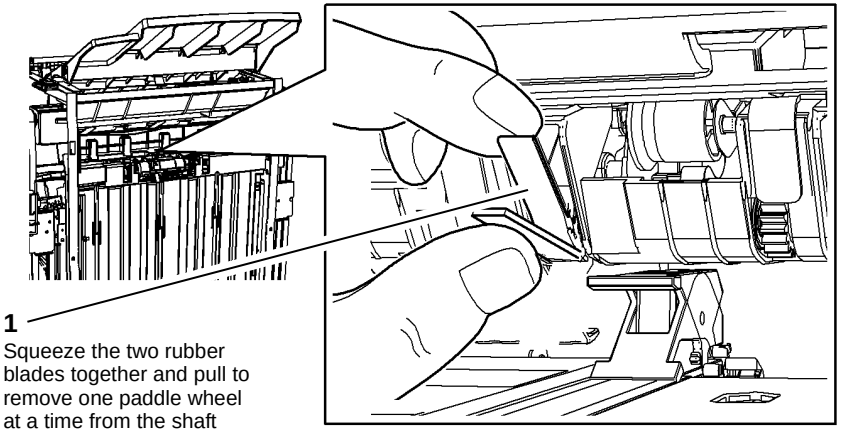


Figure 1 Paddle removal

Replacement

1. Hold the paddle wheel by the two rubber blades and clip onto the shaft one at a time to ensure that all four new paddles are in the same orientation as the old four paddles.

REP 12.1 OCT Transport Assembly and Mounting Bracket

Parts List on PL 12.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the OCT, PL 12.10 Item 1.
2. Remove the OCT transport assembly, PL 12.10 Item 6.
3. If necessary, remove the mounting bracket, PL 12.10 Item 5.

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Make sure that the mounting bracket is correctly mounted over the machine frame, Figure 1.

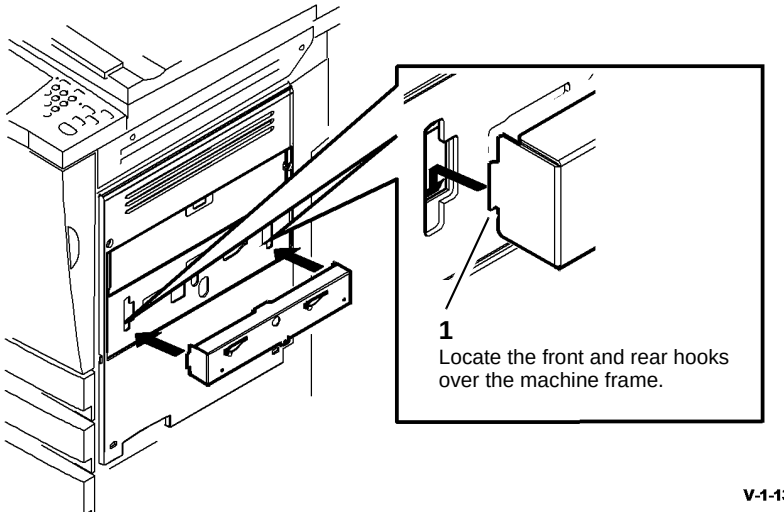


Figure 1 Mounting bracket

3. Install the transport assembly, Figure 2. Make sure that the transport assembly is correctly located over the lugs on the decurler inverter and the right cover, Figure 3.

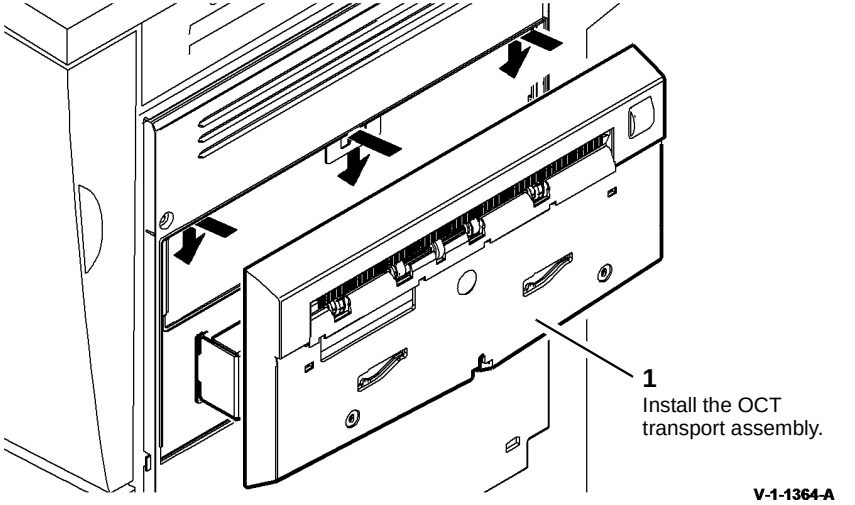


Figure 2 Transport assembly

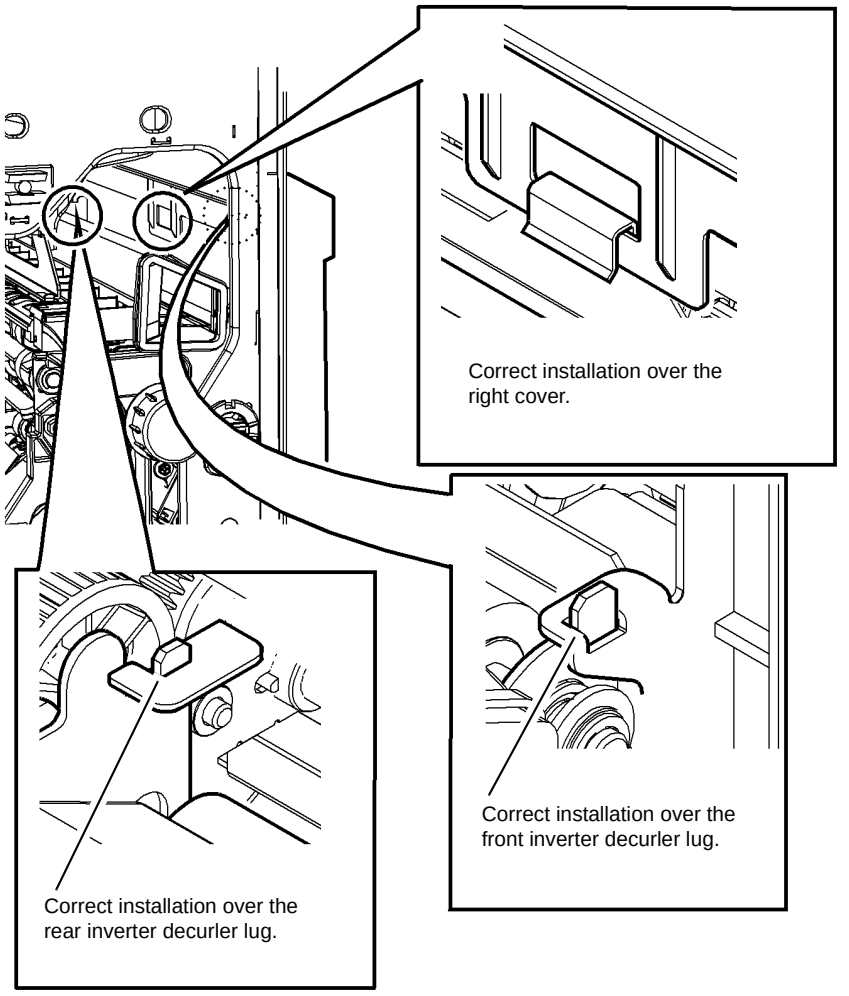


Figure 3 Location

4. Install the OCT transport assembly, Figure 4.

NOTE: *It may be necessary to open the front door to better see the front mark.*

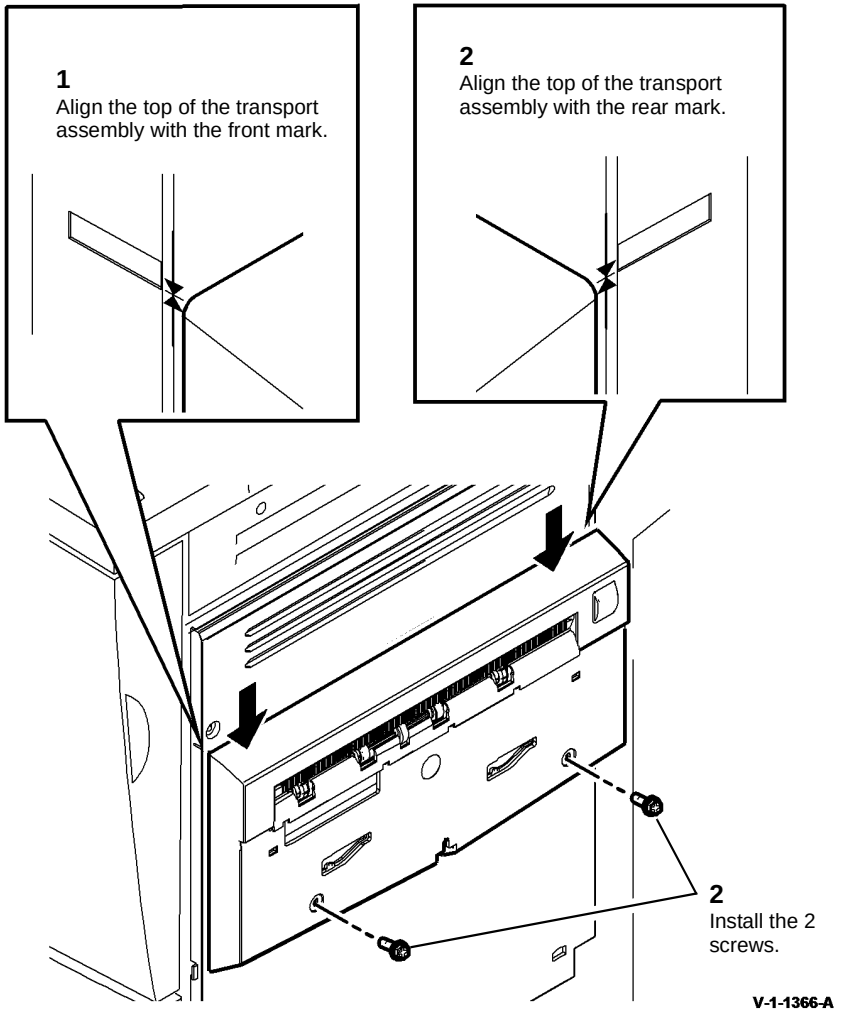


Figure 4 Mounting bracket

5. Rotate the tri-roll knob, make sure the OCT transport drive gear has engaged correctly, Figure 5.

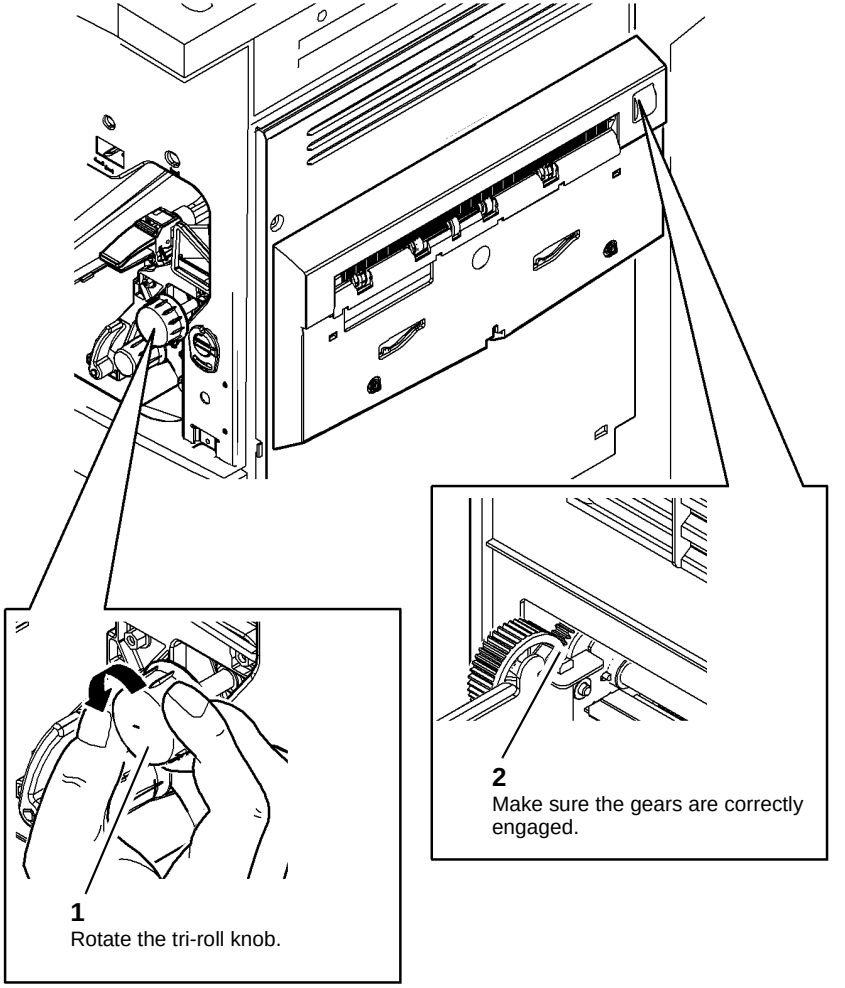


Figure 5 Mounting bracket

REP 20.1 Fax PWB

Parts List on PL 20.05

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, GP 14.
2. Remove the fax module (2 thumb screws).
3. Figure 1, remove the fax PWB.

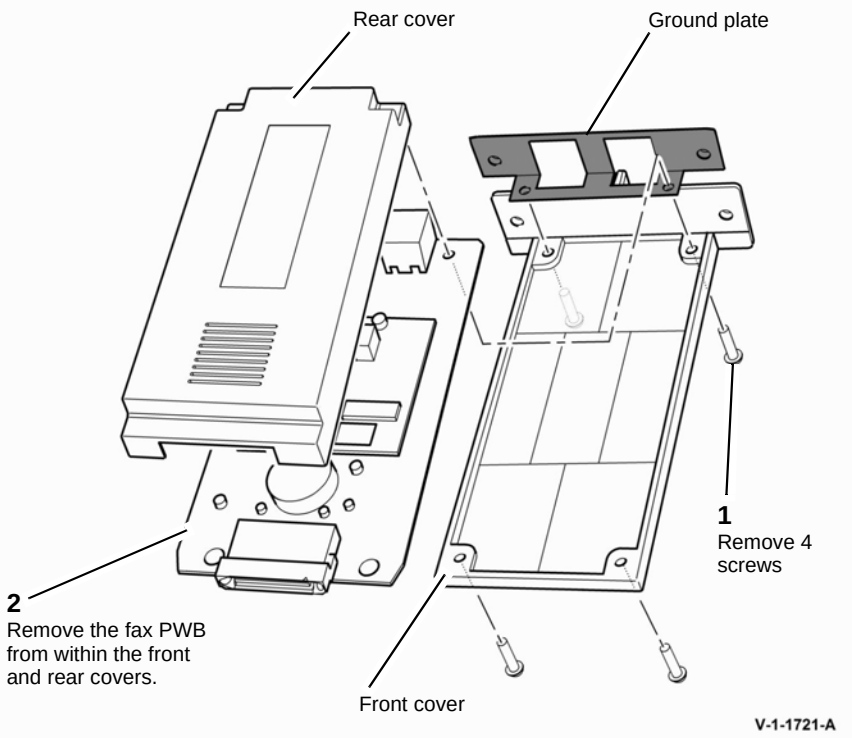


Figure 1 Fax PWB removal

Replacement

WARNING

Ensure that the ground plate is located between the Fax PWB and the front cover. The ground plate provides a ground path for lightning strikes. Electricity can cause death or injury.

Replacement is the reverse of the removal procedure.

REP 40.1 Main Drive Module (45-55 ppm)

Parts List on PL 40.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

The 45-55 ppm and 65-90 ppm main drive modules are not interchangeable. Before this procedure is begun, ensure that the new main drive module is the correct part number for the machine.

1. Pull out fuser module approximately 100mm, (4 inches), PL 10.8 Item 1.
2. Drop down the short paper path assembly, PL 10.25 Item 2.
3. Remove the xerographic module, PL 90.20 Item 1, and place in a black bag.
4. Remove the left cover, PL 28.10 Item 3.
5. Prepare the developer module, Figure 1.

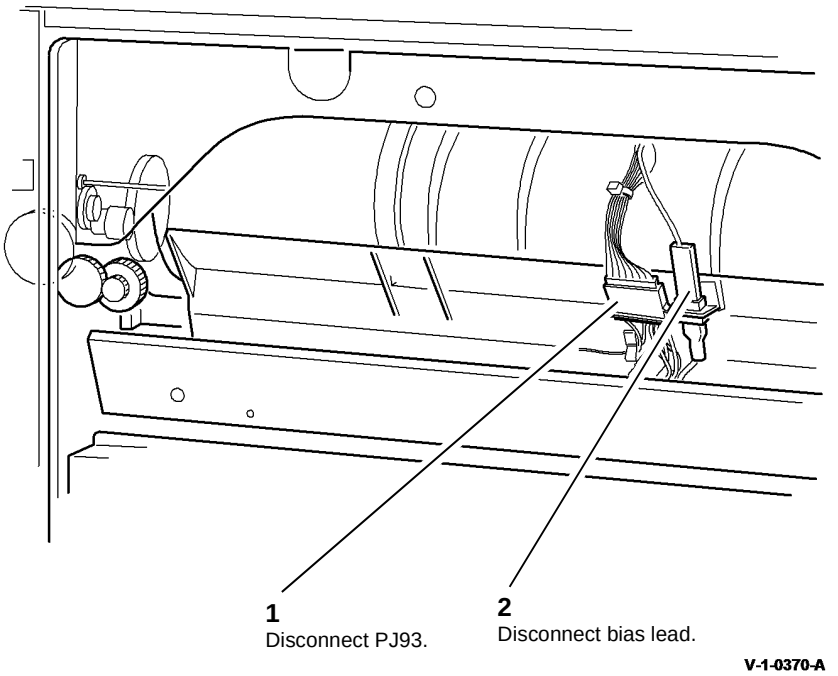


Figure 1 Developer module

6. Remove the two screws securing the developer module, REP 90.2.
7. Pull out the developer module approximately 100mm (4 inches).
8. Remove the rear cover, PL 28.10 Item 1.
9. Remove the waste toner bottle door assembly, REP 90.1.
10. Remove the ozone filter and duct, PL 90.25 Item 2.

11. Move the power and control assembly to the rear, Figure 2.

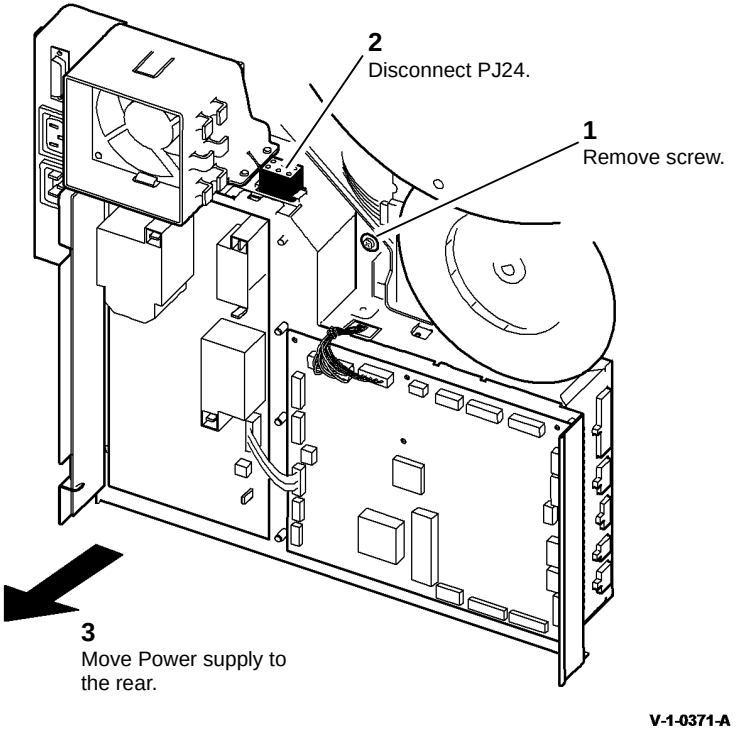


Figure 2 Power supply

CAUTION

Take care when removing PJ1 on the IOT PWB, the pins can be easily damaged.

12. Prepare the power and control assembly, Figure 3.

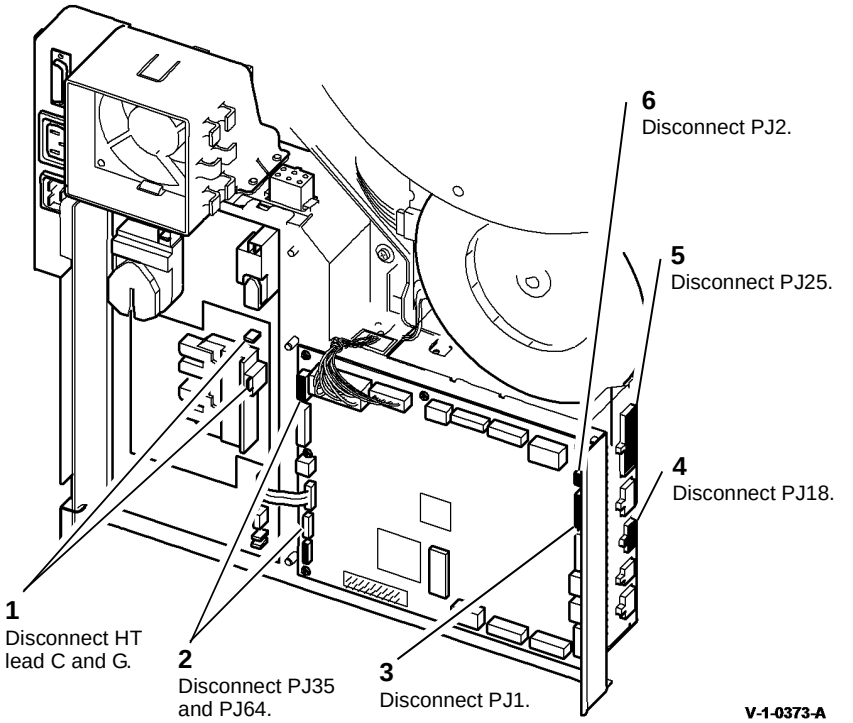


Figure 3 Power and control assembly

13. Remove the main frame ground wire, refer to the 301A Ground Distribution RAP.
14. Remove the waste toner full sensor, REP 90.4.

15. Prepare to remove the main drive module, Figure 4.

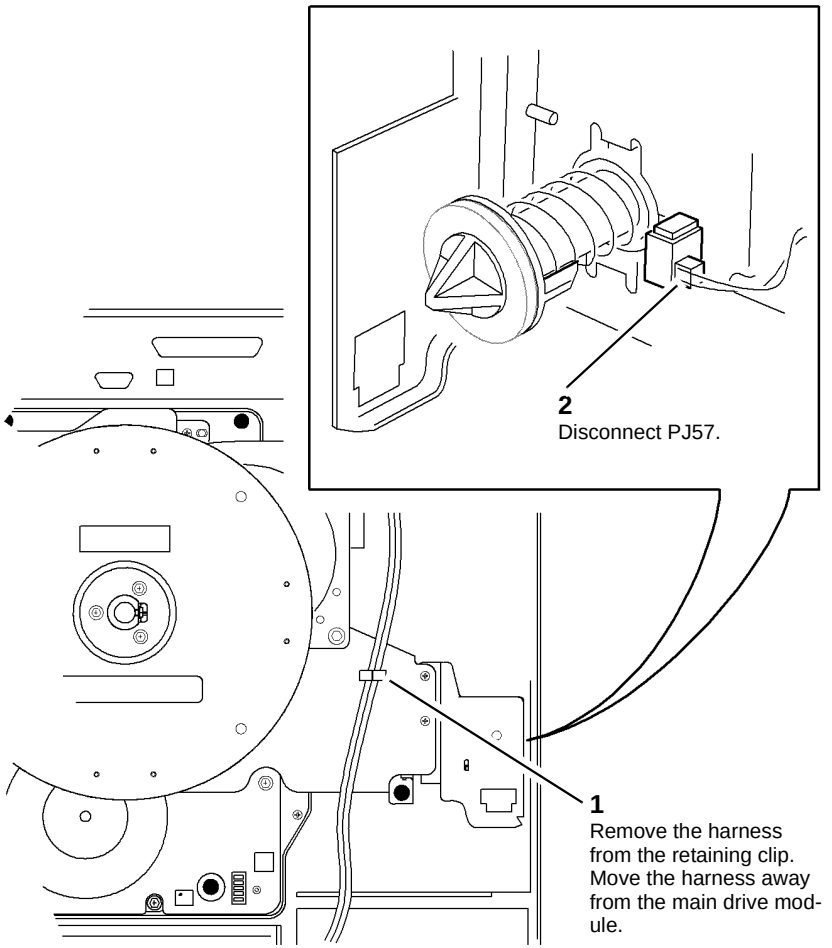


Figure 4 Harness and door switch

16. Remove the main drive module, Figure 5.

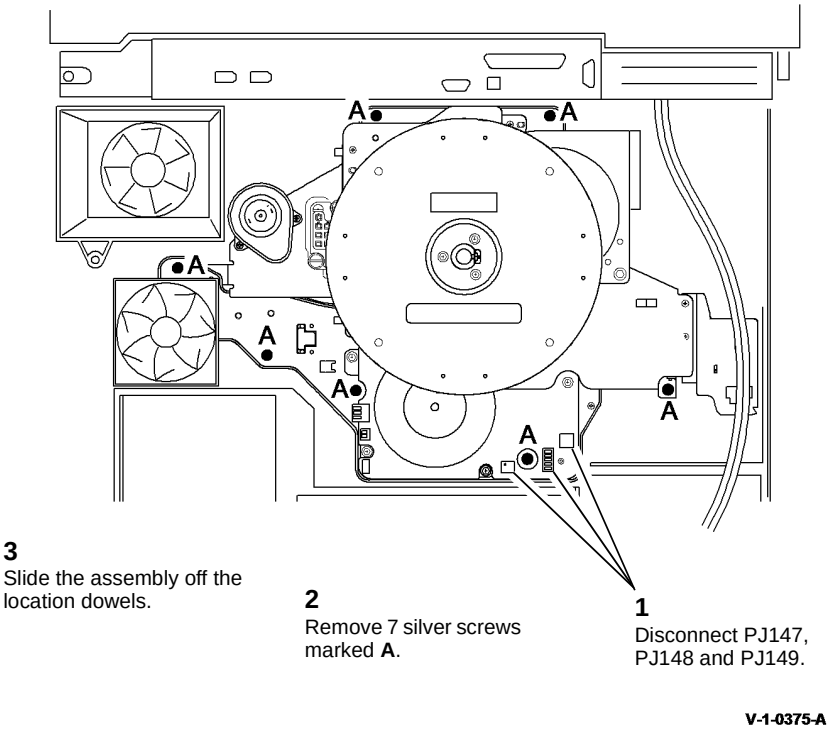


Figure 5 Main drive module removal

Replacement

CAUTION

Do not trap the harnesses when the main drives module is located onto the dowels. Take care when reconnecting PJ1 on the IOT PWB, the pins can easily be damaged.

Perform the following:

1. Replacement is the reverse of the removal procedure.
2. It is important that the short paper path assembly is held in the up position before installing the main drives module, Figure 6.

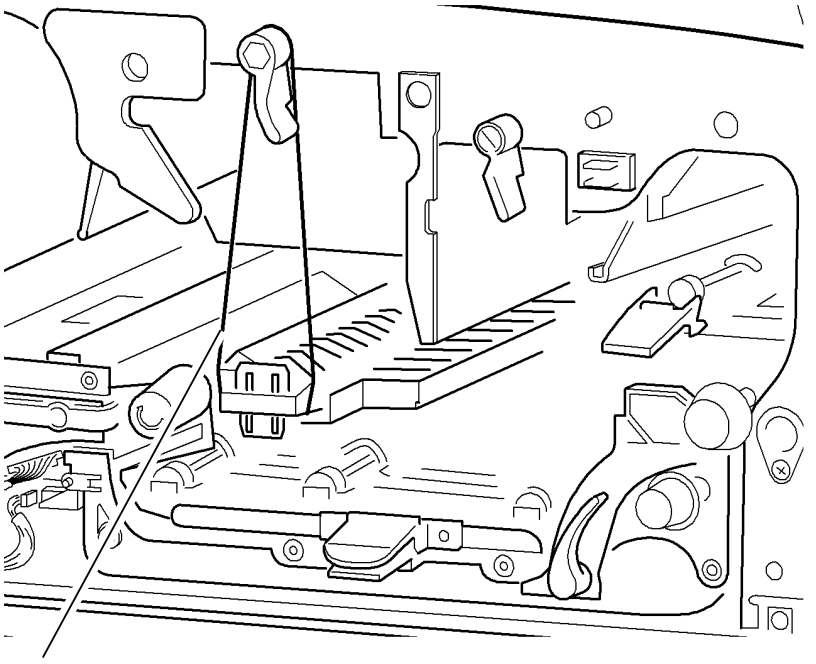


Figure 6 Short paper path assembly

3. Use plastislip grease to lubricate the developer module support pin on the main drive module drives plate, Figure 7.

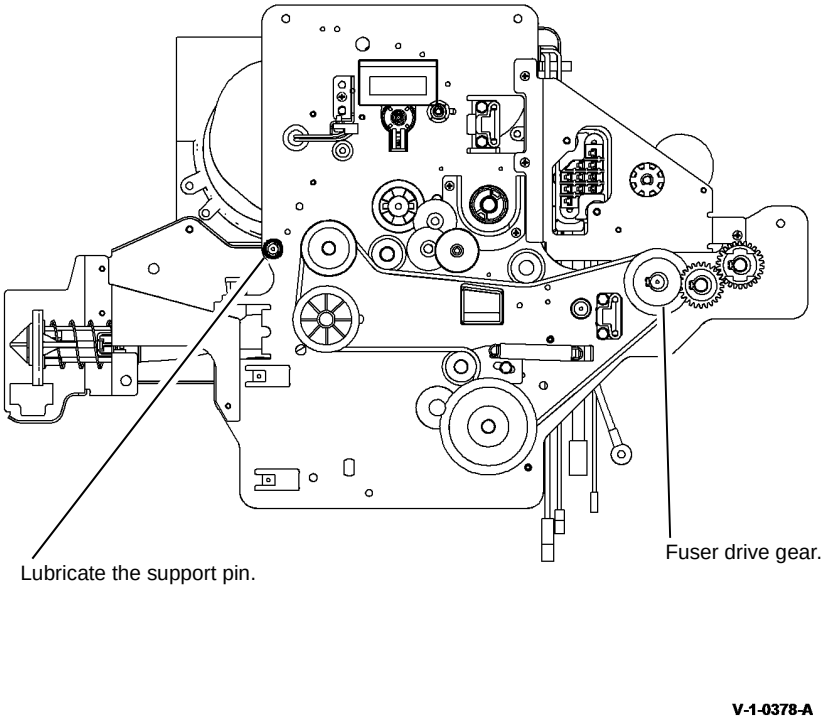


Figure 7 Main drive module

4. Manually rotate the main drive motor to engage the drive between the drives plate and the inverter transport before tightening up the seven mounting screws, Figure 5.
5. Take care when connecting PJ1 on the IOT PWB, make sure to align the pins correctly.

REP 40.2 Main Drive PWB (45-55 ppm)

Parts List on PL 40.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 28.10 Item 1.
2. Remove the flywheel, Figure 1.

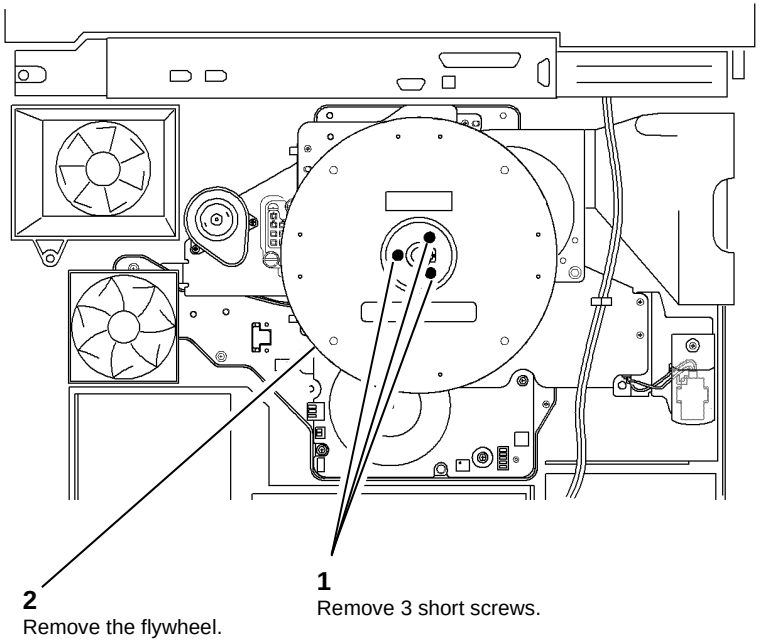


Figure 1 Remove the flywheel

3. Remove the main drive PWB, Figure 2.

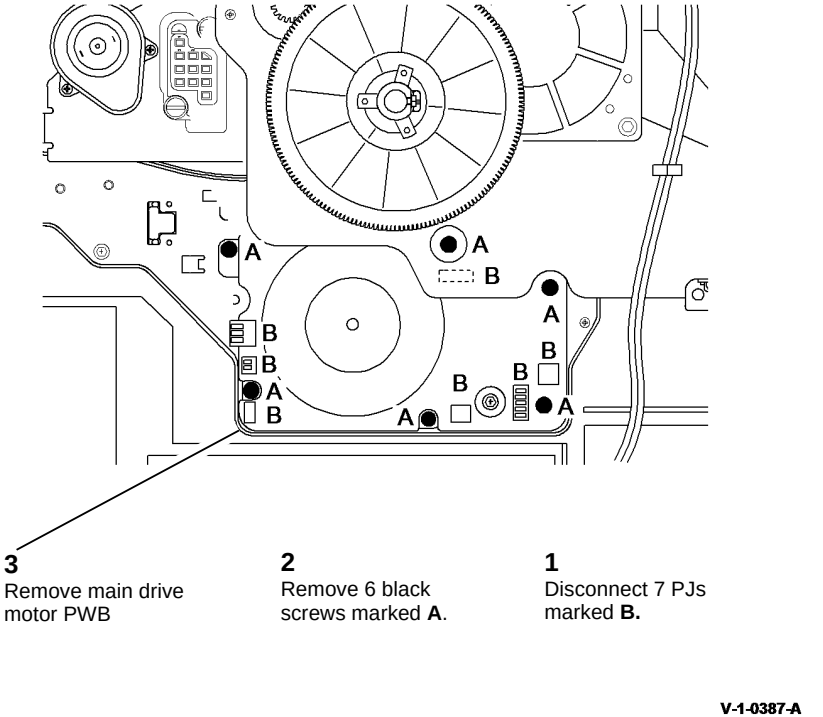


Figure 2 Main drive PWB

Replacement

Replacement is the reverse of the removal procedure.

REP 40.3 Main Drive Belt, Drive Gears and Idlers (45-55 ppm)

Parts List on PL 40.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the main drive module, REP 40.1.
2. Remove the main drive belt, Figure 1.

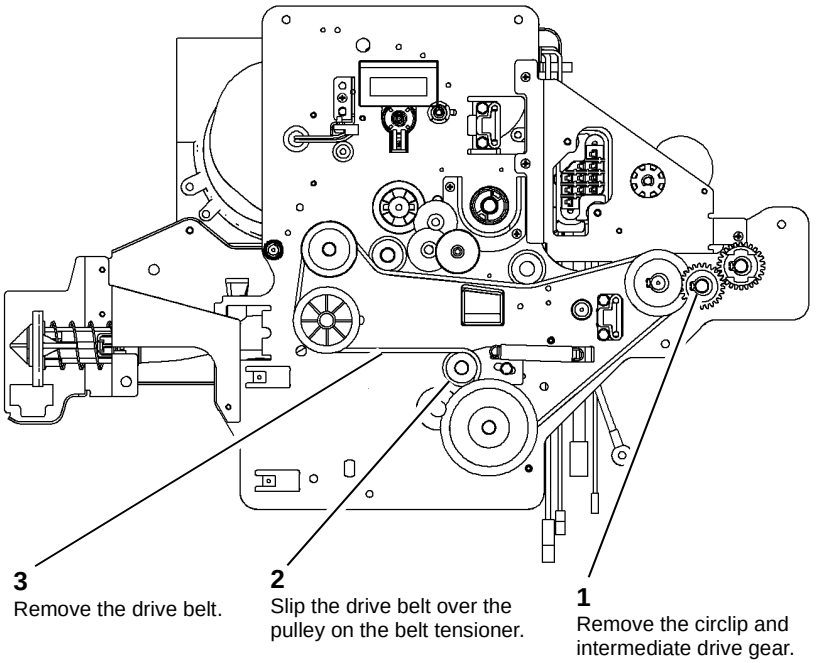


Figure 1 Main drive belt removal

3. Refer to Figure 2. Remove the following as necessary:
   - Developer drive gear.
   - Registration transport drive pulley.
   - Fuser drive gear.
   - Output paper path drive gear.

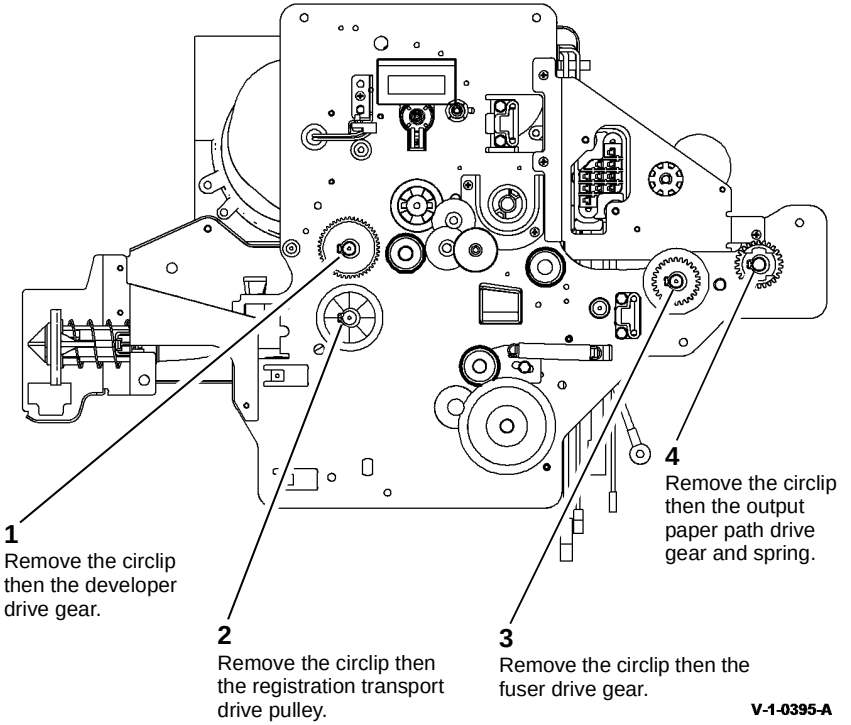


Figure 2 Drive gears removal

Replacement

1. Replacement is the reverse of the removal procedure.

REP 40.4 Photoreceptor Drive Gear

Parts List on (45-55 ppm) PL 40.15, (65-90 ppm) PL 40.10.

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove rear cover, PL 28.10 Item 1.

CAUTION

When the drive gear is removed from the shaft, the dowel pin may drop onto the IOT PWB or LVPS.

2. Remove the photoreceptor drive gear, Figure 1.

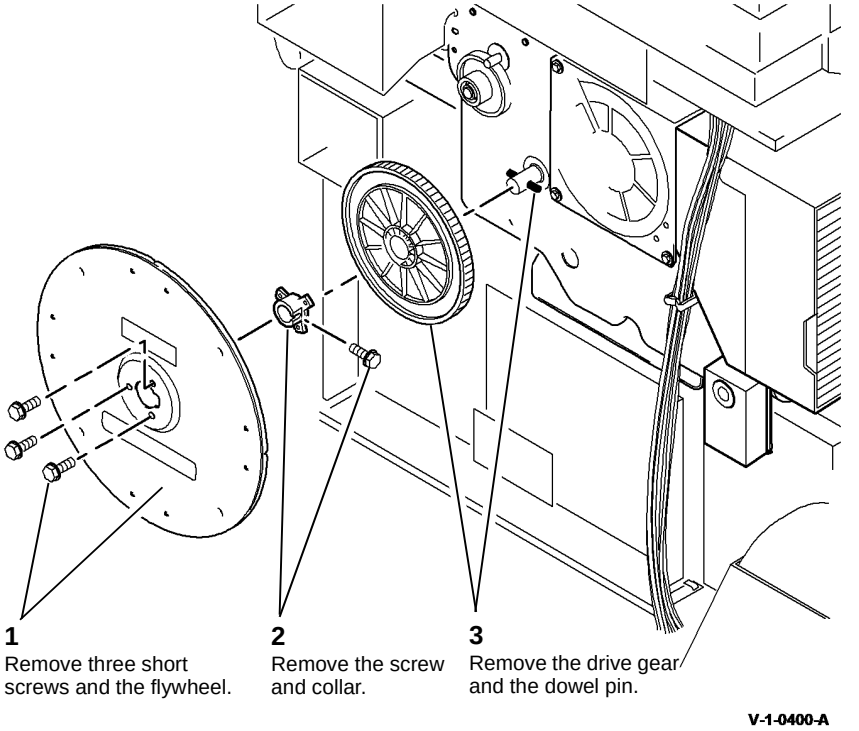


Figure 1 Photoreceptor drive gear

Replacement

1. Replacement is the reverse of the removal procedure.

   NOTE: *Turn the drive shaft, so that the dowel pin is horizontal then locate the drive gear onto the drive shaft.*

2. Refer to GP 6 before refitting the screws.

REP 40.5 Main Drive Module (65-90 ppm)

Parts List on PL 40.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

The 45-55 ppm and 65-90 ppm main drive modules are not interchangeable. Before this procedure is begun, ensure that the new main drive module is the correct part number for the machine.

1. Pull out fuser module approximately 100mm, (4 inches), PL 10.10 Item 1.
2. Drop down short paper path assembly, PL 10.25 Item 1.
3. Remove the xerographic module, PL 90.20 Item 2, and place in a black bag.
4. Remove left cover, PL 28.10 Item 3.
5. Prepare the developer module, Figure 1.

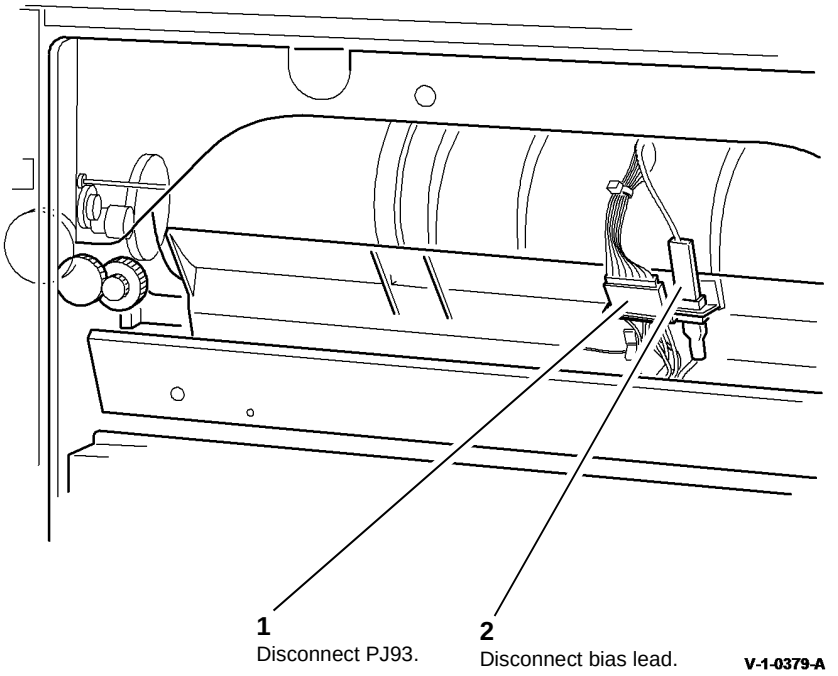


Figure 1 Developer module

6. Remove the two screws securing the developer module, REP 90.2.
7. Pull out the developer module approximately 100mm (4 inches).
8. Remove the rear cover, PL 28.10 Item 1.
9. Remove the waste toner bottle door assembly, REP 90.1.
10. Remove the ozone filter and duct, PL 90.25 Item 2.

11. Move the power and control assembly to the rear, Figure 2.

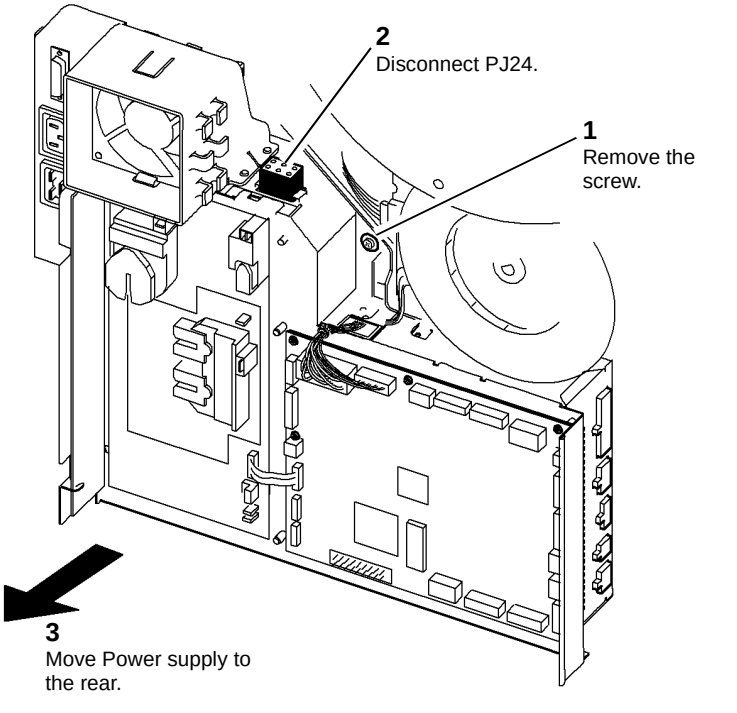


Figure 2 Power supply

CAUTION

Take care when removing PJ1 on the IOT PWB, the pins can be easily damaged.

12. Prepare power and control assembly, Figure 3.

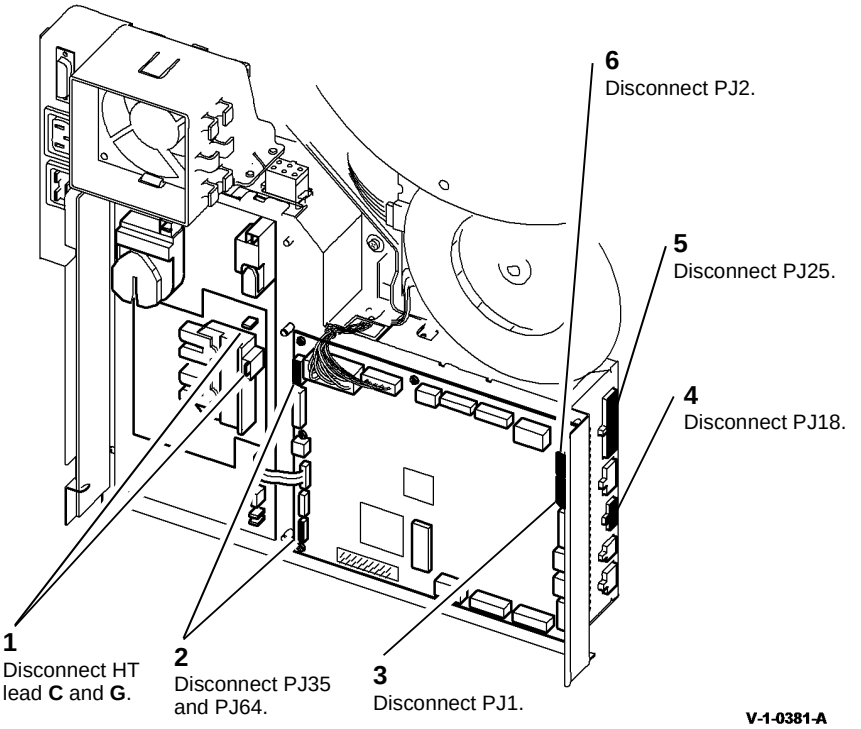


Figure 3 Power and control assembly

13. Remove the main frame ground wire, refer to the 301A Ground Distribution RAP.
14. Remove the waste toner full sensor, REP 90.4.

15. Prepare to remove the main drives module, Figure 4.

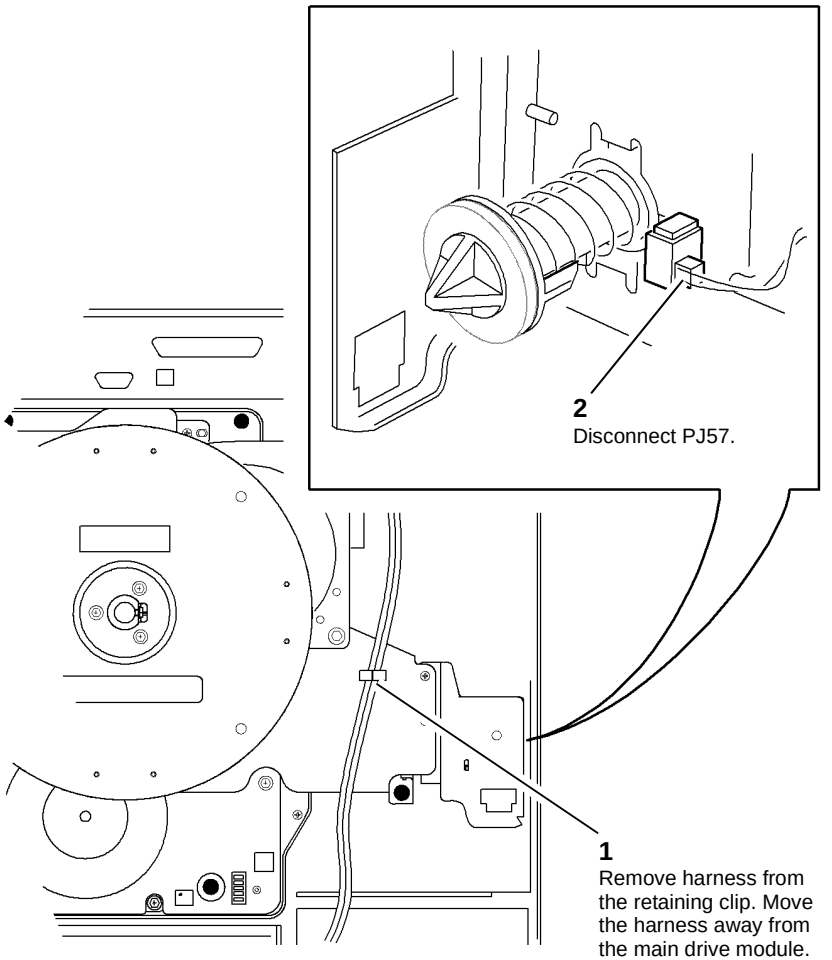


Figure 4 Harness and door switch

16. Remove the main drive module, Figure 5.

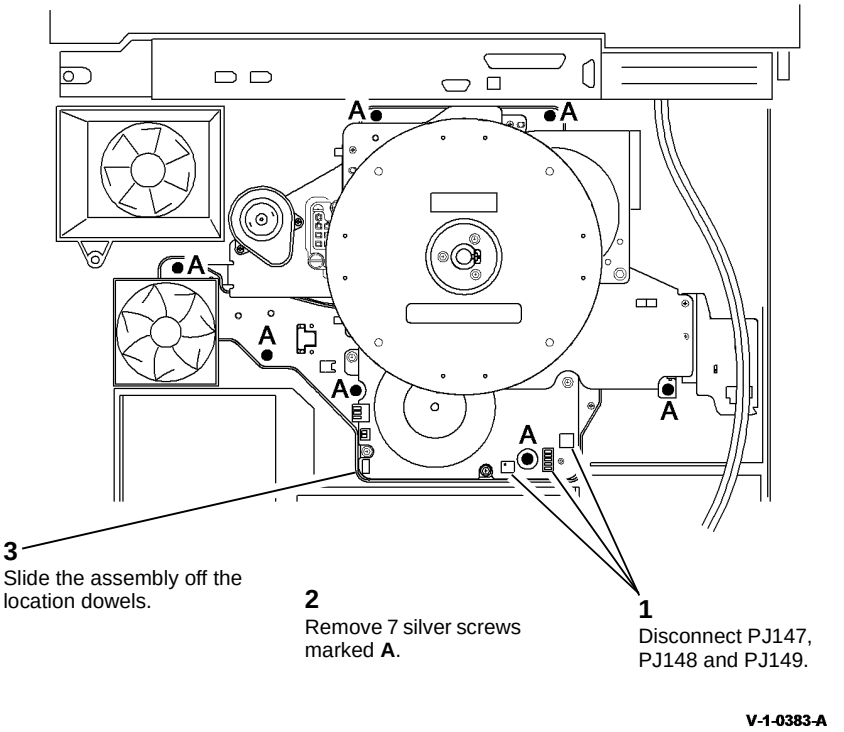


Figure 5 Main drive module removal

Replacement

CAUTION

Do not trap the harnesses when the main drives module is located onto the dowels. Take care when reconnecting PJ1 on the IOT PWB, the pins can easily be damaged.

Perform the following:

1. Replacement is the reverse of the removal procedure.
2. It is important that the short paper path assembly is held in the up position before installing the main drives module, Figure 6.

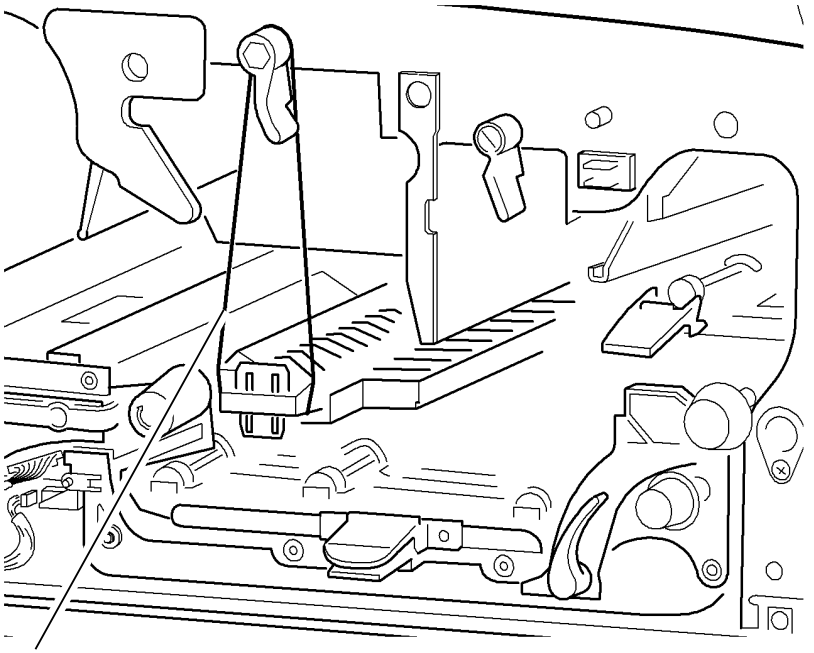


Figure 6 Short paper path assembly

CAUTION

The belt tensioners are of the floating type, and are spring loaded. They should not be locked down.

3. Use plastislip to lubricate the developer module support pin on the main drive module drives plate, Figure 7.

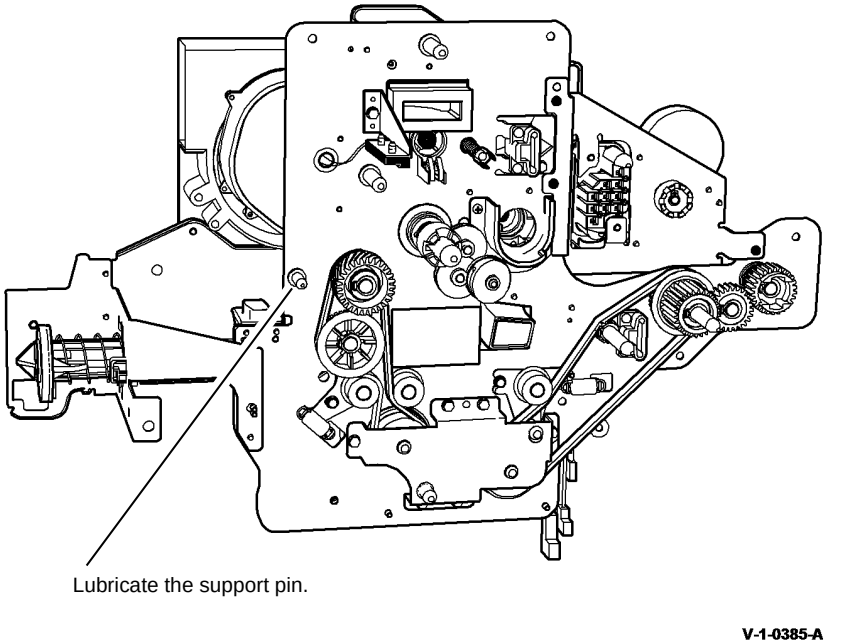


Figure 7 Main drives module

4. Manually rotate the main drive motor to engage the drive between the drives plate and the inverter transport before tightening the seven mounting screws, Figure 5.
5. Rotate the jam clearance knob 4c and ensure that the registration shaft turns freely.
6. Take care when connecting PJ1 on the IOT PWB, make sure to align the pins correctly.

REP 40.6 Main Drive PWB (65-90 ppm)

Parts List on PL 40.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the main drive module, REP 40.5.
2. Disconnect the PJs from the main drive PWB, Figure 1.

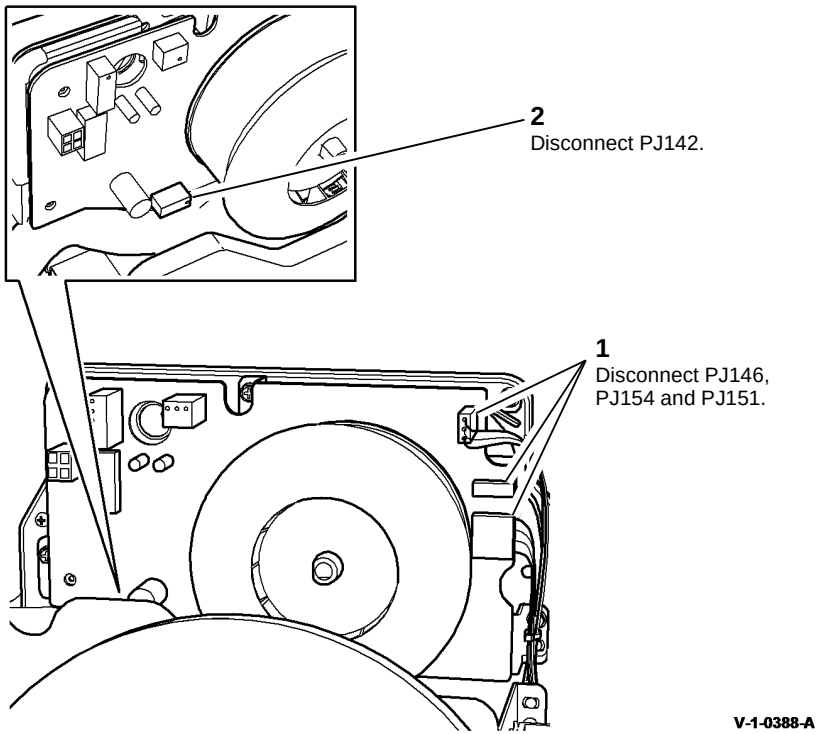


Figure 1 Disconnect the PJs

3. Prepare to remove the main drive PWB, Figure 2.

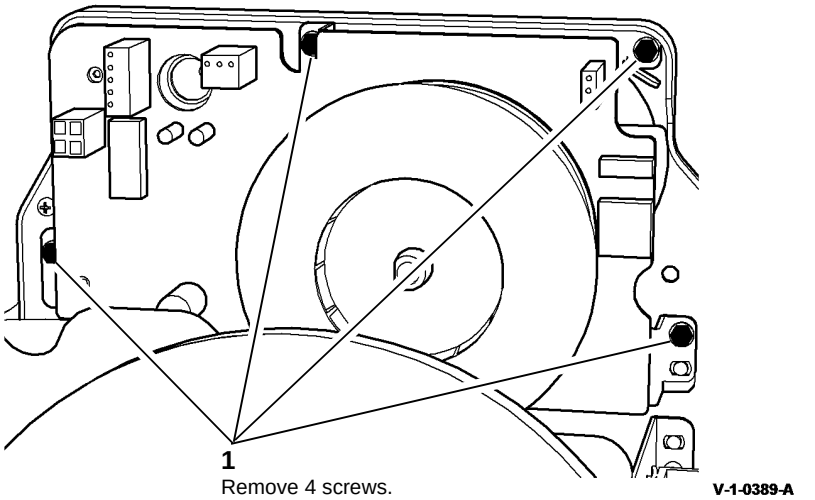


Figure 2 Preparation

4. Remove the main drive PWB, Figure 3.

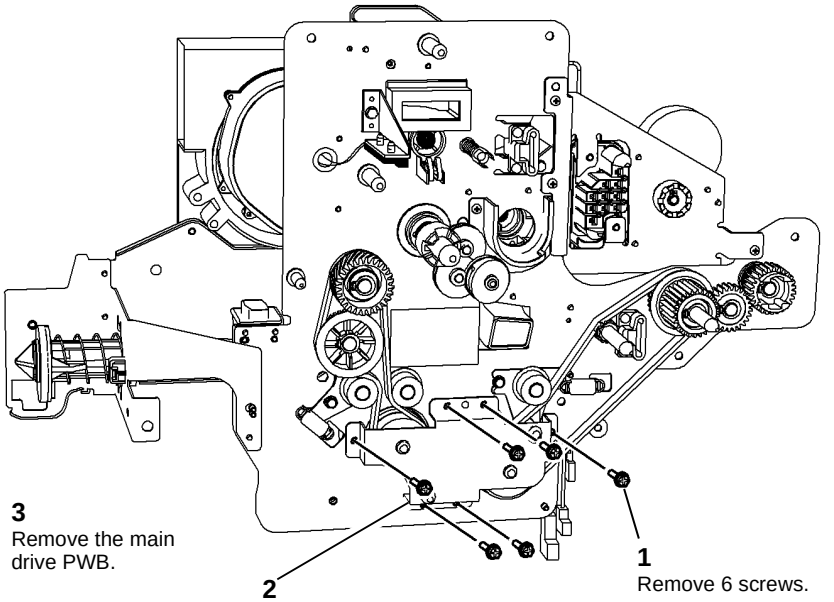


Figure 3 Main drive PWB removal

Replacement

CAUTION

The belt tensioners are of the floating type, and are spring loaded. They should not be locked down.

1. Replacement is the reverse of the removal procedure.
2. Ensure that the drives bracket is located in the tabs on the drives plate, Figure 4. Then secure the main drive PWB to the drives plate.

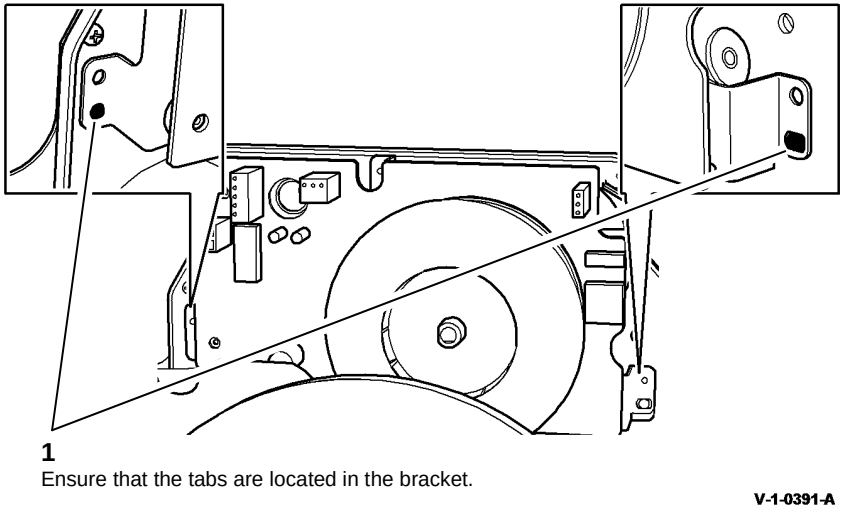


Figure 4 Main drive PWB location

3. Ensure that the support bracket on the main drive module is located correctly with the drive shafts and the collar, Figure 5. Then secure the support bracket.

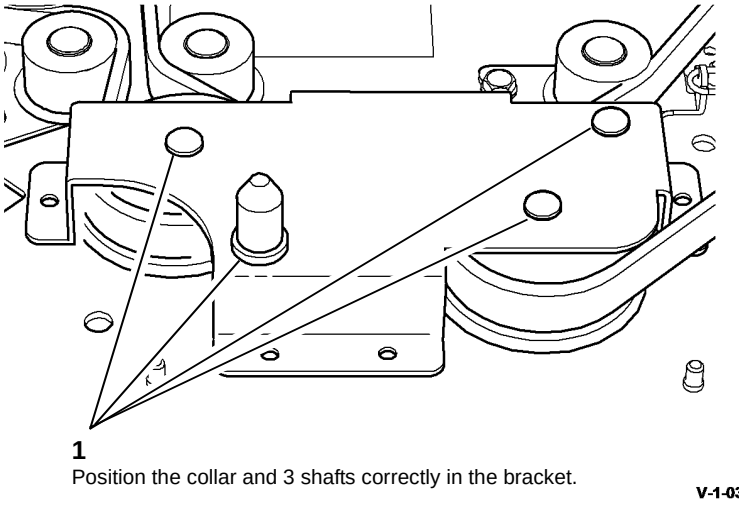


Figure 5 Main drive module support bracket

4. Before installing the main drive module turn the drive gears by hand to position the drive belts correctly on the drive gears.

REP 40.7 Main Drive Belts, Drive Gears and Idlers (65-90 ppm)

Parts List on PL 40.12

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the main drive module, REP 40.5.
2. Remove the drives support bracket, Figure 1.

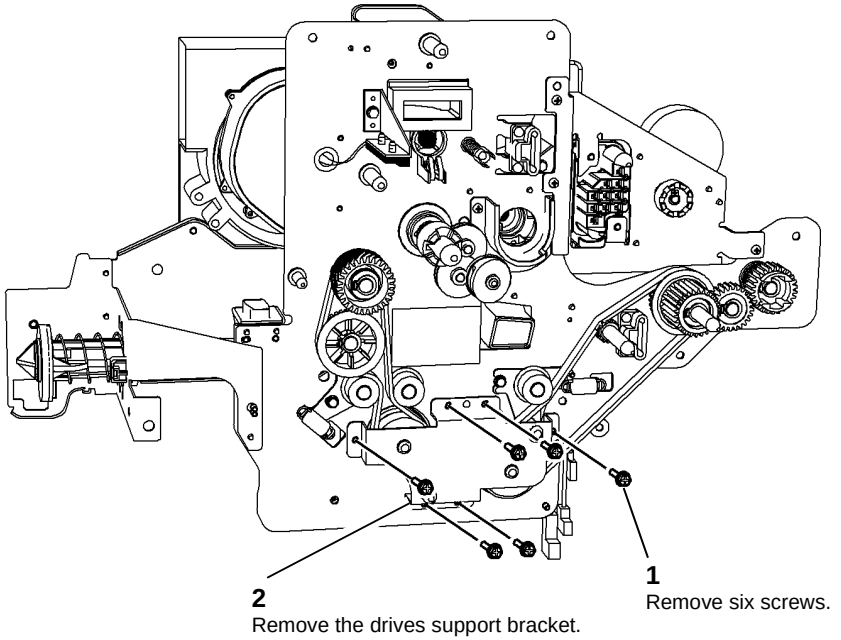


Figure 1 Drives support bracket

3. Refer to Figure 2. Remove the following as necessary:
   - Main drive belt 2.
   - Fuser drive gear.
   - Output paper path drive gear.
   - Intermediate drive gear.

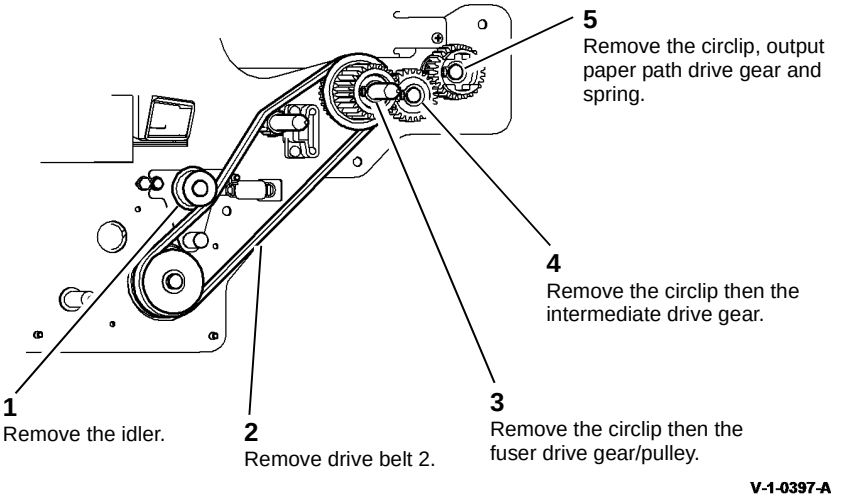


Figure 2 Drive belt 2 removal

4. Refer to Figure 3. Remove the following as necessary:
   - Main drive belt 1.
   - Registration transport drive pulley.
   - Developer drive gear/pulley.

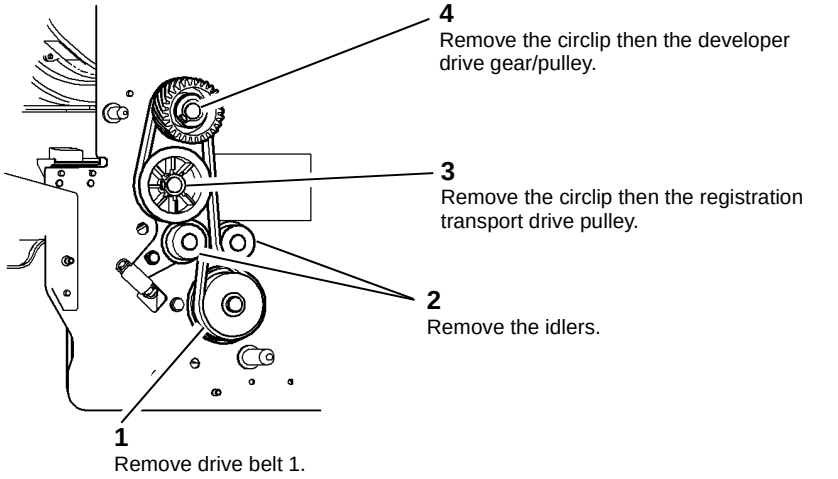


Figure 3 Drive belt 1 removal

Replacement

CAUTION

The belt tensioners are of the floating type, and are spring loaded. They should not be locked down.

1. Replacement is the reverse of the removal procedure.
2. Ensure that the support bracket on the main drive module is located correctly on the drive shafts and the collar, Figure 4.

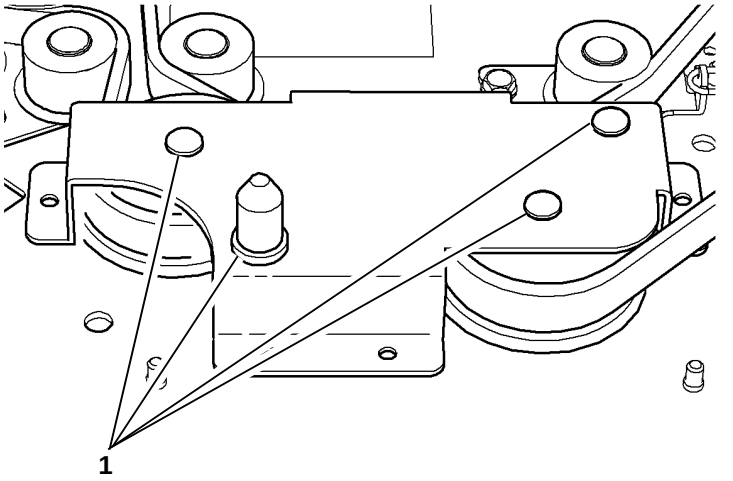


Figure 4 Main drive module support bracket

3. Turn the drive gears by hand to position the drive belts correctly on the drive gears and tensioner rolls.

REP 60.1 Scanner Rear Cover and Faraday Shield

Parts List on PL 60.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Raise the SPDH, PL 5.10 Item 9.
2. Remove the scanner rear cover, Figure 1.

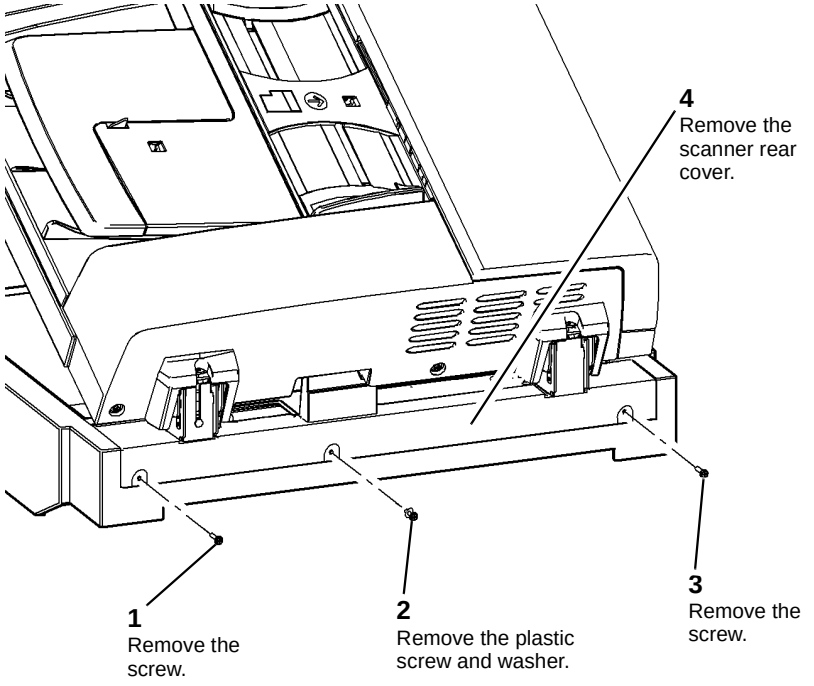


Figure 1 Scanner rear cover

3. Remove the faraday shield, Figure 2.

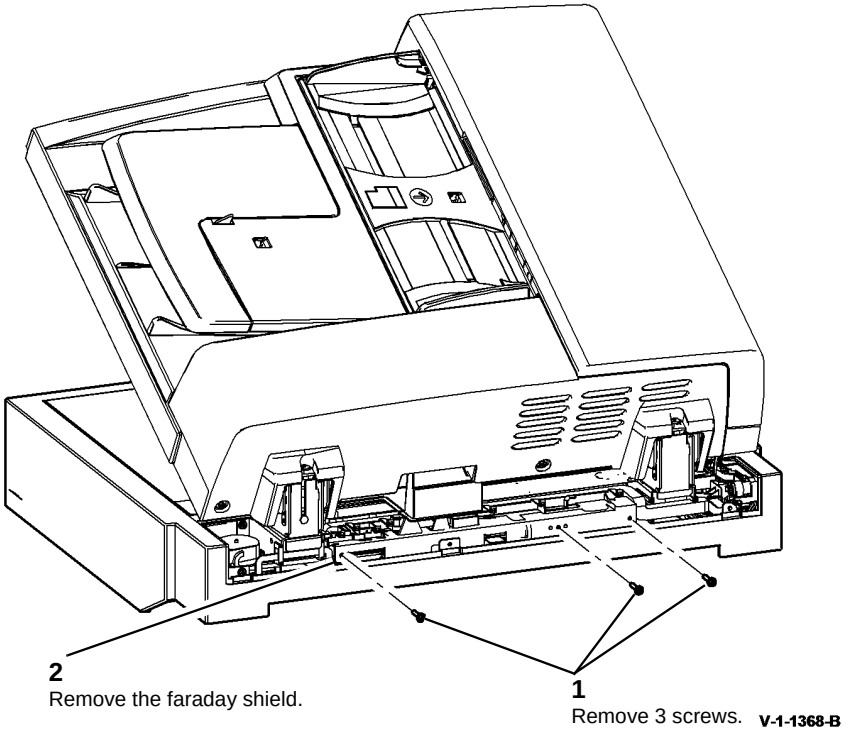


Figure 2 Faraday shield removal

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Ensure the faraday shield is positioned under the 6 hooks formed in the scanner PWB cover, PL 60.20 Item 6.
3. Ensure the scanner rear cover central fixing screw and washer are of the plastic type, in order to control ESD, Figure 1.

REP 60.2 Scanner Module

Parts List on PL 60.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Use safe handling procedures, GP 16 when removing the module. The module is heavy.

1. Remove the OCT or perform the following.
   - REP 11.13-120 1K LCSS Un-Docking
   - REP 11.13-110 2K LCSS Un-Docking
   - REP 11.13-150 LVF BM Un-Docking
   - REP 11.13-171 HVF and HVF BM Un-Docking
2. Remove the SPDH. REP 5.19.
3. Remove the user interface assembly, REP 2.1.
4. Withdraw the single board controller PWB module PL 3.22, then disconnect the scanner, Figure 1.

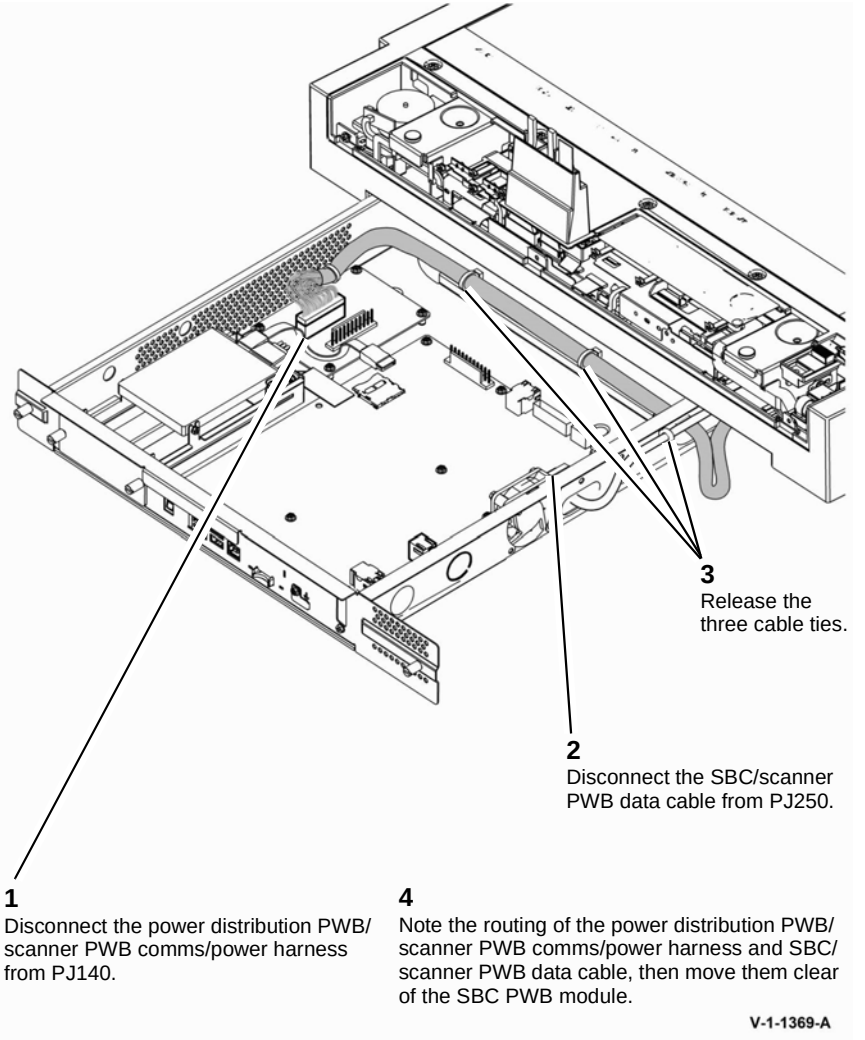


Figure 1 Disconnect the scanner

5. Remove the rear cover, PL 28.10 Item 1, then disconnect the two earth harnesses of the scanner, Figure 2.

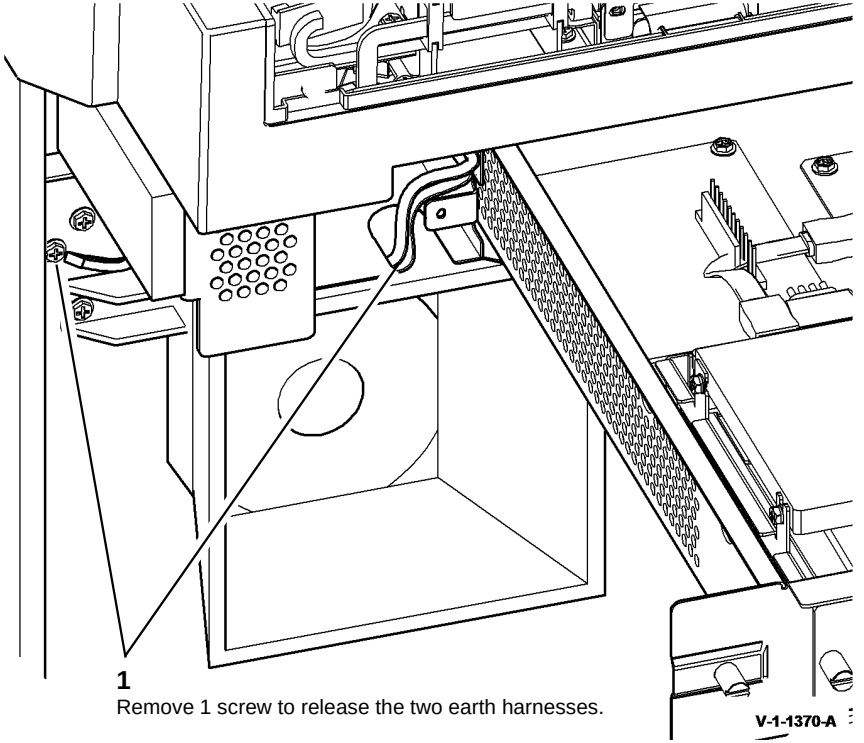


Figure 2 Scanner earth harnesses

6. Lock the scan carriage then remove the scanner module. Figure 3.

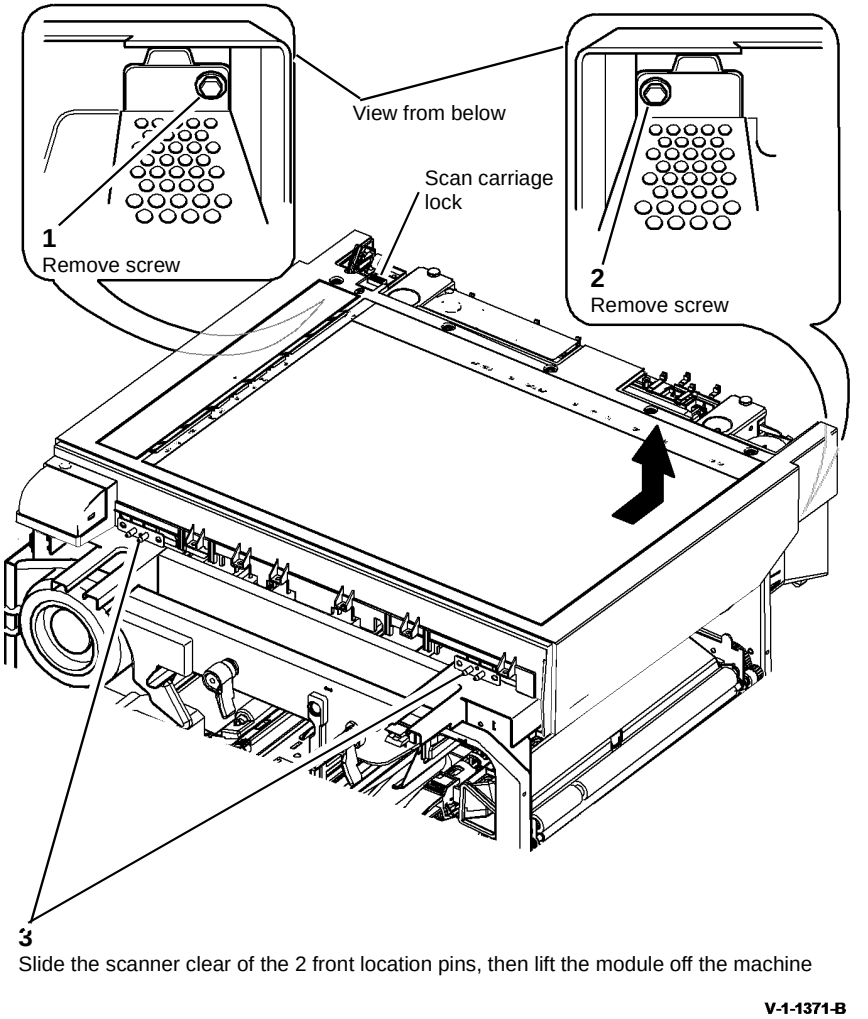


Figure 3 Scanner removal

Replacement

1. The replacement procedure is the reverse of the removal procedure
2. Check the power distribution PWB/scanner PWB comms/power harness and SBC/scanner PWB data cable are routed correctly through the cut-out of the scanner module mounting frame, Figure 4.

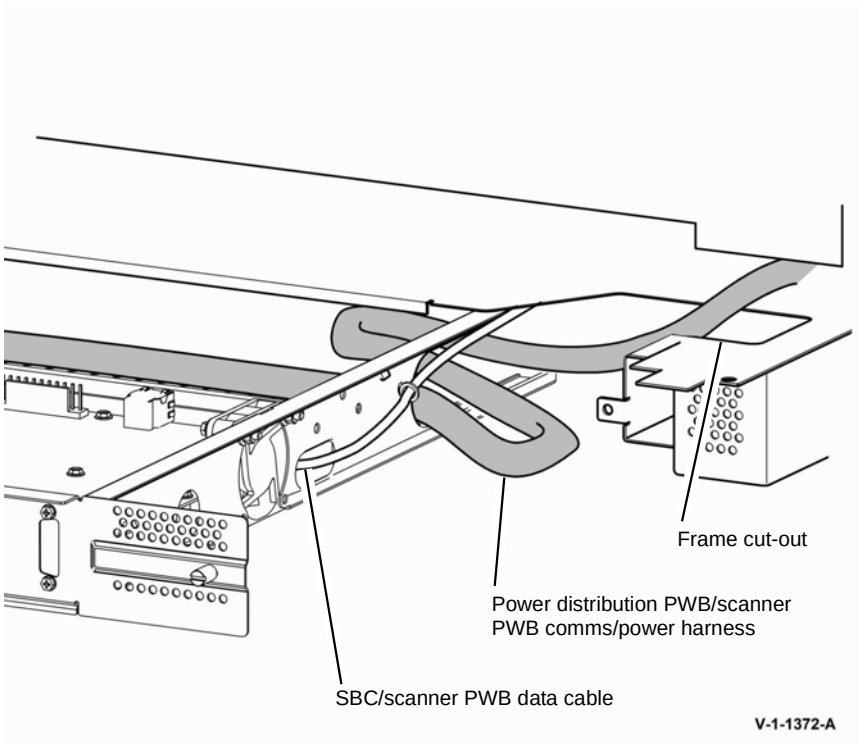


Figure 4 Harness cutout

3. Check the front location pins are located correctly and have not pushed the grommets out of position.
4. Ensure the scan carriage is unlocked, refer to Figure 3.
5. Ensure the two earth harnesses are routed correctly, refer to Figure 2.
6. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.
7. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.

REP 60.3 Top Cover Assembly

Parts List on PL 60.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the SPDH, REP 5.19.
2. Remove the user interface assembly, REP 2.1.
3. Remove the front door assembly, PL 28.10 Item 10 (45-55ppm), PL 28.11 Item 10 (65-90ppm).
4. Remove the UI surround, PL 2.10 Item 12.
5. Remove the top cover assembly, Figure 1.

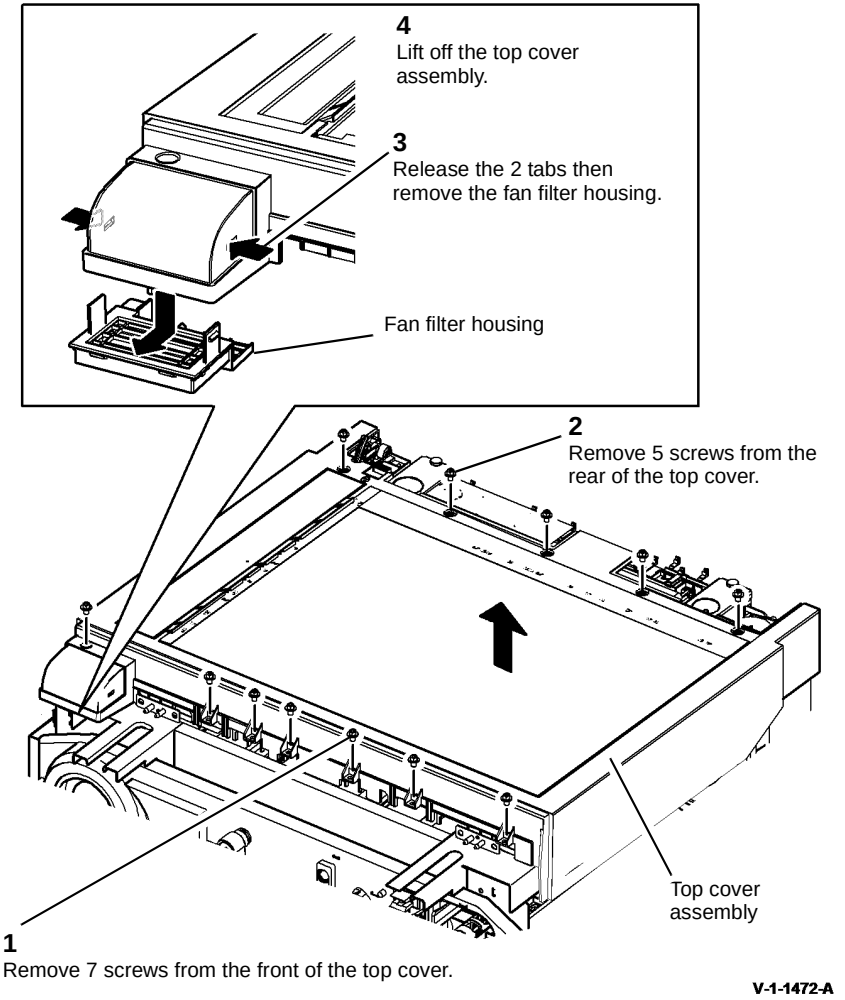


Figure 1 Top cover assembly

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Perform ADJ 60.3 scanner cleaning procedure.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.4 Scanner PWB

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Take care if a new IOT PWB, scanner PWB, hard disk or SD card is to be installed. Ensure that any combination of these components are replace one at a time, and that the machine is switched off and then on again (GP 14) between each installation of a PWB or the hard disk. Failure to do so will cause corruption of the machine's NVM configuration data, GP 27.

1. Remove the SPDH. REP 5.19.
2. Remove the harness guide, Figure 1.

3. Remove the scanner PWB cover, Figure 2.

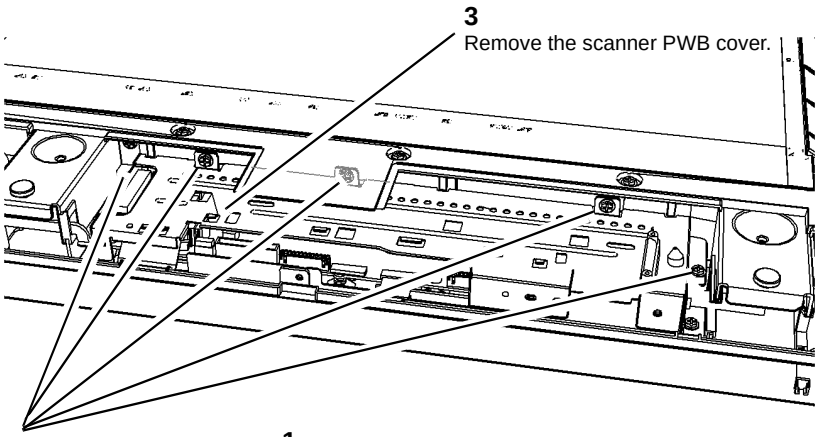
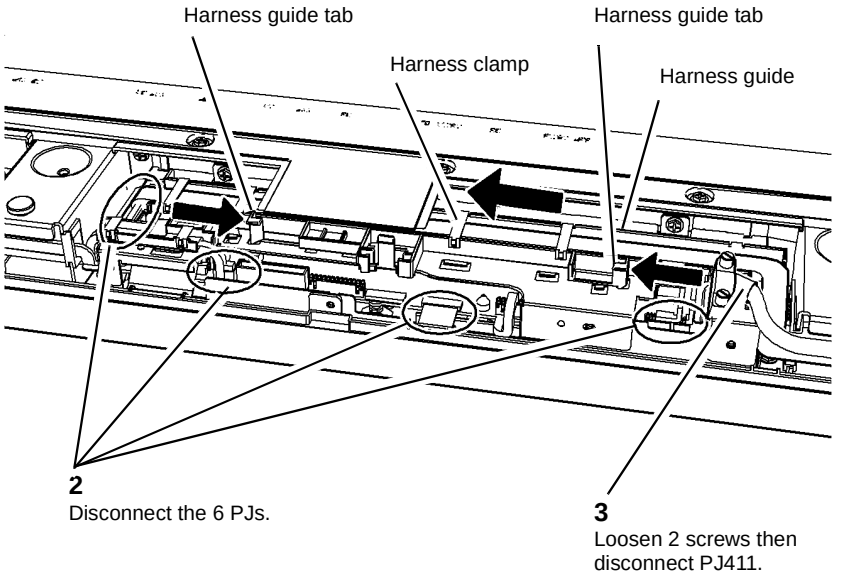


Figure 2 Scanner PWB cover

4
Press the 2 harness guide tabs towards each other. Simultaneously, slide the harness guide in the direction of the large arrow, then remove the harness guide.



1
Release the 7 harness clips, then move the harnesses clear of the harness guide.

V-1-1468-B

Figure 1 Scanner harness guide

4. Remove the scanner PWB, Figure 3.

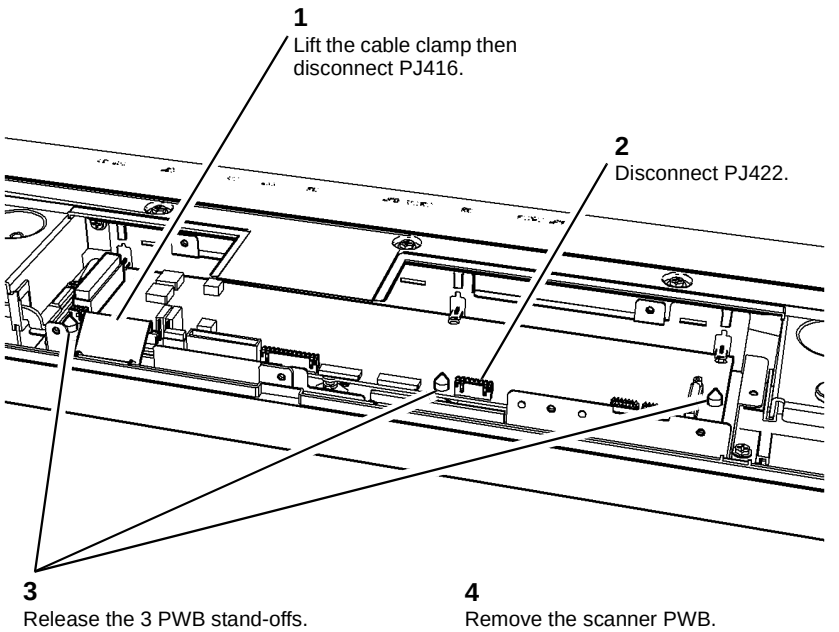


Figure 3 Scanner PWB

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Ensure the scanner PWB engages with the 3 PWB locators on the rear of the housing, Figure 4.

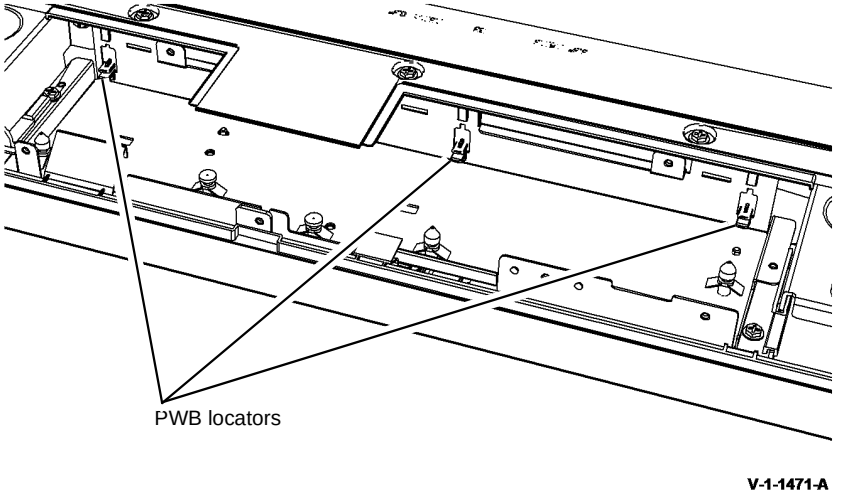


Figure 4 Scanner PWB locators

3. If a new scanner PWB has been installed, perform ADJ 60.5 IIT Registration, Magnification and Calibration.
4. Ensure that the machine serial number in dC132 is correct. If necessary, enter the correct serial number.

REP 60.5 Scan Carriage Assembly

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove the scan carriage drive belt, REP 60.11.
3. Remove the ribbon cable retainer, Figure 1.

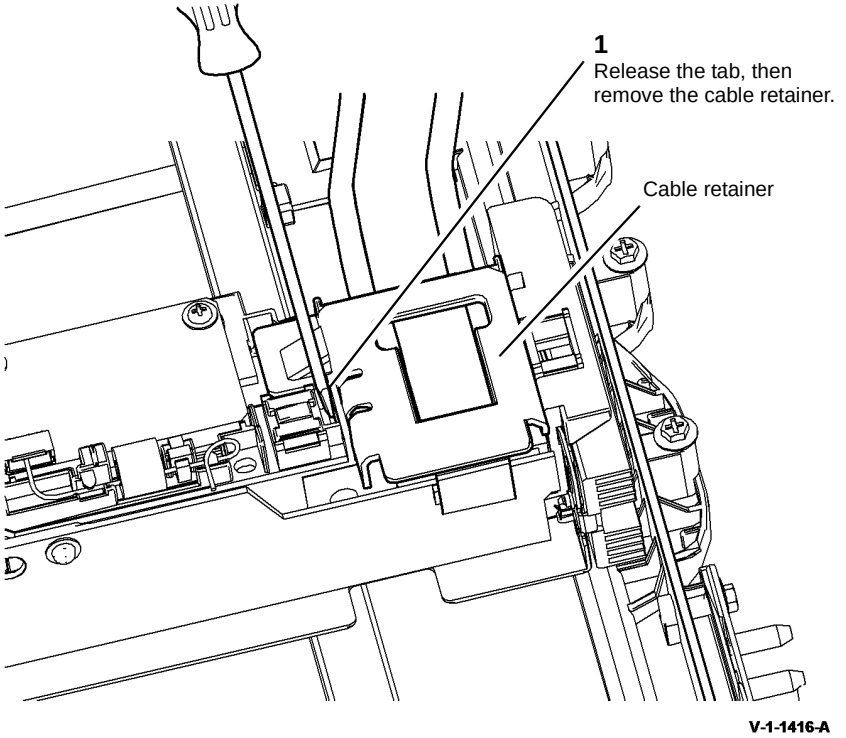


Figure 1 Ribbon cable retainer

4. Remove the cable clamp, Figure 2.

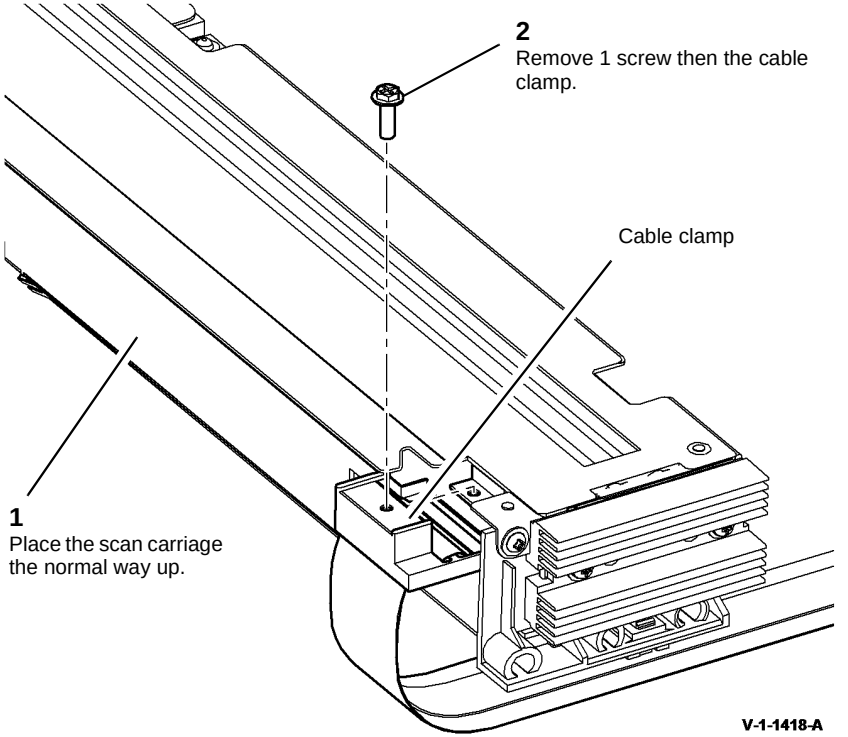


Figure 2 Cable clamp removal

5. Remove the scan carriage, Figure 3.

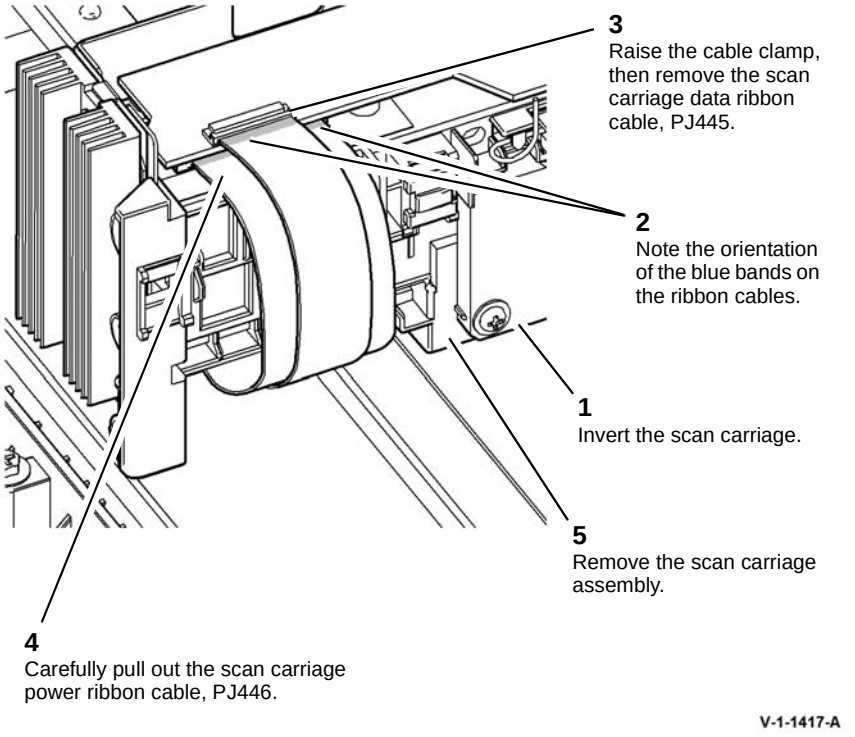


Figure 3 Scan carriage removal

Replacement

1. Reverse the removal procedure to replace the scan carriage assembly.
2. When re-connecting the ribbon cables, the blue band printed on the cables must be orientated as shown in Figure 3.
3. Perform ADJ 60.3 Optics Cleaning.
4. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.6 Side 2 Scan Assembly and Reg Sensor

Parts List on PL 60.30

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the takeaway roll assembly, REP 5.5.
2. Prepare to remove the side 2 scan assembly, Figure 1.

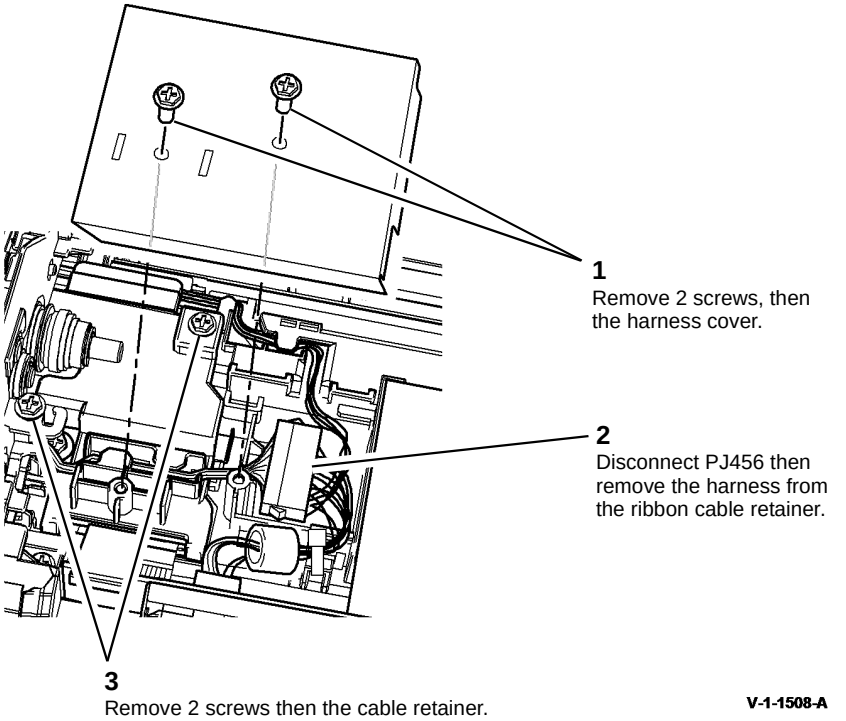


Figure 1 Scan assembly harnesses

3. Remove the side 2 scan assembly, Figure 2.

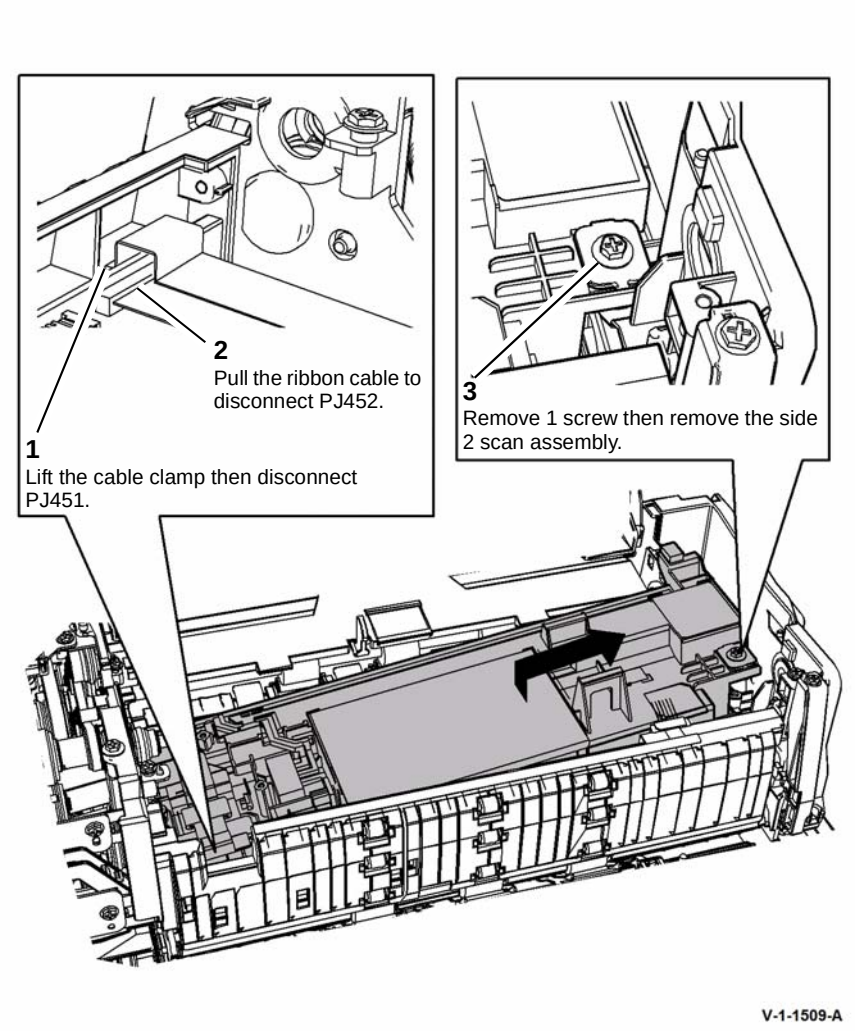


Figure 2 Side 2 scan assembly

4. If required remove the side 2 reg sensor, Figure 3.

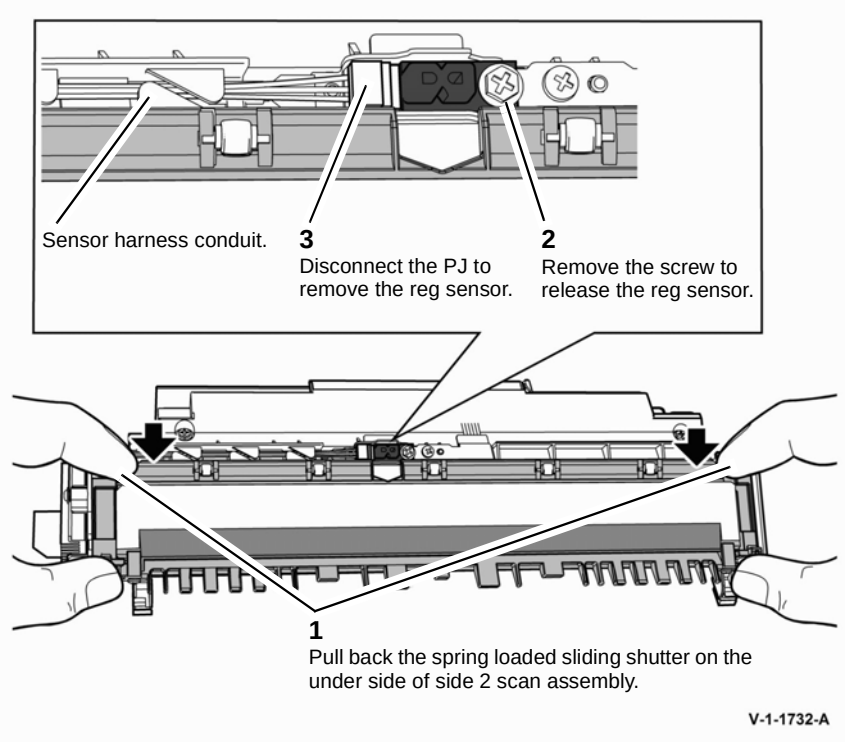


Figure 3 Side 2 reg sensor

Replacement

CAUTION

Take care not to trap the stack sensor actuator, PL 5.30 Item 6 beneath the side 2 scan assembly during re-assembly.

1. Reverse the removal procedure to replace the side 2 scan assembly.
2. If the side 2 reg sensor was removed, ensure that the sensor harness is routed correctly within the harness conduit, Figure 3.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.7 Scan Carriage Power Ribbon Cable

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Disconnect the scan carriage power ribbon cable (P/J416) from the scanner PWB, refer to REP 60.4.
3. Disconnect the scan carriage power ribbon cable (P/J446) from the scan carriage assembly. Refer to REP 60.5.

   NOTE: *It is not necessary to detach the scan carriage drive belt from the scan carriage.*

   Place the scan carriage upside down resting on the rear frame and scanner base, so that it is stable.
4. Remove the scan carriage support rail from the front of the scanner base, by removing 1 screw from the right end and 2 screws from the left end.
5. Remove the ribbon cable, Figure 1.

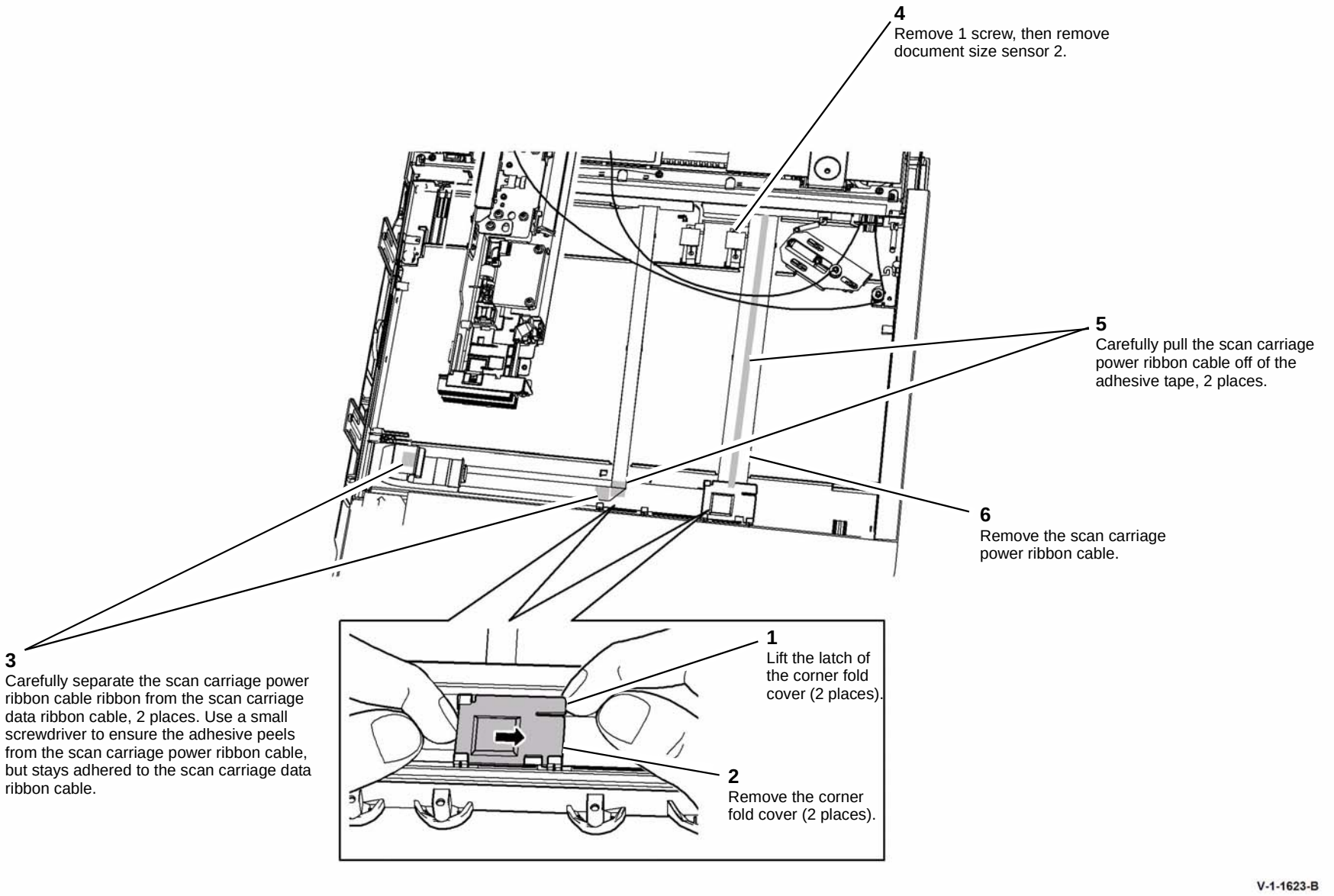


Figure 1 Ribbon cable removal

6. Clean the adhesive residue from the scanner frame using film remover, PL 26.10 Item 4.

Replacement

1. A new pre-folded scan carriage power ribbon cable is supplied with double sided tape attached. Figure 2 shows the positions of the double sided tape.

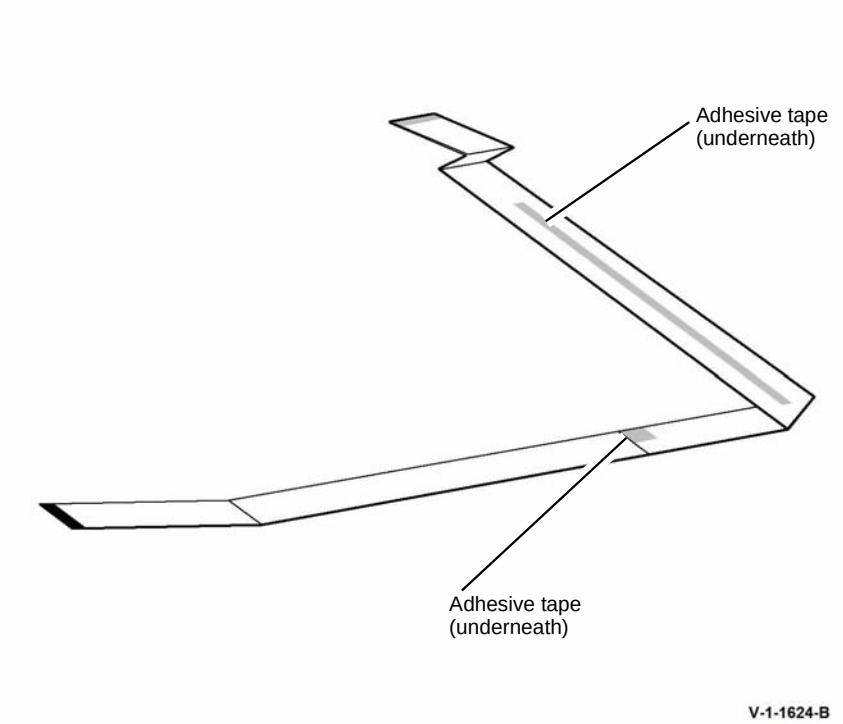


Figure 2 Ribbon cable adhesive

2. Align the scan carriage power ribbon cable, Figure 3.

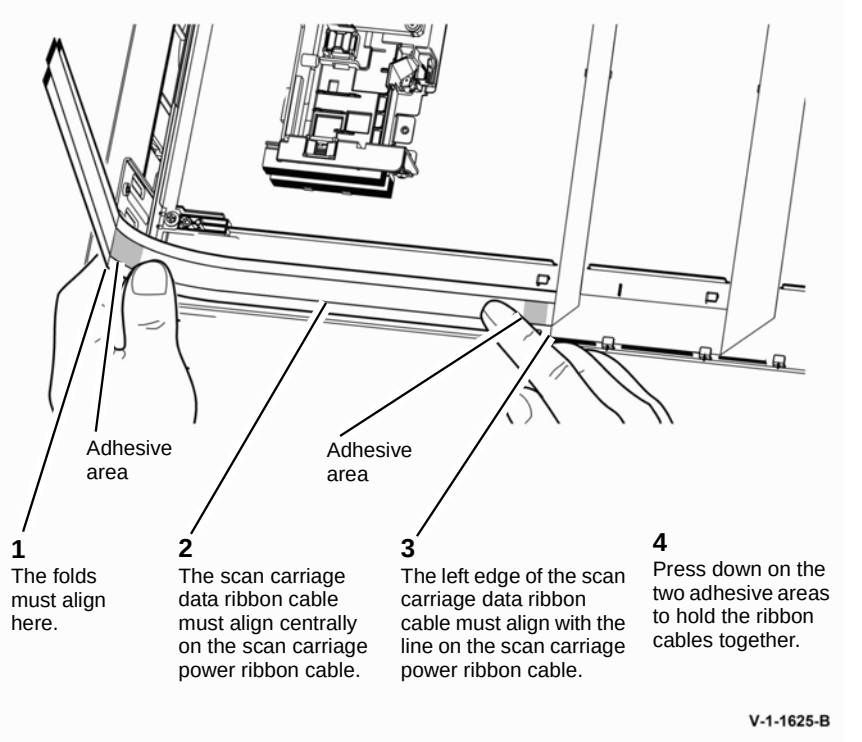


Figure 3 Ribbon cable alignment

3. Install the scan carriage power ribbon cable, Figure 4.

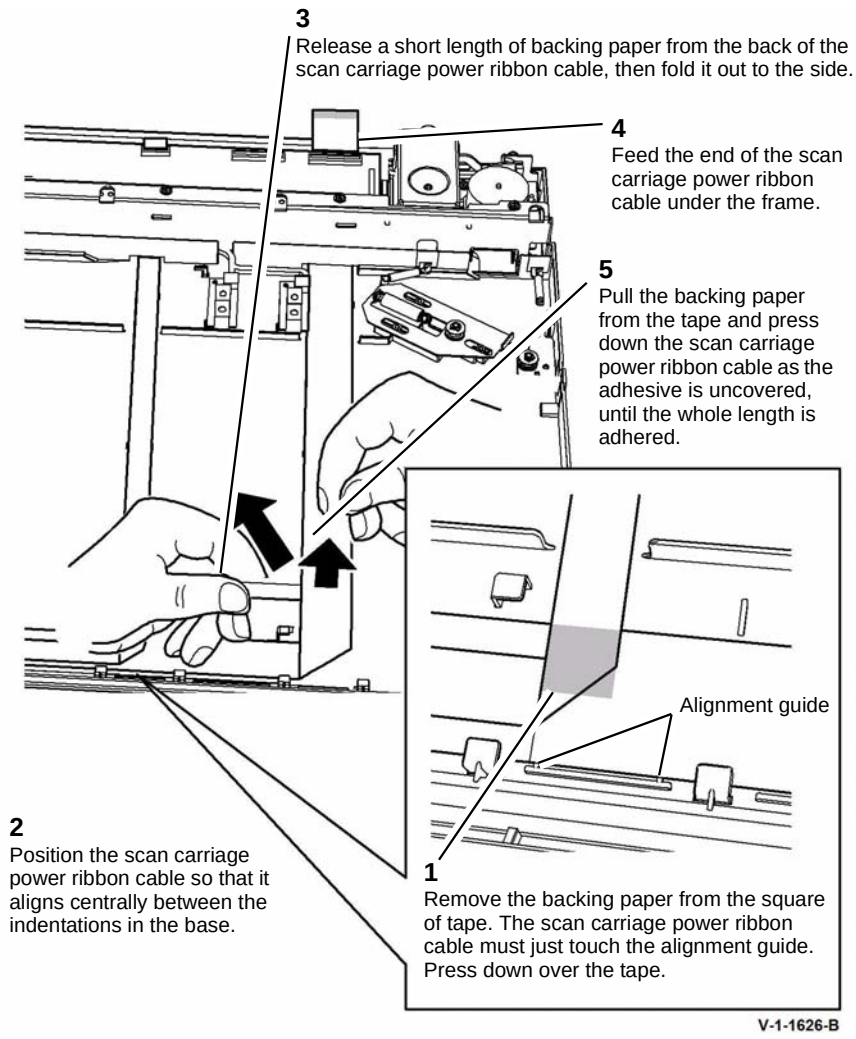


Figure 4 Ribbon cable placement

4. The remainder of the replacement procedure is the reverse of the removal procedure.

   NOTE: *Add folds to the ends of the new scan carriage power ribbon cable to copy the shape of the old scan carriage power ribbon cable. This will aid in the ease of connection to the scan carriage power ribbon cable connectors.*

5. Perform ADJ 60.1 Scanner Cleaning Procedure.
6. Perform ADJ 60.3 IIT Registration, Magnification and Calibration.

REP 60.8 Scan Carriage Data Ribbon Cable

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove the scanner PWB, REP 60.4.
3. Remove the scanner PWB support, Figure 1.

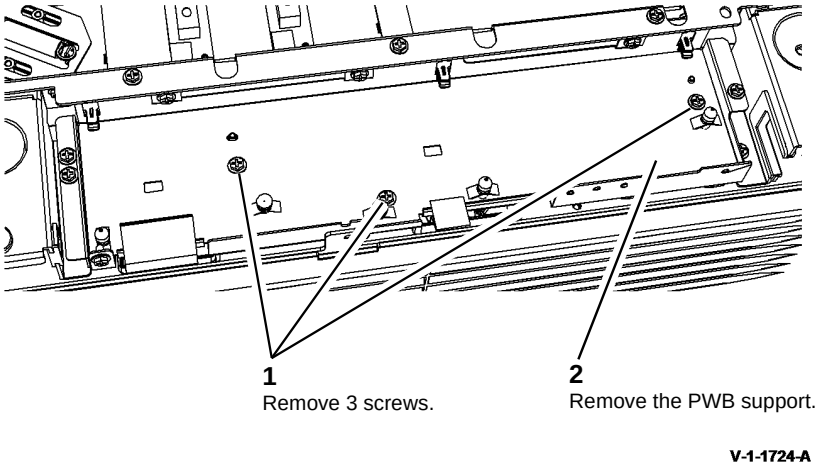


Figure 1 PWB support removal

4. Disconnect the scan carriage data ribbon cable (PJ445) from the scan carriage assembly. Refer to REP 60.5.

   NOTE: *It is not necessary to detach the scan carriage drive belt from the scan carriage.*

   Place the scan carriage upside down resting on the rear frame and scanner base, so that it is stable.
5. Remove the scan carriage support rail from the front of the scanner base, by removing 1 screw from the right end and 2 screws from the left end.

6. Remove the scan carriage data ribbon cable, Figure 2.

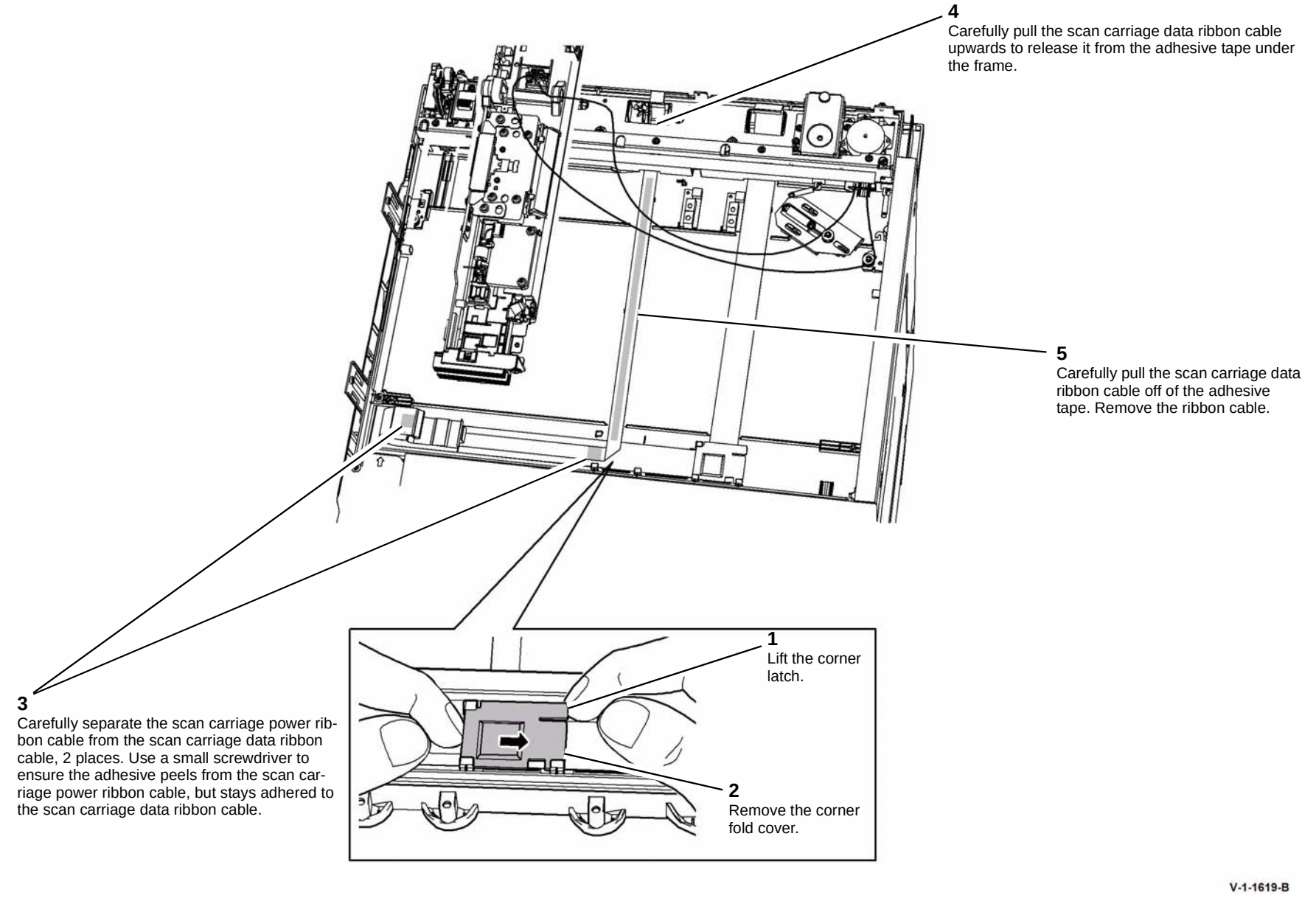


Figure 2 Ribbon cable removal

7. Clean the adhesive residue from the scanner frame using film remover, PL 26.10 Item 4.

Replacement

1. A new pre-folded scan carriage data ribbon cable is supplied with double sided tape attached. Figure 3 shows the positions of the double sided tape.

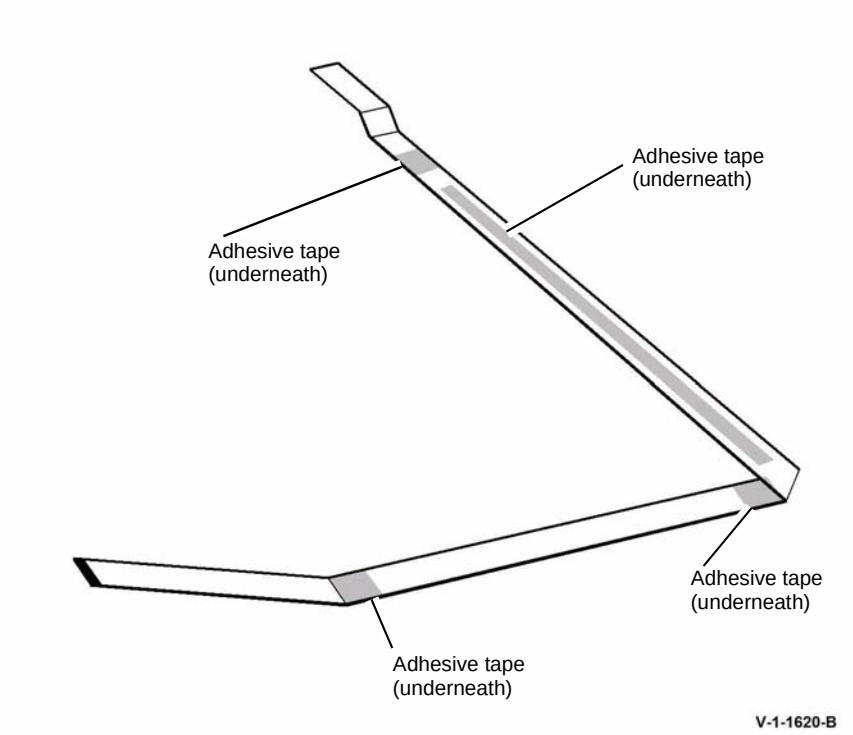


Figure 3 Ribbon cable adhesive

2. Align the scan carriage data ribbon cable, Figure 4.

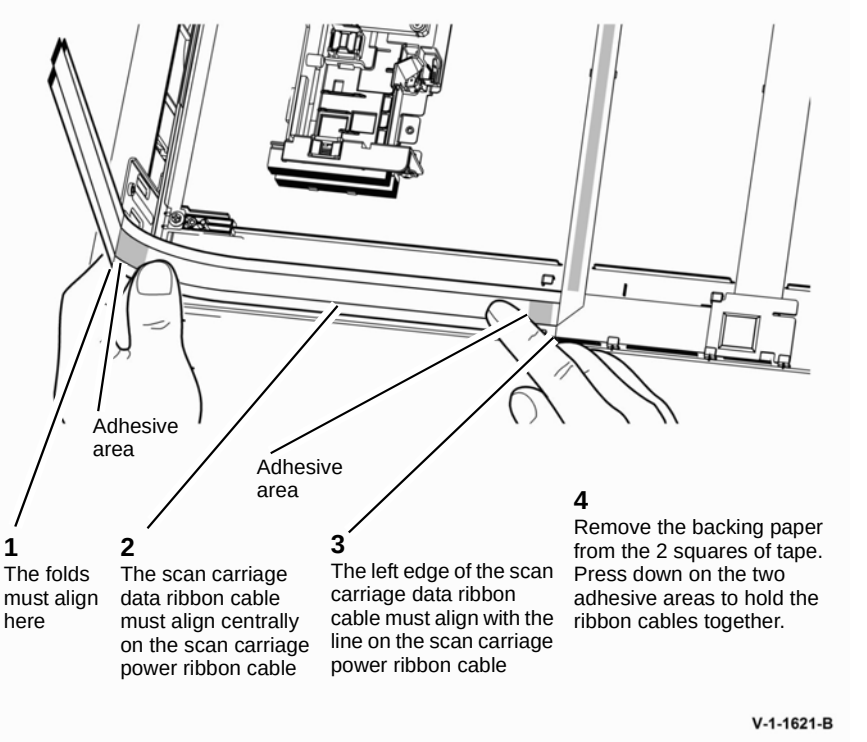


Figure 4 Ribbon cable alignment

3. Install the ribbon cable, Figure 5.

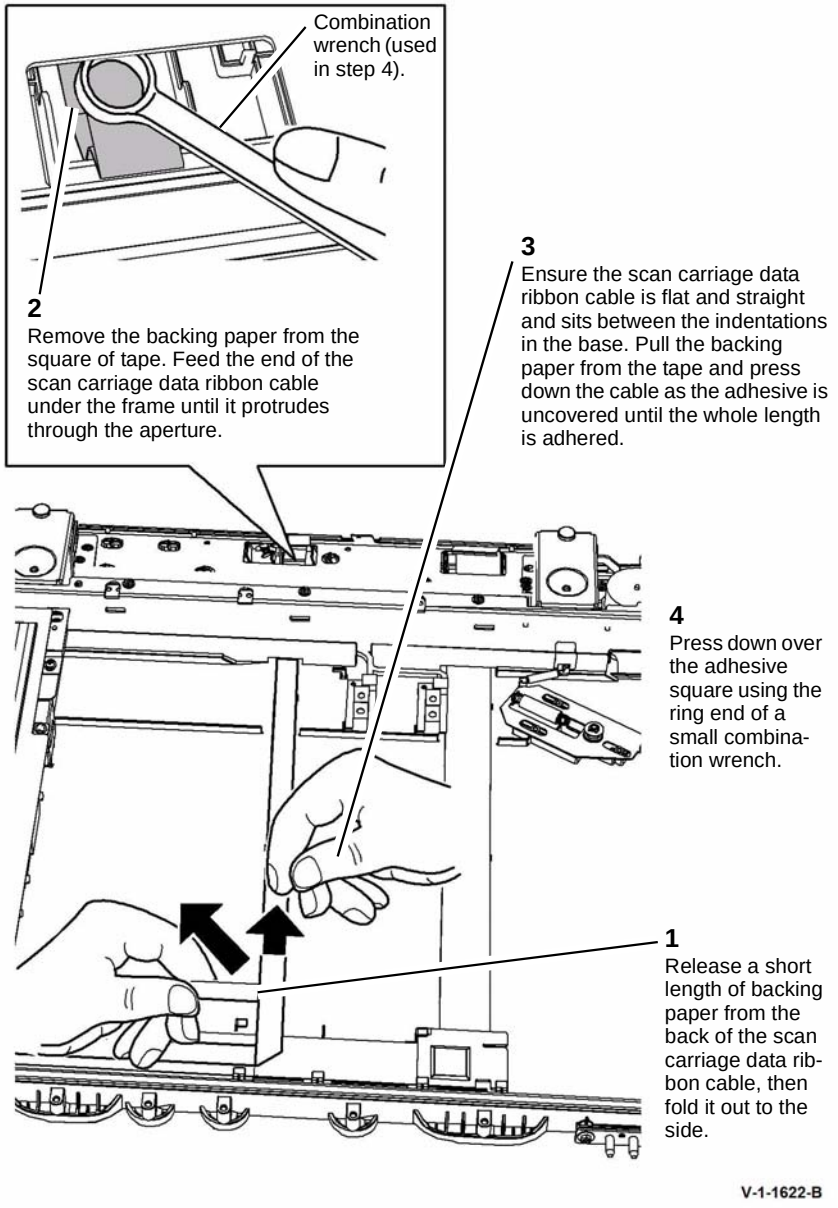


Figure 5 Ribbon cable placement

4. The remainder of the replacement procedure is the reverse of the removal procedure.

   NOTE: *Add folds to the ends of the new scan carriage data ribbon cable to copy the shape of the old scan carriage data ribbon cable. This will aid in the ease of connection to the ribbon cable connectors.*

5. Perform ADJ 60.1 Scanner Cleaning Procedure.
6. Perform ADJ 60.3 IIT Registration, Magnification and Calibration.

REP 60.9 Actuator Support Assembly

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the SPDH. REP 5.19.
2. Disconnect the actuator support harnesses, Figure 1.

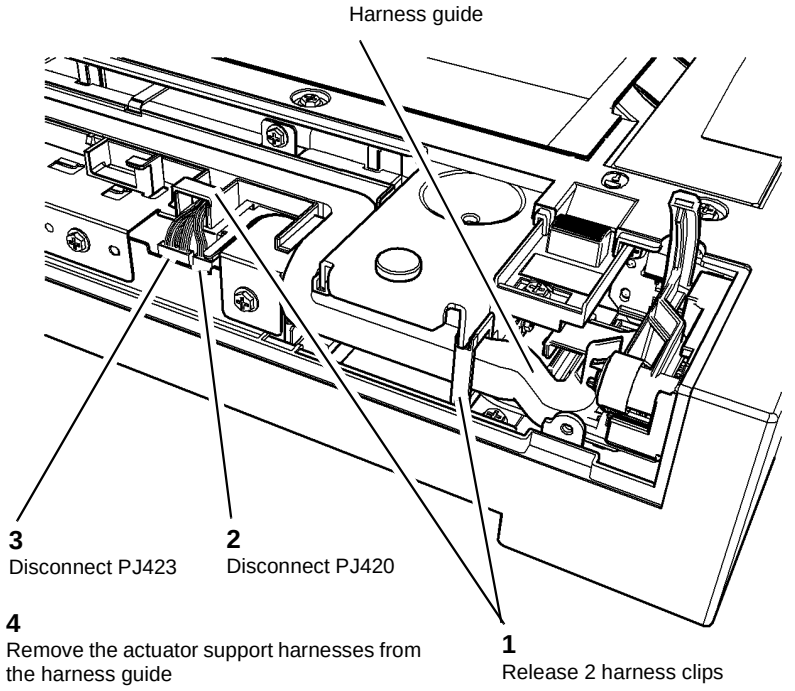


Figure 1 Harness connections

3. Remove the actuator support assembly, Figure 2.

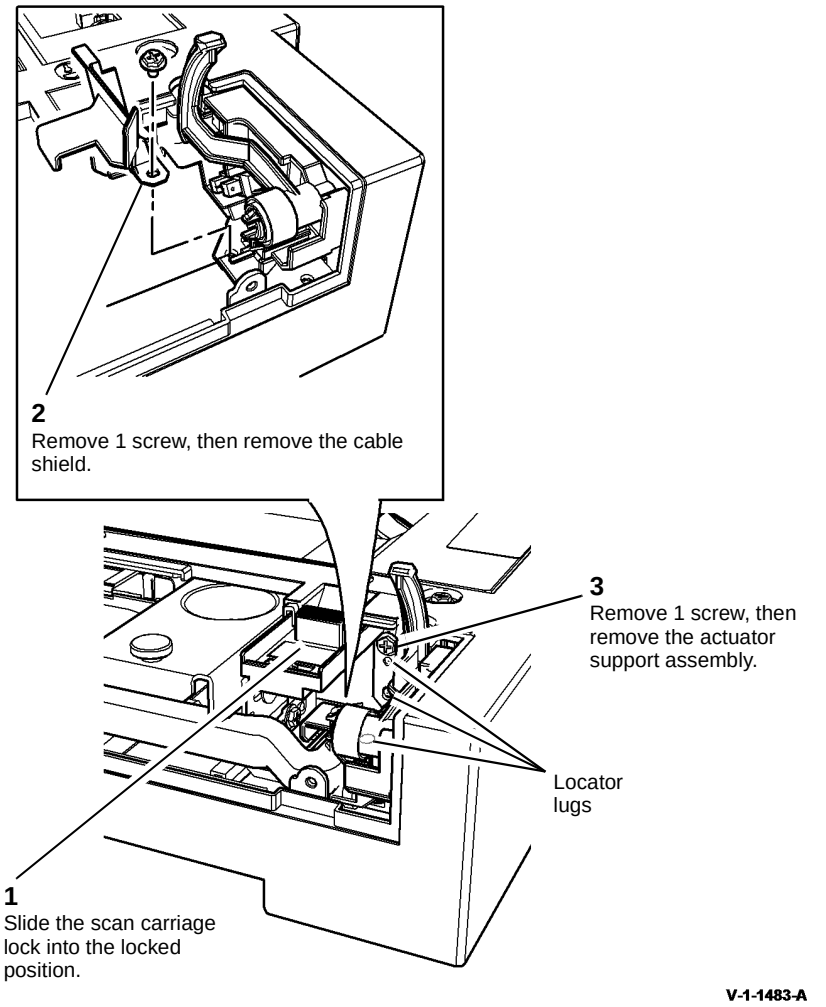
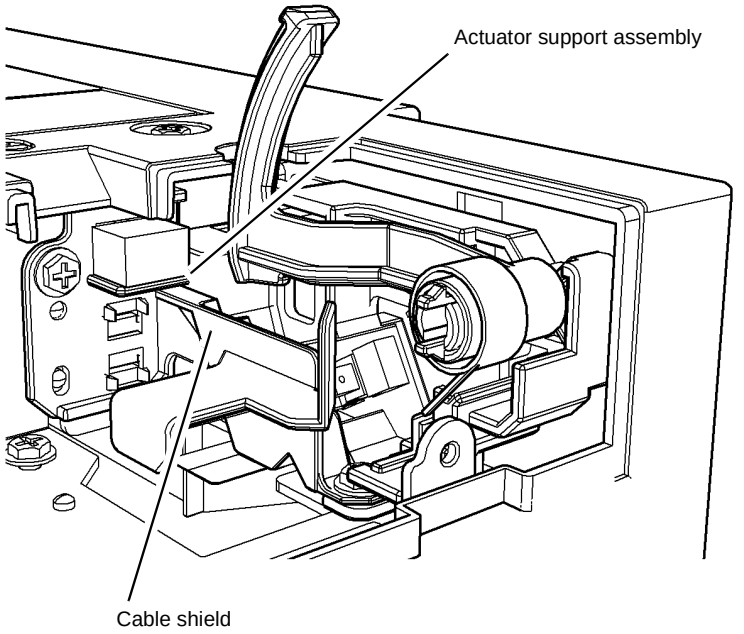


Figure 2 Actuator support assembly

Replacement

1. Reverse the removal procedures to replace the actuator support assembly.
2. When replacing the actuator support assembly ensure that the 3 locator lugs of the scanner frame are located into the actuator support assembly, before tightening the screw.
3. When replacing the cable shield ensure the tip of the cable shield is positioned under the actuator support assembly, Figure 3.



NOTE: The scanner lock has been removed from this illustration for clarity.

V-1-1484-A

Figure 3 Replacing the cable shield

4. Press down the SPDH angle sensor actuator to ensure that it does not catch on the cable shield, PL 60.20 Item 12.

REP 60.10 Scan Carriage Motor Assembly

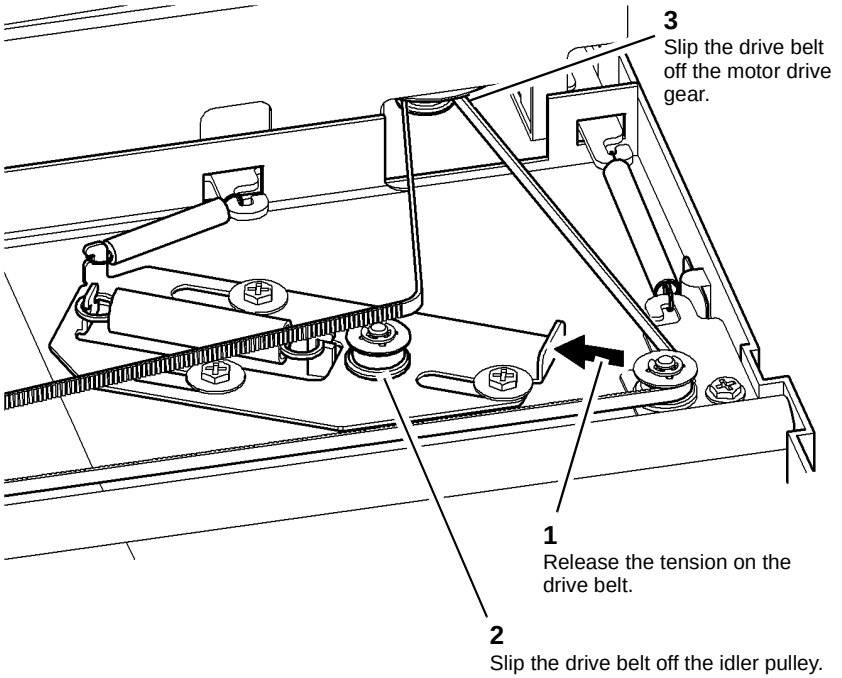
Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove the scan carriage drive belt from the motor drive gear, Figure 1.



V-1-1411-A

Figure 1 Release the drive belt

3. Remove the scan carriage motor, Figure 2.

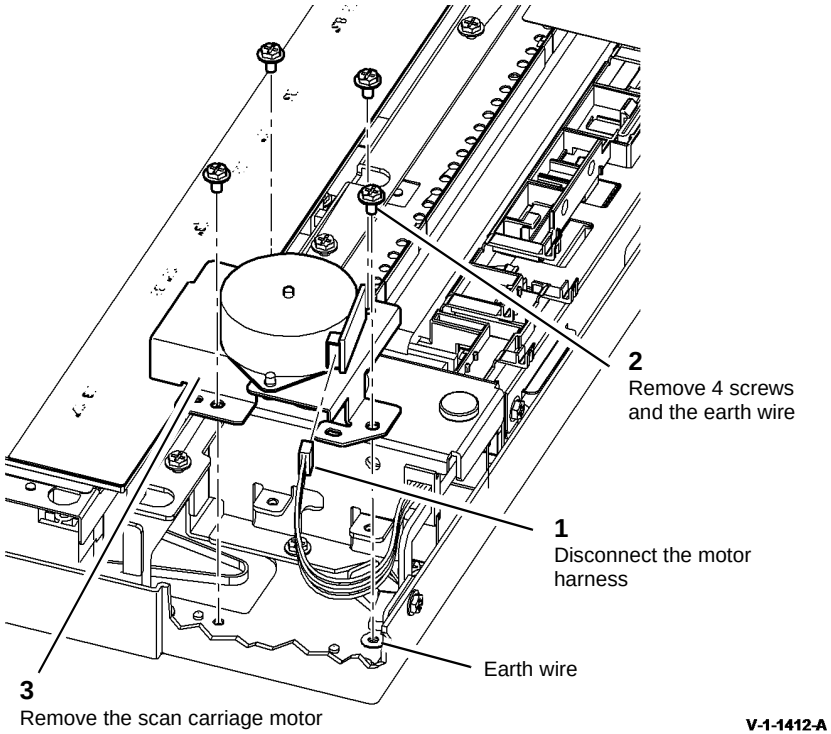


Figure 2 Scan carriage motor

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Perform ADJ 60.3 Optics Cleaning.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.11 Scan Carriage Drive Belt

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove the scan carriage drive belt from the scan carriage motor assembly, Figure 1.

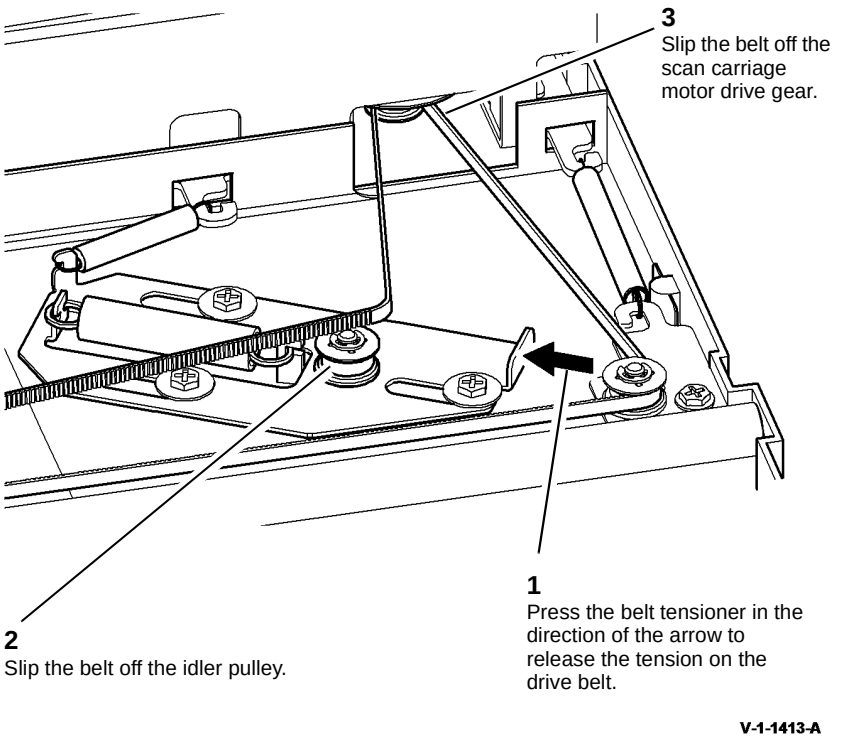


Figure 1 Release the drive belt

3. Remove scan carriage transit shaft, Figure 2.

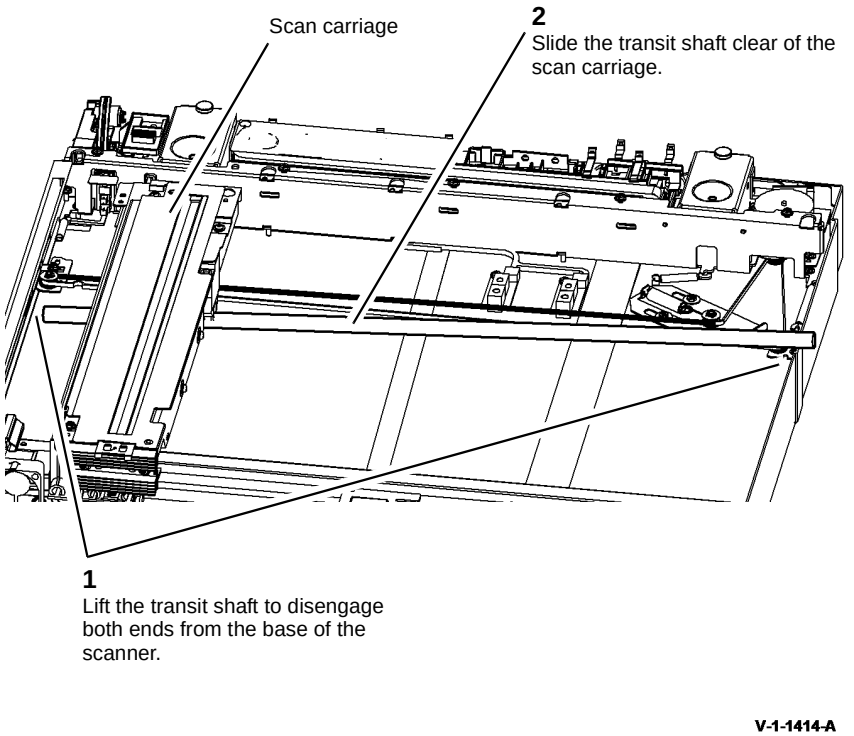


Figure 2 Release the transit shaft

4. Detach the scan carriage drive belt, Figure 3.

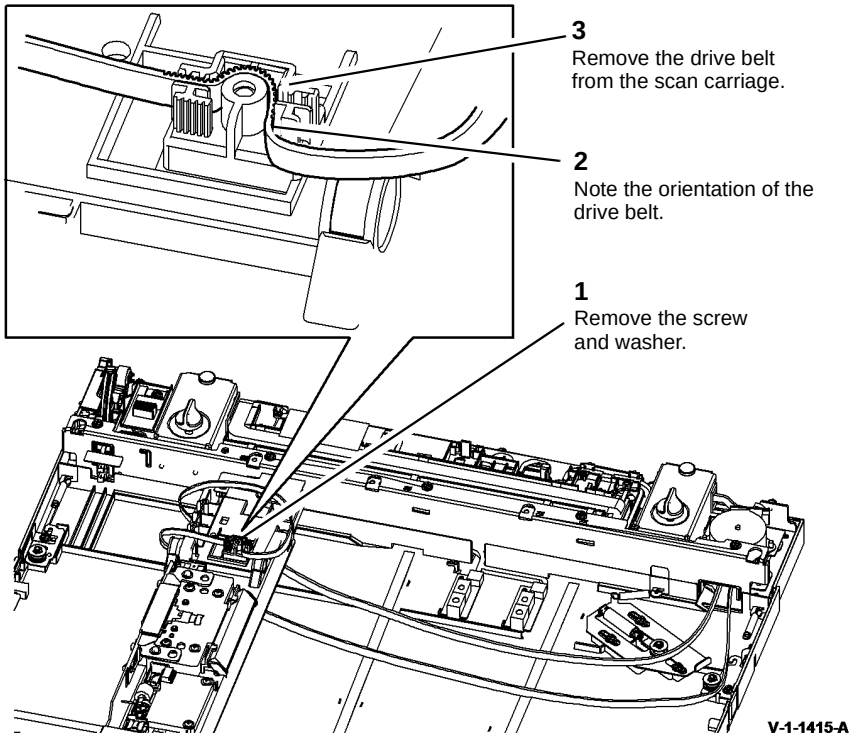


Figure 3 Drive belt retaining screw

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Ensure the scan carriage drive belt is installed correctly on all 3 idler pulleys and the scan carriage motor drive gear.
3. Perform ADJ 60.3 Optics Cleaning.
4. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.12 Scan Carriage Idler Pulleys

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the scanner top cover, REP 60.14.
2. Remove the scan carriage drive belt from the idler pulley of the belt tensioner, Figure 1.

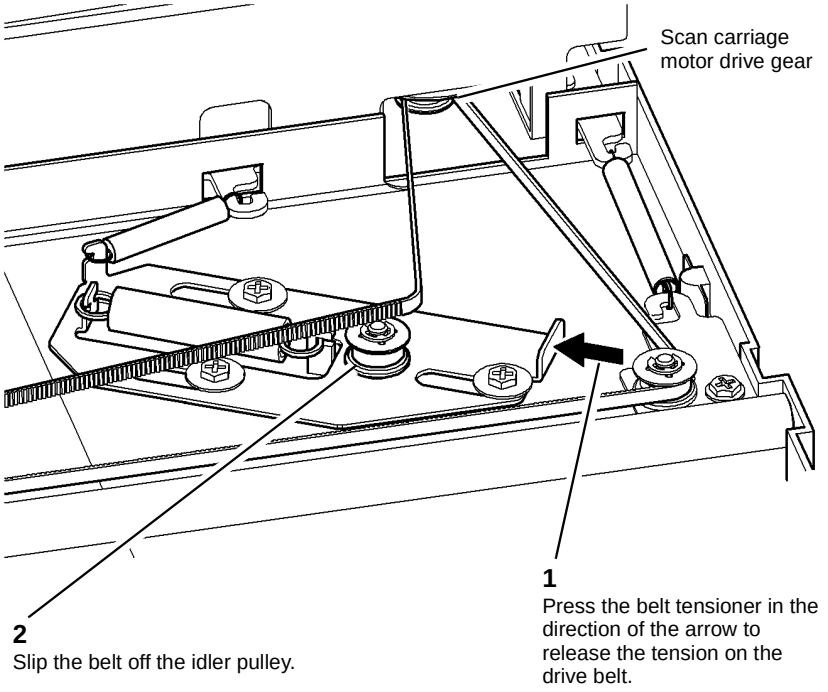


Figure 1 Release the drive belt

3. Remove the scan idler pulley, Figure 2.

NOTE: *Figure 2 shows the idler pulley of the belt tensioner. However, the removal procedure for all 3 idler pulleys is identical.*

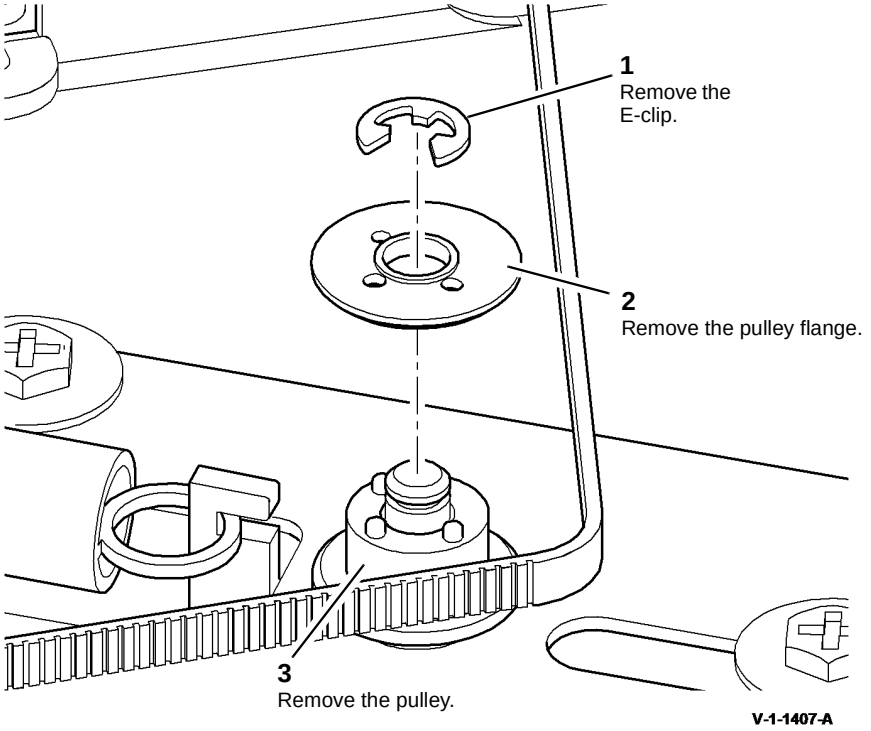


Figure 2 Scan idler pulley removal

Replacement

1. Reverse the removal procedure to replace the scan carriage idler pulleys.
2. Ensure the scan idler pulleys are installed correctly, Figure 3.

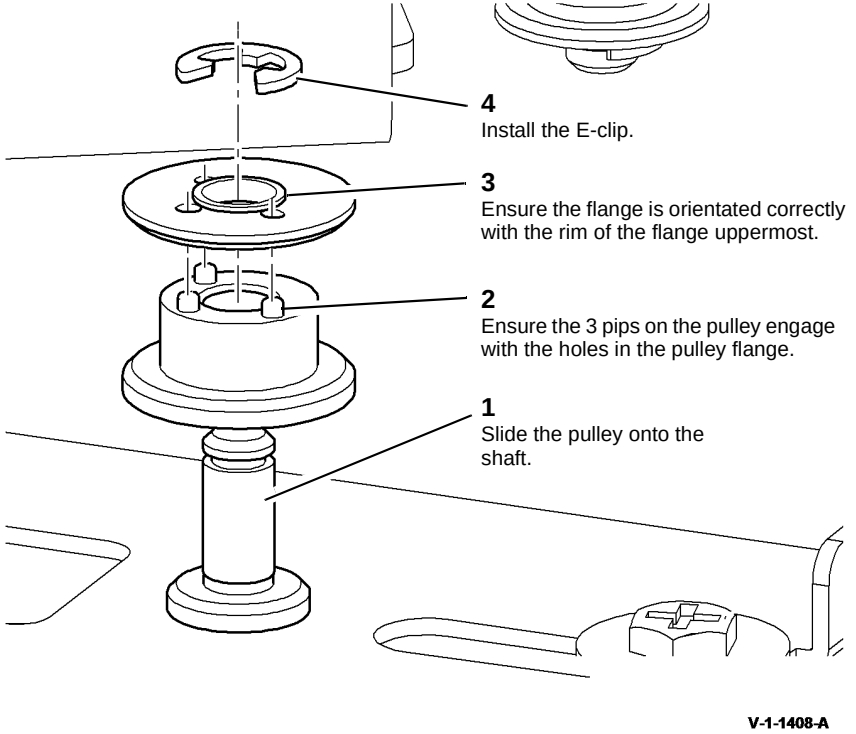


Figure 3 Idler pulley replacement

3. Ensure the scan carriage drive belt is installed correctly on all 3 idler pulleys and the scan carriage motor drive gear.
4. Perform ADJ 60.3 Optics Cleaning.
5. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.13 Document Size Sensor 1 and Document Size Sensor 2

Parts List on PL 60.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove document size sensor 1 (Q62-315) or document size sensor 2 (Q62-320), Figure 1.

NOTE: *The removal of document size sensor 1 and document size sensor 2 is identical.*

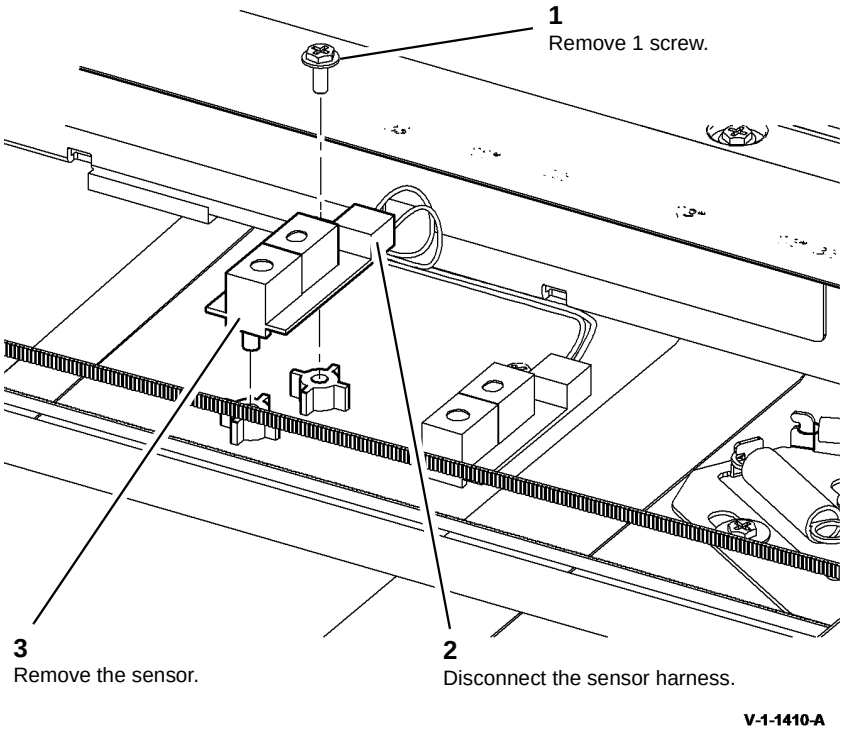


Figure 1 Removal

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Perform ADJ 60.3 Optics Cleaning.
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.14 Scanner Cooling Fan

Parts List on PL 60.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover assembly, REP 60.3.
2. Remove the cooling fan, Figure 1.

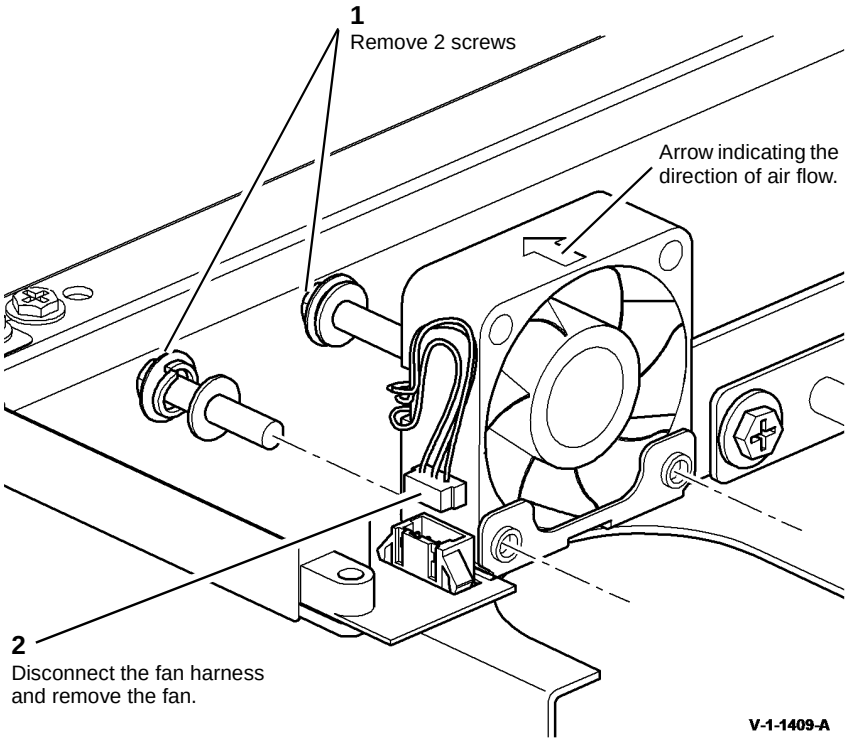


Figure 1 Remove the cooling fan

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Ensure the fan is oriented correctly. The arrow on the fan housing indicates the direction of air flow, and must be pointing into the scanner housing, Figure 1.
3. Perform ADJ 60.3 Optics Cleaning.
4. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

REP 60.15 ROS

Parts List on PL 60.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

Figure 1 Laser Beam Symbol

Figure 2 ESD Symbol

1. Remove the scanner, REP 60.2.
2. Remove the scanner module mounting frame, REP 60.16.

CAUTION

Take care not to damage the wiring at the rear of the ROS.

3. Remove the ROS, Figure 3.

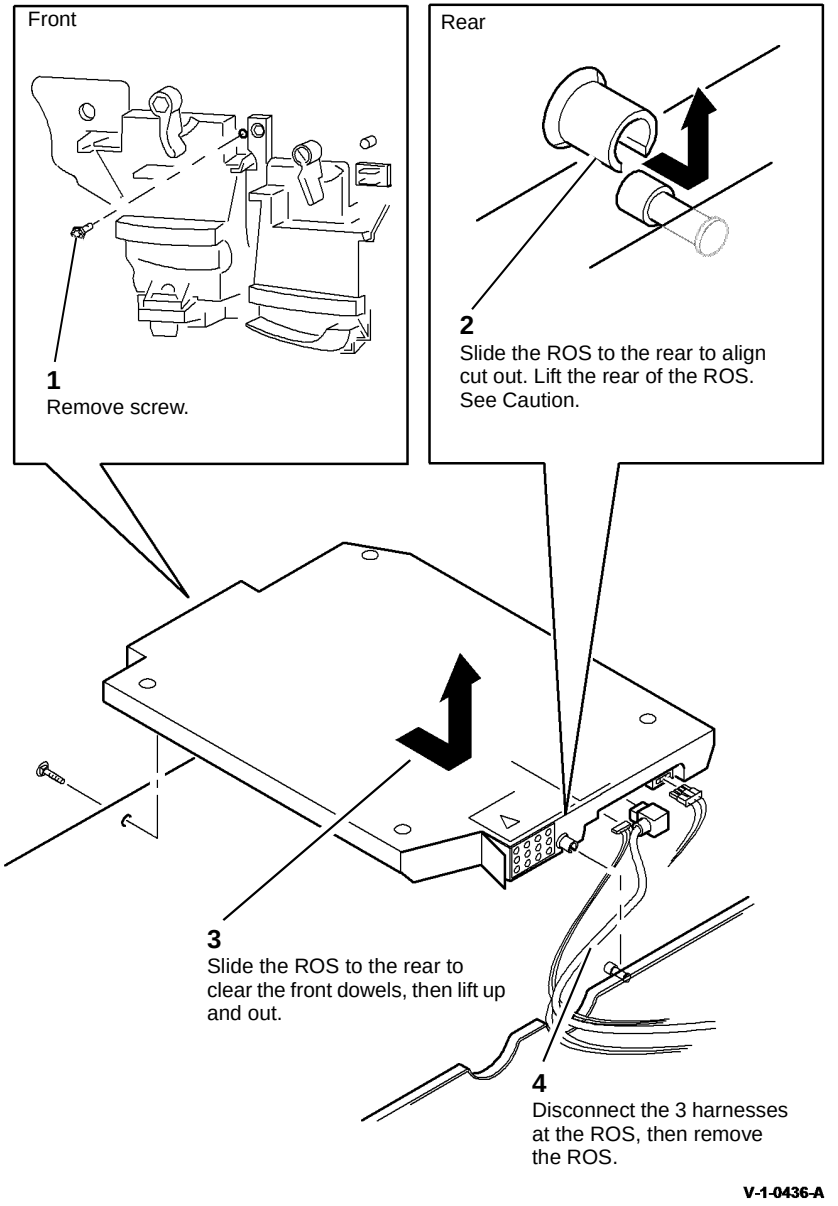


Figure 3 ROS removal

Replacement

CAUTION

Ensure that the harnesses are not damaged when the ROS is installed.

1. Reverse the removal procedure to replace the ROS.
2. If installing a new ROS, ensure that the ROS is the correct one for the speed of the machine. Check that the part number is correct, PL 60.10 Item 4. The part number and the machine speed are labelled on the underside of the ROS, as shown in Figure 4.
3. Ensure that the harness is routed correctly, Figure 4.

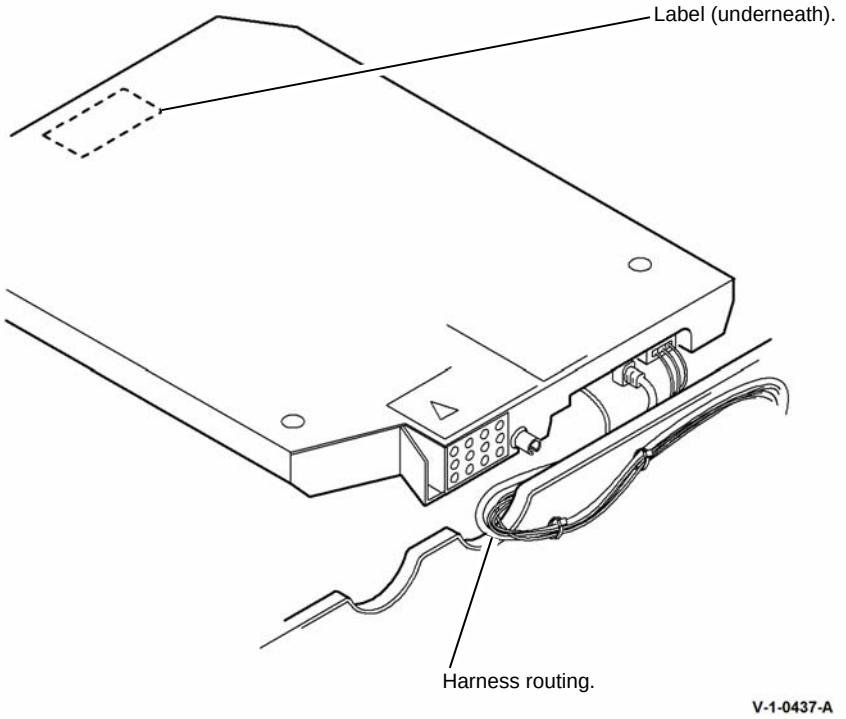


Figure 4 ROS harness routing

4. Perform dC604 Registration Setup, check/adjust the registration.

REP 60.16 Scanner Module Mounting Frame

Parts List on PL 60.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

1. Remove the scanner, REP 60.2.
2. Remove or undock the relevant output device:
   - REP 12.1 OCT Transport Assembly
   - REP 11.11-120 1K LCSS Removal
   - REP 11.13-110 2K LCSS Un-docking
   - REP 11.13-150 LVF BM Un-docking
   - REP 11.13-171 HVF Un-docking
3. Remove the right cover, PL 28.10 Item 4.
4. Remove the left cover, PL 28.10 Item 3.
5. Remove the ozone filter and duct, PL 90.25 Item 2.
6. Prepare to remove the scanner module mounting frame, Figure 2.

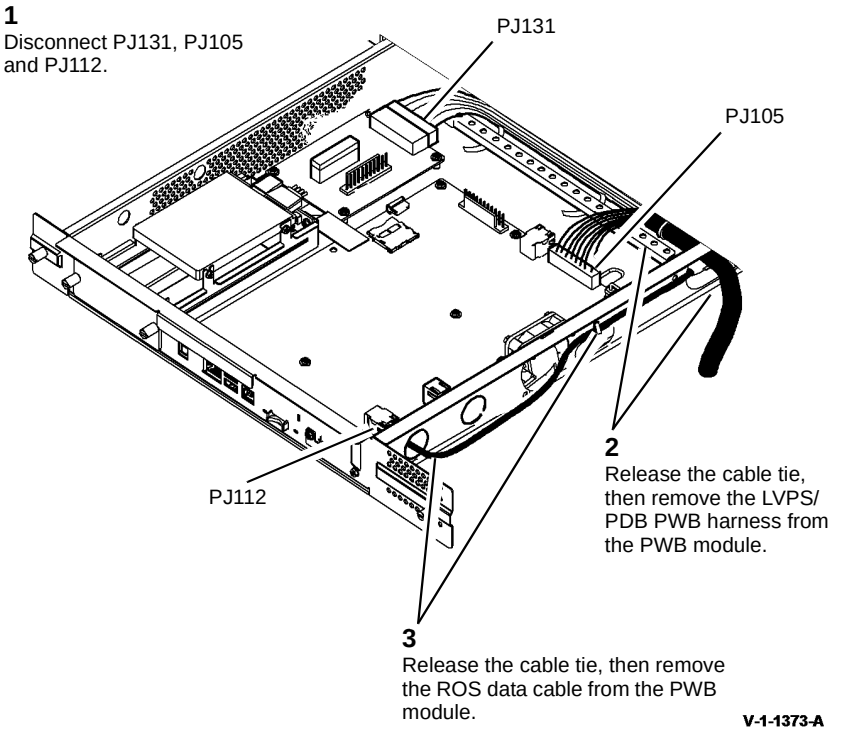


Figure 2 SBC PWB Module connections

7. Slide the SBC PWB module into the scanner module mounting frame, then secure with the two thumb screws, PL 3.22 Item 8.

8. Remove the scanner module mounting frame, Figure 3.

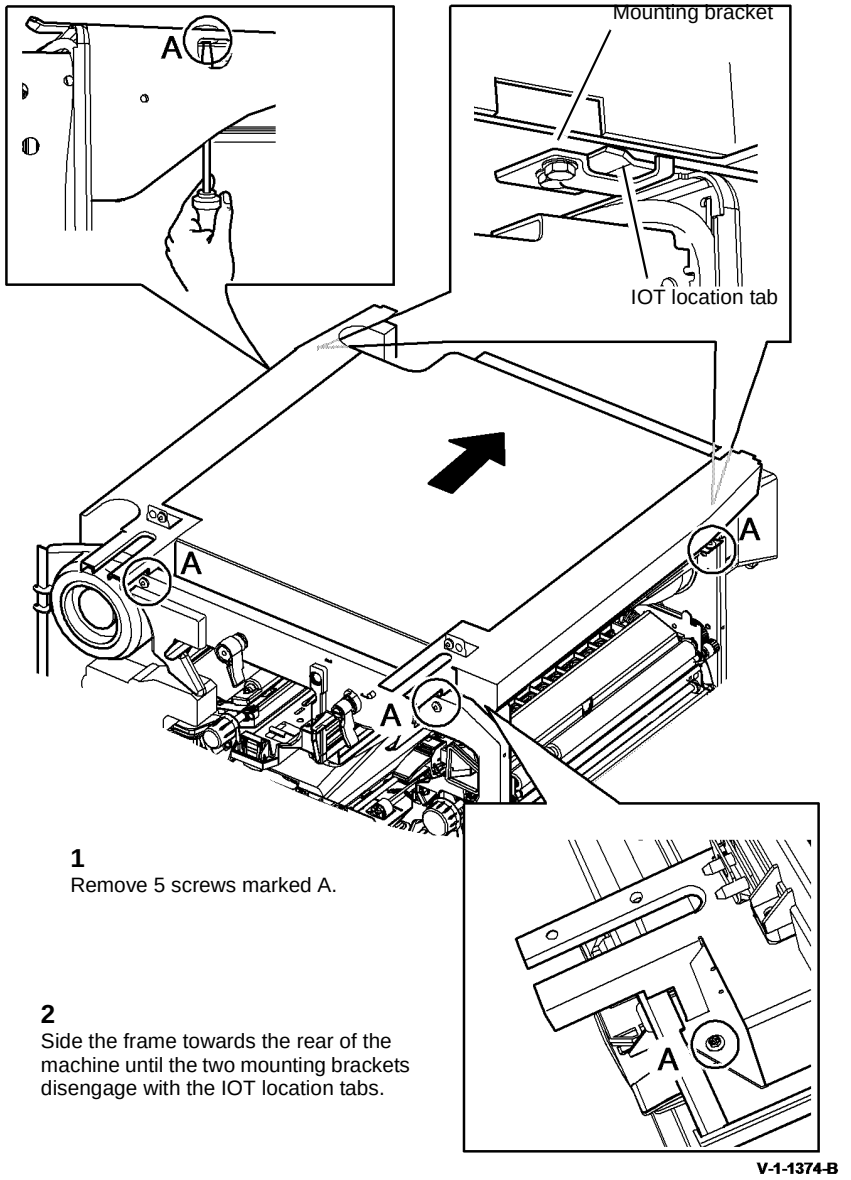


Figure 3 Mounting frame removal

Replacement

1. The replacement procedure is the reverse of the removal procedure.
2. Check the mounting brackets are fully engaged with both the location tabs on the IOT, Figure 3.

REP 70.1 Tray 1 and Tray 2 Removal

Parts List on PL 70.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Do not stack the trays one on top of the other tray. The top tray can damage the bottom tray, which can cause misfeeds or paper jams.

1. Remove tray 1 or tray 2, Figure 1.

NOTE: *The removal procedure for tray 1 and tray 2 is the same.*

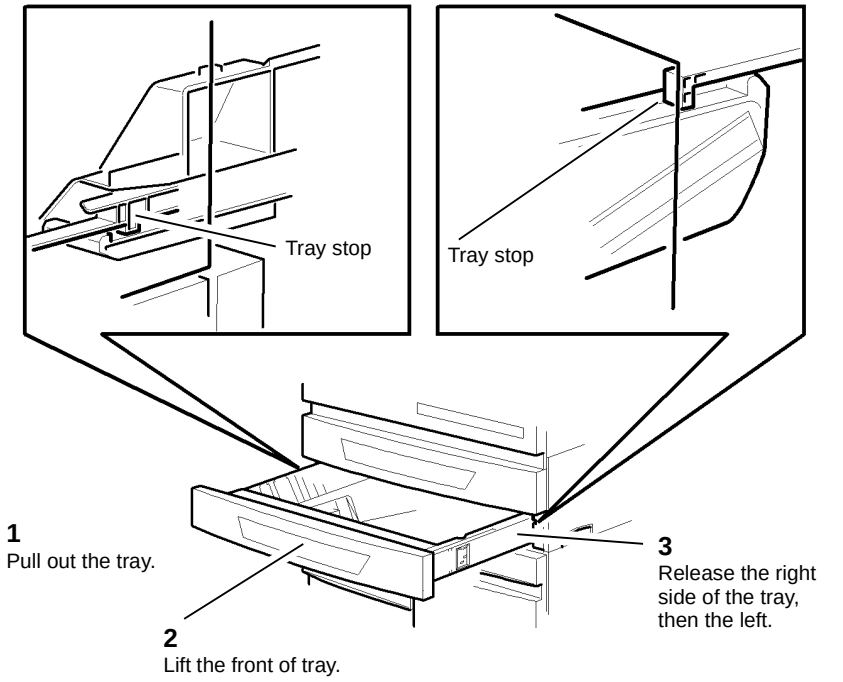


Figure 1 Tray 1 and tray 2 removal

Replacement

The replacement is the reverse of the removal procedure. Make sure that the left tray slide is located inside the tray stop before inserting the right side of the tray. Refer to Figure 1.

REP 70.2 Bypass Tray and Left Door Assembly

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove rear cover, PL 28.10 Item 1.
2. Remove the waste toner bottle and door, REP 90.1.
3. Prepare to remove the bypass tray, Figure 1.

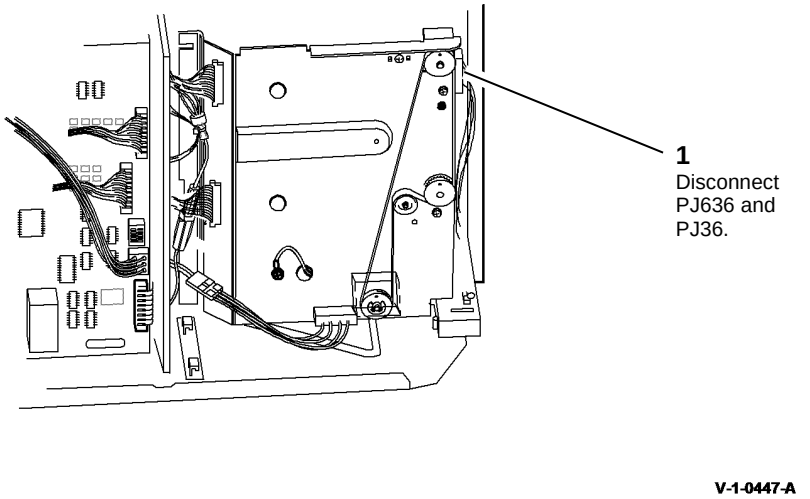


Figure 1 Preparation

4. Remove upper left cover, PL 28.10 Item 3.
5. Pull out the extender tray on the bypass tray.
6. Remove the bypass tray and left door assembly, Figure 2.

NOTE: *Check that the point of the hinge pin has not damaged the wiring harness.*

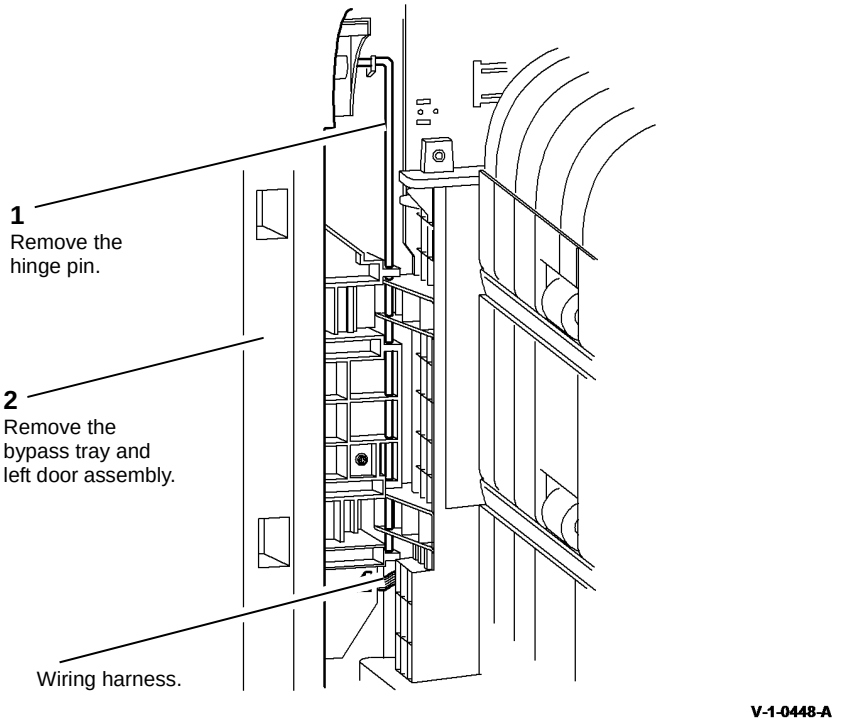


Figure 2 Door and tray removal

Replacement

CAUTION

When replacing the hinge pin, do not damage the wiring harness, Figure 2.

1. The replacement is the reverse of the removal procedure.
2. Connect PJ636 and PJ36 before installing the and left door assembly, refer to Figure 1.
3. Make sure that the bypass tray and left door assembly is correctly aligned before inserting the hinge pin.
4. Perform the dC604 Registration Setup.

REP 70.3 Tray 1 and Tray 2 Paper Guides

Parts List on PL 70.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The removal procedure is the same for tray 1 and for tray 2.*

1. Remove the paper then remove the tray, REP 70.1.
2. Remove the paper width guide and paper lift plate, Figure 1.

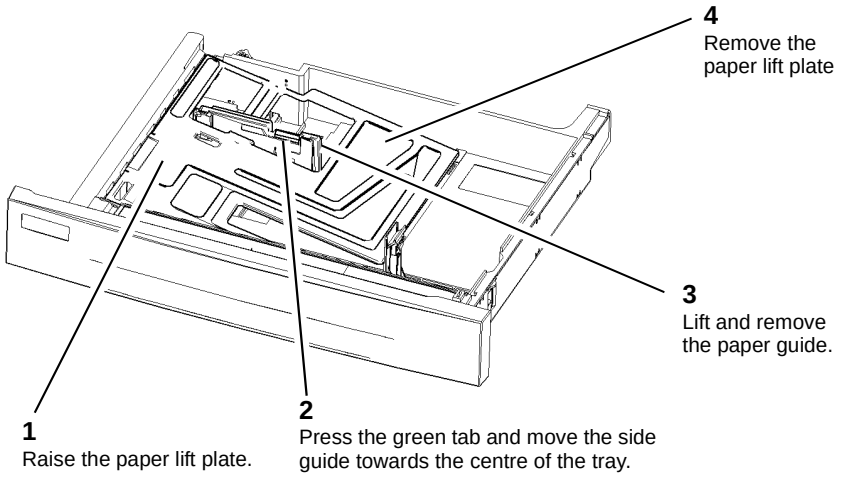


Figure 1 Paper width guide removal

3. Remove the paper length guide, Figure 2.

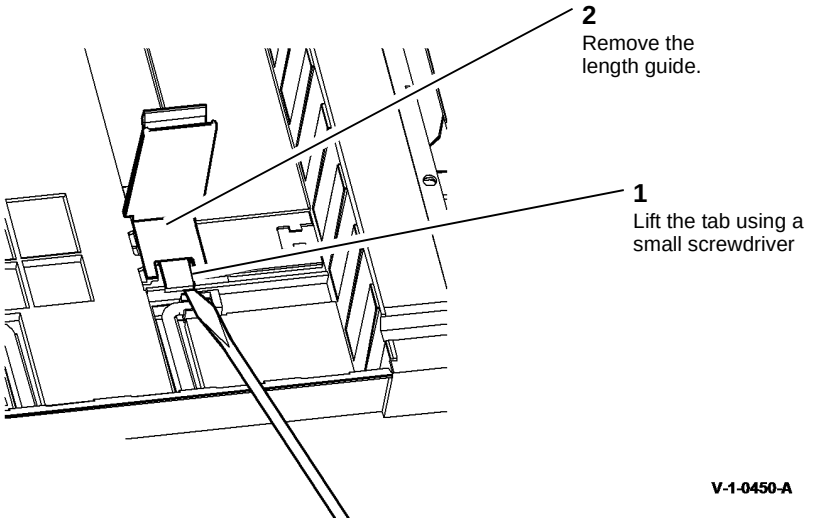


Figure 2 Paper length guide removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Locate the paper length guide correctly in the base of the tray, Figure 3.

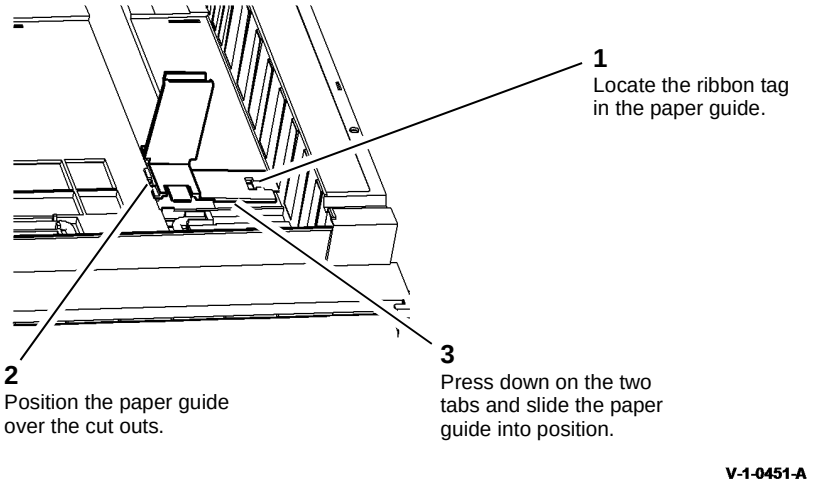


Figure 3 Paper length guide location

REP 70.4 Tray 1 and Tray 2 Paper Size Cams

Parts List on PL 70.10

Removal

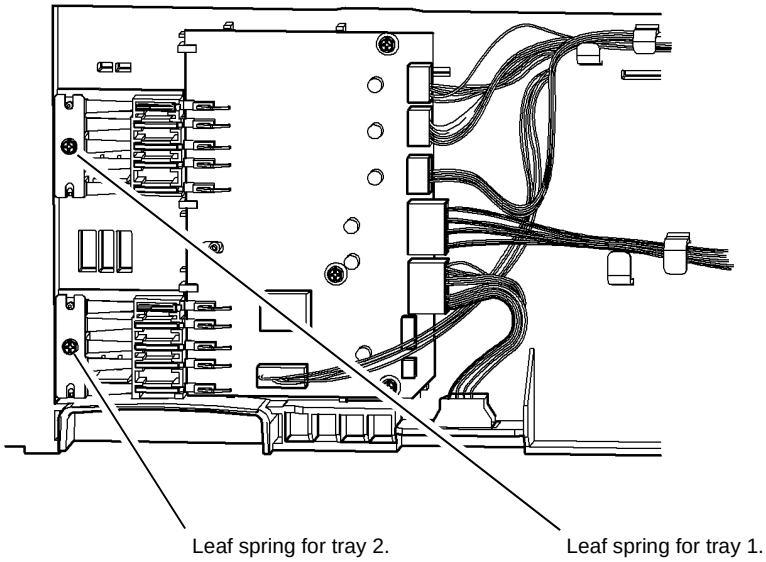
WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove or undock the relevant output device:
   - REP 12.1 OCT Transport Assembly
   - REP 11.11-120 1K LCSS Removal
   - REP 11.13-110 2K LCSS Un-docking
   - REP 11.13-150 LVF BM Un-docking
   - REP 11.13-171 HVF Un-docking
2. Remove the right cover, PL 28.10 Item 4.
3. Remove the relevant tray 1 or tray 2 leaf spring, Figure 1.



1
Remove the screw and leaf spring for the relevant tray.

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Figure 1 Leaf spring removal

4. Remove the cams for tray 1 or tray 2, Figure 2.

NOTE: *The cams are the same for tray 1 and for tray 2. The small cam is for the tray home position and the larger cams are for the paper size position.*

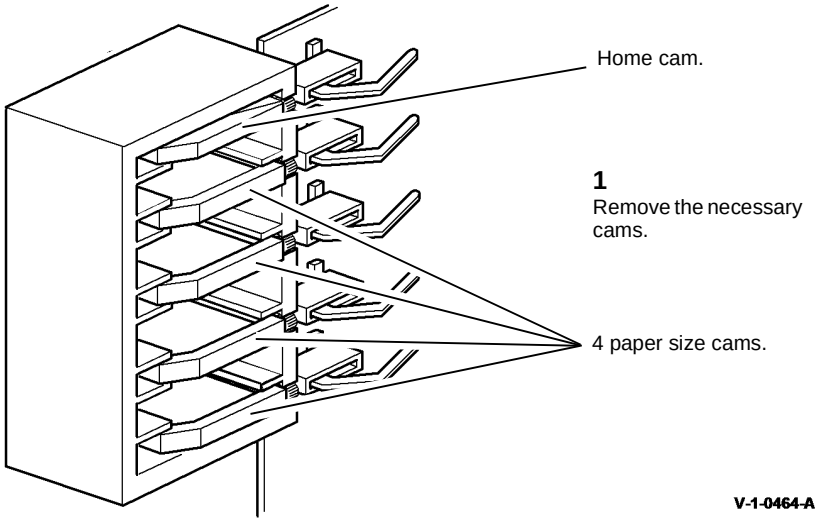


Figure 2 Cams removal

Replacement

The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 70.5 Tray 6 Empty Sensor

Parts List on PL 80.45

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover, PL 70.60 Item 10.
2. Prepare to remove the tray 6 empty sensor, Figure 1.

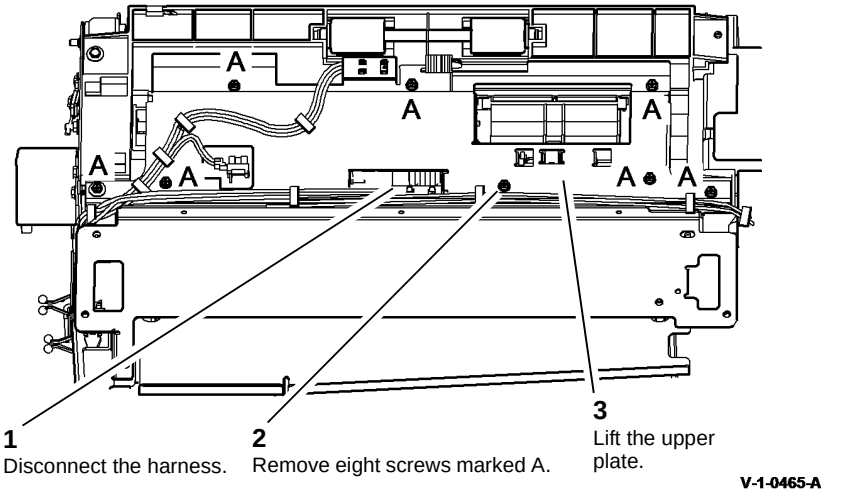


Figure 1 Preparation

3. Remove tray 6 empty sensor, Figure 2.

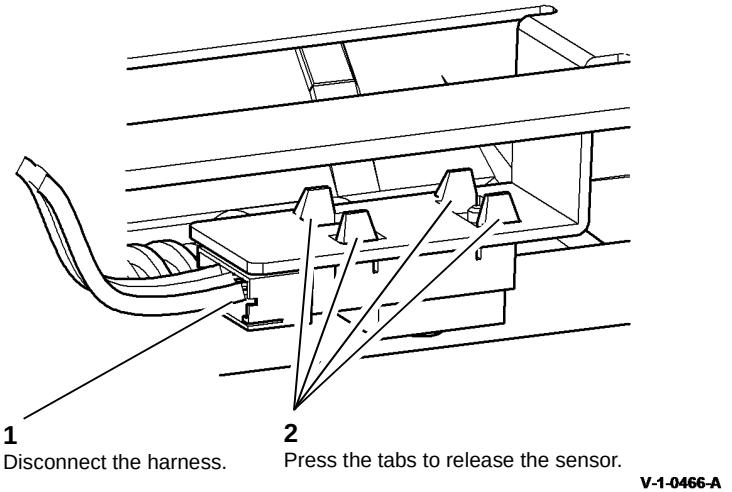


Figure 2 Tray 6 empty sensor removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Make sure that the spring on the paper feed assembly is in the correct position, Figure 3.

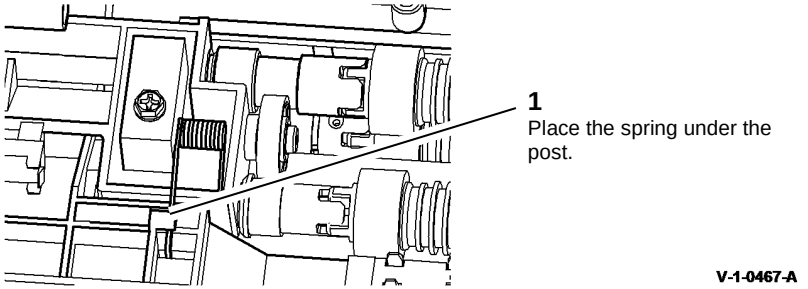


Figure 3 Feed assembly spring

3. Make sure that the spring is positioned on top of the nip roll shaft when the upper plate is installed, Figure 4.

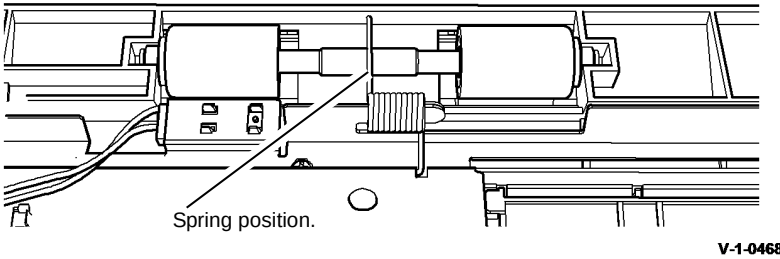


Figure 4 Nip roll spring

4. Check that the correct screw is used to attach the upper plate.
5. Check the position of the chute spring, Figure 5.

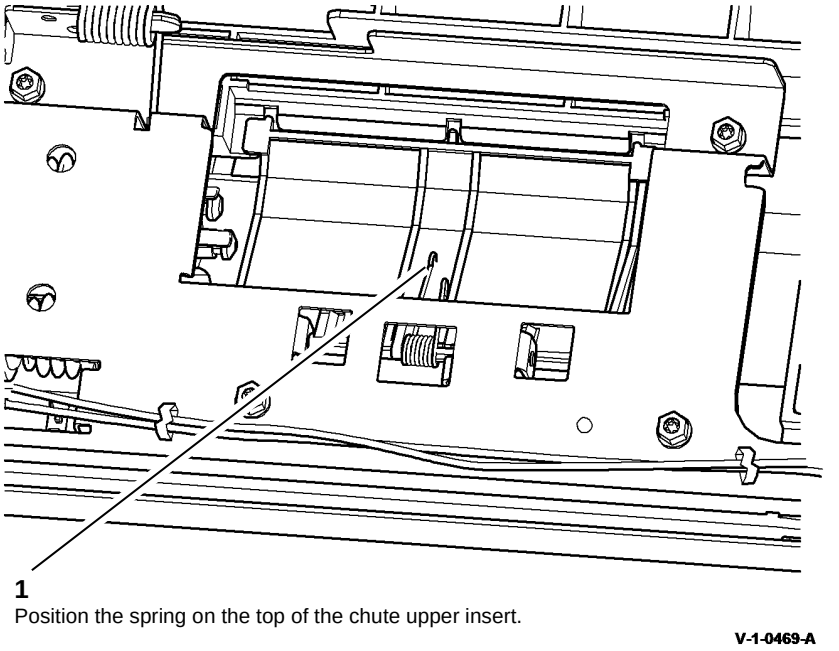


Figure 5 Upper insert chute spring

6. Check that the harness routing is correct, refer to Figure 1.

REP 70.6 Tray 6 Stack Height Sensor

Parts List on PL 80.45

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover, PL 70.60 Item 10.
2. Prepare to remove the tray 6 stack height sensor, Figure 1.

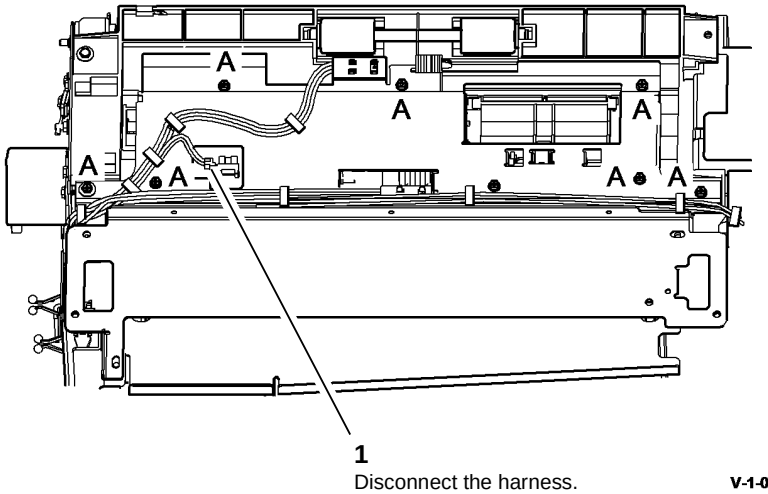


Figure 1 Preparation

3. Remove tray 6 stack height sensor W/O TAG P-050, Figure 2. Remove tray 6 stack height sensor W/TAG P-050, Figure 3.

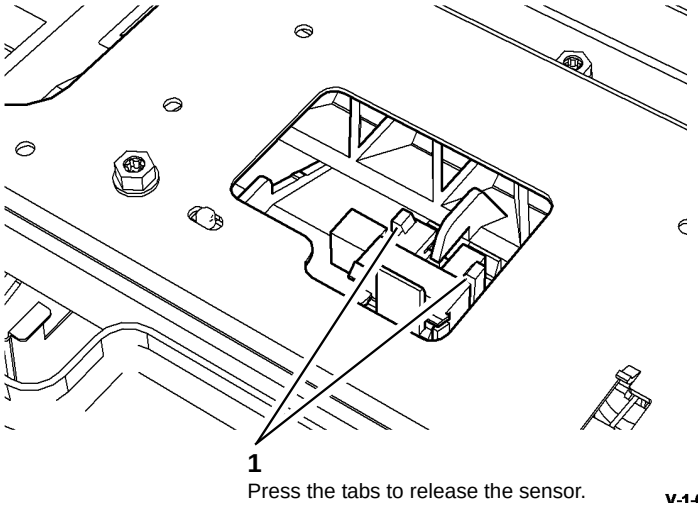


Figure 2 Sensor removal W/OTAG P-050

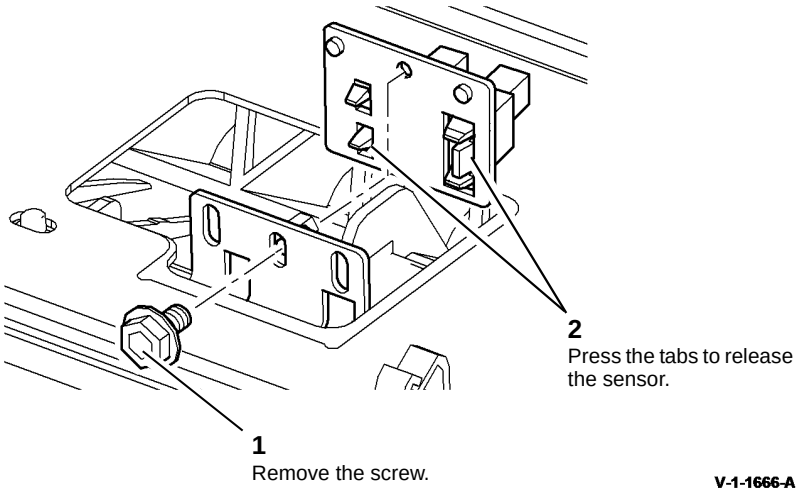


Figure 3 Sensor removal W/TAG P-050

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that the harness routing is correct, refer to Figure 1.
3. W/TAG P-050 machines only, perform ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield.

REP 70.7 Tray 6 Down Sensor

Parts List on PL 70.68

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Remove the tray 6 down sensor, Figure 1.

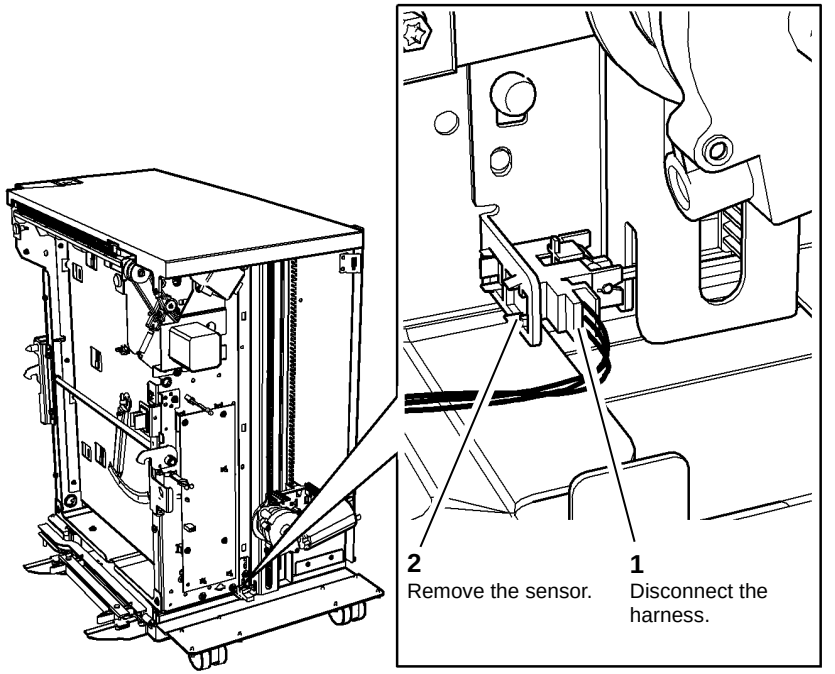


Figure 1 Sensor removal

Replacement

The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 70.8 Tray 6 Elevator Motor Assembly

Parts List on PL 70.68

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the paper from the tray.
2. Remove the rear cover, PL 70.60 Item 9.
3. Remove the tray 6 elevator motor assembly, Figure 1.

NOTE: *The tray 6 paper tray must be supported before the elevator motor assembly is removed.*

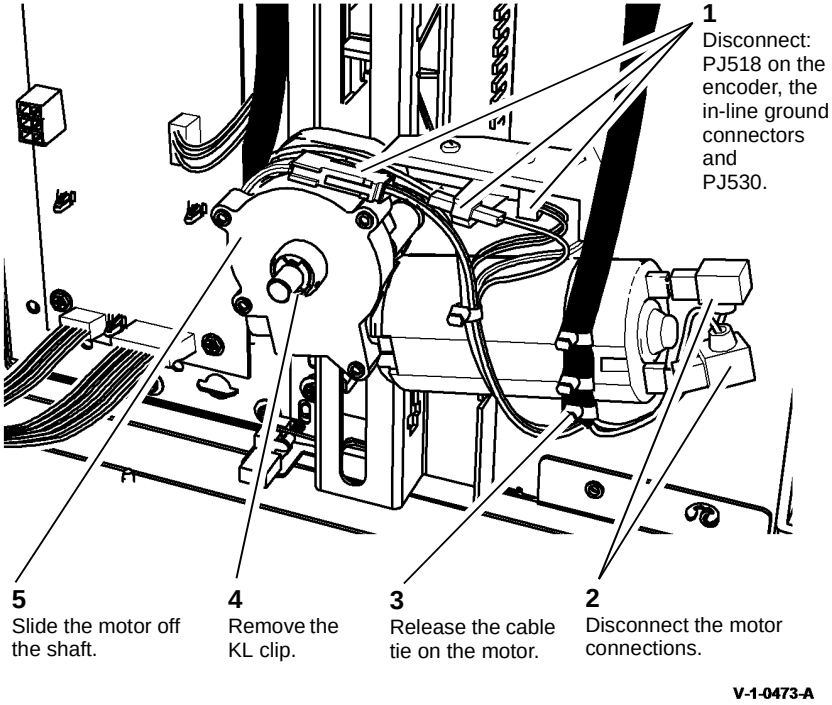


Figure 1 Motor assembly removal

4. If required, remove the encoder sensor from the plastic bracket, Figure 2.

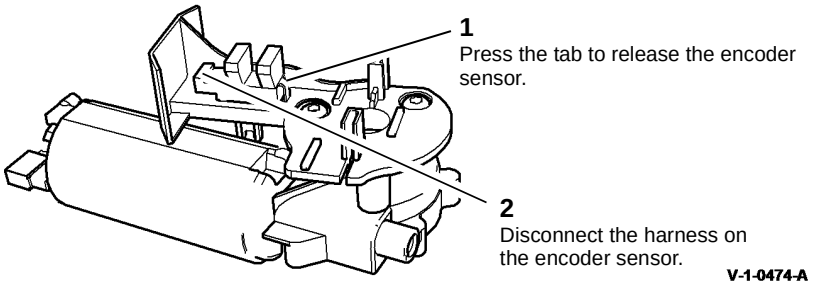


Figure 2 Encoder sensor removal

Replacement

1. To help with the installation of a new elevator motor, support the paper tray on two reams of paper.
2. Make sure that the encoder sensor is positioned on the elevator motor assembly, Figure 2.
3. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
4. Check that the harness is routed in the channel on the plastic bracket, Figure 3.

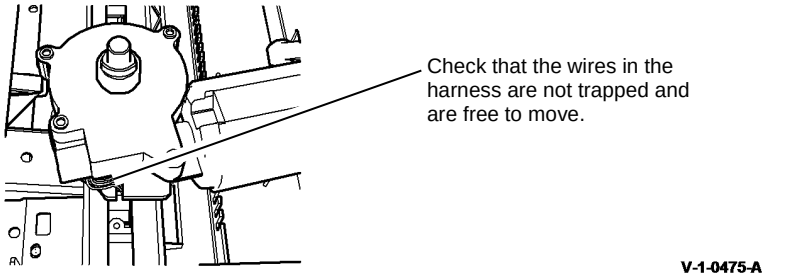


Figure 3 Harness position

5. Ensure that there are no twists in the harness when installing the elevator motor.
6. When the motor is installed, remove the paper supporting the paper tray.
7. Exercise the elevator motor with one sheet of paper in the tray. Observe that the harness tracks properly between the mylar guide and the rear channel. Figure 4.

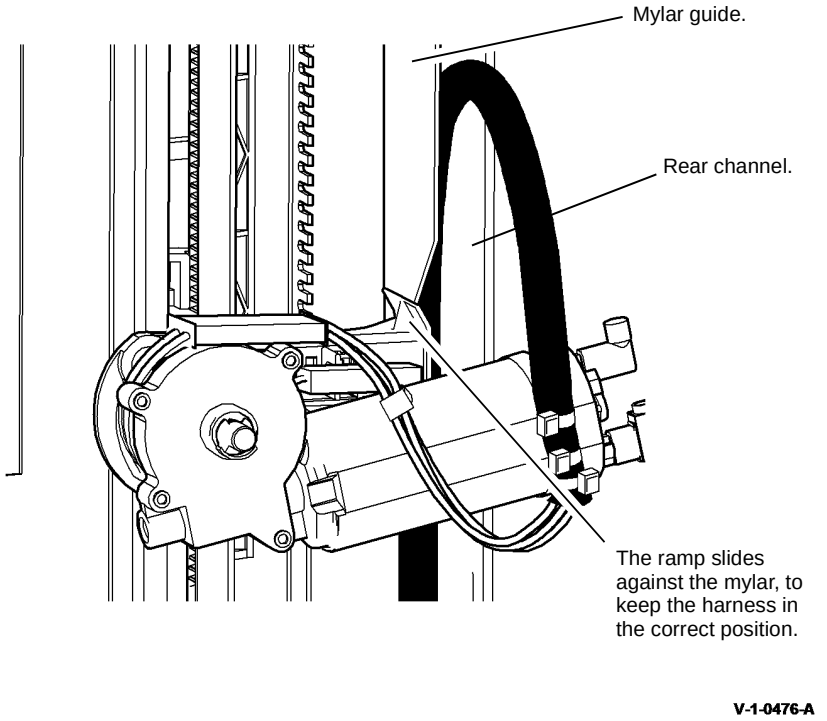


Figure 4 Location of the harness

8. Check the registration, refer to dC604 Registration Setup Procedure.

REP 70.9 Tray 6 Upper Limit Switch

Parts List on PL 70.68

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Remove the tray 6 upper limit switch, Figure 1.

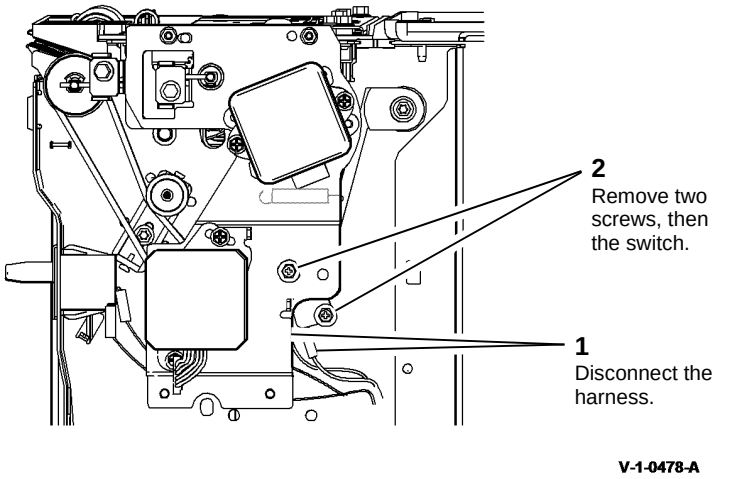


Figure 1 Upper limit switch removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 70.10 Tray 6 Down Limit Switch

Parts List on PL 70.70

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. The tray needs to be positioned in the middle of its travel. If the tray must be repositioned, refer to REP 70.8. Disengage the elevator motor from the tray and move the tray to the required position. Re-engage the elevator motor to hold the tray.
2. Remove the tray lift top cover, Figure 1.

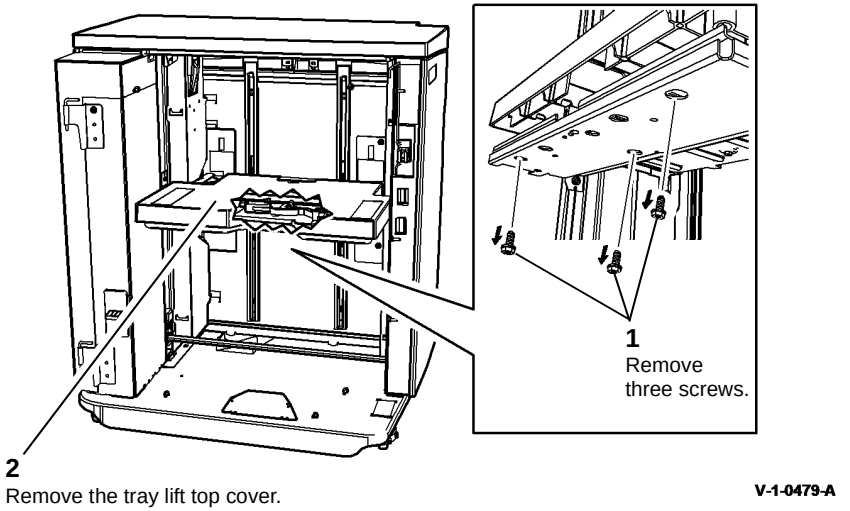


Figure 1 Paper tray release

3. Remove the tray 6 down limit switch, Figure 2.

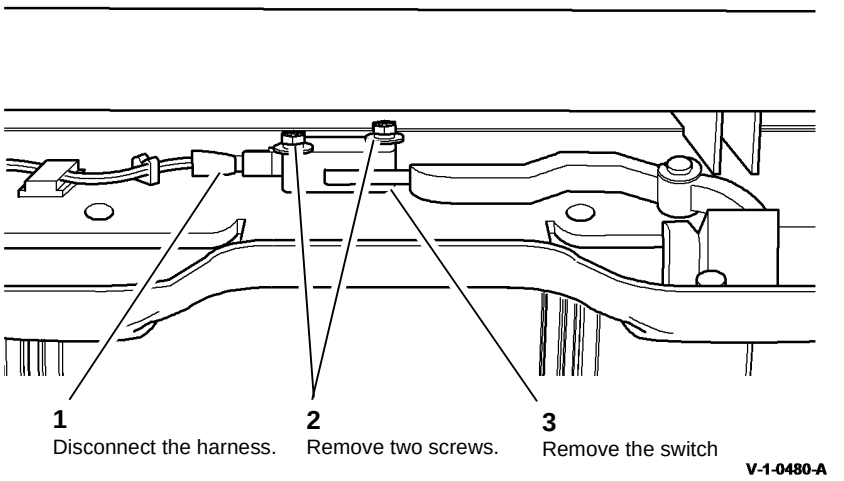


Figure 2 Remove tray 6 down limit switch

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that the wires are not trapped when refitting the tray lift top cover.

REP 70.11 Un-docking and Docking Tray 6

Parts List on PL 70.64

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care not to topple tray 6. Tray 6 is unstable when undocked from the machine. Do not show the customer how to undock tray 6.

1. Remove the paper from the tray.
2. Engage the transit lock, Figure 1.

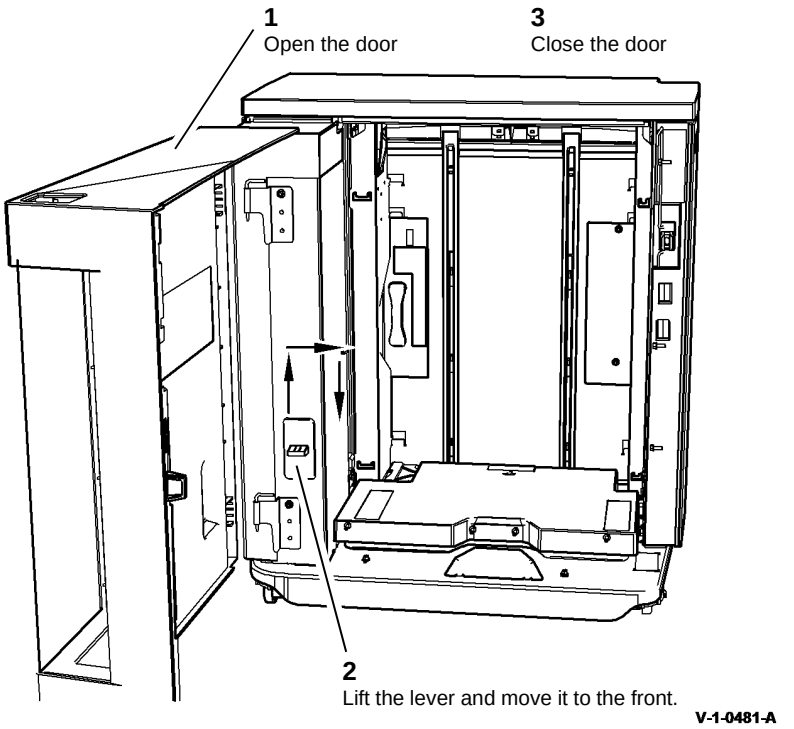


Figure 1 Transit lock engage

3. Pull the tray 6 module away from the machine until the transit lock engages.

4. At the rear of the machine release the docking latch and pull the tray 6 module away from the machine, Figure 2.

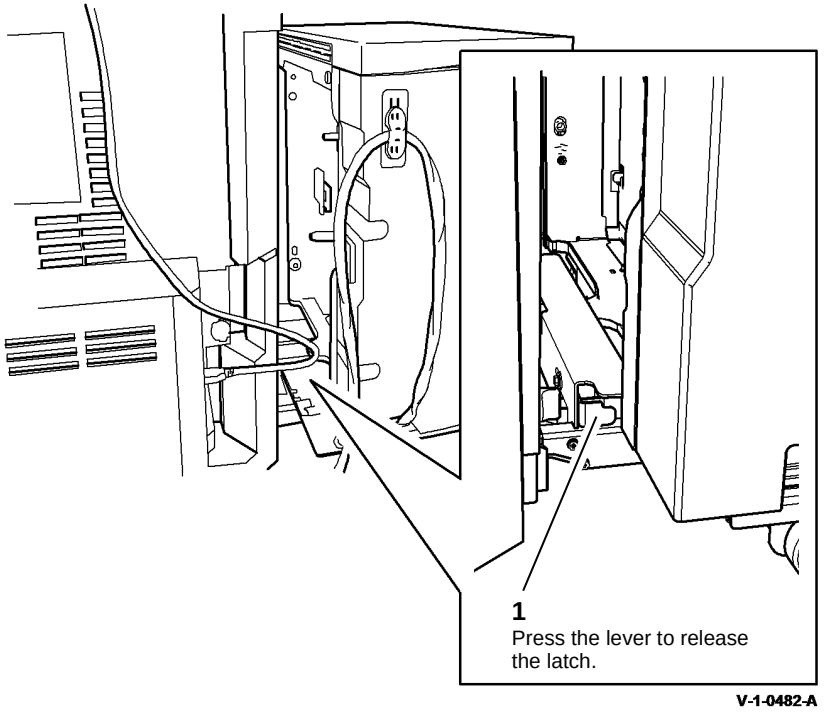


Figure 2 Tray 6 un-docking

Replacement

1. The docking is the reverse of the un-docking procedure.
2. Dock and lock the tray 6 module to the machine, Figure 3.

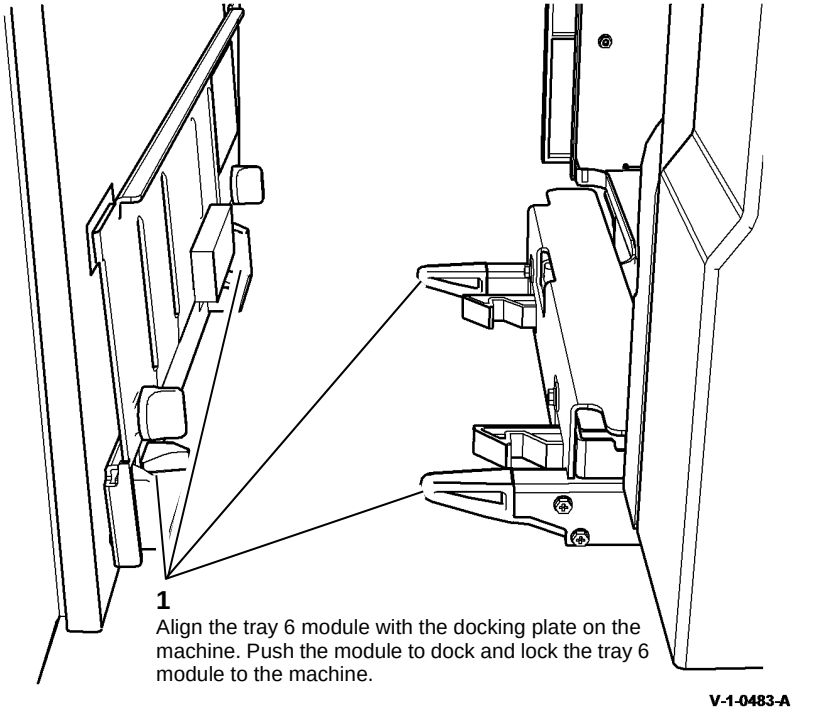


Figure 3 Tray 6 module docking

3. Release the transit lock and push the tray 6 module into the working position against the machine, Figure 4.

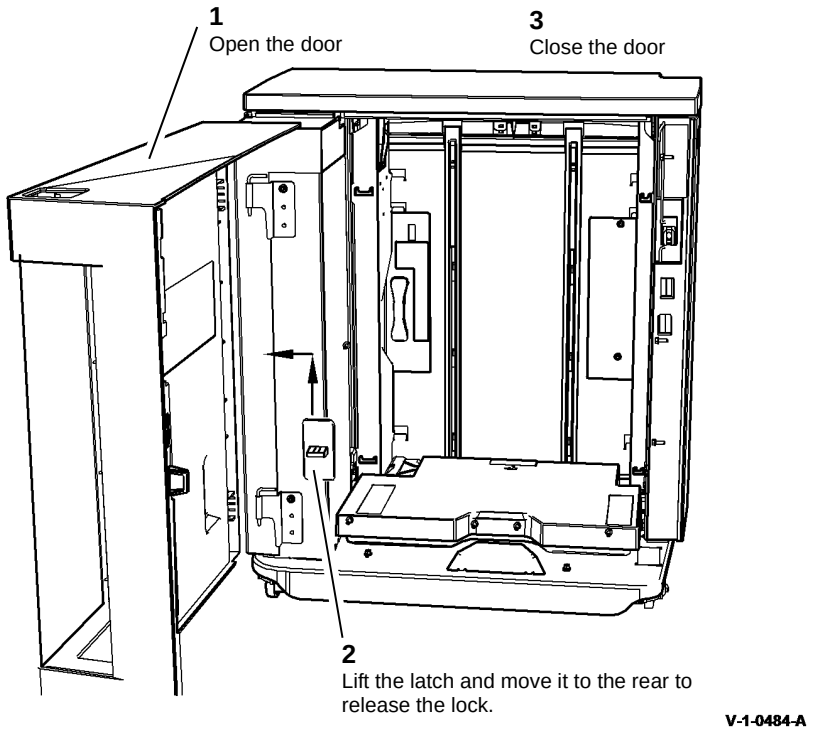


Figure 4 Transit lock release

4. Perform ADJ 70.3 Machine to Tray 6 Alignment.

REP 70.12 Tray 1 and Tray 2 Lift Gear Assembly

Parts List on PL 70.10

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray, REP 70.1.
2. Remove the paper width guide, REP 70.3.

   NOTE: *Make a note of the position of the two screws on the gear assembly, for replacement purposes.*

3. Raise the paper lift plate. Raise the paper tray lift arm to its fullest extent and slide it towards the rear of the tray. This releases the pin from the quadrant as shown in Figure 1.

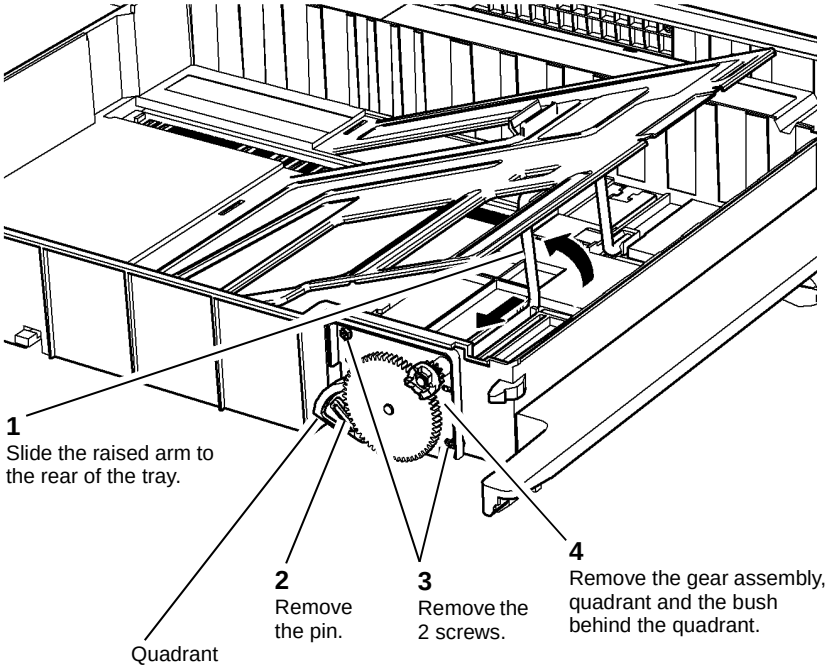


Figure 1 Lift gear removal

Replacement

1. Engage the lift gear assembly with the spigots on the rear of the tray. The remainder of the replacement procedure is the reverse of the removal procedure.

   NOTE: *The existing gears are snap fitted to the shafts and can be removed to allow the new gears to be pushed on.*

REP 70.13 Tray 6 Elevator Rack Assembly

Parts List on PL 70.68

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present can cause injury.

1. Release the cable clamp from the rear cover, Figure 1.

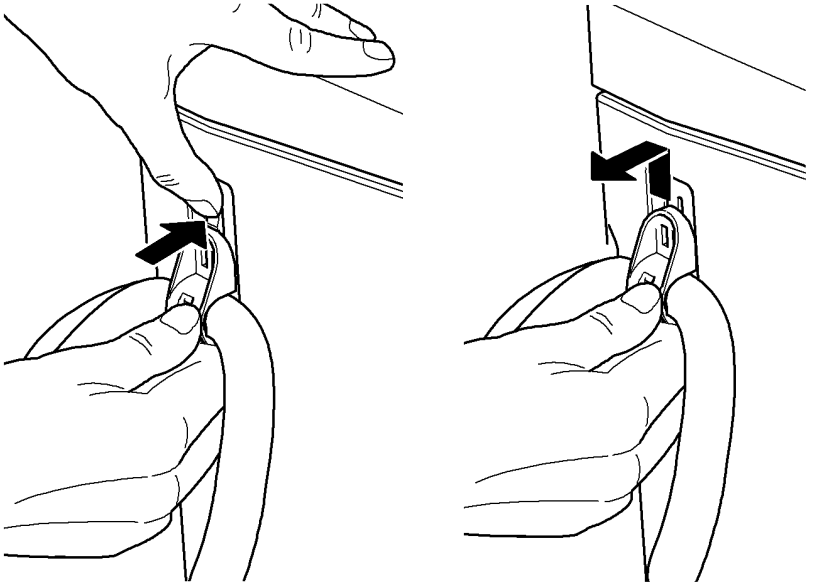


Figure 1 Cable clamp release

2. Remove any paper from tray 6, then un-dock tray 6, REP 70.11.
3. Remove the two front door hinge pins, PL 70.60 Item 3, then remove the front door assembly, PL 70.60 Item 1.

4. Remove the top cover PL 70.60 Item 10, front cover PL 70.60 Item 8 and rear cover PL 70.60 Item 9.
5. Remove the tray 6 elevator motor assembly, REP 70.8.
6. Remove the frame top brace, PL 70.68 Item 3.
7. Remove the crash bar, PL 70.68 Item 2.
8. Disconnect the tray 6 transport motor, PL 80.40 Item 2.
9. Disconnect the feed motor, PL 80.40 Item 3.
10. Remove the upper feeder assembly, PL 80.40 Item 1, refer to REP 80.28.
11. Prepare to remove the tray assembly, Figure 2.

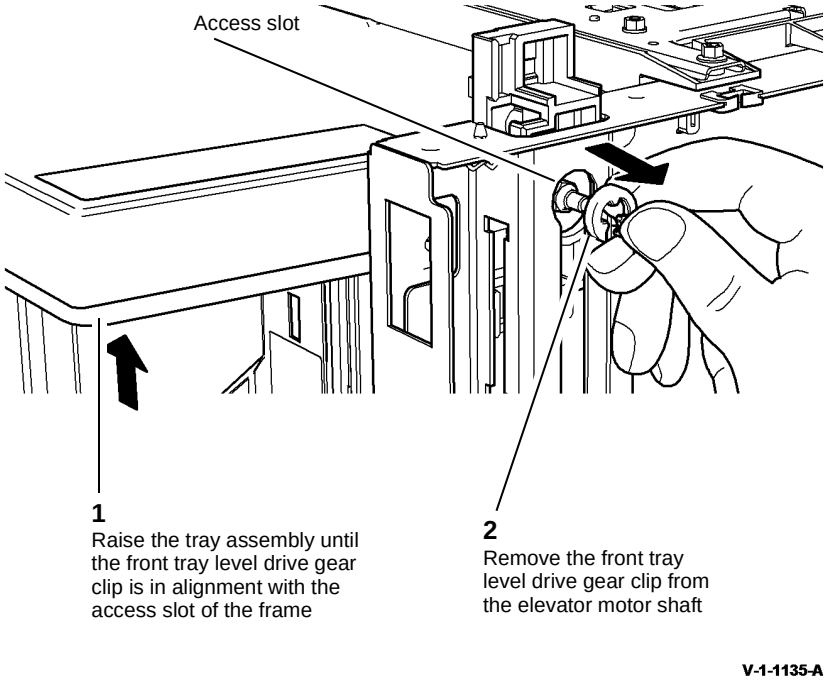


Figure 2 Preparation

12. Remove the tray assembly, Figure 3.

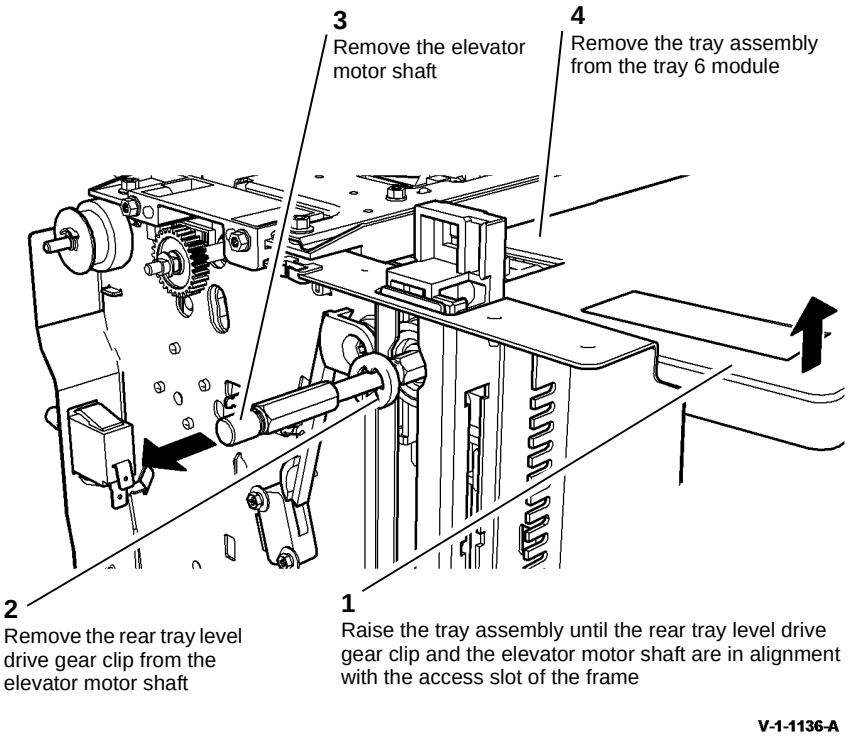


Figure 3 Tray assembly rear view

13. Remove the front and rear drive gears, PL 70.68 Item 28.
14. Remove the front elevator rack, PL 70.68 Item 14. Slide the rack upwards within the frame then lift the rack away from the tray 6 module.
15. Remove the rear elevator rack, PL 70.68 Item 13. Slide the rear elevator rack upwards within the frame, then lift the rack away from the tray 6 module.

Replacement

1. The replacement is the reverse of the removal procedure.
2. Refer to Figure 4 when Installing the front elevator rack.

NOTE: *Only the front elevator rack has a clearance cut-out to accommodate the front door interlock switch, Figure 4.*

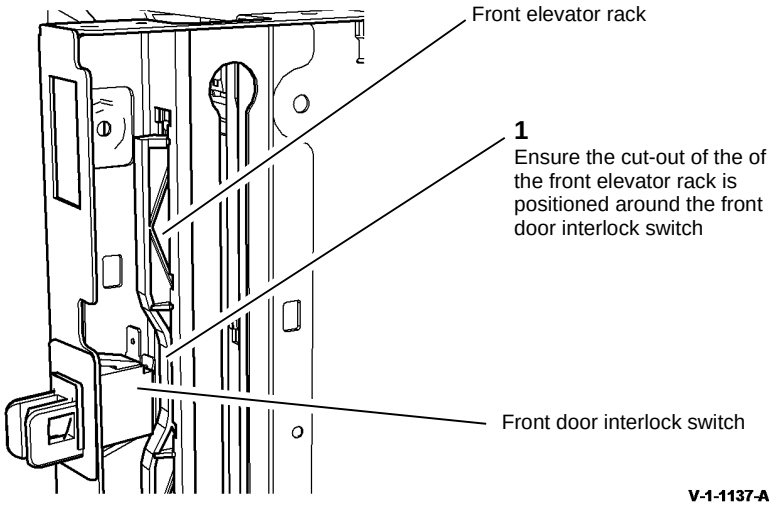


Figure 4 Front elevator rack

3. After the front and rear drive gears are re-installed ensure that the tray assembly is re-installed in the same horizontal plane as the base of the tray 6 module, Figure 5.

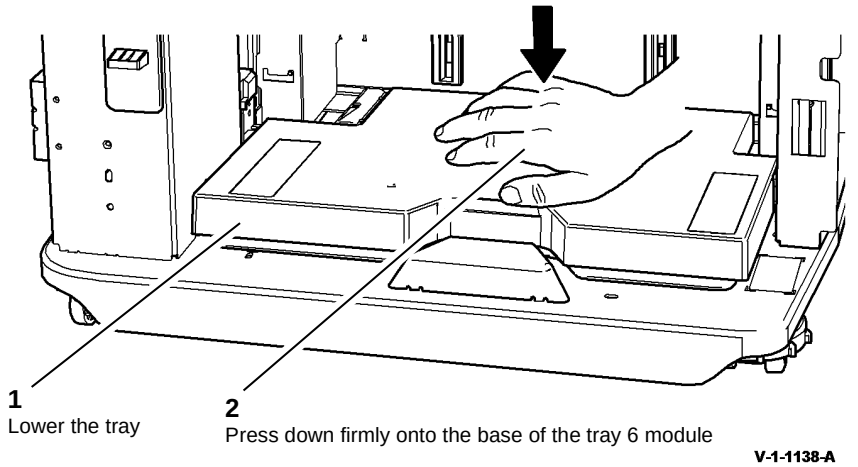


Figure 5 Tray alignment check

4. Keep the tray assembly against the base of the tray 6 module, then reinstall the elevator motor shaft.
5. Raise the tray to ensure that it is in horizontal alignment with the lower feeder assembly, Figure 6. If necessary remove the elevator motor shaft then repeat the replacement procedure from step 3.

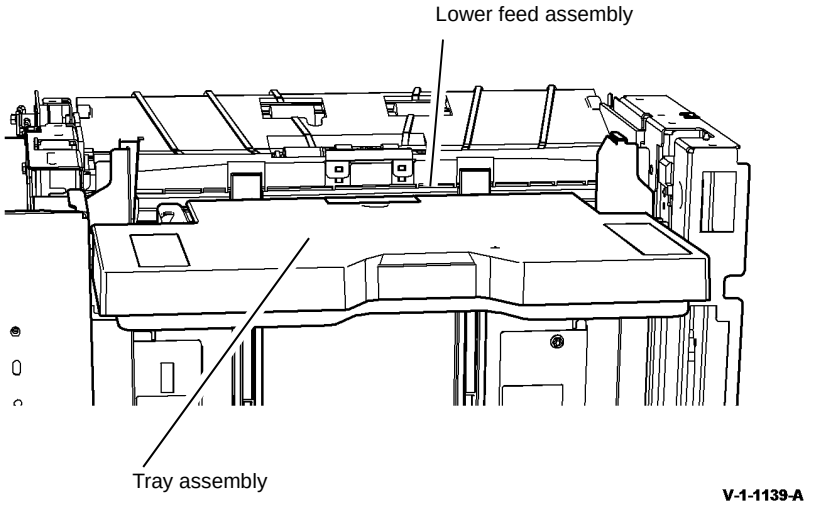


Figure 6 Tray alignment

REP 70.14 Tray 3 and Tray 4 Removal

Parts List on PL 70.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the paper from the two trays.
2. Remove the right cover, PL 70.26 Item 7.
3. Remove the tray 3 and tray 4 front covers, Figure 1.

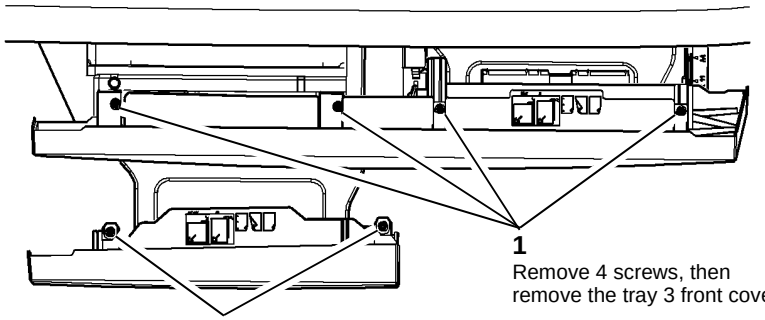


Figure 1 Tray front covers removal

NOTE: *If only tray 3 is to be removed then do not remove the left hand stop. If tray 4 needs to be removed, remove tray 3 first.*

4. Remove the stops, Figure 2.

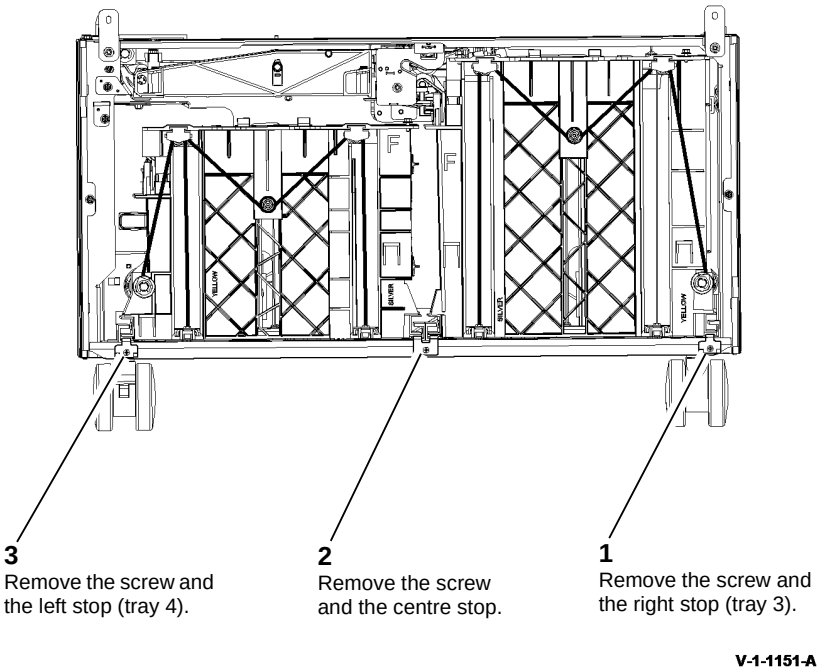


Figure 2 Tray 3 and tray 4 rail stops

5. Lift and pull to remove the tray complete with the guide rails.

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 when refitting the screws to secure tray 3 and tray 4 front covers.

   NOTE: *When installing tray 3 or tray 4 ensure that the tray rails are located correctly in the base of the HCF, Figure 3.*

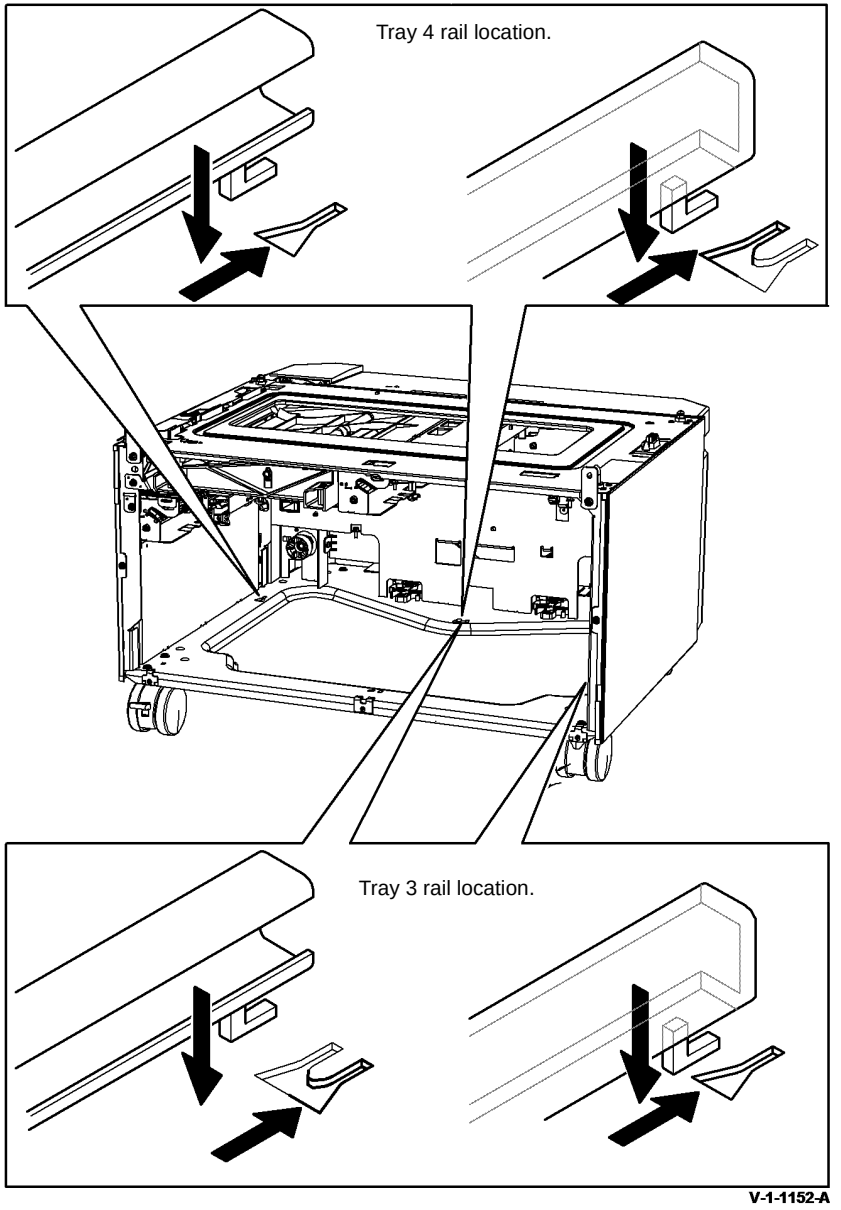


Figure 3 Location of the tray rails

REP 70.15 Tray 3 and Tray 4 Elevator Motor

Parts List on PL 70.21

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Pull out tray 3 and tray 4.
2. Remove the rear cover from the HCF, PL 70.26 Item 1.
3. Remove the tray 3 or tray 4 elevator motor, Figure 1.

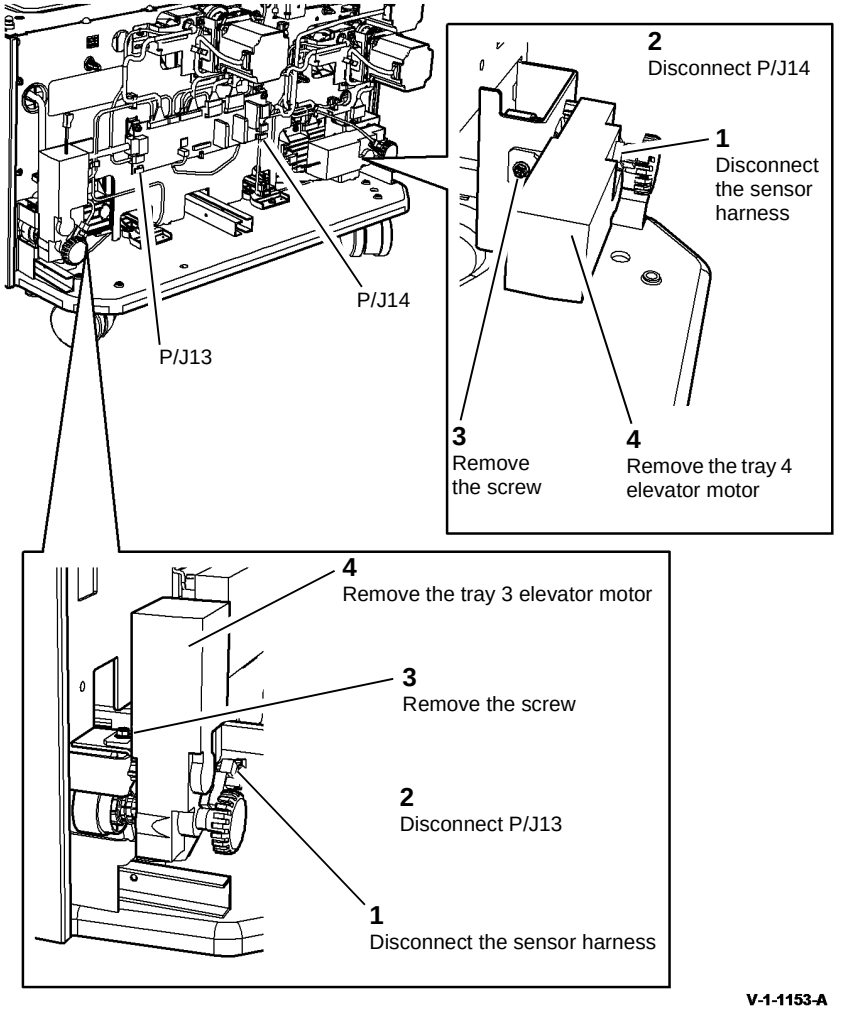


Figure 1 Elevator motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 70.16 Tray 3 and Tray 4 Elevator Cables

Parts List on PL 70.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Do not replace individual elevator cables. The rear cable and 2 front cables must be replaced as a set of 3, as supplied with the Tray 3 or Tray 4 elevator cable kit.

***NOTE:** The elevator drives at the front and at the rear are similar for both trays.*

1. Remove tray 3 or tray 4, REP 70.14.

2. Release the cables from the appropriate front drive pulley, Figure 1.

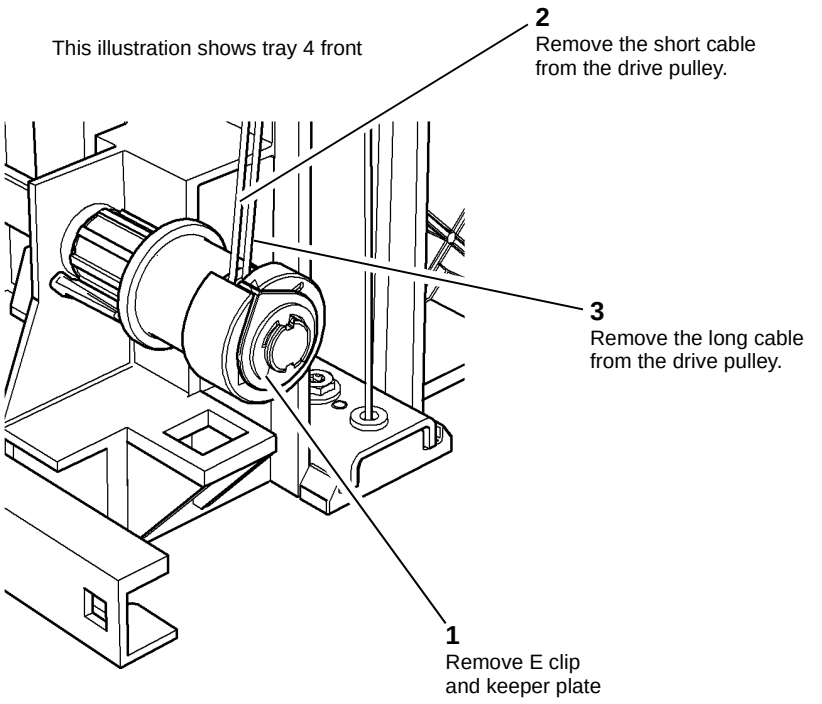


Figure 1 Front elevator cables release

3. Remove the appropriate front elevator cables, Figure 2.

NOTE: *The short cable is located over the outer pulley and the long cable is located over the inner pulley.*

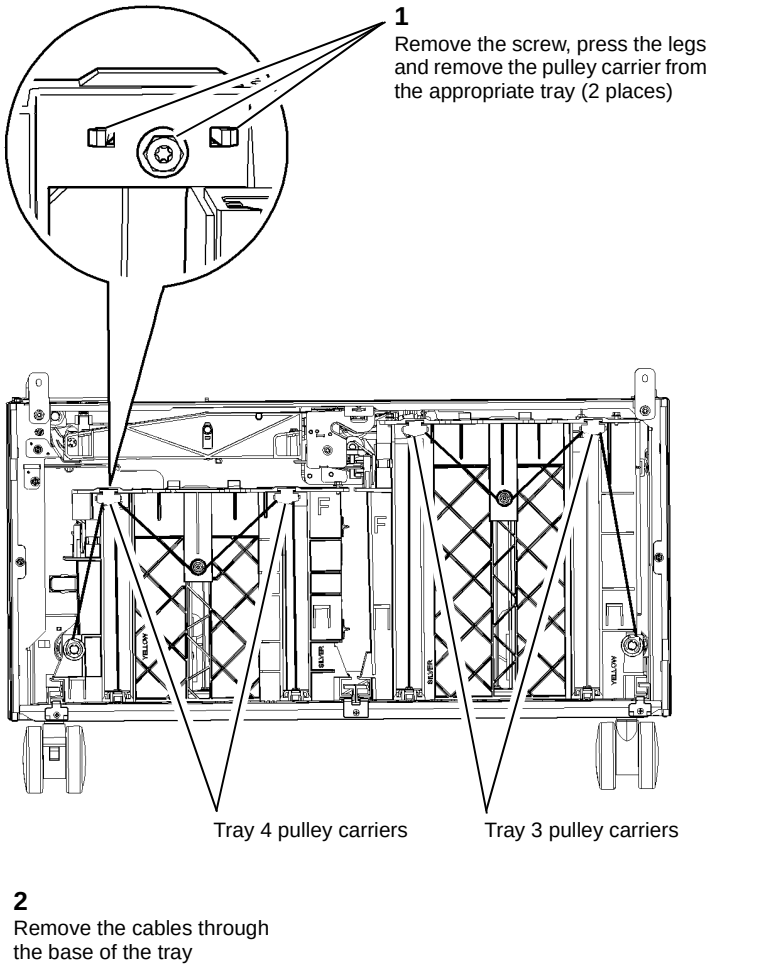


Figure 2 Front elevator cables removal

4. Release the appropriate paper tray guide, refer to ADJ 70.1.

5. Remove the appropriate rear elevator cable:
   - Tray 3, Figure 3
   - Tray 4, Figure 4

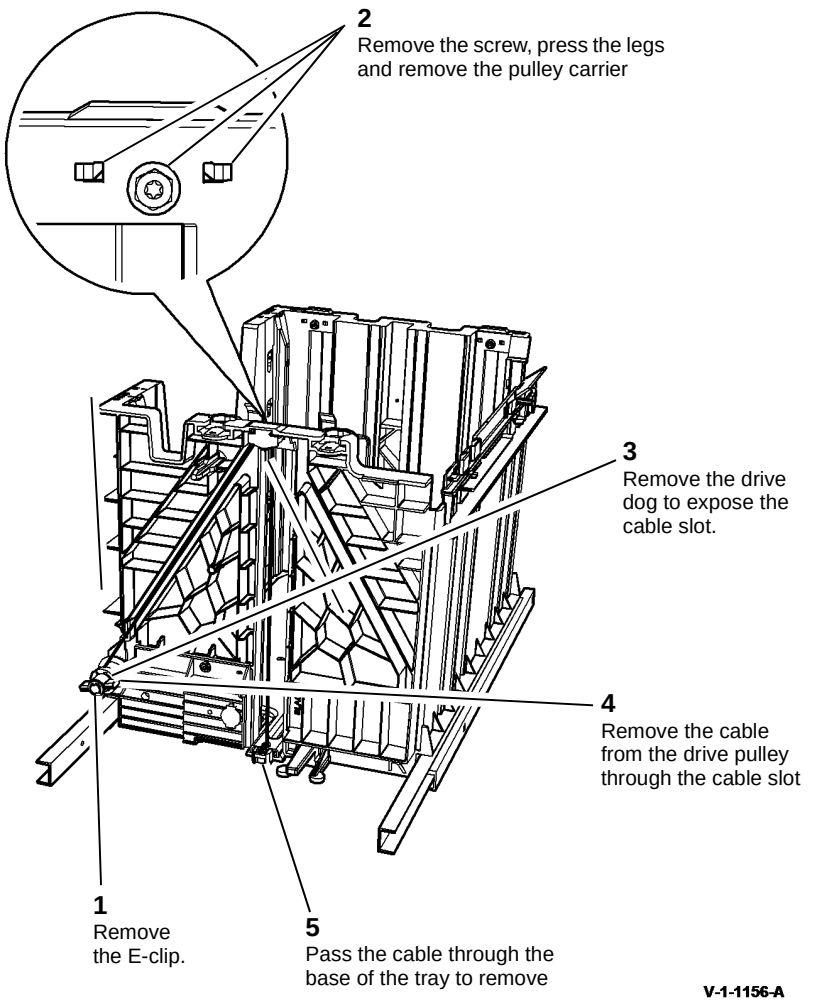


Figure 3 Tray 3 rear cable removal

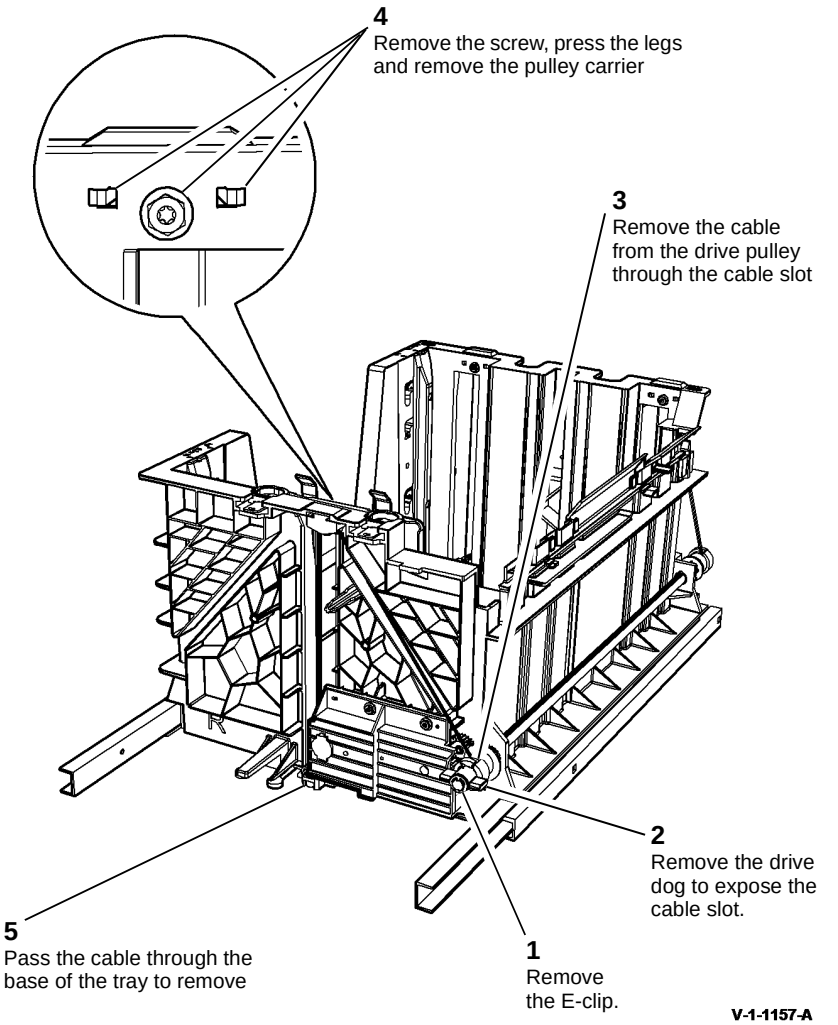


Figure 4 Tray 4 rear cable removal

Replacement

CAUTION

Do not replace individual elevator cables. The rear cable and 2 front cables must be replaced as a set of 3, as supplied with the Tray 3 or Tray 4 elevator cable kit.

1. The replacement is the reverse of the removal procedure.
2. For the tray 3 front cables:

a. Thread the short cable over the inner groove on the pulley.
b. Thread the long cable over the outer groove on the pulley.

3. For the tray 3 rear cable, thread the medium length cable over the inner groove on the pulley.
4. For the tray 4 front cables:
   a. Thread the long cable over the inner groove on the pulley.
   b. Tread the short cable over the outer groove on the pulley.
5. For the tray 4 rear cable, thread the medium length cable over the outer groove on the pulley.

REP 70.17 Tray 3 and Tray 4 Stack Height Sensor

Parts List on PL 80.32, PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the required paper feed assembly:
   - Tray 3 paper feed assembly, REP 80.30.
   - Tray 4 paper feed assembly, REP 80.31.
2. Remove the stack height sensor, Figure 1.

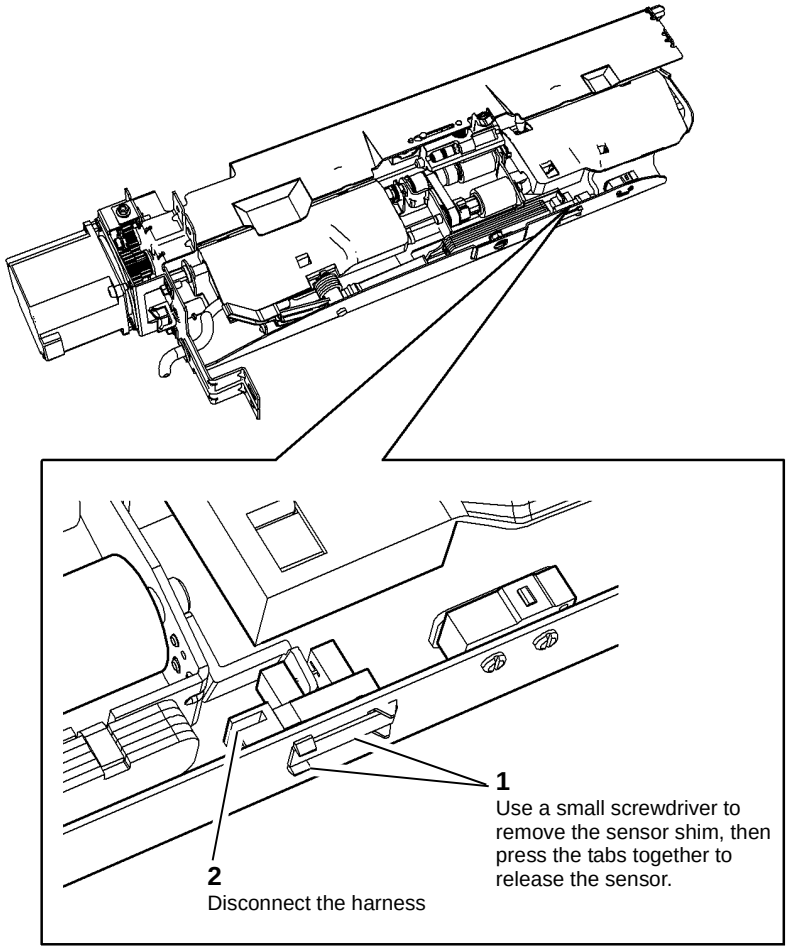


Figure 1 Stack height sensor removal

Replacement

The replacement is the reverse of the removal procedure. Install a new sensor shim to lock the sensor in place.

REP 70.18 Tray 3 and Tray 4 Home Sensor

Parts List on PL 70.21

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The removal procedure is the same for tray 3 and tray 4.*

1. Pull out tray 3 or tray 4.
2. Remove the rear cover, PL 70.26 Item 1.
3. Pull out the relevant tray by approximately 50mm (2 inches).
4. Remove the tray home sensor and holder, Figure 1.

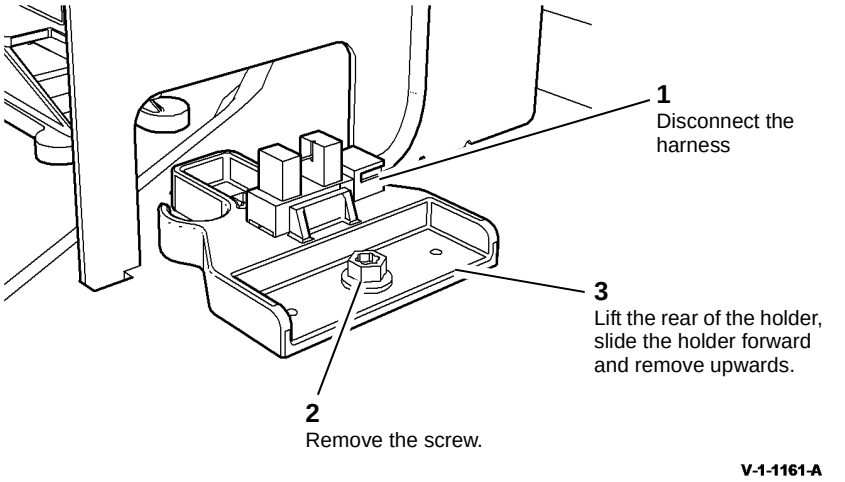
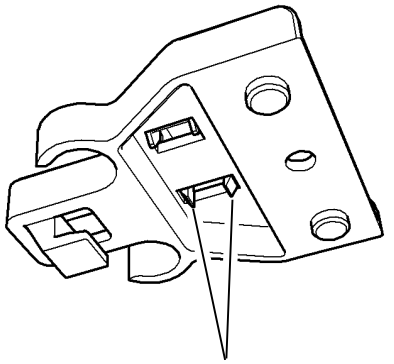


Figure 1 Tray home switch and holder

5. Remove the tray home sensor, Figure 2.



2
Press the tabs to release the sensor

V-1-1162-A

Figure 2 Sensor removal

Replacement

Replacement is the reverse of the removal procedure. Correctly locate the sensor holder, Figure 3.

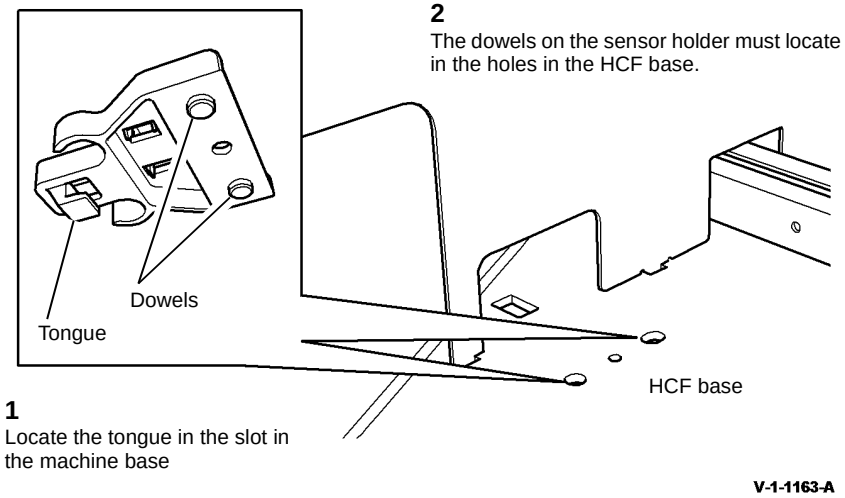


Figure 3 Holder location

REP 70.19 HCF Control PWB

Parts List on PL 70.21

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Ensure that E.S.D. procedures are observed during this procedure.

1. Remove the rear cover, PL 70.26 Item 1.
2. Remove the HCF control PWB, Figure 2.

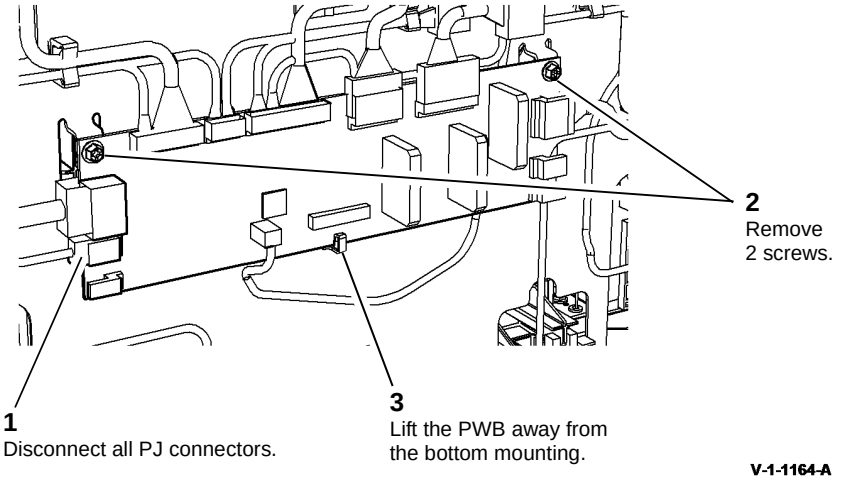


Figure 2 HCF control PWB removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Perform dC604 Registration Setup Procedure

REP 70.20 Tray 3 and Tray 4 Elevate Damper Assembly

Parts List on PL 70.18

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove tray 3 or tray 4, REP 70.2.
2. Remove the damper from tray 3, Figure 1.

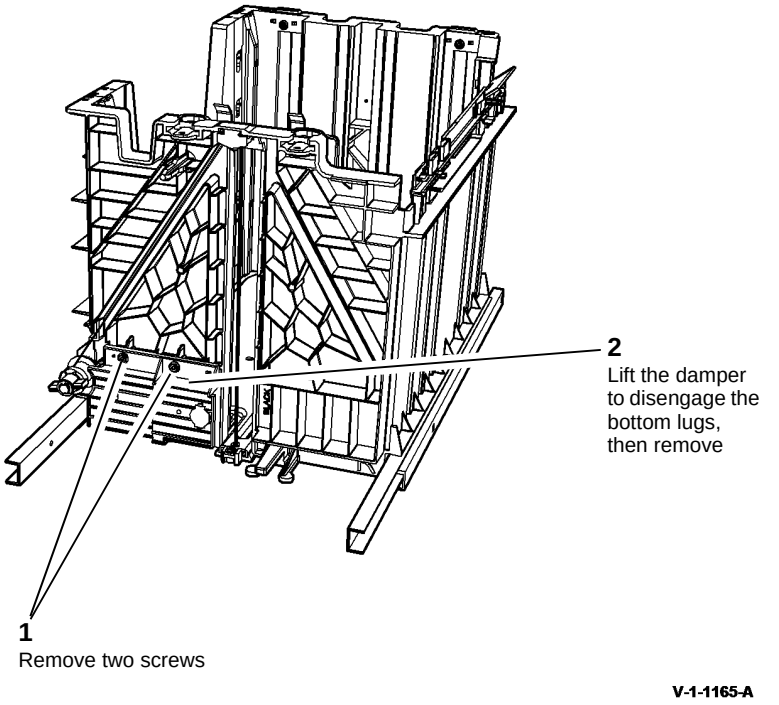


Figure 1 Tray 3 damper removal

3. Remove the damper from tray 4, Figure 2.

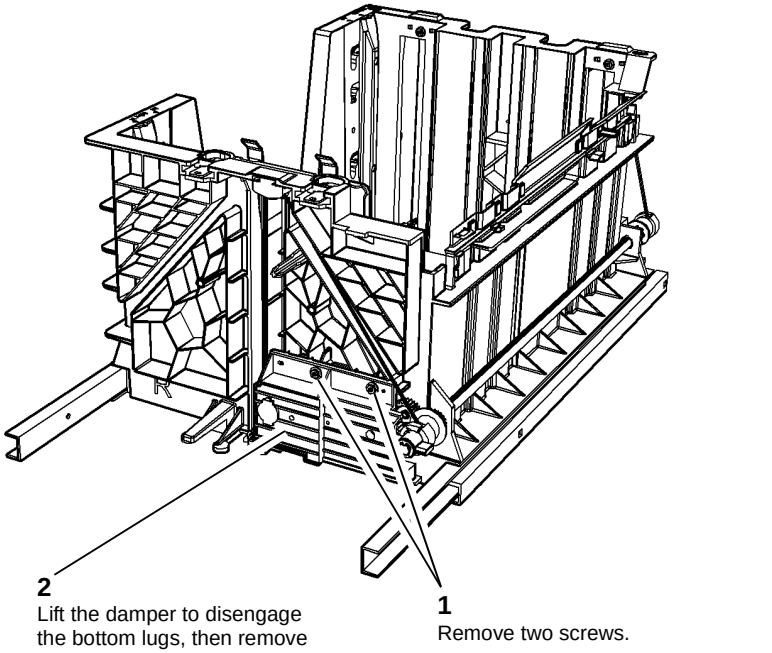


Figure 2 Tray 4 damper removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 80.1 Tray 1 and Tray 2 Paper Feed Assembly

Parts List on PL 80.26

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove tray 1 or tray 2 as required.
2. Remove the tray 1 or tray 2 feed assembly, Figure 1.

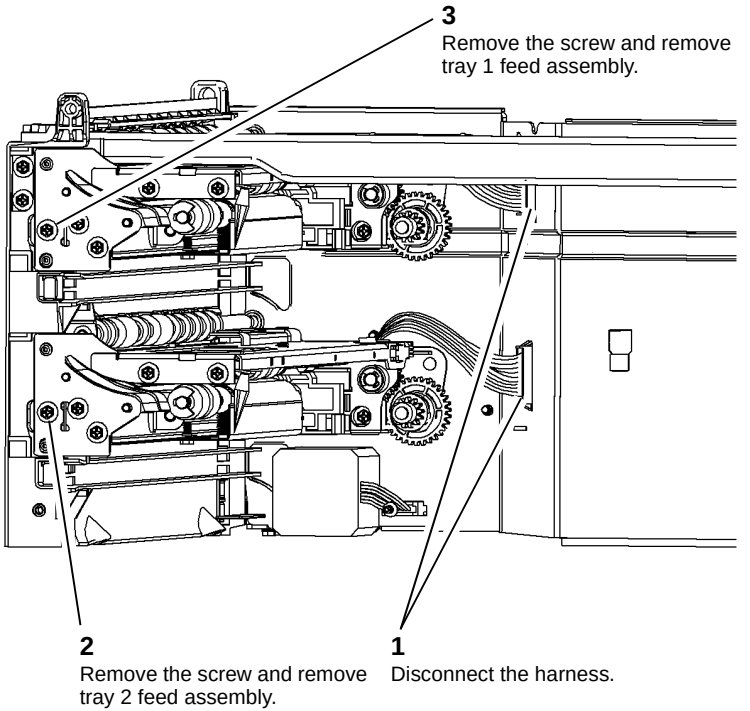


Figure 1 Paper feed assembly removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. If new feed rolls are installed reset the tray 1 or tray 2 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.2 Registration Transport

Parts List on PL 80.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the fuser module, PL 10.10 Item 1.
2. Remove the duplex assembly, REP 80.5.
3. Remove the xerographic module, PL 90.20 Item 2.
4. Remove the developer module, REP 90.2.
5. Remove the short paper path assembly, REP 10.1.
6. Open left hand door, PL 70.30 Item 2.

CAUTION

Do not damage the temperature/humidity PWB, refer to Figure 1.

7. Prepare to remove the registration transport, Figure 1.

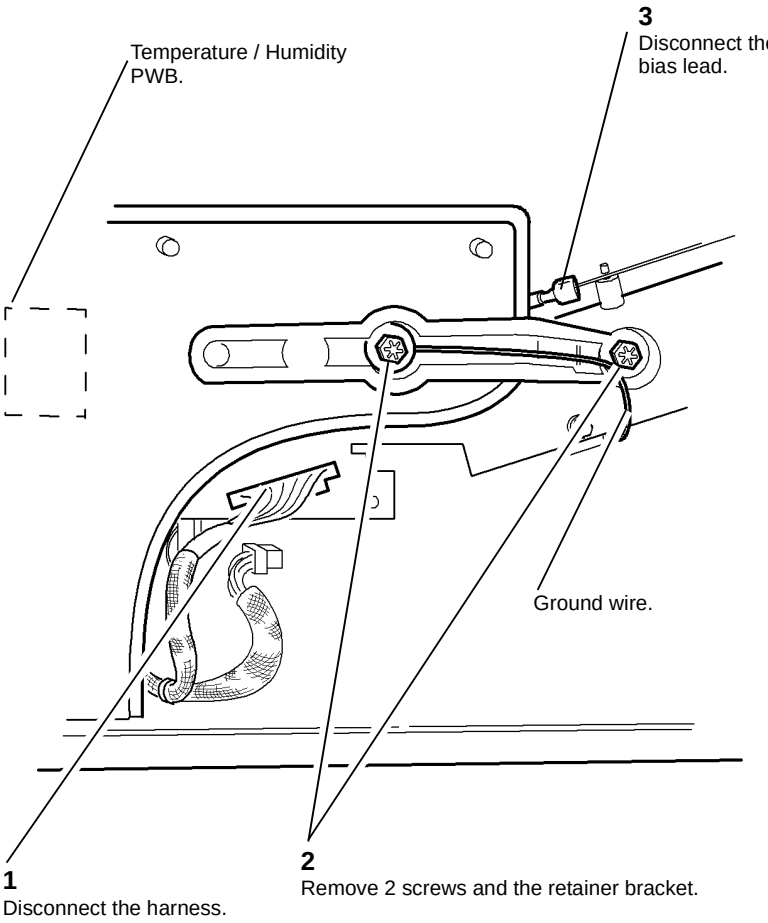


Figure 1 Preparation

8. Remove the registration transport, Figure 2.

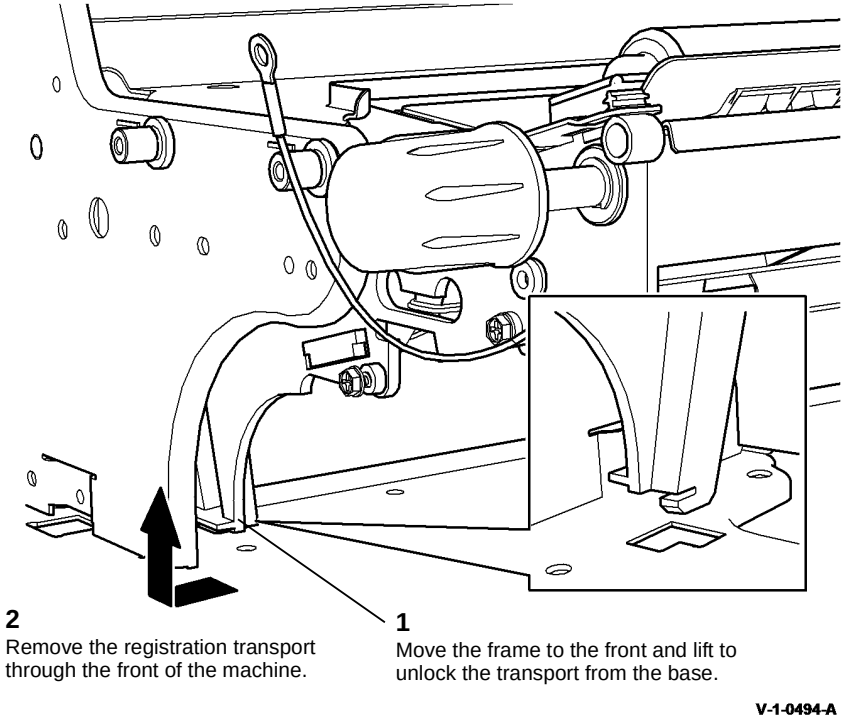


Figure 2 Registration transport removal

9. If necessary, remove the cover from the drive gears, Figure 3.

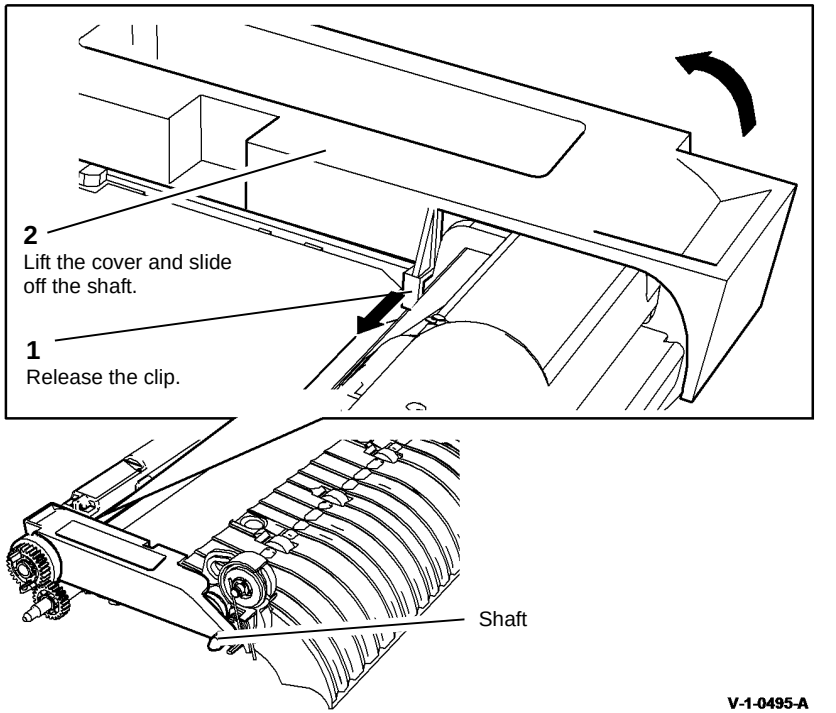


Figure 3 Cover removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screw to the retaining bracket.

CAUTION

Ensure that the transport foot is correctly located into the base.

2. Locate the transport foot into the base, Figure 4.

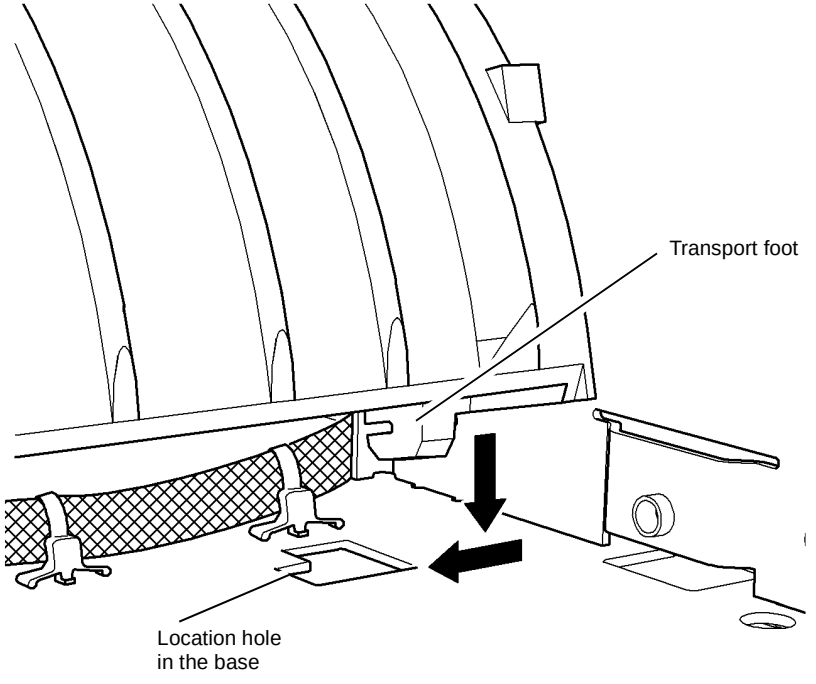


Figure 4 Transport foot location

3. Ensure that the mylar guide on the registration transport is located on the top of the IOT frame and not below the frame, Figure 5.

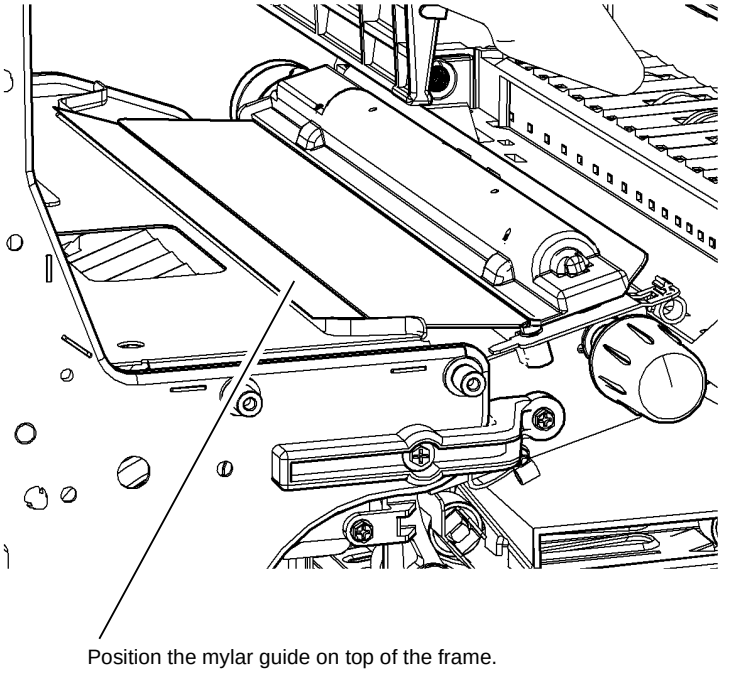


Figure 5 Mylar guide position

4. Check that the ground wire is secured when the retainer bracket is reinstalled, Figure 1.
5. Check the grounding of the registration drive shaft and the pre-registration drive shaft, refer to the 301A Ground Distribution RAP.
6. Perform the dC604 Registration Setup.
7. If a new bias contact is installed, reset the bias foam HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.3 Registration Clutch

Parts List on PL 80.15 (45-55ppm) PL 80.17 (65-90 ppm)

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the registration transport, REP 80.2.
2. Remove the clutch cover, PL 80.15 Item 24.
3. Prepare to remove the clutch, Figure 1.

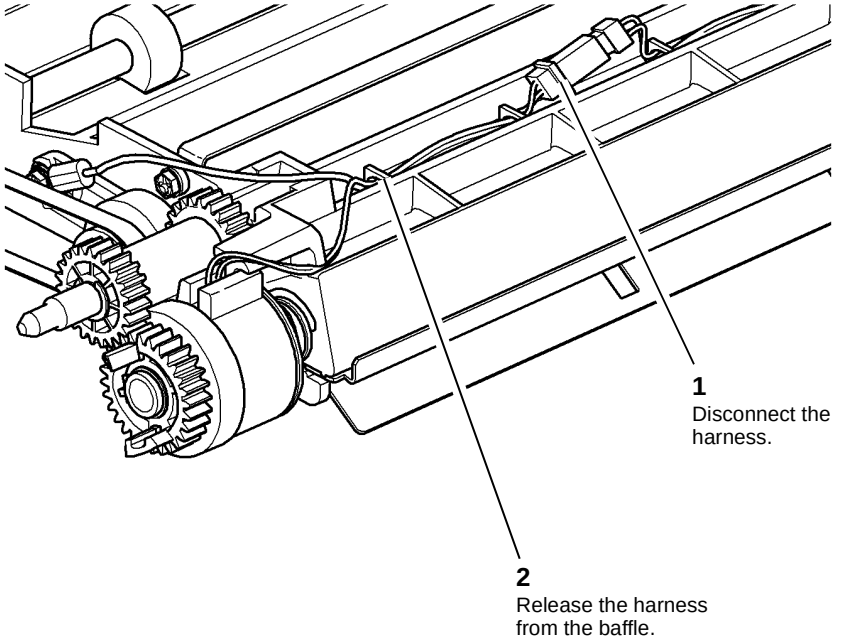


Figure 1 Preparation

4. Remove the registration clutch, Figure 2.

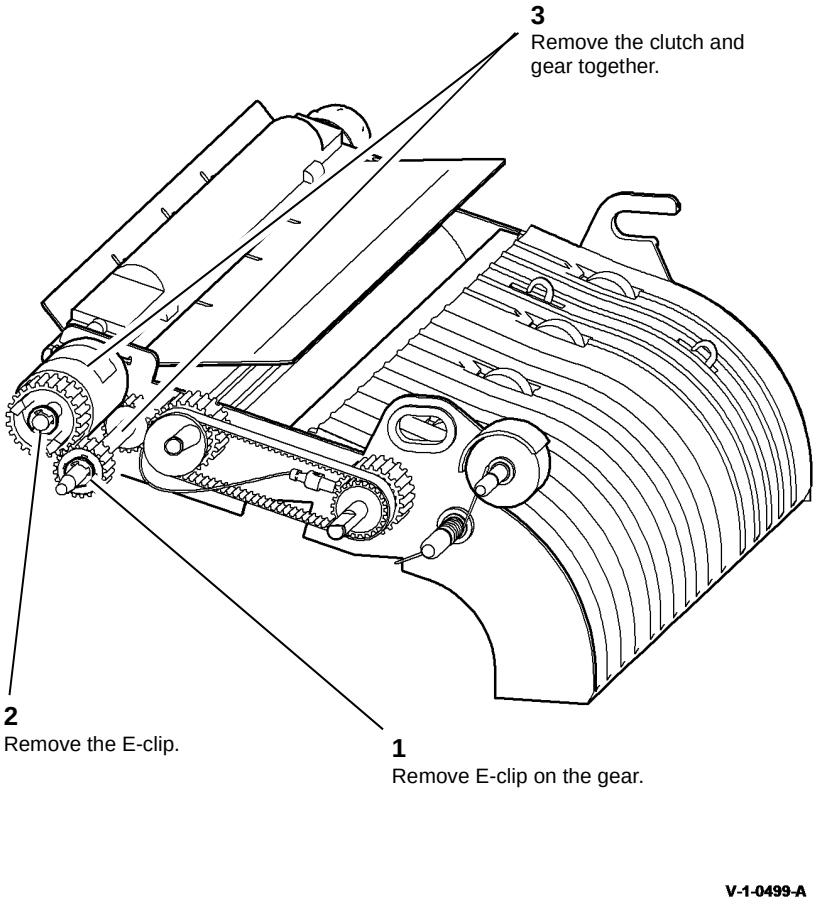


Figure 2 Registration clutch removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Check the following:
   a. That the clutch is located with the key on the frame of the registration transport assembly, Figure 3.

b. That the clutch harness is correctly routed and secure, Figure 1.

c. Turn the jam clearance knob 4c to rotate the drive shaft. Ensure that the drive plate on the clutch rotates without binding on the clutch body, Figure 3.

3. Perform the dC604 Registration Setup.

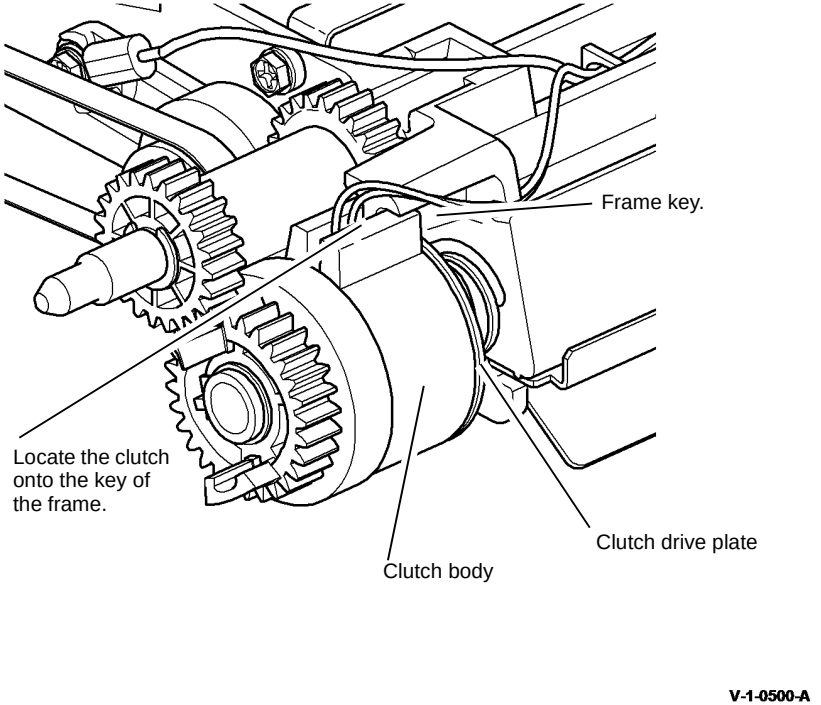


Figure 3 Clutch location

REP 80.4 Registration Sensor and Wait Sensor (45-55ppm)

Parts List on PL 80.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the registration transport, REP 80.2.
2. Remove the relevant sensor, Figure 1.

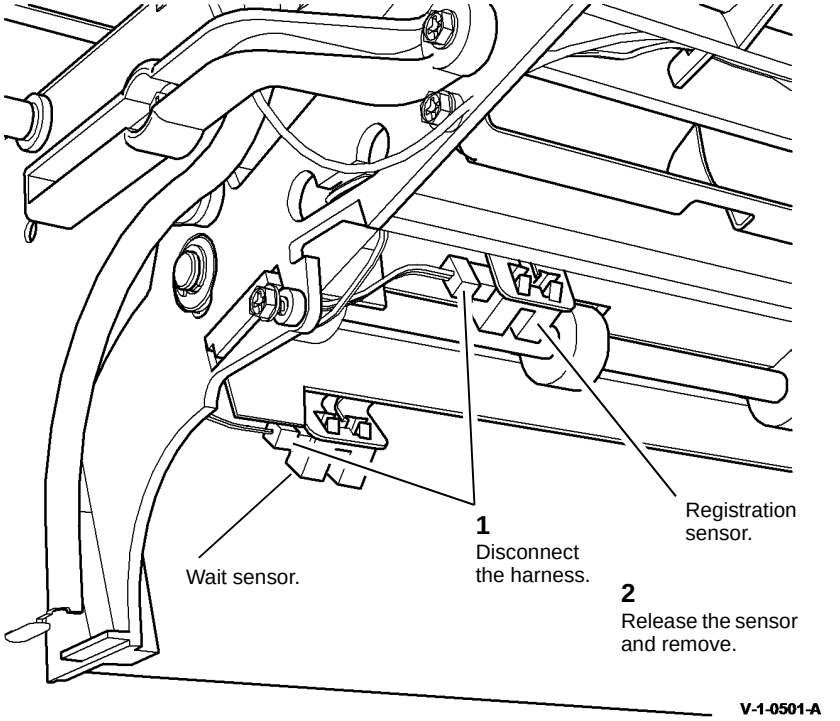


Figure 1 Sensor location

Replacement

1. Replacement is the reverse of the removal procedure.
2. Perform the dC604 Registration Setup.

REP 80.5 Duplex Transport

Parts List on (45-55 ppm) PL 80.22, (65-90 ppm) PL 80.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

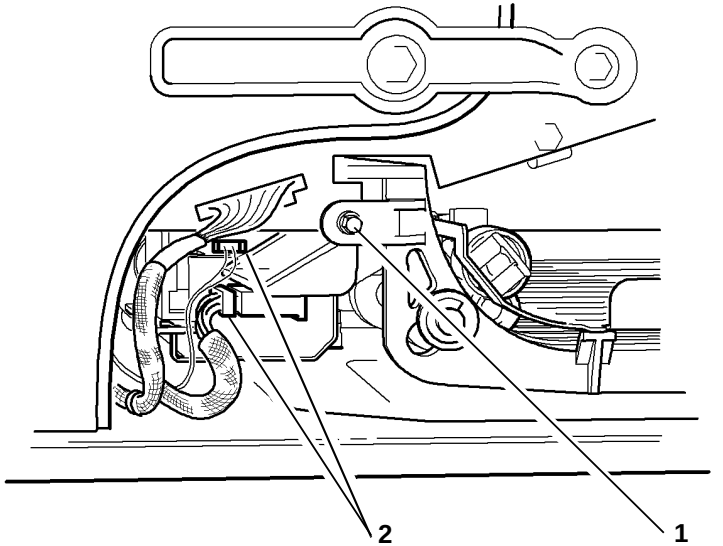
WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

1. Remove the duplex transport, Figure 1.



3
Pull out and remove the duplex transport.

2
Pull out the duplex transport by 75mm (3 inches), then disconnect the two harness.

1
Remove the screw.

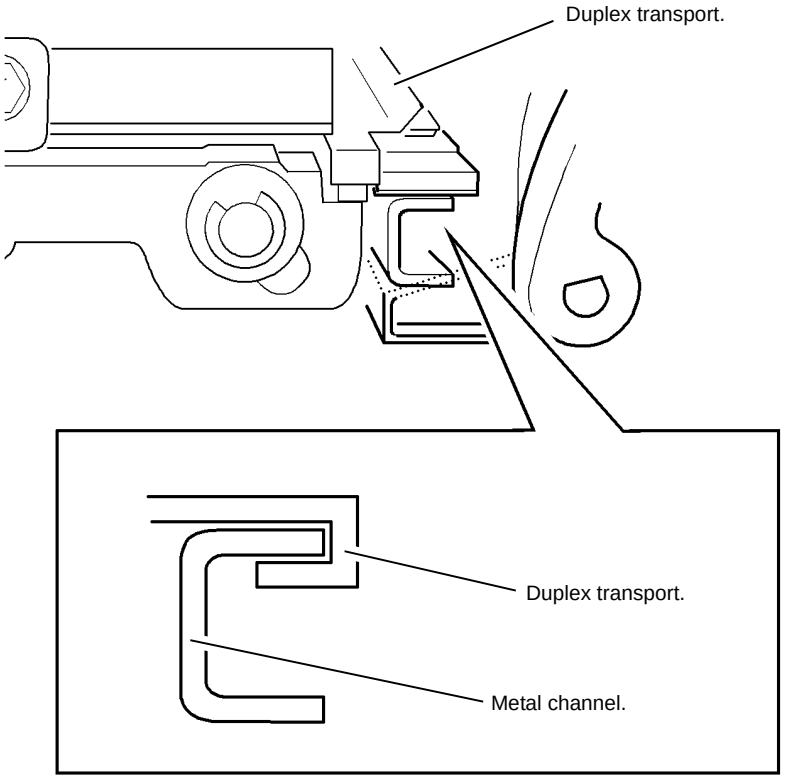
V-1-0502-A

Figure 1 Duplex transport removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screw to the duplex transport.
2. Check the grounding of the duplex transport, refer to the 301A Ground Distribution RAP
3. Check that the duplex transport is located correctly on the metal channel, Figure 2.

NOTE: *Lift the left side of the transport to engage the support pin through the rear frame.*



V-1-0503-A

Figure 2 Duplex transport location

4. Perform the dC604 Registration Setup.

REP 80.6 Duplex Motor and Drive Belts

Parts List on (45-55 ppm) PL 80.22, (65-90 ppm) PL 80.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

1. Remove the duplex transport, REP 80.5.

   NOTE: *The duct on the duplex transport is only used on the 65-90 ppm machine.*

2. Remove the motor and drive belts, Figure 1.

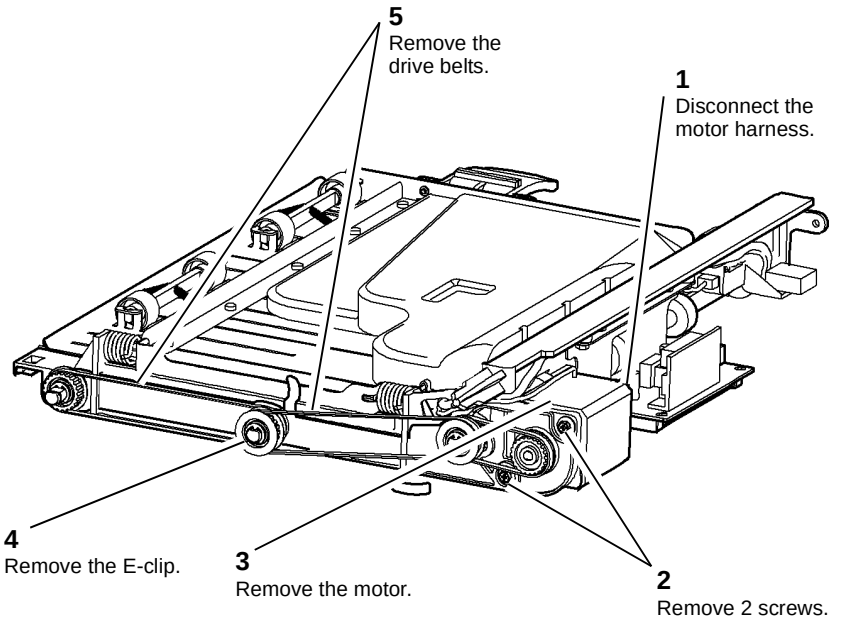


Figure 1 Motor and belts removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.7 Bypass Tray Feed Solenoid

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bypass tray and left door assembly, REP 70.2.

CAUTION

Take care not to lose the small spring on the back of the solenoid.

2. Remove the bypass tray feed solenoid, Figure 1.

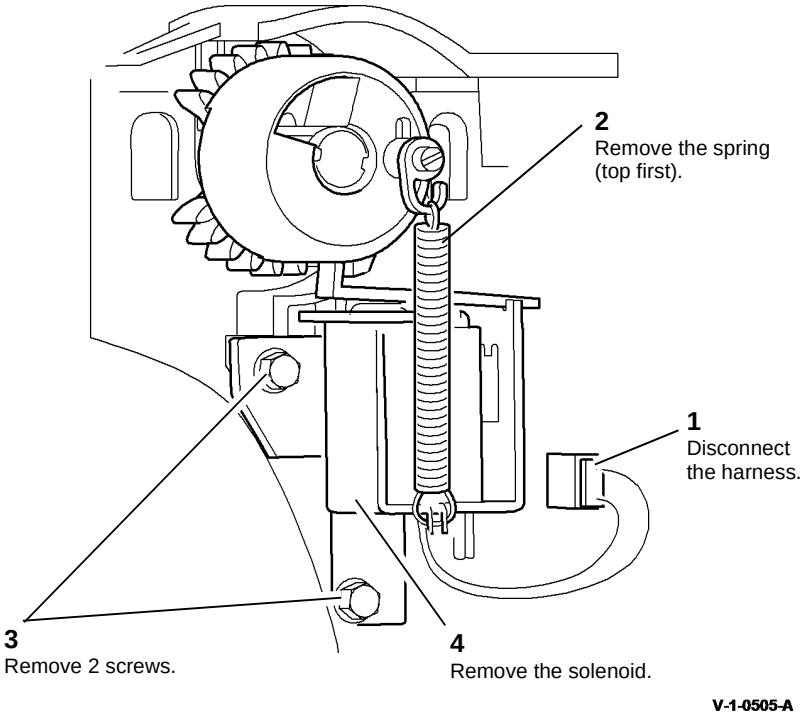


Figure 1 Solenoid removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.8 Tray 1 and Tray 2 Transport Drive Belt

Parts List on PL 80.25

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove rear cover, PL 28.10 Item 1.
2. Remove waste toner bottle, PL 90.10 Item 1.
3. Remove the tray 1 and tray 2 transport drive belt, Figure 1.

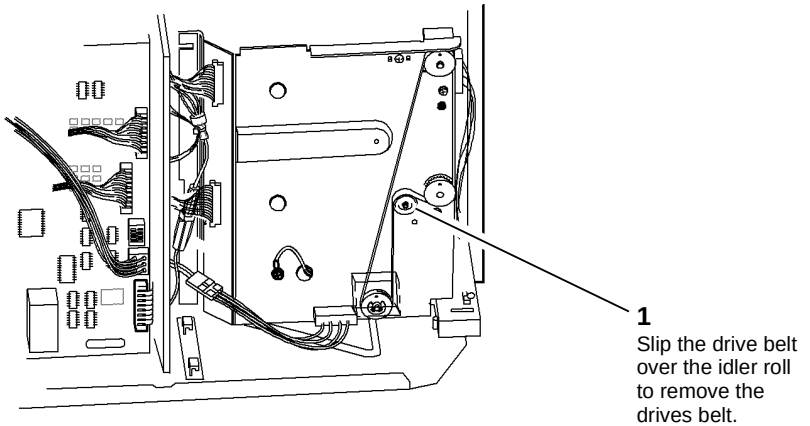


Figure 1 Drive belt removal

Replacement

1. Reverse the removal procedure to replace the transport drives belt.
2. Perform the dC604 Registration Setup.

REP 80.9 Registration Sensor (65-90 ppm)

Parts List on PL 80.17

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the developer assembly, REP 90.2.
2. Remove the xerographic module.
3. Remove the registration nip assembly, Figure 1

NOTE: *To improve the access when removing the screw. Move the xerographic module latch to the lock position, this changes the position of the developer paddle.*

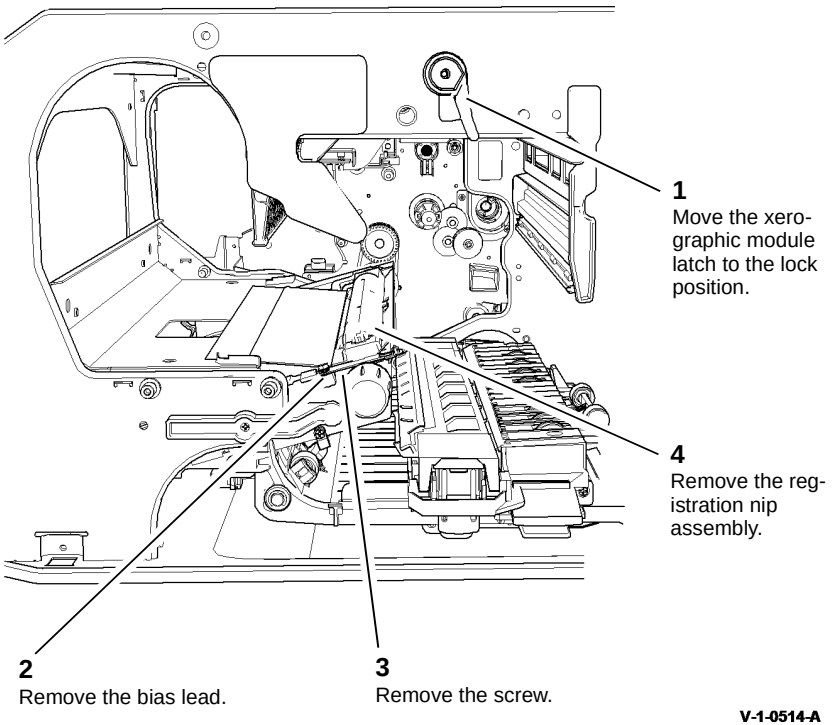


Figure 1 Registration nip removal

4. Remove the registration sensor and support bracket, Figure 2.

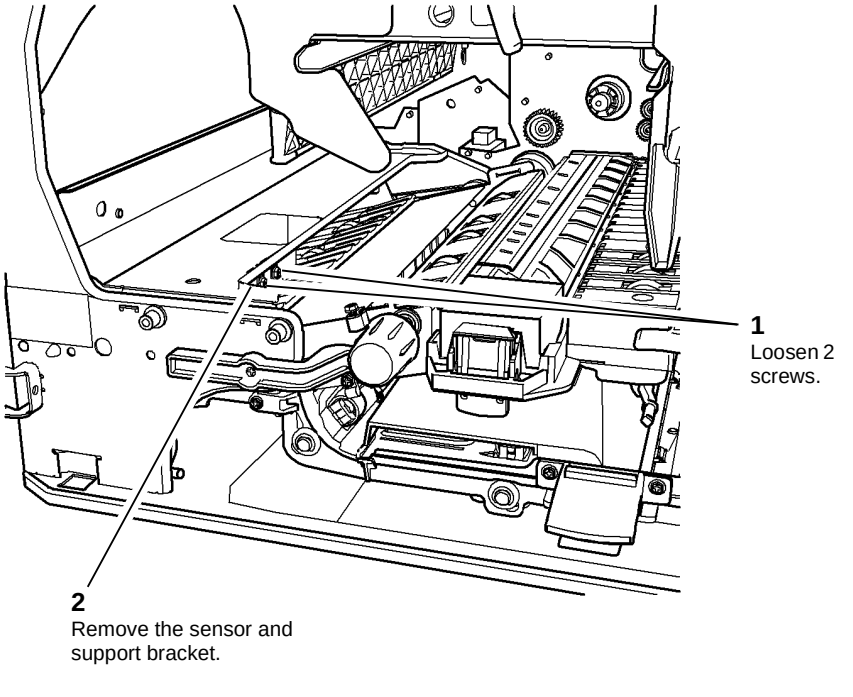


Figure 2 Sensor and bracket removal

5. Remove the sensor from the support bracket, Figure 3.

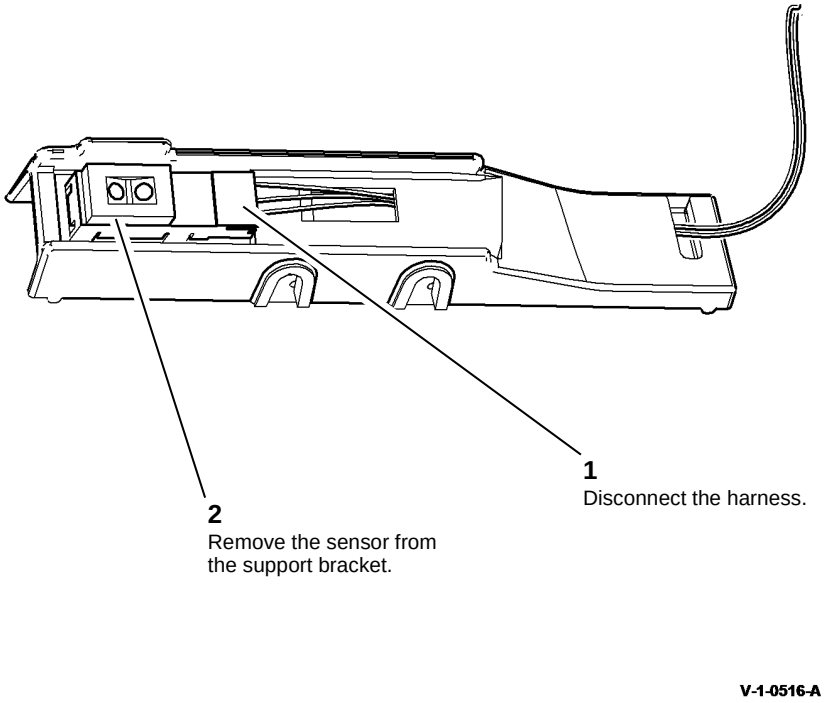


Figure 3 Sensor removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting screws.
2. Locate the support bracket on the machine frame and tightened the screws, Figure 4.

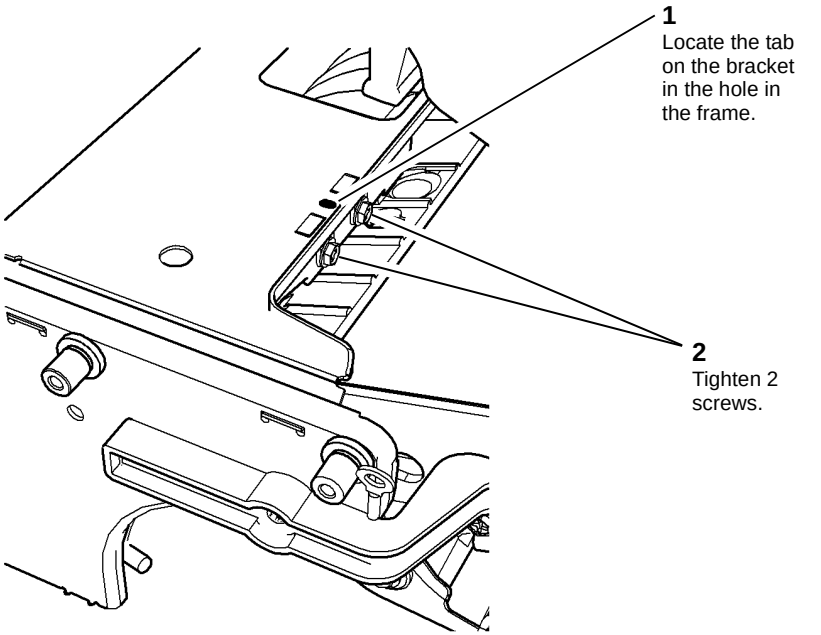


Figure 4 Support bracket position

3. Ensure that the mylar guide is located correctly, Figure 5.

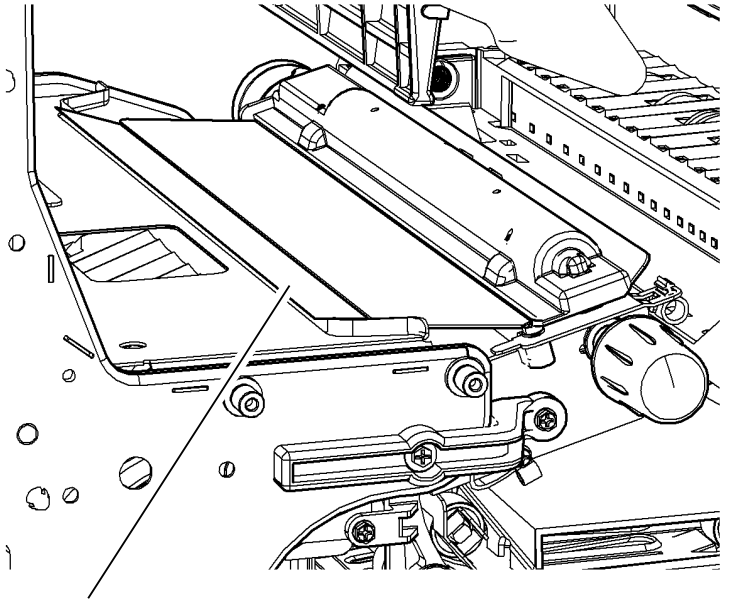


Figure 5 Mylar guide position

4. Perform the dC604 Registration Setup.

REP 80.10 Tray 1 and Tray 2 Transport Rolls and Bearings

Parts List on PL 80.25

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *The removal procedure is the same for the tray 1 and tray 2 transport rolls.*

1. Remove tray 1 and tray 2, PL 70.10.
2. Remove tray 1 and 2 paper feed assembly, REP 80.1.
3. Remove the rear cover, PL 28.10 Item 1.
4. Remove the waste toner bottle and door, REP 90.1.
5. Remove the tray 1 and tray 2 transport drive belt, REP 80.8.
6. Remove the drive shaft and bearings, Figure 1.

   NOTE: *The drive pulleys have a built-in one way clutch. Before the drive pulley is removed, mark the pulley to indicate its installed position. The drive shaft rotates when the pulley is turned in a counter-clockwise direction. Remove the front bearing when the shaft has been removed.*

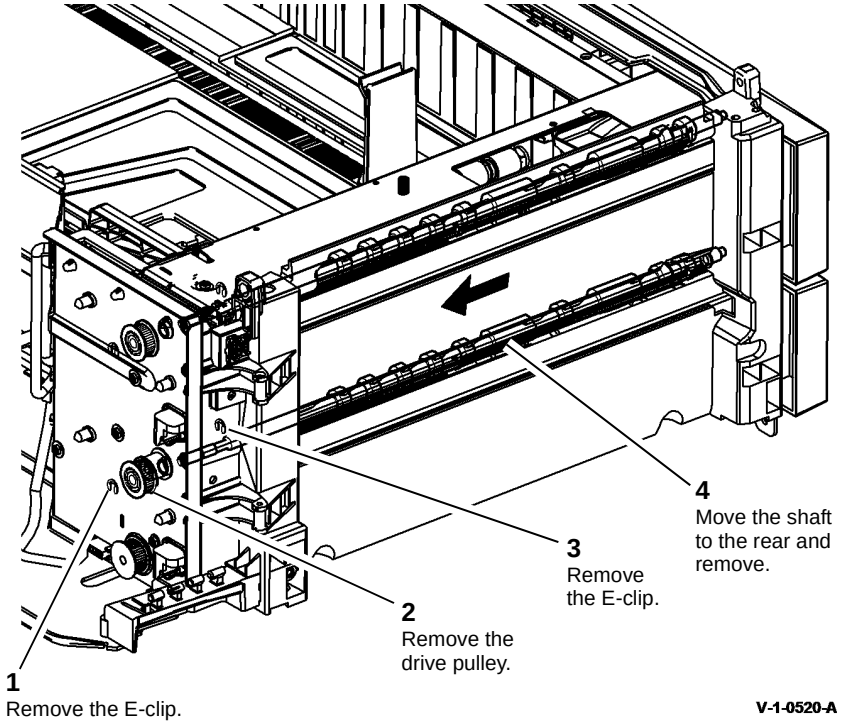


Figure 1 Drive shaft removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting screws.
2. Ensure that the bearings are located correctly.
3. Perform the dC604 Registration Setup.

REP 80.11 Wait Sensor (65-90ppm)

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the left hand door, REP 70.2.
2. Prepare to remove the door cover, Figure 1.

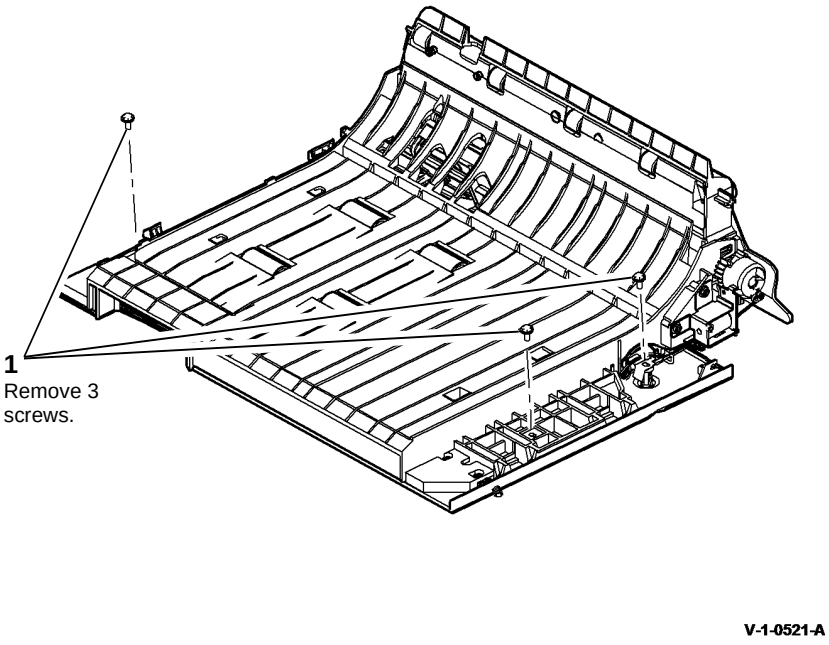


Figure 1 Preparation

3. Remove the door cover, Figure 2.

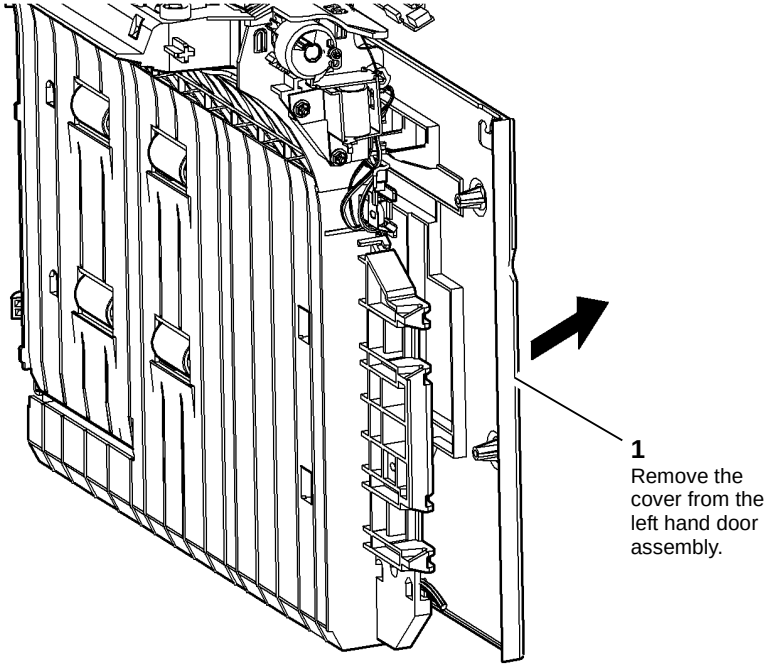


Figure 2 Door cover removal

4. Figure 3 shows the location of the wait sensor.

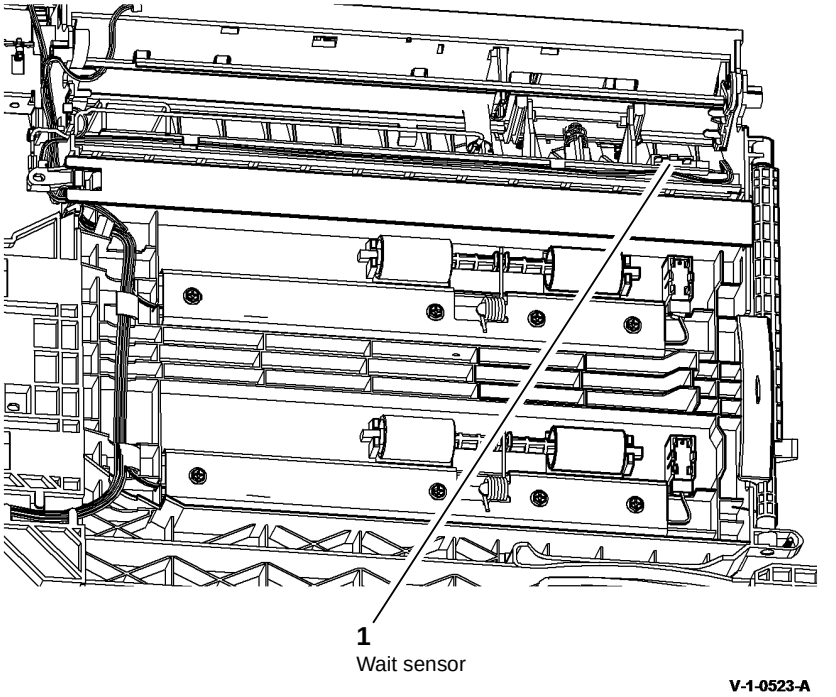


Figure 3 Wait sensor location

5. Remove the wait sensor, Figure 4.

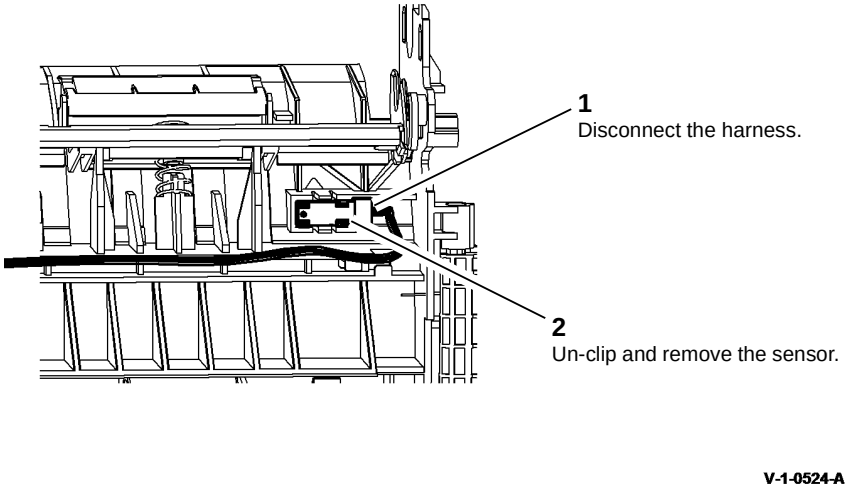


Figure 4 Wait sensor removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure that the cover is located correctly on the left hand door assembly, Figure 5.

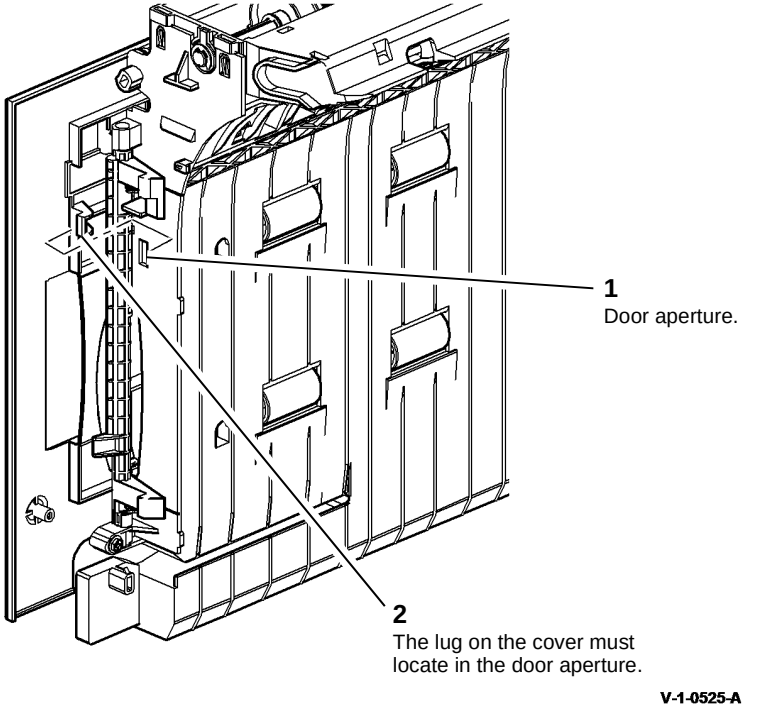


Figure 5 Cover location

3. Perform the dC604 Registration Setup.

REP 80.12 Tray 1 and Tray 2 Transport Roll Drives Motor

Parts List on PL 80.25

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 28.10 Item 1.
2. Remove the waste toner bottle and door, REP 90.1.
3. Remove tray 1 and tray 2.
4. Prepare to remove the transport roll drives motor, Figure 1.

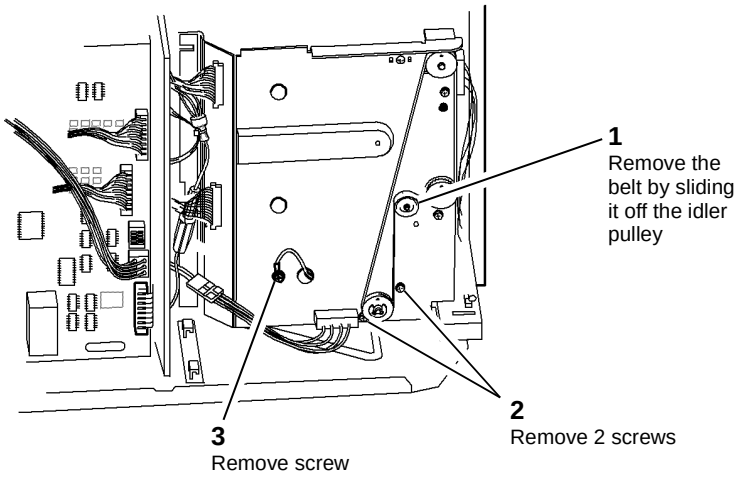


Figure 1 Preparation

5. Remove the transport roll drives motor, Figure 2.

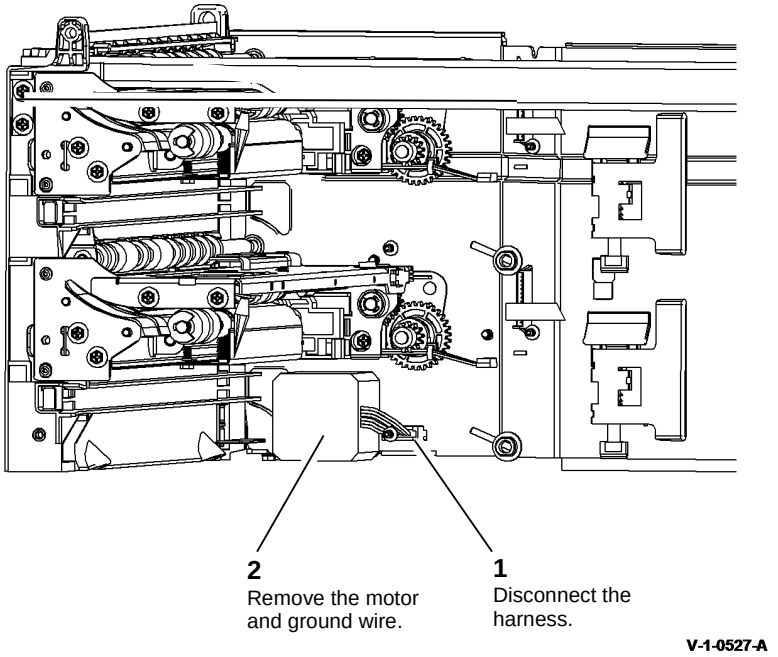


Figure 2 Motor removal

Replacement

Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 80.13 Bypass Tray Feed Head

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove left cover, PL 28.10 Item 3.

CAUTION

Take care not to lose the small spring on the back of the solenoid.

2. Open the left hand door and remove the spring from the feed solenoid, Figure 1.

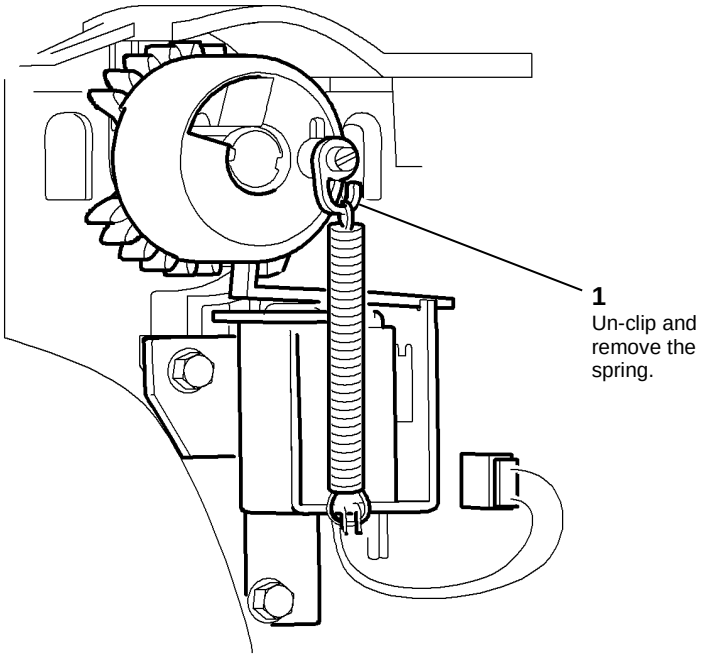


Figure 1 Feed solenoid spring removal

3. Remove the cover from the feed head, Figure 2.

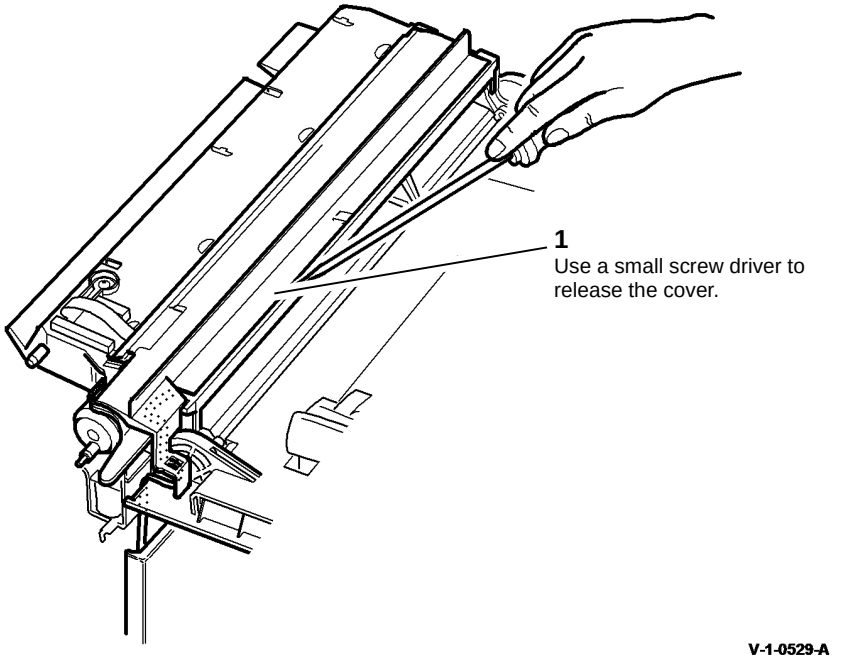


Figure 2 Feed head cover removal

4. Release the ribbon cable from the feed head, Figure 3.

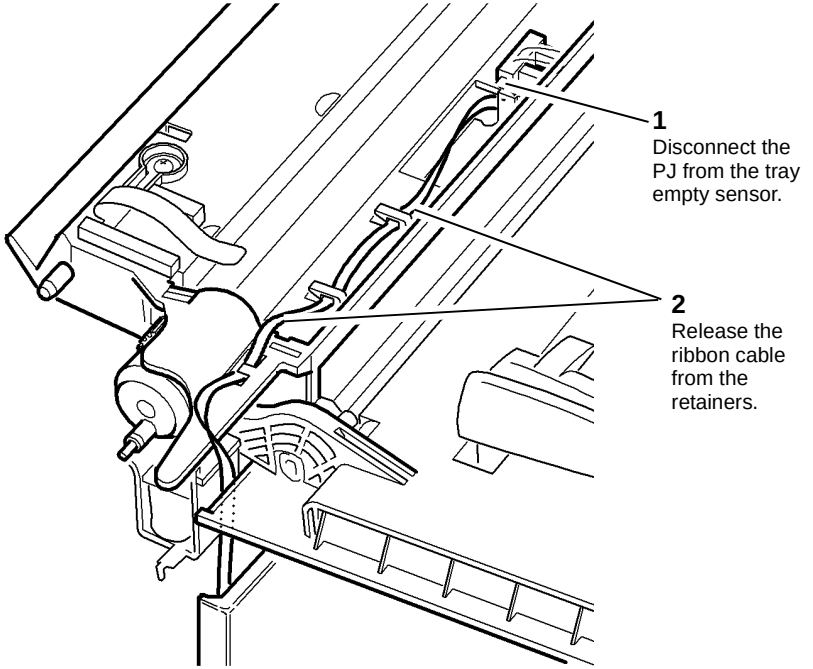


Figure 3 Ribbon cable release

5. Remove the feed head, Figure 4.

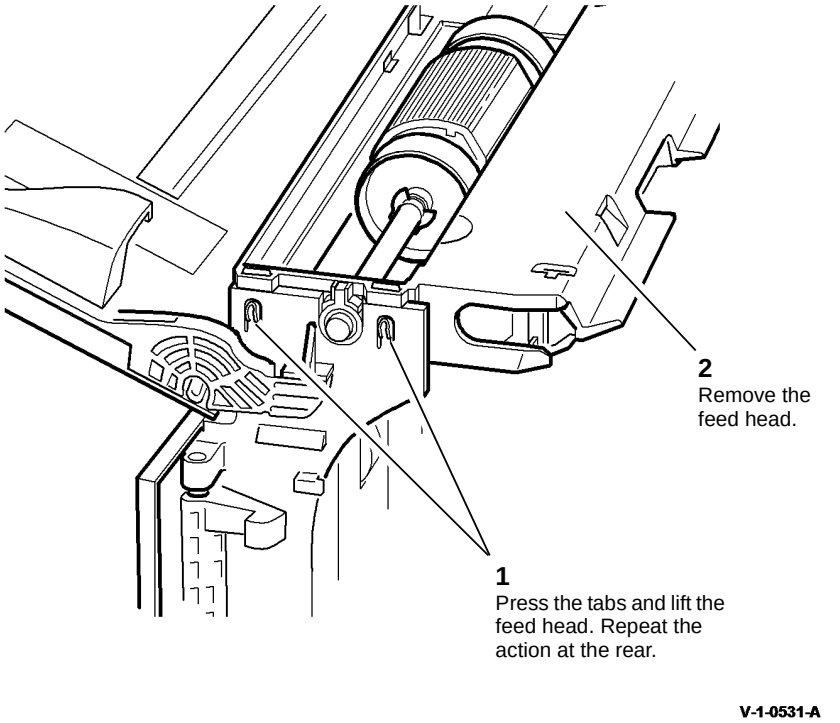


Figure 4 Feed head removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Before replacement of the feed head ensure that feed roll, pressure plate cam and drive gear are correctly aligned, Figure 5.
3. When the feed head is replaced, ensure that the bypass tray empty sensor actuator is positioned in the slot in the lift plate. Refer to Figure 5.
4. Manually rotate the drive gear until the tab on the drive gear is engaged with the armature on the bypass tray feed solenoid.

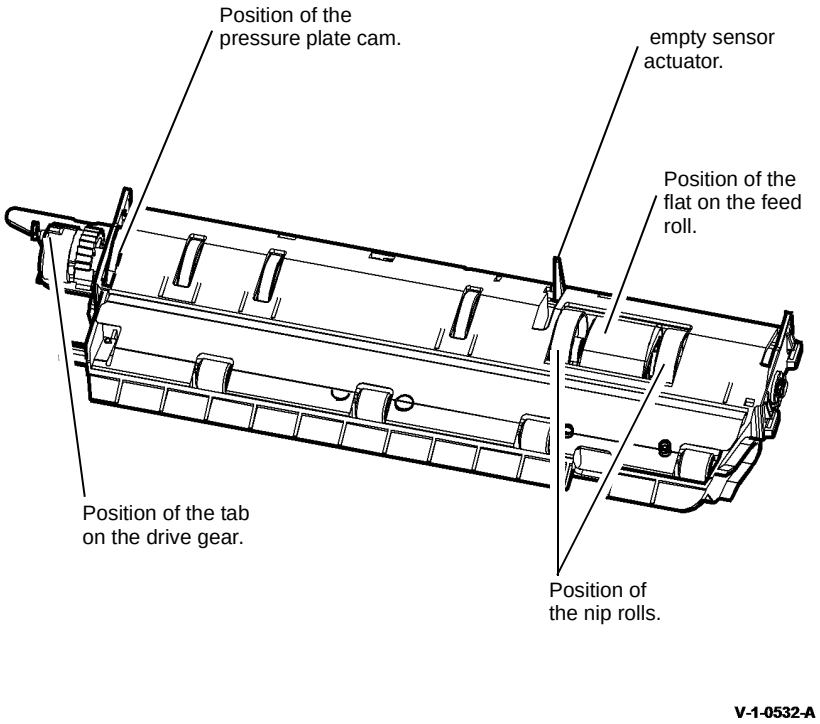


Figure 5 Component alignment

REP 80.14 Bypass Tray Drive Gear

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bypass tray feed head, REP 80.13.
2. Remove the bypass tray drive gear, Figure 1.

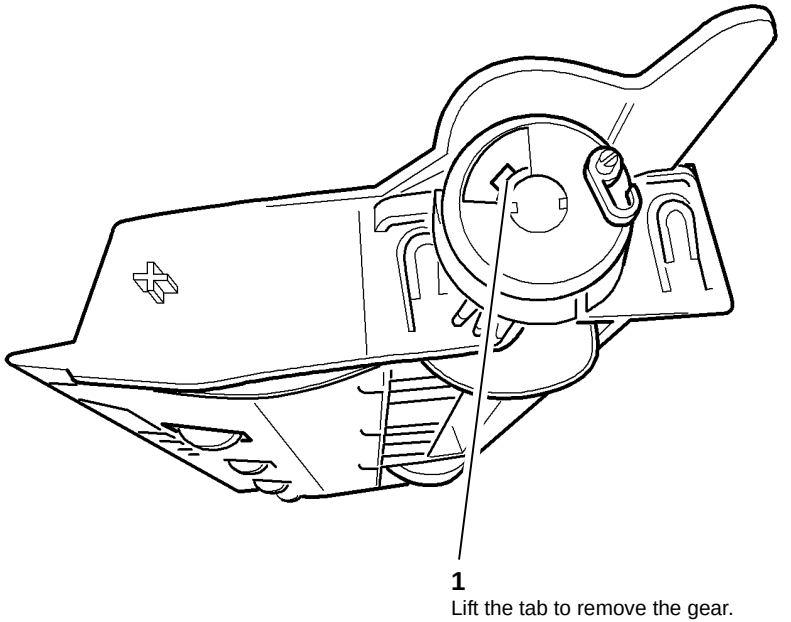


Figure 1 Drive gear removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Before replacement of the feed head, ensure that feed roll, pressure plate cam and drive gear are correctly aligned, Figure 2.

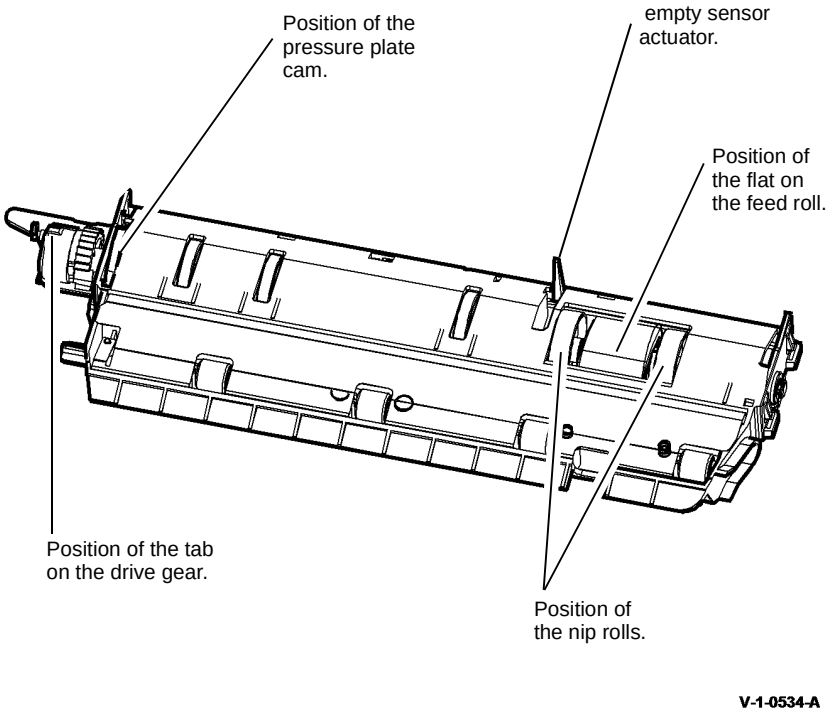


Figure 2 Component alignment

REP 80.15 Bypass Tray Feed Roll

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the left hand door, PL 70.30 Item 2.
2. Remove the bypass feed head, REP 80.13.
3. Remove the bypass tray drive gear, REP 80.14.
4. Remove the bypass feed roll, Figure 1.

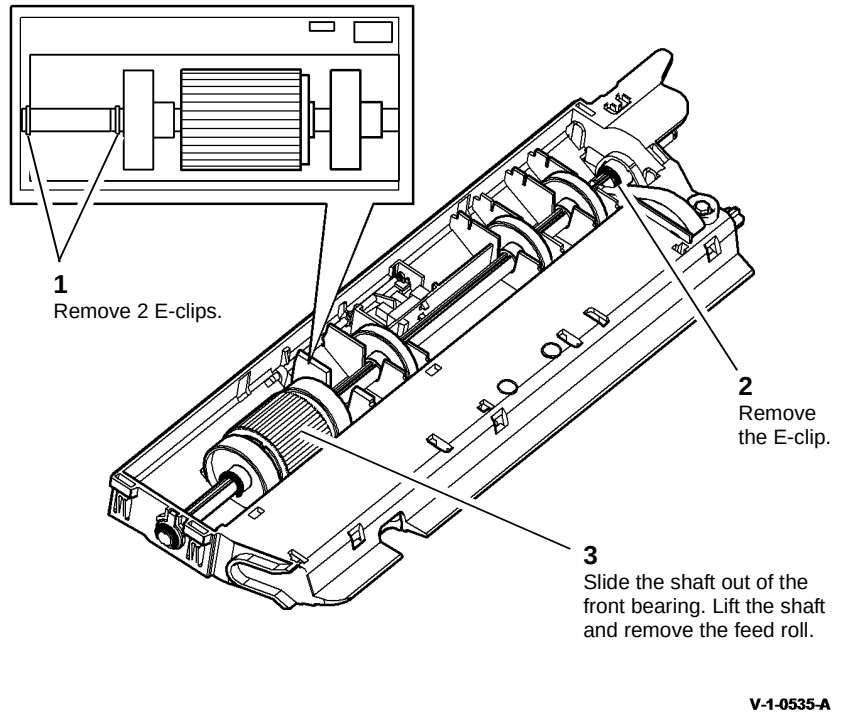


Figure 1 Remove the feed roll

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure that the bearings at both ends of the shaft are correctly located.
3. Check the feed head to ensure that the feed roll, pressure plate cam and drive gear are correctly aligned, Figure 2,

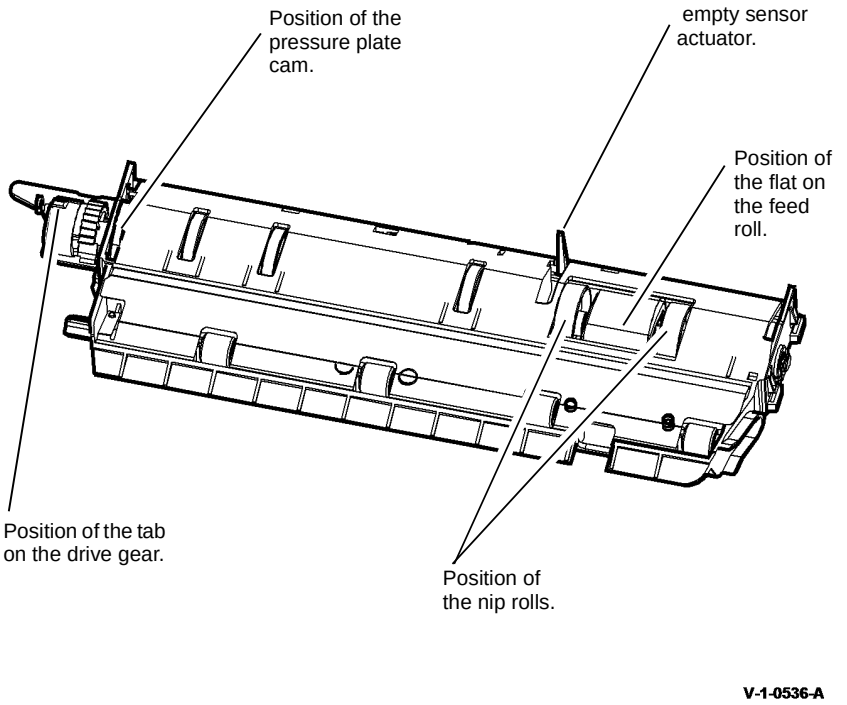


Figure 2 Component alignment

4. If a new feed roll is installed, reset the tray 5 feed roll HFSI count. Refer to dC135 CRU/ HFSI Status.

REP 80.16 Bypass Tray Retard Pad

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bypass tray feed head, REP 80.13.
2. Prepare to remove the retard pad, Figure 1.

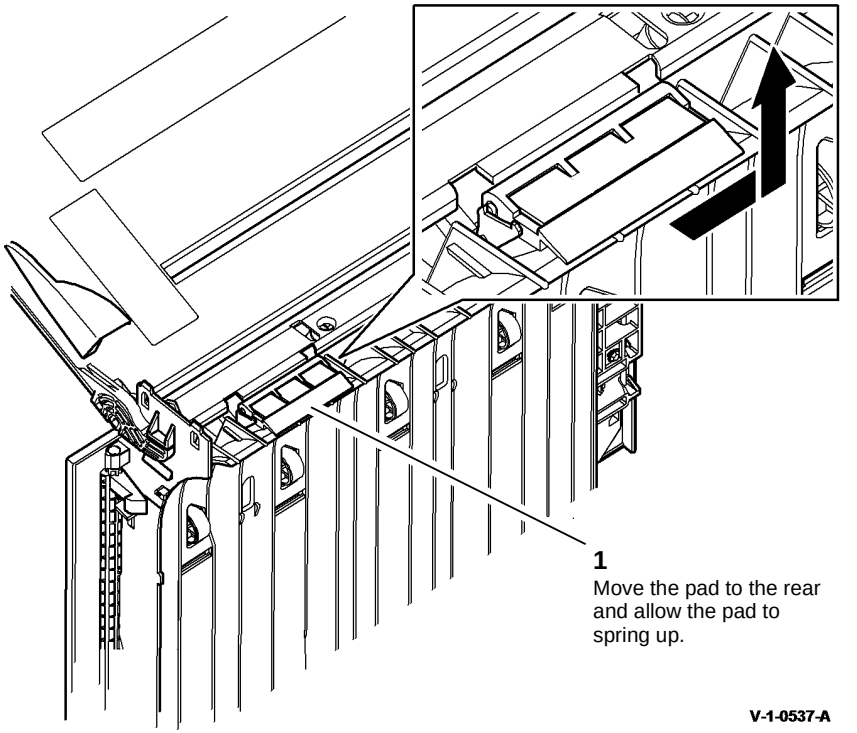


Figure 1 Preparation

3. Remove the retard pad, Figure 2.

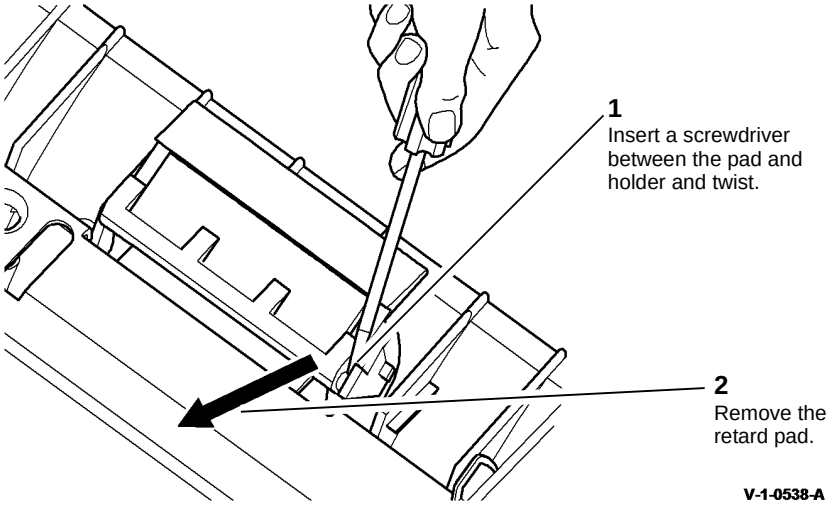


Figure 2 Remove the retard pad

Replacement

1. Replacement is the reverse of the removal procedure.
2. If a new retard pad is installed, reset the tray 5 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.17 Bypass Tray Empty Sensor

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the bypass tray feed head, REP 80.13.
2. Remove the tray empty sensor, Figure 1.

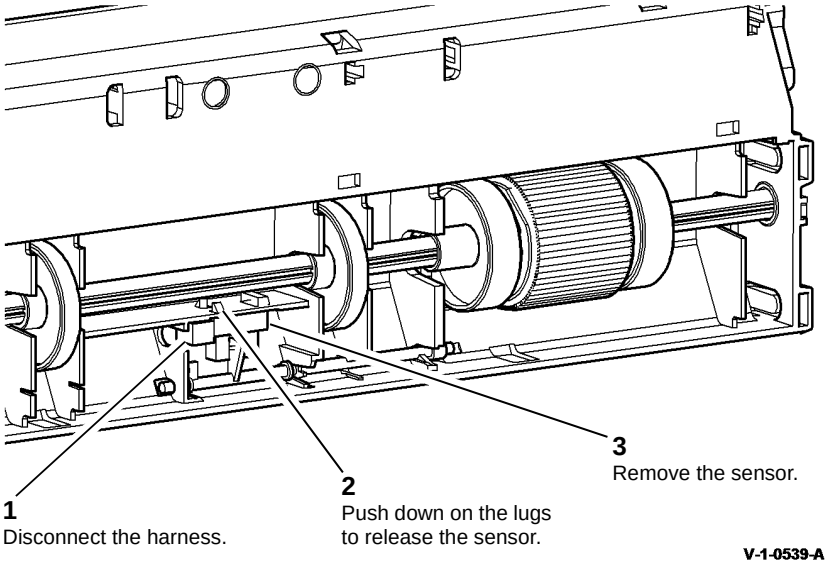


Figure 1 Tray empty sensor

Replacement

Replacement is the reverse of the removal procedure.

REP 80.18 Tray 1 or Tray 2 Feed Sensor

Parts List on PL 70.30

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the left hand door assembly, REP 70.2.
2. Prepare to remove the left hand door cover, Figure 1.

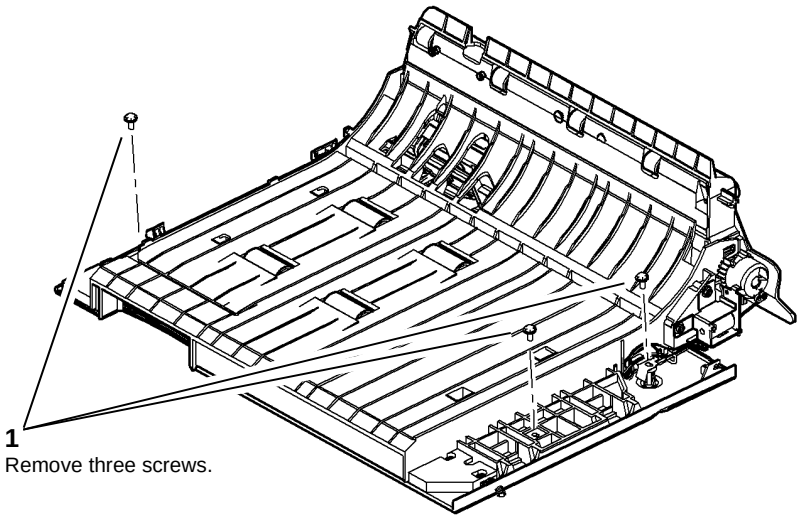


Figure 1 Preparation

3. Remove the cover from the left hand door assembly, Figure 2.

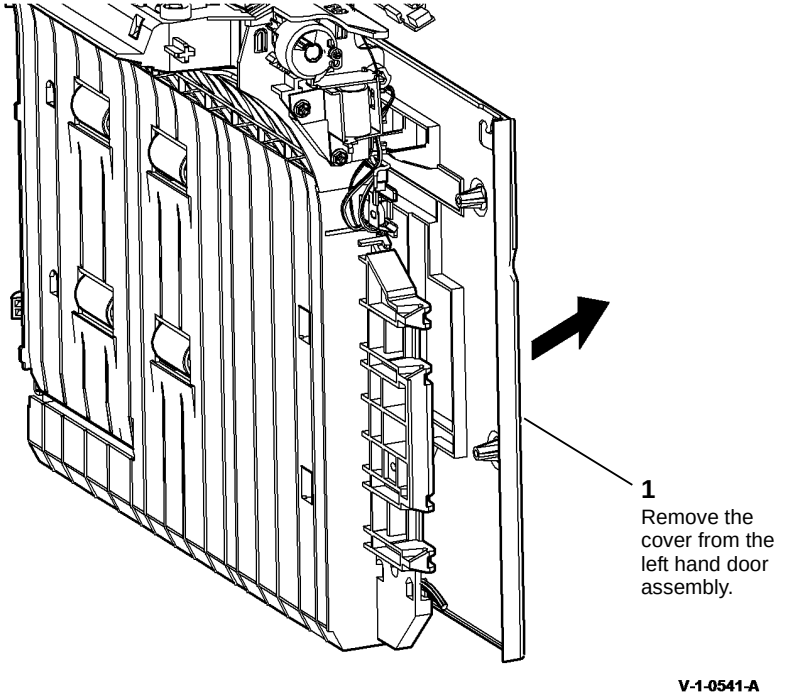


Figure 2 Remove the cover

4. Figure 3 shows the location of the tray 1 and tray 2 feed sensors.

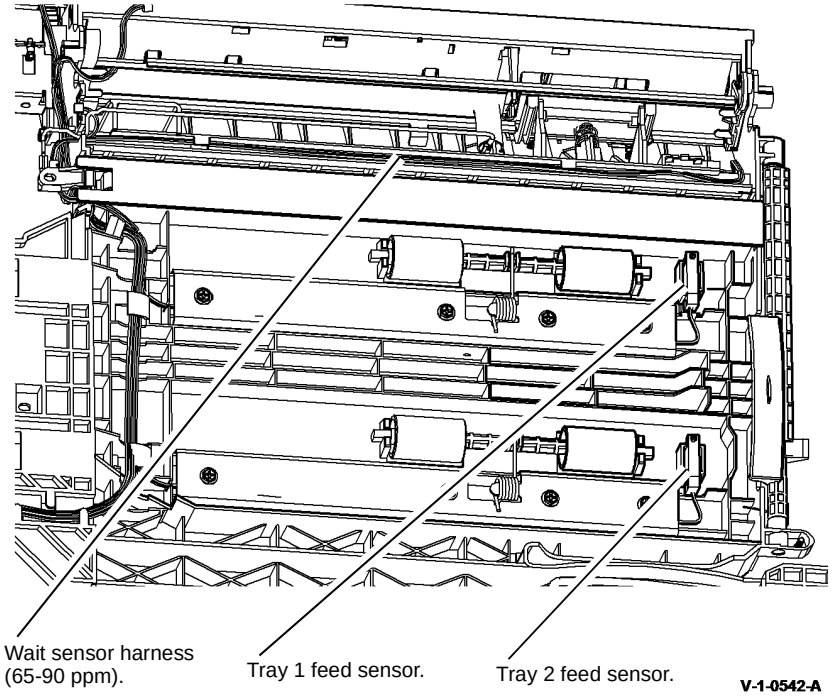


Figure 3 Feed sensor locations

5. Remove the feed sensor, Figure 4.

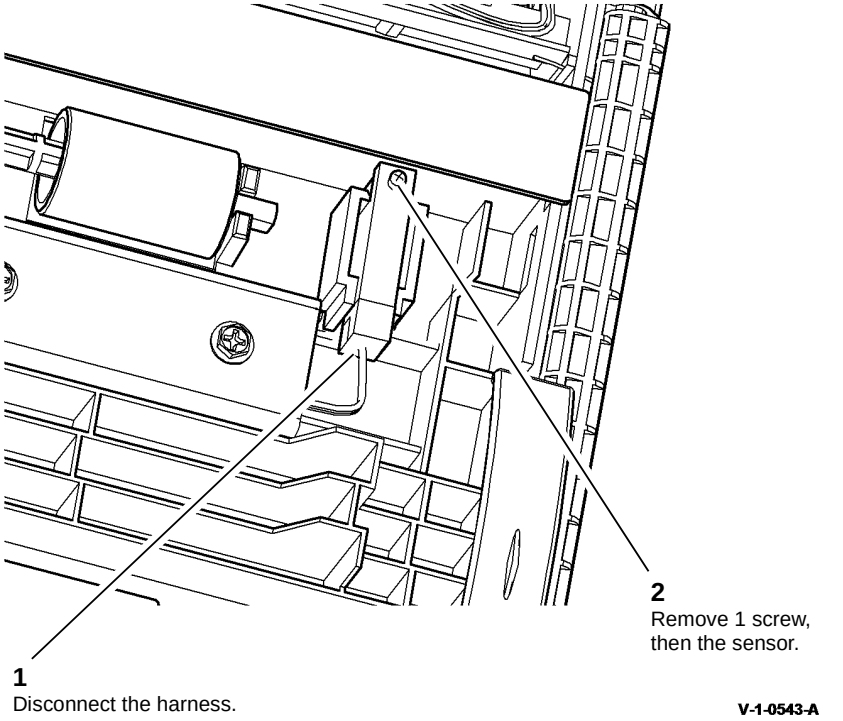


Figure 4 Remove the feed sensor

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. **(65-90 ppm Only)** Before refitting the left hand door cover, ensure that the wait sensor harness is correctly located. Refer to Figure 3.
3. Ensure that the cover is located correctly on the left hand door assembly, Figure 5.

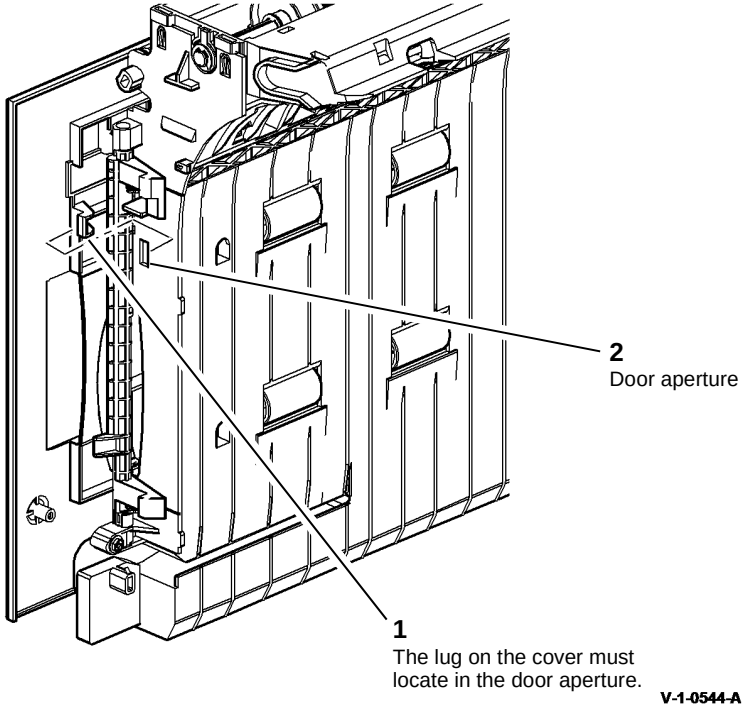


Figure 5 Cover location

REP 80.19 Tray 6 Feed Sensor

Parts List on PL 80.45

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the top cover, PL 70.60 Item 10.
2. Prepare to remove the tray 6 feed sensor, Figure 1.

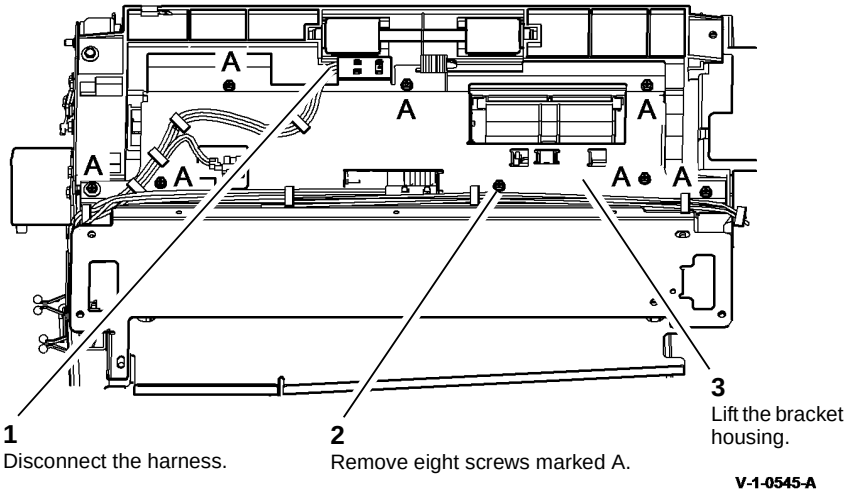


Figure 1 Preparation

3. Remove the tray 6 feed sensor, Figure 2.

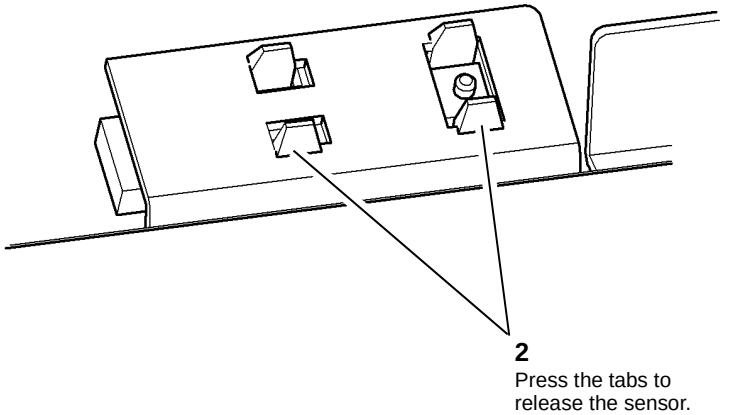


Figure 2 Feed sensor removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Make sure that the spring on the paper feed assembly is in the correct position, Figure 3.

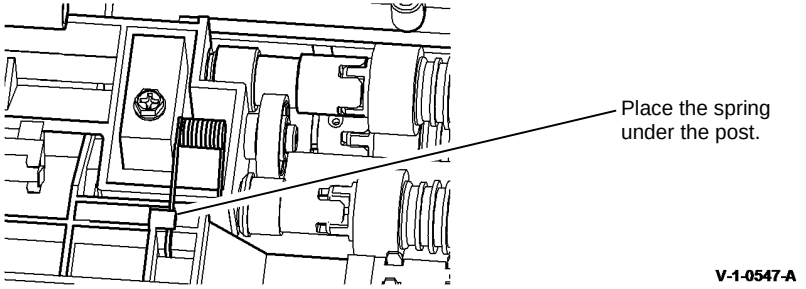


Figure 3 Spring position

3. Make sure that the spring is positioned on top of the nip roll shaft when the bracket housing is installed, Figure 4.

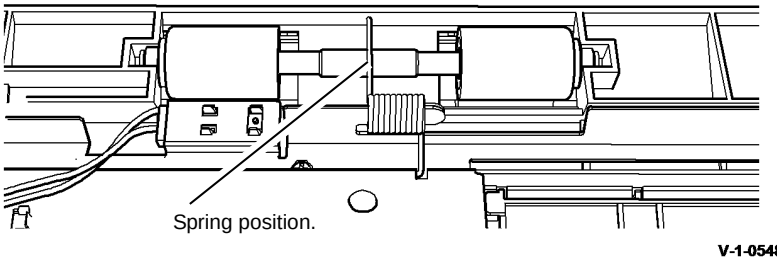


Figure 4 Nip roll spring position

4. Make sure that the spring is positioned on top of the chute upper insert, Figure 5.

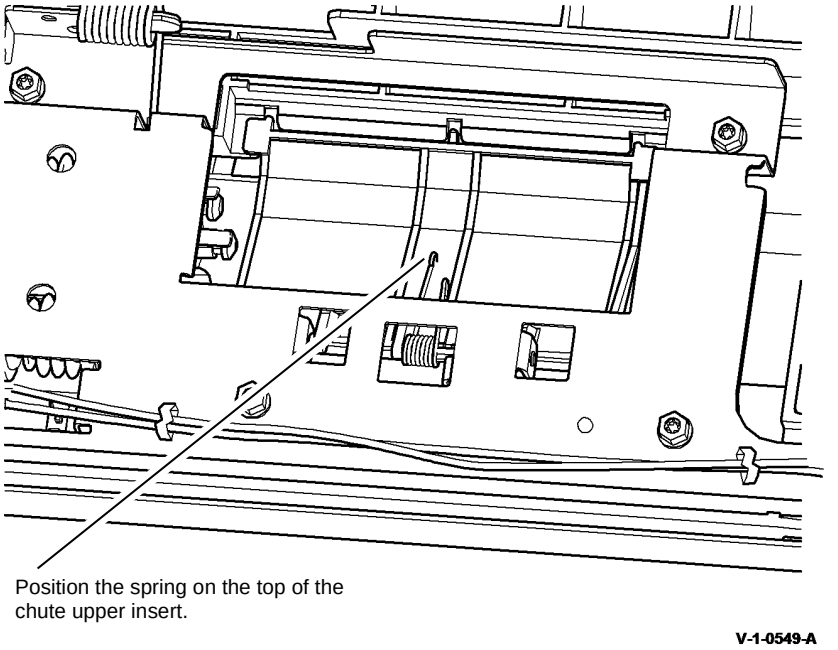


Figure 5 Upper insert chute spring

5. Check that the correct screw is used to attach the bracket housing.
6. Check that the harness routing is correct, Figure 1.

REP 80.20 Registration Drive Roll Assembly

Parts List on PL 80.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the registration transport, REP 80.2.
2. Remove the registration nip assembly, Figure 1.

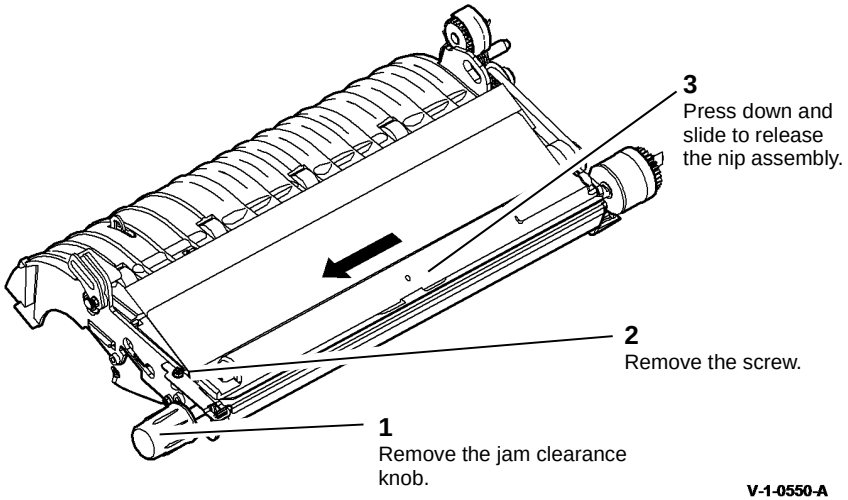


Figure 1 Registration nip assembly

3. Remove the lower registration guide, Figure 2.

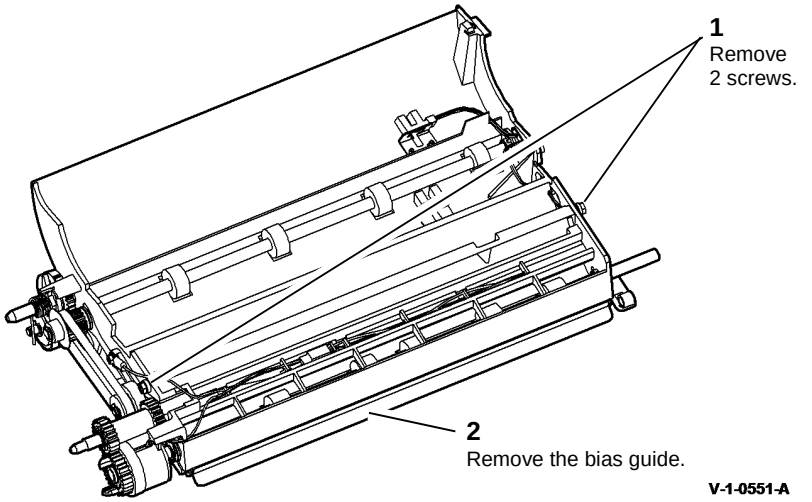


Figure 2 Bias guide removal

4. Remove the registration clutch, REP 80.21.
5. Prepare to remove the registration drive roll assembly, Figure 3.

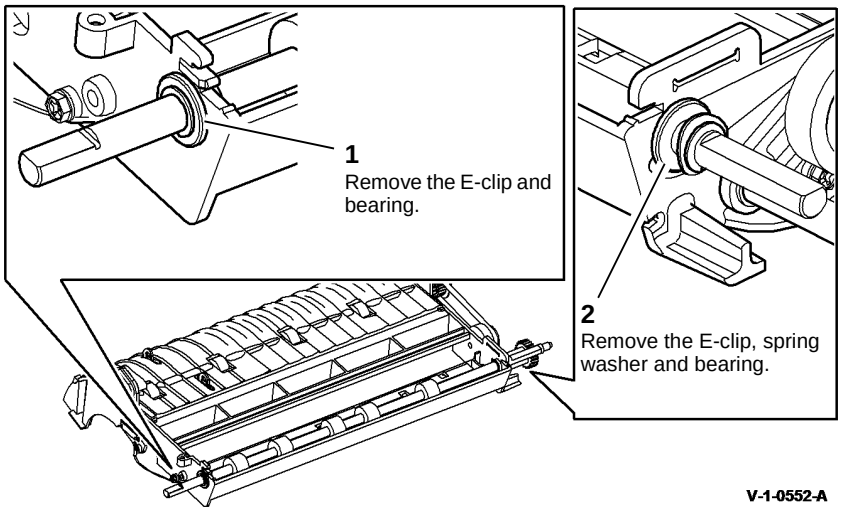


Figure 3 Preparation

6. Remove the registration drive roll assembly, Figure 4.

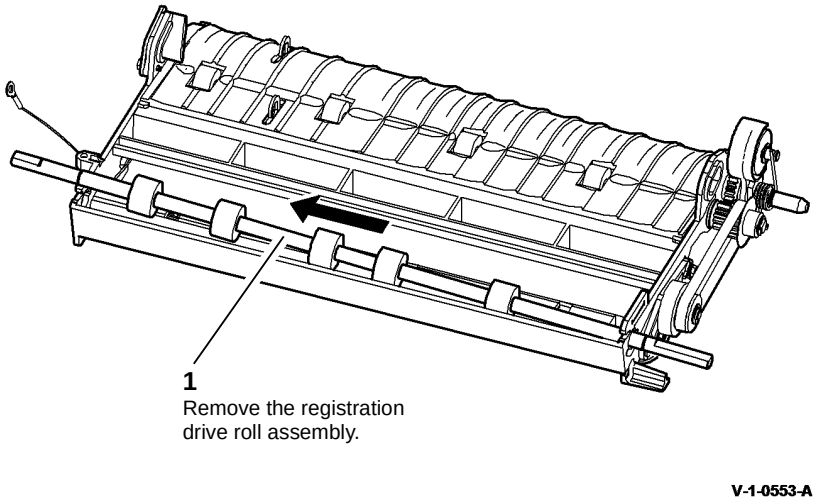


Figure 4 Drive roll removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure that the ground strap is located between the frame and the bearing. Figure 5.

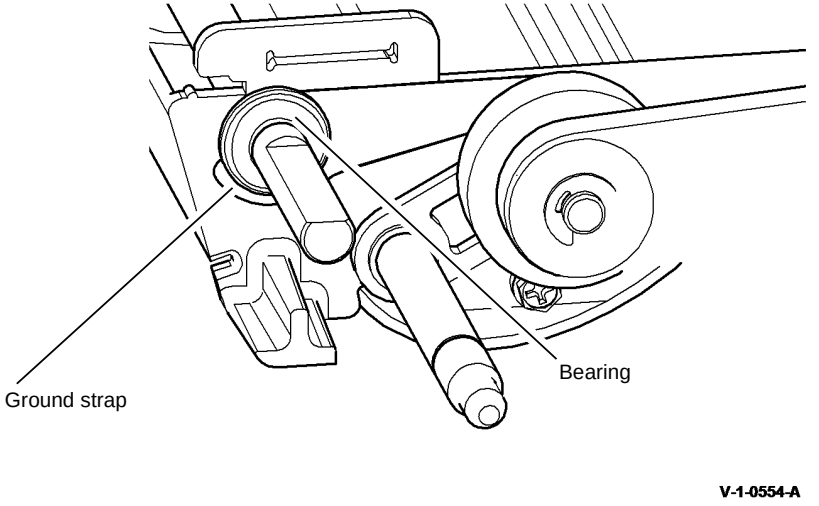


Figure 5 Ground strap location

REP 80.21 Registration Transport Drive Belt

Parts List on PL 80.15

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the registration transport, REP 80.2.
2. Remove the drive belt, Figure 1.

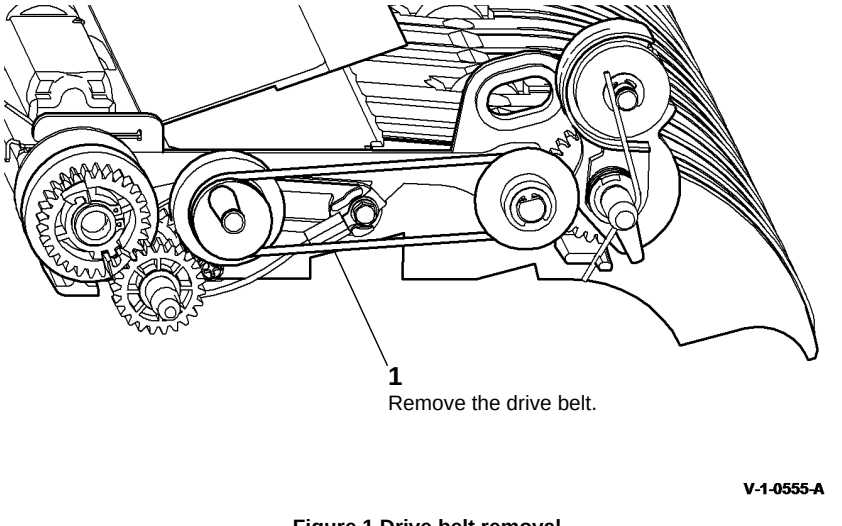


Figure 1 Drive belt removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.22 Duplex Sensor

Parts List on (45-55 ppm) PL 80.22, (65-90 ppm) PL 80.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

WARNING

Take care during this procedure. Motors will become hot during normal operation.

1. Remove the duplex transport, REP 80.5.

   NOTE: *The duct on the duplex transport is only on the 65-90 ppm machine.*

2. Identify the speed of the machine and perform the relevant procedure:
   a. **(45-55 ppm)**. Remove the duplex sensor, Figure 1.

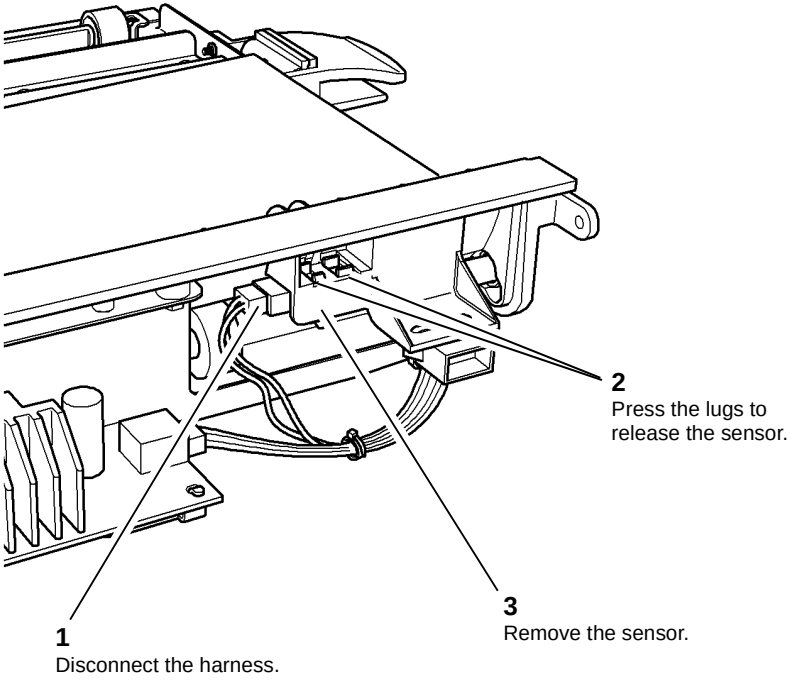


Figure 1 Duplex sensor (45-55 ppm)

b. **(65-90 ppm)**. Remove the duct from the duplex transport. Remove the duplex sensor, Figure 2.

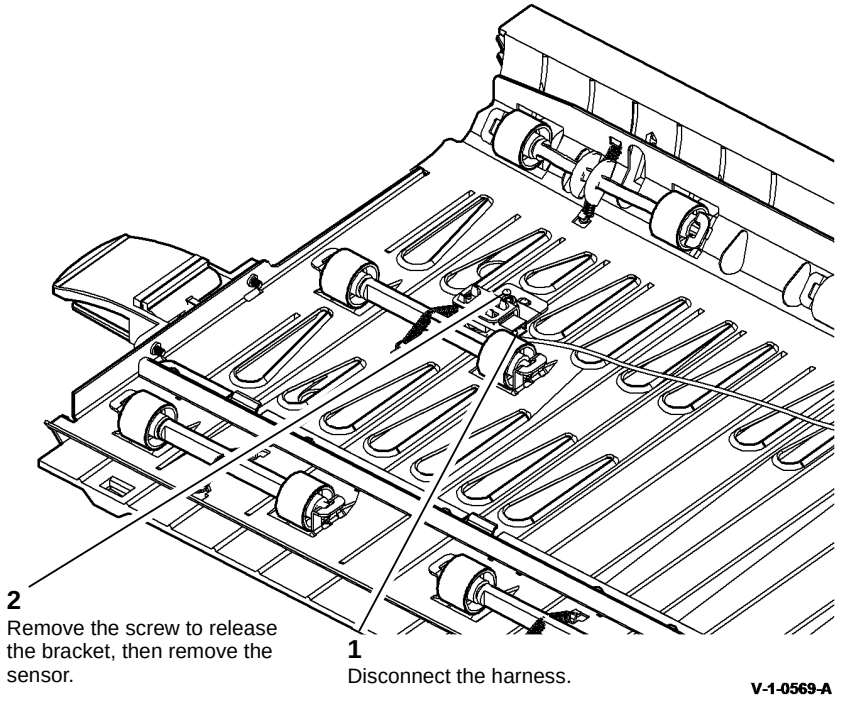


Figure 2 Duplex sensor (65-90 ppm)

Replacement

1. The replacement is the reverse of the removal procedure.
2. **(65-90 ppm)**. Check that the tension spring is located correctly on the upper transport guide. Install the duct on the duplex transport. Check that the sensor wires pass through the cut-out in the duct and are not caught under the duct. Figure 3.

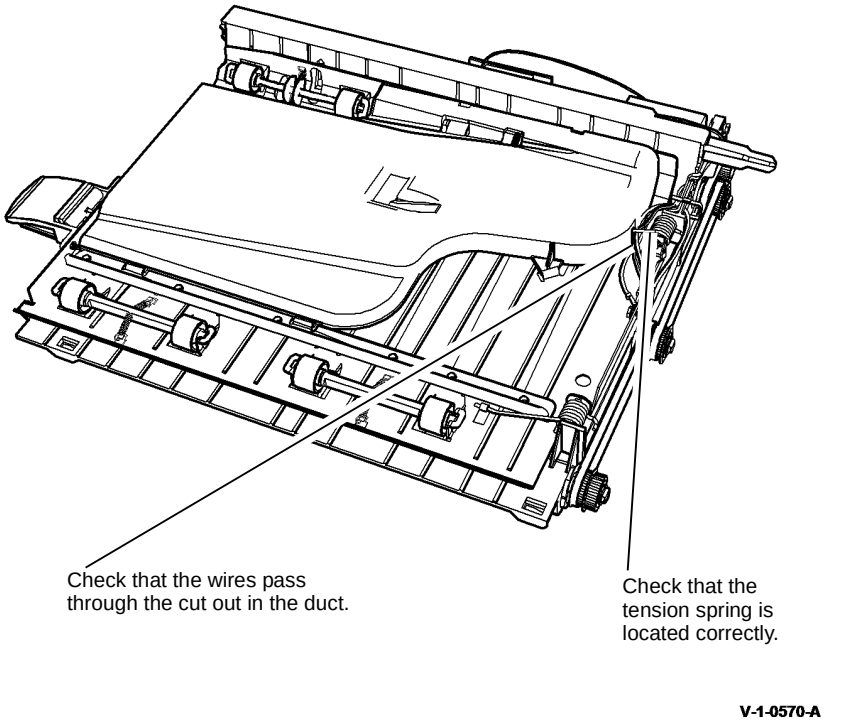


Figure 3 Duplex transport duct

REP 80.23 Tray 6 Transport Drive Belt

Parts List on PL 80.40

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Prepare to remove the drive belt, Figure 1.

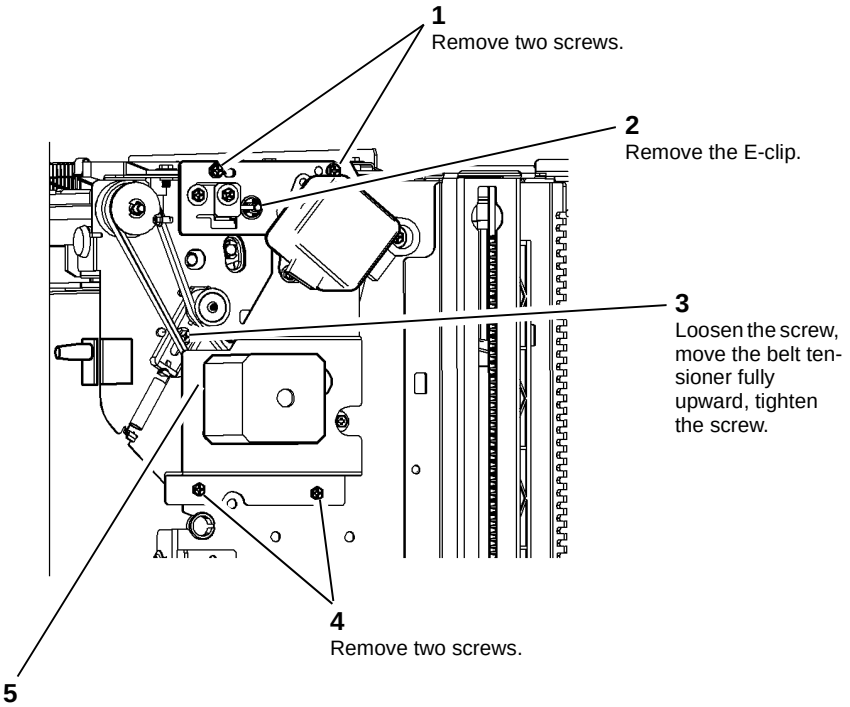


Figure 1 Preparation

3. Remove the transport drive belt, Figure 2.

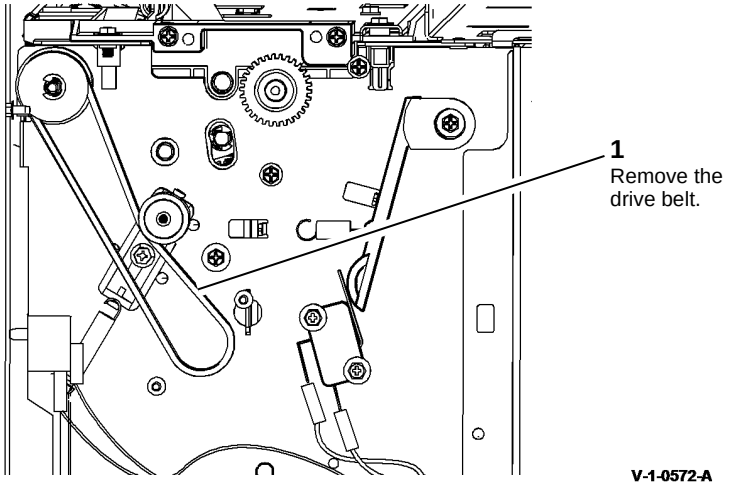


Figure 2 Drive belt removal

Replacement

1. Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Allow the tension idler to tension the belt and then tighten the screw, Figure 1.

REP 80.24 Tray 6 Feed Rolls

Parts List on PL 80.45

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the tray 6 door and allow the tray to move down.
2. Remove the nudger and the feed roll from the front. Slide the tray 6 module away from the machine then remove the retard roll, Figure 1.

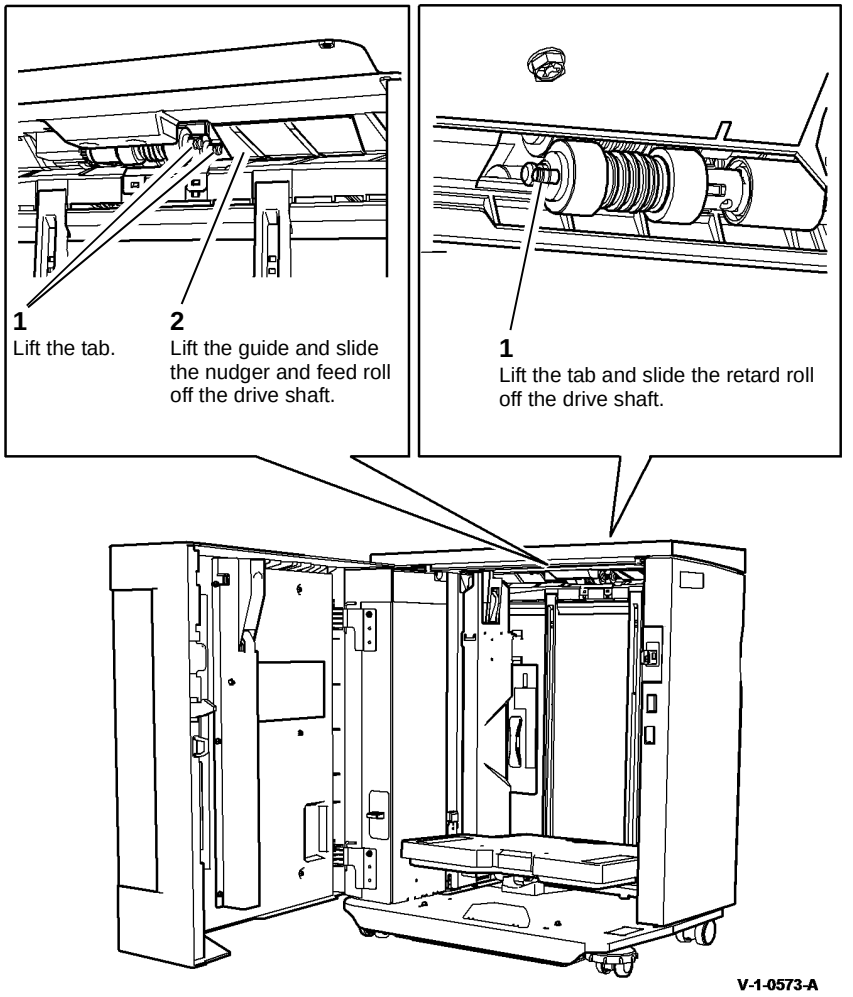


Figure 1 Feed rolls removal

Replacement

NOTE: *If new rolls are required, install the feed roll retrofit kit, PL 80.45 Item 21.*

1. The replacement is the reverse of the removal procedure.
2. Ensure that the tabs on the feed roll are located in the drive shaft.
3. Check the registration, refer to dC604 Registration Setup Procedure.
4. If a new nudger, feed and retard roll are installed, reset the tray 6 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.25 Tray 1 and Tray 2 Feed Rolls

Parts List on PL 80.26

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove tray 1 or tray 2 as required, REP 80.1.
2. Remove tray 1 or tray 2 feed rolls, Figure 1.

NOTE: *The removal procedure is the same for tray 1 and tray 2. The feed and nudger rolls are the same diameter but the retard roll has a larger diameter.*

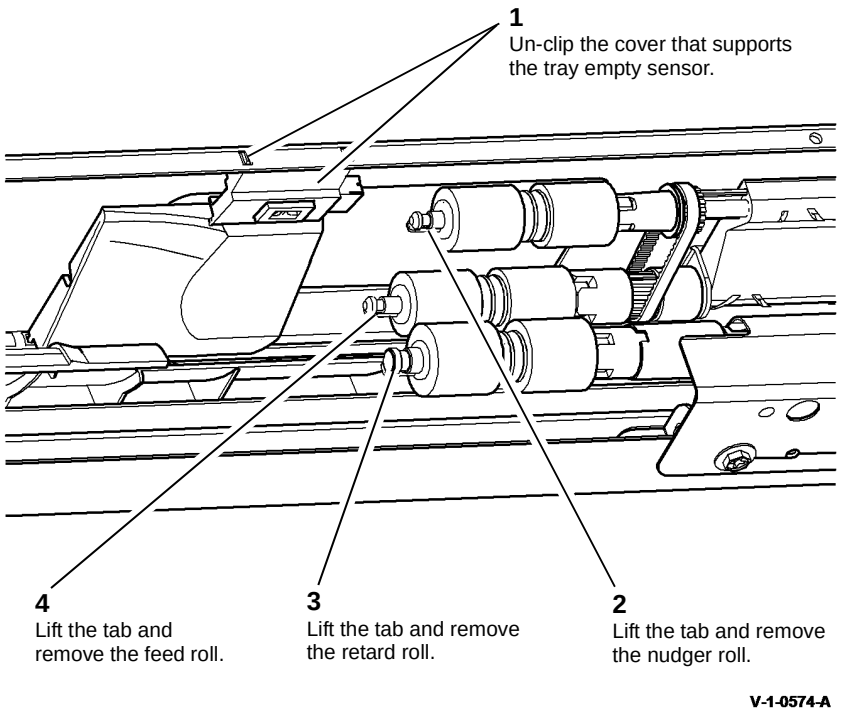


Figure 1 Feed rolls removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Make sure that the tabs on the feed roll are located in the drive shaft.
3. Check that the tray empty sensor is located in the cover and that the cover is located correctly and secure on the feeder frame.
4. Check the registration, refer to dC604 Registration Setup Procedure.
5. When new feed rolls are installed, reset the tray 1 or tray 2 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.26 Tray 6 Feed Motor

Parts List on PL 80.40

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Remove tray 6 feed motor, Figure 1.

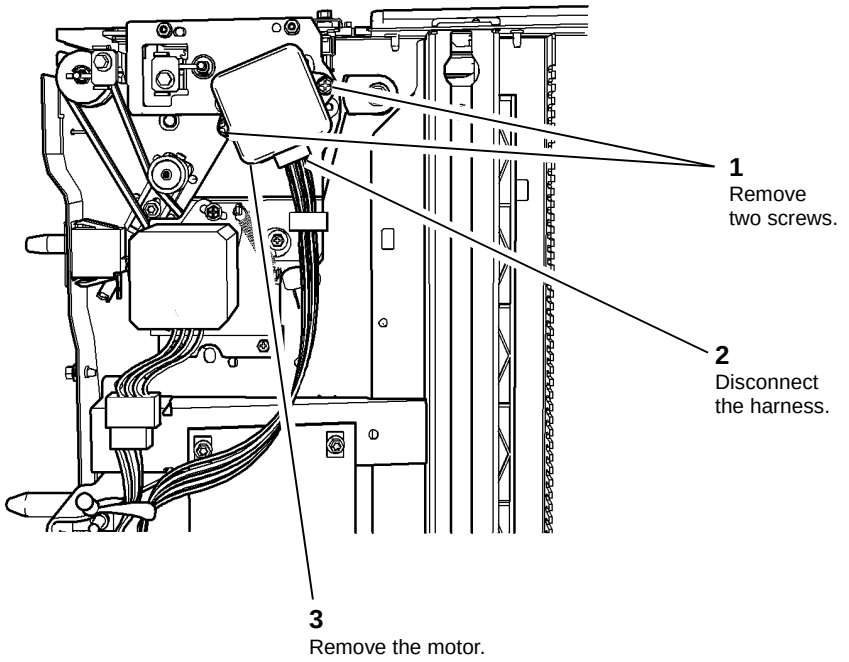


Figure 1 Feed motor removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 80.27 Tray 6 Transport Motor

Parts List on PL 80.40

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Remove the drives plate, Figure 1.

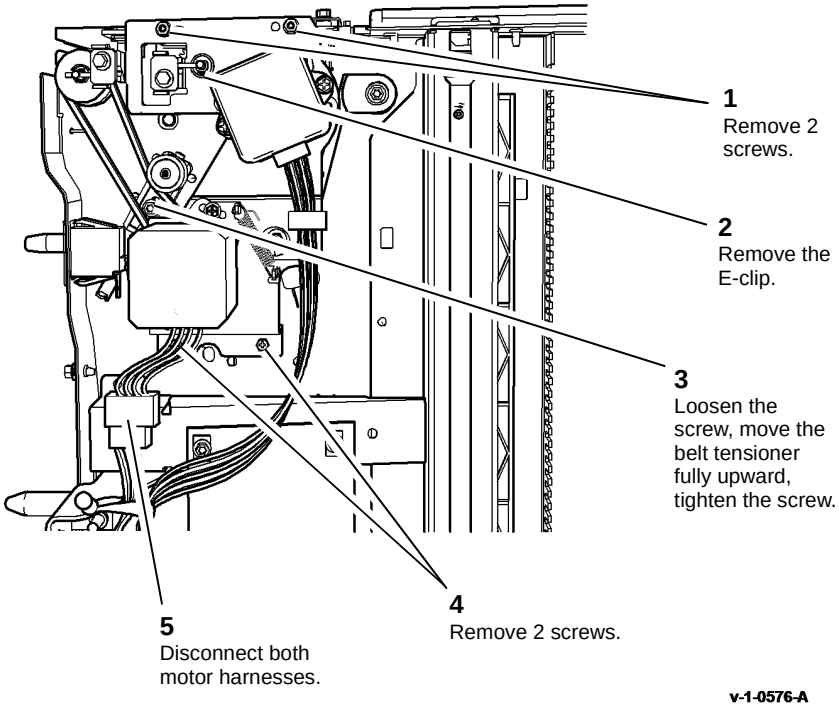


Figure 1 Drives plate removal

3. Remove the tray 6 transport motor, Figure 2.

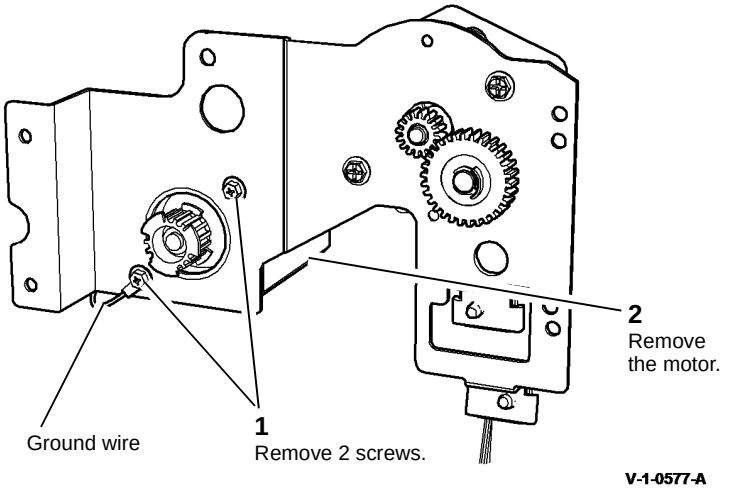


Figure 2 Transport motor removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Ensure that the ground wire terminal is located under the motor securing screw, Figure 2.

REP 80.28 Tray 6 Takeaway Roller

Parts List on PL 80.47

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.60 Item 9.
2. Remove the top cover, PL 70.60 Item 10.
3. Remove the transport drive belt, REP 80.23.
4. Prepare to remove the lower feed assembly, Figure 1.

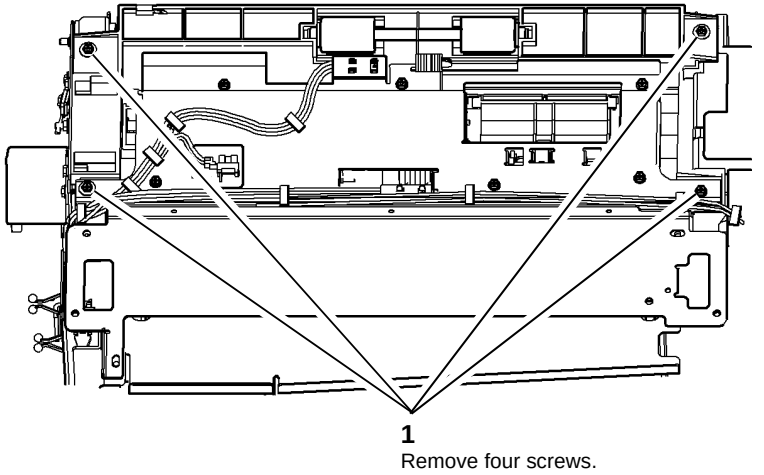


Figure 1 Preparation

5. Loosen the retard shield, PL 80.47 Item 13 retaining nut, refer to ADJ 70.5, Figure 6.
6. Remove the lower feed assembly, Figure 2.

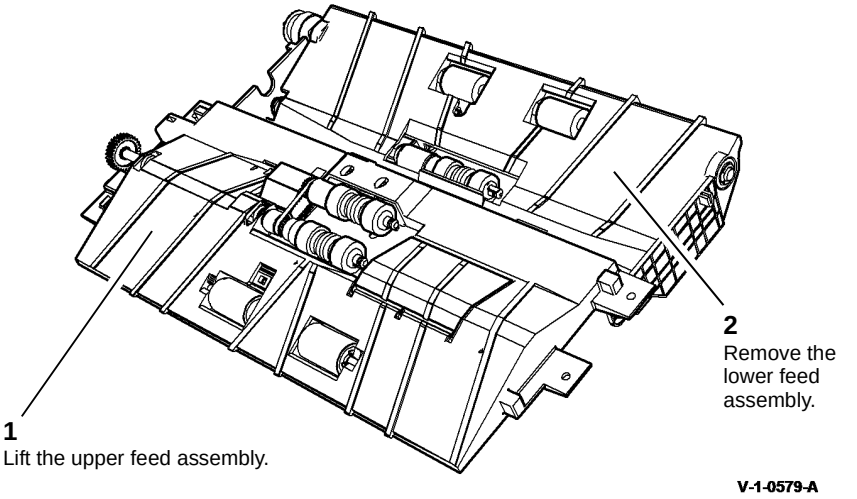


Figure 2 Lower feed removal

7. Remove components, Figure 3.

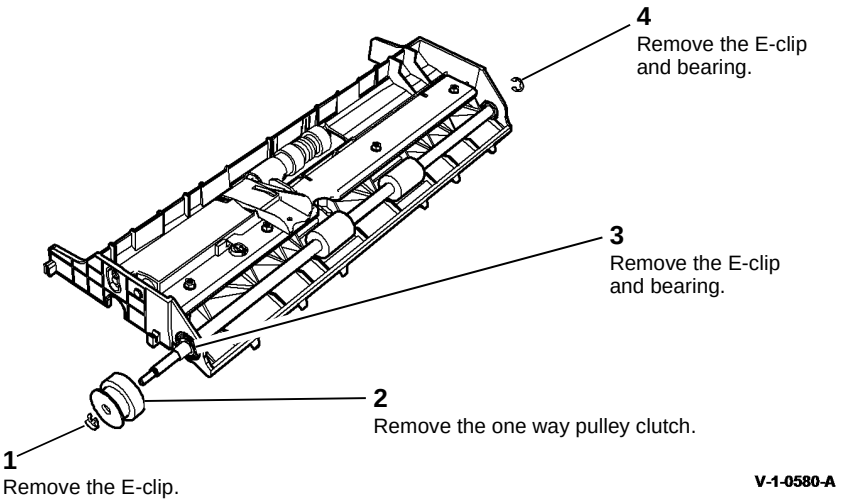


Figure 3 Components removal

8. Remove the takeaway roller, Figure 4.

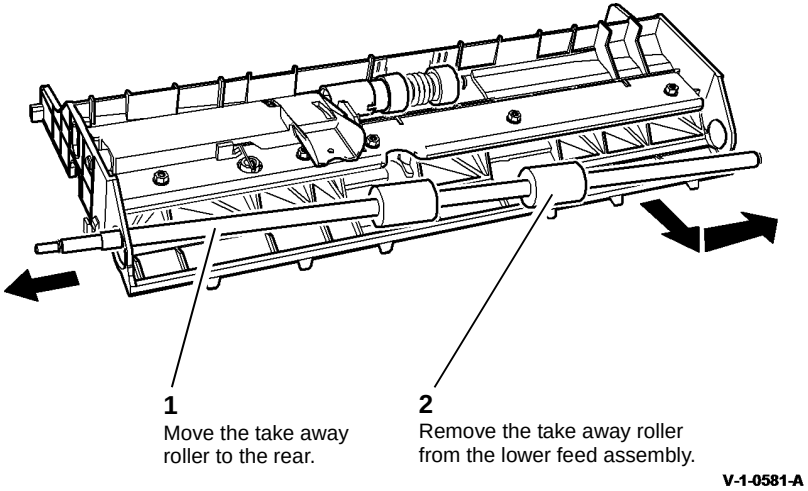


Figure 4 Takeaway roller removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
2. Check that the cable routing is correct, Figure 1.
3. Perform ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield.

REP 80.29 Tray 1 and Tray 2 Retard Roll Friction Clutch

Parts List on PL 80.26

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the retard roll, REP 80.25.
2. Remove the clutch coupling, PL 80.26 Item 13.
3. Remove the friction clutch, PL 80.26 Item 2.

Replacement

1. The replacement is the reverse of the removal procedure.

REP 80.30 Tray 3 Paper Feed Assembly

Parts List on PL 80.32

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Pull out tray 3.
2. Remove the rear cover, PL 70.26 Item 1.
3. Remove the paper feed assembly, Figure 1.

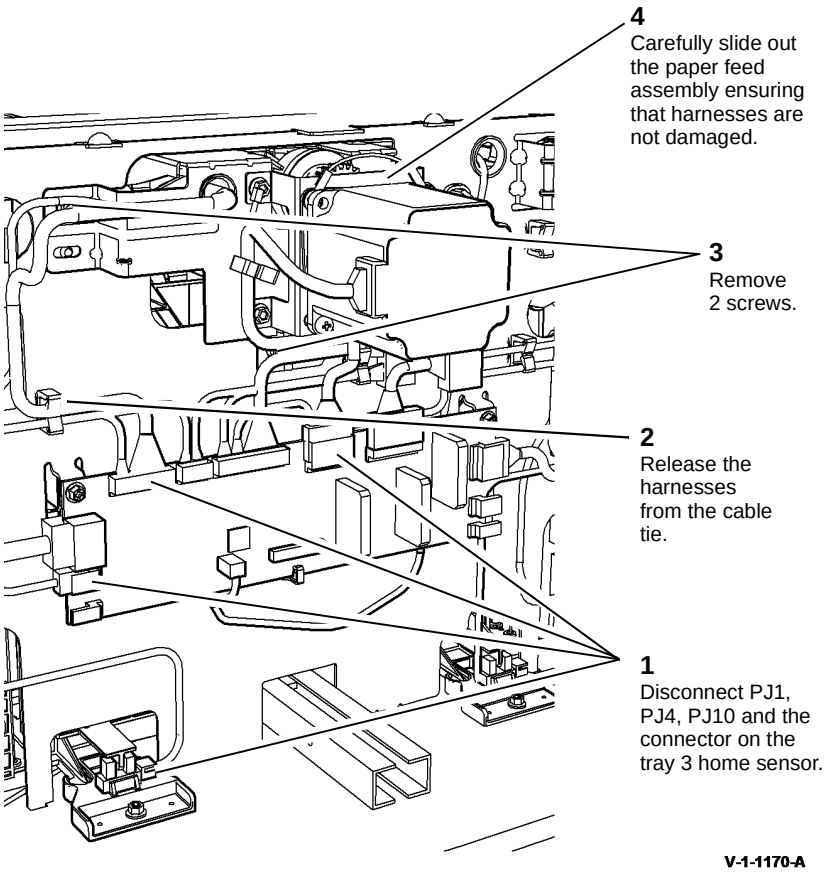


Figure 1 Feed assembly removal

Replacement

1. Ensure the support bracket is present on the tray 3 paper feed assembly, Figure 2.

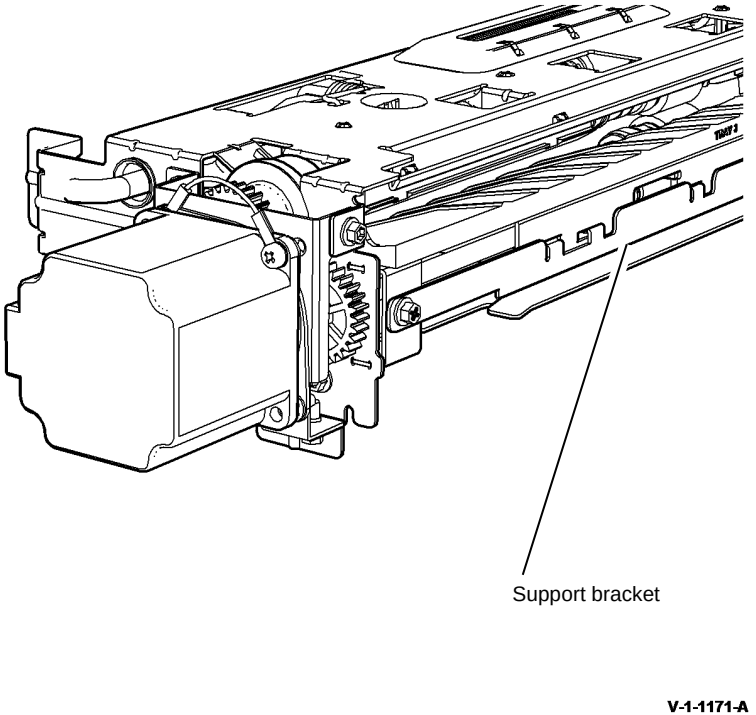


Figure 2 Support bracket

2. Install the paper feed assembly, Figure 3.

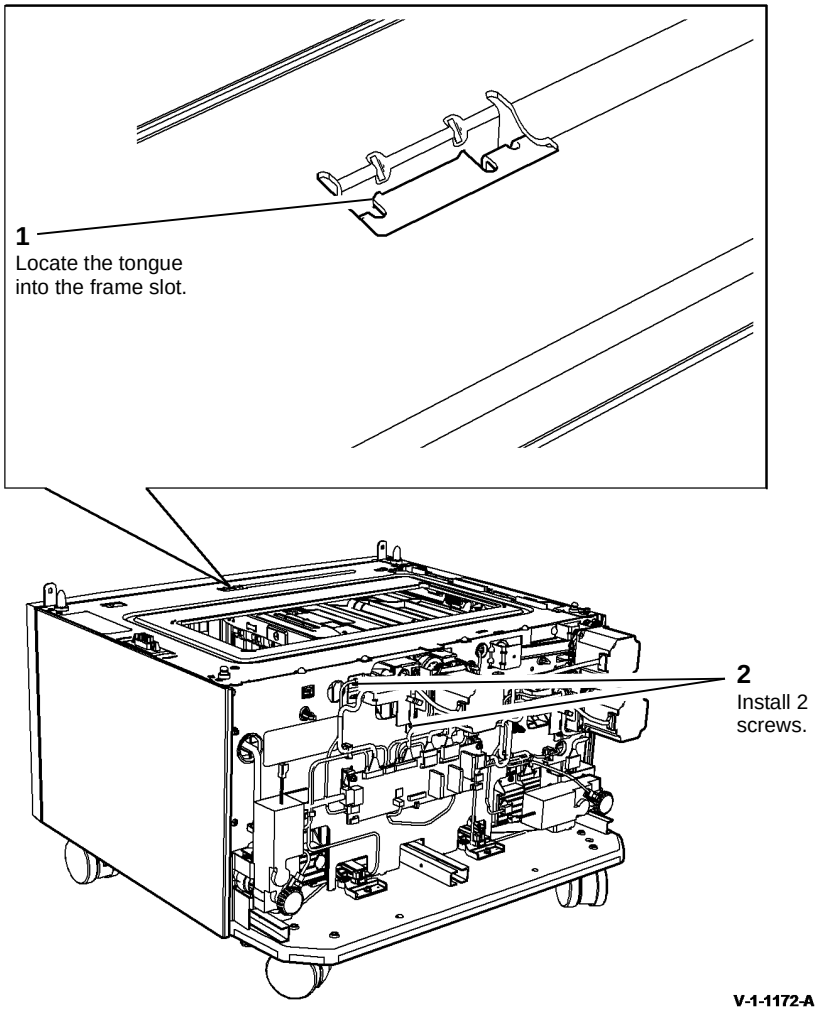


Figure 3 Feed assembly installation

3. Ensure that the tray slide, at the rear right of the tray 3 transport assembly, straddles the support bracket when the paper feed assembly is replaced.
4. Push tray 3 in slowly and check that the tray does not foul the paper feed assembly.
5. Connect the four PJs, refer to Figure 1.
6. The remainder of the replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
7. If a new paper feed assembly has been installed, reset the tray 3 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.31 Tray 4 Paper Feed Assembly

Parts List on PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Pull out tray 4.
2. Remove the rear cover, PL 70.26 Item 1.
3. Remove the paper feed assembly, Figure 1.

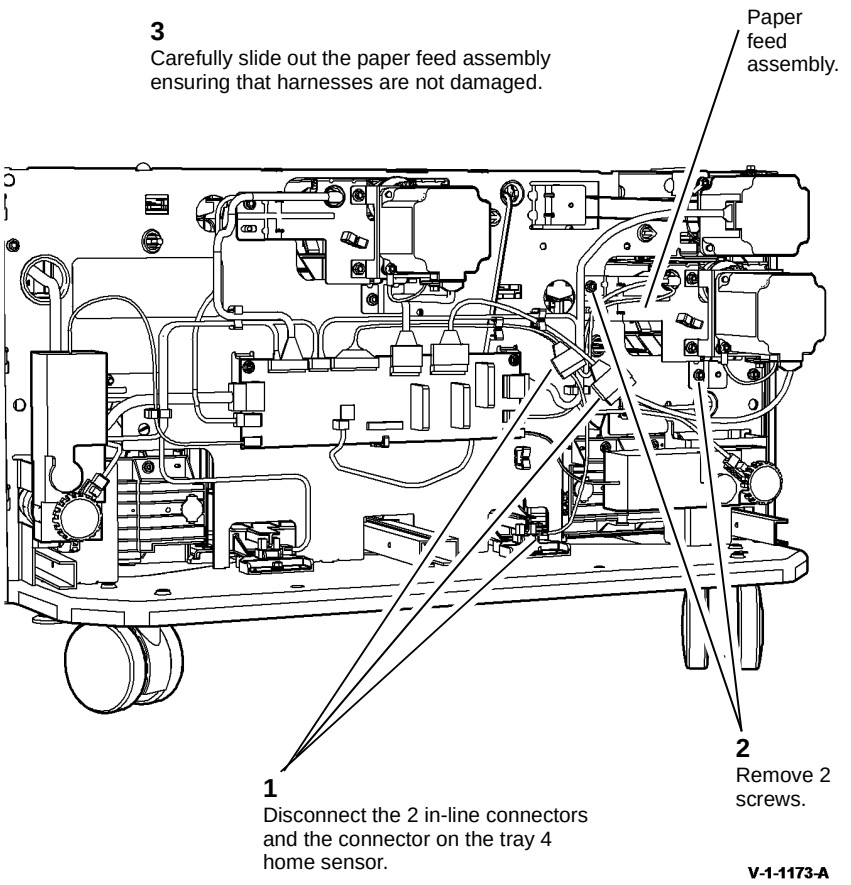


Figure 1 Feed assembly removal

Replacement

NOTE: *New paper feeder assemblies come ready configured for use in tray 3. When a new tray 4 paper feeder is required, follow the steps below.*

1. If a new tray 4 paper feed assembly is being installed, perform steps 2 to 9. If the old tray 4 paper feed assembly is being re-installed, perform steps 5 to 9.

2. Remove the support bracket, Figure 2.

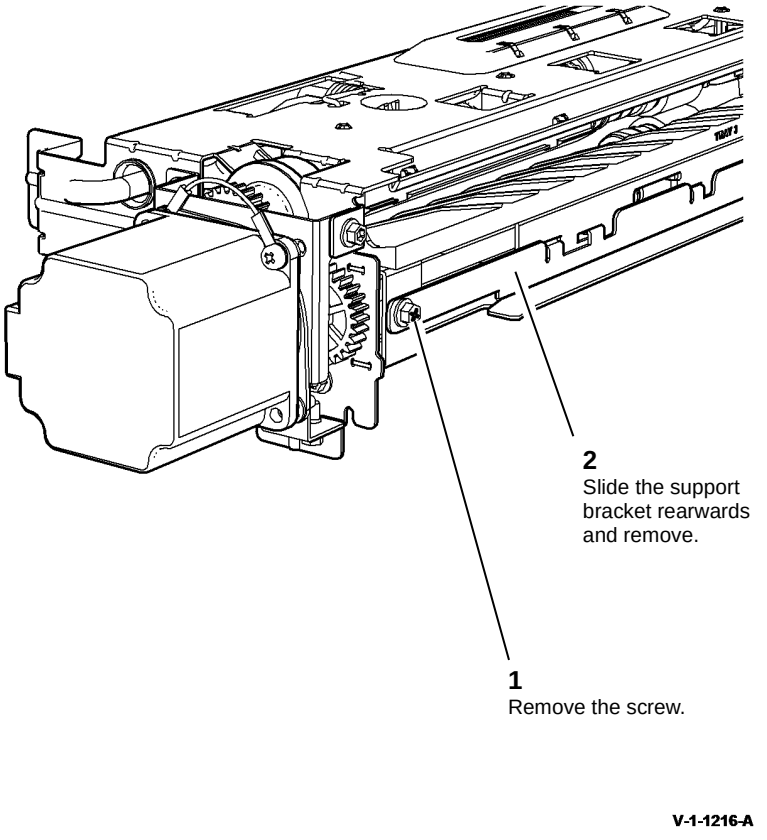


Figure 2 Support bracket removal

3. Remove the tray 3 paper guide, REP 80.45.
4. Install the tray 4 paper guide, REP 80.46.

5. Install the paper feed assembly, Figure 3.

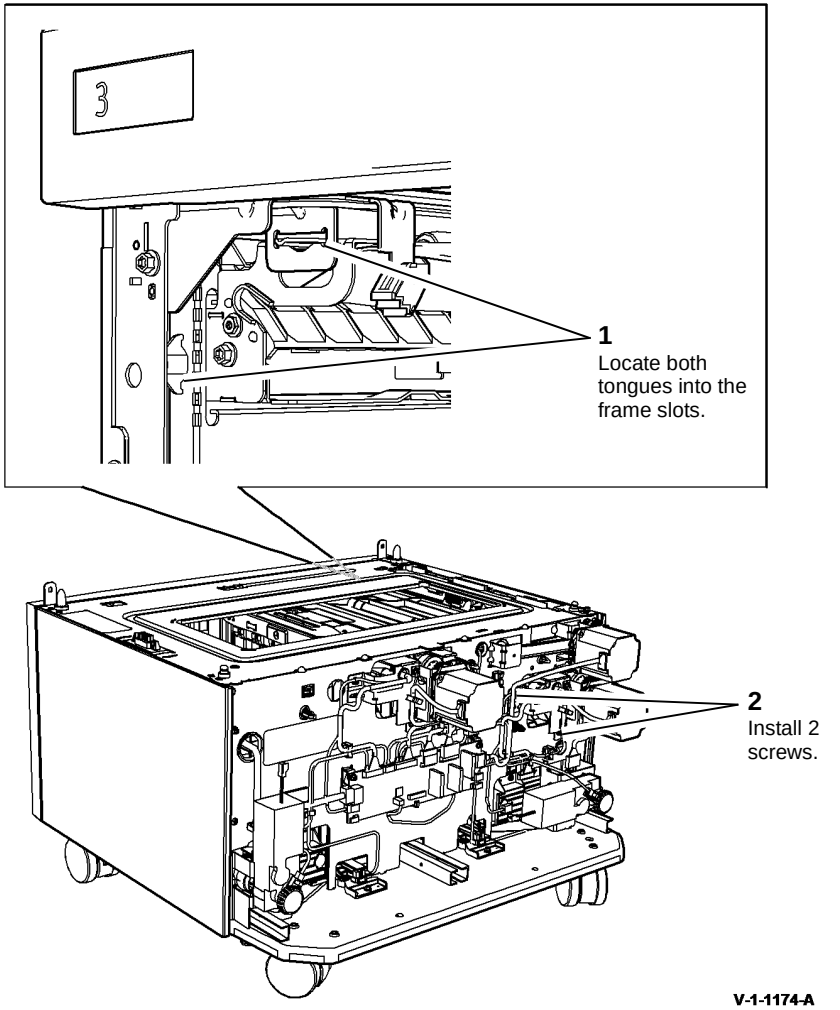


Figure 3 Feed assembly installation

6. Push tray 4 in slowly and check that the tray does not foul the paper feed assembly.
7. Connect the four PJs, refer to Figure 1.
8. The remainder of the replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.
9. If a new paper feed assembly has been installed, reset the tray 4 feed roll HFSI count. Refer to dC135 CRU/HFSI Status.

REP 80.32 HCF Transport Motor

Parts List on PL 80.36

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove HCF rear cover, PL 70.26 Item 1.
2. Remove the HCF transport motor, Figure 1.

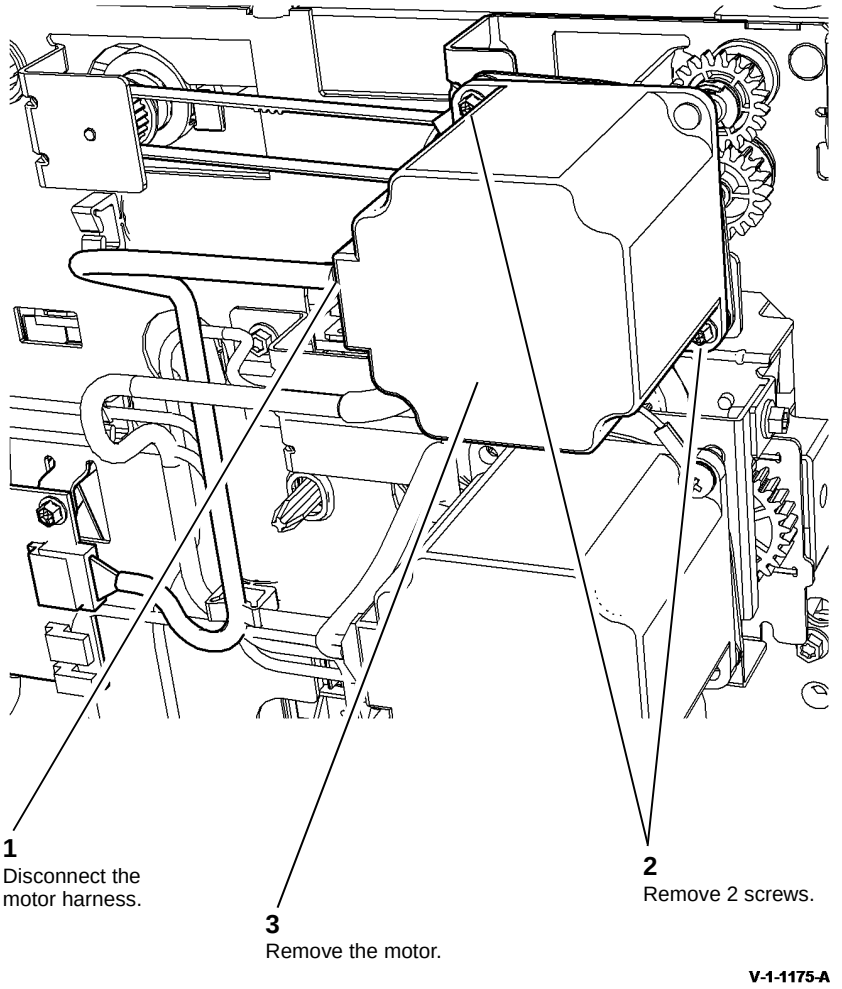


Figure 1 Transport motor removal

Replacement

1. Replacement is the reverse of the removal procedure. Ensure the at the ground wire is installed between the motor and the frame.

REP 80.33 Tray 3 Transport Gear Pulley

Parts List on PL 80.36

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 70.26 Item 1.
2. Remove the HCF transport motor, REP 80.32.
3. Remove the tray 3 transport gear pulley, Figure 1.

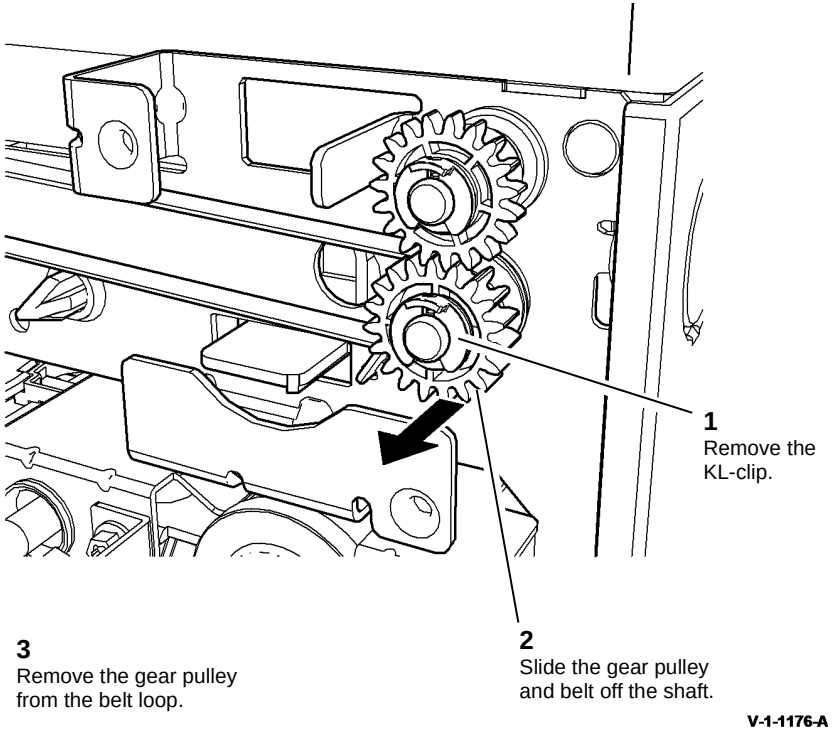


Figure 1 Transport gear removal

Replacement

1. Install the tray 3 and tray 4 transport gear pulley, Figure 2.

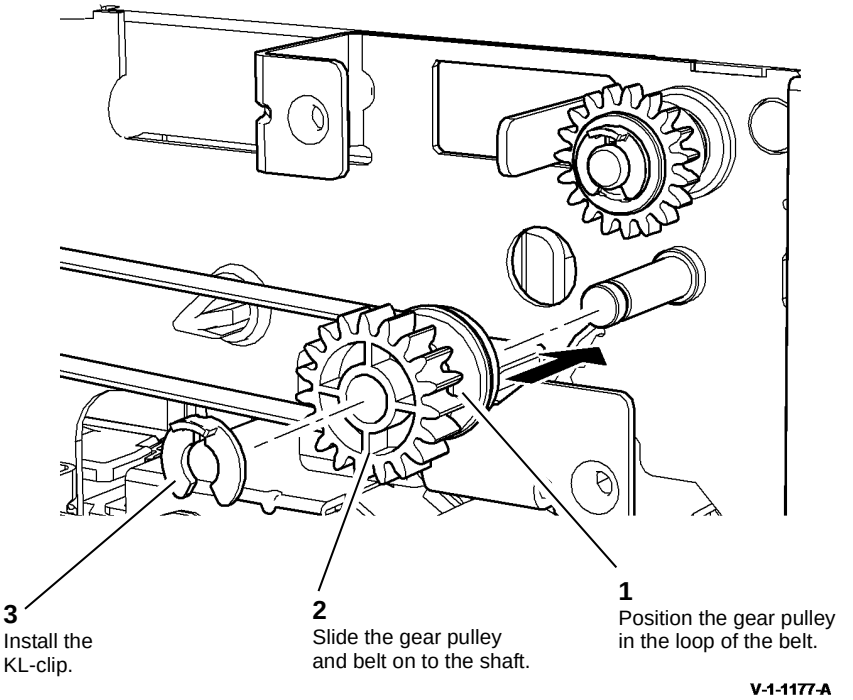


Figure 2 Drive belt installation

2. The remainder of the replacement is the reverse of the removal procedure.

REP 80.34 Tray 3 Transport Assembly

Parts List on PL 80.36

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 3 transport assembly, Figure 1.

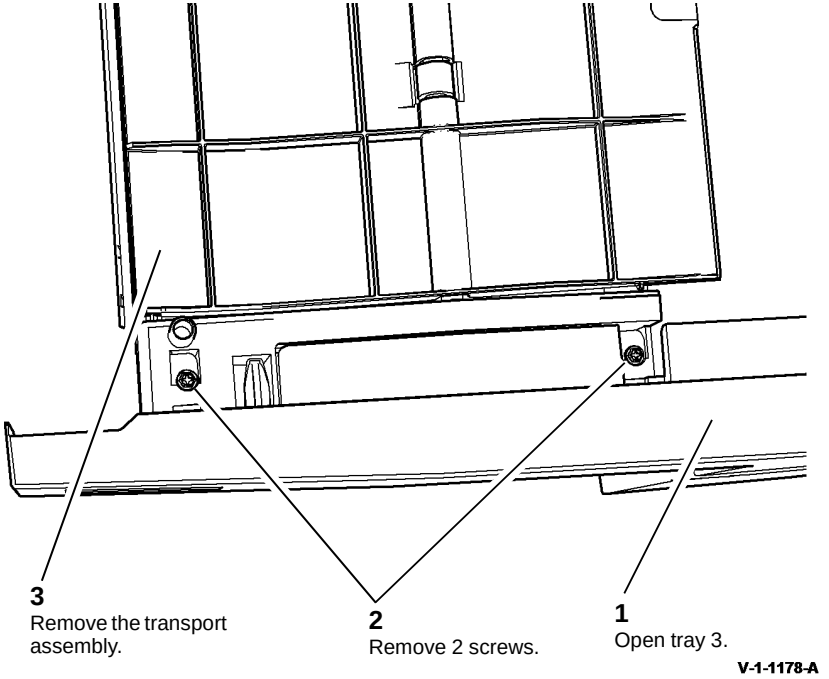


Figure 1 Transport assembly removal

Replacement

1. Ensure that the tray slide at the rear right of the tray straddles the support bracket when the tray is replaced.
2. The remainder of the replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 80.35 Tray 3 Exit Sensor

Parts List on PL 80.32

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 3 assembly and the tray 4 assembly, REP 70.14.
2. Remove the tray 3 exit sensor, Figure 1.

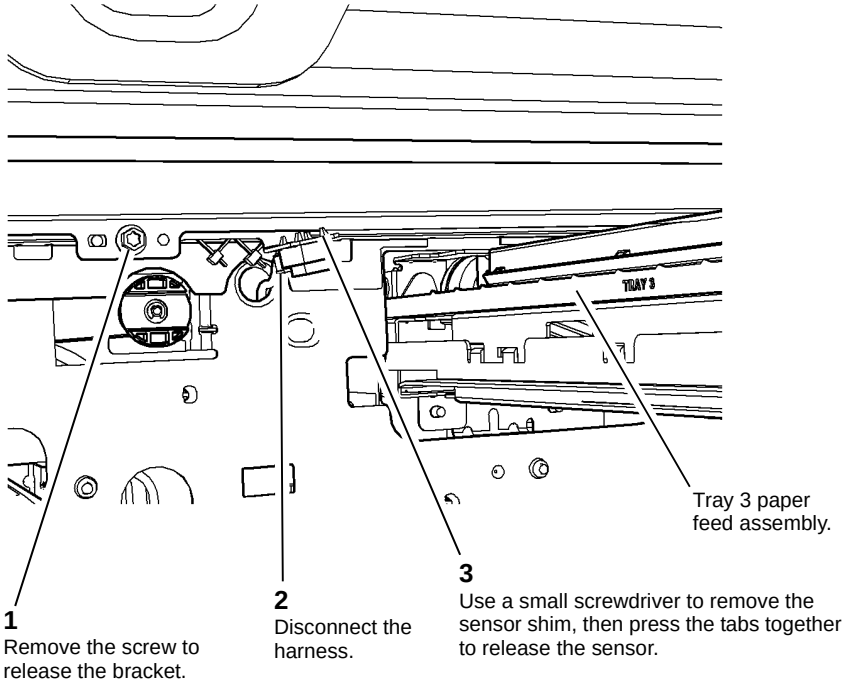


Figure 1 Tray 3 exit sensor removal

Replacement

1. Replacement is the reverse of the removal procedure.
2. Install a new sensor shim to lock the sensor in place.

REP 80.36 Tray 3 Takeaway Roll Assembly

Parts List on PL 80.36

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 3 transport assembly, REP 80.34.
2. Remove the jam clearance door, Figure 1.

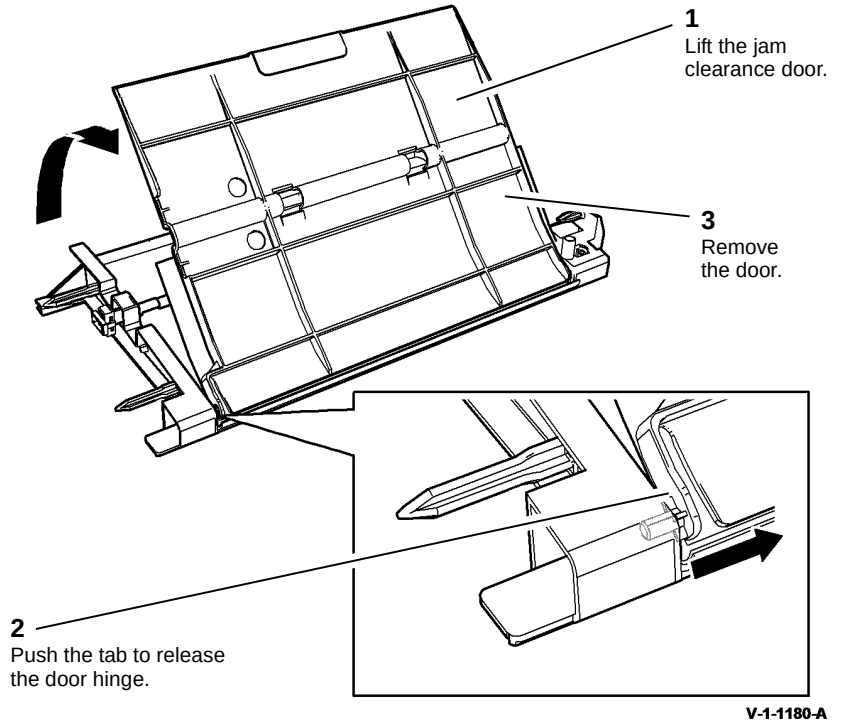


Figure 1 jam clearance door removal

3. Remove the takeaway roll assembly, Figure 2.

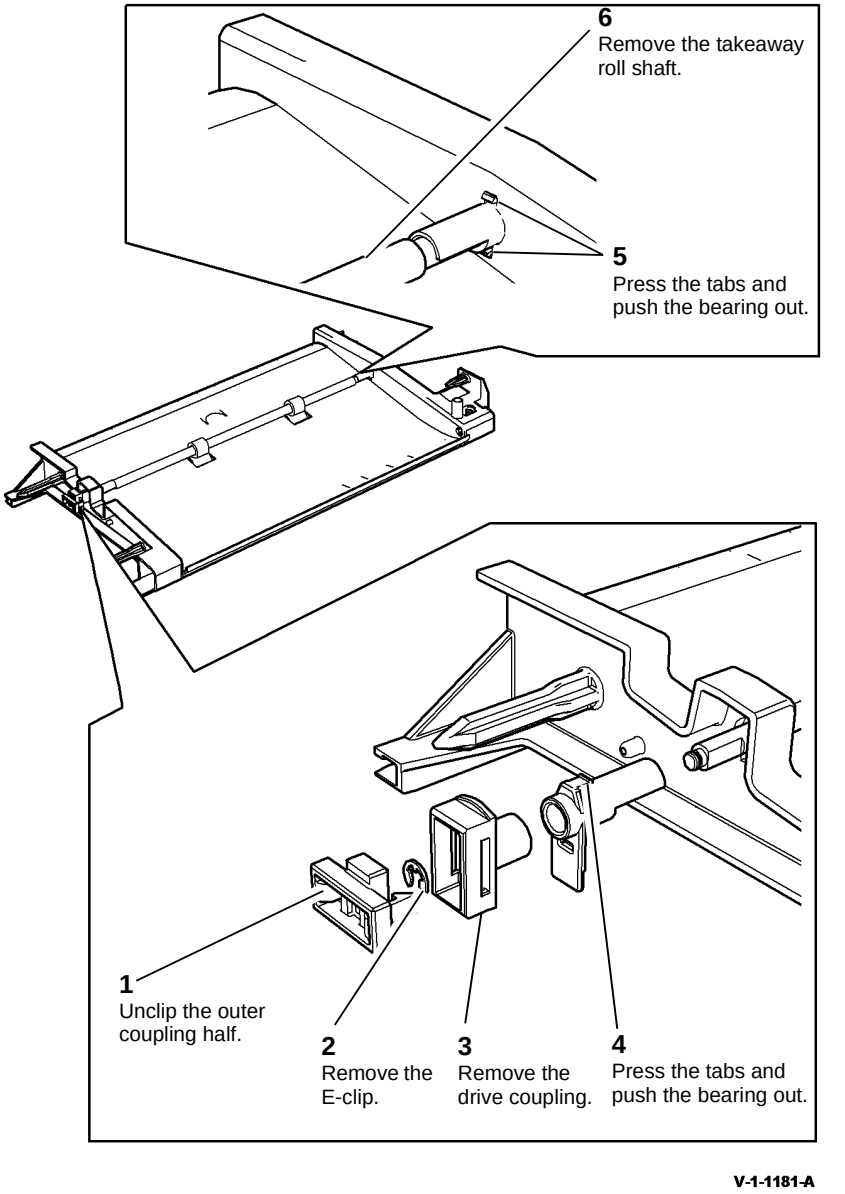


Figure 2 Takeaway roll removal

4. If necessary, remove the tray 3 transport brace, Figure 3, and the idler rolls, Figure 4.

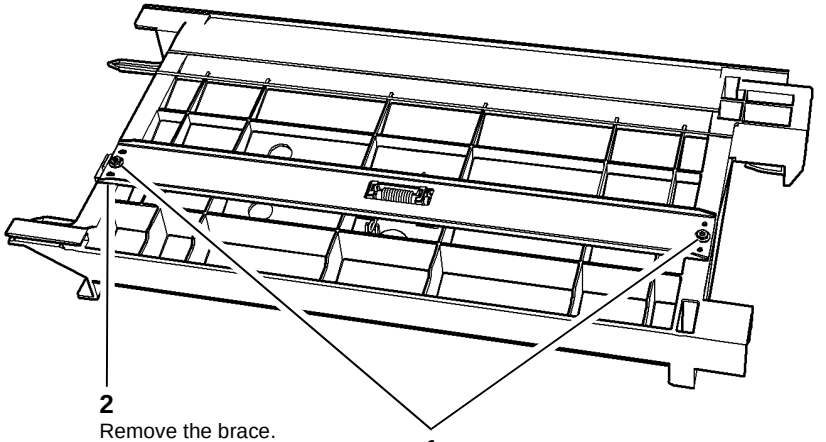


Figure 3 Brace removal

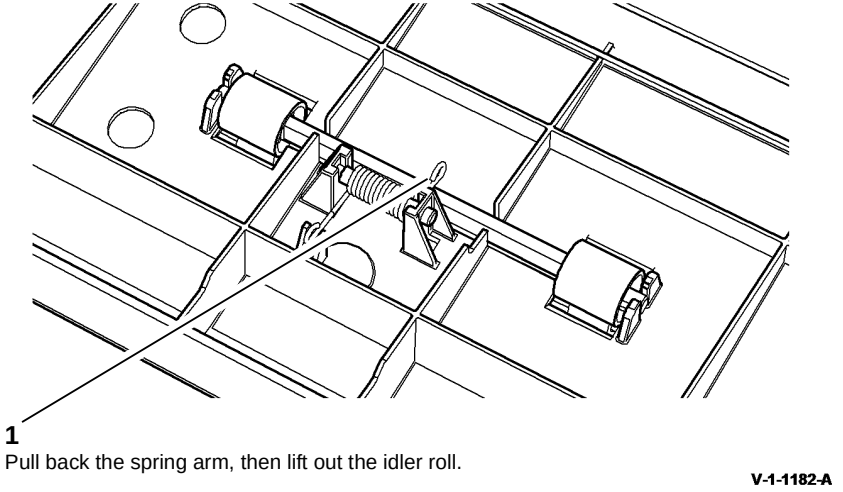


Figure 4 Idler rolls removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.37 Tray 3 and Tray 4 Transport Roll

Parts List on PL 80.32.

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the left cover, PL 70.26 Item 2.
2. Remove the tray 3 and tray 4, REP 70.14.
3. Remove the tray 3 transport assembly. REP 80.34.
4. Remove the idler shaft assembly, Figure 1.

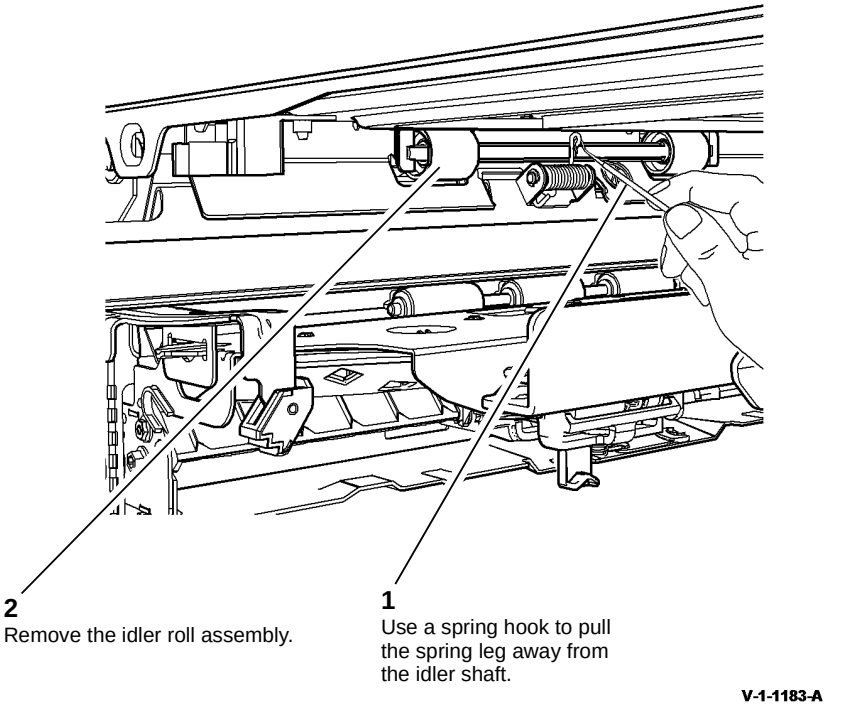


Figure 1 Idler shaft removal

5. Remove the HCF transport motor, REP 80.32.
6. Prepare to remove the tray 3 and tray 4 transport roll, Figure 2.

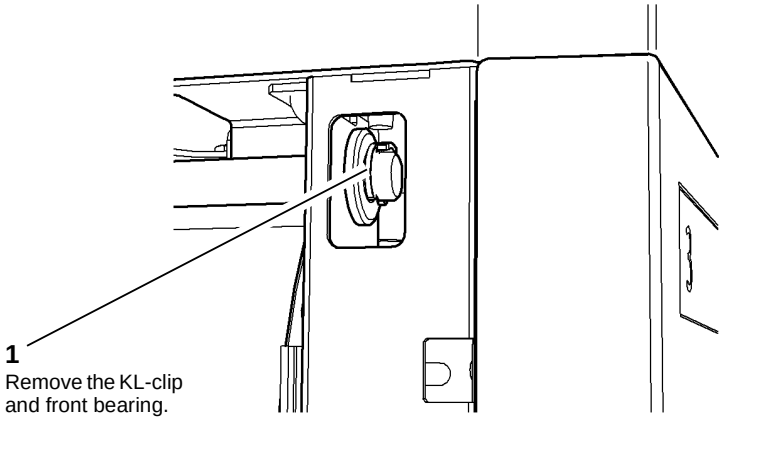


Figure 2 Preparation

7. Remove the tray 3 and tray 4 transport roll, Figure 3.

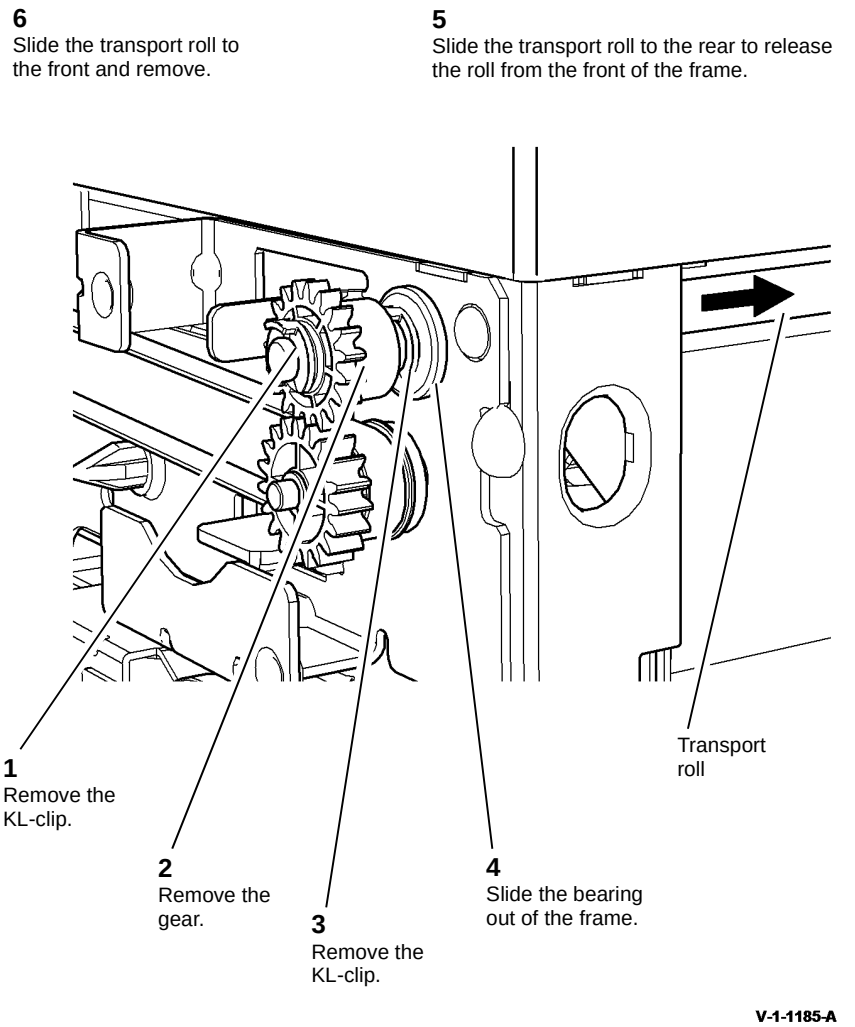


Figure 3 Transport roll removal

Replacement

CAUTION

When installing the gear on the shaft, take care not to damage the one-way clutch in the centre of the gear. Before tightening the motor screws, adjust the position of the motor so that there is a very small amount of backlash between the gears.

1. The replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

REP 80.38 Not Used

Removal

REP 80.39 Tray 3 Empty Sensor

Parts List on PL 80.32

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 3 paper feed assembly, REP 80.30.
2. Release the sensor mounting, Figure 1.

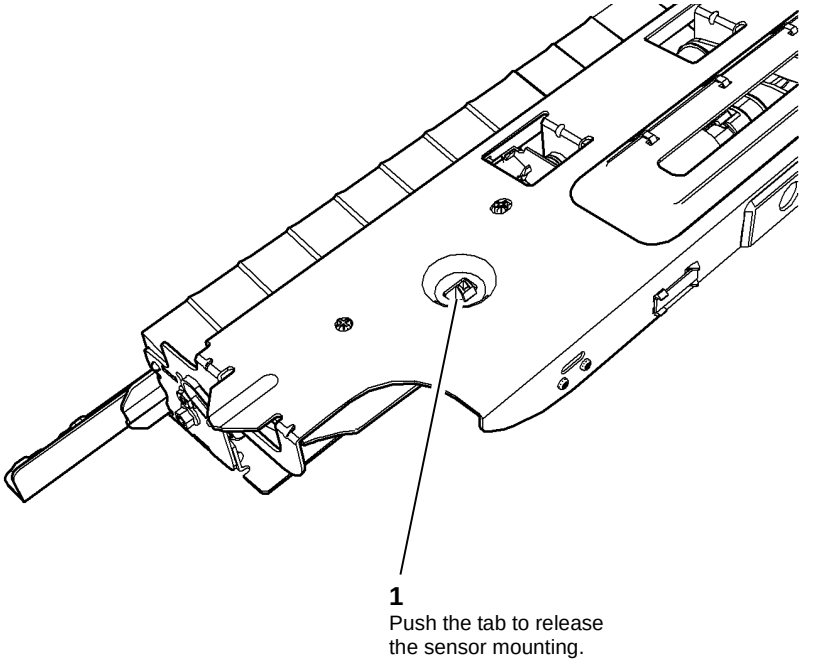


Figure 1 Sensor mounting release

3. Remove the tray 3 empty sensor, Figure 2.

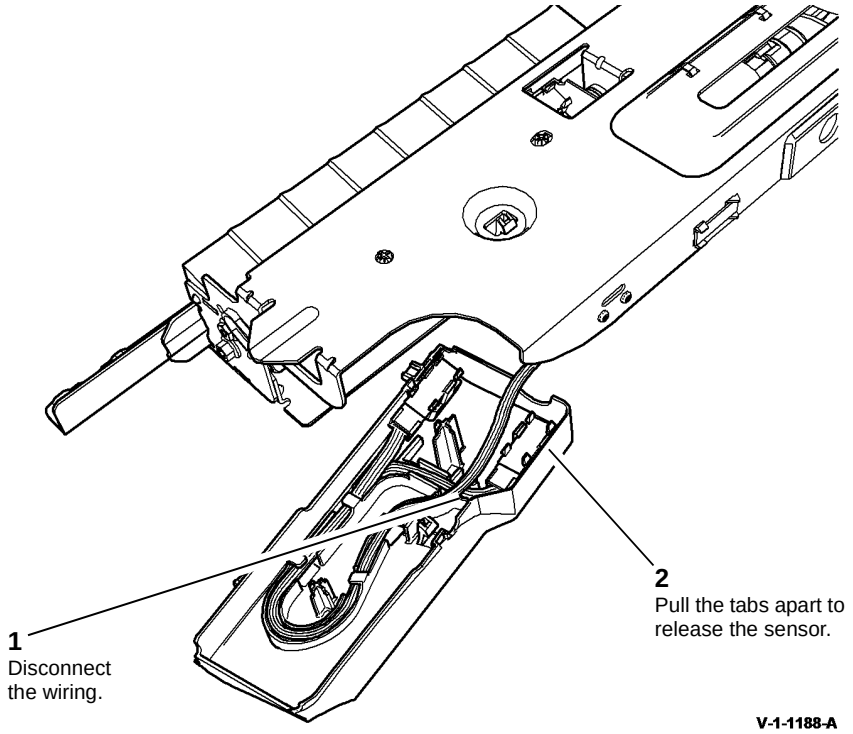


Figure 2 Sensor removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.40 Tray 3 Feed Sensor

Parts List on PL 80.32

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 3 paper feed assembly, REP 80.30.
2. Release the sensor mounting, Figure 1.

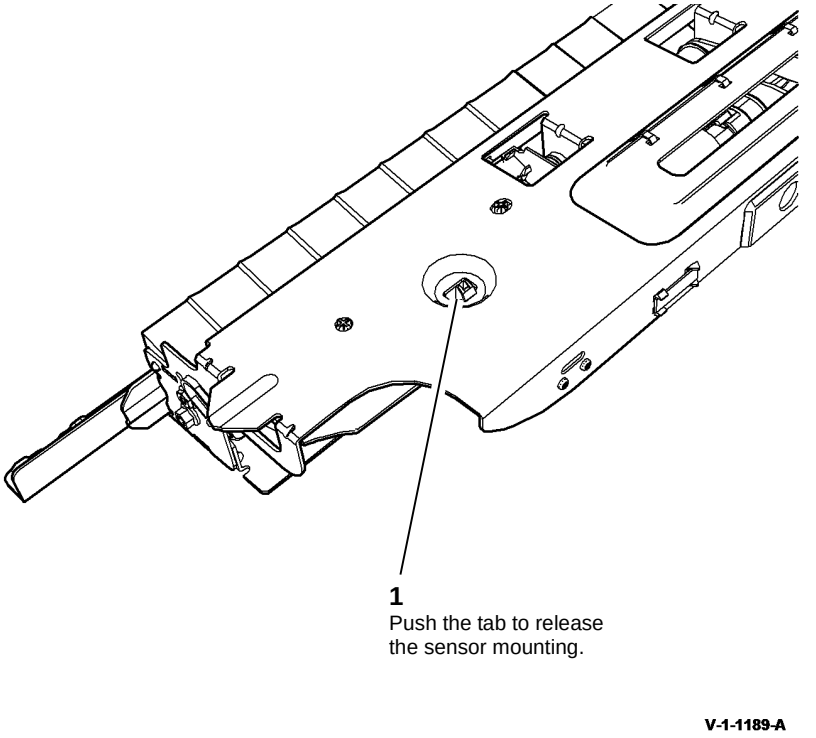


Figure 1 Sensor mounting release

3. Remove the tray 3 feed sensor, Figure 2.

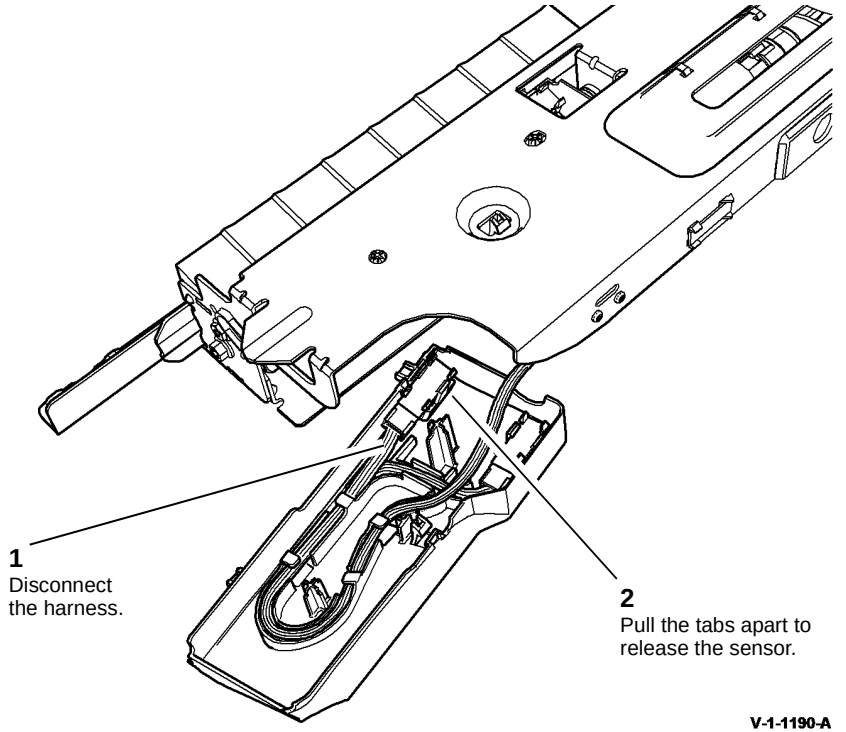


Figure 2 Sensor removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.41 Not Used

Removal

REP 80.42 Tray 4 Empty Sensor

Parts List on PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 4 paper feed assembly, REP 80.31.
2. Release the sensor mounting, Figure 1.

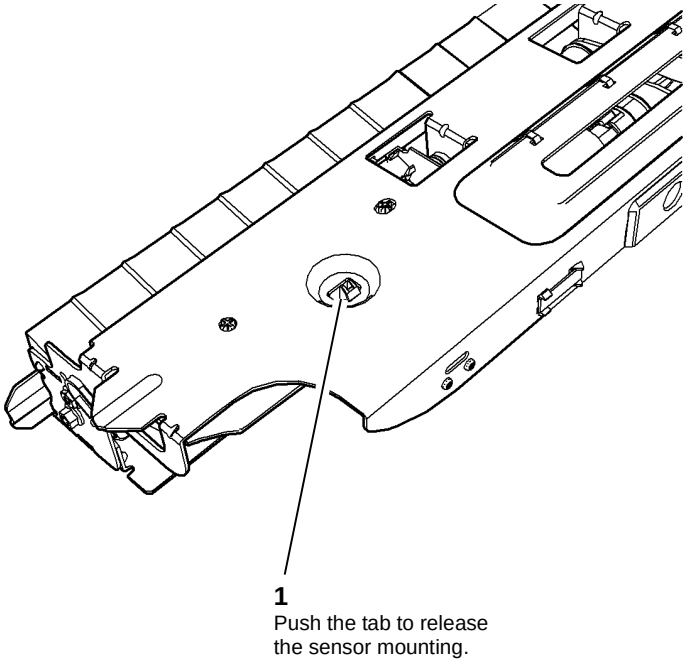


Figure 1 Sensor mounting release

3. Remove the tray 4 empty sensor, Figure 2.

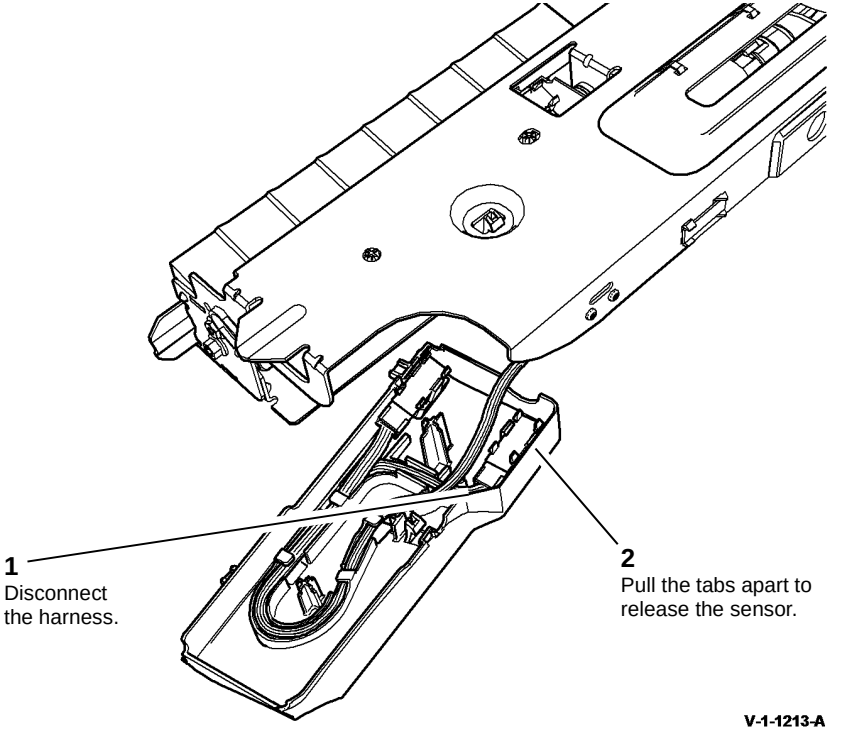


Figure 2 Sensor removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.43 Tray 4 Feed Sensor

Parts List on PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the tray 4 paper feed assembly, REP 80.31.
2. Release the sensor mounting, Figure 1.

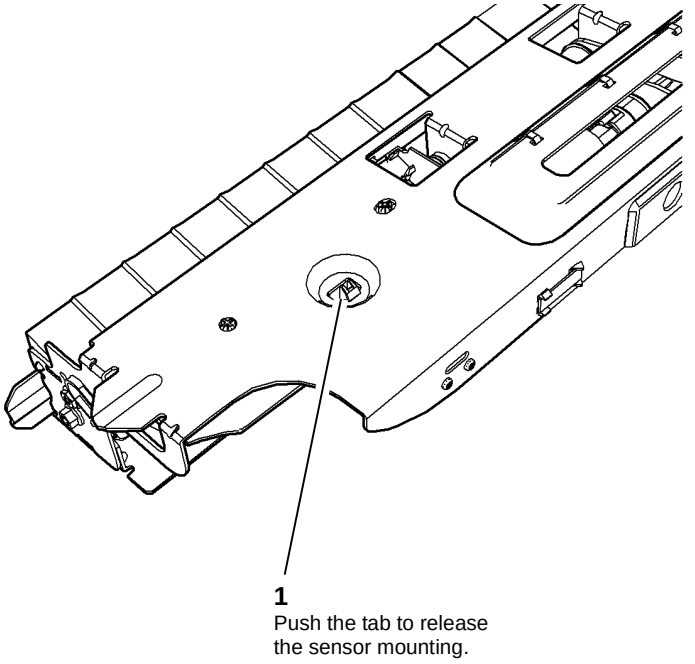


Figure 1 Sensor mounting release

3. Remove the tray 4 feed sensor, Figure 2.

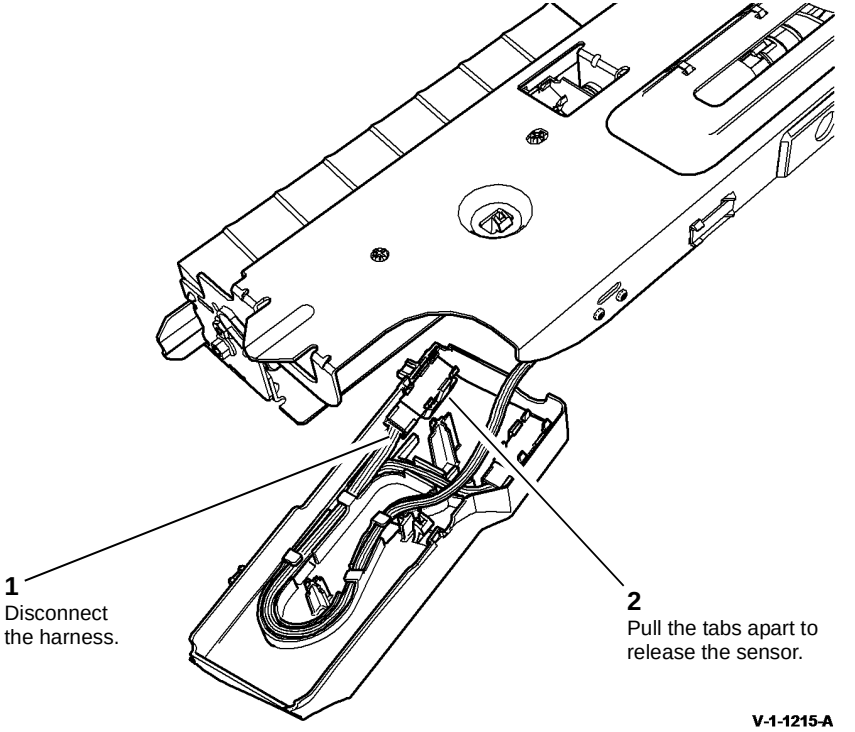


Figure 2 Sensor removal

Replacement

Replacement is the reverse of the removal procedure.

REP 80.44 Tray 3 and Tray 4 Feed Assembly Feed Rolls

Parts List on PL 80.32, PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

NOTE: *This procedure illustrates a tray 3 feed assembly. The procedure for the tray 4 feed assembly is identical.*

1. Remove the relevant paper feed assembly:
   - Tray 3 paper feed assembly, REP 80.30
   - Tray 4 paper feed assembly, REP 80.31
2. Turn the paper feed assembly upside down and place on a flat work surface.
3. Remove the tray 3 feed motor with the bracket, Figure 1.

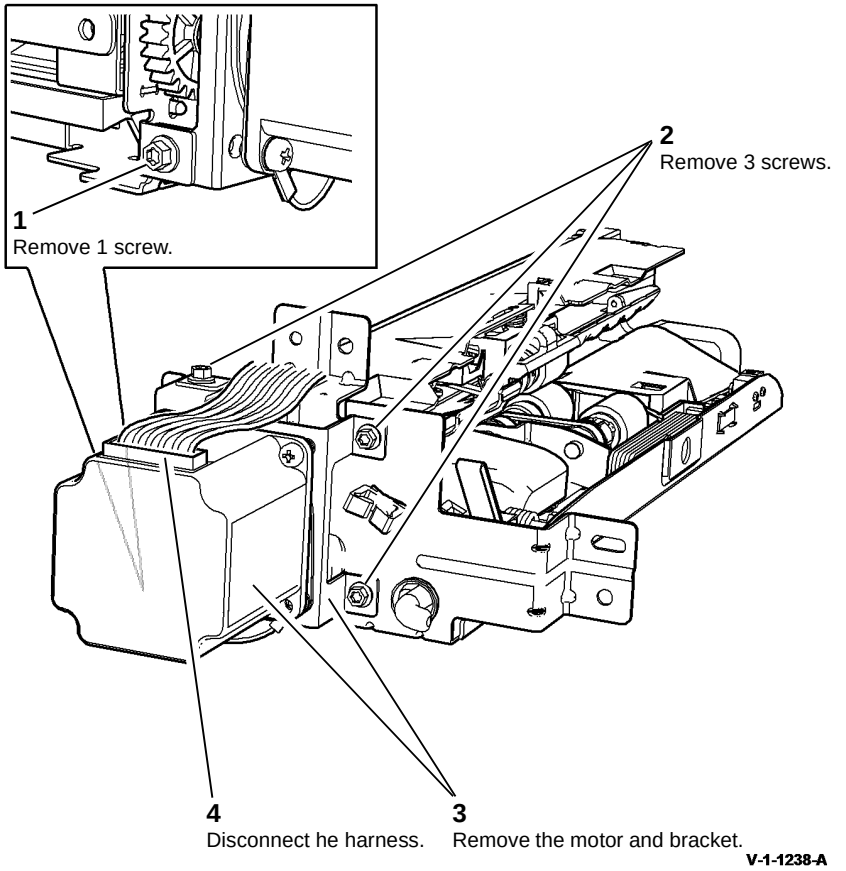


Figure 1 Motor and bracket removal

4. Release the rear fixings, Figure 2.

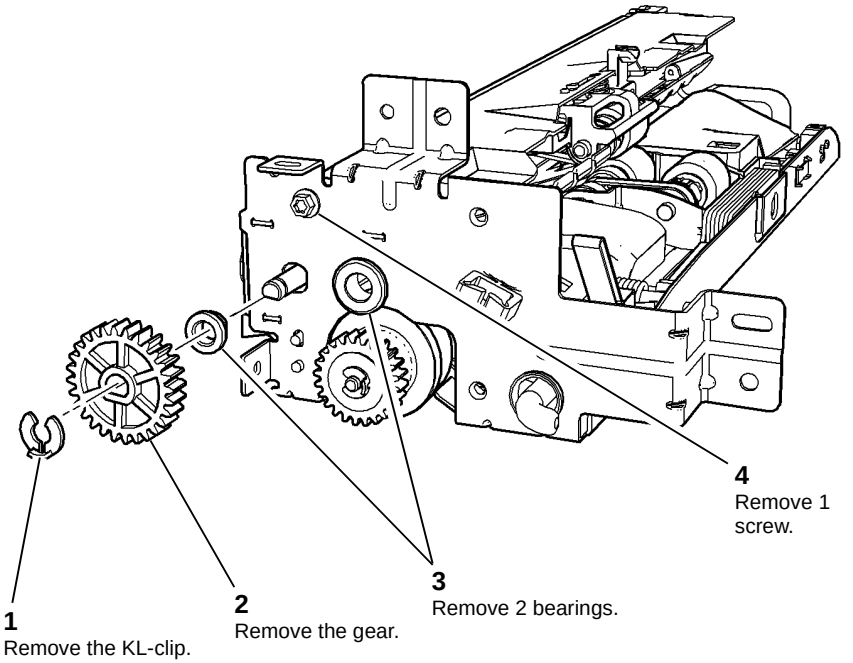


Figure 2 Rear fixings

5. Release the front fixings, Figure 3.

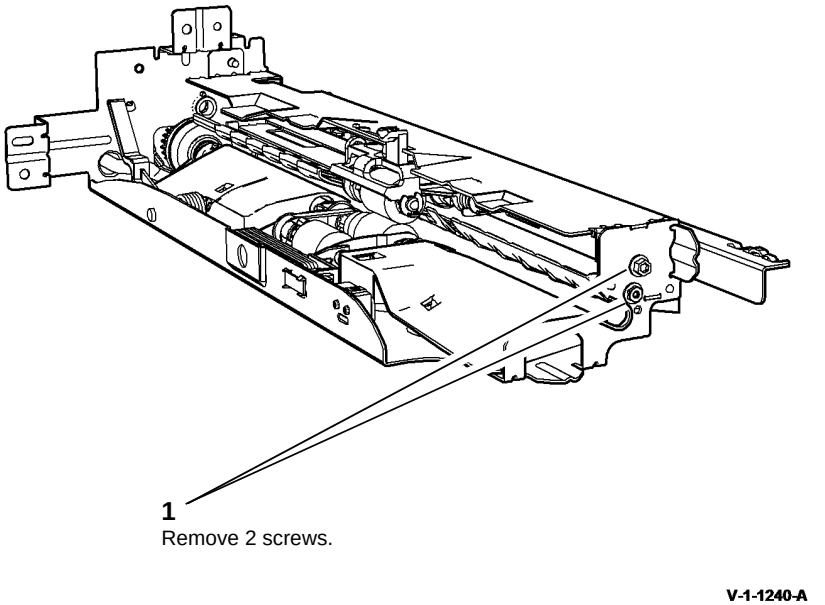


Figure 3 Front fixings

6. Separate the upper and lower frames, Figure 4.

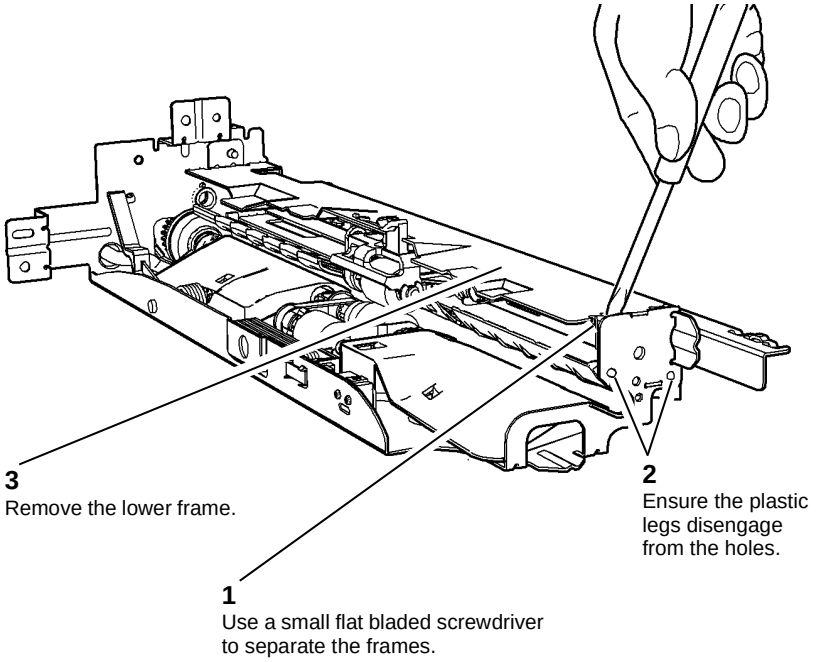


Figure 4 Frame separation

7. Remove the plastic cover, Figure 5.

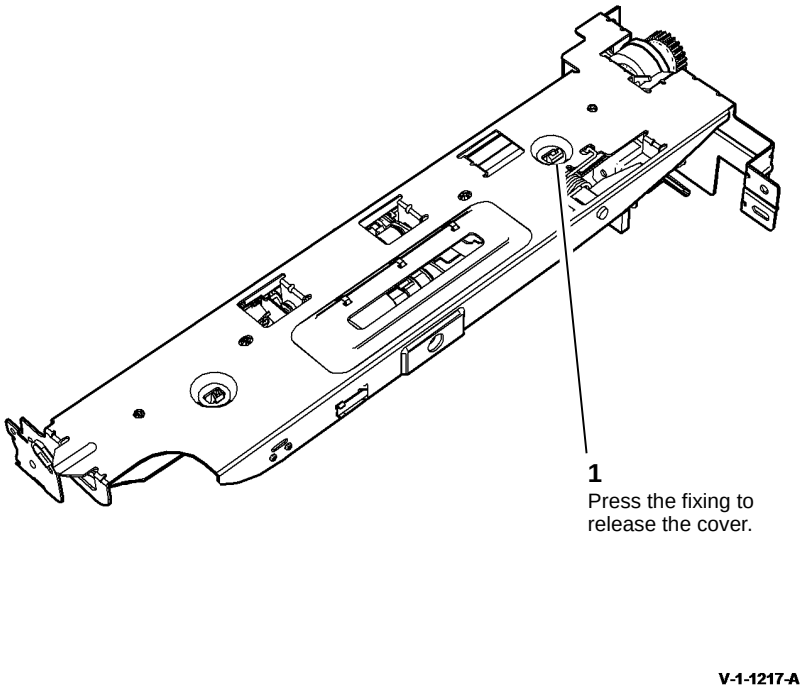


Figure 5 Cover removal

8. Remove the nudger roll and feed roll assembly, Figure 6.

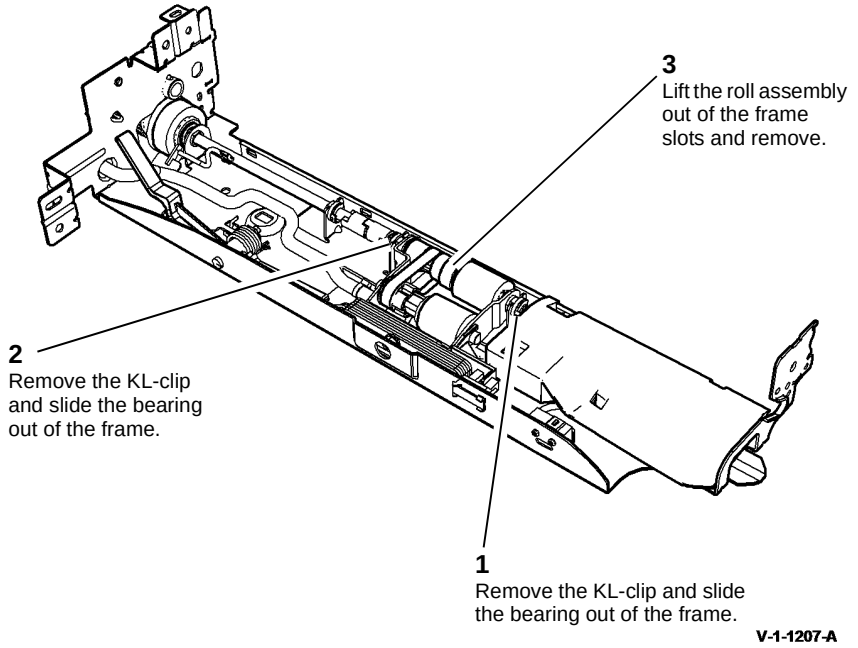


Figure 6 Nudger and feed roll removal

9. Remove the retard roller, Figure 7.

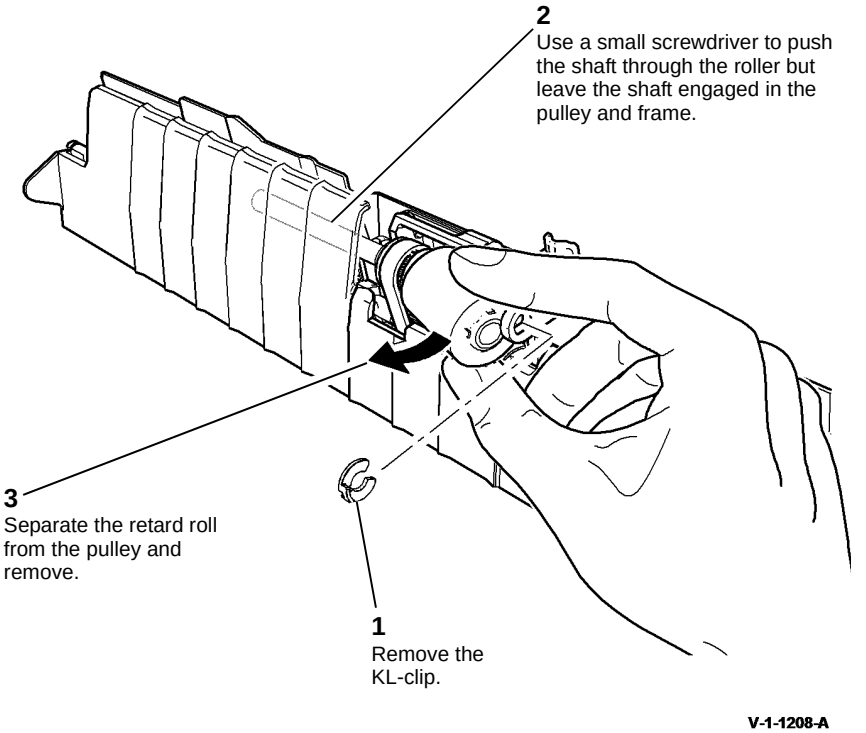


Figure 7 Retard roll removal

Replacement

1. Install the retard roll by reversing the steps in Figure 7.
2. If necessary refer to Figure 8 for the correct assembly of the retard roll components.

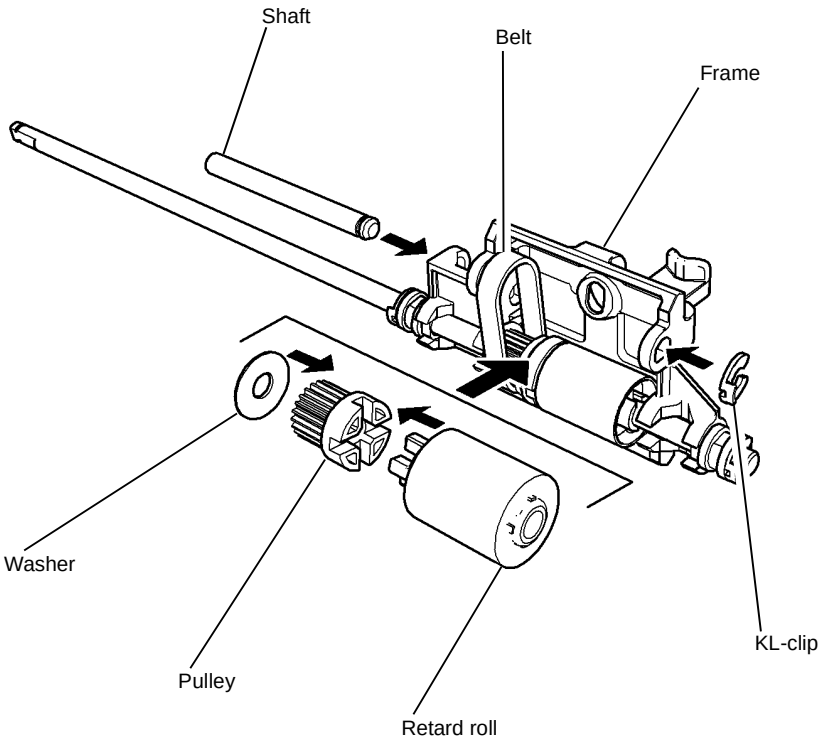


Figure 8 Exploded view of the retard assembly

3. Check that the number of weights on the new nudger roll and feed roll assembly is the same as on the old assembly. If necessary, correct the number of weights, refer to ADJ 80.4.
4. Install the nudger roll and feed roll assembly, Figure 9.

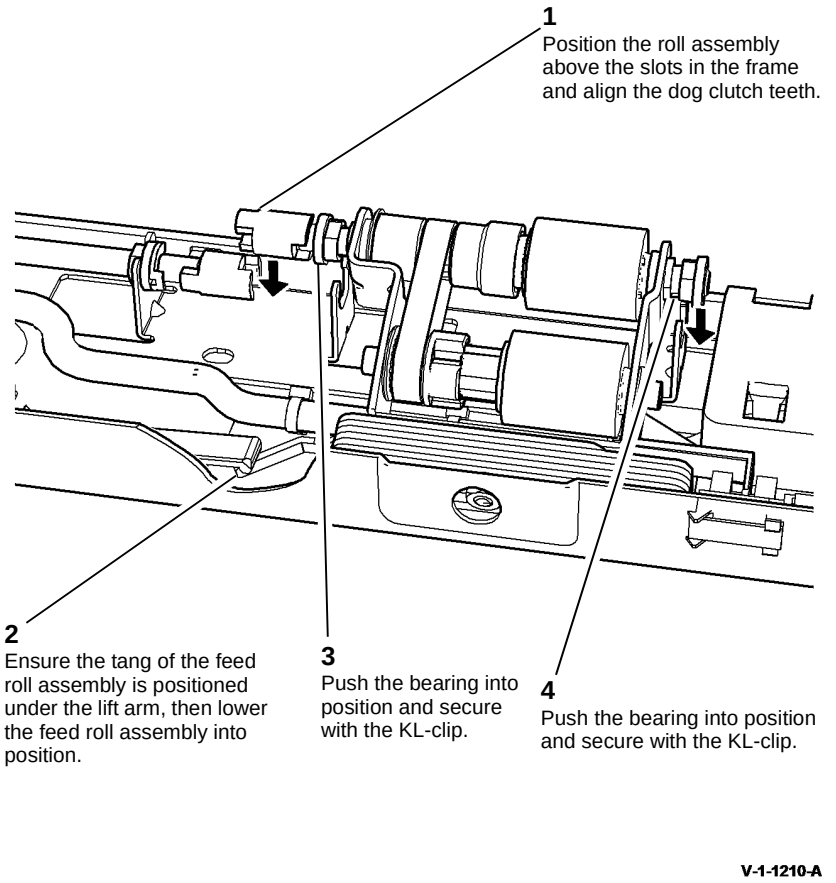


Figure 9 Nudger and feed roll install

5. Fasten the plastic cover into position ensuring that the wiring is not trapped, refer to Figure 5.

6. Assemble the two halves of the frame, Figure 10.

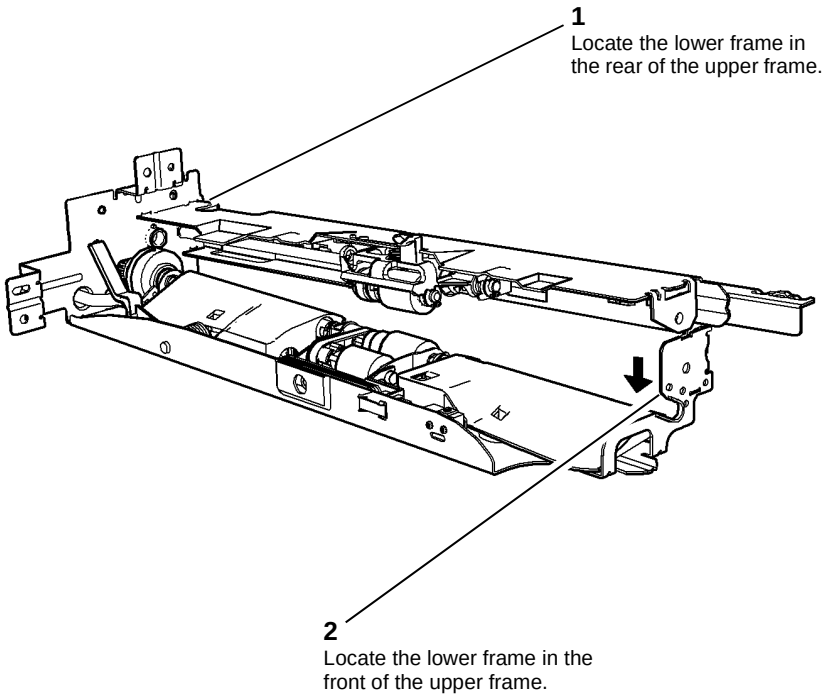


Figure 10 Frame assembly

7. Assemble the paper guide to the lower frame.
   8.Refer to :
   - REP 80.45 Tray 3 paper guide
     or
   - REP 80.46 Tray 4 paper guide
9. Align and secure the upper and lower frames, Figure 11.

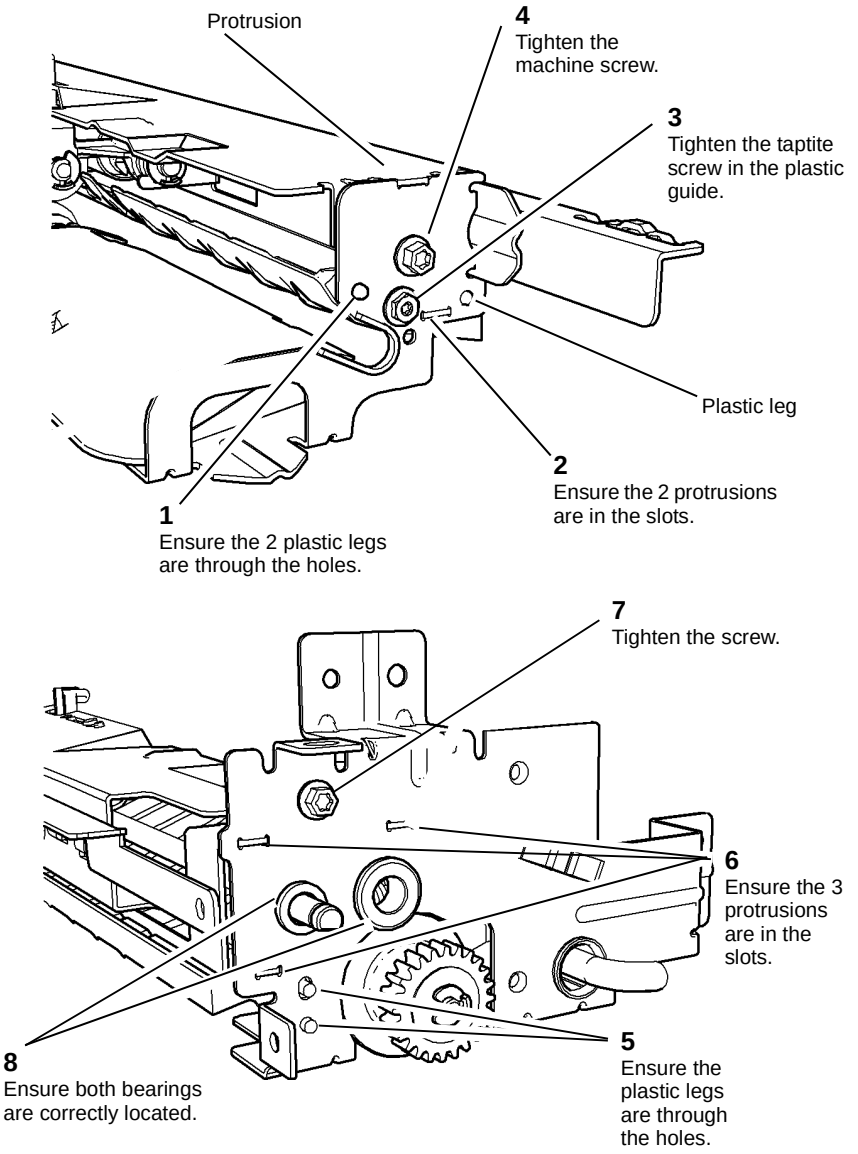


Figure 11 Final assembly

10. Install the remainder of the removed components, Figure 2 and Figure 1.
11. Install the feeder assembly into the machine. Check the feeding performance of the HCF.
12. Reset the HFSI count. refer to dC135 CRU/HFSI Status.

REP 80.45 Tray 3 Paper Guide

Parts List on PL 80.32

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 3 paper feed assembly, REP 80.30.
2. Remove the tray 3 paper guide, Figure 1.

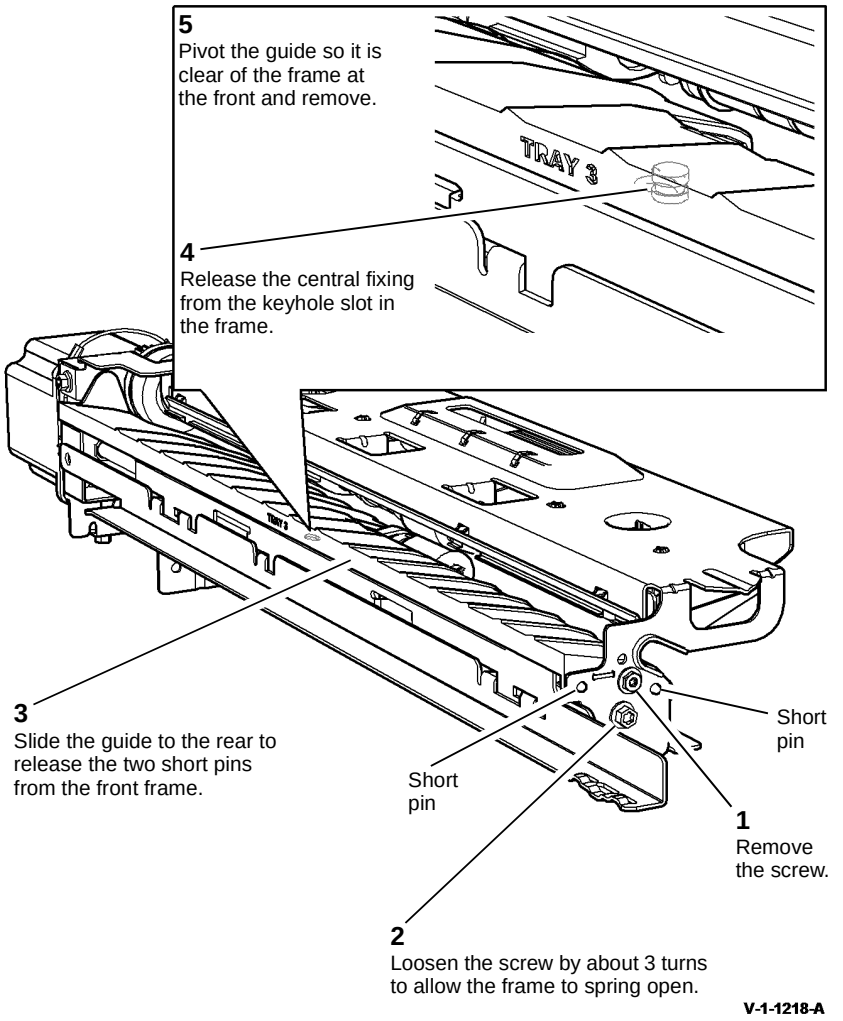


Figure 1 Paper guide removal

Replacement

1. Install the tray 3 paper guide, Figure 2.

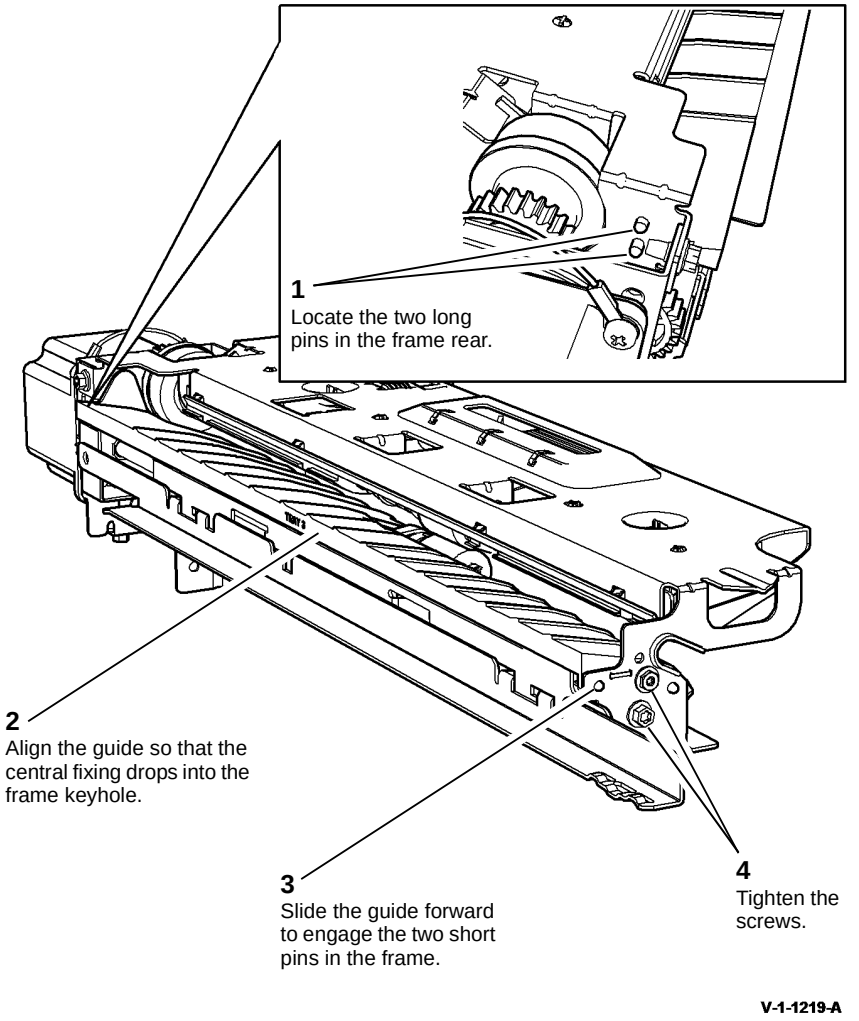


Figure 2 Paper guide replacement

2. The remainder of the replacement is the reverse of the removal procedure.

REP 80.46 Tray 4 Paper Guide

Parts List on PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 4 paper feed assembly, REP 80.31.
2. Remove the tray 4 paper guide, Figure 1.

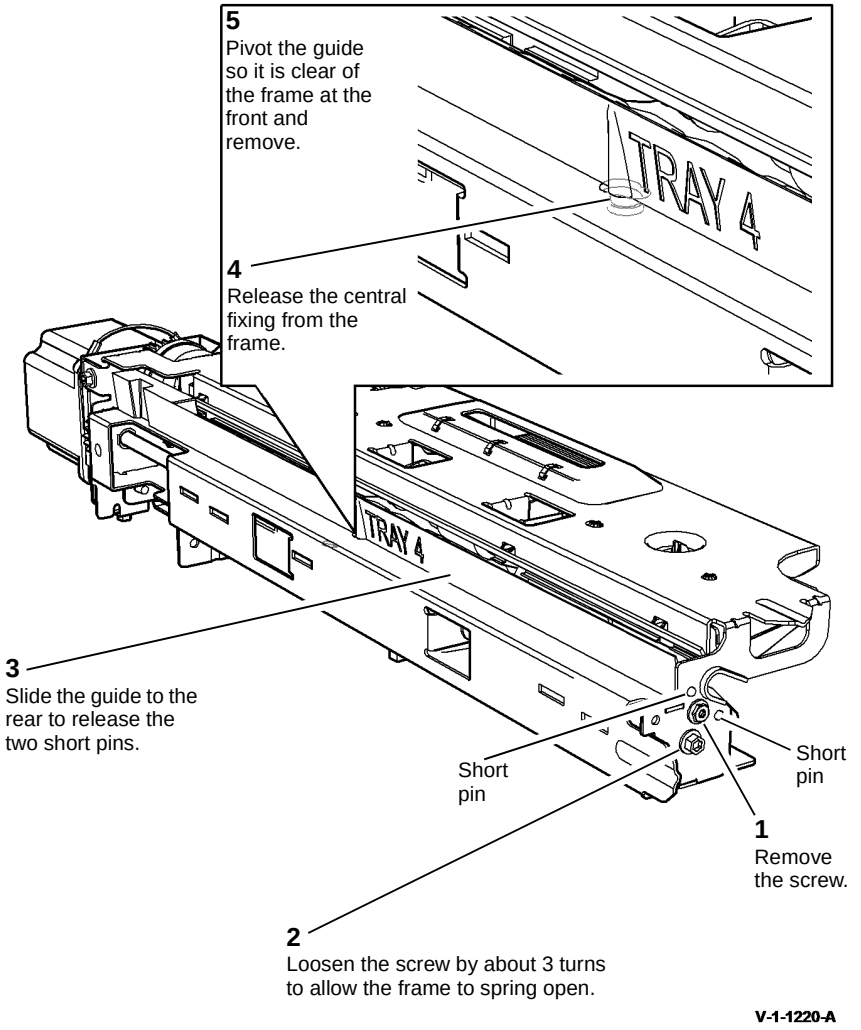


Figure 1 Paper guide removal

Replacement

1. Install the tray 4 paper guide, Figure 2.

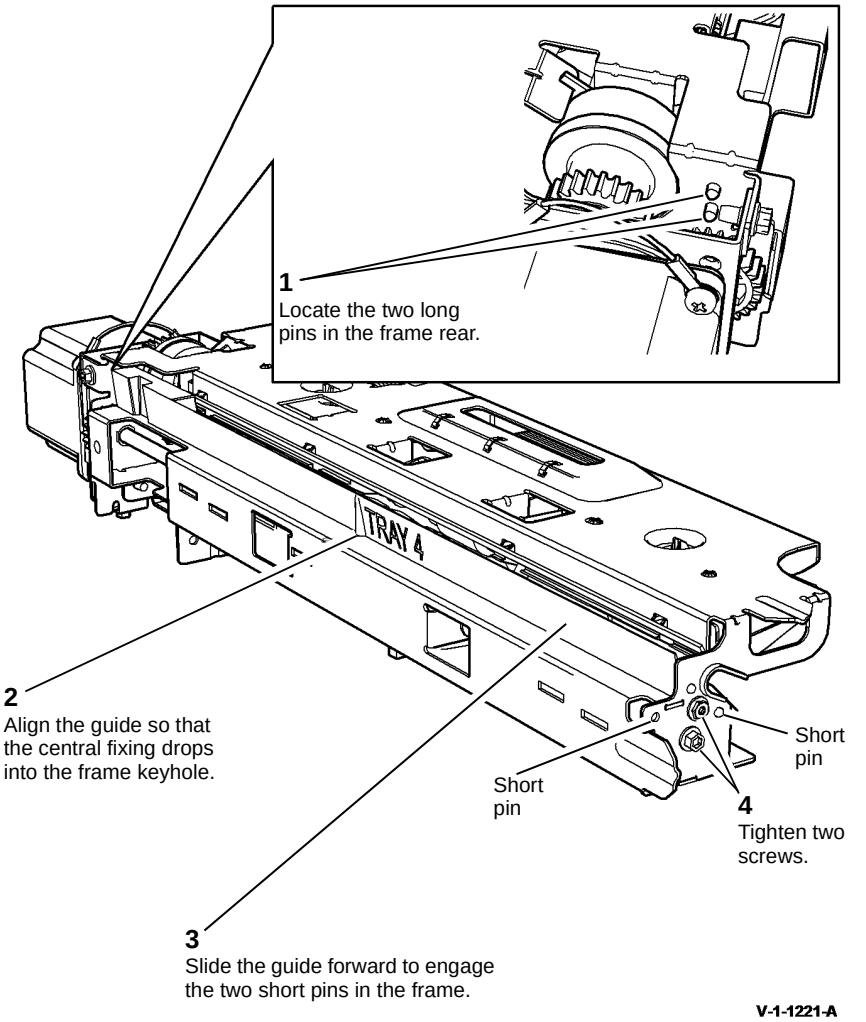


Figure 2 Paper guide replacement

2. The remainder of the replacement is the reverse of the removal procedure.

REP 80.47 Tray 3 Transport Clutch Drive Assembly

Parts List on PL 80.36

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove tray 3 and tray 4, REP 70.14.
2. Remove the tray 3 transport gear pulley, REP 80.33.
3. Remove the tray 3 transport clutch drive assembly, Figure 1.

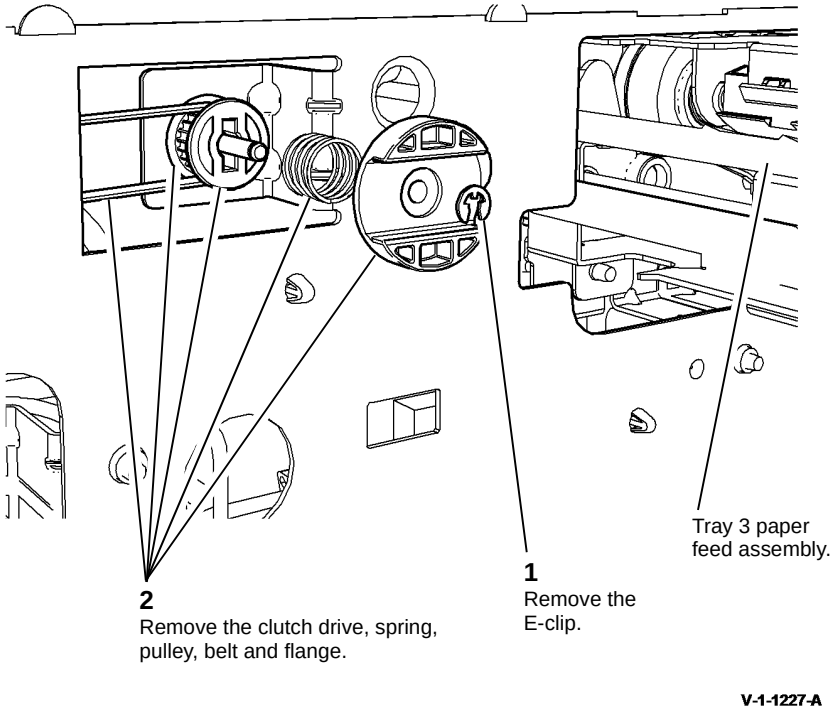


Figure 1 Clutch drive removal

Replacement

Replacement is the reverse of the removal procedure.

NOTE: *The E-clip is very small, use a small magnetised screwdriver to position the E-clip whilst pressing the clutch drive against the spring to expose the groove in the shaft.*

REP 80.48 Duplex Transport LED

Parts List on (45-55 ppm) PL 80.22, (65-90 ppm) PL 80.20

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the duplex transport, REP 80.5.
2. (65-90 ppm only) Remove the duplex duct, PL 80.20 Item 12.
3. Unclip the LED harness guide (45-55 ppm) PL 80.22 Item 18 or (65-90 ppm) PL 80.20 Item 19.
4. Unclip the LED from the harness guide. Disconnect the LED from the harness.

Replacement

Replacement is the reverse of the removal procedure.

REP 80.49 Tray 3 or Tray 4 Feed Clutch

Parts List on PL 80.32, PL 80.33

Removal

WARNING

Switch off the electricity to the machine, GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the appropriate paper feed assembly;
   - REP 80.30, for tray 3.
   - REP 80.31, for tray 4.
2. Remove the feed clutch, Figure 1.

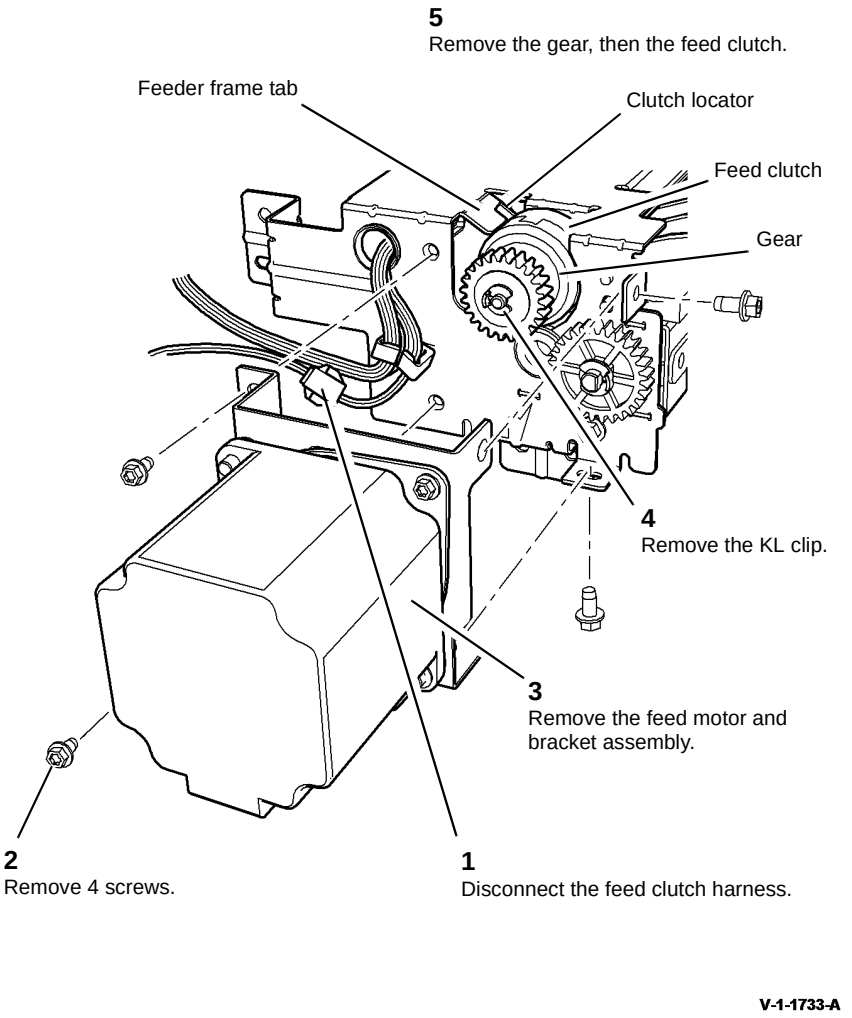


Figure 1 Feed clutch removal

Replacement

Replacement is the reverse of the removal procedure.

- Ensure that the clutch locator is engaged with the tab on the feeder frame, Figure 1.

REP 90.1 Waste Toner Bottle Assembly

Parts List on PL 90.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 28.10 Item 1.
2. Remove the waste toner bottle and the waste toner door, Figure 1.

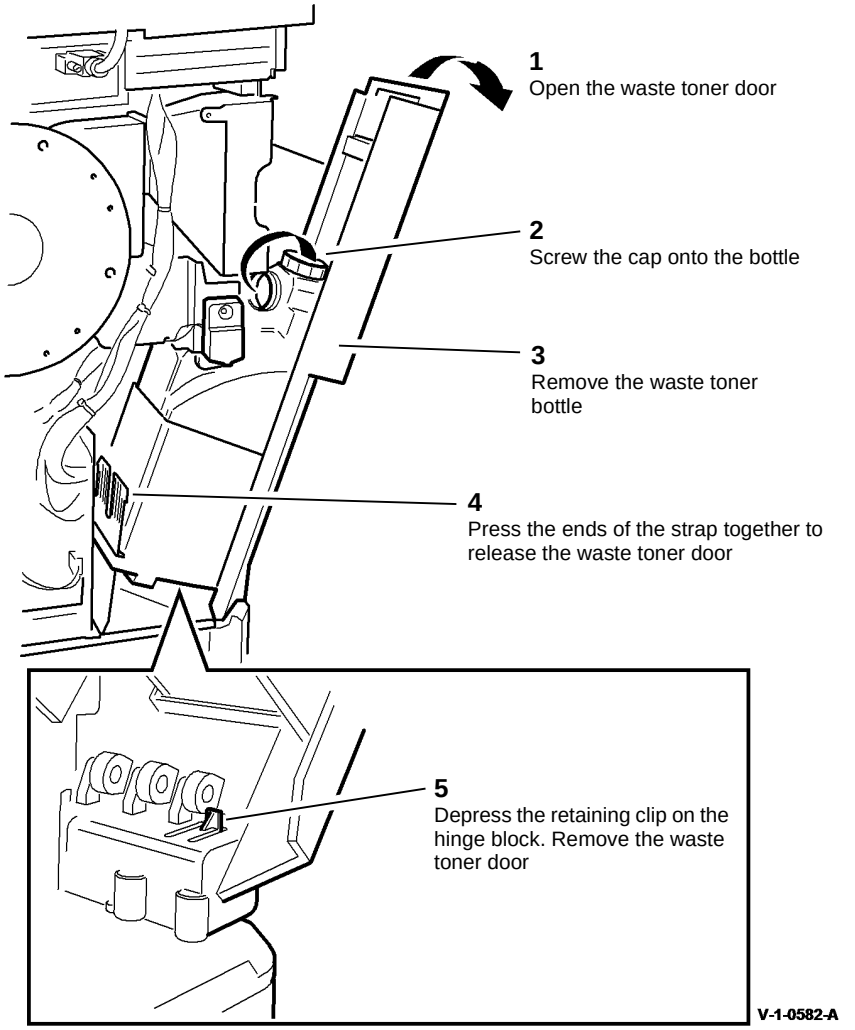


Figure 1 Waste toner door

Replacement

Replacement is the reverse of the removal procedure.

REP 90.2 Developer Assembly

Parts List on (45-55 ppm) PL 90.17, (65-90 ppm) PL 90.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove left cover, PL 28.10 Item 3.
2. Disconnect PJ93 and the developer bias lead, Figure 1.

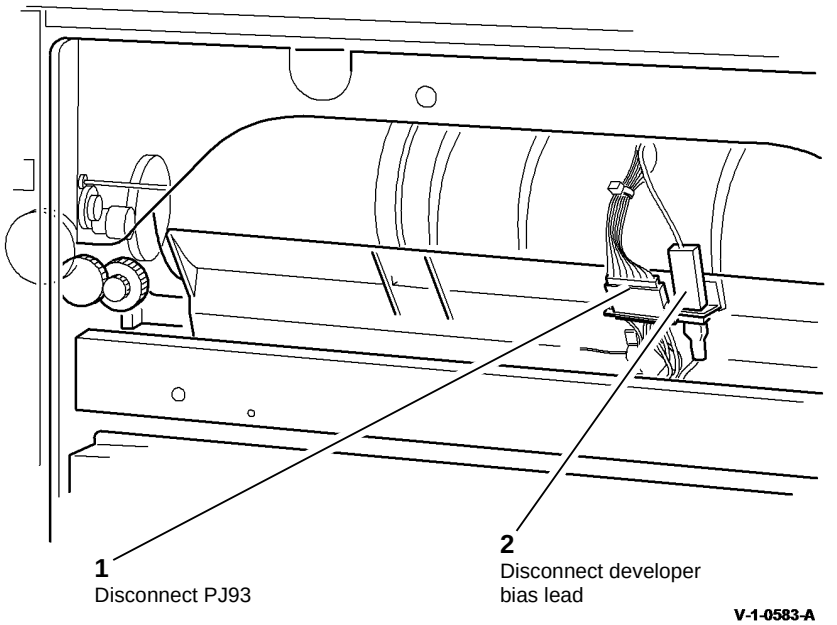


Figure 1 Developer bias leads

3. Remove the developer module, Figure 2.

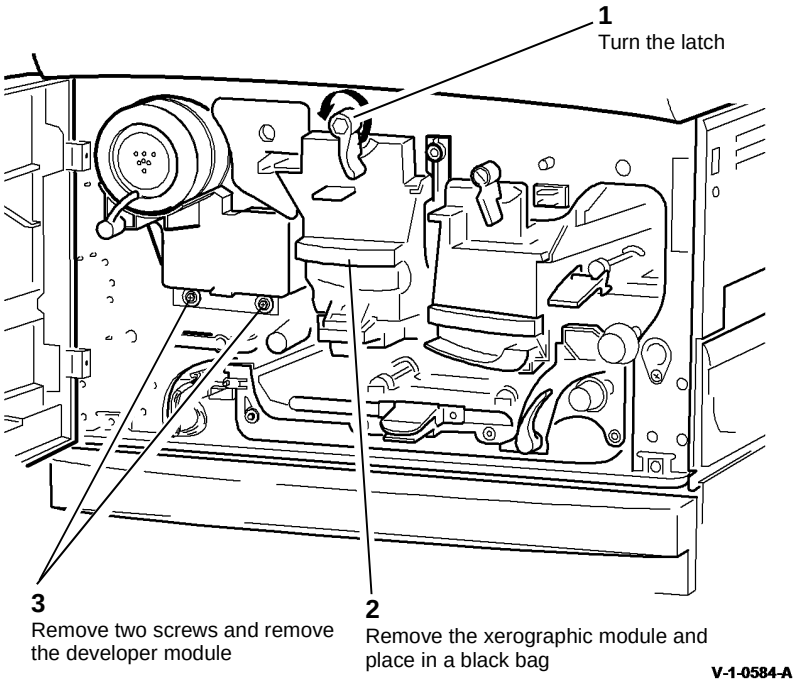


Figure 2 Remove the developer assembly

Replacement

NOTE: *When re-installing the original developer assembly, only perform steps 1, 4 and 5.*

1. Replacement is the reverse of the removal procedure.
2. Follow the developer spares pack instruction sheet to prepare the developer module.
3. Perform ADJ 90.3 Developer Magnetic Seal Brush Adjustment.
4. Lubricate the developer module support pins, ADJ 40.1.
5. **(45-55 ppm only)**. Ensure that the washer and stepped washer are correctly positioned, Figure 3.
6. Enter service mode, GP 1. Select dC131 location 791-087 developer age and reset to zero.
7. Perform the dC905 TC Sensor Calibration.

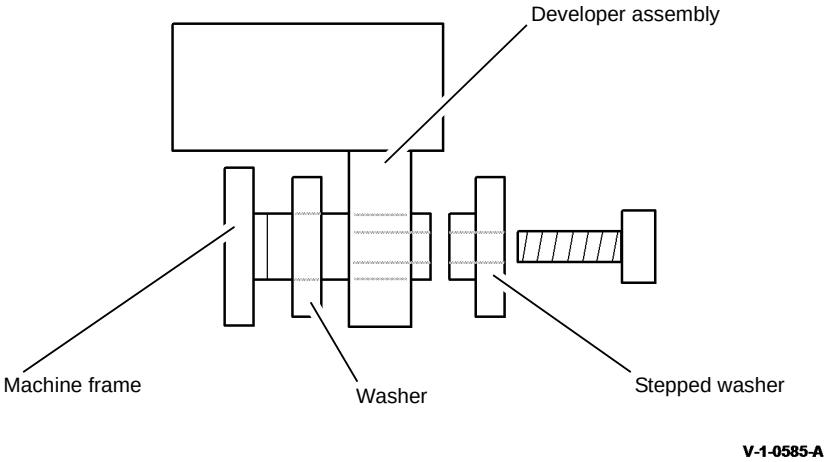


Figure 3 45-55 ppm developer washer location

REP 90.3 Ozone Fan

Parts List on PL 90.25

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove rear cover, PL 28.10 Item 1.
2. Remove the waste toner bottle, REP 90.1.
3. Remove ozone filter and duct, PL 90.25 Item 2.

CAUTION

When the drive gear is removed, the drive pin may fall onto the IOT PWB or LVPS.

4. Remove the ozone fan, Figure 1.

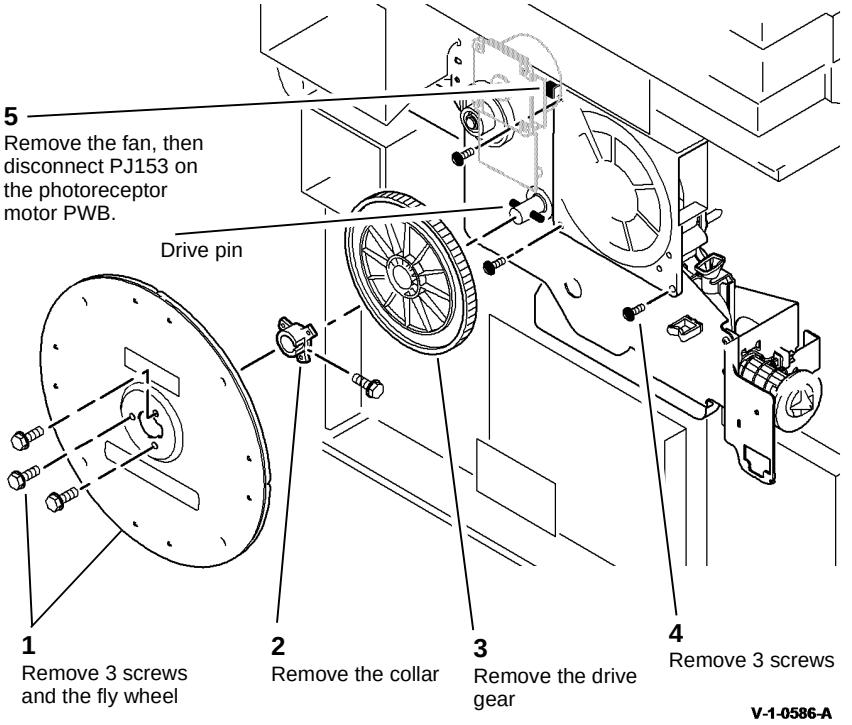


Figure 1 Remove the ozone fan

Replacement

Replacement is the reverse of the removal procedure. Refer to GP 6 before refitting the screws.

NOTE: *Turn the drive shaft so that the dowel pin is horizontal then locate the drive gear onto the shaft.*

REP 90.4 Waste Toner Full Sensor

Parts List on PL 90.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, PL 28.10 Item 1.
2. Remove the waste toner bottle, PL 90.10 Item 1.

3. Remove the waste toner full sensor, Figure 1.

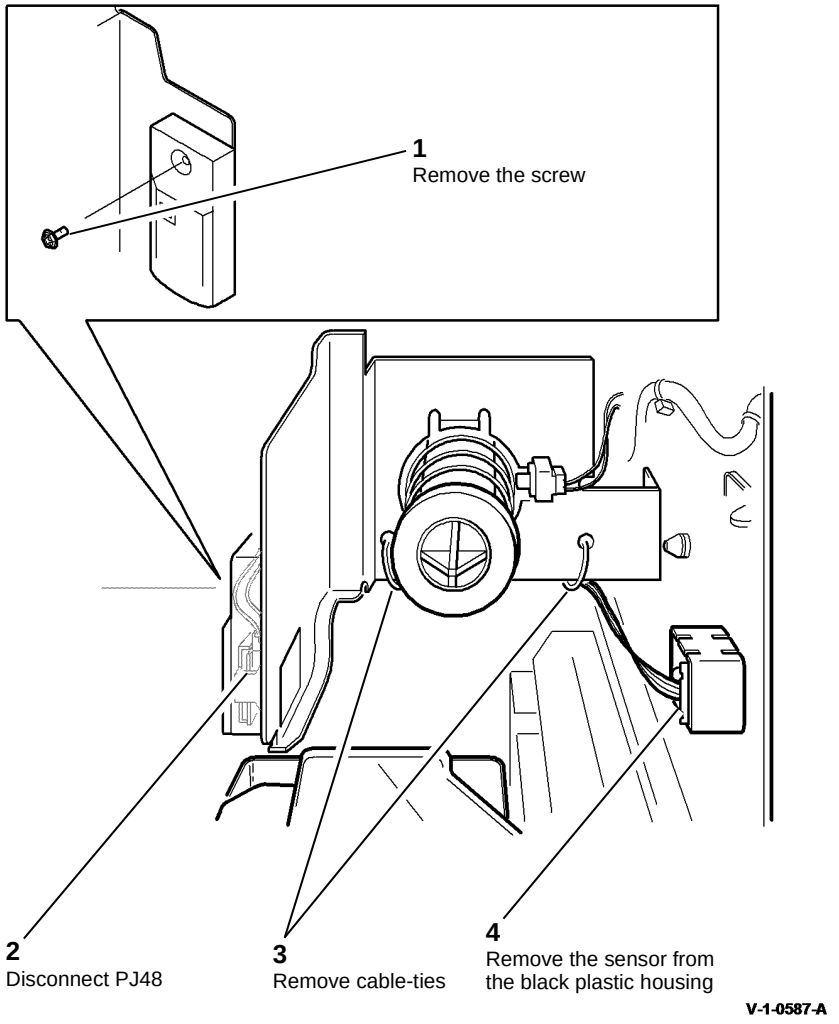


Figure 1 Waste toner full sensor

Replacement

Replacement is the reverse of the removal procedure.

REP 90.5 Toner Dispense Module

Parts List on (45-55 ppm) PL 90.17, (65-90 ppm) PL 90.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the developer assembly, REP 90.2.
2. Remove the toner cartridge.
3. Disconnect the harness PJ97 and PJ75 on the toner dispense module, Figure 1.

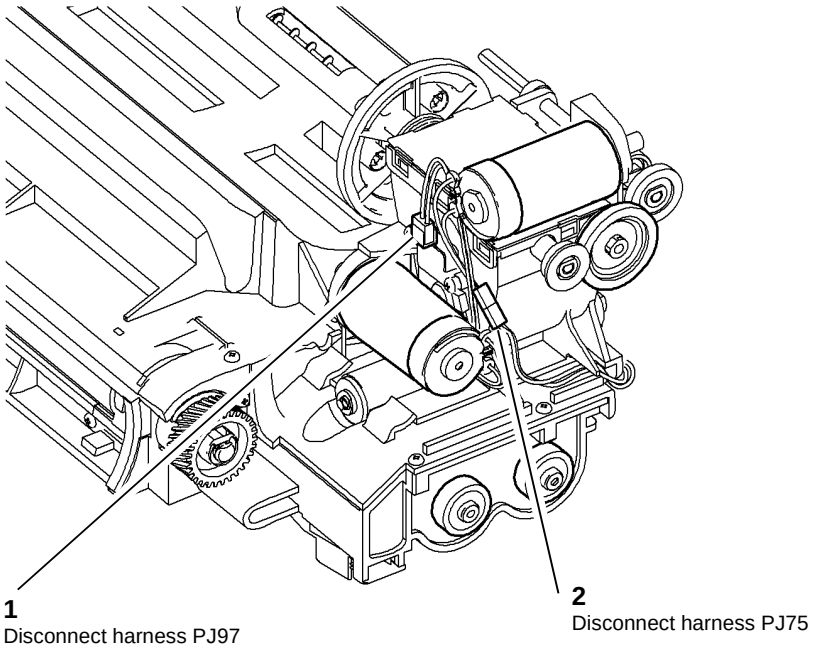


Figure 1 Disconnect the harness

4. Remove the securing screws from the toner dispense module, Figure 2.

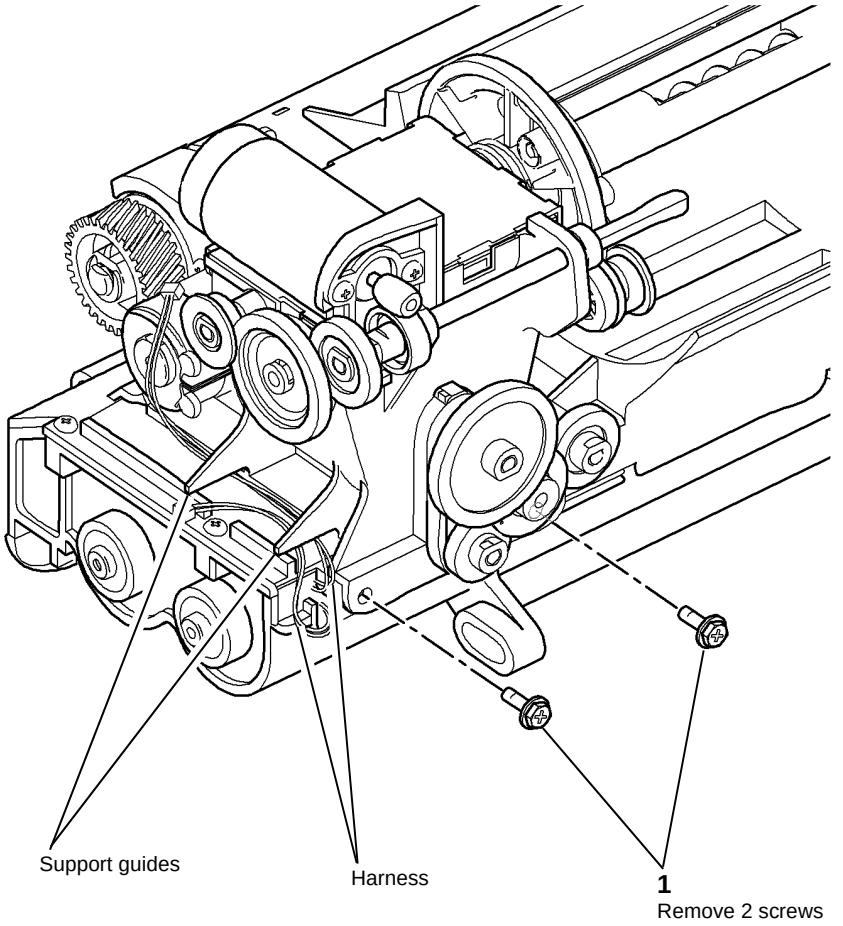


Figure 2 Remove the securing screws

5. Remove the toner dispense module by sliding it of the developer assembly, Figure 3.

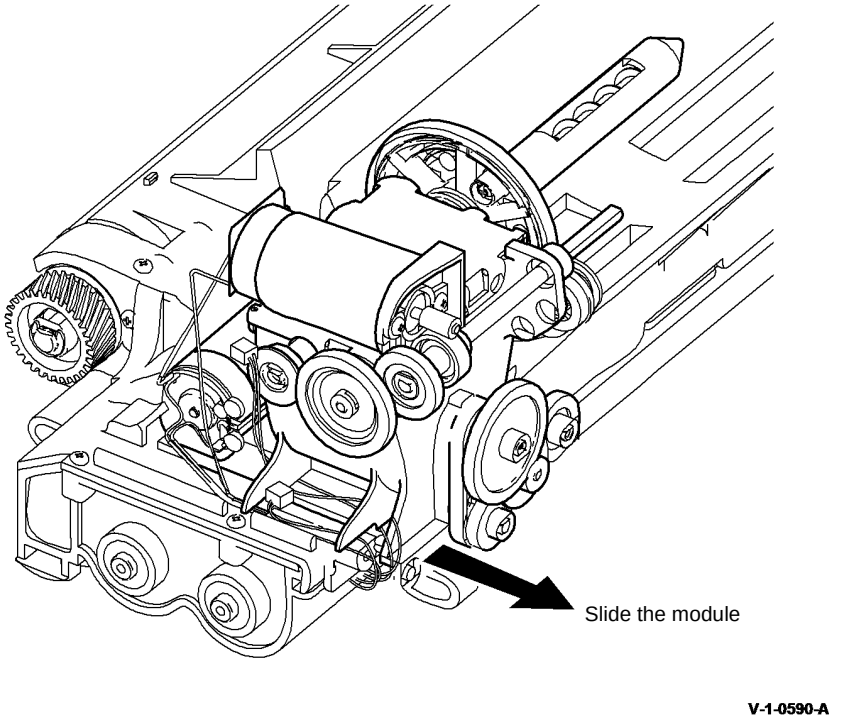


Figure 3 Remove the toner dispense module

Replacement

1. Replacement is the reverse of the removal procedure.
2. Ensure that the harnesses are routed under the support guides on the toner dispense module, Figure 2.
3. After a new toner dispense module and toner cartridge are installed and the machine switched on:
   a. The toner cartridge motor will turn on, the toner bottle will rotate and toner dispensed into the toner dispenser sump.
   b. Once the toner in the sump reaches the level of the low toner sensor, the toner bottle will stop turning.
   c. The toner must then be manually run from the toner sump into the developer module.

   To run toner into the developer module:
   a. Remove the left cover, PL 28.10 Item 3 to access the left side of the developer module. Monitor the toner concentration sensor voltage output at PJ93 pin 8 (red wire).
   b. Enter dC330 code 042-010 main drive motor and 093-040 toner dispense motor.

c. Start the routine.

NOTE: *Start will have to be pressed every 5 seconds to restart the toner dispense motor.*

d. Run the routine until the monitored voltage at PJ93 pin 8 is between 2.2V and 2.8V.

e. Check the density and image quality, IQ1. Repeat the procedure if the copies are still light.

REP 90.6 Xerographic Module Latch

Parts List on PL 90.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the scanner module mounting frame, REP 60.16.
2. Remove the developer assembly, REP 90.2.
3. Refer to REP 60.1 and move the ROS to the side, Figure 1.

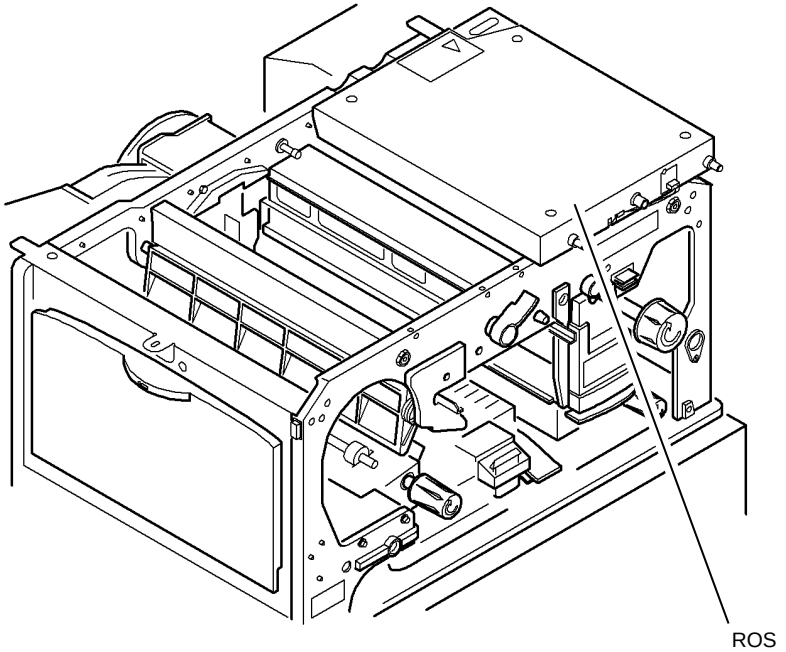


Figure 1 Position the ROS

4. Remove the pivot plate to release the developer paddle, Figure 2.

NOTE: *Observe where the spring is located on the tie bar and on the developer paddle.*

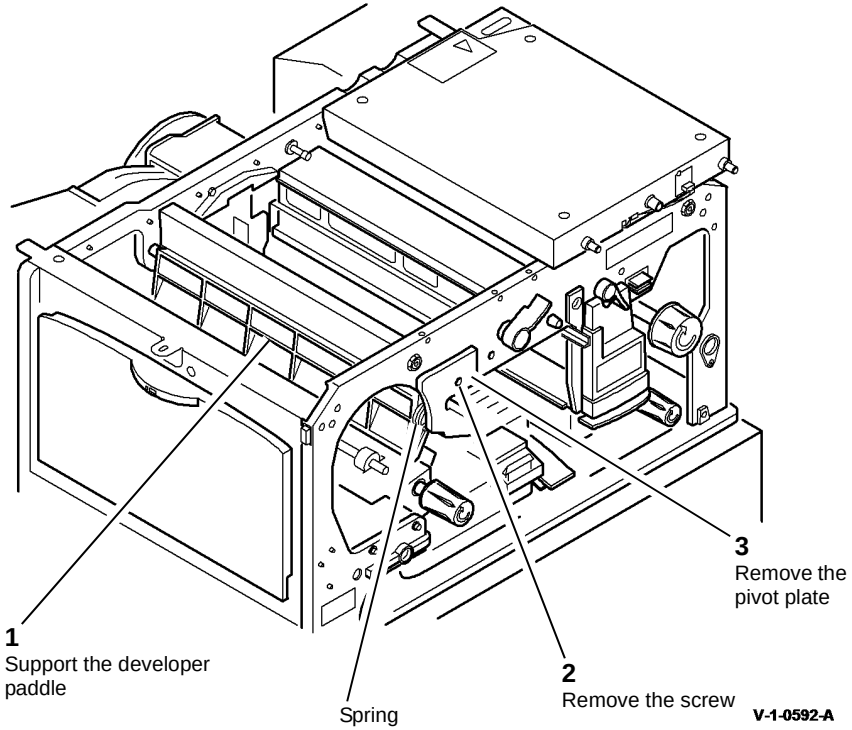


Figure 2 Remove the pivot plate

WARNING

Take care when removing the latch. The latch contains a compressed spring, which can cause injury when released.

5. Remove the screw from the latch, Figure 3.

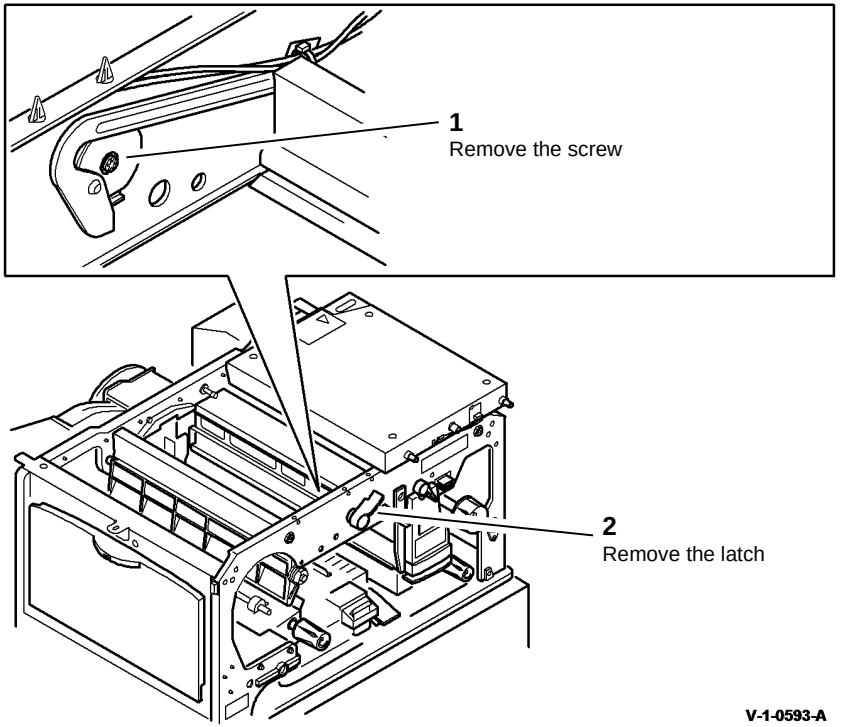


Figure 3 Remove the latch

Replacement

1. Replacement is the reverse of the removal procedure.
2. Apply plastislip grease, PL 26.10 Item 8, to the internal diameter of the bush on the frame (i.e. the hole the pin fits into) prior to insertion.
3. Refer to Figure 4. Check the following:
   a. The latch pin is correctly lined up with the flats on the latch plate.
   b. The latch handle and the latch pin are correctly lined up.
   c. When reinstalling the developer paddle into the pivot plate, check that the spring is correctly located on the tie bar and on the feature on the developer paddle, Figure 2.

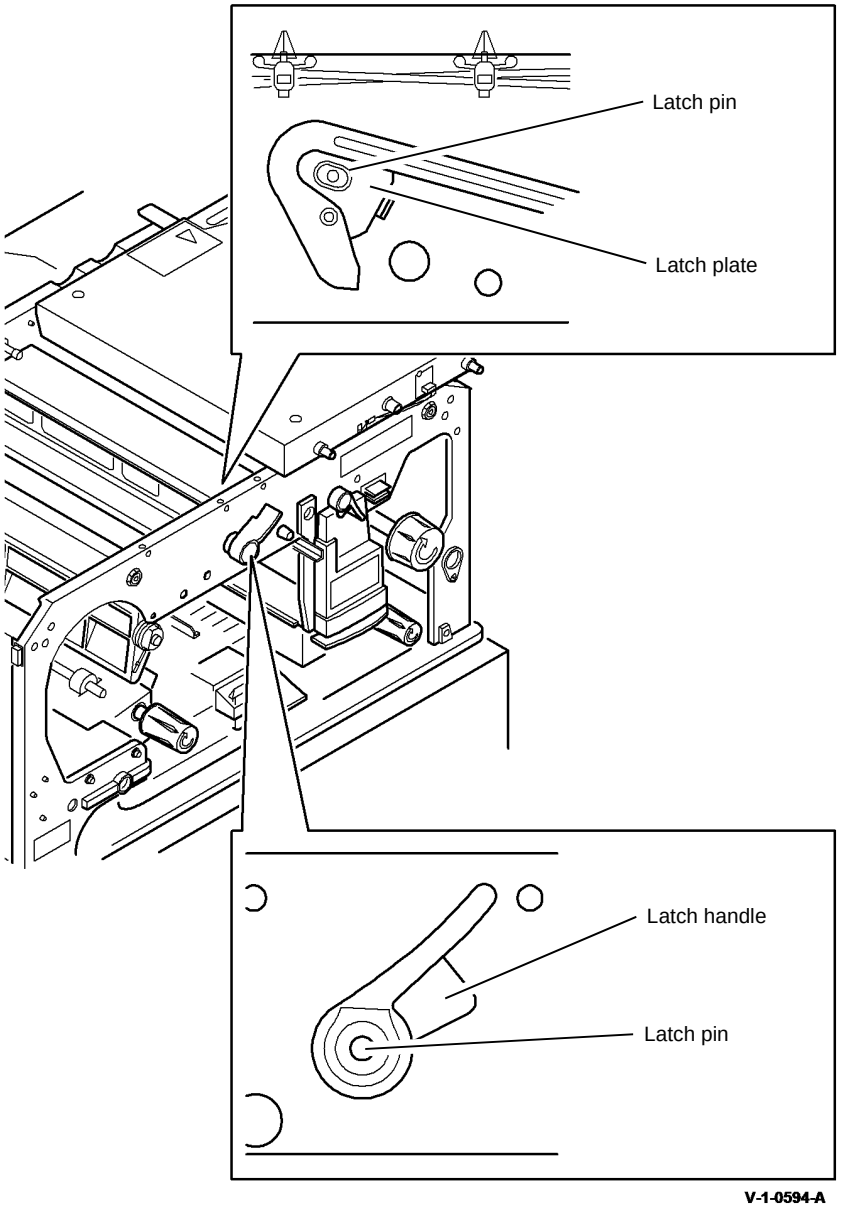


Figure 4 Latch alignment

REP 90.7 Developer Paddle

Parts List on PL 90.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the xerographic module latch, REP 90.6.
2. Remove the developer paddle, Figure 1.

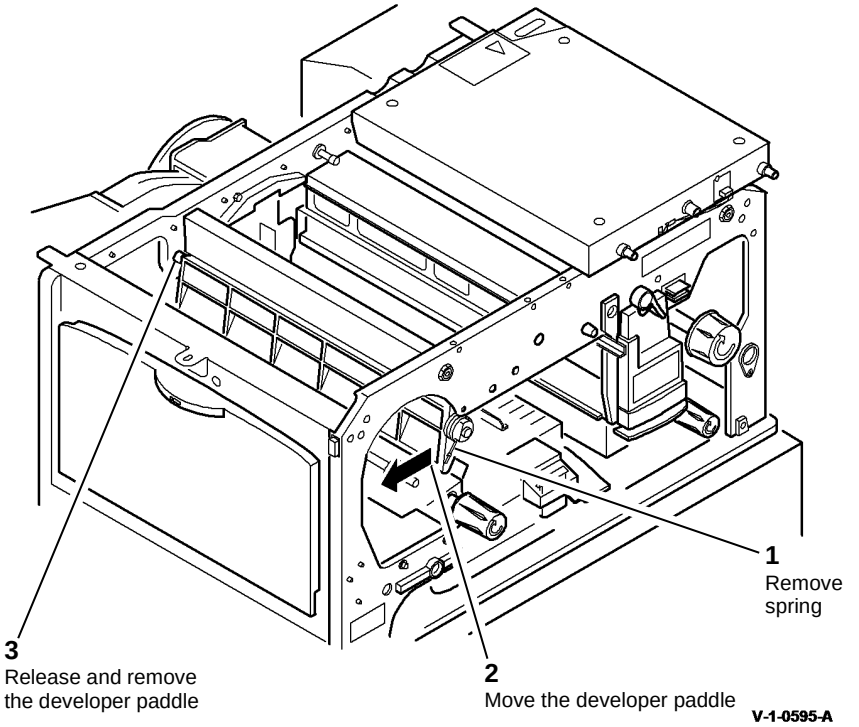


Figure 1 Developer paddle

Replacement

Replacement is the reverse of the removal procedure.

REP 90.8 Transfer / Detack Harness

Parts List on PL 90.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the short paper path assembly, REP 10.1.
2. Remove the transfer/detack harness, Figure 1.

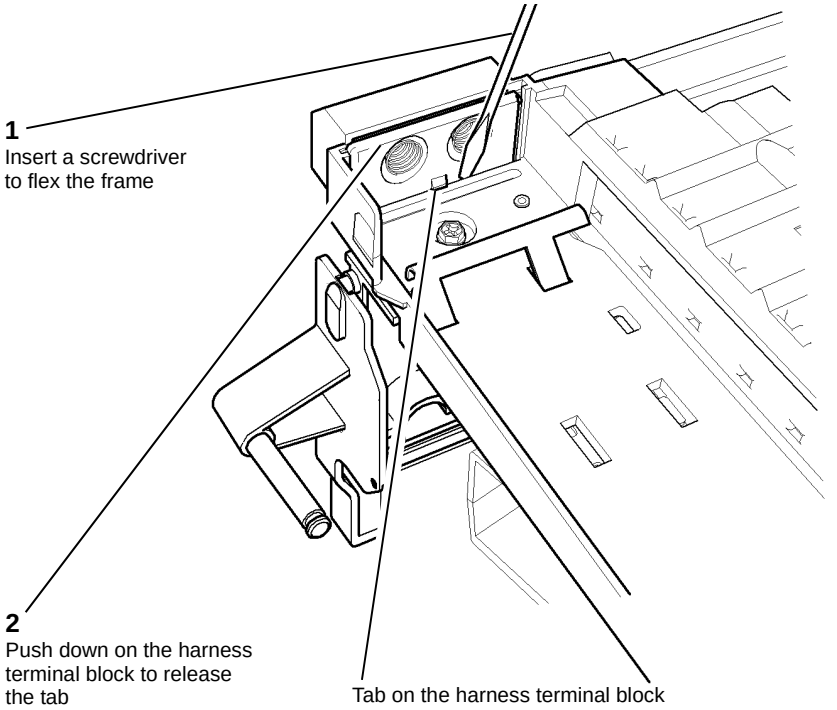


Figure 1 Transfer/detack harness

Replacement

Replacement is the reverse of the removal procedure.

REP 90.9 Erase Lamp

Parts List on PL 90.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the fuser module, PL 10.10 Item 1.
2. Remove the xerographic module, PL 90.20 Item 2.
3. Remove the erase lamp support, Figure 1.

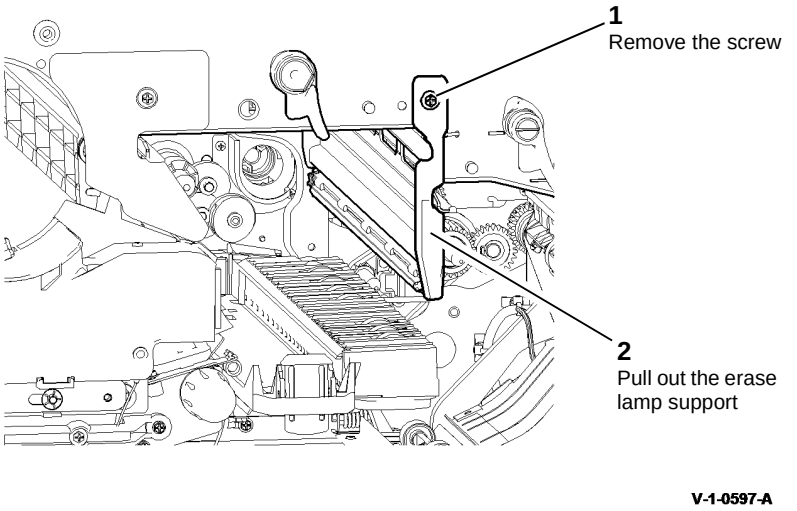


Figure 1 Erase lamp support

4. Remove the erase lamp, Figure 2.

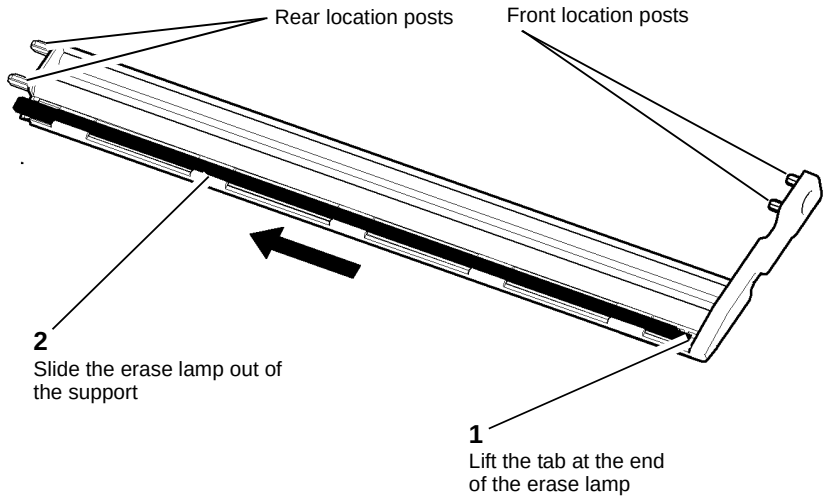


Figure 2 Remove the erase lamp

Replacement

1. Replacement is the reverse of the removal procedure.
2. Check that the location posts on the erase lamp (Figure 2), locate in the holes in the frame, Figure 3.

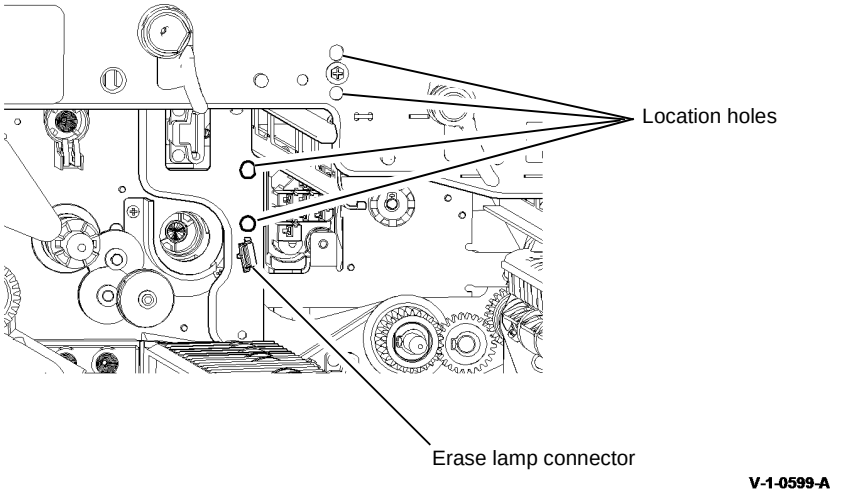


Figure 3 Location holes

REP 90.10 Auger Damper

Parts List on (45-55 ppm) PL 40.15, (65-90 ppm) PL 40.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 14. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Cam off the developer module.
2. Remove the xerographic module, PL 90.20 Item 2.
3. Remove the waste toner from the auger system at the front of the machine, Figure 1.

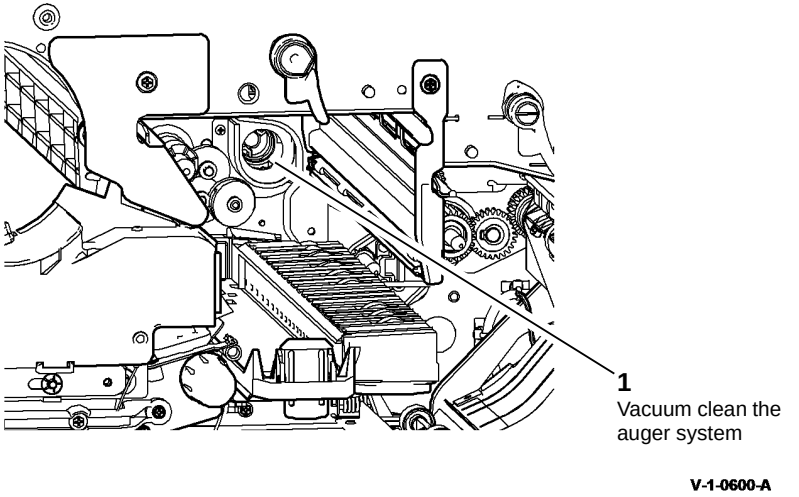


Figure 1 Auger system at the front

4. Remove the waste toner bottle assembly, REP 90.1.

5. Remove the waste toner from the shutter auger tube at the rear of the machine, Figure 2.

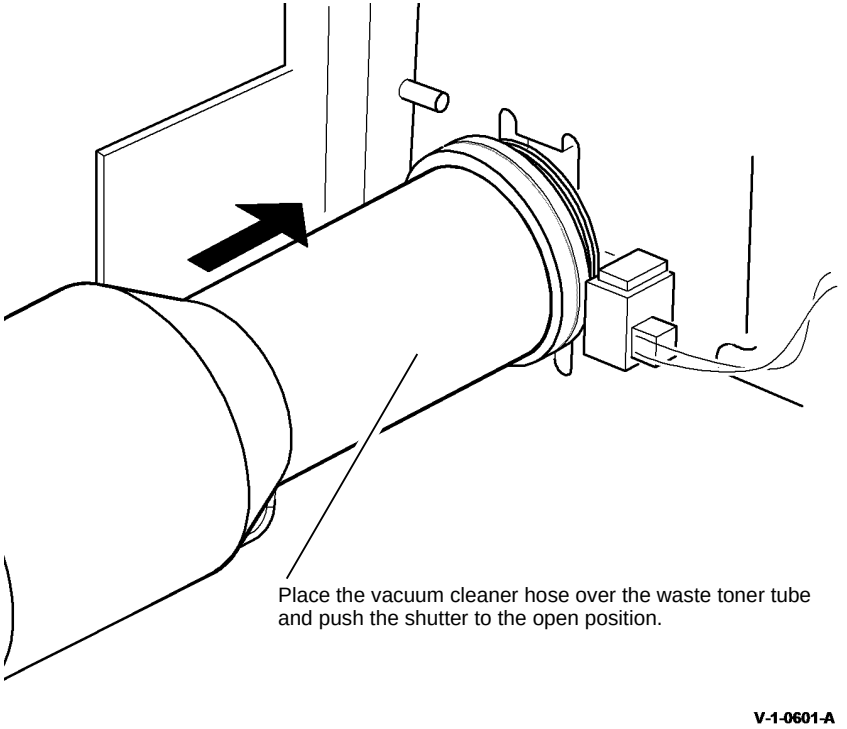


Figure 2 Shutter and waste toner auger

6. Remove the ozone filter and the duct, PL 90.25 Item 2.
7. Remove the waste toner full sensor, REP 90.4.
8. Remove the shutter assembly and the support bracket, Figure 3.

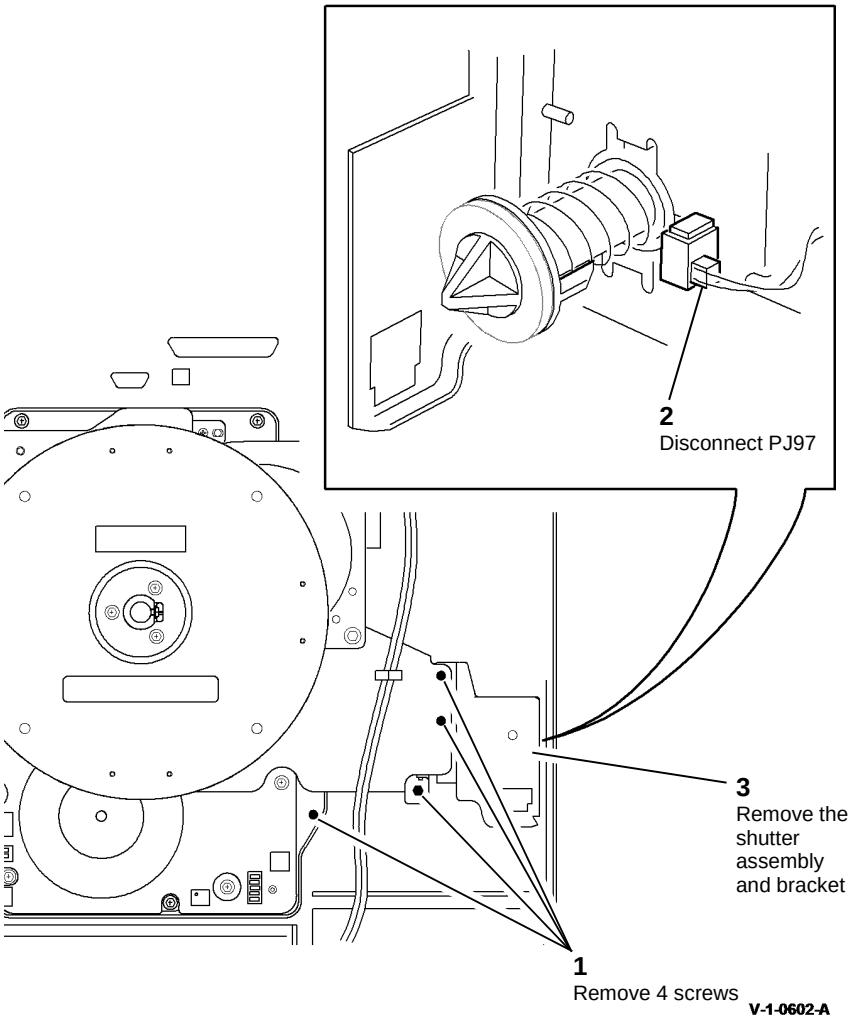


Figure 3 Remove shutter assembly

9. Remove the auger damper, Figure 4.

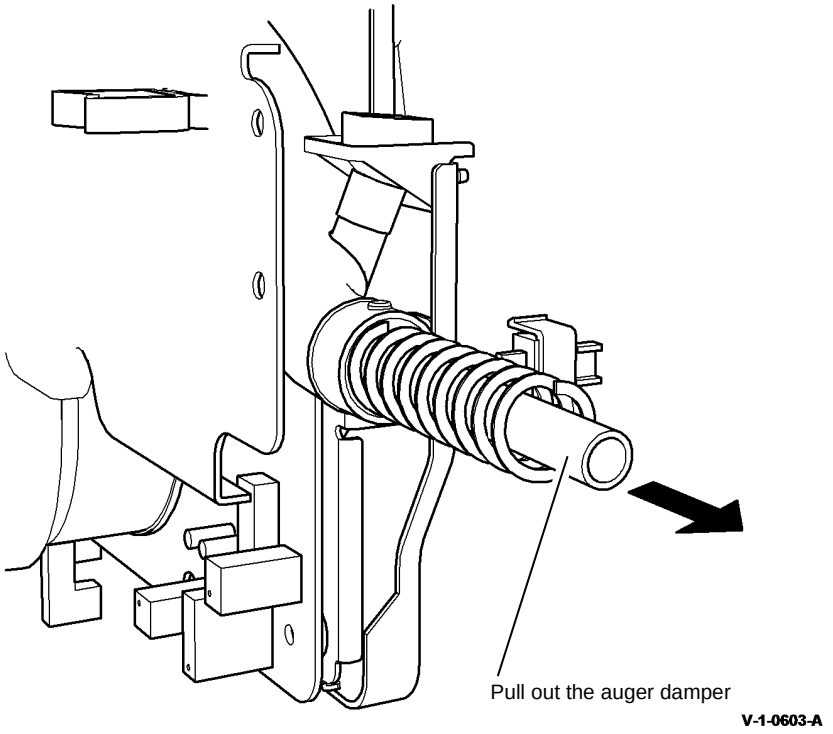


Figure 4 Remove the auger damper

Replacement

1. Replacement is the reverse of the removal procedure.
2. Install the new auger damper, Figure 5.

   NOTE: *The auger damper is longer than the auger spring.*

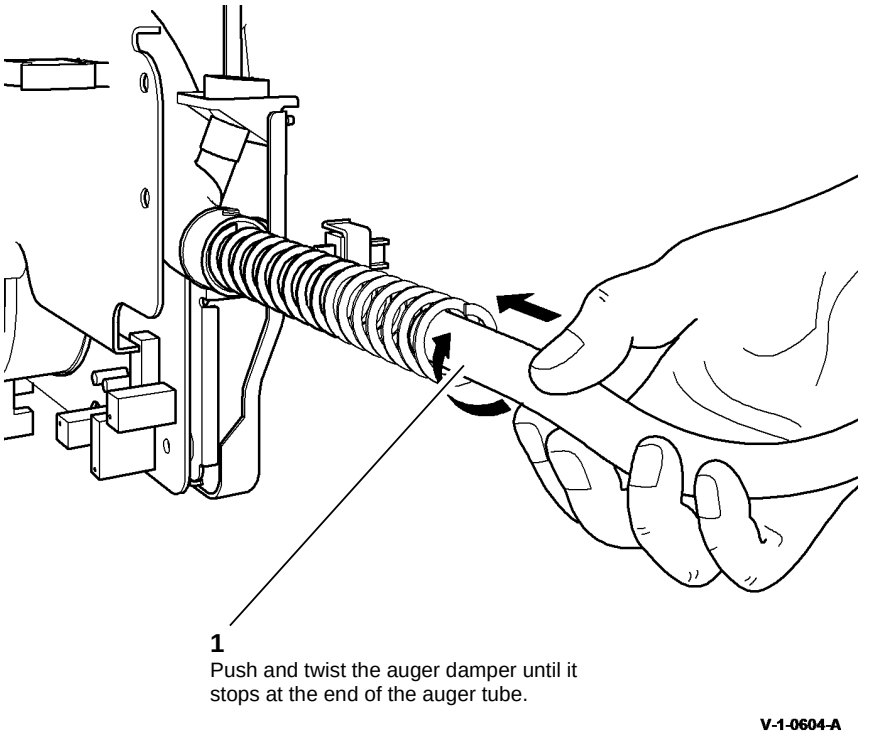


Figure 5 Installing the insert

3. Ensure that the shutter assembly is positioned correctly on the support bracket.

4. Support the auger tube when locating the shutter assembly and bracket onto the auger tube, Figure 6.

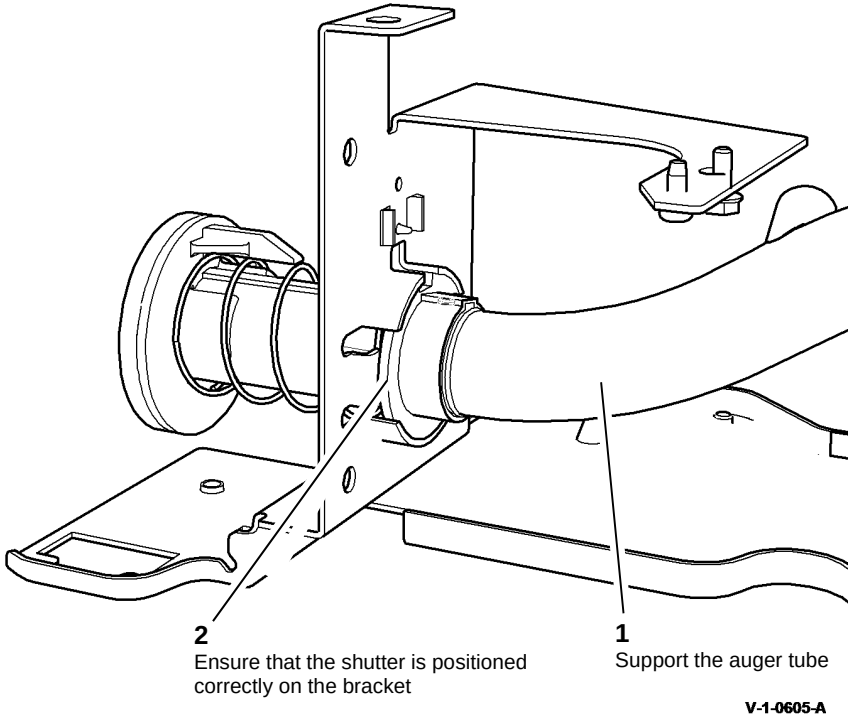


Figure 6 Shutter and bracket position

ADJ 3.1 Registration Setup

Purpose

To measure and adjust image to paper registration. Go to dC604 Registration Setup.

ADJ 3.2 Magnification Adjustment

Purpose

To adjust the machine magnification to 100%

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

ADJ 5.1 SPDH Drive Belts

Purpose

To correctly set the tension of all the drive belts in the SPDH.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Before this adjustment is performed, make sure all components removed in the repair procedure are installed correctly.

NOTE: *All drive belts in the SPDH are tensioned by springs. Although all the belt drives are different to each other, the process of adjusting the belt tension is the same.*

1. Loosen the screws that hold the motor or tensioning plate to the frame.
2. Allow the spring to tension the drive belt.
3. Tighten the screws.

ADJ 5.2 SPDH Height

Parts List on PL 5.10 and PL 60.15

Purpose

To correctly set the distance between the scanner module and the SPDH.

Important

This procedure must be performed in the following order:

1. Left Side Check.
2. Left Side Adjustment, if necessary.
3. Right Side Check.
4. Right Side Adjustment, if necessary.

Left Side Check

1. Check the gap between the rear left stand-off, Figure 1, and the CVT glass, also check the gap between the front left stand-off, Figure 2, and the CVT glass.

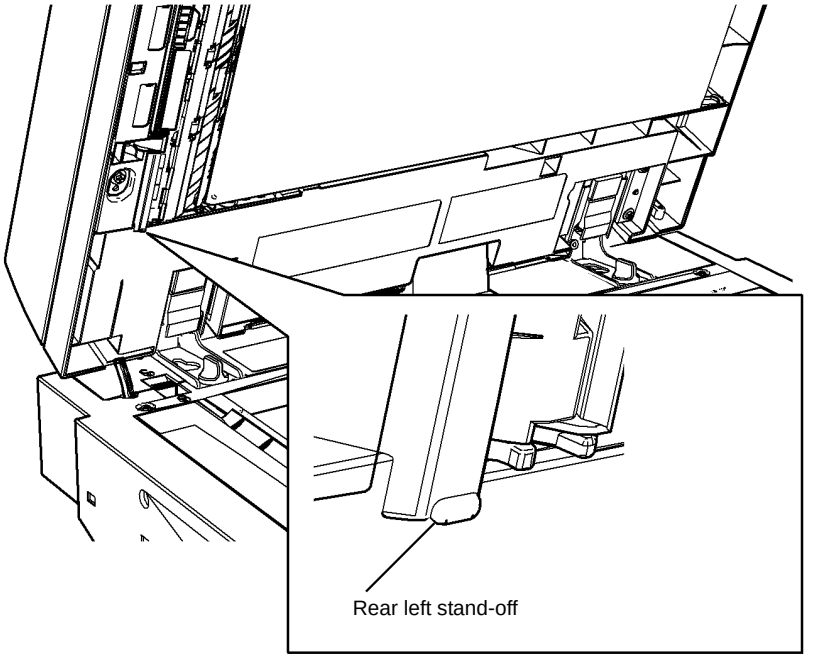


Figure 1 Rear left stand-off location

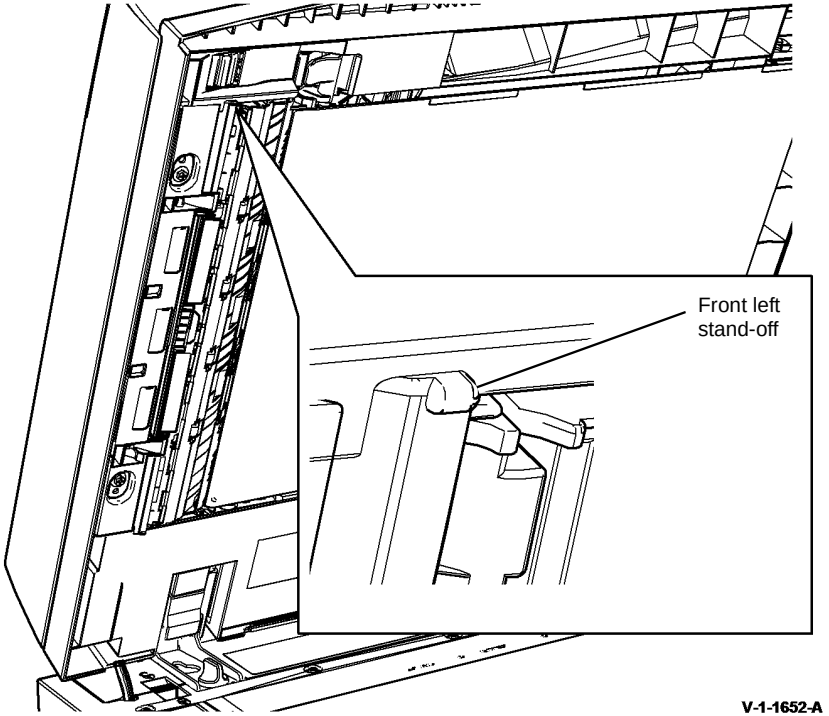


Figure 2 Front left stand-off location

2. With the machine powered on, lift the SPDH then lower it back down so that the side 1 scanner lamp illuminates. View the rear left stand-off gap, Figure 3 in the space between the SPDH and the scanner module. The rear left stand-off must just touch the CVT glass.

NOTE: *Opening and closing the SPDH will only illuminate the scanner lamp for approximately 6 seconds. If a longer duration of illumination is required, enter dC330 code 062-002 to illuminate the lamp.*

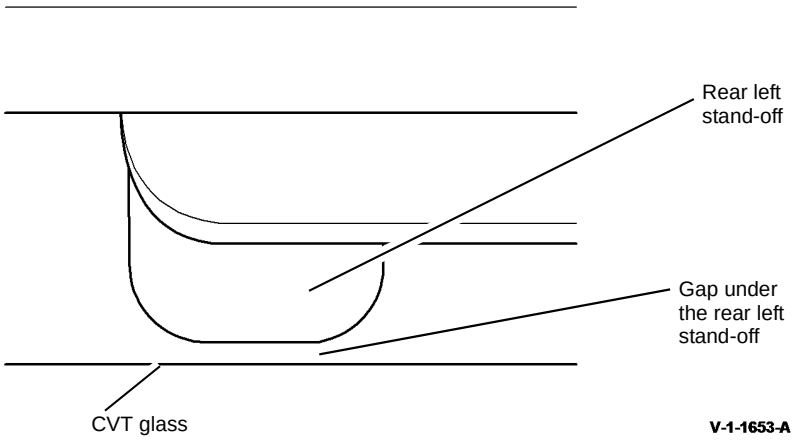


Figure 3 Rear left stand-off gap

3. View the front left stand-off gap, Figure 4 in the space between the SPDH and the scanner module. The front left stand-off must just touch the CVT glass.

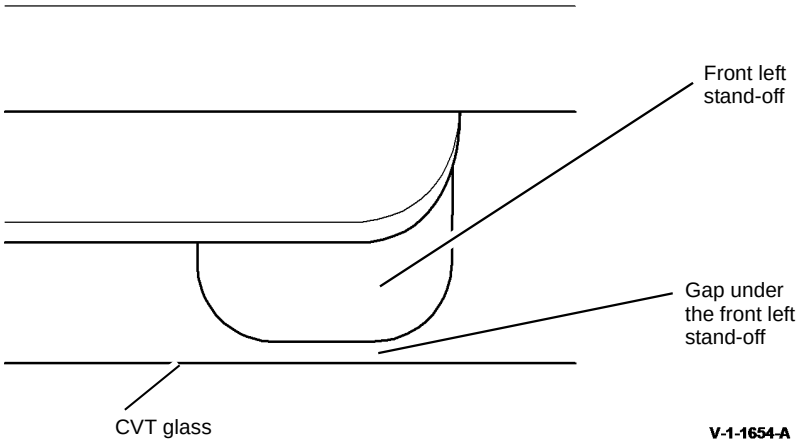


Figure 4 Front left stand-off gap

4. If the front left stand-off, or rear left stand-off do not touch the CVT glass, perform the Left Side Adjustment.

Left Side Adjustment

1. The height of the SPDH is adjusted by the screws on the top of the counterbalances. **Only the left counterbalance screw** should be adjusted during the left side adjustment.

   NOTE: *Adjusting the height of the left side of the SPDH can effect the height of the right side of the SPDH and vise versa. Ensure that the height of all three stand-offs is checked at the end of the procedure.*

2. Figure 5, adjust the left counterbalance.

   NOTE: *It should only be necessary to adjust the height by around one turn of the adjustment screw. Keep watching the* front left stand-off and rear left stand-off *whilst adjusting the screw and stop when they are both in contact with the CVT glass.*

   NOTE: *If the rear of the SPDH is lowered too much then it will start to lift the front off the CVT glass.*

   NOTE: *If the front of the SPDH is lowered too much then it will start to lift the rear off the CVT glass.*

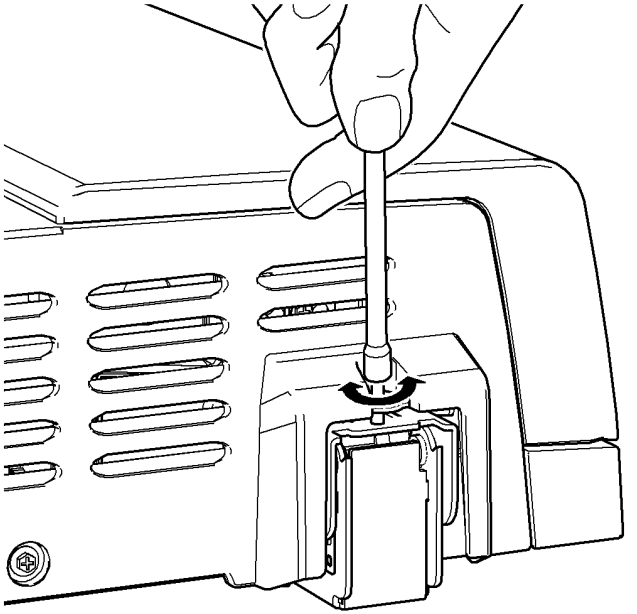


Figure 5 Left side adjustment

Right Side Check

1. Check the gap between the front right stand-off, Figure 6, and the document glass

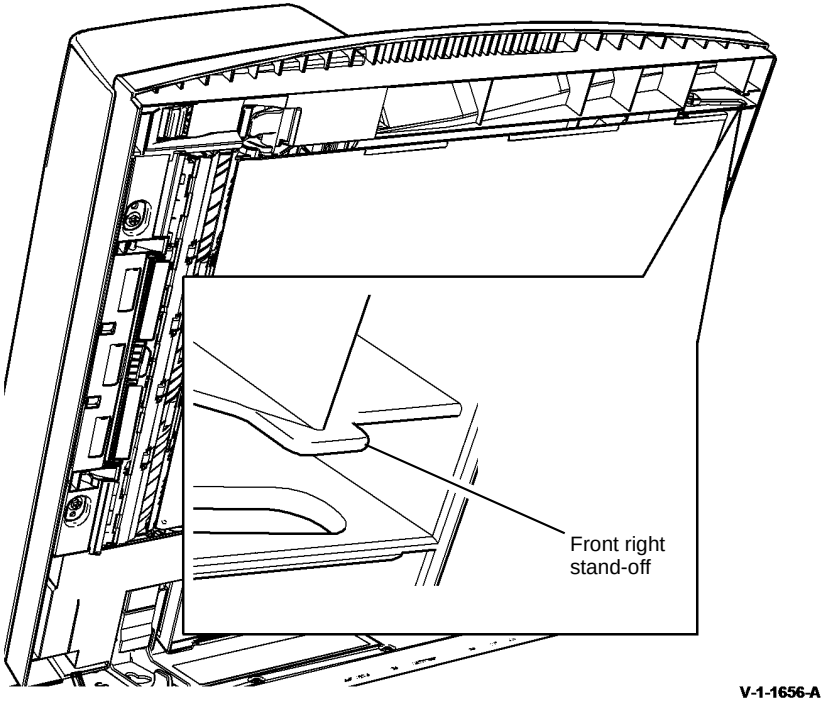


Figure 6 Front right stand-off location

2. View the front right stand-off gap, Figure 7 in the space between the SPDH and the scanner module. The front right stand-off must just touch the document glass.

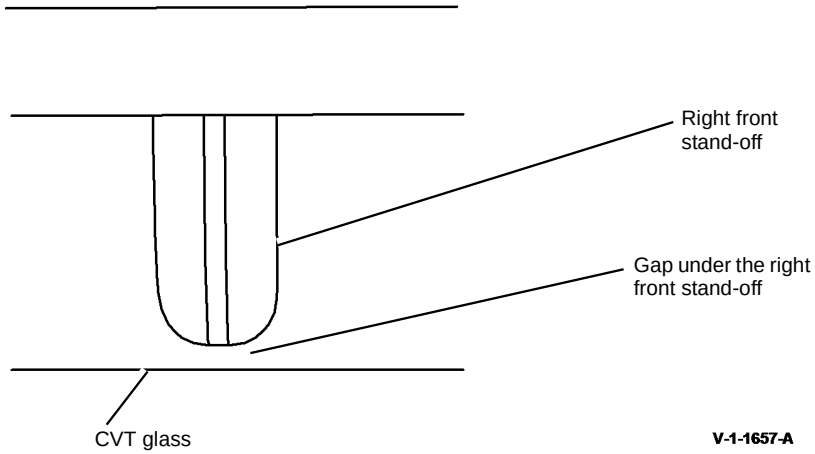


Figure 7 Front right stand-off gap

3. If the front right stand-off does not touch the CVT glass, perform the Right Side Adjustment.

Right Side Adjustment

1. The height of the SPDH is adjusted by the screws on the top of the counterbalances. **Only the right counterbalance screw** should be adjusted during the right side adjustment.

   NOTE: *Adjusting the height of the right side of the SPDH can effect the height of the left side of the SPDH and vise versa. Ensure that the height of all three stand-offs is checked at the end of the procedure.*

2. Figure 8, adjust the right counterbalance.

   NOTE: *It should only be necessary to adjust the height by around one turn of the adjustment screw. Keep watching the stand-off whilst adjusting the screw and stop when the front right stand-off is in contact with the document glass.*

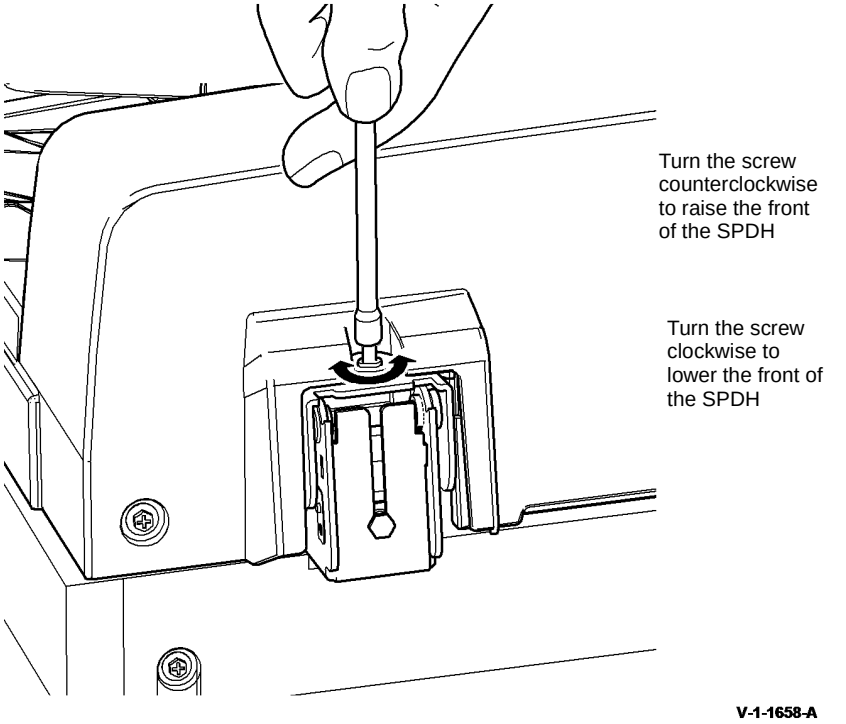


Figure 8 right side adjustment

3. Check the height of all three stand-offs. Re-adjust the counterbalances if necessary.

If mis-registration is found after the SPDH is set to the correct height, go to ADJ 5.5 SPDH Registration Adjustment.

ADJ 5.3 SPDH Skew

Parts List on PL 5.10

Purpose

To correct document feed skew induced by the SPDH.

Preparation

Perform the following:

1. Clean the CVT glass. Refer to ADJ 5.4 SPDH cleaning procedure.
2. Check that the document width guides are adjusted correctly.
3. Make sure that the SPDH is set to the correct height. Go to ADJ 5.2 SPDH Height Adjustment.
4. Check the document path for obstructions or foreign objects.
5. Perform the Skew Check.

Skew Check

1. Print internal test pattern 16, ensure it is completely free of skew.
2. Use the SPDH to make 5 side 1 copies of the test pattern, by placing the test pattern face up in the SPDH document tray.
3. Use the SPDH to make 5 side 2 copies of the test pattern, by placing the test pattern face down in the SPDH document tray and selecting duplex copies.

   NOTE: *Skew is always measured on the lead edge, irrespective of paper orientation.*

4. Check the skew, refer to IQS 5 Skew.
5. If necessary, perform the Side 1 Skew Adjustment and/or the Side 2 Skew Adjustment.

   NOTE: *If skew requires adjustment on both side 1 and side 2, the side 2 skew must be adjusted first.*

Side 2 Skew Adjustment

1. From the rear of the SPDH locate the skew adjusting screw, Figure 1.

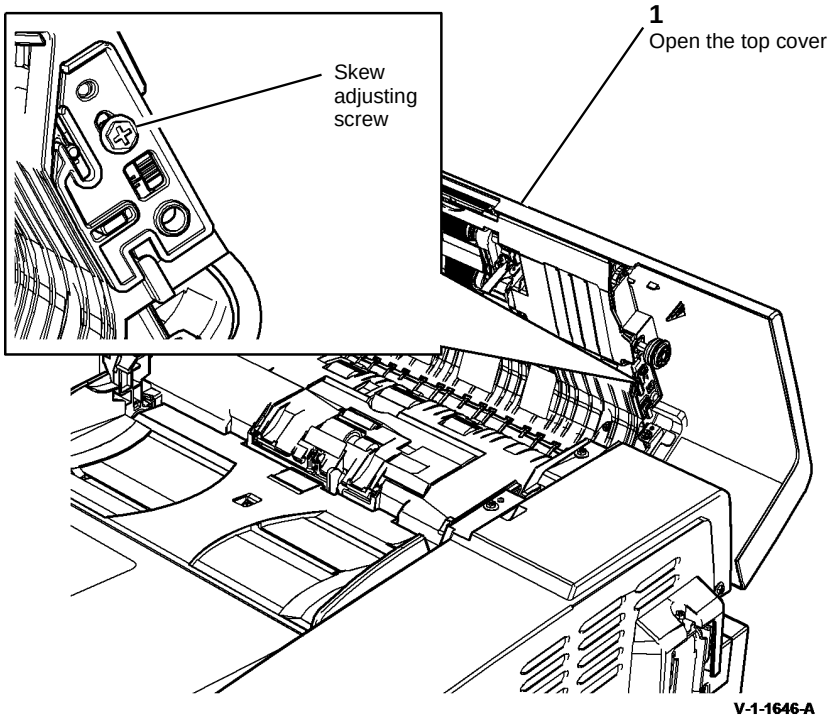


Figure 1 Adjusting screw location

2. If the SPDH did not need adjustment during build, the adjustment screw will be in the fixed location hole, if necessary move the screw to the adjustable slot position, Figure 2.

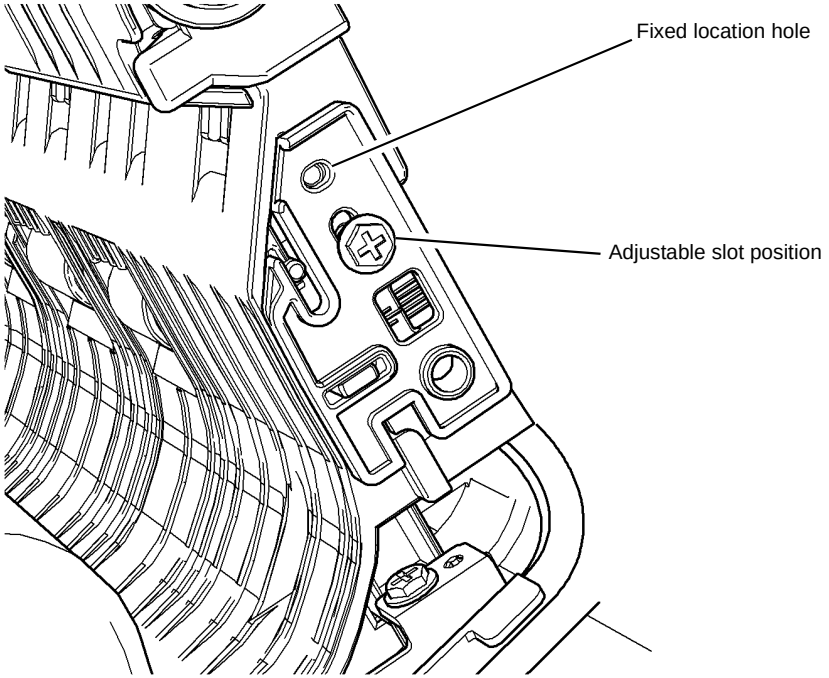


Figure 2 Adjusting screw position

3. Adjust the side 2 skew, Figure 3.

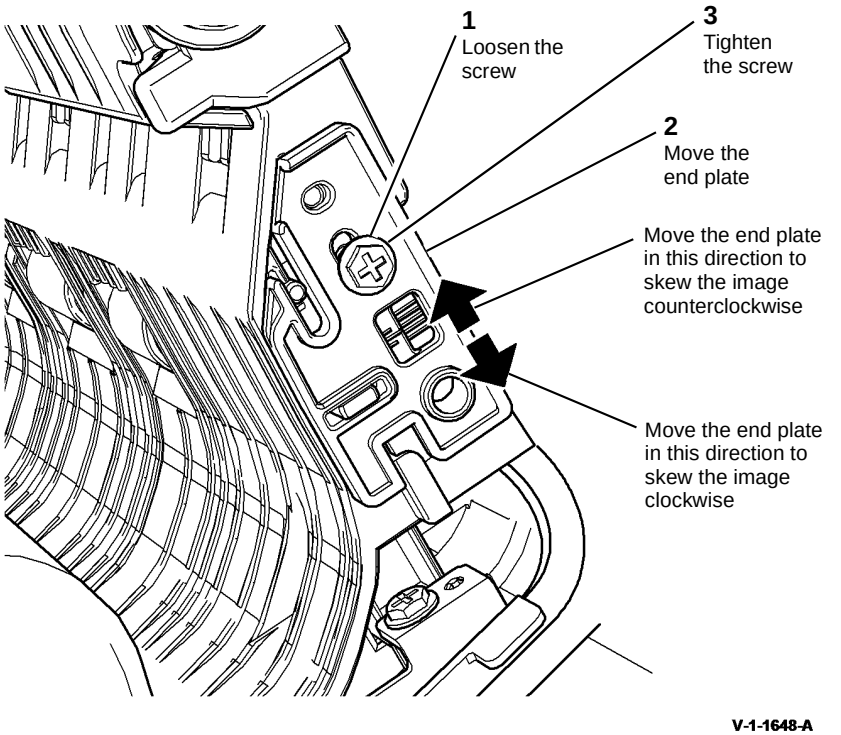


Figure 3 Side 2 skew adjustment

Side 1 Skew Adjustment

1. Prepare to adjust the side 1 skew, Figure 4.

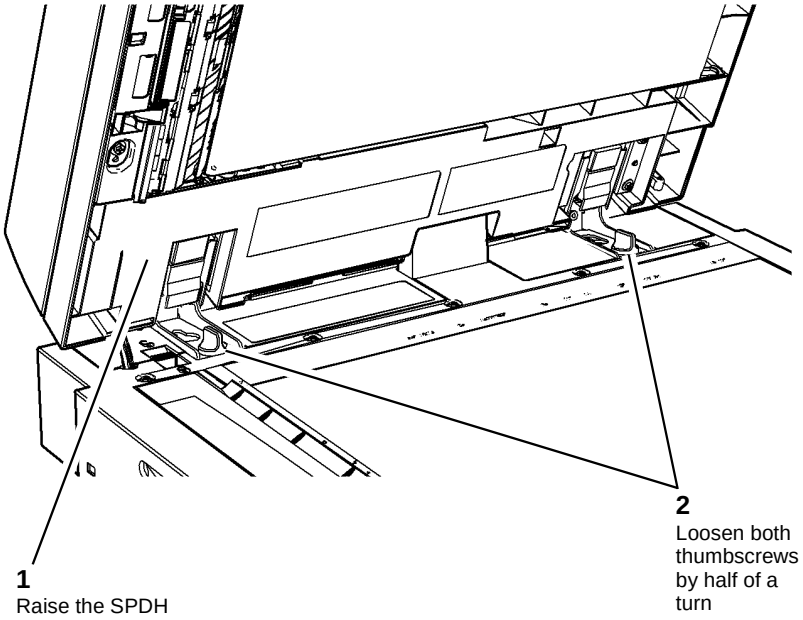


Figure 4 Preparation

2. Adjust the side 1 skew, Figure 5.

NOTE: *Approximately 3 turns of the adjustment screw will move the skew by 1mm*

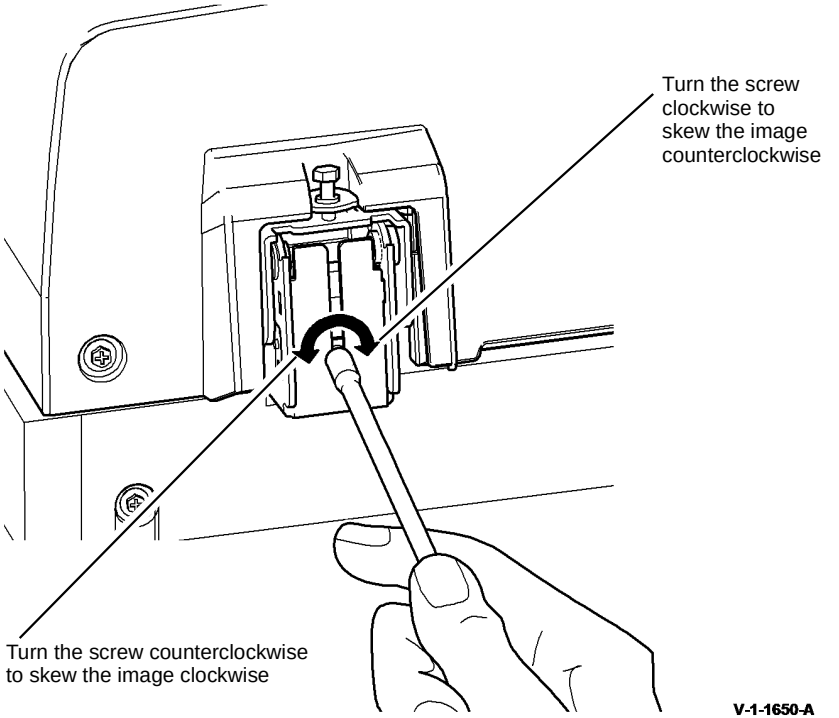


Figure 5 Side 1 skew adjustment

3. Tighten the thumbscrews.
4. Perform the Skew Check again. If necessary repeat the adjustments.
5. When the SPDH skew is good, perform ADJ 60.5 IIT Registration, Magnification and Calibration.

ADJ 5.4 SPDH Cleaning Procedure

Parts List on PL 5.10

Purpose

This procedure describes how to clean the SPDH. The wear of the feed rolls, paper dust and dirt in the environment can cause copy quality defects.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Use a brush to clean the document length sensors, PL 5.30 Item 5 and PL 5.30 Item 9.
2. Open the SPDH top cover.
3. Use a dry micro fiber wiper, PL 26.10 Item 13 or brush to clean the document path area, top and bottom. Remove all loose material.
4. Clean the upper document path idlers and takeaway roll assembly PL 5.17 Item 1, with a micro fiber wiper, PL 26.10 Item 13 and water.
5. Remove the feed, nudger and retard rolls, REP 5.2 and REP 5.3. Clean the 3 rolls and the retard pad, PL 5.30 Item 8 with a micro fiber wiper, PL 26.10 Item 13 and water. Use a brush to clean the paper dust from the feed assembly and from the area around the separation assembly. Re-install three roll assemblies.
6. Leave the top cover open and raise the SPDH assembly.
7. Remove the lower pre scan roller assembly, REP 5.6. Clean the three idler rolls with a micro fiber wiper, PL 26.10 Item 13 and water.
8. Rotate the pre scan jam clearance knob, PL 5.17 Item 11 and clean the pre scan roll assembly, PL 5.17 Item 4 and the lower document path idlers with a micro fiber wiper, PL 26.10 Item 13 and water.
9. Clean the document pad with a micro fiber wiper, PL 26.10 Item 13 and water.
10. Lower the SPDH assembly.

CAUTION

When the under side of the input tray is cleaned, do not damage the re-stack arm, PL 5.30 Item 7.

11. Clean the input tray and the exit area below the input tray with a micro fiber wiper, PL 26.10 Item 13 and antistatic fluid, PL 26.10 Item 19.
12. Clean the CVT glass and the document glass. Refer to ADJ 60.3 Scanner Cleaning Procedure.
13. Clean the side 2 scan assembly. Refer to ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure.

ADJ 5.5 SPDH Registration

Parts List on PL 5.10

Purpose

To adjust the side 2 image to paper registration.

Adjustment

Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

ADJ 10.1 Inverter Decurler Adjustment

Parts List on PL 10.11, PL 10.12, PL 10.13 and PL 10.14

Purpose

Use this adjustment to increase or decrease the output curl on prints from the IOT.

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check

1. Enter dC131a NVM Read/Write, read 710-001, Standby Temp and 710-002, Run Temp and ensure that the values are set to default.
2. Perform the procedures in IQ5 Print Damage RAP.
3. Check the machine is otherwise functioning correctly, refer to SCP 1 Initial Actions.

Adjustment

1. Initial calibration of the inverter decurler:

   NOTE: *The initial calibration procedure should give acceptable results for 80gsm paper and most other print media. However, for non-Xerox paper, pre-printed paper and card it may be necessary to adjust the initial calibration, Figure 2 or reset the inverter decurler retaining ring, Figure 3.*

   Align the slot of the adjuster slot with the retaining ring, Figure 1.

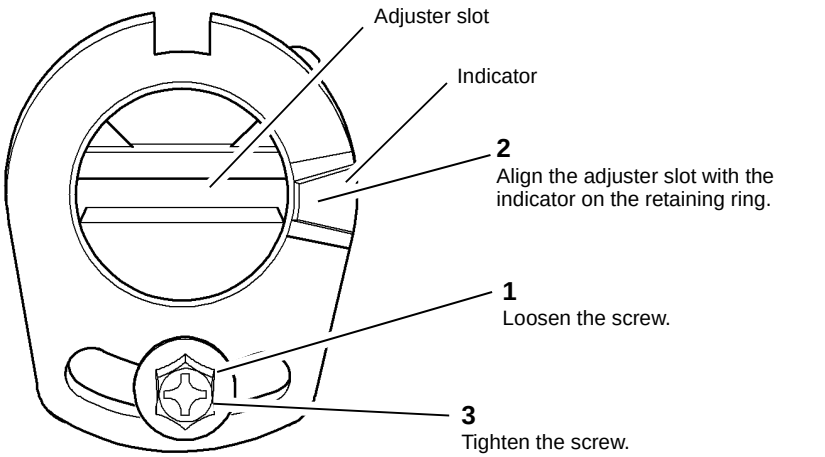


Figure 1 Initial calibration

   NOTE: *After the adjuster slot is set central to the indicator on the retaining ring, it will only be possible to make adjustments of 1 increment in either the clockwise or counter clockwise directions.*

2. Adjust the initial calibration of the inverter decurler:
   a. Adjust the initial calibration, Figure 2.
   b. Run 20 duplex copies of the customers preferred print media or A4 / 8.5x11 inch paper.

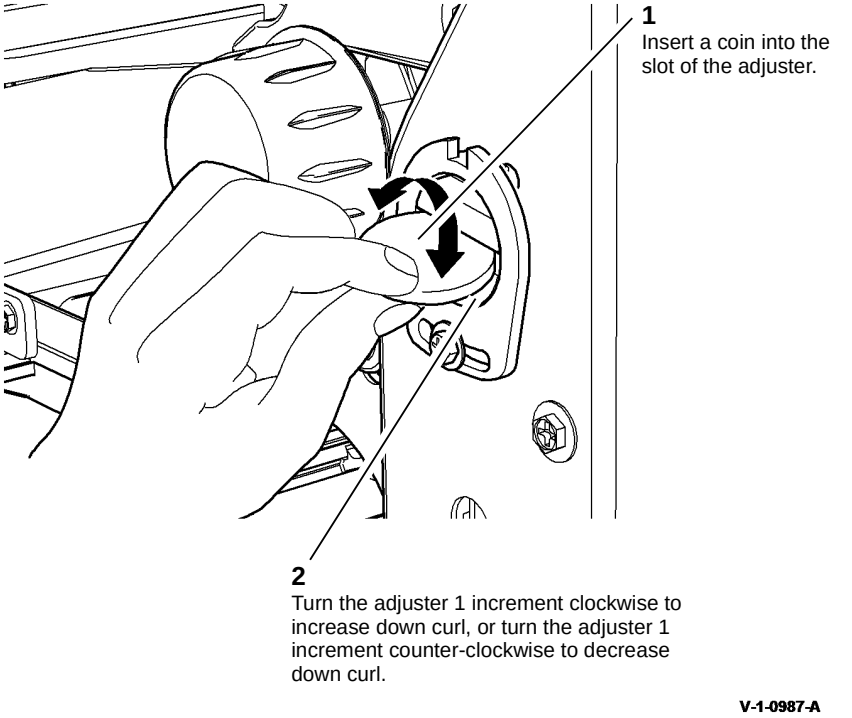


Figure 2 Adjust the initial calibration

c. Assess the copies for curl, refer to IQ5. If output curl is evident then reset the inverter decurler retaining ring to allow for further adjustment, refer to Figure 3 and Figure 4.

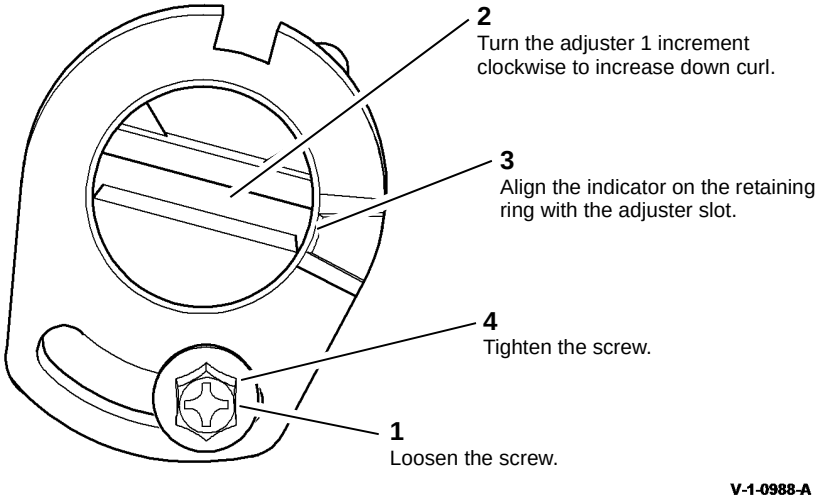


Figure 3 Increase down curl

3. Reset the inverter decurler retaining ring:

   After the retaining ring is reset adjustments of a further 2 increments are enabled, 1 in either direction.

   a. Reset the position of the retaining ring. To increase the down curl on output copies, see Figure 3. To decrease the down curl on output copies, see Figure 4.

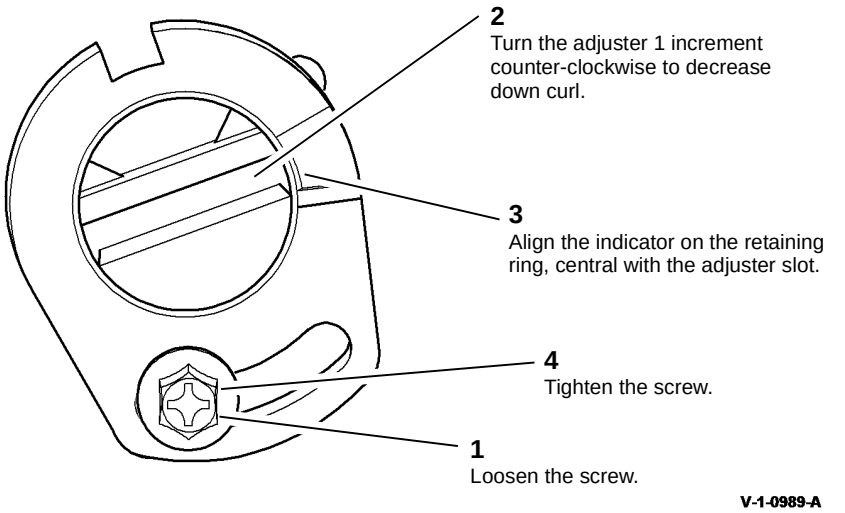


Figure 4 Decrease down curl

   b. Run 20 duplex copies of the customers preferred print media or A4 / 8.5x11 inch paper.

   c. Assess the copies for curl, refer to IQ5.

ADJ 11.1-110 2K LCSS Bin 1 Level

Parts List on PL 11.10

Purpose

To ensure bin 1 is level, and achieve the best stacking performance.

Check

Move bin 1 to the lowest position. Check that the tray is level. Enter dC330, code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications. If necessary, perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the bin 1 elevator motor, refer to REP 11.5-110.
2. Move bin 1 to the lowest position.
3. Slacken the screw on each belt clamp and adjust the position they sit on the belts to level the tray. Lock the clamps.
4. Re-install the bin 1 motor, refer to REP 11.5-110.
5. Switch on the machine, GP 14.
6. Enter dC330 code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications.

ADJ 11.2-110 Machine to 2K LCSS Alignment

Parts List on PL 11.2

Purpose

To correctly align the 2K LCSS to achieve reliable transfer of paper from the machine to the 2K LCSS.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1, turn both right hand wheels in the same direction to adjust the vertical alignment between the 2K LCSS and the machine viewed from the front or rear.

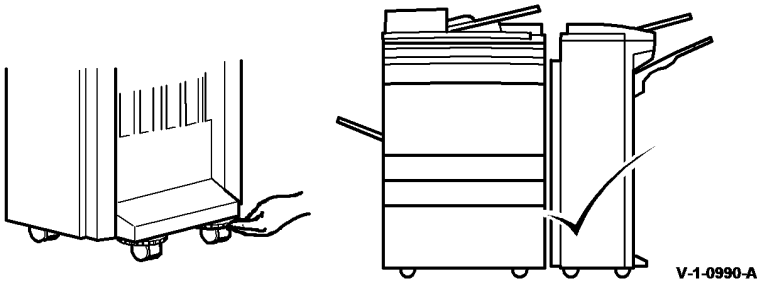


Figure 1 Machine to 2K LCSS alignment

ADJ 11.3-110 Hole Punch Position

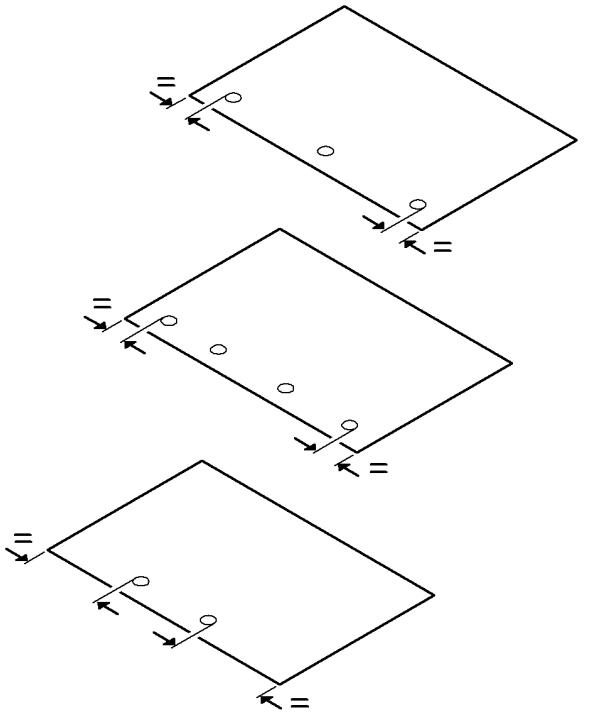
Parts List on PL 11.6.

Purpose

To optimize the position of the hole punch.

Check

1. Ask the customer which trays are used to feed from for hole punching.
2. Load the indicated trays with A4 (8.5x11 inch) paper.
3. Make a set of five punched copies or prints from each of the indicated trays. Mark the top edge (towards the front of the machine) of each set to indicate the tray from which it was fed.
4. Evaluate the average hole positions in each set, referring to Figure 1. The distances shown should be equal at the top and bottom of the sheet. If the distances are different by more than 1mm (0.040 inches), perform the adjustment.



V-1-0991-A

Figure 1 Hole positions

Adjustment

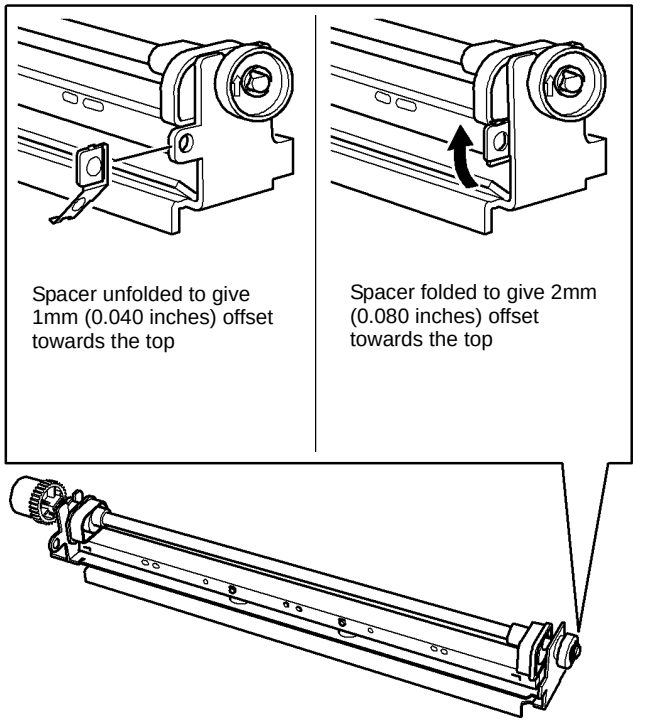
WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the chad bin and unscrew the thumb screw retaining the hole punch assembly.
2. Pull out the hole punch assembly a short distance to access the spacer, if installed, refer to Figure 2. The following settings can be made:

   NOTE: *If the spacer cannot be found, suitable washers up to a total thickness of 2mm (0.080 inches) may be used.*

   - With no spacer installed the holes are punched closest to the bottom of the sheet.
   - With the spacer installed unfolded the holes are punched 1mm (0.040 inches) closer to the top of the sheet.
   - With the spacer installed folded the holes are punched is 2mm (0.080 inches) closer to the top of the sheet.



V-1-0992-A

Figure 2 Hole punch spacer

3. Evaluate the movement needed and re-position the hole punch assembly. If the spacer is removed, tape it next to the TAG label on the 2K LCSS frame for future use.
4. Make sets from each of the indicated trays once more and ensure that the hole alignment is now optimized, make further adjustment if necessary.
5. If necessary, re-load the paper trays as they were before the adjustment was performed.

ADJ 11.4-110 Motor Drive Belt Tensioning

Purpose

To set the tension of directly or indirectly driven belts that are tensioned by a spring attached to the motor.

Check

1. The shafts and pulleys are installed and properly located.
2. The drive belt is undamaged and correctly routed.
3. The adjustable motor or tensioning pulley bracket is positioned with fastening screws tightened fully.

   NOTE: *For motors with pivoted brackets, the pivot screw must be fitted and tightened.*

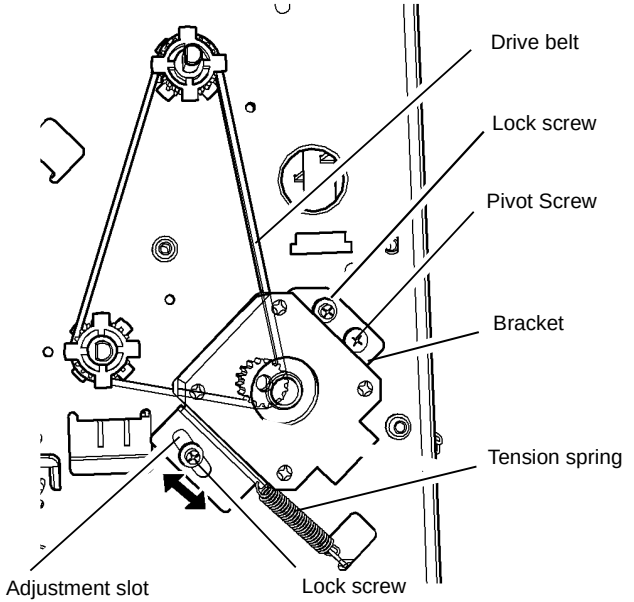
4. The tensioning spring is fitted between the bracket and frame locating point.

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1 shows a typical arrangement. Slacken the bracket lock screws. Press the belt midway between pulleys and check that the bracket moves and returns by the spring pull.
2. Release the belt and allow the spring to pull the bracket and tension the drive belt then tighten the lock screws.

NOTE: *Check the belt condition and routing if the tension spring is not extended or the locking screw is at the end of the bracket adjustment slot.*



Typical spring tensioning arrangement

V-1-0993-A

Figure 1 Drive belt tensioning

ADJ 11.1-120 1K LCSS Bin 1 Level

Parts List on PL 11.100, PL 11.120

Purpose

To ensure bin 1 is level, and achieve the best stacking performance.

Check

Move bin 1 to the lowest position. Check that the tray is level. Enter dC330, code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications. If necessary, perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the bin 1 elevator motor, refer to REP 11.5-120.
2. Move bin 1 to the lowest position.
3. Slacken the screw on each belt clamp and adjust the position they sit on the belts to level the tray. Lock the clamps.
4. Re-install the bin 1 elevator motor, refer to REP 11.5-120.
5. Switch on the machine, GP 14.
6. Enter dC330, code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications.

ADJ 11.2-120 Motor Drive Belt Tensioning

Purpose

To set the tension of directly or indirectly driven belts that are tensioned by a spring attached to the motor.

Check

1. The shafts and pulleys are installed and properly located.
2. The drive belt is undamaged and correctly routed.
3. The adjustable motor or tensioning pulley bracket is positioned with fastening screws tightened fully.

   NOTE: *For motors with pivoted brackets, the pivot screw must be fitted and tightened.*

4. The tensioning spring is fitted between the bracket and frame locating point.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1 shows a typical arrangement. Slacken the lock screws. Press the belt midway between pulleys and check that the bracket moves and returns by the spring pull.
2. Release the belt and allow the spring to pull the bracket and tension the drive belt then tighten the lock screws.

   NOTE: *Check the belt condition and routing if the tension spring is not extended or the locking screw is at the end of the bracket adjustment slot.*

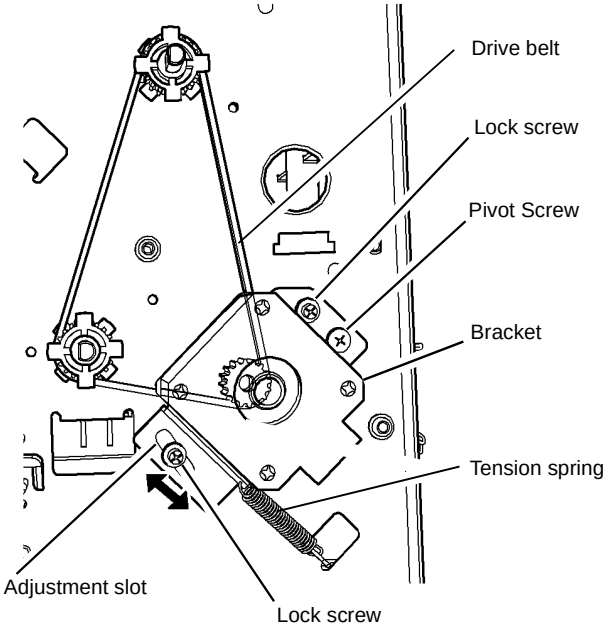


Figure 1 Drive belt tensioning

ADJ 11.1-150 LVF BM Bin 1 Level

Parts List on PL 11.50

Purpose

To ensure bin 1 is level, and achieve the best stacking performance.

Check

Move bin 1 to the lowest position. Check that the tray is level. Enter dC330, code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications. If necessary, perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the stacker tray drive and motor assembly, refer to REP 11.5-150.
2. Move bin 1 to the lowest position.
3. Slacken the screw on each belt clamp, PL 11.58 Item 2 and PL 11.58 Item 8, adjust the position they sit on the belts to level the tray. Lock the clamps.
4. Re-install the stacker tray drive and motor assembly refer to REP 11.5-150.
5. Switch on the machine, GP 14.
6. Enter dC330 code 011-033, Bin 1 Elevator Motor Cycle. Check that bin 1 cycles without giving any fault indications.

ADJ 11.2-150 Machine to LVF BM Alignment

Parts List on PL 11.50

Purpose

To correctly align the LVF BM to achieve reliable transfer of paper from the machine to the LVF BM.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1, turn both right hand wheels in the same direction to adjust the vertical alignment between the LVF BM and the machine viewed from the front or rear.

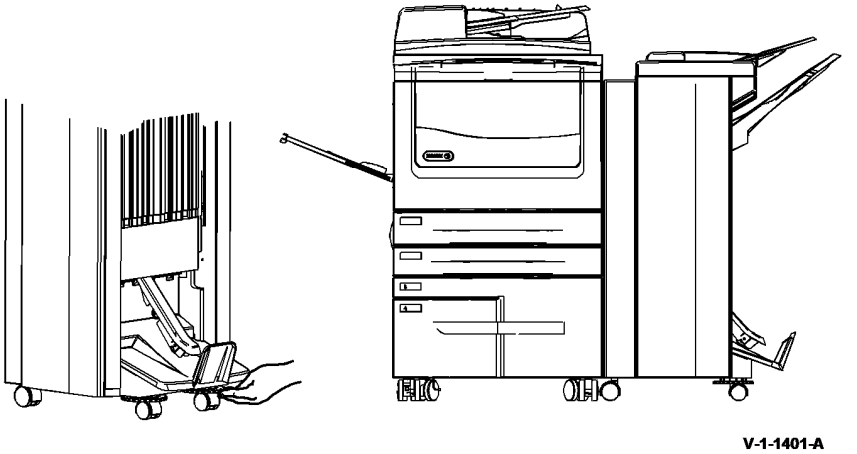


Figure 1 Machine to LVF BM alignment

ADJ 11.3-150 Hole Punch Position

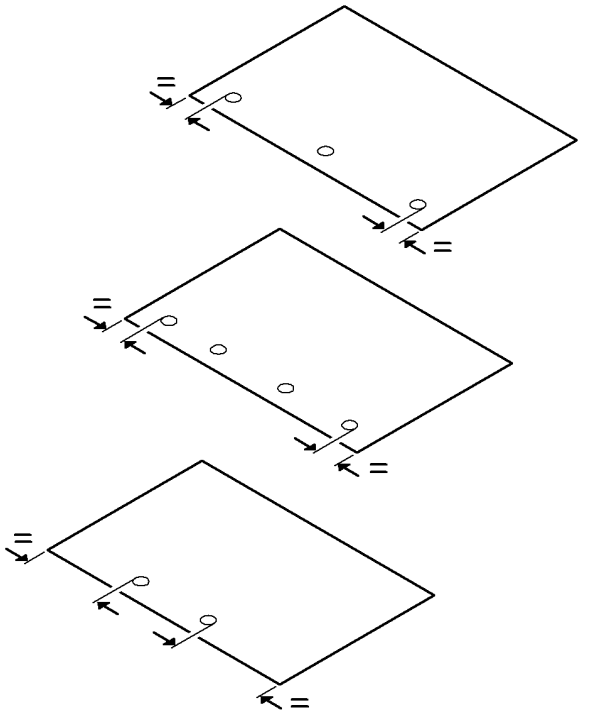
Parts List on PL 11.54.

Purpose

To optimize the position of the hole punch.

Check

1. Ask the customer which trays are used to feed from for hole punching.
2. Load the indicated trays with A4 (8.5x11 inch) paper.
3. Make a set of five punched copies or prints from each of the indicated trays. Mark the top edge (towards the front of the machine) of each set to indicate the tray from which it was fed.
4. Evaluate the average hole positions in each set, referring to Figure 1. The distances shown should be equal at the top and bottom of the sheet. If the distances are different by more than 1mm (0.040 inches), perform the adjustment.



V-1-1402-A

Figure 1 Hole positions

Adjustment

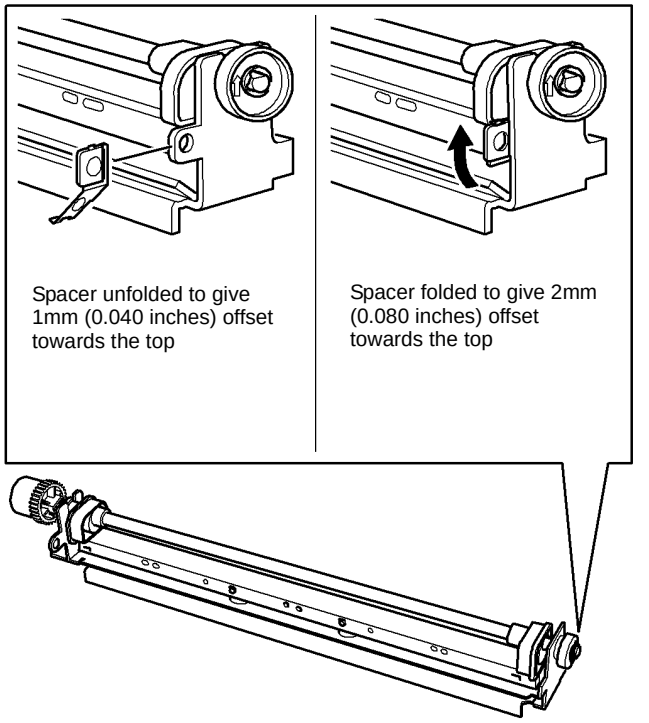
WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the chad bin and unscrew the thumb screw retaining the hole punch assembly.
2. Pull out the hole punch assembly a short distance to access the spacer, if installed, refer to Figure 2. The following settings can be made:

   NOTE: *If the spacer cannot be found, suitable washers up to a total thickness of 2mm (0.080 inches) may be used.*

   - With no spacer installed the holes are punched closest to the bottom of the sheet.
   - With the spacer installed unfolded the holes are punched 1mm (0.040 inches) closer to the top of the sheet.
   - With the spacer installed folded the holes are punched is 2mm (0.080 inches) closer to the top of the sheet.



V-1-1403-A

Figure 2 Hole punch spacer

3. Evaluate the movement needed and re-position the hole punch assembly. If the spacer is removed, tape it next to the TAG label on the LVF BM frame for future use.
4. Make sets from each of the indicated trays once more and ensure that the hole alignment is now optimized, make further adjustment if necessary.
5. If necessary, re-load the paper trays as they were before the adjustment was performed.

ADJ 11.4-150 Motor Drive Belt Tensioning

Purpose

To set the tension of directly or indirectly driven belts that are tensioned by a spring attached to the motor.

Check

1. The shafts and pulleys are installed and properly located.
2. The drive belt is undamaged and correctly routed.
3. The adjustable motor or tensioning pulley bracket is positioned with fastening screws tightened fully.

   NOTE: *For motors with pivoted brackets, the pivot screw must be fitted and tightened.*

4. The tensioning spring is fitted between the bracket and frame locating point.

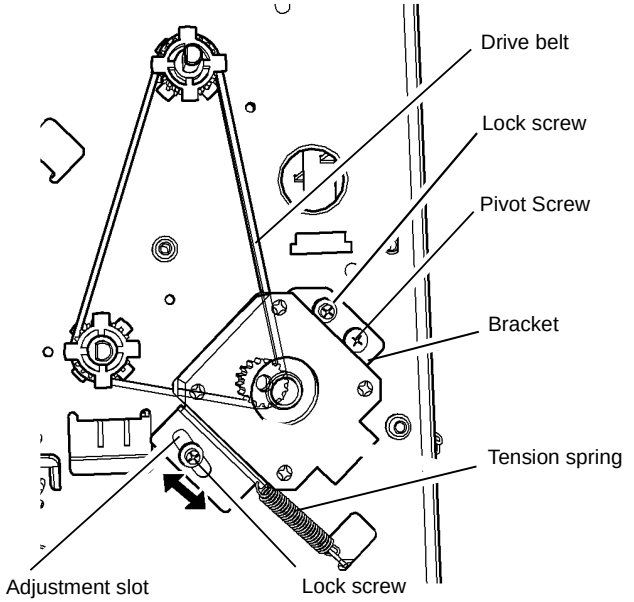
Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1 shows a typical arrangement. Slacken the bracket lock screws. Press the belt midway between pulleys and check that the bracket moves and returns by the spring pull.
2. Release the belt and allow the spring to pull the bracket and tension the drive belt then tighten the lock screws.

NOTE: *Check the belt condition and routing if the tension spring is not extended or the locking screw is at the end of the bracket adjustment slot.*



Typical spring tensioning arrangement

V-1-1404-A

Figure 1 Drive belt tensioning

ADJ 11.5-150 Booklet Crease Position

Purpose

To set the crease position of the booklet in relation to the centre of the booklet sheets.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the position of the crease in relation to the open end of the booklet. The fold should be central, so that the open ends of the booklet pages are equal from the fold. If necessary perform the adjustment.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-101.
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.

      NOTE: *Increasing the value increases the width of the top sheet of the booklet (moves the fold away from the left edge). Decreasing the value decreases the width of the top sheet of the booklet (moves the fold towards the left edge). One step = 0.1mm.*

   e. Select Save, then OK.
2. Select Save, then select OK.
3. When the crease position is correct, switch the machine off then on, GP 14.
4. Record the new NVM value on the LVF BM NVM label.

ADJ 11.6-150 Booklet Staple Position

Purpose

To set the position of the staples so that they are positioned on the fold of the booklet.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the position of the staple in relation to the fold of the booklet. The staple should be positioned in the middle of the fold. If necessary perform the adjustment.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-100
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.

      NOTE: *Increasing the value moves the staple position toward the left edge of the top sheet. Decreasing the value moves the staple position away from the left edge of the top sheet. One step = 0.1mm.*

   e. Select Save, then OK.
2. Select Save, then select OK.
3. Repeat the Check to ensure the staple position is correct.
4. When the staple position is correct, switch the machine off then on, GP 14.
5. Record the new NVM value on the LVF BM NVM label.
6. If the staples are not correctly clinched, perform as necessary, ADJ 11.7-150 Booklet Stapler Anvil Position - Front or ADJ 11.8-150 Booklet Stapler Anvil Position - Rear.

ADJ 11.7-150 Booklet Stapler Anvil Position - Front

Purpose

To set the position of the BM staple head assembly so that it is correctly aligned with the front BM staple cartridge, to give correctly clinched staples.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the condition of the staple legs. Both staple legs should be formed to the same shape and by the same amount.
3. If the staple legs are not correctly clinched, perform the adjustment.

Adjustment

CAUTION

Do not enter NVM values of less than 6 or greater than 14. NVM values outside of these values may cause machine damage.

1. Perform the following:
   a. Enter dC131.
   b. Select 712-102.
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.
      - If the lesser formed leg is towards the front, move the BM staple head assembly towards the rear (decrease the NVM value)
      - If the lesser formed leg is towards the rear, move the BM staple head assembly towards the front (increase the NVM value)

      NOTE: *Increasing the value will move the BM staple head assembly towards the front. Decreasing the value will move the BM staple head towards the rear. One step = 0.2666mm.*

   e. Select Save, then OK.
2. Select Save, then select OK.
3. Repeat the Check to ensure the staple clinching is correct.
4. When the staple clinching is correct, switch the machine off then on, GP 14.
5. Record the new NVM value on the LVF BM NVM label.

ADJ 11.8-150 Booklet Stapler Anvil Position - Rear

Purpose

To set the position of the BM staple head assembly so that it is correctly aligned with the rear BM staple cartridge, to give correctly clinched staples.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the condition of the staple legs. Both staple legs should be formed to the same shape and by the same amount.
3. If the staple legs are not correctly clinched, perform the adjustment.

Adjustment

CAUTION

Do not enter NVM values of less than 6 or greater than 14. NVM values outside of these values may cause machine damage.

1. Perform the following:
   a. Enter dC131.
   b. Select 712-103.
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.
      - If the lesser formed leg is towards the front, move the BM staple head assembly towards the rear (decrease the NVM value)
      - If the lesser formed leg is towards the rear, move the BM staple head assembly towards the front (increase the NVM value)

      NOTE: *Increasing the value will move the BM staple head assembly towards the front. Decreasing the value will move the BM staple head towards the rear. One step = 0.2666mm.*

   e. Select Save, then OK.
2. Select Save, then select OK.
3. Repeat the Check to ensure the staple clinching is correct.
4. When the staple clinching is correct, switch the machine off then on, GP 14.
5. Record the new NVM value on the LVF BM NVM label.

ADJ 11.1-171 Machine to HVF/HVF BM, HVF BM to Tri-Folder Alignment

Purpose

To correctly align the HVF or HVF BM, to achieve reliable transfer of paper from the machine to the output tray.

To correctly align the tri-folder, to achieve reliable transfer of paper from the HVF BM to the output tray.

Check

- Ensure the HVF/HVF BM is aligned both vertically and horizontally with the machine. If necessary perform the adjustment.
- Ensure the Tri-folder is aligned vertically and horizontally with the HVF/HVF BM. If necessary perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1, turn both adjustable castors in the same direction to adjust the vertical alignment between the HVF/HVF BM and the machine.

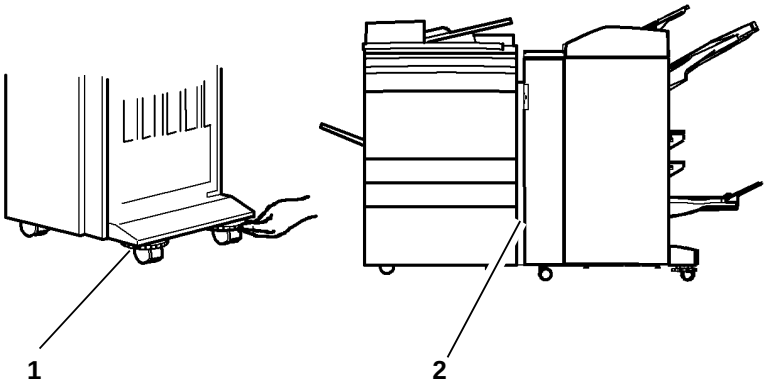


Figure 1 Machine to HVF/HVF BM alignment

2. Figure 2, turn both adjustable castors in the same direction to adjust the vertical alignment between the tri-folder and the HVF/HVF BM.

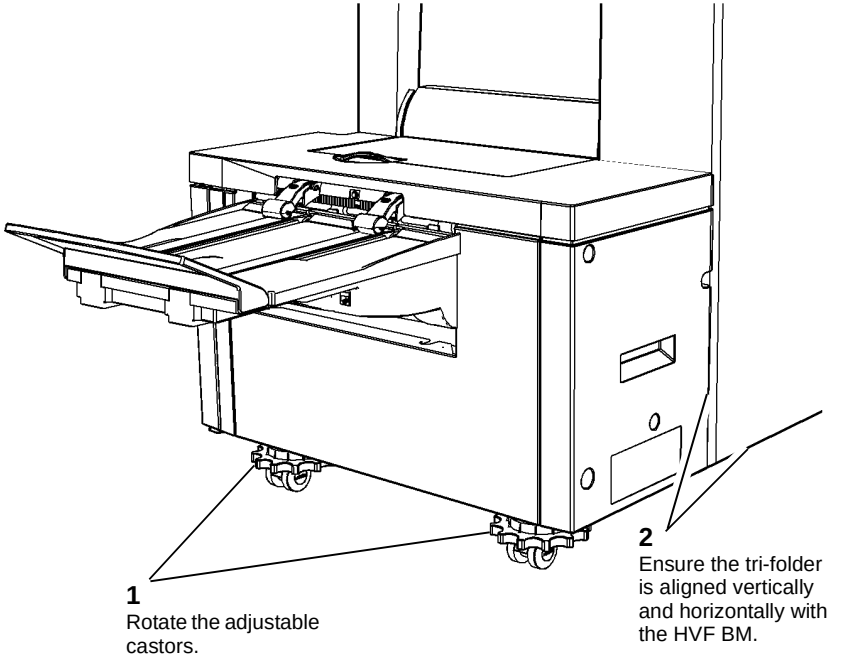


Figure 2 Tri-Folder to HVF BM alignment

ADJ 11.2-171 Tri-Folder Paper Size Setting

Purpose

To set the tri-folder to correctly fold 8.5 x 11 inch or A4 paper.

Check

1. Ensure that the tri-folder is at the same height as the HVF, ADJ 11.1-171.
2. Run a copy job 4 sheets and check that the folds are in the correct place.
3. The paper should be folded into three equal parts and the folds parallel to the edge of the paper. If necessary perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *Figure 1 shows the tri-folder front and rear paper setting adjusters in the 8.5 x11 inch (LTR) position.*

1. Remove the tri-folder front door, PL 11.190 Item 2, tri-folder front cover, PL 11.190 Item 12 and the rear cover PL 11.190 Item 3. Check that the front and rear paper setting adjusters are in position for the appropriate size of paper, Figure 1.

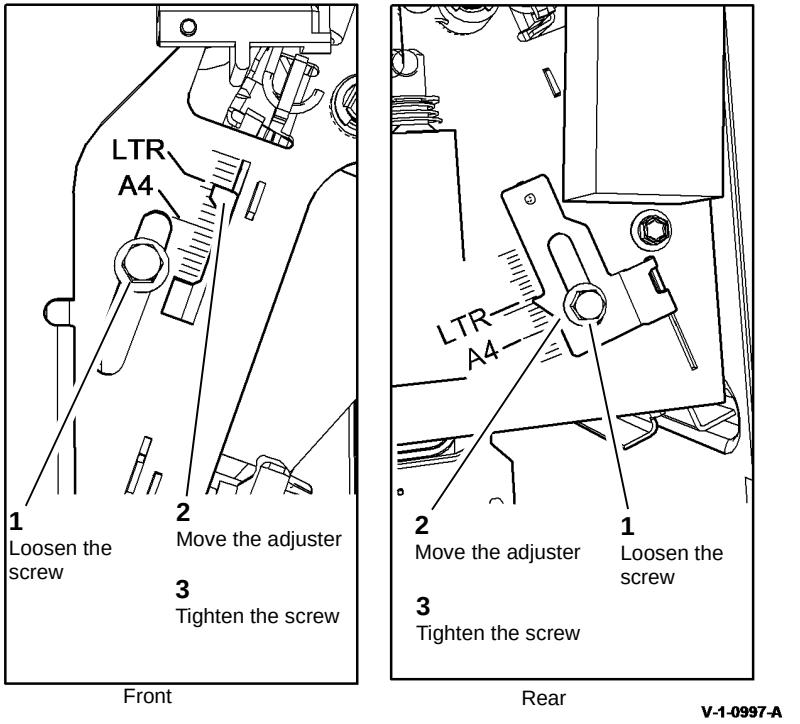


Figure 1 Tri-Folder paper setting

2. Set the front and rear paper setting adjusters to the A4 or 8.5 x 11 inch (LTR) position, Figure 1.

   NOTE: *Do not over loosen the adjuster screws. The adjusters can detach from the back-stop. Make sure the position of the backstop changes when the adjusters are moved.*

3. Ensure the front door interlock switch is cheated, PL 11.197 Item 2. Run a four sheet C fold and Z fold copy job. Check that the copies are folded into three approximately equal parts, with the folds parallel to the edge of the paper.
4. Check the C and Z folded copies meet the customer requirements. If necessary make fine adjustments to the position of the folds, ADJ 11.12-171 Tri-Folder Fold Adjustment.

ADJ 11.3-171 Stapler Anvil Alignment

Parts List on PL 11.168

Purpose

To ensure the correct alignment of the stapler anvil to the stapler throat.

Special Tools Required

Stapler alignment tool, supplied with the HVF BM, located on the left of the BM frame.

NOTE: *This procedure illustrates the front stapler. The procedure for adjusting the rear stapler is identical.*

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. To improve the access to the two clamp screws for the anvil, remove the tamper assembly, REP 11.30-171.
2. Fully pull out the BM module. Remove the stapler cover(s), one screw on each. Pull the stapler bracket handle and swing open the stapler bracket.
3. Insert the alignment tool, Figure 1.

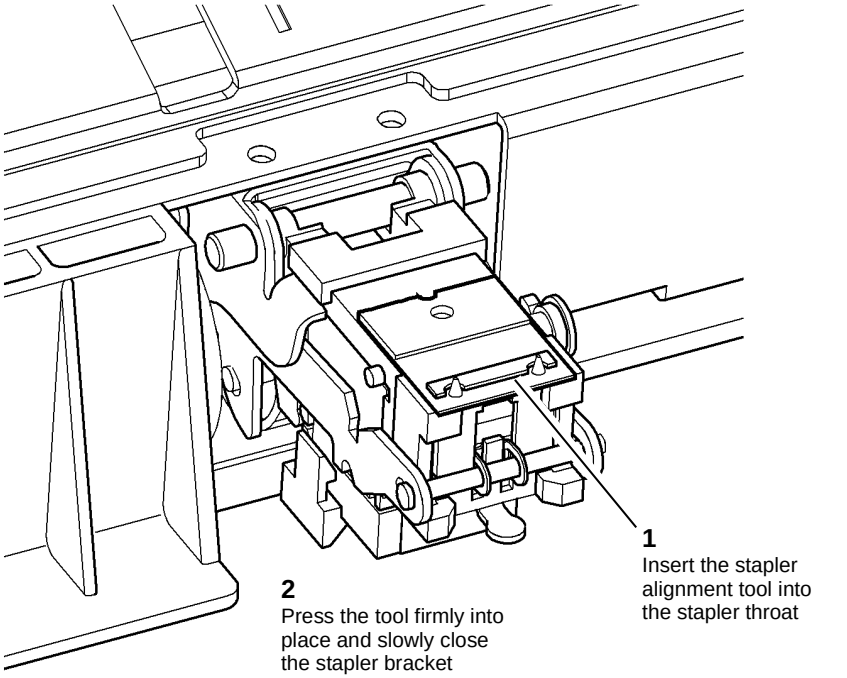


Figure 1 Alignment tool insertion

4. Loosen the anvil, Figure 2.

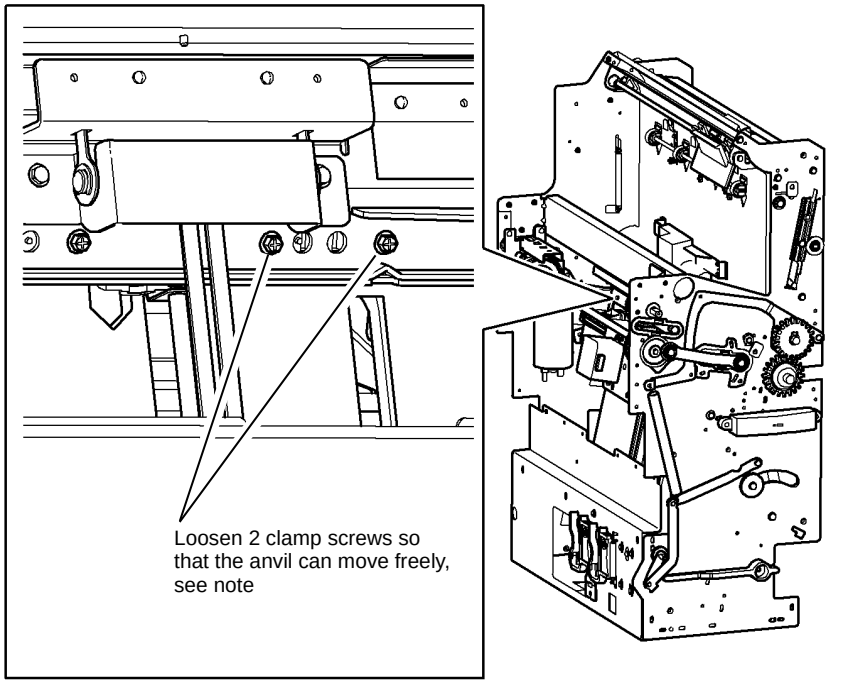


Figure 2 Loosening the anvil

NOTE: *Take great care not to drop the anvil, spacer or clamp plate, Figure 3, as they can fall to the bottom of the BM module. If parts need to be retrieved from the bottom of the BM module it may be necessary to tilt the whole HVF BM to make the loose parts slide to the centre of the base, from where they can be easily removed.*

5. Close the stapler, Figure 3.

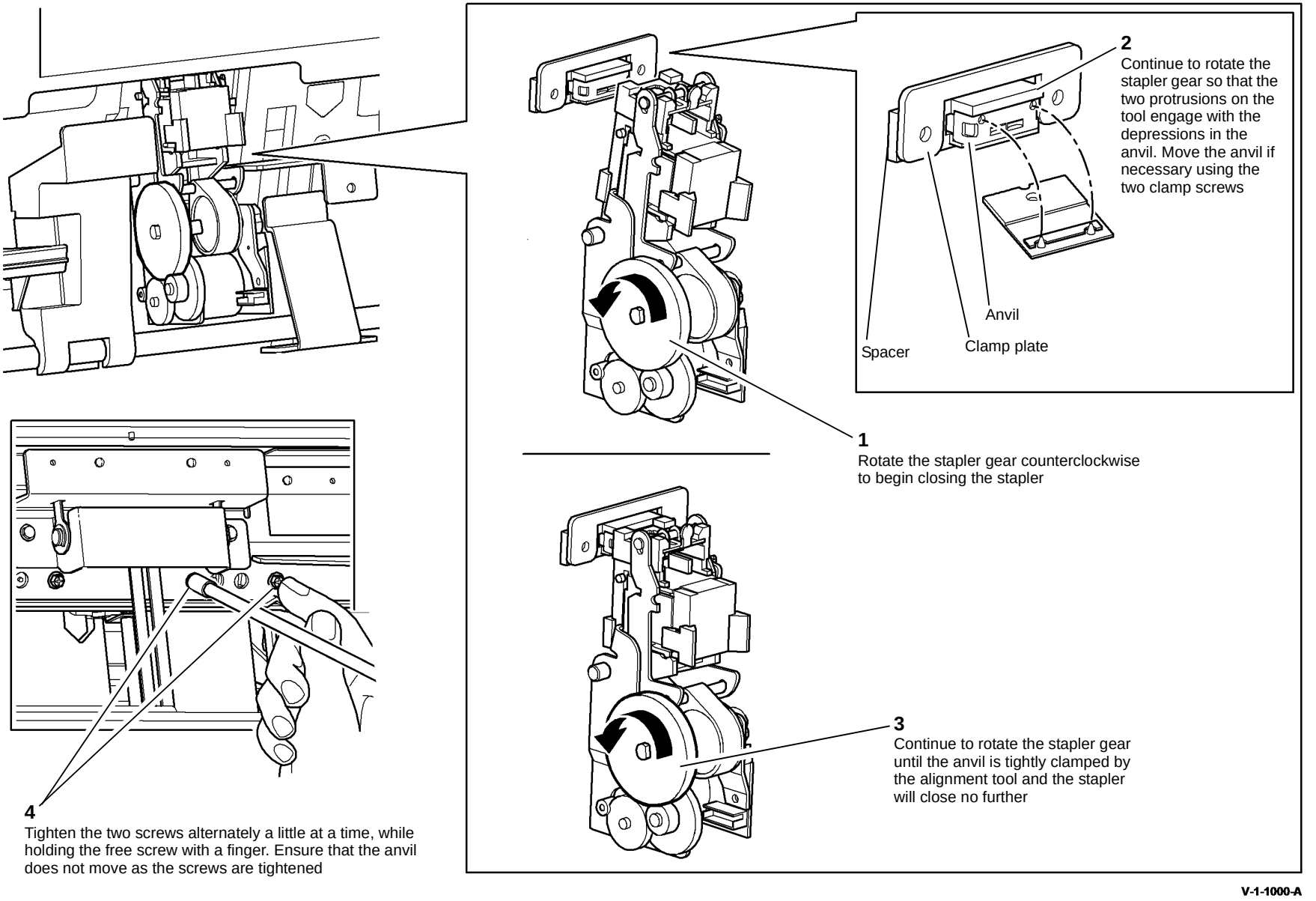


Figure 3 Closing the stapler

6. Open the stapler fully by use of the stapler gear, Figure 3, then remove the alignment tool.
7. Perform the adjustment on the other stapler anvil if necessary.
8. Check the operation of the stapler by making a few stapled sets using 2 sheets of 80gsm (20 pound) paper. check the quality of the staple clinch.

ADJ 11.4-171 Crease Blade Position

Purpose

To correctly position the crease blade to ensure accurate booklet creasing.

Special Tools Required

Crease blade setup tools (2), supplied with the HVF BM, located on the left of the frame.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Open the HVF BM front door and fully pull out the BM module.
2. Remove the crease blade knob (6d), PL 11.161 Item 4.
3. Remove the crease roll handle (6c), PL 11.161 Item 5.
4. Remove the BM front cover, PL 11.161 Item 3.
5. Re-install the crease blade knob and crease roll handle.
6. Remove the BM right hand cover, REP 11.56-171.
7. Rotate the crease roll handle fully counter clockwise to open the crease roll nip. Rotate the crease roll handle clockwise until the crease rolls are just touching.
8. Ensure the crease blade is fully retracted by positioning the crease blade knob with the arrow in the up position.

9. Position the crease blade setup tools on the crease roll shafts, Figure 1.

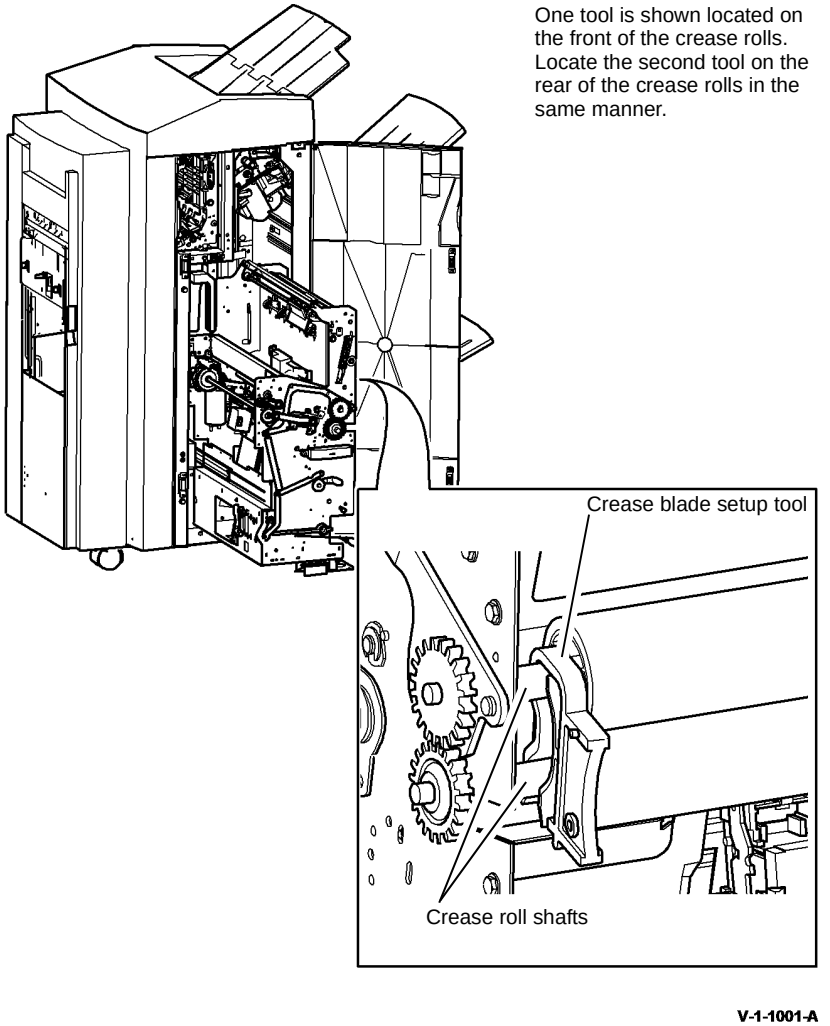


Figure 1 Setup tool positioning

10. Lock the crease gate in the open position, Figure 2.

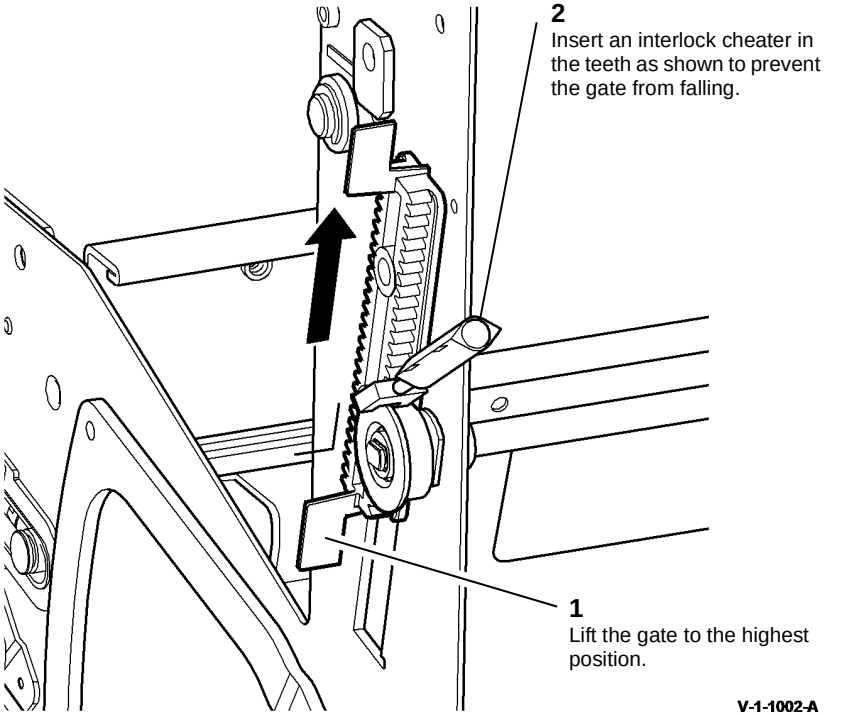


Figure 2 Lock the crease gate

11. Loosen the crease blade screws, Figure 3.

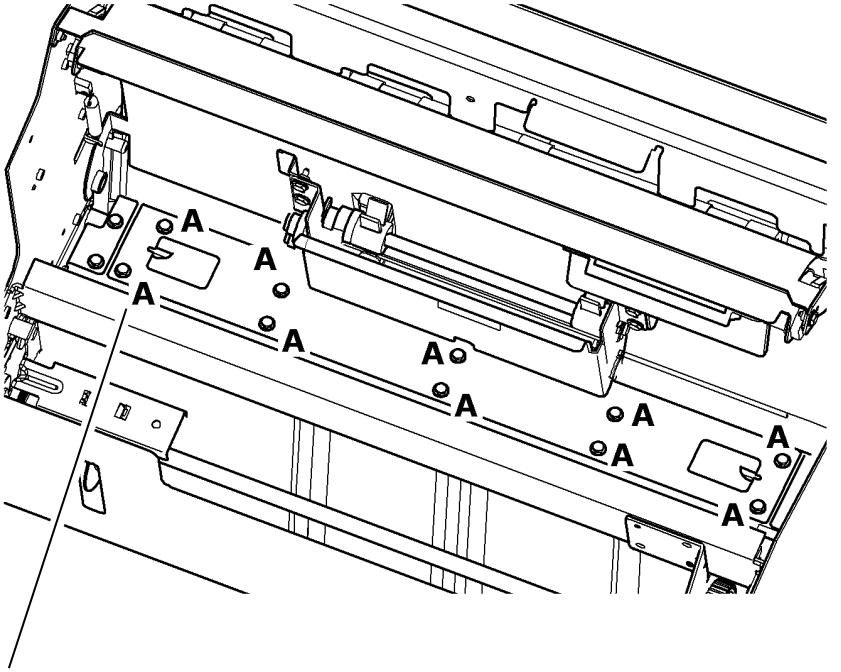


Figure 3 Blade loosening

12. Fully insert the crease blade by positioning the crease blade knob (6d), PL 11.161 Item 4, with the arrow in the down position.

13. Set the crease blade in the correct position, Figure 4.

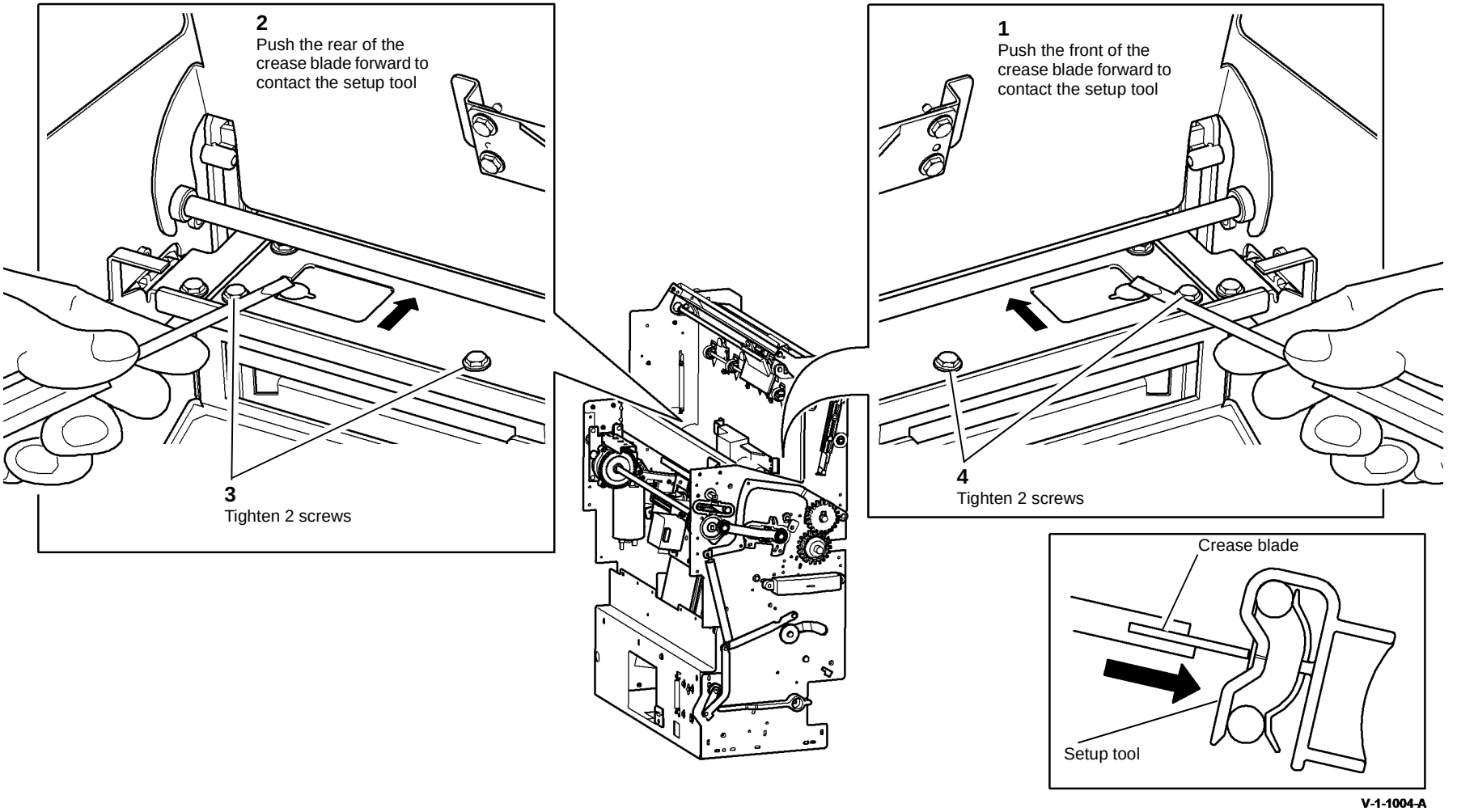


Figure 4 Blade positioning

14. Fully retract the crease blade by positioning the crease blade knob (6d), PL 11.161 Item 4, with the arrow in the up position.
15. Tighten the six remaining crease blade clamp screws, refer to Figure 3.
16. Remove both crease blade setup tools and return them to the storage position.
17. Install all of the removed components and check the operation of the BM module.

ADJ 11.5-171 Booklet Tamping

Purpose

To set the tamper travel to give neat booklets without edge damage.

Procedure

Go to the appropriate check and adjustment from the following options:

- If only A4 paper is available, go to A4 Paper Procedure.
- If only 8.5 X 11 inch paper is available, go to 8.5 X 11 Inch Procedure.

A4 Paper Procedure

Check

1. Open the HVF BM front door and insert an interlock cheater into the front door interlock switch.
2. Fully pull out the BM module and release the jam clearance handle PL 11.161 Item 8, fully open the paper guide, PL 11.161 Item 7.
3. Enter dC131. Select 712-006. Reduce the value by 8.
4. Enter dC330 code 011-065 BM Backstop Motor, select Start, allow the backstop to raise to the receive position (where it will pause), select Stop.
5. Enter dC330 code 011-066 BM tamper 1 motor. Select Start to energize the tamper motor, allow the tampers to move into the tamped position (where they will pause), select Stop.
6. Insert a single sheet of A4 paper, short edge downward into the booklet maker compiling area, so that it rests on the backstop and is located between the two tampers
7. Bias the sheet towards the rear of the machine until the sheet touches the rear tamper, Figure 1.

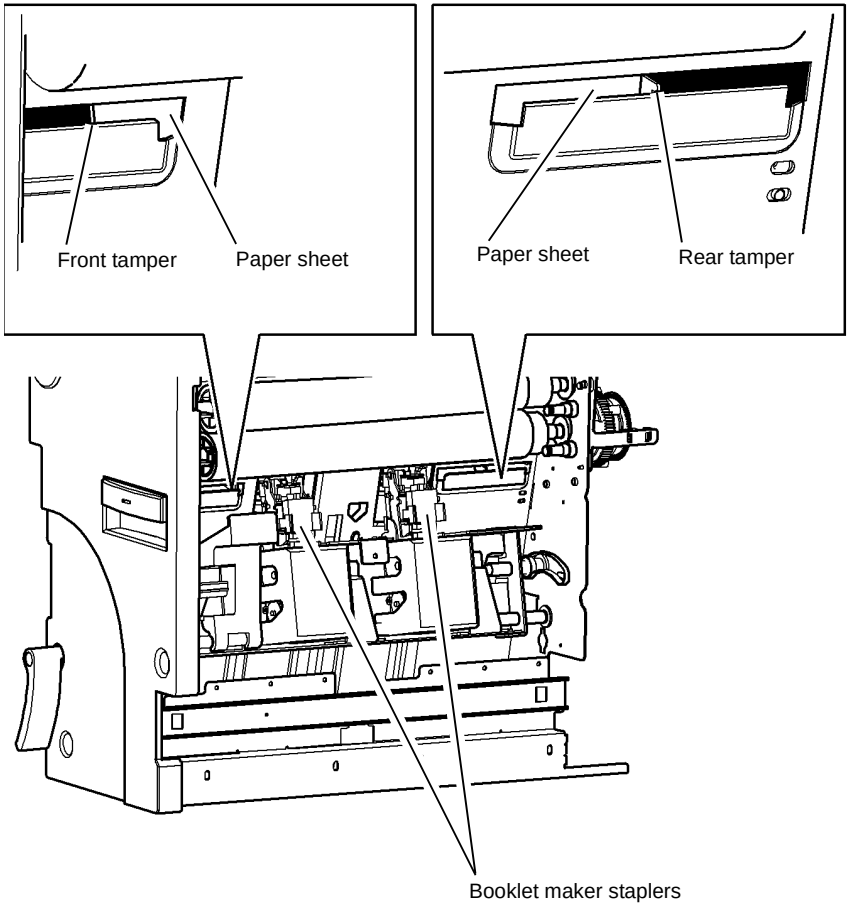


Figure 1 Observing the tamper positions

8. Observe the position of the sheet between the tampers, Figure 1.
   - If the sheet cannot reach the backstop because the tampers are too close together, the NVM value will need to be decreased to move the tampers further apart, perform the adjustment.
   - If the front tamper is not within 0.5mm (0.02 inch) of the sheet edge without touching the sheet, the NVM value will need to be increased to move the tampers closer together, perform the adjustment.

- If the tampers are in the correct position, within 0.5mm (0.02 inch) of the sheet edge without touching the sheet, enter dC131. Select 712-006. Increase the value by 8.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-006.
   c. Enter the new value to correct the error found during the check. Increasing the value lengthens the tamping stroke (tamps to a narrower dimension between the tampers. Decreasing the value shortens the tamping stroke (tamps to a wider dimension between the tampers). One step = 0.53mm.
2. Repeat the check to ensure the tampers are set correctly.
3. When the tamper travel is correct, enter dC131. Select 712-006. Increase the value by 8.
4. Switch the machine off then on, GP 14.

8.5 X 11 Inch Procedure

Check

1. Open the HVF BM front door and insert an interlock cheater into the front door interlock switch.
2. Fully pull out the booklet maker and release the jam clearance handle PL 11.161 Item 8, fully open the paper guide PL 11.161 Item 7.
3. Enter dC131. Select 712-006. Reduce the value by 19.
4. Enter dC330 code 011-065 BM Backstop Motor, select Start, allow the backstop to raise to the receive position (where it will pause), select Stop.
5. Enter dC330 code 011-066 BM tamper 1 motor. Select Start to energize the tamper motor, allow the tampers to move into the tamped position (where they will pause), select Stop.
6. Insert a single sheet of 8.5 X 11 inch paper, short edge downward into the booklet maker compiling area, so that it rests on the backstop and is located between the two tampers
7. Bias the sheet towards the rear of the machine until the sheet touches the rear tamper, Figure 1.
8. Observe the position of the sheet between the tampers, Figure 1.
   - If the sheet cannot reach the backstop because the tampers are too close together, the NVM value will need to be decreased to move the tampers further apart, perform the adjustment.
   - If the front tamper is not within 0.5mm (0.02 inch) of the sheet edge without touching the sheet, the NVM value will need to be increased to move the tampers closer together, perform the adjustment.
   - If the tampers are in the correct position, within 0.5mm (0.02 inch) of the sheet edge without touching the sheet, enter dC131. Select 712-006. Increase the value by 19.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-006
   c. Enter the new value to correct the error found during the check. Increasing the value lengthens the tamping stroke (tamps to a narrower dimension between the tampers. Decreasing the value shortens the tamping stroke (tamps to a wider dimension between the tampers). One step = 0.53mm.
2. Repeat the check to ensure the tampers are set correctly.
3. When the tamper travel is correct, enter dC131. Select 712-006. Increase the value by 19.
4. Switch the machine off then on, GP 14.

ADJ 11.6-171 Booklet Compiling Position

Purpose

To set the compiling position to ensure correct compiling without damage. When the compiling position is correctly set, each sheet is fed behind the BM entry roll to rest against the right side of the compiler.

Procedure

Go to the appropriate check and adjustment from the following options:

- If only A4 paper is available, go to A4 Paper Procedure.
- If only 8.5 X 11 inch paper is available, go to 8.5 X 11 Inch Procedure.

A4 Paper Procedure

Check

1. Open the HVF BM front door and insert an interlock cheater into the front door interlock switch.
2. Fully pull out the BM module and release the jam clearance handle PL 11.161 Item 8, fully open the paper guide PL 11.161 Item 7.
3. Enter dC330 code 011-065 BM Backstop Motor, select Start, allow the backstop to raise to the receive position (where it will pause), select Stop.
4. Insert a single sheet of A4 paper short edge downward into the booklet maker compiling area, so that it rests on the backstop and is approximately central front to back. Tuck the top of the sheet behind the BM entry roll, PL 11.161 Item 15.
5. If the BM right hand cover does not have a viewing hole, remove the BM right hand cover, REP 11.56-171.
6. Figure 1, check the alignment of the sheet against the scale.

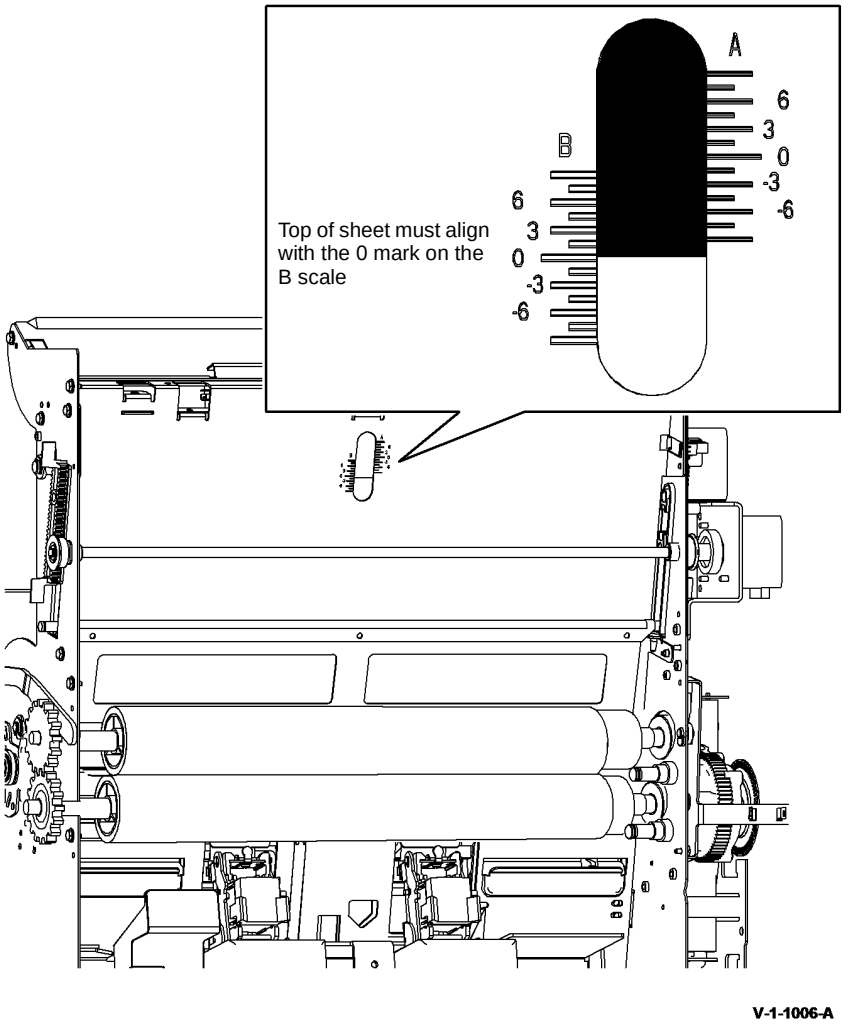


Figure 1 Top edge alignment

7. If the sheet is correctly aligned, exit service mode and re-install the BM right hand cover, if removed in step 5. If the sheet is not correctly aligned, perform the adjustment.

Adjustment

1. Do the following
   a. Enter dC131.
   b. Select 712-003.

c. Select Read/Write. Enter the new value to correct the error found during the check. Increasing the value will raise the sheet. Decreasing the value will lower the sheet. One step = 0.1137mm.

d. Select Save, select OK, select Close, select Exit.

2. Repeat the Check to ensure the compiling position is correctly set.
3. When the compiling position is correct, switch the machine off then on, GP 14.

8.5 X 11 Inch Procedure

Check

1. Open the HVF BM front door and insert an interlock cheater into the front door interlock switch.
2. Fully pull out the BM module and release the jam clearance handle PL 11.161 Item 8. fully open the paper guide PL 11.161 Item 7.
3. Do the following
   a. Enter dC131.
   b. Select 712-003.
   c. Select Read/Write. Increase the original value by 80.
   d. Select Save, select OK, select Close, select Exit.
4. Enter dC330 code 011-065 BM Backstop Motor, select Start, allow the backstop to raise to the receive position (where it will pause), select Stop.
5. Insert a single sheet of 8.5 X 11 inch paper short edge downward into the booklet maker compiling area, so that it rests on the backstop and is approximately central front to back. Tuck the top of the sheet behind the BM entry roll, PL 11.161 Item 15.
6. If the BM right hand cover does not have a viewing hole, remove the BM right hand cover, REP 11.56-171.
7. Figure 2, check the alignment of the sheet against the scale.

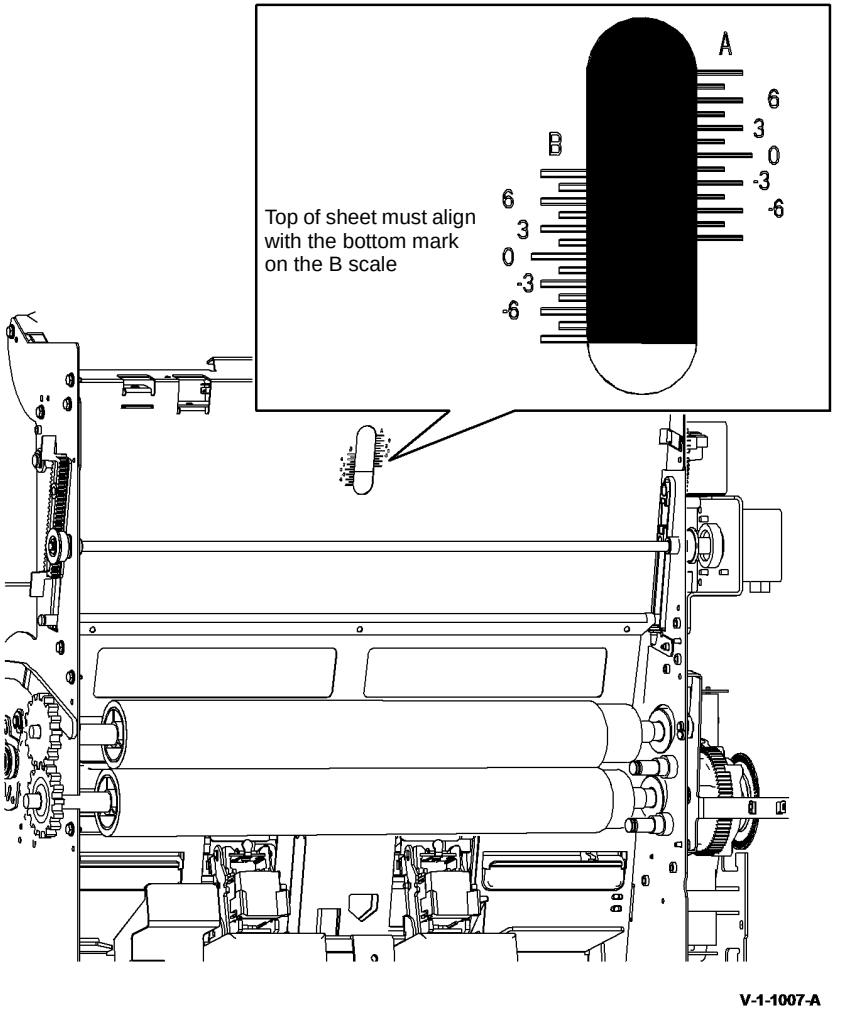


Figure 2 Top edge alignment

8. If the sheet is correctly aligned, do the following:
   a. Enter dC131.
   b. Select 712-003
   c. Select Read/Write. Decrease the value by 80. This will return the NVM value to the original setting.
   d. Select Save, select OK, select Close, select Exit.

e. Re-install the BM right hand cover, if removed in step 5.

9. If the sheet is not correctly aligned, perform the adjustment.

Adjustment

1. Do the following
   a. Enter dC131.
   b. Select 712-003.
   c. Select Read/Write, then enter the new value to correct the error found during the check. Increasing the value will raise the sheet. Decreasing the value will lower the sheet. One step = 0.1137mm.
   d. Select Save, select OK, select Close, select Exit.
2. Repeat the Check to ensure the compiling position is correctly set.
3. Do the following:
   a. Enter dC131.
   b. Select 712-003.
   c. Select Read/Write. Decrease the value by 80.
   d. Select Save, select OK, select Close, select Exit.
   e. Re-install the BM right hand cover, if removed in step 5.
4. When the compiling position is correct, switch the machine off then on, GP 14.

ADJ 11.7-171 Booklet Crease Position

Purpose

To set the crease position of the booklet in relation to the left edge of the top sheet of the booklet.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the position of the crease in relation to the open end of the booklet. The fold should be central, so that the open end of the booklet pages are equal from the fold. If necessary perform the adjustment.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-005.
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.

      NOTE: *Increasing the value increases the width of the top sheet of the booklet (moves the fold away from the left edge). Decreasing the value decreases the width of the top sheet of the booklet (moves the fold towards the left edge). One step = 0.1137mm.*

   e. Select Save, then OK.
2. Select Save, then select OK.
3. When the crease position is correct, switch the machine off then on, GP 14.

ADJ 11.8-171 Booklet Staple Position

Purpose

To set the position of the staples so that they are positioned on the fold of the booklet.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the position of the staple in relation to the fold of the booklet. The staple should be positioned in the middle of the fold. If necessary perform the adjustment.

Adjustment

1. Perform the following:
   a. Enter dC131.
   b. Select 712-004
   c. Select Read/Write.
   d. Enter the new value to correct the error found during the check.
   e. Select Save, then OK.
   f. Select 712-005.
   g. Select Read/Write.
   h. Change the value by the same amount as the 712-004 value.

      NOTE: *Increasing both values moves the staple position toward the left edge of the top sheet. Decreasing both values moves the staple position away from the left edge of the top sheet. One step = 0.1137mm. Changing only the 12-004 BookMrkStaple-Offset value will move the staple position and fold position the same amount.*

   i. Select Save, then OK.
2. Select Save, then select OK.
3. Repeat the Check to ensure the staple position is correct.
4. When the staple position is correct, switch the machine off then on, GP 14.

ADJ 11.9-171 Booklet Maker Skew

Purpose

To adjust the skew of the booklet crease.

Check and complete the following adjustments:

- ADJ 11.6-171 Booklet compiling position.
- ADJ 11.8-171 Booklet staple position.
- ADJ 11.7-171 Booklet crease position.

Check

1. Run a copy job of 3 stapled 4 sheet booklets.
2. Observe the position of the crease in relation to the open end of the booklet. The fold should be central, so that the open end of the booklet pages are equal from the fold. If necessary perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Slide out the booklet maker and locate the adjustment screw on the booklet backstop, Figure 1.
2. Use a 2.5mm allen head driver and turn the adjustment screw as follows:
   - Turn the screw clockwise to rotate the crease clockwise relative to the centre line.
   - Turn the screw anti-clockwise to rotate the crease anti-clockwise relative to the centre line.
   - One half turn of the adjustment screw will change the crease angle approximately 3 to 4mm over the length of the crease.
3. Run a copy job of 3 stapled 4 sheet booklets to check that the crease is in the centre of the book. Repeat the adjustment if necessary.

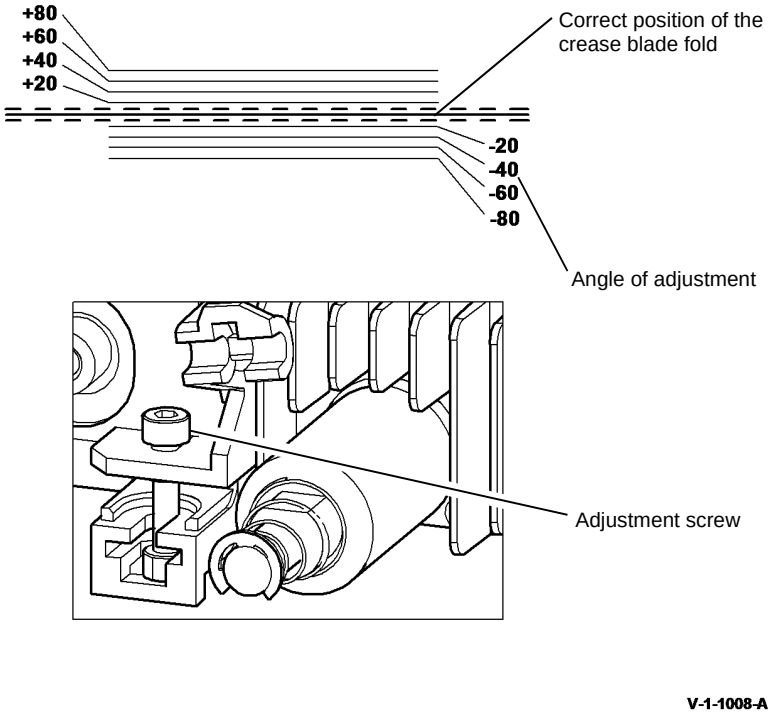


Figure 1 Booklet crease adjustment

ADJ 11.10-171 Motor Drive Belt Tensioning

Purpose

To set the tension of belts that are tensioned by a spring attached to a motor. See also ADJ 11.11-171 Idler Drive Belt Tensioning.

Check

1. The shafts and pulleys are installed and properly located.
2. The drive belt is undamaged and correctly routed.
3. The adjustable motor or tensioning pulley bracket is positioned with fastening screws tightened fully.

   NOTE: *For motors with pivoted brackets, the pivot screw must be fitted and tightened.*

4. The tensioning spring is fitted between the bracket and frame locating point.

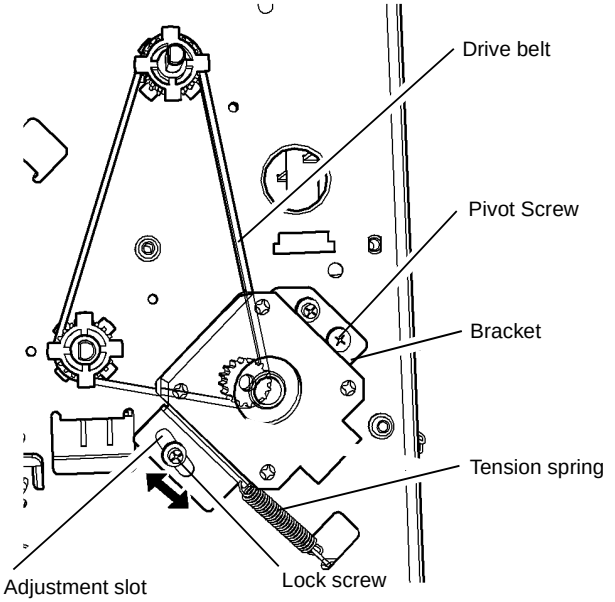
Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1 shows a typical arrangement. Slacken the bracket and lock screws. Press the belt midway between pulleys and check that the bracket moves and returns by the spring pull.
2. Release the belt and allow the spring to pull the bracket and tension the drive belt then tighten the lock and bracket screws.

   NOTE: *Check the belt condition and routing if the tension spring is not extended or the locking screw is at the end of the bracket adjustment slot.*



Typical spring tensioning arrangement

V-1-1009-A

Figure 1 Drive belt tensioning

ADJ 11.11-171 Idler Drive Belt Tensioning

Purpose

To set the tension of drive belts that are tensioned by a spring attached to an idler. See also ADJ 11.10-171 Motor Drive Belt Tensioning.

Check

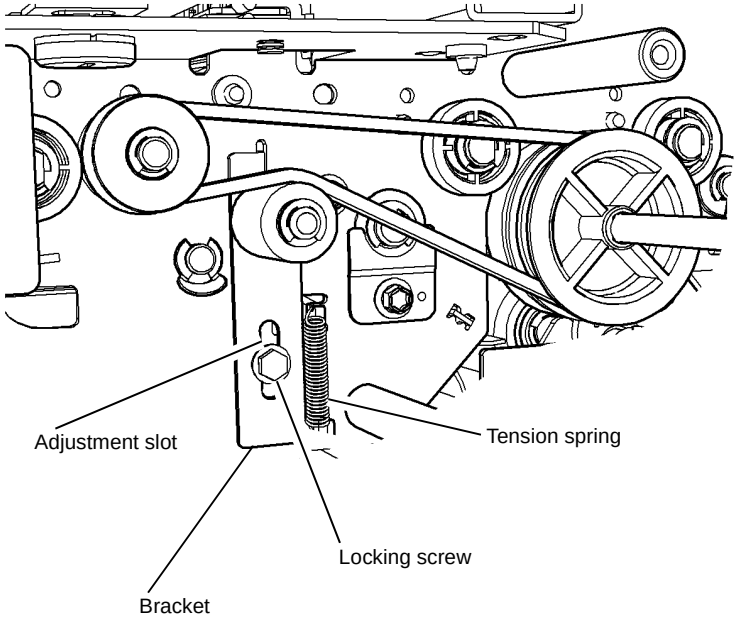
1. The shafts and pulleys are installed and properly located.
2. The drive belt is undamaged and correctly routed.
3. The tensioning spring is fitted between the idler bracket and frame locating point.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 1 shows a typical arrangement. Loosen the locking screw and allow the spring to tension the belt.
2. Tighten the locking screw.
3. If no more adjustment is available, install new components as necessary.



Typical idler tensioning arrangement

V-1-1010-A

Figure 1 Drive belt tensioning

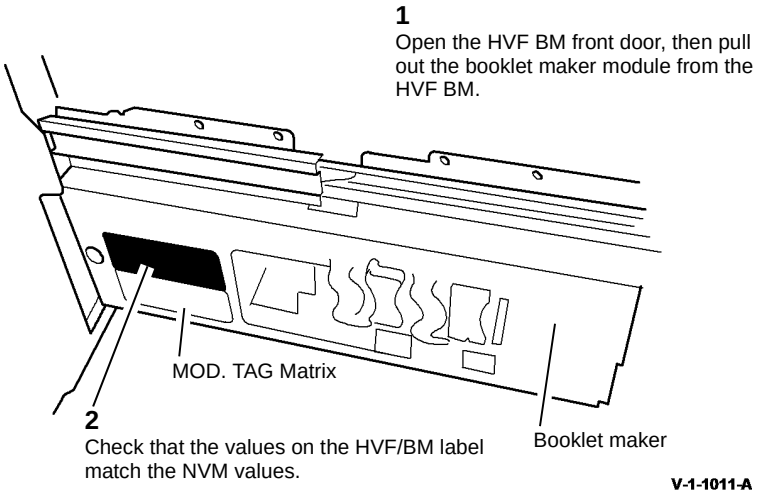
ADJ 11.12-171 Tri-Folder Fold Adjustment

Purpose

To adjust C or Z folded copies in accordance with the customer requirements.

Check

1. Ensure the tri-folder and the HVF BM are aligned correctly, ADJ 11.1-171 Machine to HVF/HVF BM, HVF BM to Tri-Folder Alignment.
2. Ensure the tri-folder is set for the correct size of paper, ADJ 11.2-171 Tri-Folder Paper Size Setting.
3. The NVM settings. Enter dC131 then check that codes values for 712-009 (C folds), 712-010 (Z folds) and 712-011 (Tri-fold de-skew) are set in accordance with the values on the HVF/BM label, Figure 1.
   - If necessary, enter dC131 and change the NVM values for 712-009, 712-010 and 712-011 to match the values on the HVF BM label.
4. Ensure the front door interlock switch is cheated, PL 11.197 Item 2. Run a four sheet C fold and Z fold copy job. Check that the copies are folded into three approximately equal parts, with the folds parallel to the edge of the paper.
5. Check that the C and Z folded copies meet with the customer requirements. If necessary make fine adjustments to the length of folds A and/or B. Figure 3.



V-1-1011-A

Figure 1 HVF/BM NVM value label location

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Perform the adjustments that follow as necessary to meet with the customer C fold and Z fold requirements, Figure 2.

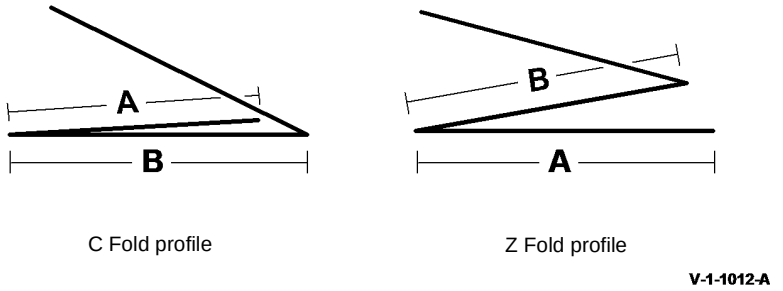


Figure 2 C folded and Z folded output copy profiles

NOTE: *Figure 2 shows the orientation of a C and Z folded copy on the tri-folder output tray, as viewed from the front of the machine.*

A Folds

The folds marked A are created within the booklet maker module. The length of the A fold is determined by the NVM values in dC131. An increase to the NVM value by 30 will decrease the A fold by 1mm. A decrease to the NVM value by 30 will increase the A fold by 1mm.

- Use dC131 712-009 to make adjustments to C folded copies.
- Use dC131 712-010 to make adjustments to Z folded copies.

B Folds

The folds marked B are created within the tri-folder module. The length of the B fold is determined by the position of the paper setting adjusters. If necessary remove the front door, PL 11.190, front cover PL 11.190 and the rear cover PL 11.190, then reposition the paper setting adjusters. Figure 3. An adjustment of 1 graduation on the paper size adjuster scale will adjust the position of the B fold by 1mm.

- Raise the paper setting adjusters to decrease fold B.
- Lower the paper setting adjusters to increase fold B.

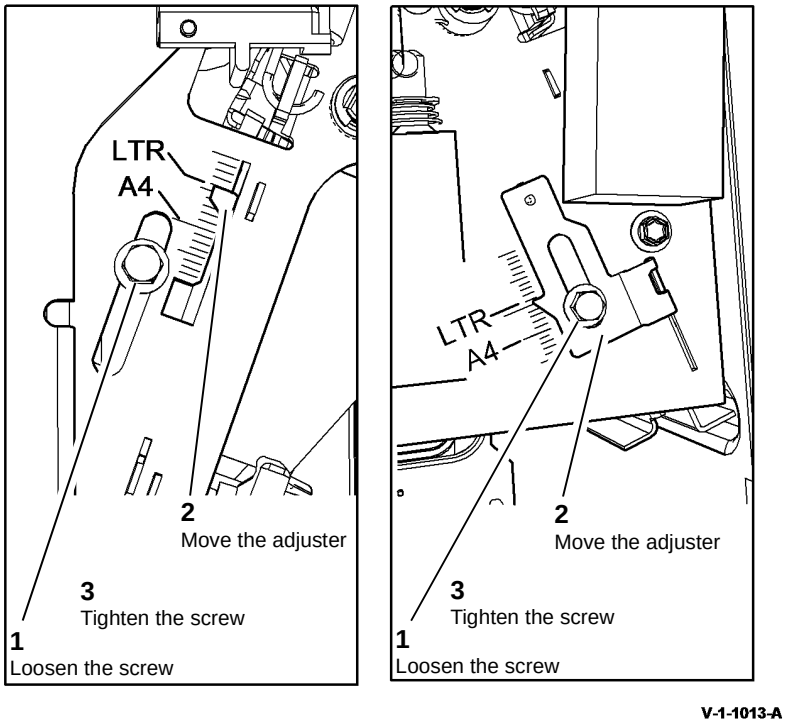


Figure 3 Set the paper size adjusters

ADJ 11.13-171 HVF Performance Improvement (W/TAG V-006)

Purpose

To improve the overall performance and reliability of the HVF finisher module.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following 10 remedial procedures in consecutive order to accomplish the HVF performance improvement adjustment W/TAG V-006.

1. Hole Punch Blanking Assembly Modification.
2. Hole Punch Blanking Assembly to HVF Frame Modification.
3. Check for Wear on the Upper Paddles.
4. Check the Front and Rear Tampers for Scoring.
5. Check the Spacing Between the Front and Rear Tampers.
6. Buffer Pocket Jam Clearance Guide Modification.
7. Check for Wear on the Lower Paddles.
8. Check the Position of the Ejector Assembly.
9. Chamfered Staple Cartridge Installation.
10. Customer Awareness Instruction on Bin 1 Obstructions.
11. BM Diverter Solenoid Position.

Procedures

Hole Punch Blanking Assembly Modification

The hole punch blanking assembly heats up as copies pass through. The increase in temperature causes the hole punch blanking assembly to bow. This bowing effect causes a reduction of the paper path gap through the assembly, resulting in paper jams and misfeeds.

1. Remove the hole punch blanking assembly, PL 11.153 Item 4.
2. Figure 1. Dismantle the hole punch blanking assembly.

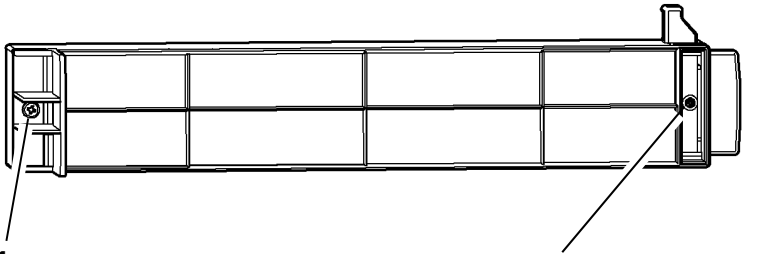


Figure 1 Hole punch blanking assembly

3. Figure 2. Form a slot to allow translational movement (inboard to outboard) during expansion and contraction of the hole punch blanking assembly.

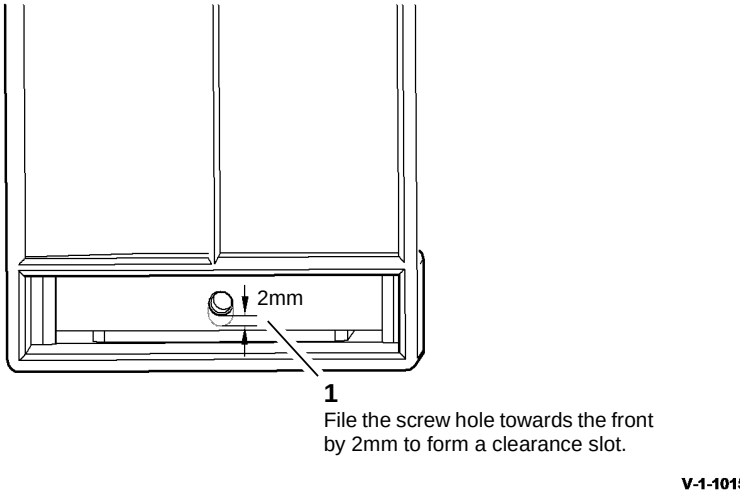


Figure 2 Hole punch blanking assembly

4. Reinstall the hole punch blanking assembly then proceed to Hole Punch Blanking Assembly to HVF Frame Modification.

Hole Punch Blanking Assembly to HVF Frame Modification

The right angled tab on the HVF Rear frame can obstruct the hole punch blanking assembly from reaching the home position. This causes the top section of the assembly to bend forward and reduce the paper path gap through the assembly, resulting in paper jams and misfeeds.

1. Remove then reinstall the hole punch blanking assembly, PL 11.153 Item 4. Check if the assembly collides with the tab, refer to Figure 3.

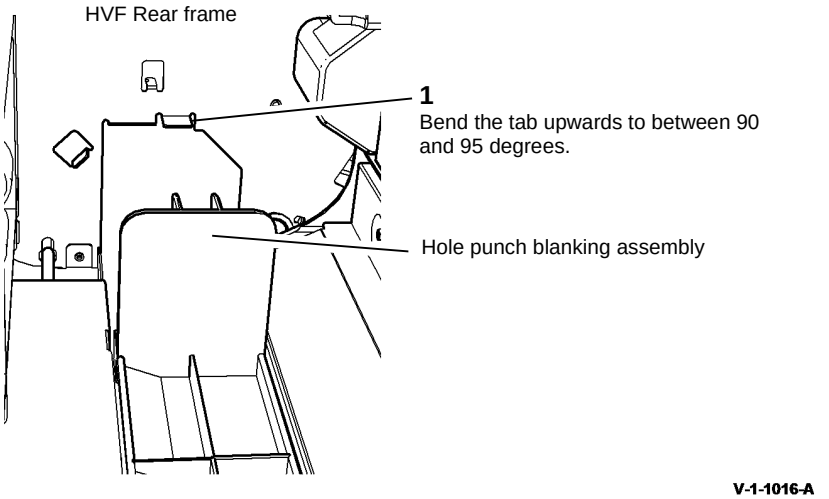


Figure 3 HVF rear frame

2. Figure 3. If necessary bend the tab.
3. Reinstall the hole punch blanking assembly. Ensure the assembly is not obstructed by the tab.
4. Proceed to Check for Wear on the Upper Paddles.

Check for Wear on the Upper Paddles

Wear of the upper paddles will cause the failure of sheets 2 to 100 in the compile area to register against the back stops. This can lead to mis-registered or mis-stapled sheets in a set.

NOTE: *Check the serial number of the machine, if the serial number is before either of the following, install a new set of four paddle wheels, PL 11.145 Item 28 to maintain good reliability:*

- *HVF YFV005294 (manufacture date 17th March 2009)*
- *HVF/BM YFW02881 (manufacture date 19th November 2009)*

1. Figure 4. Check the paddle wheels of the paddle module assembly for wear.

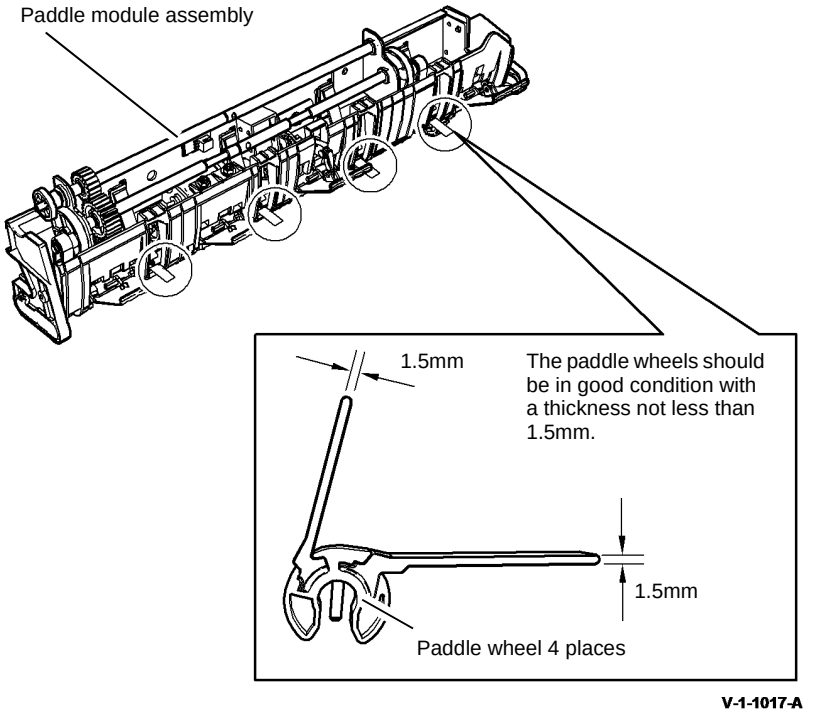


Figure 4 Paddle module assembly

2. Run 50 sets of 3 documents in A4 or 8.5 x 11 inch LEF simplex and stapled mode. Check for mis-registered or mis-stapled sets in the direction of paper feed on the 2nd and 3rd sheets of each set. If any sets are mis-registered or mis-stapled install new paddle wheels, refer to REP 11.49-171 and REP 11.101-171.
3. Proceed to Check the Front and Rear Tampers for Scoring.

Check the Front and Rear Tampers for Scoring

Deep scores in the front and rear tampers can cause the paper to catch and fail to register in the compiler area.

1. Figure 5. Check the tampers for scoring. If scoring is evident install a new metal pin reinforced tamper set, PL 11.140 Item 22.

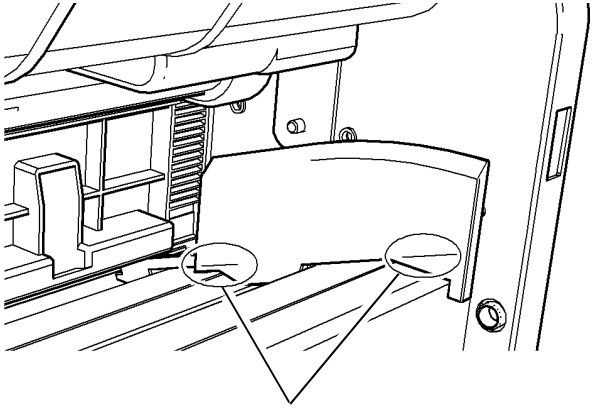


Figure 5 Rear tamper

2. In extreme cases where abrasive paper is being used, scoring can still occur with the new metal pin reinforced tampers. This scoring can be seen especially on the rear tamper, underneath the left pin. if necessary, install a new metal pin reinforced tamper set, PL 11.140 Item 22.
3. Proceed to Check the Spacing Between the Front and Rear Tampers.

Check the Spacing Between the Front and Rear Tampers

CAUTION

The use of shim stock packing between the HVF frame and the front tamper motor assembly. must not exceed a total thickness of 2mm. Exceeding the 2mm limit will impede the operation of the HVF front door.

Incorrect spacing between the tampers can cause the paper to buckle between the tampers. This can cause mis-stacking, mis-stapling and/or upper and lower paper grooves in one or more of the tampers.

1. Run 50 sets of 3 documents in A4 or 8.5 x 11 inch LEF simplex and stapled mode.
2. Check during the upper paddle operation that the tampers come to a closed position with un-buckled paper in between.
3. Check for mis-compiling in the direction of feed. If mis-compiling is evident and greater than 1.2mm continue with steps 4 to 6. If there is no mis-compiling or mis-compiling less than 1.2mm proceed to Buffer Pocket Jam Clearance Guide Modification.
4. Figure 6. In small increments position the front tamper motor assembly up to 2mm away from the front frame with spacers made from shim stock (600T41512).

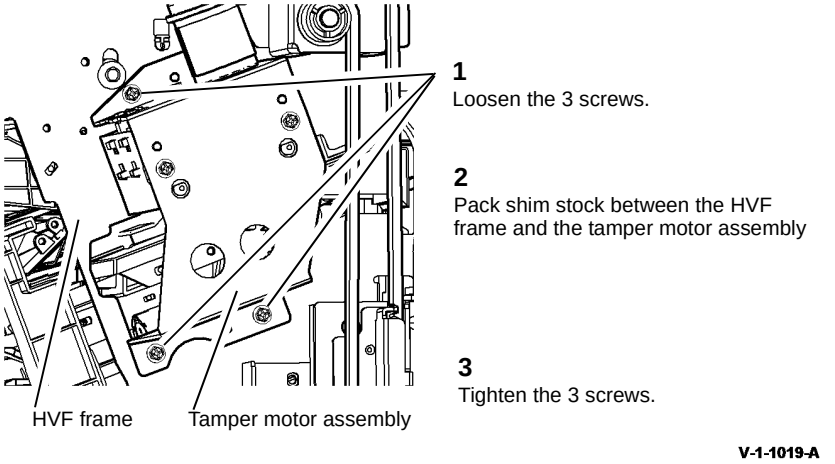


Figure 6 Tamper motor assembly

5. Re-run the test job (step 1) and check for improvements.
6. Repeat steps 4 and 5 as necessary, then proceed to Buffer Pocket Jam Clearance Guide Modification.

Buffer Pocket Jam Clearance Guide Modification

The spring loaded diverter gate shaft can bind to the buffer pocket jam clearance guide. As a result the diverter gate becomes slow in its movement causing 311-142-171 and 311-140-171 paper jam faults.

1. Remove the buffer pocket jam clearance guide, REP 11.33-171.
2. Figure 7. Cut away the guide.

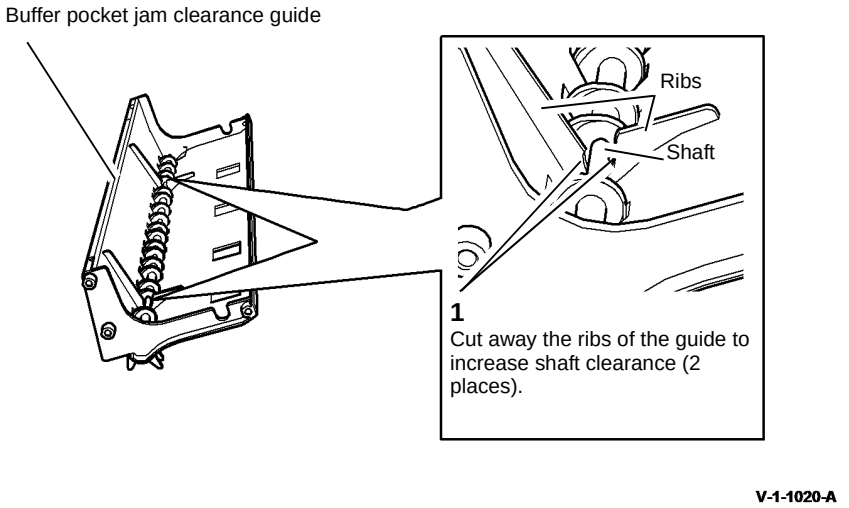


Figure 7 Buffer pocket jam clearance guide

3. Replace the buffer pocket jam clearance guide, REP 11.33-171.
4. Proceed to Check for Wear on the Lower Paddles.

Check for Wear on the Lower Paddles

Wear on the lower paddle on the ejector assembly will cause the top sheet of a stacked set to mis-stack, mis-staple or not staple.

1. Figure 8. Check the lower paddle for wear.

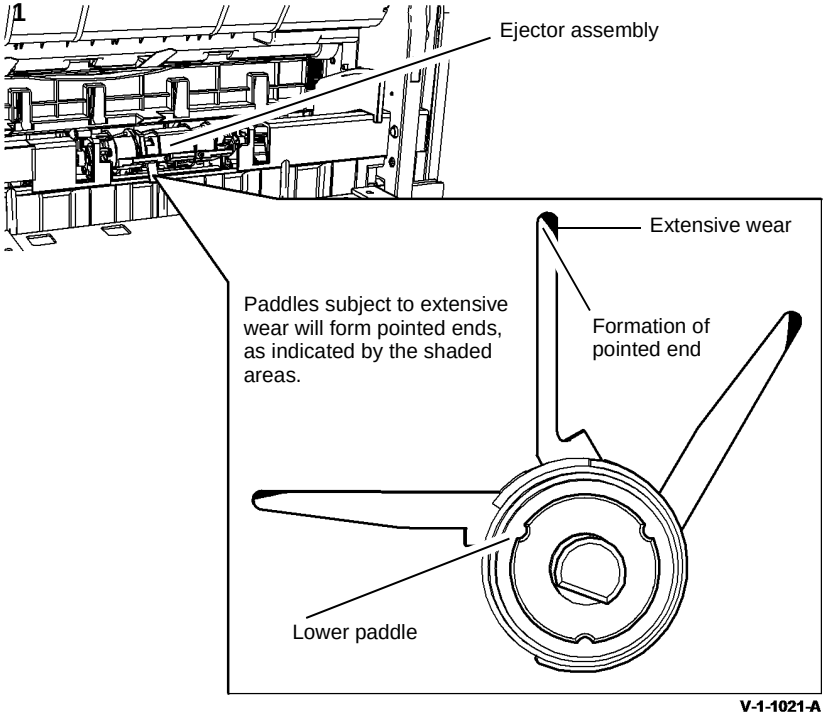


Figure 8 Lower paddle

NOTE: *On W/O Tag V-007 machines, the lower paddle is not a spared item.*

2. Perform one of the following:
   - If wear on the lower paddle is evident on a W/O Tag V-007 machine, install a new W/Tag V-007 ejector assembly, PL 11.14 Item 2.
   - If wear on the lower paddle is evident on a W/Tag V-007 machine, install a new ejector paddle assembly, PL 11.140 Item 26.
3. Proceed to Check the Position of the Ejector Assembly.

Check the Position of the Ejector Assembly

If the ejector assembly has been removed after manufacturing it may have been replaced incorrectly. A incorrectly positioned ejector assembly will cause miss-compiling and premature wear of components.

1. Figure 9. Check the ejector module is located correctly, refer to REP 11.6-171.

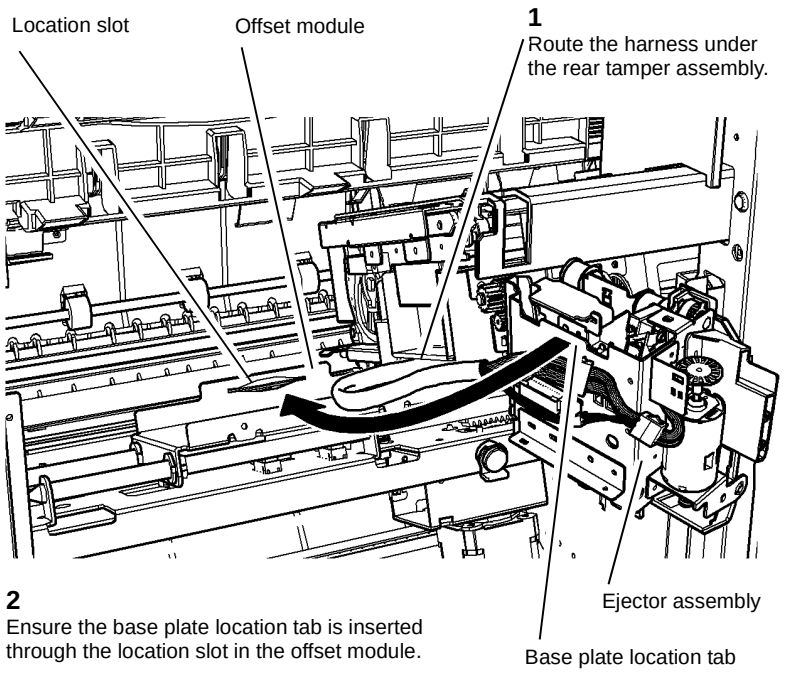


Figure 9 Ejector assembly

2. Proceed to Chamfered Staple Cartridge Installation.

Chamfered Staple Cartridge Installation

The surface area of the 100 sheet staple cartridge can protrude slightly, where the corner of the output sets are positioned for stapling. This raised area can catch the first 5 sheets in a output set, then cause the set to mis-compile, mis-staple and/or create dog ears.

1. Figure 10. Check the staple cartridge for a raised surface.

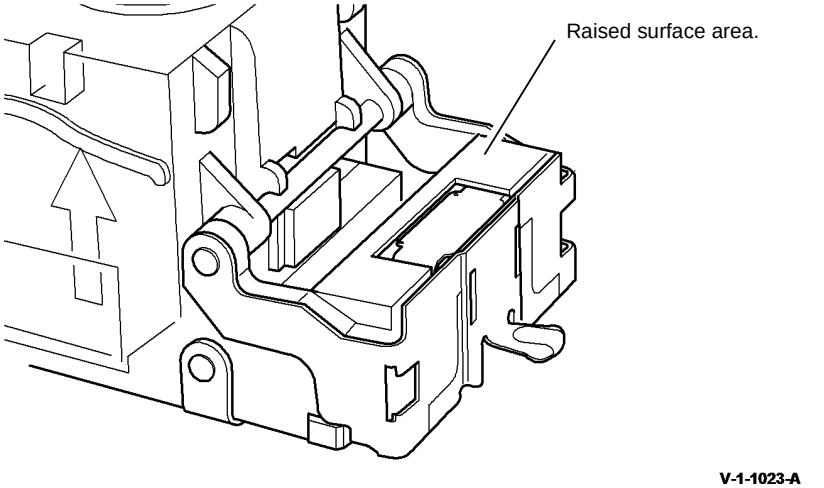


Figure 10 Staple cartridge

2. Check if the customer ever runs more than 50 sheet staple sets.
3. In accordance with the customer requirements either;
   - Fit a 50 sheet capacity staple cartridge, which has a chamfered surface.
   - Figure 11. Hand file a chamfer on a 100 sheet capacity staple cartridge.

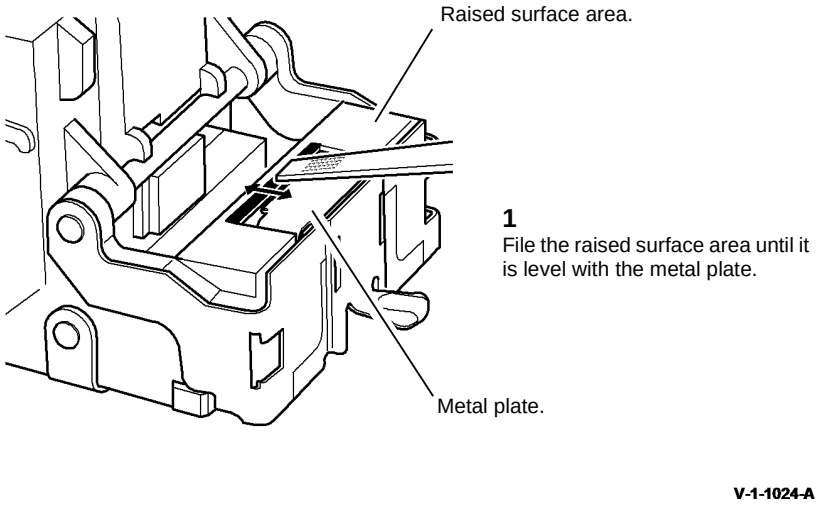


Figure 11 Staple cartridge

4. Proceed to Customer Awareness Instruction on Bin 1 Obstructions

Customer Awareness Instruction on Bin 1 Obstructions

It is not always obvious to customers that bin 1 will lower almost to the base of the HVF finisher when the stacker tray is at full capacity. If bin 1 is obstructed as it descends the elevator motor will continue to try and drive bin 1 downwards. This type of incident can cause elevator motor (11-460-171) faults.

1. Advise the customer that items should never be placed in the area under bin 1, and that obstruction of bin 1 will cause premature elevator motor failure.
2. Mark off the HVF module modification tag number 006, refer to Tags.

NOTE: *Check the serial number of the machine, if the serial number is before either of the following, install a new stacker motor gearbox, PL 11.135 Item 10 to maintain good reliability:*

- *HVF YFV005294 (manufacture date 17th March 2009)*
- *HVF/BM YFW02881 (manufacture date 19th November 2009)*

BM Diverter Solenoid Position

The booklet maker diverter gate is susceptible to breakage if the diverter gate solenoid travel is not arrested by the stop washer pressing against the solenoid body, but by the diverter gate reaching the end of it's travel.

Perform ADJ 11.14-171 BM Diverter Solenoid Position.

ADJ 11.14-171 BM Diverter Solenoid Position

Purpose

To correctly position the BM diverter solenoid. The booklet maker diverter gate is susceptible to breakage if the diverter gate solenoid travel is not arrested by the stop washer pressing against the solenoid body, but by the diverter gate reaching the end of it's travel.

Check

1. Remove the HVF rear cover, REP 11.1-171.
2. Enter the dC330 output code 011-074 to energize the BM diverter solenoid.
3. Figure 1, check the position of the solenoid.

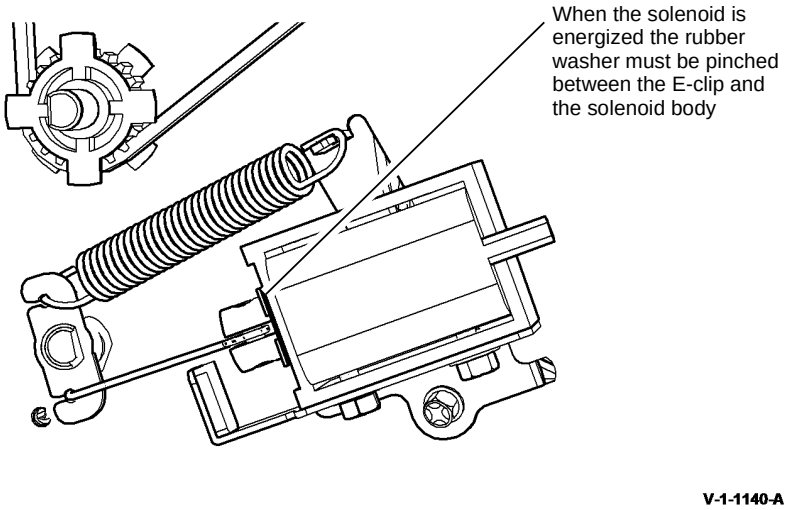


Figure 1 Solenoid position check

4. If the condition stated in Figure 1 is not met, perform the adjustment.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Figure 2, adjust the position of the solenoid.

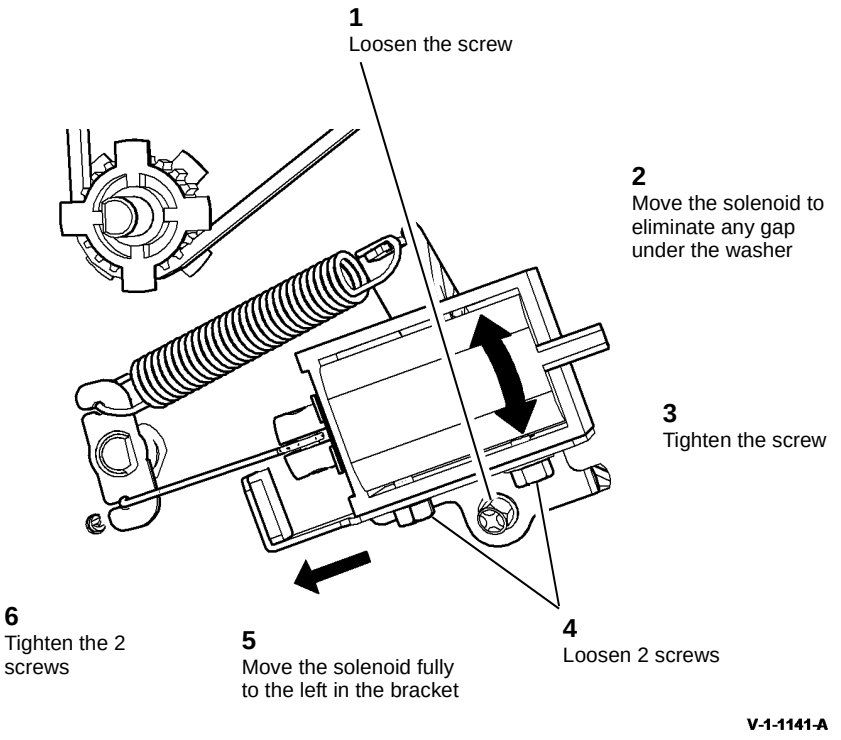


Figure 2 Solenoid position adjustment

2. If there is not enough movement in the solenoid mounting position to eliminate any gap under the washer, install a spacer washer/shim between the E-clip and rubber washer to eliminate the gap.
3. Enter the dC330 output code 011-074 to energize the BM diverter solenoid to check that the rubber washer is now pinched between the E-clip and the solenoid body.
4. Make prints or copies to both the booklet maker and to bin 1 to ensure that the BM diverter is operating correctly.

ADJ 40.1 Machine Lubrication

Purpose

To correctly lubricate the machine to prevent noise and wear.

Lubrication

Refer to GP 18 Machine Lubrication for general guidance on the use of lubricants.

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The following list gives the parts of the machine where lubrication is permitted. Go to the relevant procedure:

- Bypass Feed Roll Shaft.
- Tray 1 and 2 Support Slides.
- Registration Transport Nip Assembly.
- Registration Transport Gears.
- Developer Module Support Pins.
- 1K LCSS Drive Belt Tensioners.
- 1K LCSS Bin 1 Drive Belt Pulleys and Idler.
- 2K LCSS Drive Belt Tensioners.
- 2K LCSS Bin 1 Drive Belt Pulleys and Idler.
- LVF BM Drive Belt Tensioners.
- LVF BM Bin 1 Drive Belt Pulleys and Idler.
- 1K, 2K LCSS and LVF BM Bin 1 Elevator Motor Worm and Gear.
- 1K LCSS, 2K LCSS and LVF BM Ejector Shafts and Slide Bearings.
- 1K LCSS, 2K LCSS and LVF BM Tamper Assembly.
- HVF BM Support Pin.

Bypass Feed Roll Shaft

1. Remove the bypass tray drive gear, REP 80.14.
2. Apply plastislip grease, PL 26.10 Item 8, to lubricate the shaft, Figure 1.

3
Slide the shaft to the rear to expose the areas of the shaft normally located within the rear and front bearings. Apply grease to these newly exposed areas.

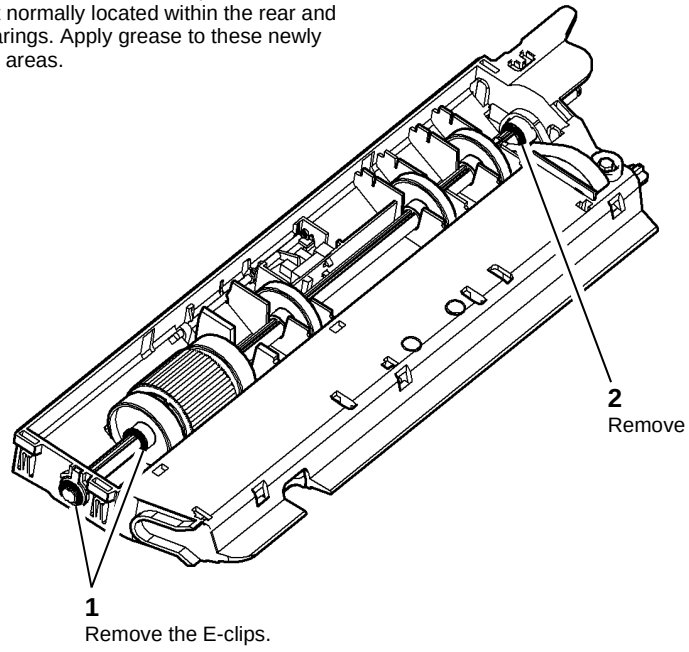


Figure 1 Bypass feed shaft

3. Return the feed roll shaft to the original position and install the E-clips, Figure 1.
4. Install the bypass tray drive gear and feed head, REP 80.14.

Tray 1 and 2 Support Slides

1. Remove tray 1 and 2, REP 70.1.
2. Apply plastislip grease, PL 26.10 Item 8, to lubricate the support slides, Figure 2.

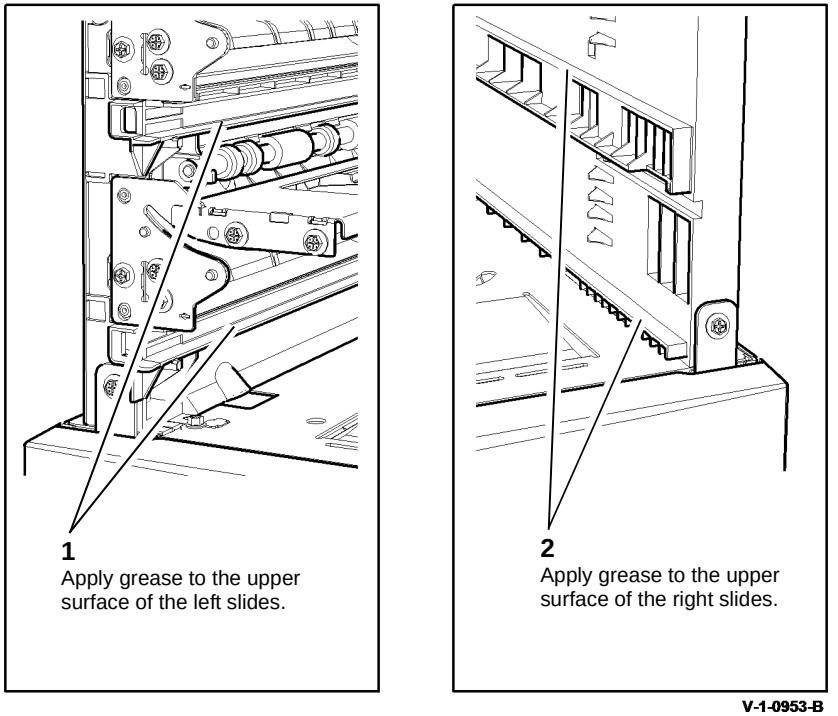


Figure 2 Tray 1 and 2 support slides

3. Lubricate the stack height mechanism actuator located at the rear left side of the tray and the paper width guides.
4. Re-install tray 1 and 2, REP 70.1.

Registration Transport Nip Assembly

1. Remove the registration transport assembly, REP 80.2.
2. Figure 3, remove the nip assembly.

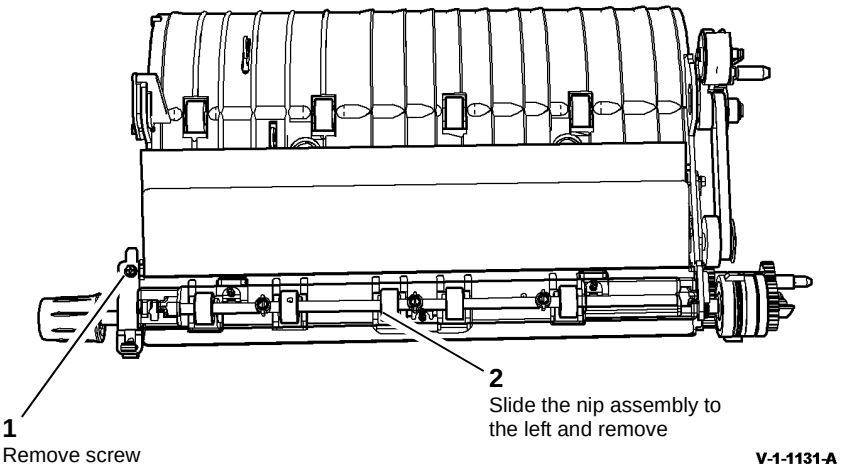


Figure 3 Nip assembly removal

3. Turn over the nip assembly and remove two screws to release the transparent nip roll housing, Figure 4.

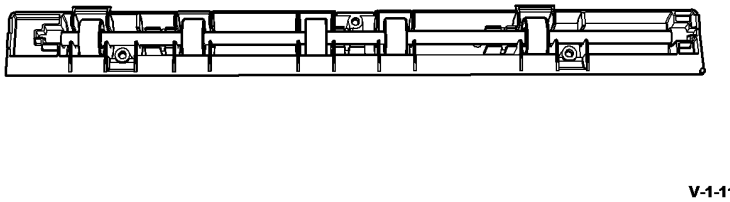


Figure 4 Transparent nip roll housing

CAUTION

Only use plastislip grease. The use of any other type of grease may dissolve the plastic.

4. Use plastislip grease, PL 26.10 Item 8 to lubricate the nip roll shaft contact areas of the housing, Figure 5.

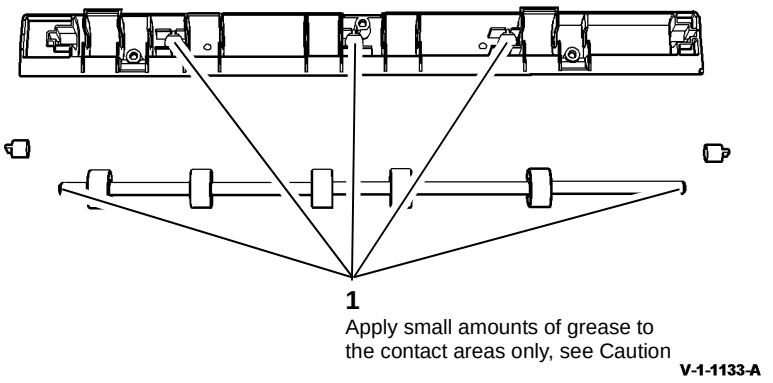


Figure 5 Lubricant application

5. Reassemble the parts and install the registration transport assembly, REP 80.2.

Registration Transport Gears

Parts list on: PL 80.15.

1. Remove the registration clutch, REP 80.3.
2. Use plastislip grease, PL 26.10 Item 8, to lubricate the following parts:
   - Registration clutch, PL 80.15 Item 7. Lubricate the gear teeth only.
   - Gear (22T/28T), PL 80.15 Item 17. Lubricate the gear teeth only.
   - Gear (23T), PL 80.15 Item 18. Lubricate the gear teeth and the bore of the gear.
3. Re-install the removed components, REP 80.3.

Developer Module Support Pins

1. Remove the developer assembly, REP 90.2.
2. Use plastislip grease, PL 26.10 Item 8, to lubricate the developer assembly support pins at the front and rear, Figure 6.

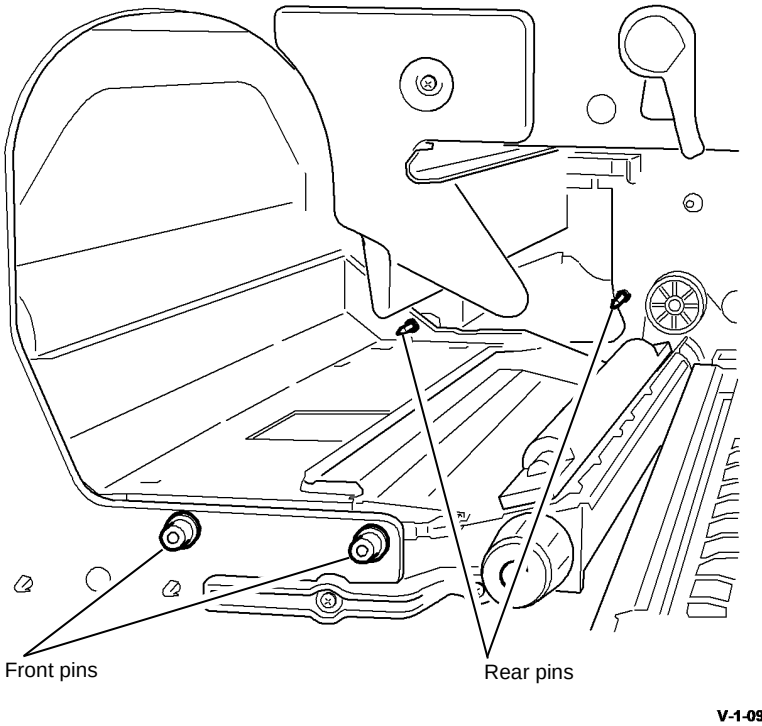


Figure 6 Developer assembly support pins

3. Re-install the developer assembly, REP 90.2.

1K LCSS Drive Belt Tensioners

1. Remove the 1K LCSS top cover and rear cover, REP 11.1-120.
2. Remove the relevant belt tensioner:
   - Bin 1 drive belt tensioner, PL 11.106 Item 15.
   - Intermediate paper drive belt tensioner, PL 11.118 Item 14.
   - Paper output drive belt, PL 11.120 Item 8.
3. Remove the E-clip and pulley from the belt tensioner. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley bore. Re-assemble the pulley and E-clip on the belt tensioner.
4. **(Bin 1 drive belt tensioner only)** Clean off the old lubricant and any contamination from the belt tensioner and 1K LCSS frame using a micro fiber wiper, PL 26.10 Item 13. Apply plastislip grease, PL 26.10 Item 8, to the whole contact face of the belt tensioner.
5. Reinstall the belt tensioner.

1K LCSS Bin 1 Drive Belt Pulleys and Idler

1. Remove the 1K LCSS top cover and rear cover, REP 11.1-120.
2. If necessary, remove the 1K LCSS PWB, REP 11.12-120.
3. Remove the relevant pulley or idler:
   - Bin 1 drive belt idler, PL 11.106 Item 17.
   - Bin 1 drive belt pulleys, PL 11.106 Item 6.
4. Remove the E-clip and pulley or idler from the bracket. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley or idler bore. Re-assemble the pulley or idler and E-clip on the bracket.
5. Reinstall the idler assembly.

2K LCSS Drive Belt Tensioners

1. Remove the 2K LCSS top cover and rear cover, REP 11.1-110.
2. Remove the relevant belt tensioner:
   - Intermediate paper drive belt tensioner, PL 11.22 Item 17.
   - Bin 1 drive belt tensioner, PL 11.10 Item 13.
3. Remove the E-clip and pulley from the belt tensioner. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley bore. Re-assemble the pulley and E-clip on the belt tensioner.
4. Clean off the old lubricant and any contamination from the belt tensioner and 2K LCSS frame using a micro fiber wiper, PL 26.10 Item 13. Apply plastislip grease, PL 26.10 Item 8, to the whole contact face of the belt tensioner.
5. Reinstall the belt tensioner.

2K LCSS Bin 1 Drive Belt Pulleys and Idler

1. Remove the 2K LCSS top cover and rear cover, REP 11.1-110.
2. If necessary, remove the 2K LCSS PWB, REP 11.14-110.
3. Remove the relevant pulley or idler:
   - Bin 1 drive belt idler, PL 11.10 Item 15.
   - Bin 1 drive belt pulleys, PL 11.10 Item 6.
4. Remove the E-clip and pulley or idler from the bracket. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley or idler bore. Re-assemble the pulley or idler and E-clip on the bracket.
5. Reinstall the idler assembly.

LVF BM Drive Belt Tensioners

1. Remove the LVF BM top cover and rear cover, REP 11.1-150.
2. Remove the intermediate paper drive belt tensioner, PL 11.70 Item 17.
3. Remove the E-clip and pulley from the belt tensioner. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley bore. Re-assemble the pulley and E-clip on the belt tensioner.
4. Clean off the old lubricant and any contamination from the belt tensioner and LVF BM frame using a micro fiber wiper, PL 26.10 Item 13. Apply plastislip grease, PL 26.10 Item 8, to the whole contact face of the belt tensioner.
5. Reinstall the belt tensioner.

LVF BM Bin 1 Drive Belt Pulleys and Idler

1. Remove the LVF BM top cover and rear cover, REP 11.1-150.
2. If necessary, remove the LVF PWB, REP 11.14-150.
3. Remove the relevant pulley or idler:
   - Bin 1 drive belt idler, PL 11.58.
   - Bin 1 drive belt pulleys, PL 11.58 Item 6.
4. Remove the E-clip and pulley or idler from the bracket. Apply plastislip grease, PL 26.10 Item 8 to the shaft and pulley or idler bore. Re-assemble the pulley or idler and E-clip on the bracket.
5. Reinstall the idler assembly.

1K, 2K LCSS and LVF BM Bin 1 Elevator Motor Worm and Gear

1. Remove the relevant covers:
   - 1K LCSS top cover and rear cover, REP 11.1-120.
   - 2K LCSS top cover and rear cover, REP 11.1-110.
   - LVF BM top cover and rear cover, REP REP 11.1-150.
2. Use plastislip grease, PL 26.10 Item 8, to lubricate the worm and gear, Figure 7.

   NOTE: *The lubrication procedure is the same for the 1K LCSS, 2K LCSS and LVF BM. The 1K LCSS is shown in Figure 7.*

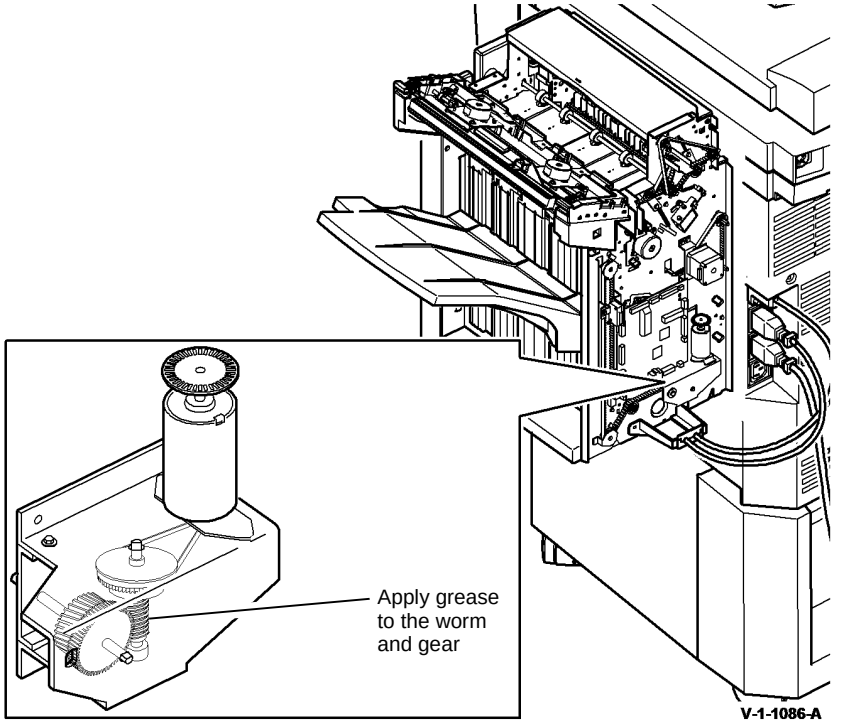


Figure 7 Worm and gear

1K LCSS, 2K LCSS and LVF BM Ejector Shafts and Slide Bearings

1. Remove the appropriate ejector assembly:
   - 1K LCSS, PL 11.114 Item 1.
   - 2K LCSS, PL 11.18 Item 1.
   - LVF BM, PL 11.66 Item 1.
2. Check the ejector shafts are adequately lubricated and the slide bearings move freely along the ejector shafts.
   - 1K LCSS, PL 11.114 Item 1.
   - 2K LCSS, PL 11.18 Item 11, PL 11.18 Item 12, PL 11.18 Item 13.
   - LVF BM, PL 11.66 Item 11, PL 11.66 Item 12, PL 11.66 Item 13.

CAUTION

Do not mix the residual lubrication with new lubricant on the ejector shafts and slide bearings. Contamination of the manufactures's lubricant with another will decrease durability and high temperature resistance.

3. If the assembly requires lubrication, perform the steps that follow:
   a. Refer to GP 18 Machine Lubrication.
   b. Clean both ejector shafts and the 4 slide bearings with film remover, PL 26.10 Item 4 , so that they are completely free of existing residual lubricant and contamination.
   c. Apply Hi-Lube grease, PL 26.11 Item 11 sparingly to the ejector shafts, then manually move the ejector base along the ejector shafts to distribute the lubricant fully along the shafts and inside the slide bearings.
4. Re-install the ejector assembly in the machine.

1K LCSS, 2K LCSS and LVF BM Tamper Assembly

1. Remove the 1K LCSS top cover, REP 11.1-120, 2K LCSS top cover, REP 11.1-110 or LVF BM top cover, REP 11.1-150.
2. Use plastislip grease, PL 26.10 Item 8, to lubricate the tamper assembly, Figure 8.

NOTE: *The lubrication procedure is the same for the 1K LCSS, 2K LCSS and LVF BM.*

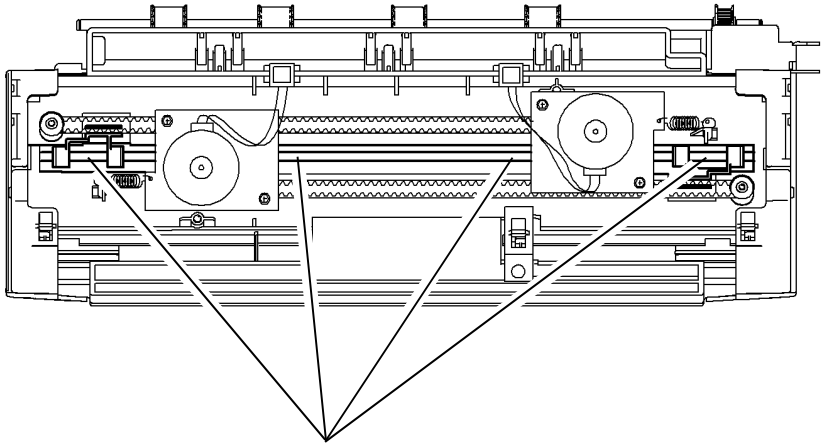


Figure 8 Tamper assembly

HVF BM Support Pin

1. Open the BM front door.
2. Fully pull out the BM unit.
3. Use plastislip grease, PL 26.10 Item 8, to lubricate the BM support pin, Figure 9.

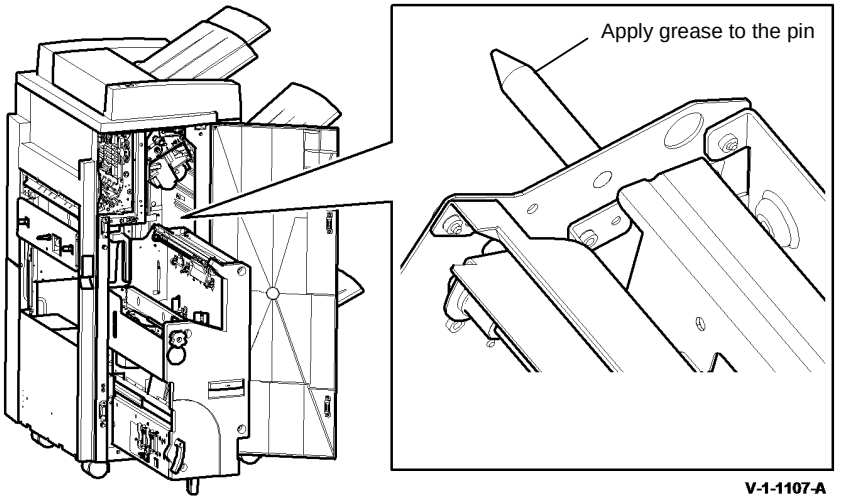


Figure 9 Support pin lubrication

4. Fully push in the BM unit and close the HVF BM front door.

ADJ 60.1 ROS Window Cleaning Procedure

Purpose

To improve the image quality.

NOTE: *Only perform this procedure if directed to it from an Image Quality RAP.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not break the glass. Broken glass can cause injury.

CAUTION

The ROS window is secured by 2 clips, 1 at the front and 1 at the rear. If too much pressure is applied when cleaning the ROS window, the glass will flex and may break.

1. Remove the xerographic module, PL 90.20 Item 2.
2. Using a clean, dry cotton tip, very carefully clean the underside of the ROS widow, Figure 1.

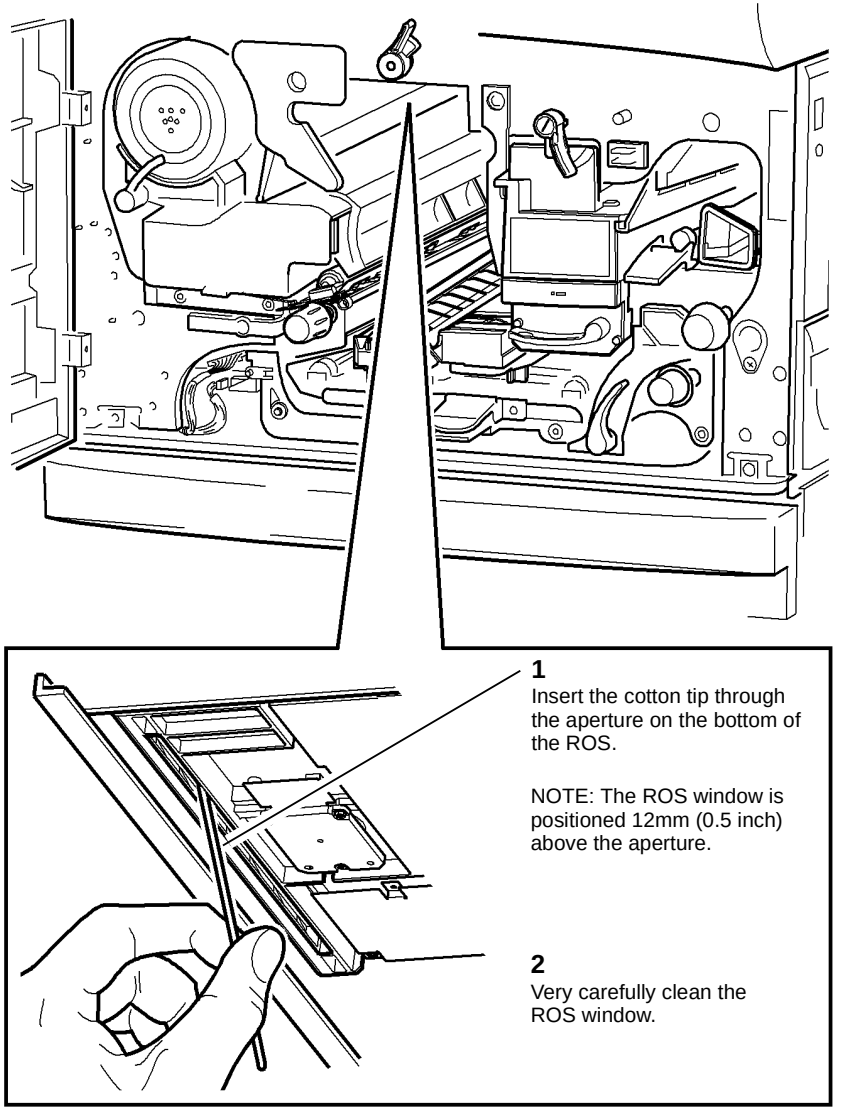


Figure 1 ROS window cleaning

ADJ 60.2 ROS Cleaning Procedure

Purpose

To improve the image quality.

NOTE: *Only perform this procedure if directed to from an Image Quality RAP.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

CAUTION

Ensure that E.S.D. procedures are observed during this procedure.

CAUTION

When rotating the polygon mirror, do not press down on the polygon mirror. Do not move any other components. The components are aligned during manufacture.

CAUTION

Contamination of the inside of the ROS can cause image quality defects. Ensure the inside of the ROS is clean before the top cover is replaced.

1. Remove the ROS, REP 60.15.
2. Remove the top cover from the ROS (4 torx head screws).

CAUTION

Do not attempt to clean the ROS laser diode.

3. Refer to Figure 1. Refer to Cleaning Methods. Inspect the inside of the ROS. As necessary, clean the inside of the ROS, the mirrors, the polygon mirror, the lens and the surface of all glass components

NOTE: *Carefully rotate the polygon mirror for access to all sides.*

4. Install the ROS top cover.
5. Install the ROS, REP 60.15.

Cleaning Methods

WARNING

Do not break the glass. Broken glass can cause injury.

CAUTION

Do not use the toner vacuum cleaner near the ROS window. The glass is flexible and can break.

1. Use a toner vacuum cleaner to carefully clean metalwork inside of the ROS.
2. Use a clean, dry cotton tip to remove the contamination from glass components.
3. If the contamination remains, use a cotton tip dampened with film remover, PL 26.10 Item 4.
4. Start from the center of each component and carefully clean towards the outside edge.

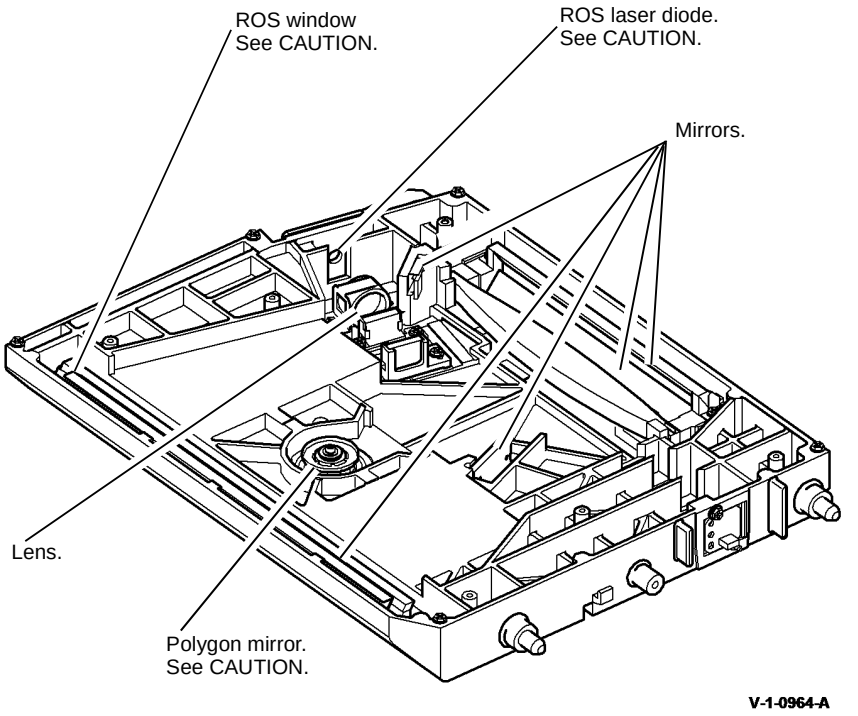


Figure 1 ROS component location

ADJ 60.3 Scanner Cleaning Procedure

Parts List on PL 60.15

Purpose

To clean the optical components of the scanner ensuring optimum image quality.

NOTE: *This adjustment must only be performed if directed to it from dC945, a Image Quality RAP, or if the optics cavity was opened to install a new component and contamination can be seen.*

NOTE: *Refer to ADJ 60.4 Side 2 Scan assembly Cleaning Procedure.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Observe ESD precautions during this procedure.

1. Remove the top cover assembly, REP 60.3.
2. Inspect the cleanliness of the scanner interior, then if necessary, clean as follows:
   a. Vacuum clean the area as necessary to remove all visible contamination. It may be necessary to move the carriage gently to the right. It is advisable to leave it in this position, but it can be returned to the home position. **Do not** vacuum clean the scan carriage.
   b. Wash your hands.
   c. Carefully clean any contamination from the scan carriage using an air duster (an aerosol can of compressed air).
3. Examine the lenses of the document size sensors, PL 60.20, then clean if necessary with a micro fiber wiper, PL 26.10 Item 13.
4. Inspect the document glass and CVT glass and if necessary, clean them as follows:
   a. Clean the under side of document glass and CVT glass using a micro fiber wiper, PL 26.10 Item 13, dampened with antistatic fluid, PL 26.10 Item 19.
   b. Polish the under side of document glass and CVT glass with a dry micro fiber wiper, PL 26.10 Item 13.
   c. Install the top cover, taking care not to smear the cleaned underside, REP 60.3.
   d. Clean the upper side of document glass and CVT glass using a micro fiber wiper, dampened with film remover, PL 26.10 Item 4.
   e. Polish the upper side of document glass and CVT glass using a dry, micro fiber wiper.
5. Re-install the remainder of the removed components.

ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure

Parts List on PL 60.30

Purpose

To improve the image quality.

NOTE: *This adjustment must only be performed if directed to it from dC945, a Image Quality RAP, or if the side 2 scanner or SPDH have been removed.*

NOTE: *Refer to ADJ 60.3 Scanner Cleaning Procedure.*

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Go to the appropriate procedure:

- External Surface Cleaning
- Internal Surface Cleaning

NOTE: *Only clean the internal surface of the side 2 scan assembly glass if cleaning the external surface failed to resolve the defect.*

External Surface Cleaning

1. Raise the SPDH.
2. Lower the jam clearance baffle assembly, Figure 1.

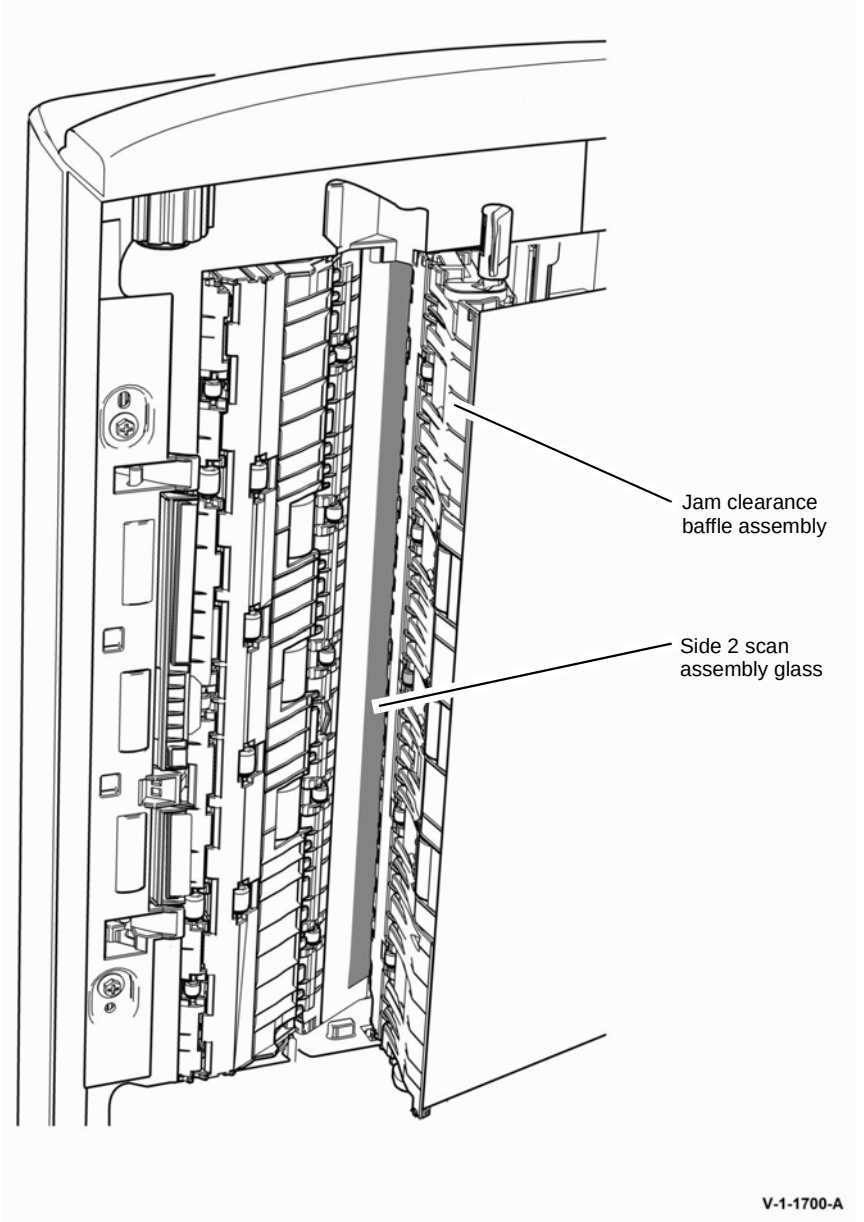


Figure 1 Component location

3. Clean the side 2 scan assembly glass, Figure 1. Perform the following:
   a. Use a micro fiber wiper, PL 26.10 Item 13, dampened with antistatic fluid, PL 26.10 Item 19 to clean the side 2 scan assembly glass.
   b. Use a dry micro fiber wiper, PL 26.10 Item 13 to polish the side 2 scan assembly glass.

Internal Surface Cleaning

1. Remove the side 2 scan assembly, REP 60.6.
2. Remove the side 2 scan assembly glass, Figure 2.

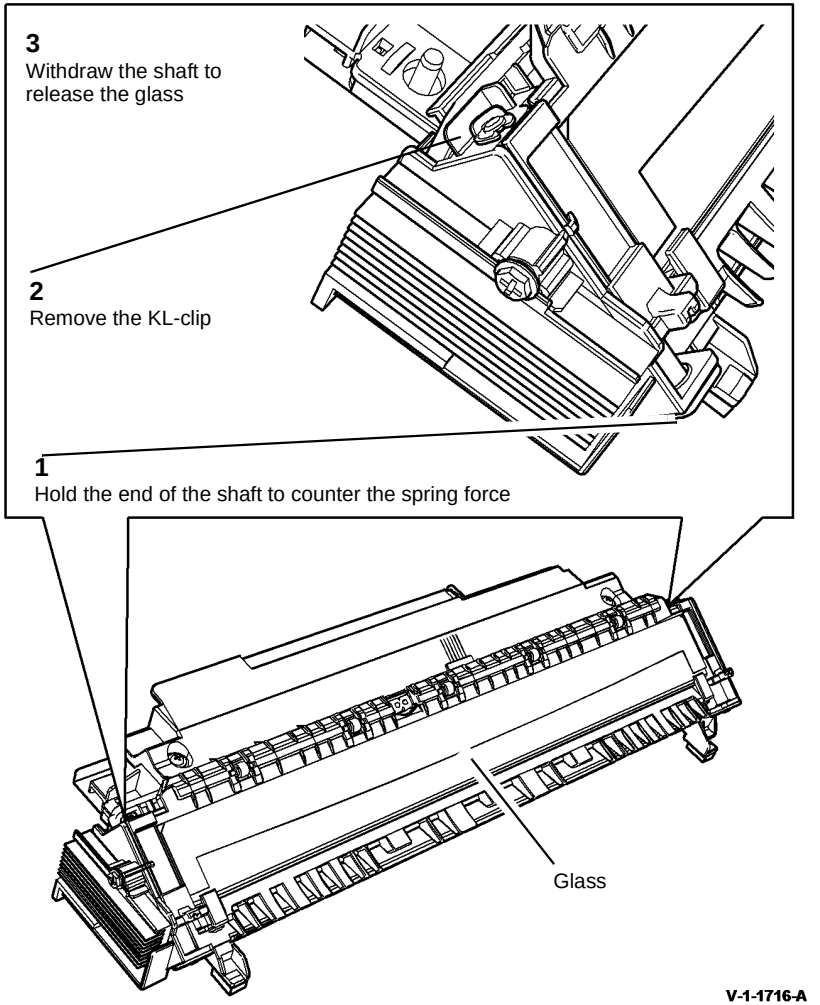


Figure 2 Side 2 scan glass assembly removal

3. Use a micro fiber wiper, PL 26.10 Item 13, dampened with antistatic fluid, PL 26.10 Item 19 to clean the inside surface of the side 2 scan assembly glass.
4. Use a micro fiber wiper, PL 26.10 Item 13 to polish the inside surface of the side 2 scan assembly glass.
5. Reverse the removal process in 2 to replace the side 2 scan assembly glass.
6. Ensure that the retaining plate on the end of each shaft is positioned correctly relative to the locating pips on the side 2 scan assembly, Figure 3.

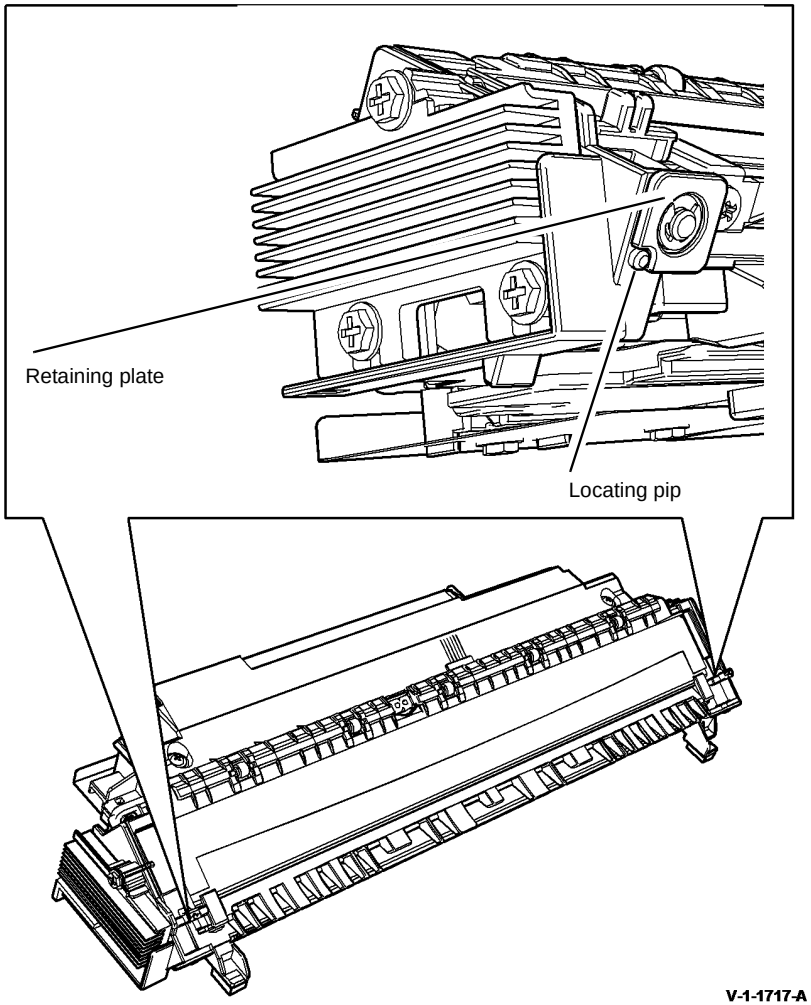


Figure 3 Replacement of the side 2 scan assembly glass

7. Replace the side 2 scan assembly. Refer to REP 60.6.

ADJ 60.5 IIT Registration, Magnification and Calibration

Purpose

To correctly set all parameters associated with IIT registration, magnification and calibration.

Procedure

Perform the following:

1. dC609 Document Glass Registration.
2. dC610 CCD Lamp Profile Adjustment.
3. dC608 Document Registration Procedure.
4. dC945 IIT Calibration.

ADJ 70.1 Tray 3 and Tray 4 Paper Tray Guide Setting

Parts List on PL 70.19

Purpose

To adjust the paper tray guides in tray 3 and tray 4 for A4 or 8.5 x 11 inch paper.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out the tray to be adjusted and remove the paper from the tray.
2. To reset the paper tray guides:
   - Refer to Figure 1 and Figure 2 to change the paper tray guides and paper guides from A4 paper size to 8.5x11 inch paper size.
   - Refer to Figure 3 and Figure 4 to change the paper tray guides and paper guides from 8.5x11 inch paper size to A4 paper size.

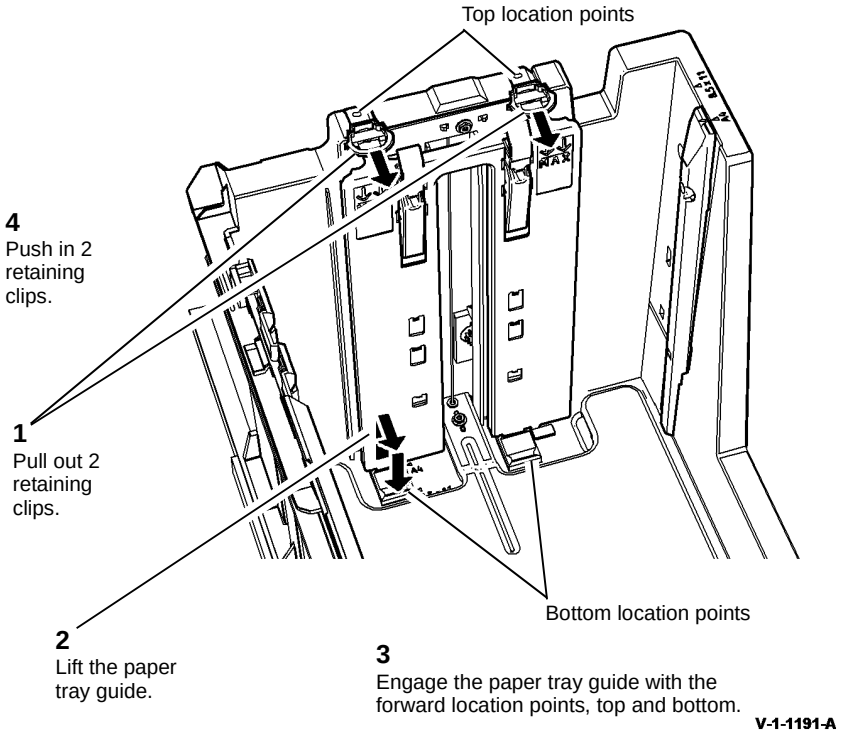


Figure 1 Paper tray guide re-position

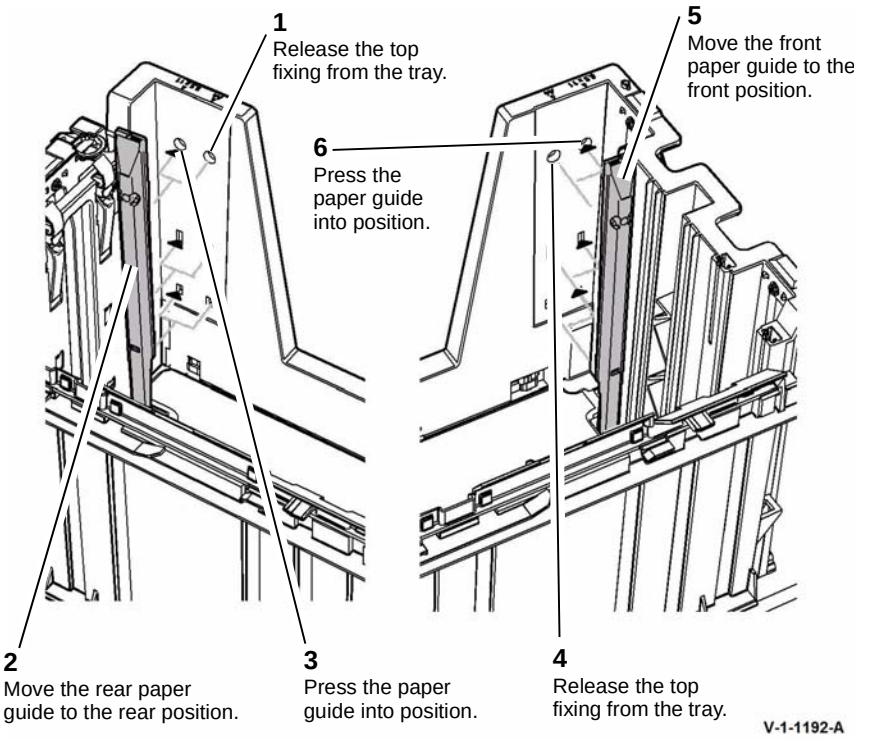


Figure 2 Paper guides re-position

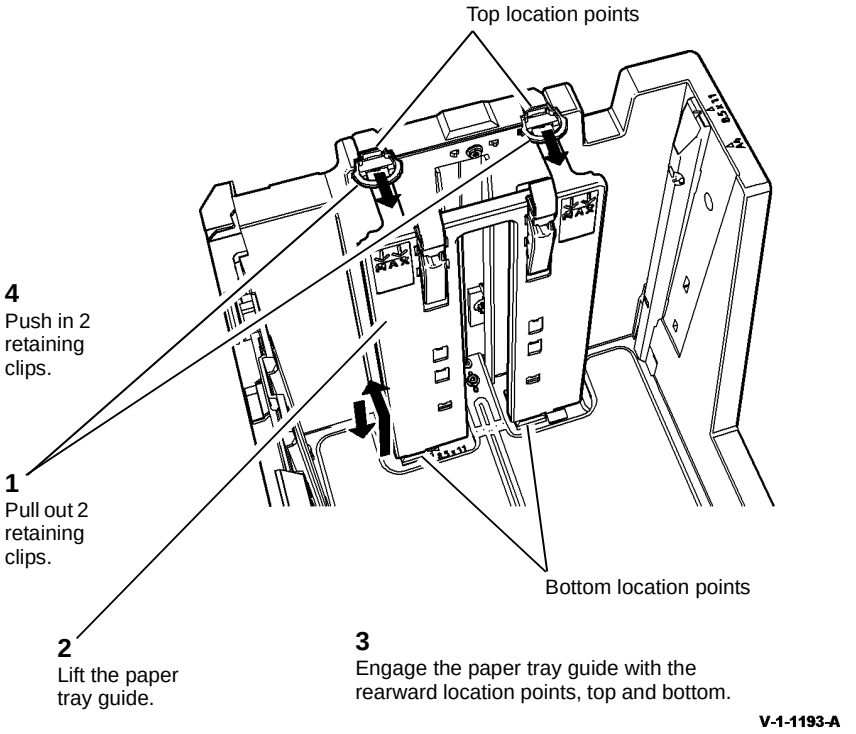


Figure 3 Paper tray guide re-position

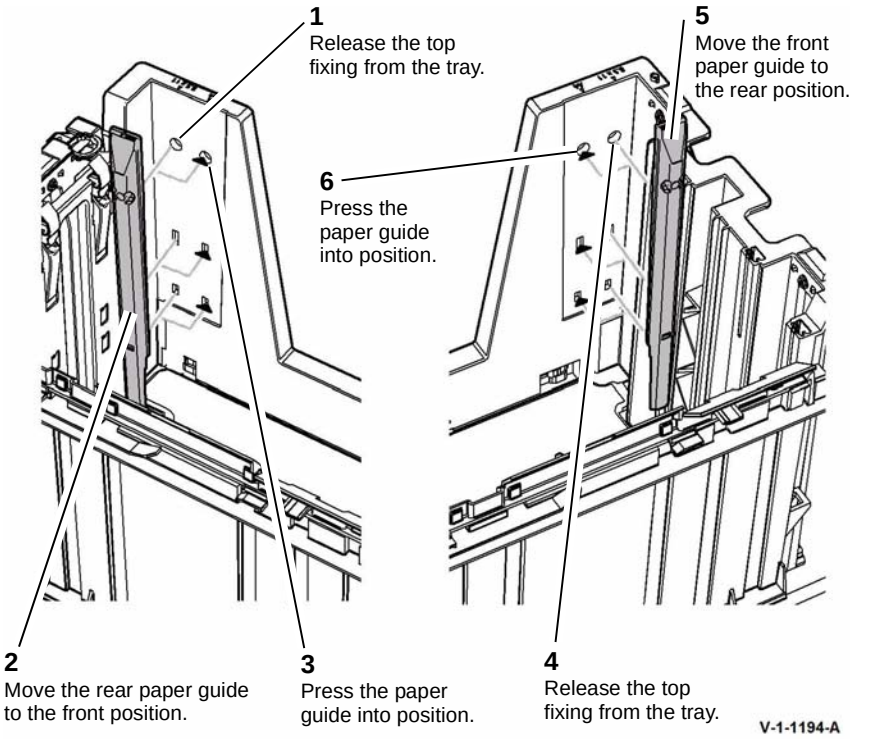


Figure 4 Paper guides re-position

ADJ 70.2 Tray 6 Paper Tray Guide Setting

Parts List on PL 70.64

Purpose

To adjust the paper tray guides in tray 6 for A4 / A3 or 8.5 x 11 / 11 x 17 inch paper.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Open tray 6 door and allow the tray to lower and remove the paper stack.
2. Adjust the paper guide to the required paper size, Figure 1.
   - To set the paper tray guide to A4 / A3 paper size, move the paper guide to the outer position.
   - To set the paper tray guide to 8.5 x 11 / 11 x 17 inch paper size, move the paper guide to the inner position.

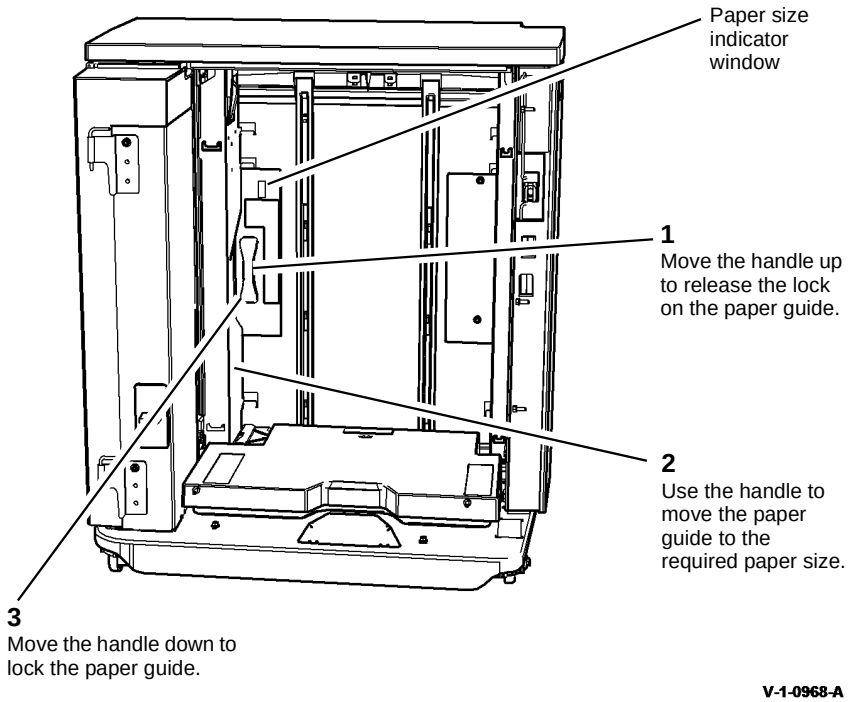


Figure 1 Paper guide adjustment

3. Check the registration, refer to dC604 Registration Setup Procedure.

ADJ 70.3 Tray 6 Module to Machine Alignment

Parts List on PL 70.64

Purpose

To correctly align the tray 6 module to achieve correct top edge registration and reliable transfer of paper from the tray 6 module to the machine.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Turn the hand wheel in the centre of the tray 6 module to raise the casters off the floor, Figure 1.

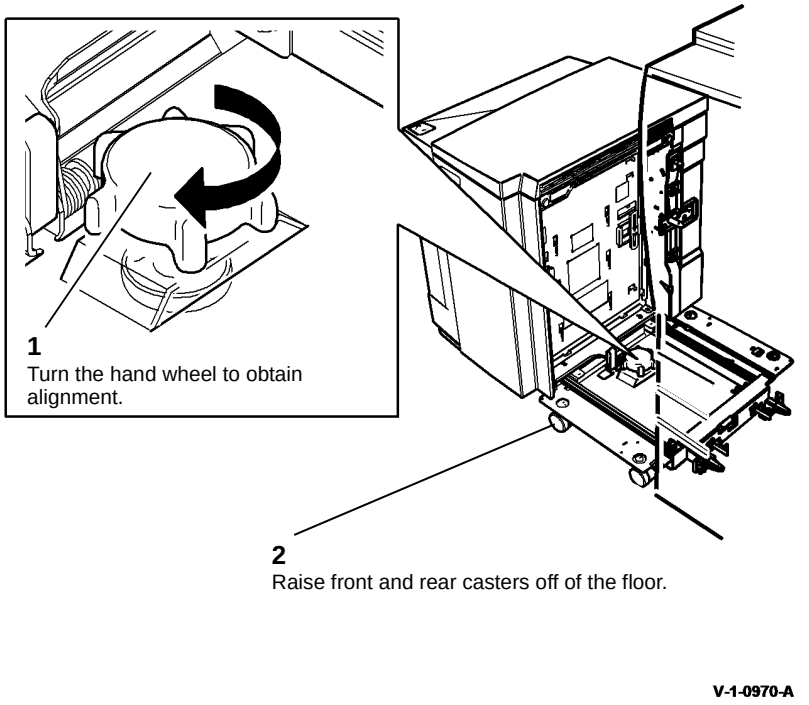


Figure 1 Tray 6 alignment

2. Check the registration, refer to dC604 Registration Setup Procedure.

ADJ 70.4 Tray 6 Module Tray Alignment

Parts List on PL 70.64

Purpose

To align the tray 6 module paper tray with the paper trays in the IOT module. Use this adjustment when the top edge registration cannot be achieved using the NVM values in dC604 Registration Setup Procedure.

NOTE: *Perform ADJ 70.3 Tray 6 Module to Machine Alignment, before starting this adjustment procedure. Use both ADJ 70.3 and this adjustment to achieve correct hole punch alignment.*

Before performing this adjustment return the NVM values for tray 6 to the nominal values.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Make a sample print and determine which way and how far the tray needs to be moved. After the adjustment is made, take a sample print.

1. Loosen the docking pin bracket, Figure 1.

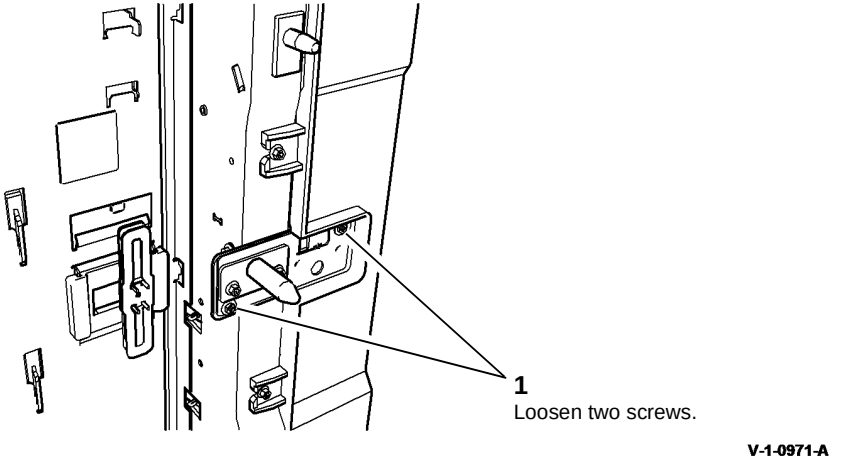


Figure 1 Docking pin bracket

2. Adjust the position of the docking pin bracket, Figure 2

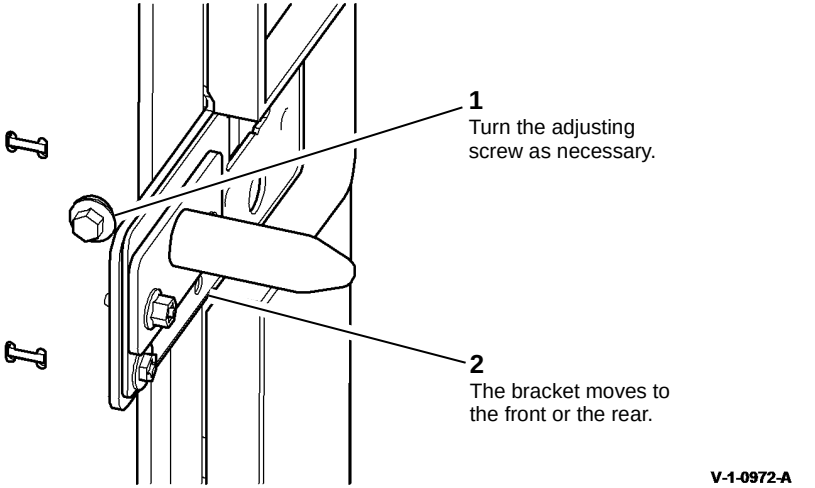


Figure 2 Adjusting screw

3. Use the scribed indicator to determine the amount of movement, Figure 3.

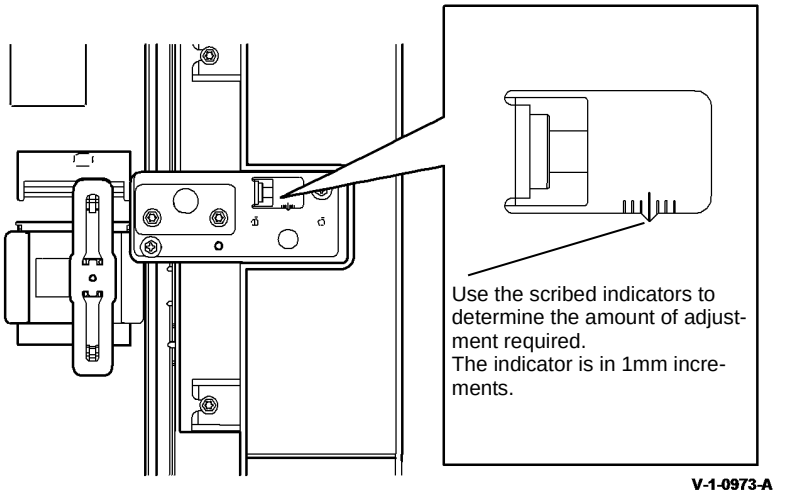


Figure 3 Adjustment indicator

4. Secure the docking pin bracket, Figure 4.

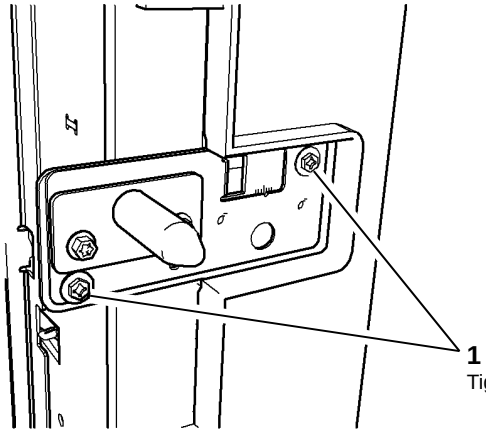


Figure 4 Secure the docking pin bracket

5. Make sample prints and check the top edge registration.
6. Enter dC604 Registration Setup Procedure and set the top edge registration.
7. If the top edge registration is still out of range, repeat the adjustment.

ADJ 70.5 Tray 6 Stack Height Sensor and Retard Shield

Parts List on PL 80.45, PL 26.11

Purpose

To enable the stack height sensor and retard shield to be set to their optimum positions on W/TAG P-050 and W/TAG P-051 tray 6 modules only. Thus extending the life of the feed, nudger and retard rolls.

NOTE: *Manufacturing failed to strike the Mod/Tag plate on a quantity of tray 6 modules manufactured with the adjustable stack height sensor (W/TAG P-050) and retard shield (W/TAG P-051). These adjustable tray 6 modules can be identified by an externally visible retard shield, refer to Figure 6.*

NOTE: *In the service engineering community tray 6 is also referred to as the PFP (Paper Feed Platform).*

Preparation

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Special tool required - PFP setting tool, PL 26.11 Item 7 and Figure 1.

1. Remove the following components from the upper feed assembly drive shafts;
   - Feed roll, REP 80.24
     - Clutch, PL 80.45 Item 13
     - One way coupling, PL 80.45 Item 4
     - Bearing, PL 80.45 Item 8
     - Roller belt, PL 80.45 Item 15
   - Nudger roll, REP 80.24
     - One way gear, PL 80.45 Item 3
   - Retard roll, REP 80.24
     - Clutch coupling, PL 80.47 Item 11
     - Clutch, PL 80.47 Item 7
2. Remove 2 screws then the top cover, PL 70.60 Item 10.

3. Prepare to locate the PFP setting tool onto the upper feed assembly, Figure 1.

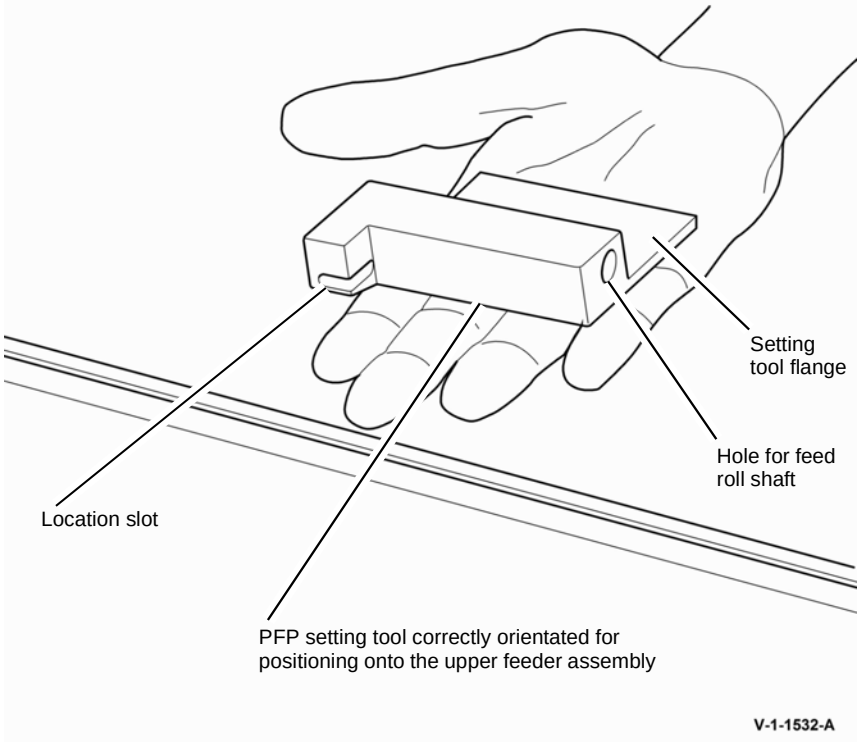


Figure 1 Tool orientation

4. Install the PFP setting tool, Figure 2.

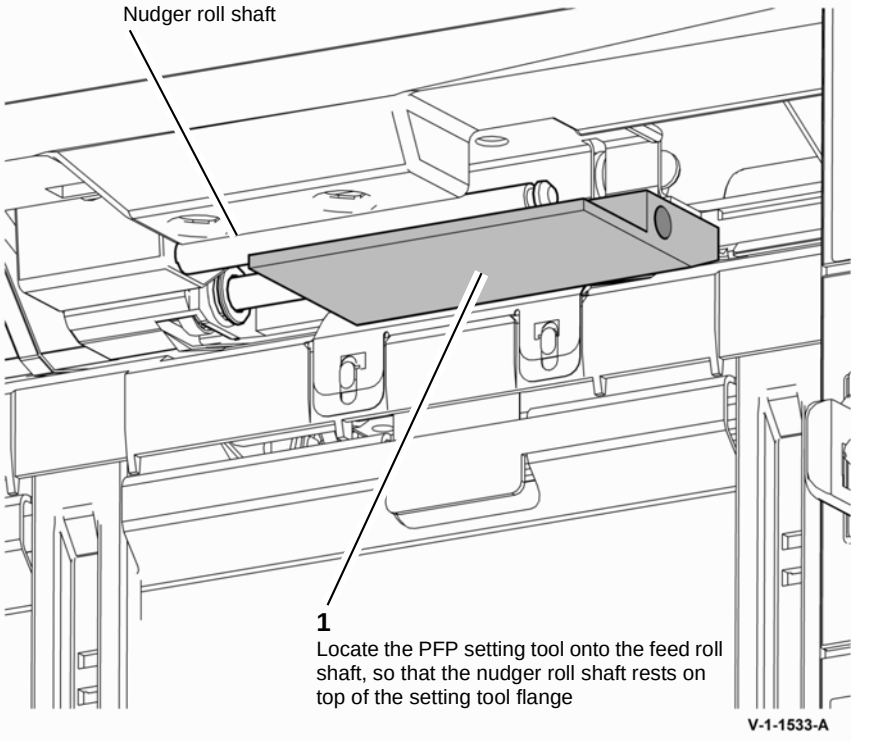


Figure 2 Setting tool location

5. Engage the tab in the setting tool location slot, Figure 3.

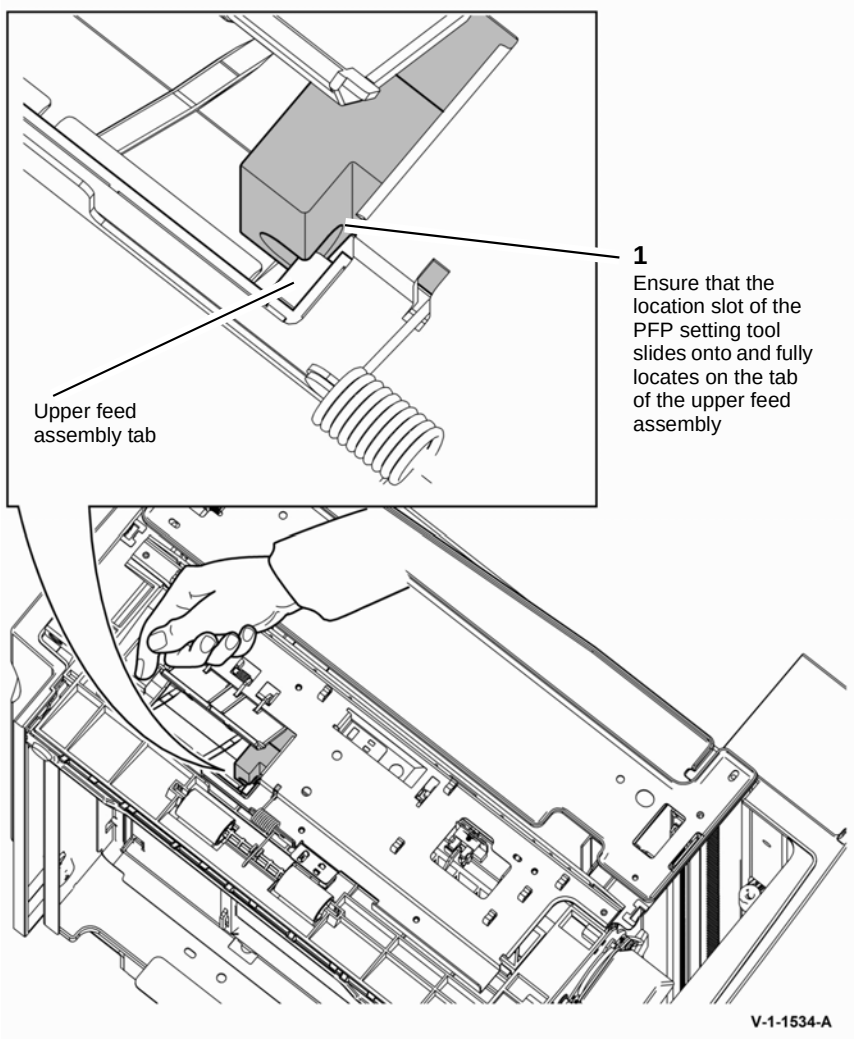


Figure 3 Tab location

6. Check that the tool is correctly located, as shown in Figure 4.

NOTE: *In Figure 4, the spring loaded access cover is shown in ghosted form for clarity.*

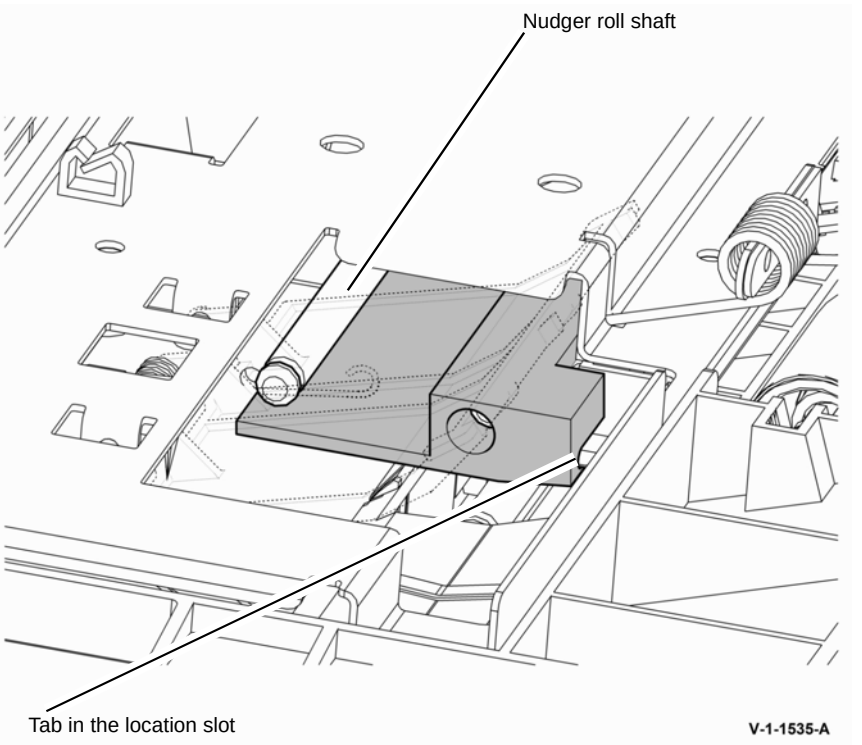


Figure 4 Correct tool location

Retard Shield Check and Adjustment

1. Check the position of the retard shield, Figure 5.

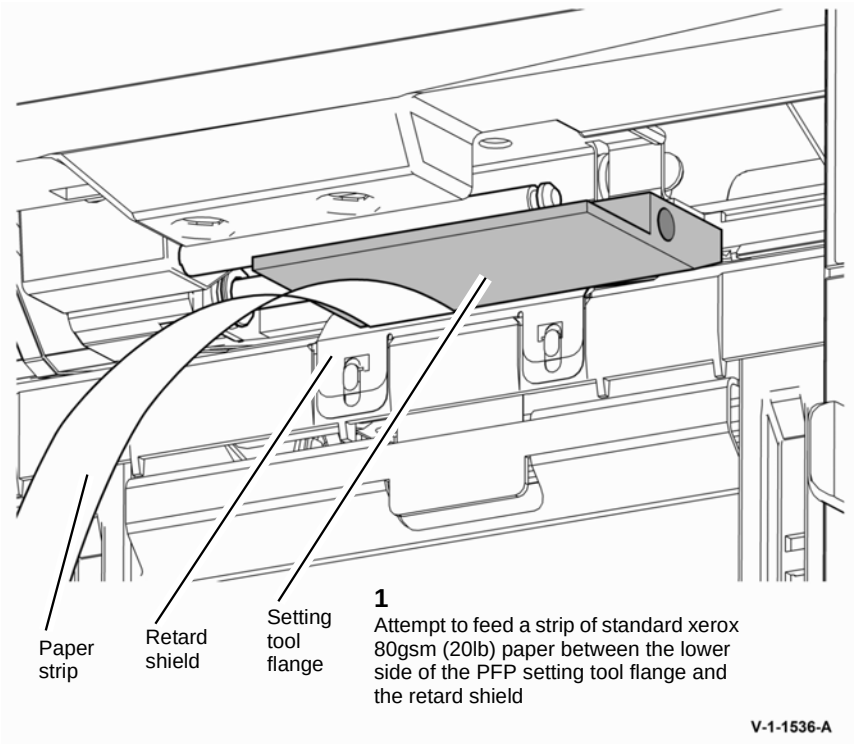


Figure 5 Retard shield check

2. If the paper strip does not feed between the flange of the PFP setting tool and the retard shield then retard shield is positioned correctly, proceed to Stack Height Sensor Check and Adjustment.

   If the paper strip does feed between the flange of the PFP setting tool and the retard shield then the retard shield requires adjustment, continue at step 3.

3. Prepare to adjust the position of the retard shield, Figure 6.

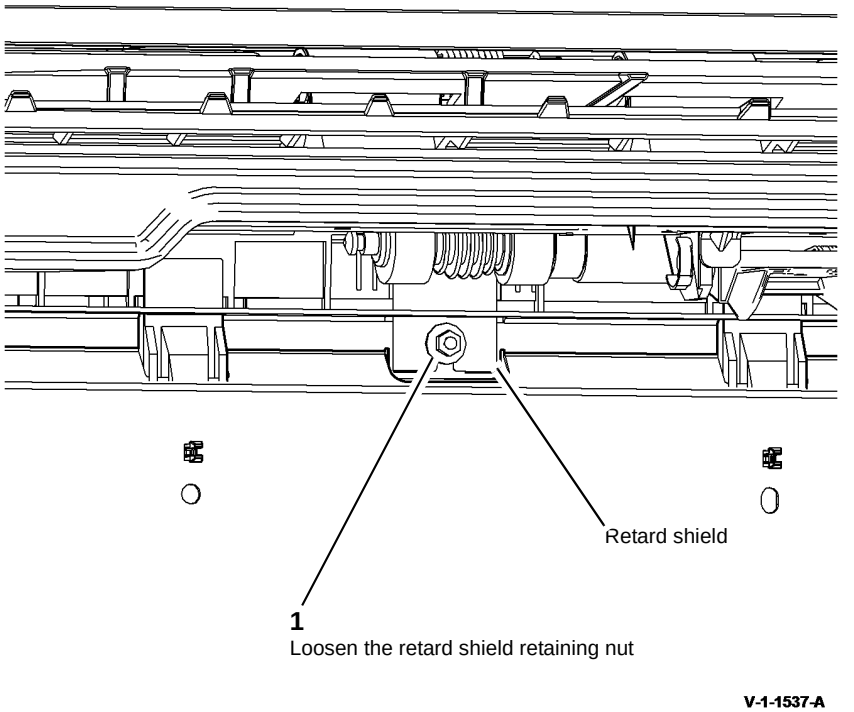


Figure 6 Preparation

4. Adjust the position of the retard shield, Figure 7.

   NOTE: *Take care not to move the PFP setting tool as the retard shield is repositioned.*

   NOTE: *Ensure the retard shield remains parallel to the upper feed assembly.*

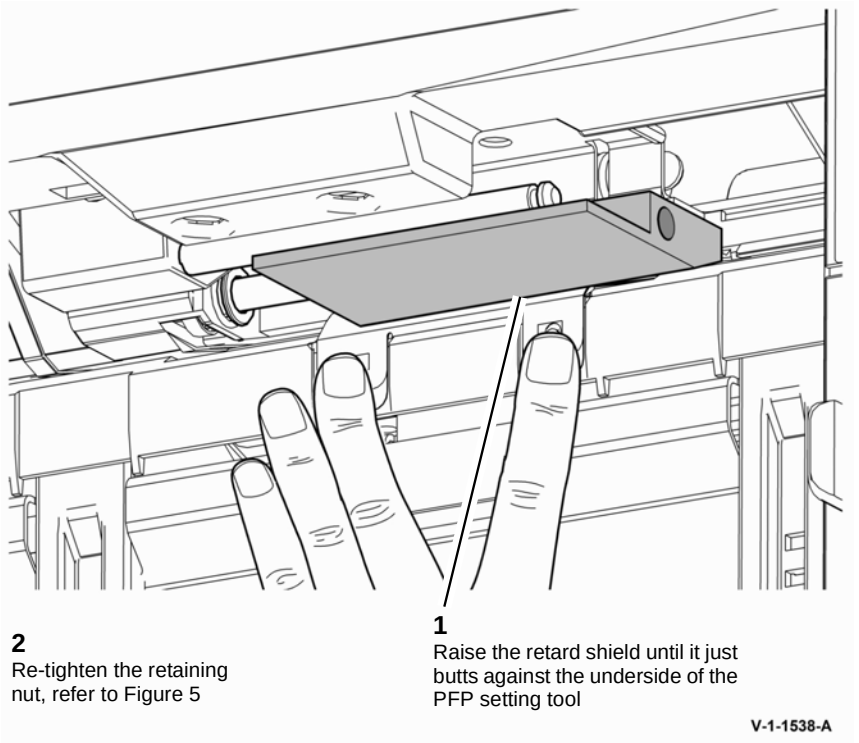


Figure 7 Retard shield adjustment

5. Re-check the position of the retard shield, Figure 5. If necessary repeat the adjustment of the retard shield.

Stack Height Sensor Check and Adjustment

1. Ensure the machine is switched on with the PFP door open so that the paper tray travels to and remains at the lowest position.
2. Enter dC330 code 076-330 PFP stack height sensor Q76-330. Press Start. The display should read low.
3. Check the position of the stack height sensor, Figure 8.

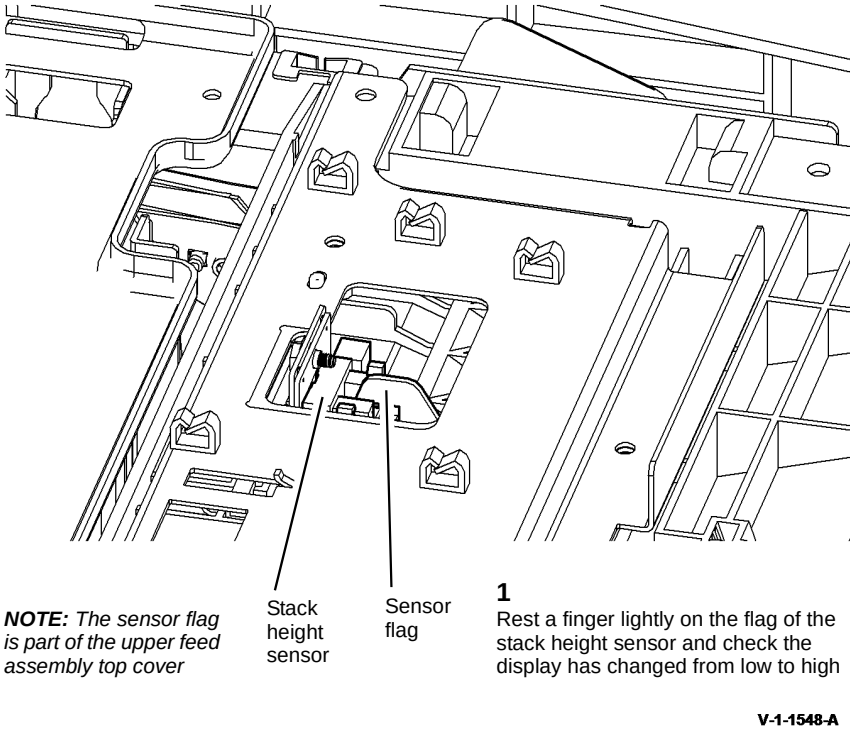


Figure 8 Sensor check

4. If the display has changed from low to high the sensor is positioned correctly. Proceed to step 7.

   NOTE: *The change of state of the sensor may be accompanied by an audible buzzer.*

   If the display does not change from low to high the sensor will require adjustment, continue at step 5.

5. Adjust the position of the stack height sensor, Figure 9.

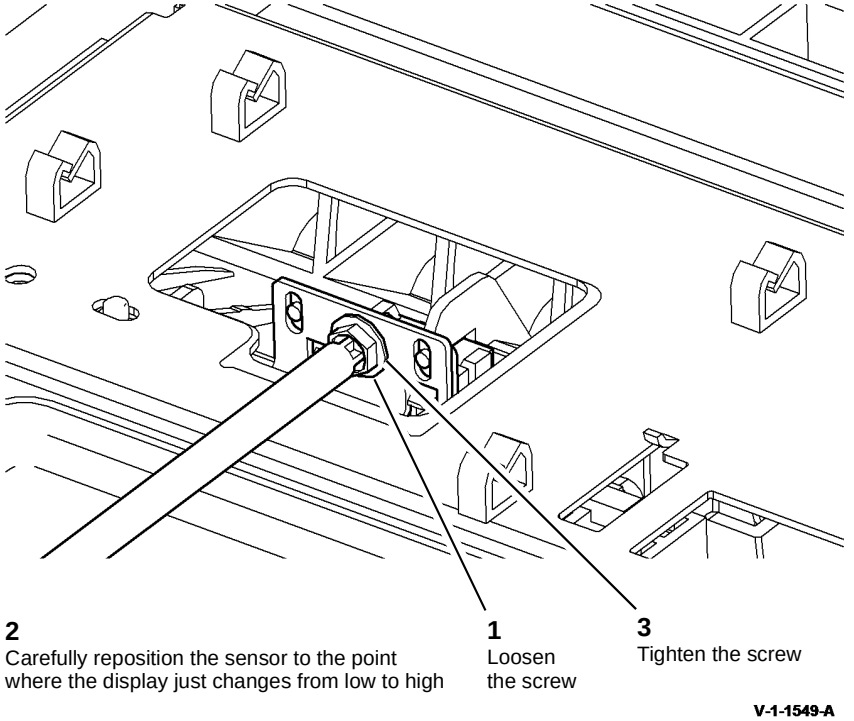


Figure 9 Sensor adjustment

6. Check the position of the stack height sensor, Figure 7. If necessary repeat the adjustment of the stack height sensor.
7. The adjustments are now complete, remove the PFP setting tool.
8. Install all the removed PFP components, refer to Preparation steps 1 and 2. Replacement is the reverse of the removal procedure.
9. Ensure Mod/Tag P-050 and P-051 are marked off on the tray 6 Mod/Tag plate.

ADJ 80.1 Registration Setup

Purpose

To measure and adjust the image to paper registration. Refer to dC604 Registration Setup.

ADJ 80.2 Simplex and Duplex Buckle Timing

Purpose

To check and adjust the buckle timing on the simplex and duplex transport assemblies.

Simplex Buckle Timing

Check

Go to dC131, select location 781-007, LeRegSnrToClutchOn. The value should be set in the region of 10 to 30 below the default value shown in the dC131 table.

Adjustment

1. Adjust the simplex buckle timing NVM value in increments of 10.
2. Print internal test pattern number 16, dC612. Run 20 copies of test pattern number 16 in simplex mode and then check the copies for cockle deletions, Figure 1.
3. If necessary repeat steps 1 and 2.
4. Record the new values in the machine log book.
5. Check the duplex buckle timing.

Duplex Buckle Timing

Check

Go to dC131, select location 783-007, LeDupSnrToClhOnAct. The value should be set in the region of 10 to 30 below the default value shown in the dC131 table.

Adjustment

1. Adjust the duplex buckle timing NVM value in increments of 10.
2. Print internal test pattern number 9, dC612. Run 20 copies of test pattern number 16 in duplex mode and then check the copies for cockle deletions, Figure 1.
3. If necessary repeat steps 1 and 2.
4. Record the new values in the machine log book.
5. Perform an NVM Save and Restore, GP 5.

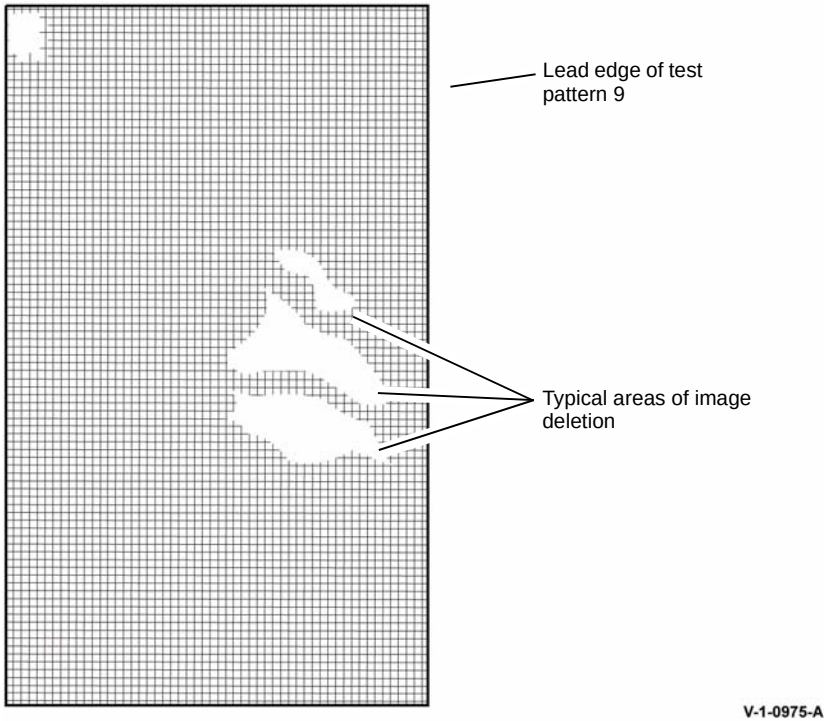


Figure 1 Cockle deletion

ADJ 80.3 Tray 3 and Tray 4 Retard Roll Pressure

Purpose

To adjust the nip pressure of the retard roll.

NOTE: *Reducing the nip pressure will make the retard action less aggressive and may improve misfeeds. Increasing the nip pressure will make the retard action more aggressive and may improve multi-feeds.*

Check

1. Remove the relevant paper feed assembly:
   - Tray 3, REP 80.30.
   - Tray 4, REP 80.31.
2. Refer to Figure 1, check the position of the spring seat.

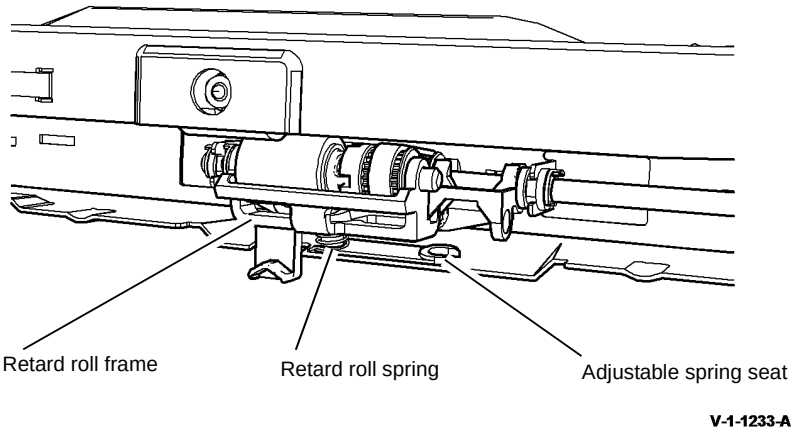
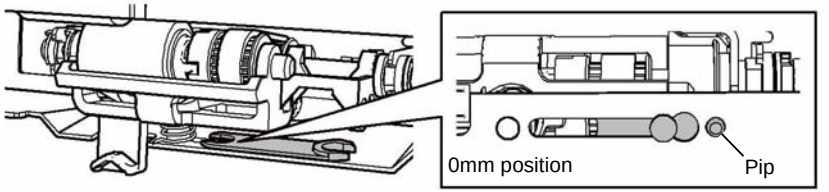


Figure 1 Spring seat position

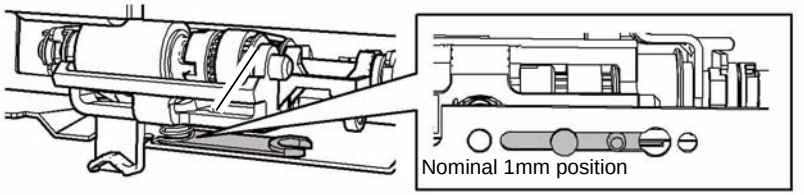
Adjustment

NOTE: *The feeders have the spring seat set in the nominal (1mm) position during manufacture, Figure 2.*

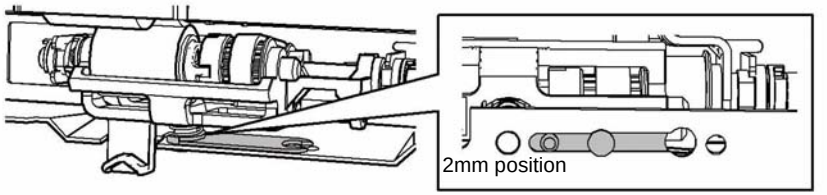
1. Figure 2, change the position of the spring seat to adjust the nip pressure of the retard roll:
   - Change the spring seat to the 2mm position to increase the retard roll pressure
   - Change the spring seat to the 0mm position to decrease the retard roll pressure



To release the spring seat from this position, press down the pip then slide the spring seat away from the frame hole.
To locate the spring seat in this position, slide the spring seat along the slot until the pip drops into the frame hole.



To release the spring seat from this position, lift up the base of the spring then slide the spring seat away from the spring position.
To locate the spring seat in this position, lift the base of the spring then slide the spring seat along the slot until the thin end is located under the spring.



To release the spring seat from this position, lift up the base of the spring then slide the spring seat away from the spring position.
To locate the spring seat in this position, lift the base of the spring then slide the spring seat along the slot until the thick end is located under the spring.

V-1-1234-A

Figure 2 Spring seat adjustment

2. Install the paper feed assembly. Check the paper feeding performance.

ADJ 80.4 Tray 3 and Tray 4 Nudger Roll Pressure

Purpose

To adjust the downward pressure of the nudger roll.

Reducing the downward pressure will make the nudging action less aggressive and may reduce the tendency of some papers from feeding more than one sheet from the top of the stack.

Increasing the downward pressure will make the nudging action more aggressive and may improve the feeding of glossy paper and thin paper.

Check

1. Remove the relevant paper feed assembly:
   - Tray 3, REP 80.30.
   - Tray 4, REP 80.31.
2. Refer to Figure 1, check the number of weights.

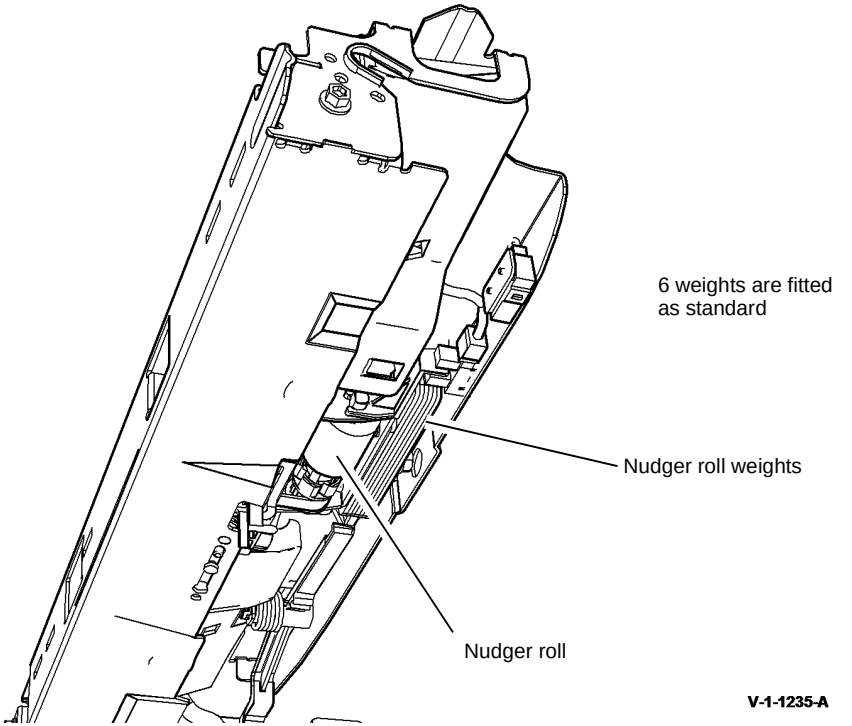


Figure 1 Weights position

Adjustment

1. Figure 2 shows the location of the spare weights.

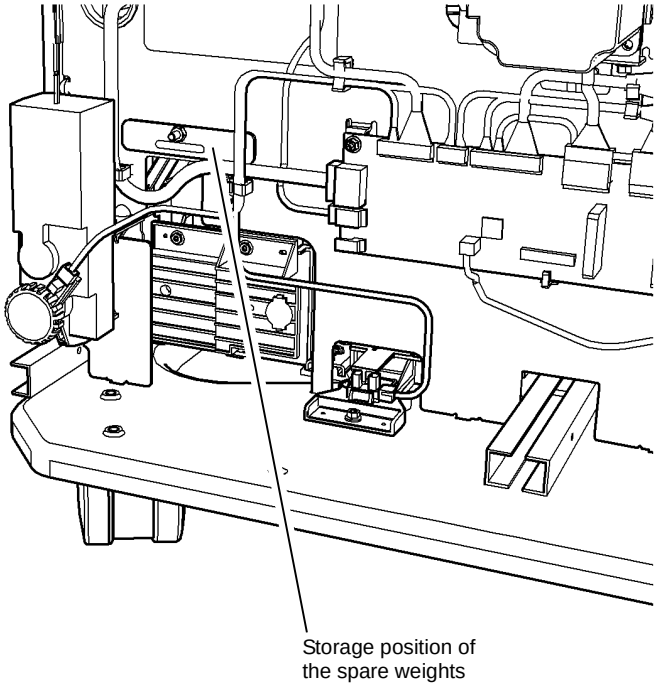


Figure 2 Weights location

2. Figure 3, change the number of weights to adjust the downward pressure of the nudger roll.

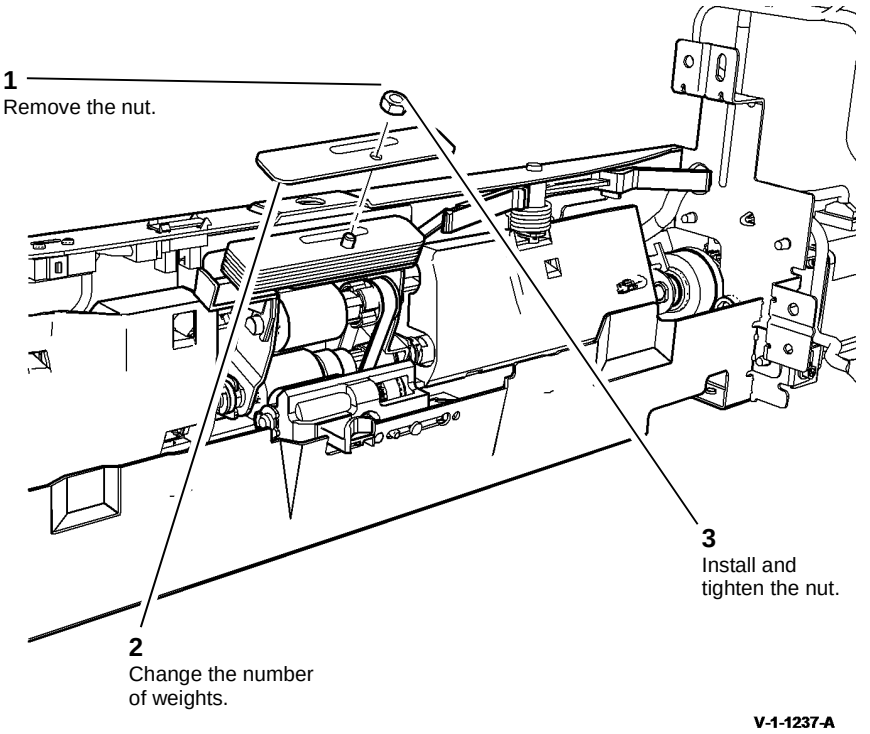


Figure 3 Spring seat adjustment

3. Install the feed head and check the paper feeding performance.

ADJ 90.1 Corotron Cleaning

Parts List on PL 90.20

Purpose

To clean the corotrons.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. The machine has a cleaning device for the transfer/detack corotron. Move the device back and forward to clean the transfer/detack wires. If the transfer/detack corotron is heavily contaminated then the corotron assembly can be removed and cleaned with a brush.
2. Raise and lower the latch mechanism of the short paper path assembly, PL 10.25 Item 1, to ensure that the transfer/detack corotron is parallel to the photoreceptor. If the movement of raising the short paper path assembly is not smooth, check the action of the push rod, PL 10.25 Item 13, REP 10.1.

NOTE: *Do not attempt to clean the corotron wires with any solvents or wipe clean using paper. If necessary install a new transfer/detack corotron, PL 90.20 Item 8.*

ADJ 90.2 Optimize Dark and Light Grey Image

Purpose

Use this adjustment if the dark greys are too dark and / or light greys are too light.

Use this adjustment in combination with the changes made in IQ10 Image Quality Improvement RAP.

NOTE: *This procedure will only make a slight improvement to the image quality.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Perform IQ3 Xerographics RAP before starting this adjustment.
- Ensure that all the image quality settings on the UI are at default.
- Make a copy of the customer document that shows the defect and keep as a reference.
- Enter dC612 Print Test Patterns. Print internal test pattern 8.
- Exit service mode, GP 1.
- Place the printed test pattern 8 on the platen glass with the dark bands to the right and the light band to the left. Make a copy.
- Compare the copy with the original, Figure 1.
  - If the sections 5-7 look the same as each other then the machine has a problem with poor shadows / dark greys. Go to the Poor Shadows Adjustment.
  - If section 1 looks white then the machine has a problem with poor highlights/light greys. Go to the Poor Highlights Adjustment.

Poor Shadows Adjustment

1. Enter dC131 NVM Read/Write location 761-001 Laser Light Level. Reduce the value by 200.
   - **45-55 ppm machines.** Ensure that the value is between 1500 and 3050.
   - **65-90 ppm machines.** Ensure that the value is between 1500 and 3200.
2. Enter dC612 Print Test Patterns. Print test pattern 8.
3. Exit service mode, GP 1.
4. Place the new printed test pattern 8 on the platen glass. Make a copy.
5. If the copy has poor shadows, then go to the next step.
   If the copy has good shadows, then go to the Poor Highlights Adjustment.
6. Enter dC131 NVM Read/Write location 761-001 Laser Light Level. Reduce the value by 200. Reduce the value in increments of 200 until good shadow is achieved.
   - **45-55 ppm machines.** Do not reduce the value below 1500.
   - **65-90 ppm machines.** Do not reduce the value below 1500.
7. Enter dC612 Print Test Patterns. Print internal test pattern 8.
8. Exit service mode, GP 1.
9. If the copy has poor highlights, then go to the Poor Highlights Adjustment.

If the highlights are good, then go to the Final Image Quality Check.

Poor Highlights Adjustment

1. Enter dC131 NVM location 791-007 Charge Grid. Reduce the value by 25.
   - **45-55 ppm machines.** Ensure that the value is between 380 and 480.
   - **65-90 ppm machines.** Ensure that the value is between 370 and 470.
2. Enter dC612 Print Test Patterns. Print internal test pattern 8.
3. Exit service mode, GP 1.
4. Place the new printed test pattern 8 on the platen glass. Make a copy.
5. If the copy has poor highlights, then go to the next step.
   If the highlights are good, then go to the Final Image Quality Check.
6. Enter dC131 NVM location 791-007 Charge Grid. Reduce the value by 25. Reduce the value in increments of 25 until good highlights is achieved.
   Do not reduce the value below 350.
7. Enter dC612 Print Test Patterns and print internal test pattern 8.
8. Exit service mode, GP 1.
9. Place the new printed test pattern 8 on the platen glass and make a copy. The copy quality is optimized.

Final Image Quality Check

1. Enter dC612 Print Test Patterns. Print internal test pattern 8.
2. Exit service mode, GP 1.
3. Place the new printed test pattern 8 on the platen glass and make a copy. The image quality is optimized.
4. Make a copy of the customer document and compare it with the initial copy. Check that the image quality has improved.
5. Run a variety of jobs to confirm that the changes made have not introduced other copy quality problems.
6. Record any NVM changes in the machine log book.
7. Perform an NVM Save and Restore, GP 5.

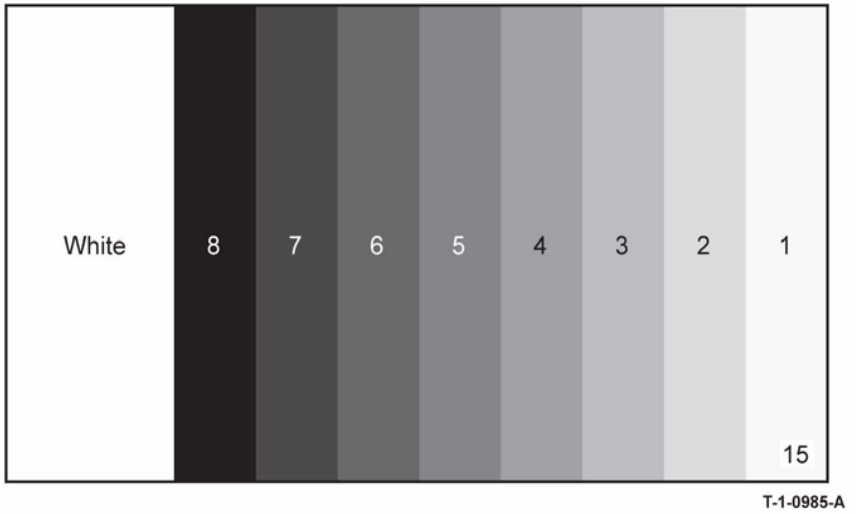


Figure 1 Test pattern 15

ADJ 90.3 Developer Magnetic Seal Brush Adjustment

Purpose

To check and maintain an effective seal on the developer module.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the xerographic module, PL 90.20 Item 2.
2. Use a flashlight to examine the condition of the seal, Figure 1.
3. Check for the following:
   - The seal for damage.
   - The halo guide, transfer and detack corotron, PL 90.20 Item 8, for contamination.

If either or both above are present, continue below.

1. Remove the developer module, PL 90.15 Item 2. Place the developer module, left side down, on a suitable surface.
2. Check the shutter assembly seal for damage, Figure 2. If necessary install a new shutter assembly, PL 90.15 Item 20.
3. Remove contamination from the following:
   - Above and below the developer roll area.
   - Registration guide and the halo guide.
   - The floor pan.
   - Transfer corotron, detack corotron and the duplex paper path.
4. Restore the magnetic seal brush. Go to Magnetic Seal Loading.
5. Reinstall the developer module and the xerographic module.
6. Make 50 prints.
7. Remove the xerographic module.
8. Use a flashlight to check the halo guide, transfer corotron, detack corotron and the duplex paper path for contamination of toner and developer beads.
9. If there is contamination, repeat steps 1 through to 9.
10. If contamination persists, install a new developer module, PL 90.15 Item 2.

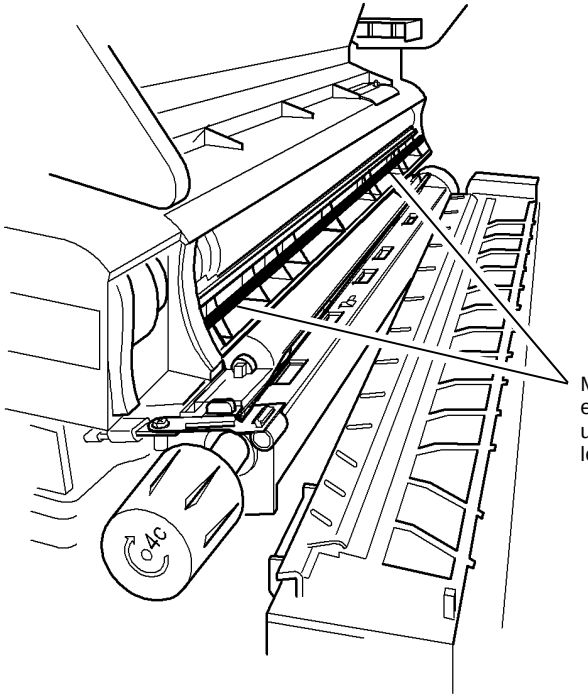


Figure 1 Magnetic seal brush

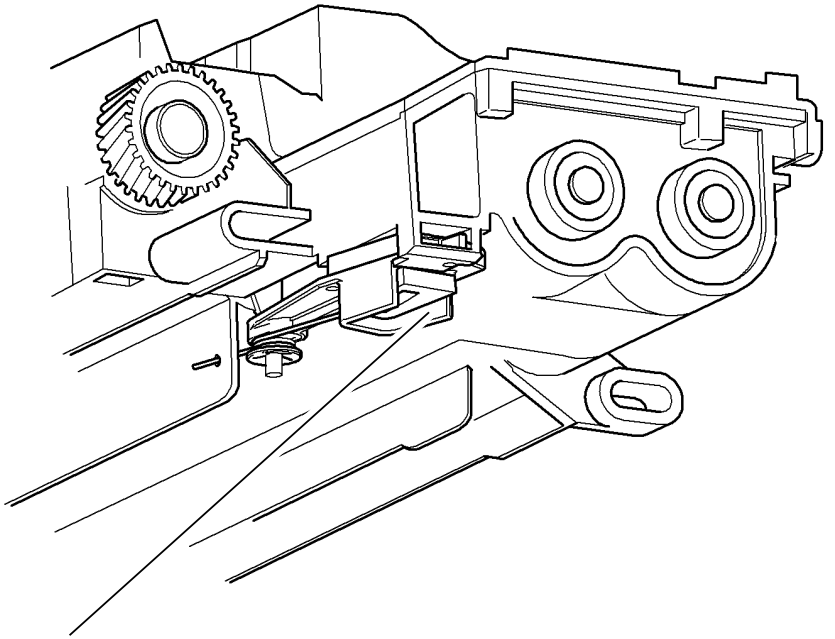


Figure 2 Shutter assembly seal

Magnetic Seal Loading

1. Use a brush to remove the residual magnetic seal brush.
2. Use the curved edge of the magnetic seal repair tool, PL 26.10 Item 23, to remove developer from the rear of the magnetic roll, Figure 3. The correct quantity of toner that should be removed from the magnetic roll is shown in Figure 4.

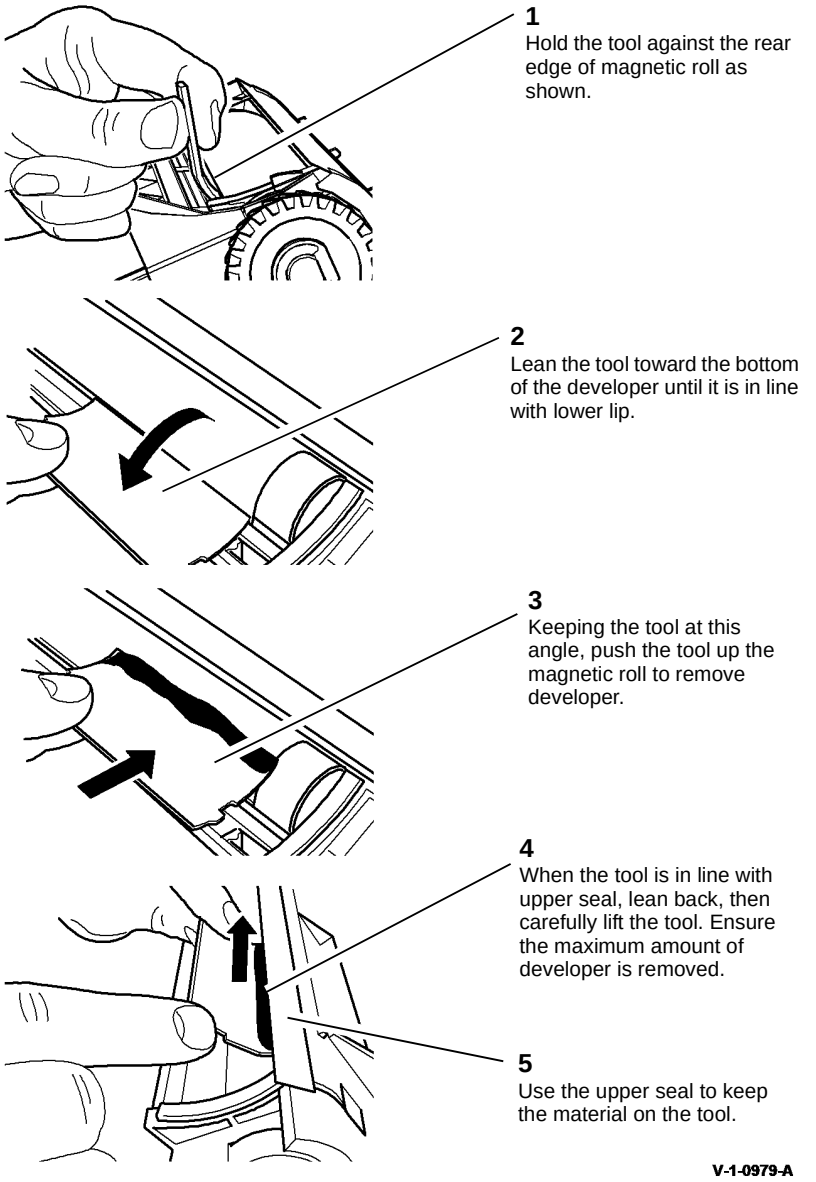


Figure 3 Developer removal

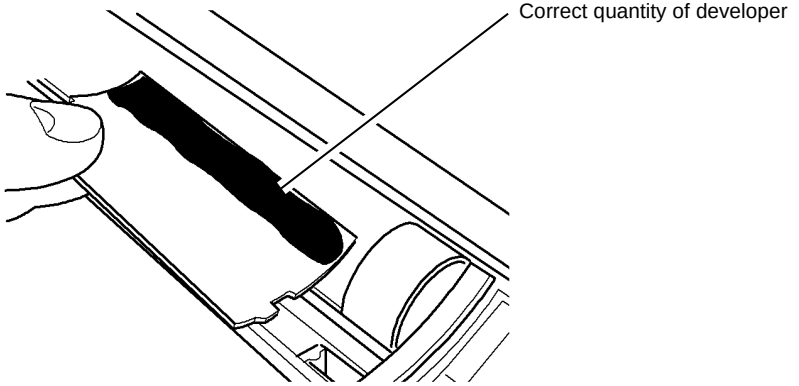


Figure 4 Developer quantity

3. Apply the developer evenly to the magnetic strip to form the seal. Gently shake the tool as developer is applied to aid distribution, Figure 5.

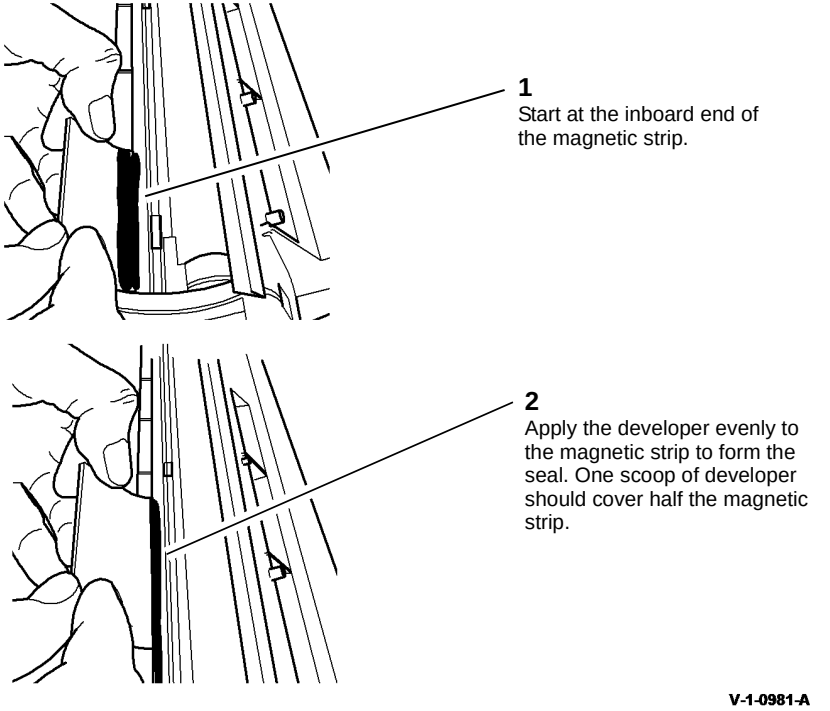


Figure 5 Applying developer

CAUTION

Ensure the developer is evenly distributed across the magnetic seal. Too much developer will cause beads on prints, too little will not form a good seal.

4. Use a flat edge of the tool to distribute the developer across the width of the magnetic strip, Figure 6.

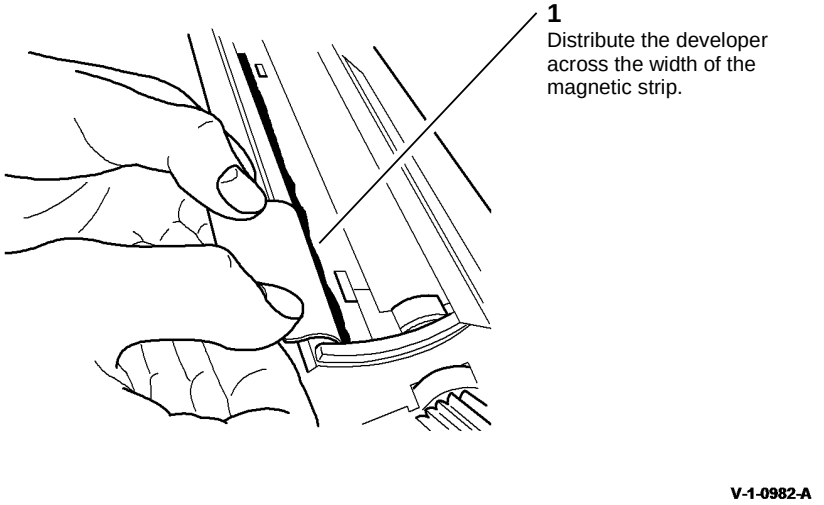


Figure 6 Distributing developer

5. Repeat steps 2 to 4 for the front of the magnetic roll.

   NOTE: *Two scoops of developer is the optimum amount to form a good seal. Do not use more than three scoops.*

6. An example of a good magnetic seal is shown in Figure 7.

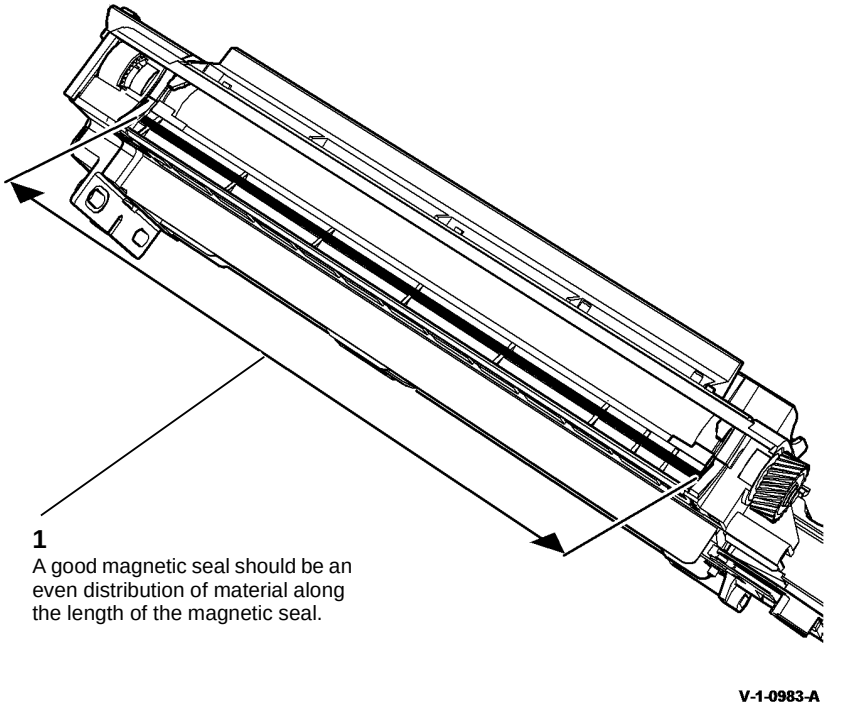


Figure 7 A good magnetic seal

ADJ 90.4 Xerographics Cleaning

Purpose

To clean the xerographics area.

Adjustment

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the erase lamp assembly, PL 90.20 Item 1. Use a dry micro fiber wiper, PL 26.10 Item 13, to clean the erase lamp assembly. Ensure the electrical contacts at the rear of the erase lamp assembly and on the chassis are clean before re-installing the assembly.
2. Clean the detack/transfer corotron assembly, ADJ 90.1 Corotron Cleaning. Ensure the electrical contacts at the rear of the transfer/detack corotron assembly and on the chassis are clean before re-installing the assembly.
3. Check that the transfer/detack corotron end block covers are properly seated and securely clipped onto the corotron end blocks. Check that the halo guide is properly seated and firmly attached to the transfer/detack corotron.
4. Clean the charge scorotron. Perform the following:
   a. Enter Customer Administration Tools, GP 24.
   b. Press the Machine Status key.
   c. Select the Tools tab.
   d. Select Troubleshooting.
   e. Select the Xerographic Module Cleaning routine. Perform the routine two times.

   NOTE: *The routine completes four cleaning cycles of the charge scorotron. If the charge scorotron cleaner fails to work, go to the 394-341-00, 394-342-00 Scorotron Cleaning Failure RAP.*
5. Clean the waste toner bottle area, refer to the OF11 Waste Toner Contamination RAP.
6. Check and clean the following areas for toner and developer bead contamination, Figure 1.
   - The developer roll area, above the roll and in the recesses below the roll.
   - Developer beads hanging from the developer roll and the lower lip.
   - The halo guide, registration guide and the registration cover.
   - The duplex paper path.
7. Perform ADJ 90.3 Developer Magnetic Seal Brush Adjustment.
8. Refer to the checkouts in the IQ3 Xerographic RAP.

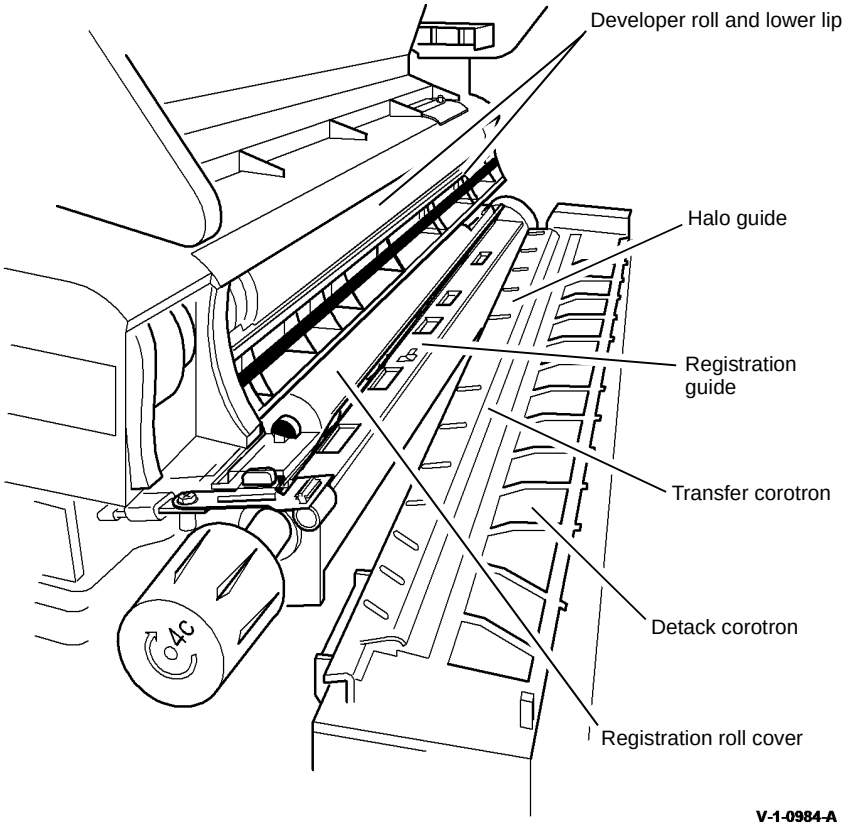


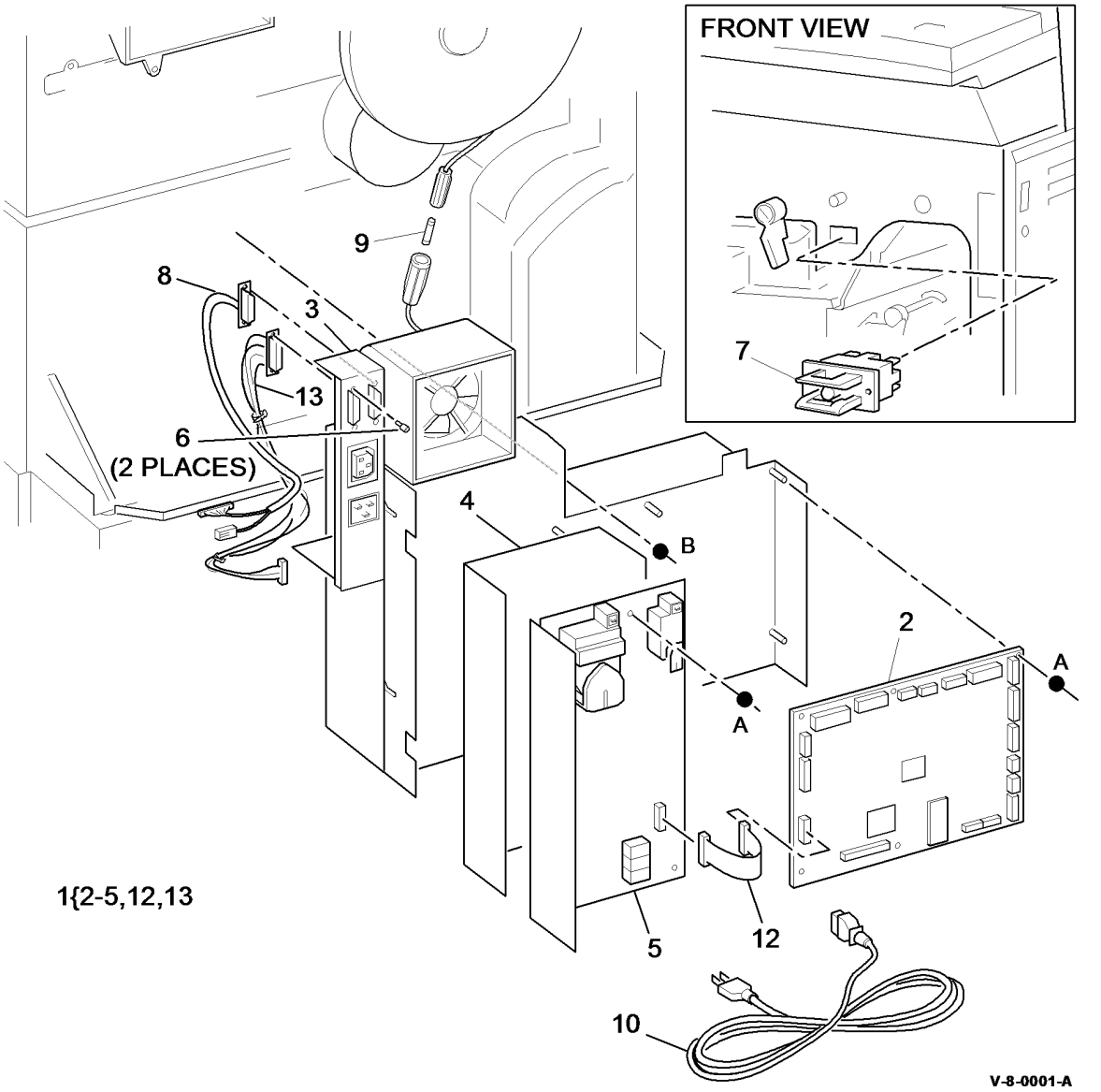
Figure 1 Component location

5 Parts Lists

PL 1.10 Power and Control Assembly

Item	Part	Description
1	–	Power and control assembly (USSG/XCL) (Not Spared) (REP 1.1)
–	–	Power and control assembly (XE) (Not Spared) (REP 1.1)
2	960K73365	IOT PWB (REP 3.1)
3	–	LVPS and base module (see below for variants) (REP 1.9)
–	105K35817	45-55 ppm (W/O TAG 013)
–	105K36402	65-90 ppm (USSG/XCL) (W/O TAG 013)
–	105K36412	65-90 ppm (XE) (W/O TAG 013)
–	105K37780	65-90 ppm (XE) (W/TAG 013)
–	105K37790	65-90 ppm (USSG/XCL) (W/TAG 013)
4	–	Shield (Not Spared)
5	105K29554	HVPS (REP 1.10)
6	–	Locking screw (Not Spared)
7	110K14020	Front door interlock switch (S01-300) (NOTE) (REP 1.8)
8	962K63630	IOT internal tray 6 harness
9	108E06730	In-line fuse (2.5A slow blow)
10	–	Main power cord (REF: PL 1.15 Item 1)
11	–	Not used
12	962K27020	IOT - HVPS harness
13	962K49460	IOT - Finisher harness

NOTE: *For the left door interlock (S01-305), refer to PL 70.30 Item 3*



PL 1.15 Main Power Cables

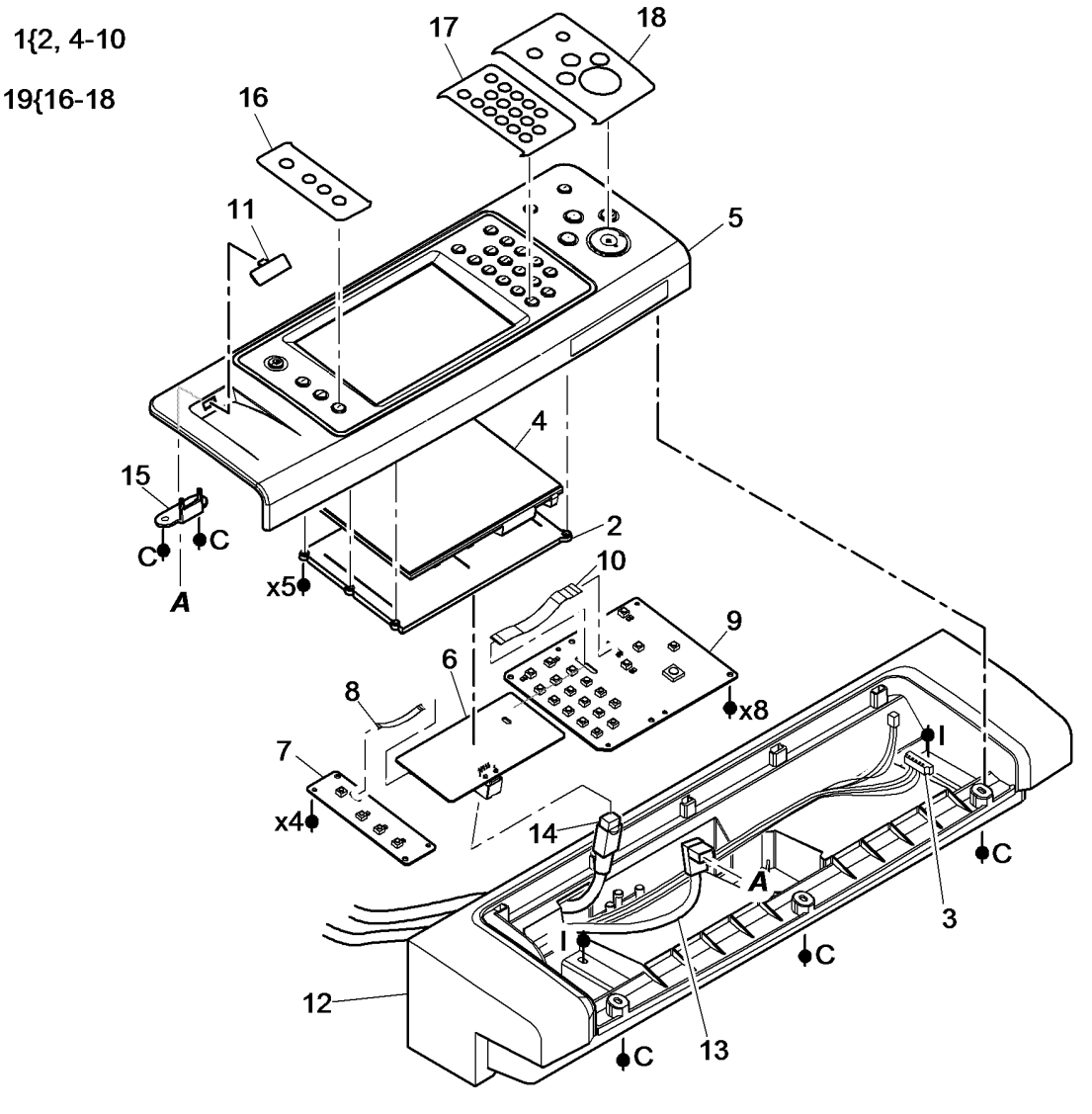
Item	Part	Description
1	–	Main power cord (see below for variants)
–	152S06400	USSG/XCL (45-55 ppm)
–	152S06401	USSG/XCL (65-90 ppm)
–	152S06410	XE (45-55 ppm)
–	152S06413	XE (Alternate) (45-55 ppm)
–	152S06406	XE (65-90 ppm)
–	152S06414	United Kingdom (45-55ppm)
–	152S06407	United Kingdom (65-90 ppm)
–	152S06415	Denmark (45-55 ppm)
–	152S06404	Denmark (65-90 ppm)
–	152S06416	Switzerland (45-55 ppm)
–	152S06420	Switzerland (65-90 ppm)
–	152S06402	Argentina (45-55 ppm)
–	152S06403	Argentina (65-90 ppm)
–	152S06405	South Africa (65-90 ppm)
2	–	20A power cord (P/O PL 31.12 Item 17)

NO EXPLODED VIEW PROVIDED

V-8-0002-A

PL 2.10 User Interface

Item	Part	Description
1	–	User interface assembly (Not Spared) (45-55 ppm) (REP 2.1)
–	–	User interface assembly (Not Spared) (65-90 ppm) (REP 2.1)
2	848E91201	UI screen clamp
3	–	UI power/comms harness (REF: PL 3.22 Item 24)
4	123K08651	UI touch screen (REP 2.2)
5	848K72132	User interface housing (USSG/ XCL)
–	848K72122	User interface housing (XE)
6	960K72633	UI Control PWB (REP 2.3)
7	960K72651	UI Status PWB
8	952K26981	Control to status PWB ribbon cable
9	960K72641	UI Keyboard PWB
10	952K26990	Control to keyboard PWB ribbon cable
11	948K14350	USB socket cover
12	822E41240	UI Surround (45-55 ppm)
–	822E41250	UI Surround (65-90 ppm)
13	–	SBC PWB/ UI USB port harness (REF: PL 3.22 Item 22)
14	–	SBC PWB/ UI Control PWB video harness (REF: PL 3.22 Item 23)
15	–	Clamp (Not Spared)
16	–	Left overlay label (P/O PL 2.10 Item 19)
17	–	Middle overlay label (P/O PL 2.10 Item 19)
18	–	Right overlay label (P/O PL 2.10 Item 19)
19	650K33680	French/Canadian overlay kit

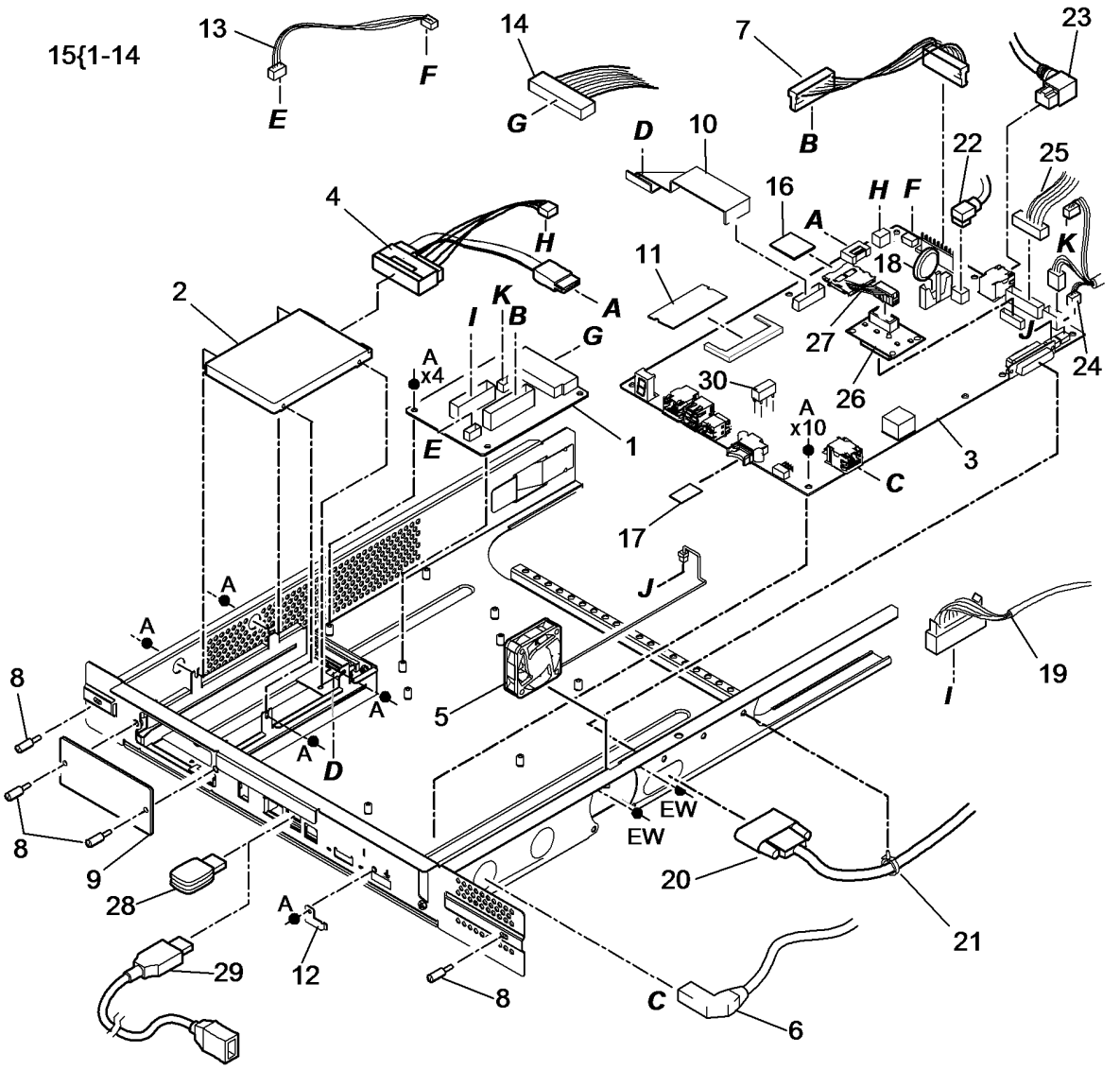


PL 3.22 Single Board Controller PWB Module

Item	Part	Description
1	960K73320	Power distribution PWB
2	121E28130	Hard disk drive (SATA) (REP 3.2)
3	–	SBC PWB (P/O PL 31.14 Item 6) (W/TAG 003) (REP 3.3)
4	952K27601	HDD cable
5	127K56210	Cooling fan assembly
6	–	ROS data cable (Not Spared)
7	952K26710	SBC PWB power harness
8	–	Thumb screw (Not Spared)
9	–	Blanking plate (Not Spared)
10	952K27590	Fax communication ribbon cable
11	960K79561	Memory module
12	–	Service connector cover (Not Spared)
13	952K27570	SBC/PDB harness
14	952K27580	LVPS/PDB PWB harness
15	–	SBC PWB module (Not Spared)
16	237E26845	SD card (REP 3.4)
17	–	SIM card (Non Page pack enabled) (P/O PL 31.14 Item 1) (NOTE 1)
–	–	SIM card (Page pack enabled) (XE-only) (P/O PL 31.14 Item 2) (NOTE 2)
18	105K37480	Battery
19	–	Power distribution PWB/Scanner PWB comms/power harness (Not Spared)
20	952K31921	SBC PWB/ Scanner PWB data cable
21	–	Cable tie (Not Spared)
22	952K27620	SBC PWB/ UI USB port harness
23	952K27611	SBC PWB/ UI Control PWB video harness
24	–	UI power/comms harness (Not Spared)
25	–	SBC PWB /IOT PWB harness
26	960K27451	Foreign interface device PWB
27	962K82620	Foreign interface device harness
28	–	Wireless network adapter (P/O PL 31.13 Item 1)
29	–	Extension cable (P/O PL 31.13 Item 1)
30	–	SBC PWB Jumper (P/O PL 31.14 Item 5) (W/TAG 003)

NOTE: *1. To obtain a Non Page pack enabled SIM card it will be neccesary to order the relevant initialisation kit, PL 31.14 Item 1.*

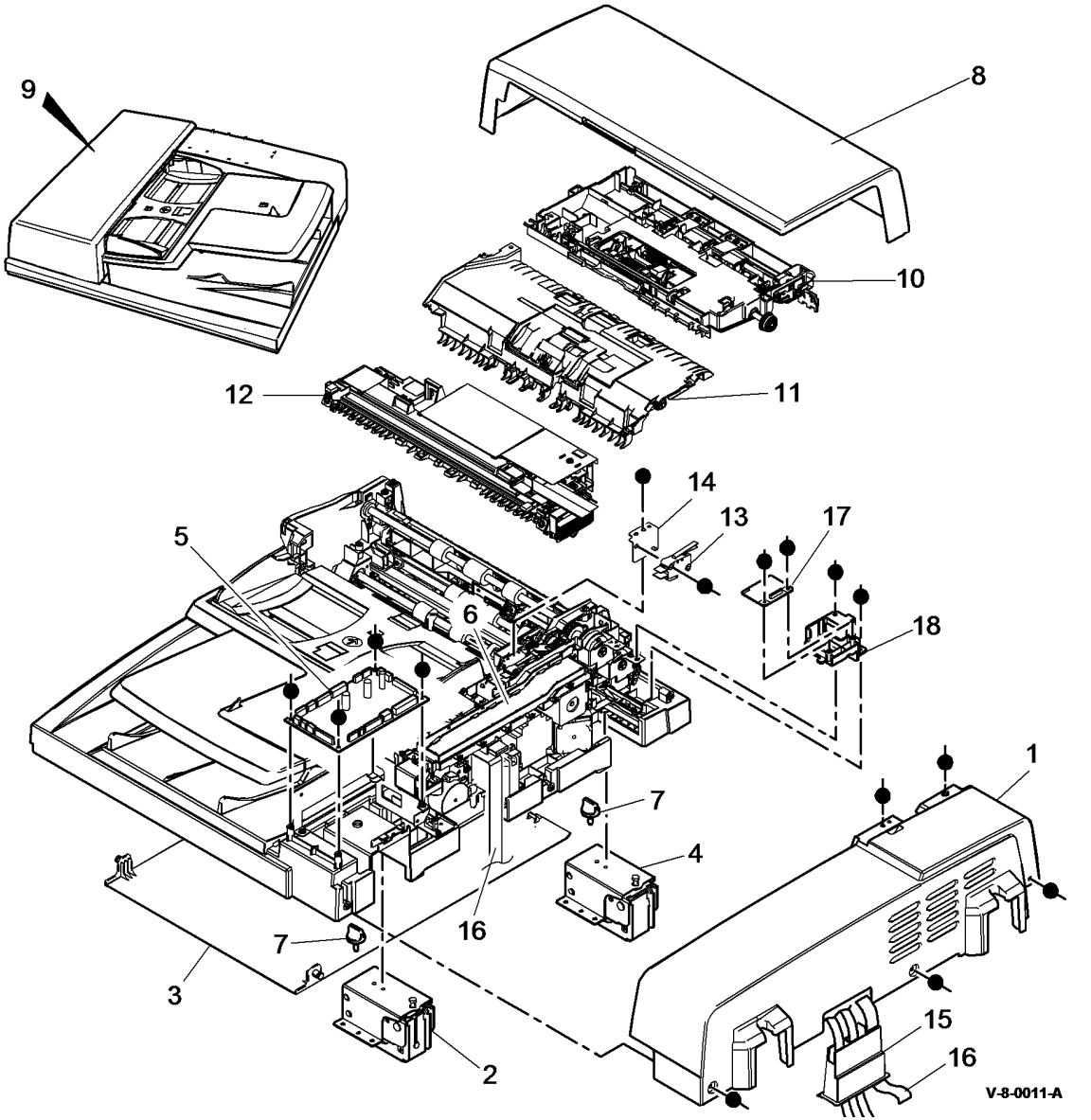
NOTE: *2. To obtain a Page pack enabled (XE) SIM card, it will be neccessary to order the relevant SIM kit, PL 31.14 Item 2.*



PL 5.10 SPDH (Complete), Covers, SPDH PWB

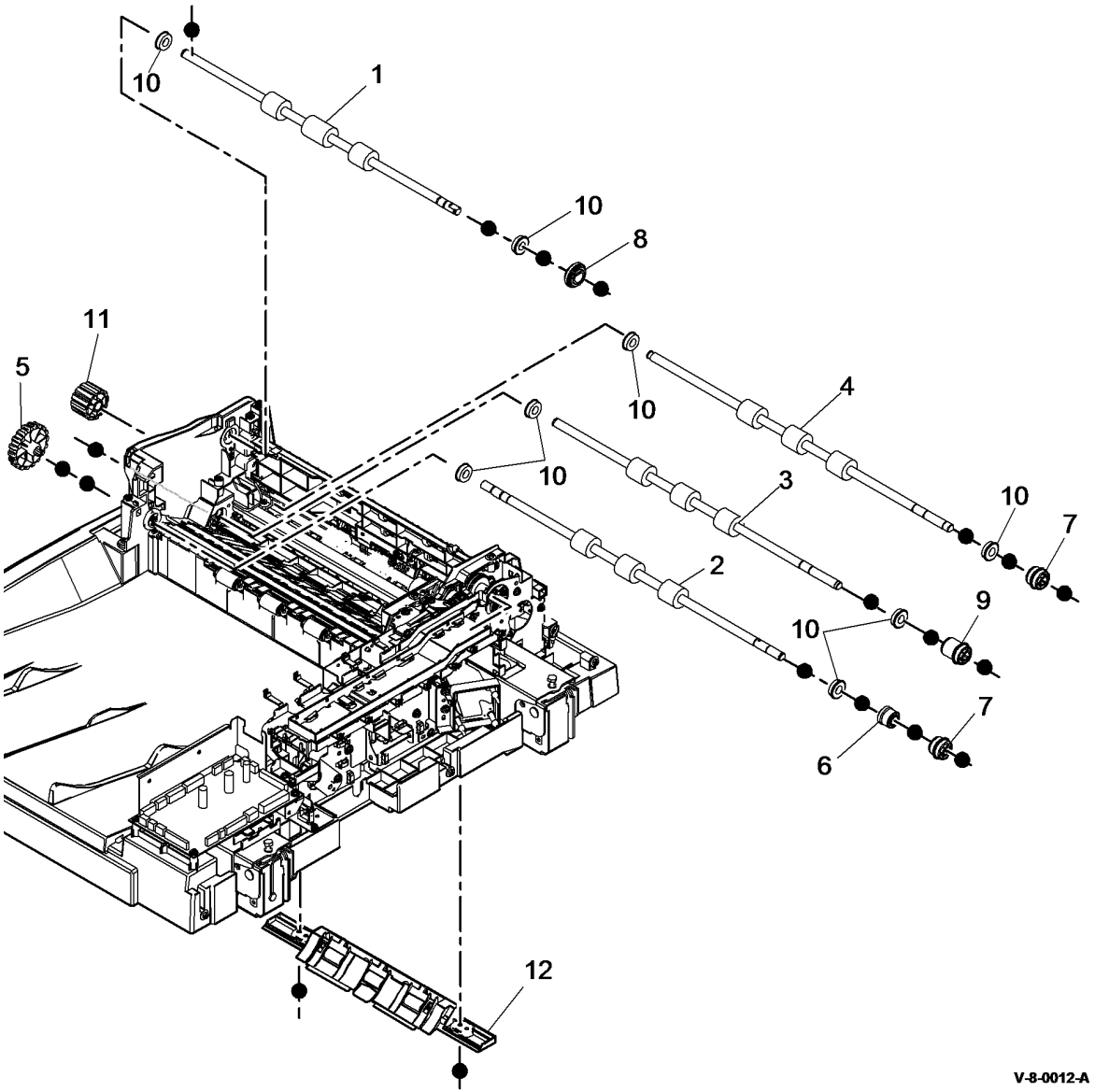
Item	Part	Description
1	848K83770	Rear cover
2	–	Right counterbalance (Not Spared) (ADJ 5.2, ADJ 5.3)
3	090K02600	Document pad (REP 5.23)
4	–	Left counterbalance (Not Spared) (ADJ 5.2, ADJ 5.3)
5	960K72570	SPDH PWB
6	117E43830	Side 2 scan assembly power ribbon cable (REP 5.22)
7	826E66710	Thumbscrew
8	–	Top cover (REF: PL 5.20)
9	084K42695	SPDH (complete) (REP 5.19)
10	–	Feed assembly (REF: PL 5.20) (ADJ 5.3)
11	–	Seperation assembly (REF: PL 5.25)
12	–	Side 2 scan assembly (REF: PL 60.30)
13	110E21490	Top cover interlock switch (S05-305)
14	–	Mounting bracket (P/O PL 5.10 Item 13)
15	–	Harness guide (REF: PL 60.15)
16	117E43800	Side 2 scan assembly data ribbon cable (REP 5.22)
17	960K79450	Side 2 LED drive PWB
18	–	Side 2 LED drive PWB support (P/O PL 5.10 Item 9)

NOTE: *To clean the SPDH, refer to ADJ 5.4.*



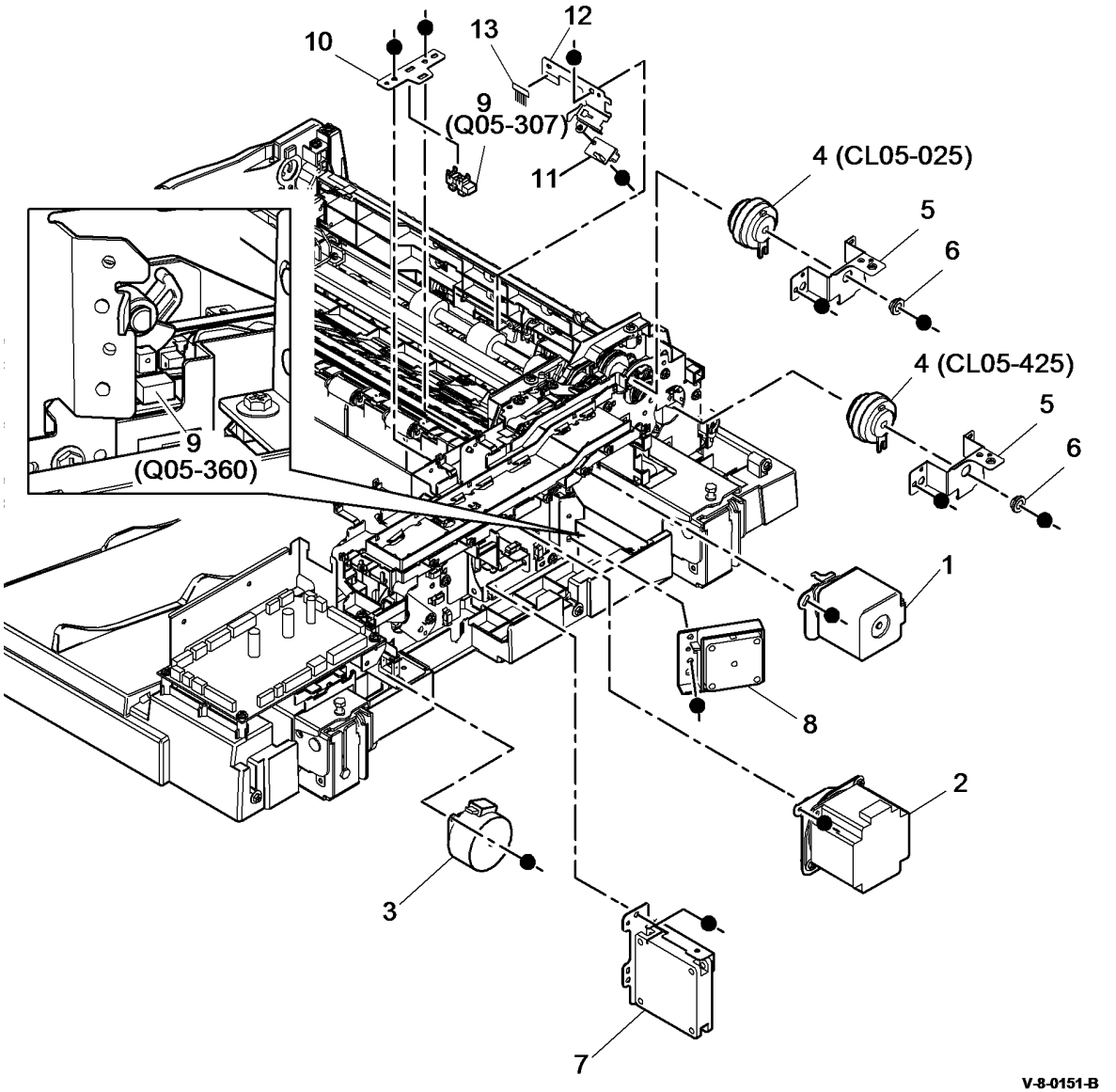
PL 5.17 SPDH Transport Assembly

Item	Part	Description
1	059K84040	Takeaway roll assembly (REP 5.5)
2	059K84070	Exit roll assembly (REP 5.7)
3	059K84050	Mid scan roll assembly (REP 5.18)
4	059K84060	Pre scan roll assembly (REP 5.17)
5	–	Exit jam clearance knob (P/O PL 5.19 Item 24) (REP 5.7)
6	–	Idler gear (P/O PL 5.19 Item 24)
7	–	Drive gear (P/O PL 5.19 Item 24)
8	–	Gear (P/O PL 5.19 Item 24)
9	–	Pre scan pulley (P/O PL 5.19 Item 24)
10	–	Bearing (P/O PL 5.19 Item 24)
11	–	Pre scan jam clearance knob (P/O PL 5.19 Item 24)
12	059K84880	Lower pre scan roller assembly (REP 5.6)



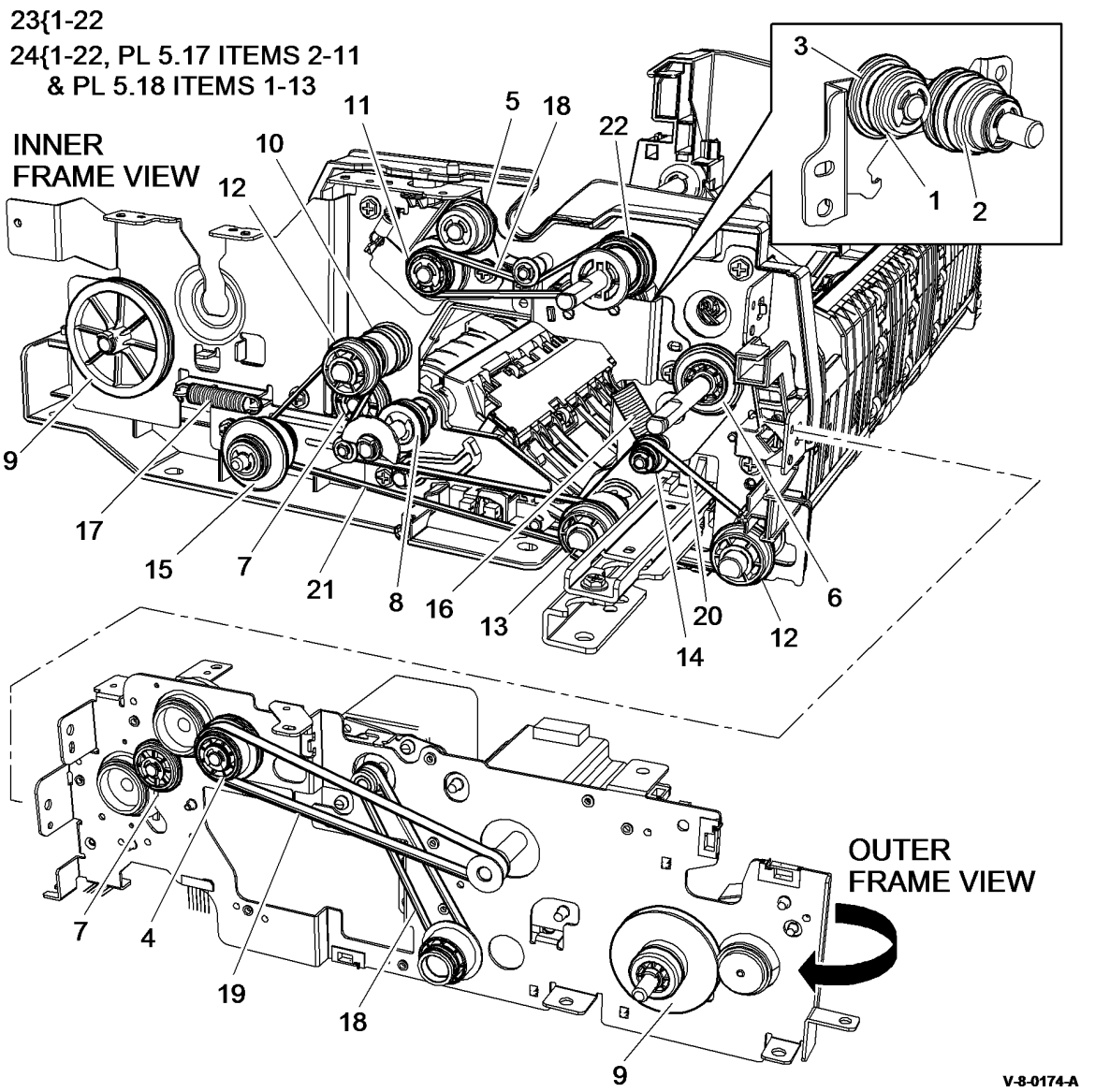
PL 5.18 SPDH Drive Assembly

Item	Part	Description
1	127K69270	Read motor (MOT05-030) (REP 5.13)
2	127K69260	Feed motor (MOT05-020) (REP 5.12)
3	127K69250	Tray elevator motor (MOT05-390) (REP 5.24)
4	005E35810	Feed clutch (CL05-025)(REP 5.14)/ Takeaway clutch (CL05-425)(REP 5.15)
5	–	Bracket (Not Spared)
6	–	Bearing (Not Spared)
7	127E17510	Motor cooling fan (MOT05-380) (REP 5.20)
8	127E17520	LED cooling fan (MOT05-370) (REP 5.21)
9	130E19040	Lift home position sensor (Q05-307)(REP 5.4)/Calibration home position sensor (Q05-360)(REP 5.11)
10	–	Sensor bracket (Not Spared)
11	130E19090	Reg sensor (Q05-340) (REP 5.10)
12	–	Mounting bracket (Not Spared)
13	–	Static eliminator (Not Spared)



PL 5.19 SPDH Read Assembly

Item	Part	Description
1	–	Retard roll intermediate drive gear (P/O PL 5.19 Item 23)
2	–	Retard roll driven gear (P/O PL 5.19 Item 23)
3	–	Retard roll drive gear (P/O PL 5.19 Item 23)
4	–	Feed clutch drive gear/pulley (P/O PL 5.19 Item 23)
5	–	Feed assembly drive idler gear (P/O PL 5.19 Item 23)
6	–	Takeaway roll drive gear (P/O PL 5.19 Item 23)
7	–	Calibration shutter idler gear/TAR clutch drive gear (P/O PL 5.19 Item 23)
8	–	Calibration shutter driven gear (P/O PL 5.19 Item 23)
9	–	Tray elevator reduction gear (P/O PL 5.19 Item 23)
10	–	Calibration shutter drive gear (P/O PL 5.19 Item 23)
11	–	Feed assembly drive gear /pulley (P/O PL 5.19 Item 23)
12	–	Exit roll /pre-scan roll drive pulley (P/O PL 5.19 Item 23)
13	–	Mid scan roll drive pulley (P/O PL 5.19 Item 23)
14	–	Pre scan belt idler pulley (P/O PL 5.19 Item 23)
15	–	Read motor intermediate pulley (P/O PL 5.19 Item 23)
16	–	Read motor belt tension spring (P/O PL 5.19 Item 23)
17	–	Mid scan drive belt tension spring (P/O PL 5.19 Item 23)
18	–	Read motor belt / feed assembly drive belt (P/O PL 5.19 Item 23)
19	–	Feed motor belt (P/O PL 5.19 Item 23)
20	–	Pre-scan roll drive belt (P/O PL 5.19 Item 23)
21	–	Mid scan drive belt (P/O PL 5.19 Item 23)
22	–	Retard/ feed drive gear/pulley (P/O PL 5.19 Item 23)
23	007K20561	SPDH drive kit (REP 5.25)
24	059K84860	Read assembly (REP 5.23)



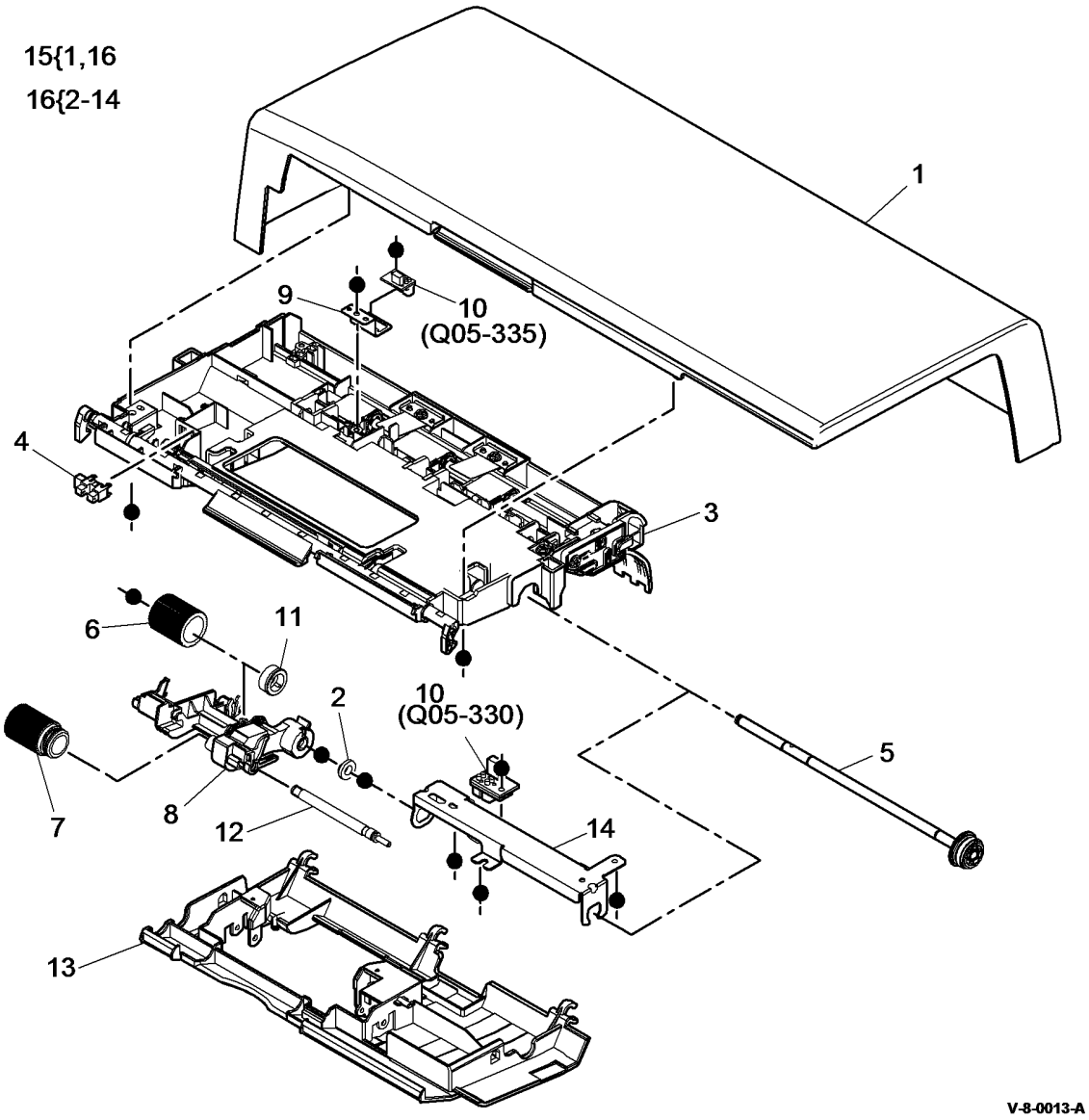
PL 5.20 SPDH Top Cover Assembly

Item	Part	Description
1	–	Top cover (P/O PL 5.20 Item 15) (REP 5.1)
2	–	Bushing (P/O PL 5.20 Item 15)
3	–	Feed assembly frame (P/O PL 5.20 Item 15) (REP 5.2)
4	130E19040	Stack height sensor (Q05-310) (REP 5.8)
5	–	Shaft (P/O PL 5.20 Item 15)
6	–	Feed roll (P/O PL 31.11 Item 16) (See NOTE 2, NOTE 3) (REP 5.2)
7	–	Nudger roll (P/O PL 31.11 Item 16) (See NOTE 2, NOTE 3) (REP 5.2)
8	–	Roll housing (P/O PL 5.20 Item 15)
9	–	TAR sensor bracket (P/O PL 5.20 Item 15) (REP 5.8)
10	130E19090	Feed sensor (Q05-330)/ Takeaway sensor(Q05-335) (REP 5.8)
11	–	Spacer (P/O PL 5.20 Item 15)
12	–	Shaft (P/O PL 5.20 Item 15)
13	–	Lower cover (P/O PL 5.20 Item 15)
14	–	Mounting bracket (P/O PL 5.20 Item 15)
15	059K84850	Top cover assembly (REP 5.1)
16	–	Feed assembly (P/O PL 5.20 Item 15)

NOTE: *1.For the top cover interlock switch, refer to PL 5.10 Item 13.*

NOTE: *2.HFSI. To reset the HFSI count, refer to dC135.*

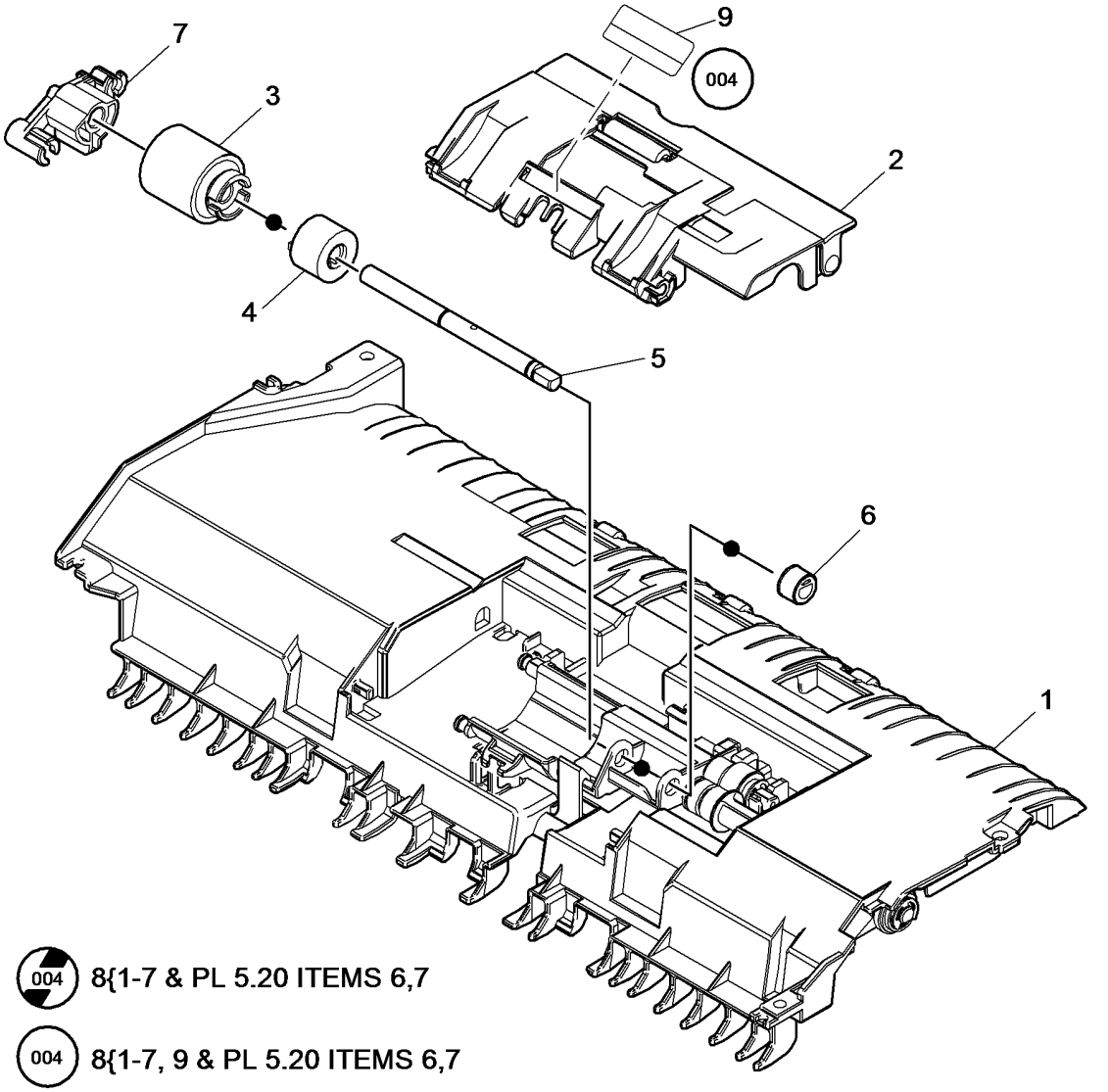
NOTE: *3. Also supplied with PL 5.25 Item 3.*



PL 5.25 SPDH Separation Assembly

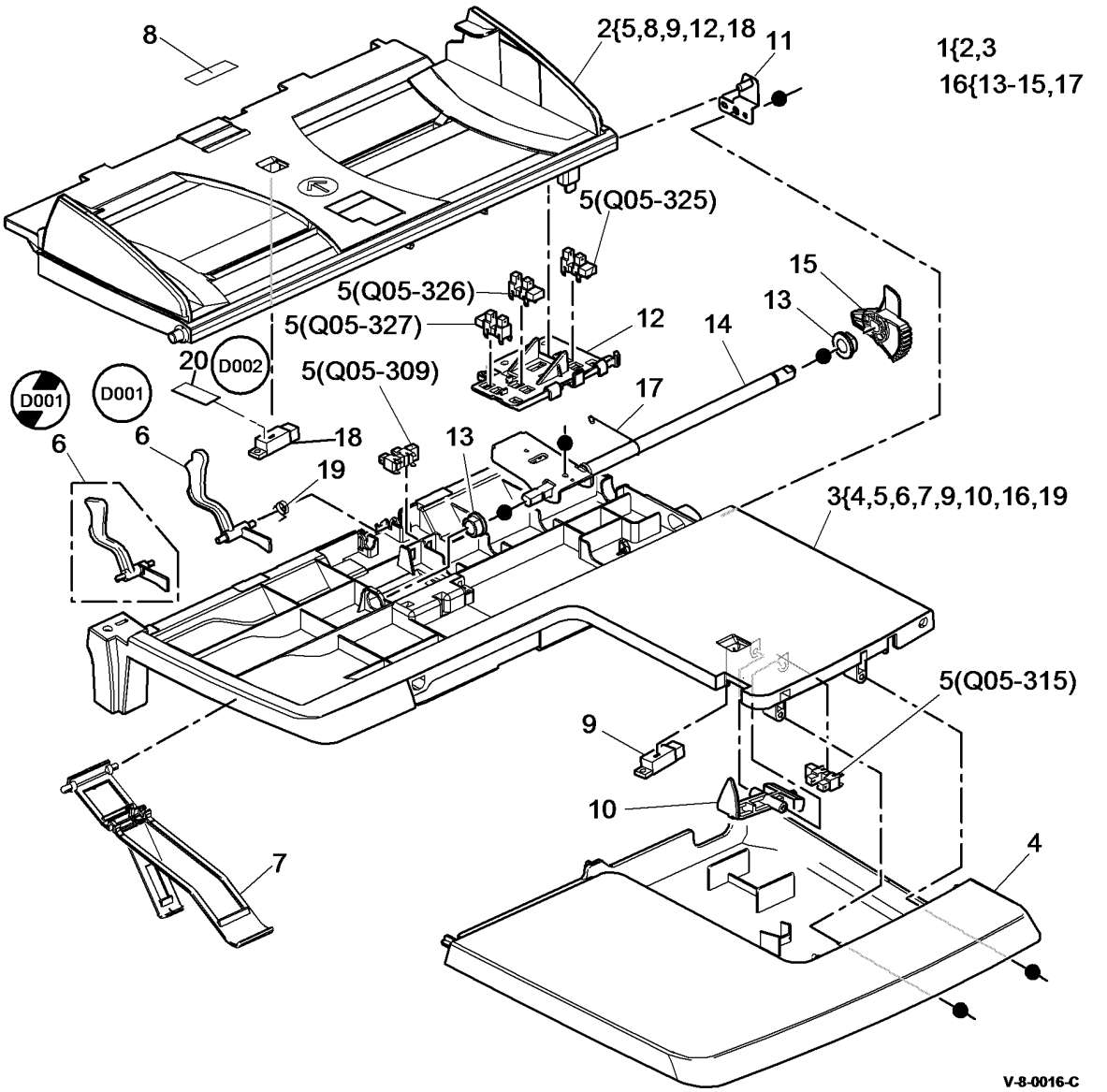
Item	Part	Description
1	–	Separation frame (P/O PL 5.25 Item 8)
2	–	Retard roll cover (P/O PL 5.25 Item 8)
3	–	Retard roll (P/O PL 31.11 Item 16) (See NOTE) (REP 5.3)
4	–	Coupling (P/O PL 5.25 Item 8)
5	–	Shaft (P/O PL 5.25 Item 8)
6	–	Cap (P/O PL 5.25 Item 8)
7	–	Retard roll retainer (P/O PL 5.25 Item 8) (REP 5.3)
8	–	Separation assembly (Not Spared) (W/O TAG D-004) (REP 5.3)
–	–	Separation assembly (P/O PL 31.14 Item 15) (W/TAG D-004)
9	–	Mylar guide (P/O PL 31.14 Item 14) (W/TAG D-004)

NOTE: *HFSI. To reset the HFSI count, refer to dC135.*



PL 5.30 Input Tray Assembly

Item	Part	Description
1	–	Input tray assembly (complete) (REP 5.4)
2	050K74650	Tray upper assembly (W/O TAG D-002 & TAG D-003) (REP 5.4)
–	–	Tray upper assembly (P/O PL 31.14 Item 12) (W/TAG D-002 & TAG D-003)
3	–	Tray lower assembly (Not Spared) (W/O TAG D-002 & TAG D-003)
–	607K03220	Tray lower assembly (W/TAG D-001 & TAG D-003) (REP 5.4)
4	–	Tray lower cover (P/O PL 5.30 Item 3)
5	130E19040	Length sensor 1 (Q05-315)(REP 5.9)/Doc present sensor (Q05-309)(REP 5.16)/Width sensor 1 (Q05-325)(REP 5.16)/Width sensor 2(Q05-326)(REP 5.16)/Width sensor 3(Q05-327)(REP 5.16)
6	–	Doc present sensor actuator (P/O PL 5.30 Item 3) (W/O TAG D-001)
–	–	Doc present sensor actuator (P/O PL 31.14 Item 8) (W/TAG D-001) (REP 5.16)
7	–	Restack arm (P/O PL 5.30 Item 1)
8	059K84030	Retard pad
9	–	Length sensor 2 (Q05-320)(P/O PL 31.14 Item 11) (REP 5.9)
10	–	Length sensor 1 actuator (P/O PL 5.30 Item 3)
11	–	Tray upper hinge (Not Spared) (REP 5.4)
12	–	Sensor mounting plate (P/O PL 5.30 Item 2)
13	–	Bearing (P/O PL 5.30 Item 16)
14	–	Shaft assembly (P/O PL 5.30 Item 16) (REP 5.4)
15	–	Cam (P/O PL 5.30 Item 16)
16	–	Lift shaft assembly (P/O PL 5.30 Item 3)
17	–	Ground spring (P/O PL 5.30 Item 16)
18	130E19330	Last sheet out sensor (Q05-308) (W/O TAG D-002) (REP 5.16)
–	–	Last sheet out sensor (Q05-308) (P/O PL 31.14 Item 11) (W/TAG D-002)
19	–	Actuator spring (P/O PL 31.14 Item 8) (REP 5.16)
20	–	Filter (P/O PL 31.14 Item 9) (W/ TAG D-002)

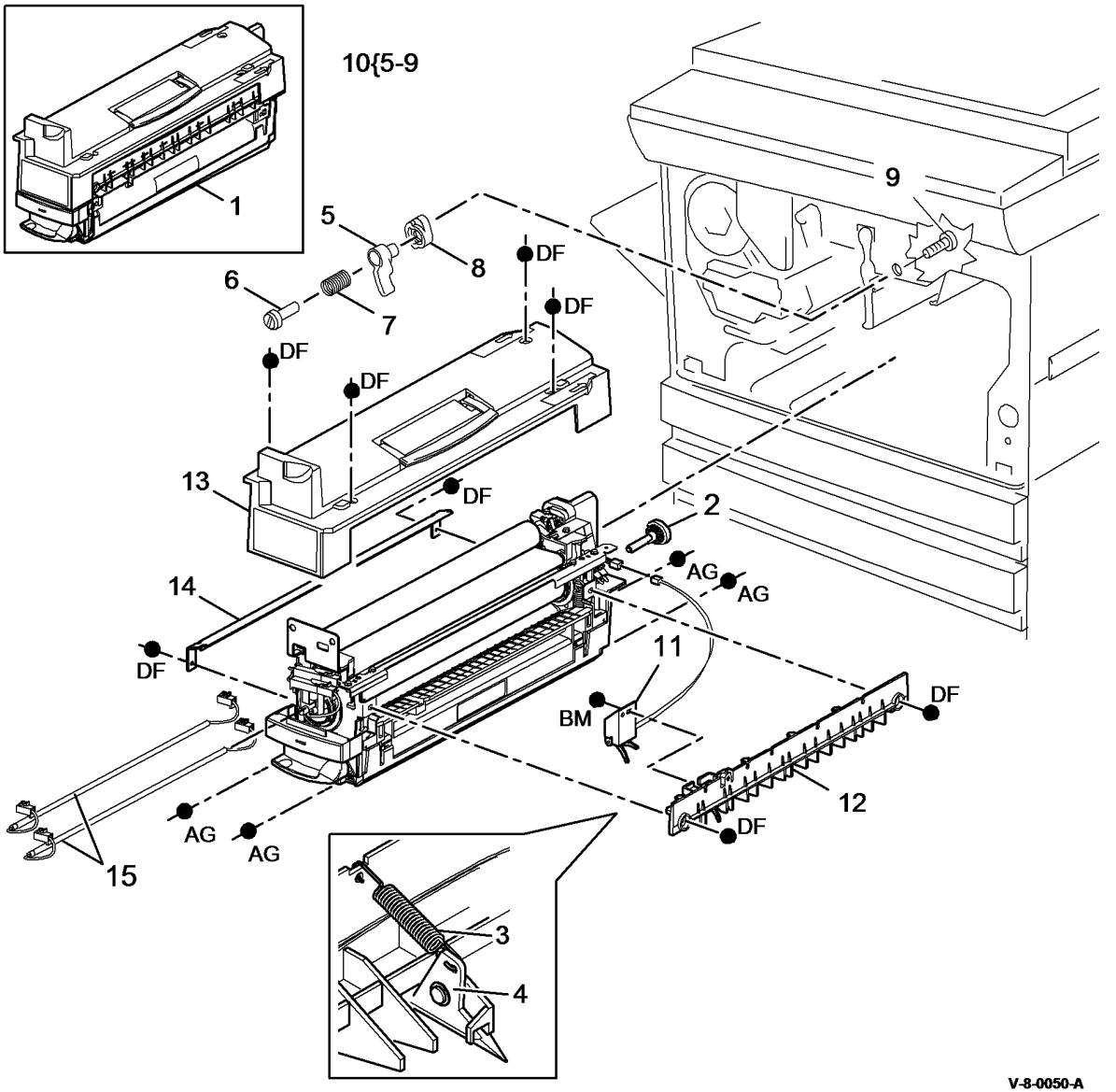


PL 10.8 Fuser Module (45-55 ppm)

Item	Part	Description
1	109R00751	Fuser module (XE) (NOTE 1)
–	109R00752	Fuser module (USSG/XCL) (NOTE 1)
2	–	Web drive dog (Not Spared)
3	–	Spring (P/O PL 10.8 Item 1)
4	–	Fuser stripper finger kit (REF: PL 31.13 Item 19)
5	–	Fuser latch (P/O PL 10.8 Item 10) (REP 10.10)
6	–	Fuser latch pin (P/O PL 10.8 Item 10)
7	–	Spring (P/O PL 10.8 Item 10)
8	–	Latch stop (P/O PL 10.8 Item 10)
9	–	Screw (P/O PL 10.10 Item 10)
10	–	Fuser latch pin kit (REF: PL 31.13 Item 2) (REP 10.10)
11	110E20190	Fuser exit switch (S10-100) (REP 10.16)
12	–	Fuser upper exit guide (P/O PL 10.8 Item 1)
13	–	Fuser top cover (P/O PL 10.8 Item 1)
14	–	Lower input guide (Not Spared)
15	–	Lamp (P/O PL 10.8 Item 1)

NOTE: *1. An ozone filter, PL 90.25 Item 3, is supplied with the fuser module.*

NOTE: *2. For the fuser web motor, fuser connector assembly and fuser CRUM connector, refer to PL 40.15.*

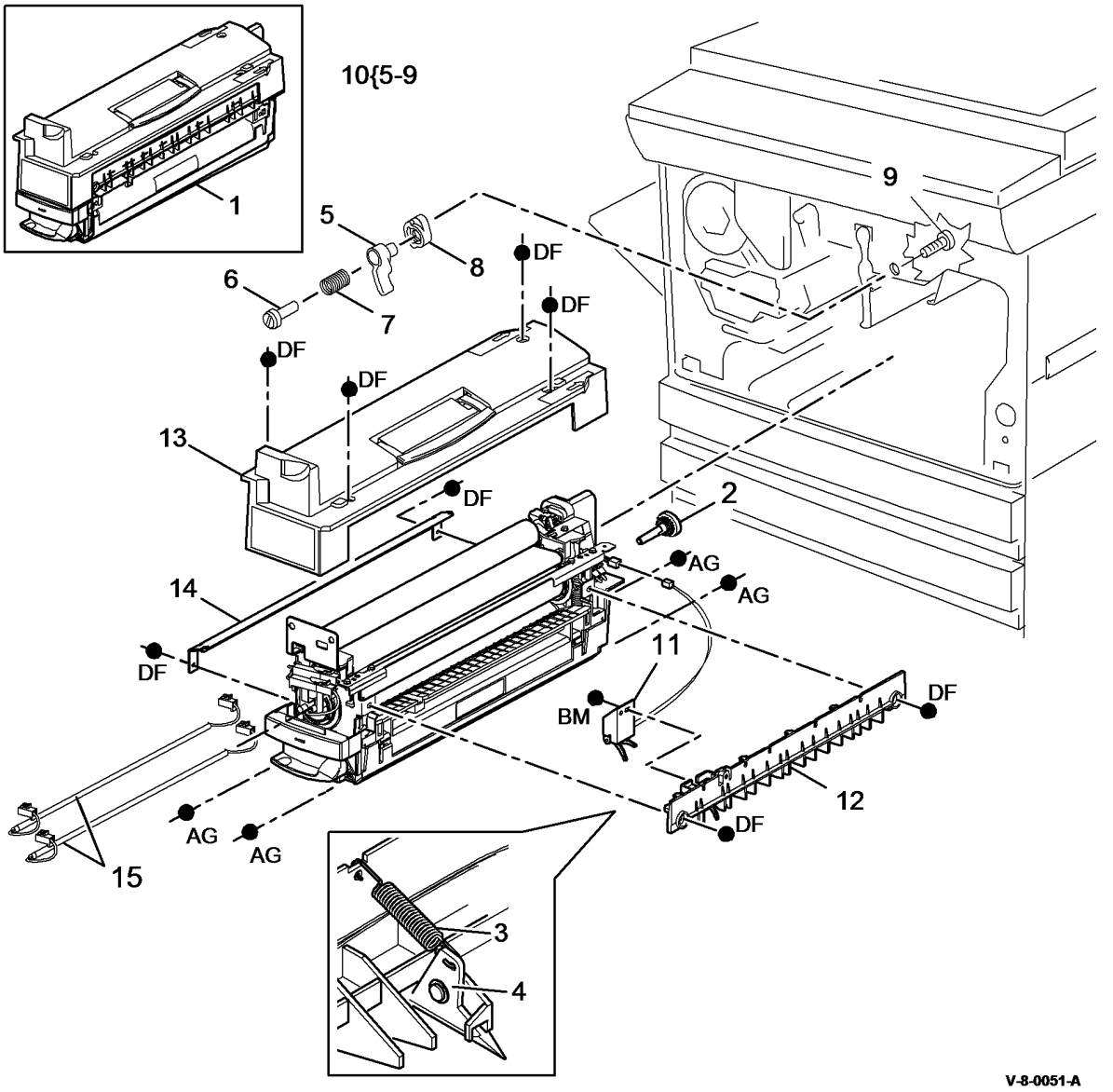


PL 10.10 Fuser Module (65-90 ppm)

Item	Part	Description
1	109R00772	Fuser module (XE) (NOTE 1)
–	109R00773	Fuser module (USSG/XCL) (NOTE 1)
2	–	Web drive dog (Not Spared)
3	–	Spring (P/O PL 10.10 Item 1)
4	–	Fuser stripper finger kit (REF: PL 31.13 Item 19)
5	–	Fuser latch (P/O PL 10.10 Item 10) (REP 10.10)
6	–	Fuser latch pin (P/O PL 10.10 Item 10)
7	–	Spring (P/O PL 10.10 Item 10)
8	–	Latch stop (P/O PL 10.10 Item 10)
9	–	Screw (P/O PL 10.10 Item 10)
10	–	Fuser latch pin kit (REF: PL 31.13 Item 2) (REP 10.10)
11	110K20910	Fuser exit switch (S10-100) (REP 10.16)
12	–	Fuser upper exit guide (P/O PL 10.10 Item 1)
13	–	Fuser top cover (P/O PL 10.10 Item 1)
14	–	Lower input guide (Not Spared)
15	–	Lamp (P/O PL 10.10 Item 1)

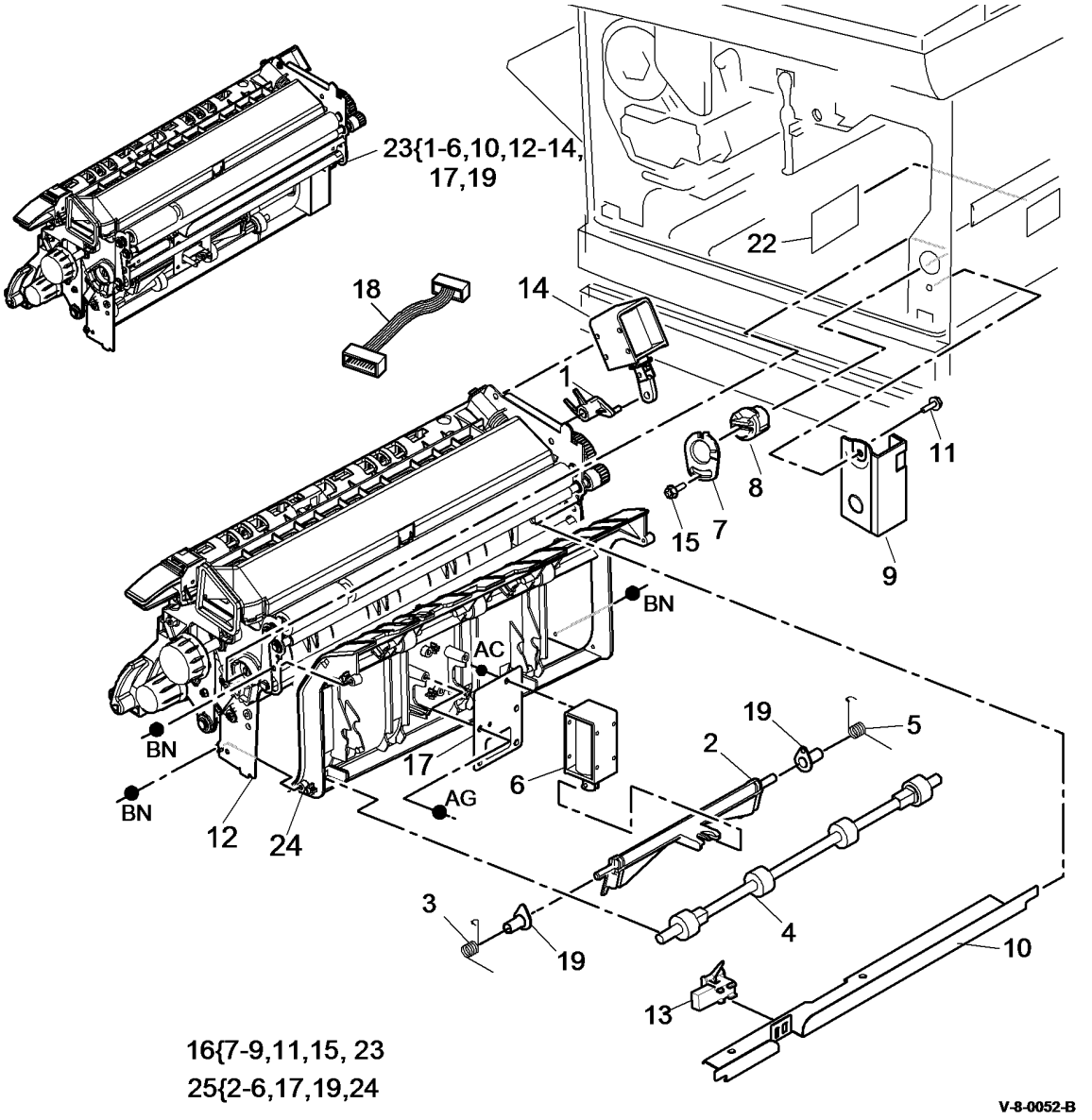
NOTE: *1. An ozone filter, PL 90.25 Item 3 is supplied with the fuser module.*

NOTE: *2. For the fuser web motor, fuser connector assembly and fuser CRUM connector, refer to PL 40.10.*



PL 10.11 Inverter Decurler Assembly (1 of 4)

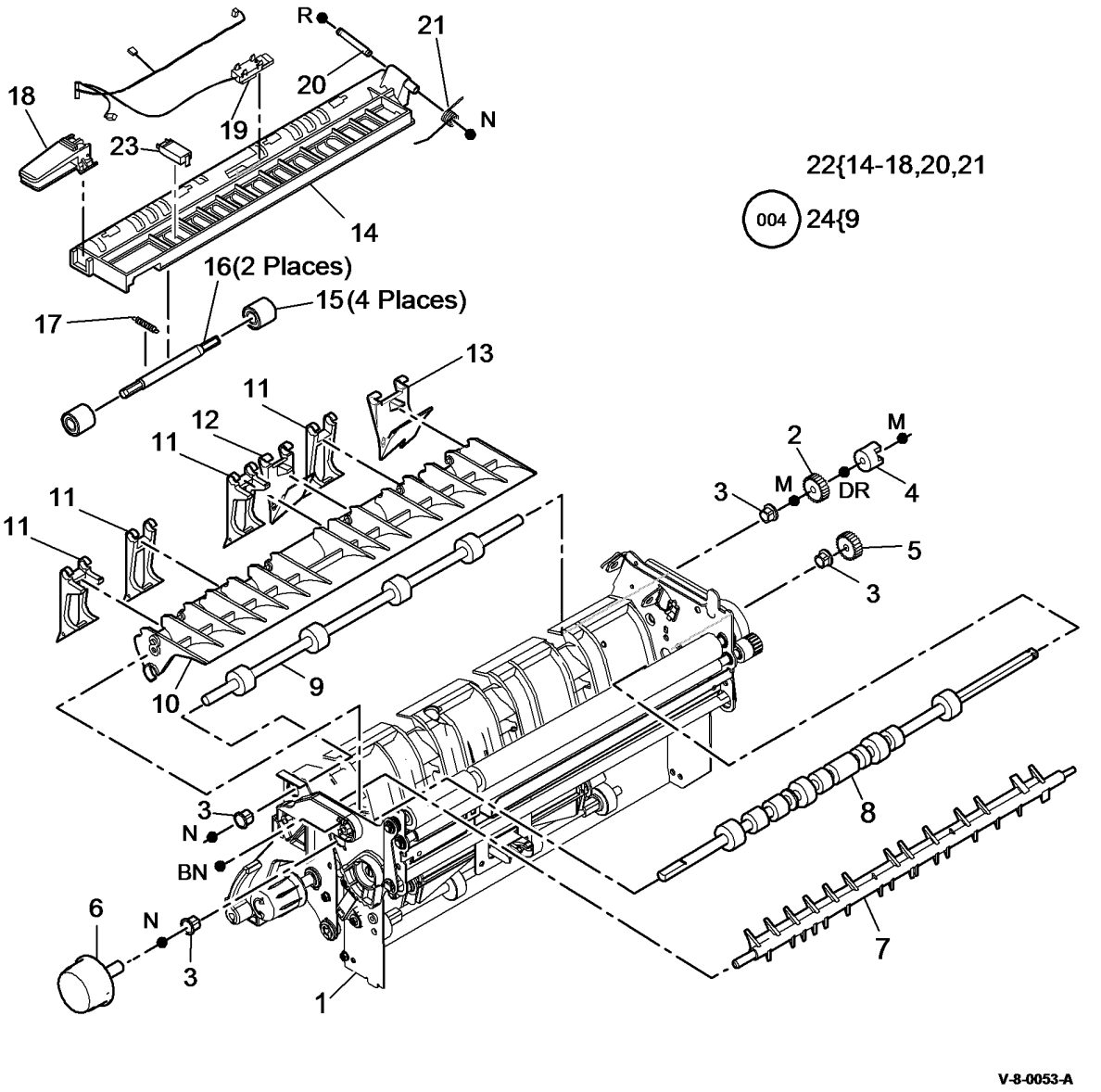
Item	Part	Description
1	011E25300	Link arm
2	–	Shaft actuator (P/O PL 10.11 Item 25) (REP 10.9)
3	–	LH Spring (P/O PL 10.11 Item 25)
4	006K30320	Nip split shaft assembly (REP 10.8)
5	–	RH Spring (P/O PL 10.11 Item 25)
6	121K44381	Inverter nip solenoid (SOL10-050) (REP 10.5)
7	–	Retaining ring (P/O PL 10.11 Item 16)
8	–	Adjuster (P/O PL 10.11 Item 16)
9	–	Support bracket (P/O PL 10.11 Item 16)
10	–	IOT exit sensor mounting bracket (P/O PL 10.11 Item 23)
11	–	Screw (M4x8) (P/O PL 10.11 Item 16)
12	–	Inverter output assembly (P/O PL 10.11 Item 23)
13	130E12080	IOT Exit sensor (Q10-120) (REP 10.17)
14	121K44391	Inverter path solenoid (SOL10-045) (REP 10.4)
15	–	Shoulder screw (M4x12) (P/O PL 10.11 Item 16)
16	–	Inverter decurler kit (REF: PL 31.13 Item 3)
17	–	Inverter nip solenoid bracket (P/O PL 10.11 Item 25)
18	962K96240	Inverter jumper harness
19	–	Bearing (P/O PL 10.11 Item 25)
20	–	Not used
21	–	Not used
22	960K41881	Inverter motor driver PWB (45-55ppm)
–	960K32891	Inverter motor driver PWB (65-90 ppm)
23	–	Inverter decurler assembly (P/O PL 31.13 Item 3) (45-55 ppm) (REP 10.2)
–	–	Inverter decurler assembly (P/O PL 31.13 Item 3) (65-90 ppm) (REP 10.2)
24	–	Output guide (P/O PL 10.11 Item 25)
25	–	Output guide assembly (Not Spared)



PL 10.12 Inverter Decurler Assembly (2 of 4)

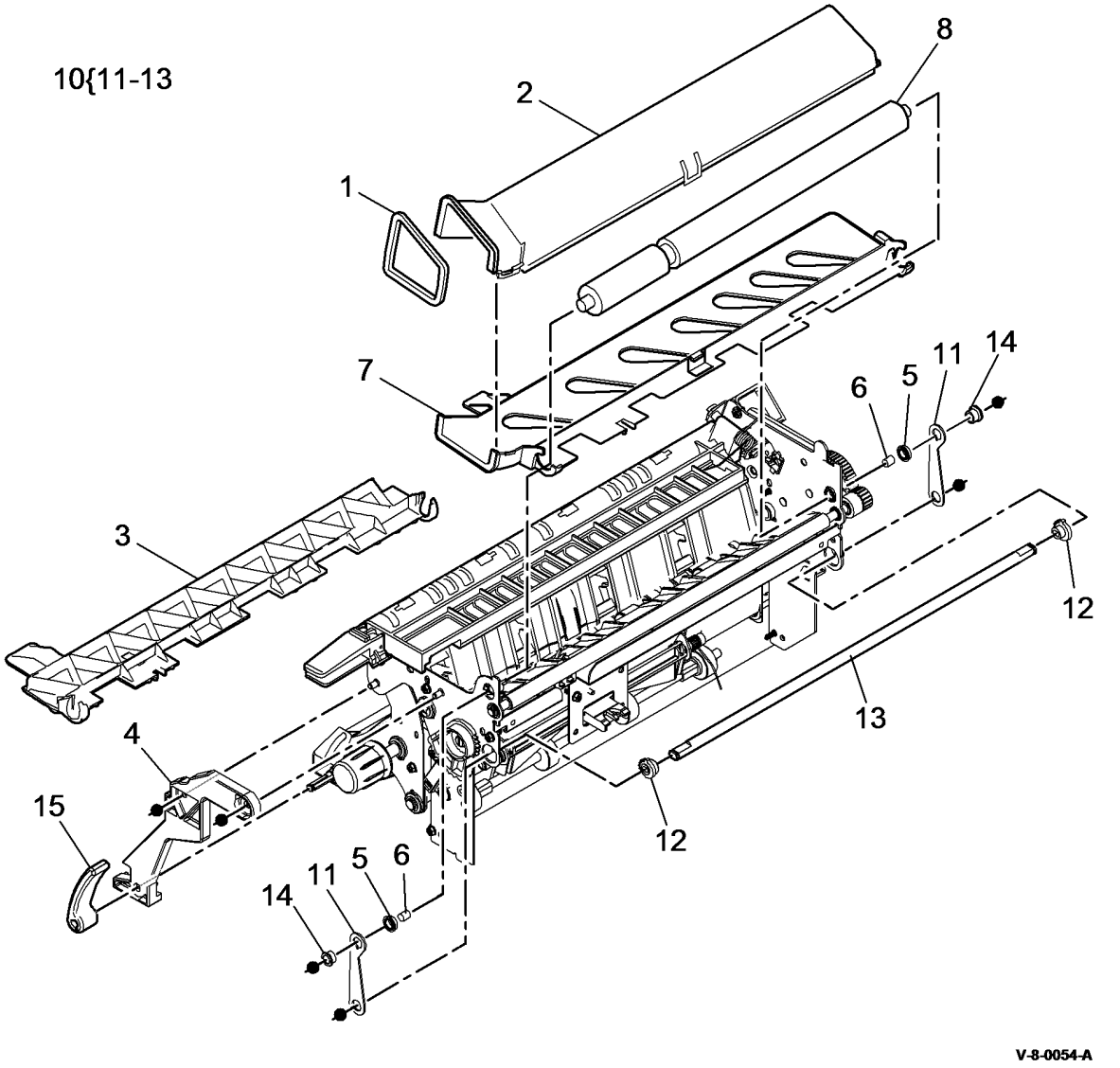
Item	Part	Description
1	–	Inverter output assembly (P/O PL 10.11 Item 23)
2	–	Post fuser gear (20T) (REF: PL 10.15 Item 7)
3	013E36980	Bearing
4	–	Dog drive assembly (REF: PL 10.15 Item 6) (REP 10.12)
5	–	Idler gear (20T) (REF: PL 10.15 Item 4)
6	–	Tri-roll knob (REF: PL 10.15 Item 12)
7	–	Inverter gate (Not Spared) (REP 10.11)
8	–	Tri-roll shaft (Not Spared) (REP 10.12)
9	006K29971	Post fuser exit roller (W/O TAG 004) (REP 10.12)
–	–	Post fuser exit roller (P/O PL 10.12 Item 24) (W/TAG 004)
10	–	Tri-roll guide (P/O PL 10.11 Item 23) (REP 10.12)
11	–	Front gravity finger (P/O PL 10.11 Item 23)
12	–	Gravity gate finger (P/O PL 10.11 Item 23)
13	–	Rear gravity gate finger (P/O PL 10.11 Item 23) (REP 10.12)
14	–	Upper baffle (P/O PL 10.12 Item 22)
15	–	Idler roll (P/O PL 10.12 Item 22)
16	–	Idler roll shaft (P/O PL 10.12 Item 22)
17	–	Spring (P/O PL 10.12 Item 22)
18	–	Post fuser jam clearance latch (REF: PL 10.15 Item 11)
19	–	Inverter sensor (Q10-105) (P/O item 22) (65-90 ppm) (NOTE) (REP 10.20)
20	–	Hinge pin (P/O PL 10.12 Item 22)
21	–	Torsion spring (P/O PL 10.12 Item 22)
22	038K17843	Upper baffle assembly (45-55 ppm) (REP 10.7)
–	038K23890	Upper baffle assembly (65-90 ppm)
23	123E02481	Upper LED (REP 10.18)
24	–	Inverter transparency feed kit (REF: PL 31.12 Item 2) (W/TAG 004)

NOTE: *The 45-55 ppm machines do not have the inverter sensor.*



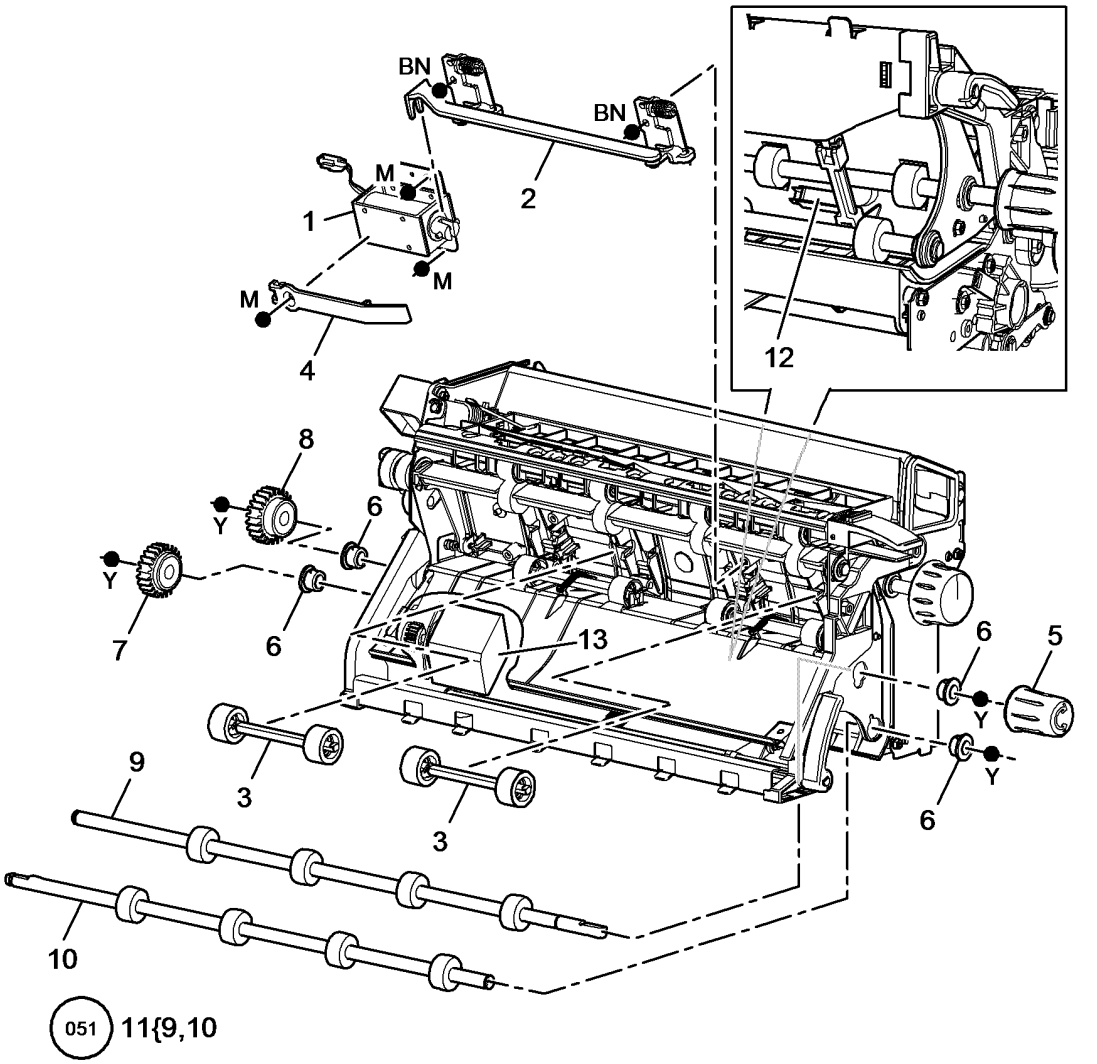
PL 10.13 Inverter Decurler Assembly (3 of 4)

Item	Part	Description
1	–	Inverter assembly duct seal (P/O PL 10.11 Item 23)
2	–	Inverter assembly duct (P/O PL 10.11 Item 23) (65-90 ppm)
3	–	Baffle guide (P/O PL 10.11 Item 23) (45-55 ppm)
4	–	Inverter bracket (Not Spared)
5	013E36980	Bearing
6	–	Spacer (Not Spared)
7	–	Baffle guide (65-90 ppm) (P/O PL 10.11 Item 23)
8	–	Decurler roll (P/O PL 31.13 Item 5)
9	–	Not used (REP 10.14)
10	–	Camshaft assembly (Not Spared) (REP 10.6)
11	–	Link arm (P/O PL 10.13 Item 10)
12	–	Toothed cam (P/O PL 10.13 Item 10)
13	–	Camshaft (P/O PL 10.13 Item 10)
14	–	Link arm bush (Not Spared)
15	–	Handle (Not Spared)



PL 10.14 Inverter Decurler Assembly (4 of 4)

Item	Part	Description
1	121K44381	Tri-roll nip split solenoid (SOL10-055) (65-90 ppm) (REP 10.19)
2	–	Actuator assembly (Not Spared)
3	–	Nip roller (Not Spared)
4	–	Solenoid ramp (Not Spared)
5	–	Jam clearance knob (2b) (REF: PL 10.15 Item 13)
6	–	Bearing (Not Spared)
7	–	Gear (24T) (REF: PL 10.15 Item 9)
8	–	Gear assembly (REF: PL 10.15 Item 8)
9	–	Upper inverter drive shaft (P/O PL 10.14 Item 11)
10	–	Lower inverter drive shaft (P/O PL 10.14 Item 11)
11	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)
12	123E02481	Lower LED (REP 10.18)
13	127K53210	Inverter motor (MOT10-030) (45-55 ppm) (REP 10.3)
–	127K53540	Inverter motor (MOT10-030) (65-90 ppm) (REP 10.3)



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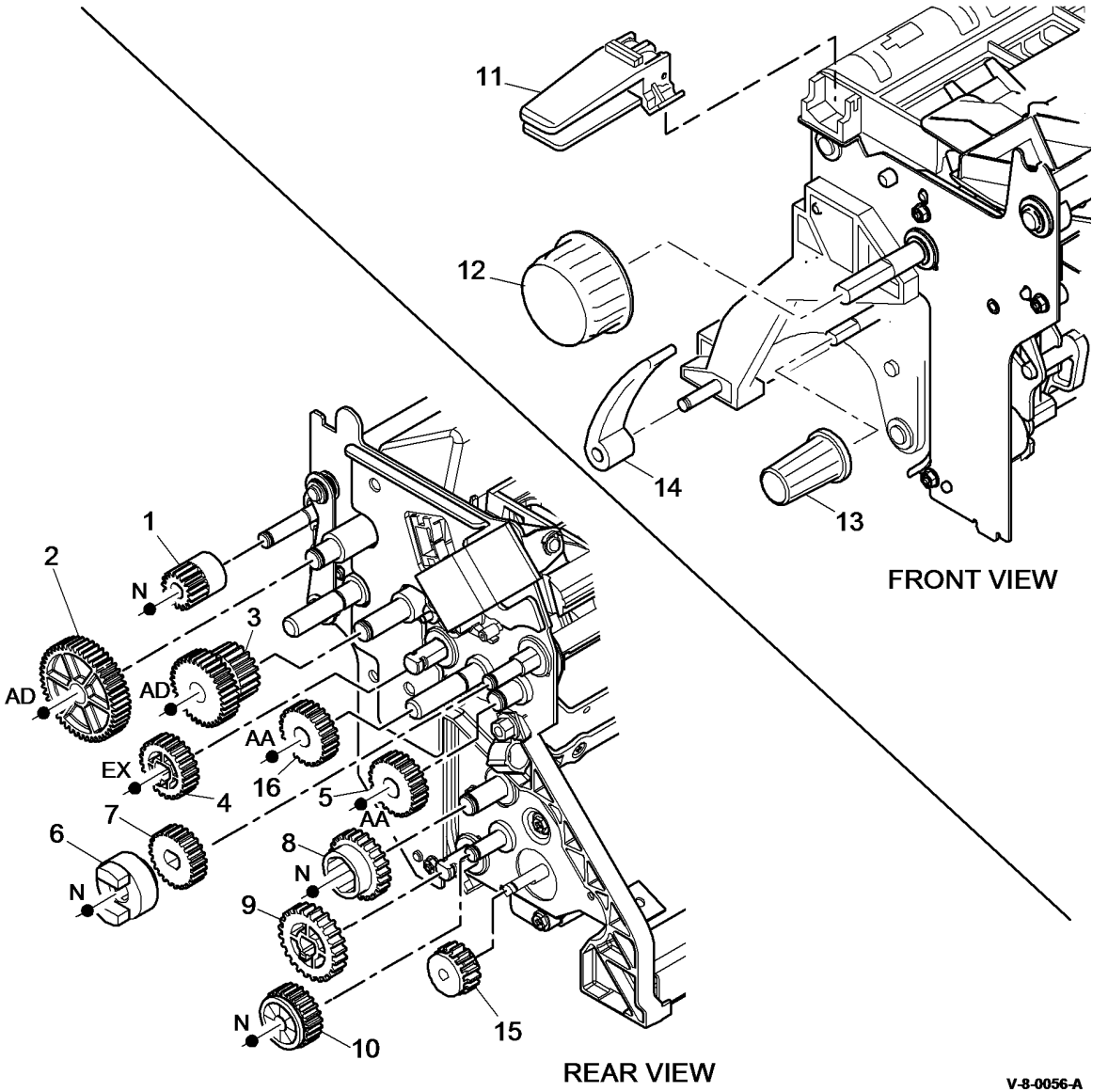
PL 10.15 Inverter Drive Gears and Jam Clearance Knobs

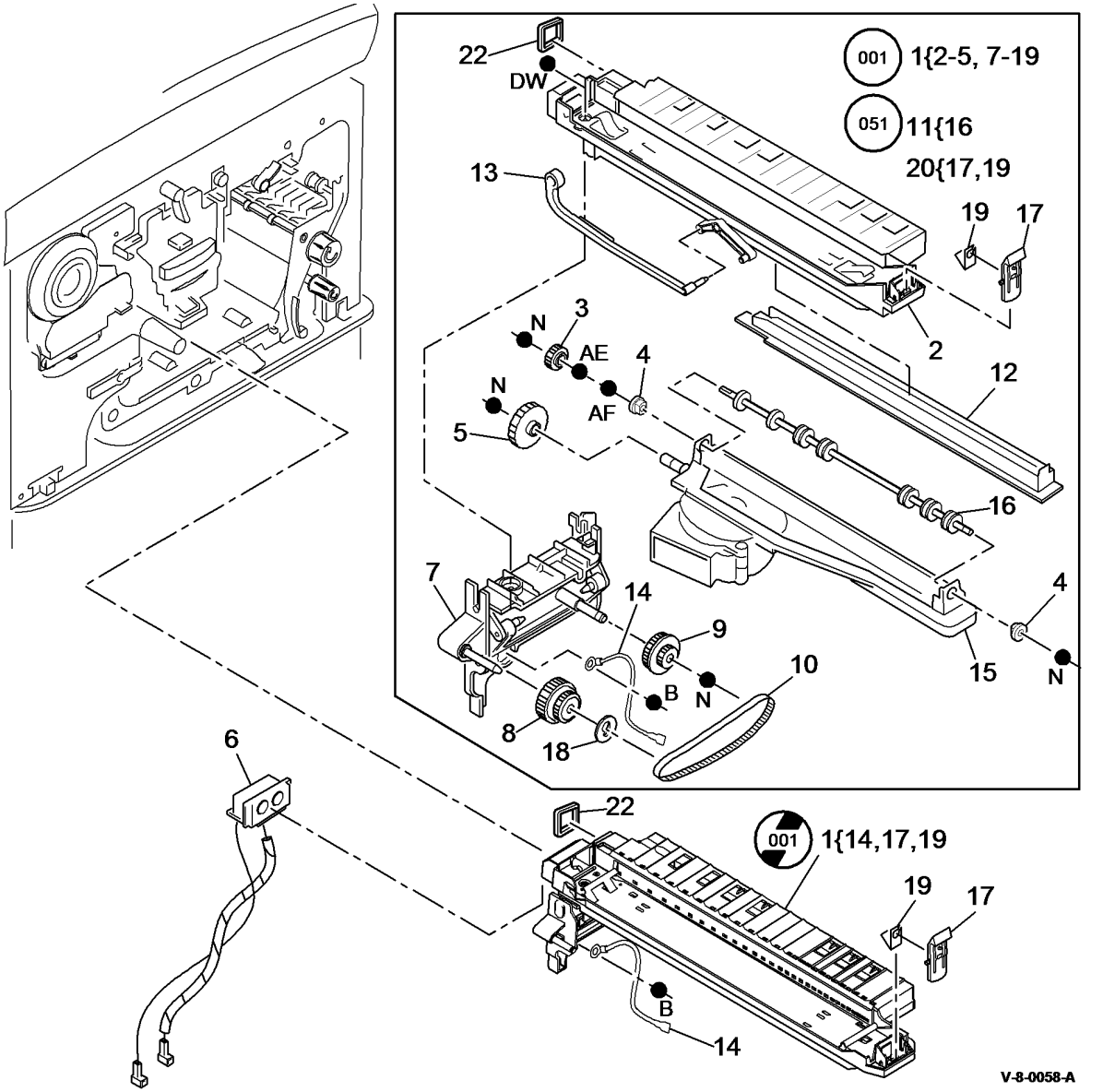
Item	Part	Description
1	–	Exit gear (17T) (Not Spared)
2	807E15800	Idler gear (47T)
3	–	Idler gear (33/19T) (Not Spared)
4	807E15790	Idler gear (20T)
5	807E15780	Idler gear (19T)
6	007K19670	Dog drive assembly
7	807E15770	Post fuser gear (20T)
8	807E15820	Gear assembly (24T)
9	807E15850	Gear (24T)
10	807E15840	Gear (21T)
11	003K20990	Post fuser jam clearance latch
12	003E77261	Tri-roll knob
13	003E77271	Jam clearance knob (2b)
14	003E77251	Latch cam handle
15	–	Inverter motor gear (45-55 ppm) (P/O PL 10.14 Item 13)
–	–	Inverter motor gear (65-90 ppm) (P/O PL 10.14 Item 13)
16	–	Idler (21T) (Not Spared)



PL 10.25 Short Paper Path Assembly

Item	Part	Description
1	–	Short paper path assembly (P/O PL 31.11 Item 9) (W/O TAG 001) (REP 10.1)
–	–	Short paper path assembly (P/O PL 31.11 Item 9) (W/TAG 001) (REP 10.1)
2	–	Corotron carrier (P/O PL 10.25 Item 1)
3	–	Gear (P/O PL 10.25 Item 1) (16T)
4	–	Bearing (P/O PL 10.25 Item 1)
5	–	Gear (P/O PL 10.25 Item 1) (32T)
6	–	Transfer/Detack harness (REF: PL 90.20 Item 9)
7	–	Intermediate drive assembly (P/O PL 10.25 Item 1)
8	807E15940	Gear/Pulley (28T/25G)
9	–	Gear/Pulley (P/O PL 10.25 Item 1) (16T/30G)
10	–	Intermediate drive belt (P/O PL 10.25 Item 1) (REP 10.15)
11	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)
12	–	Ozone duct (P/O PL 10.25 Item 1)
13	–	Push rod (P/O PL 10.25 Item 1)
14	–	Ground harness (P/O PL 10.25 Item 1)
15	–	Base (P/O PL 10.25 Item 1)
16	–	Roll assembly (P/O PL 10.25 Item 11)
17	–	Corotron carrier latch (P/O PL 10.25 Item 20)
18	028E16630	Snap on washer (M6)
19	–	Spring clip (P/O PL 10.25 Item 20)
20	–	4B latch kit (P/O PL 31.12 Item 7)
21	–	Not used
22	–	Carrier seal (P/O PL 31.11 Item 6)

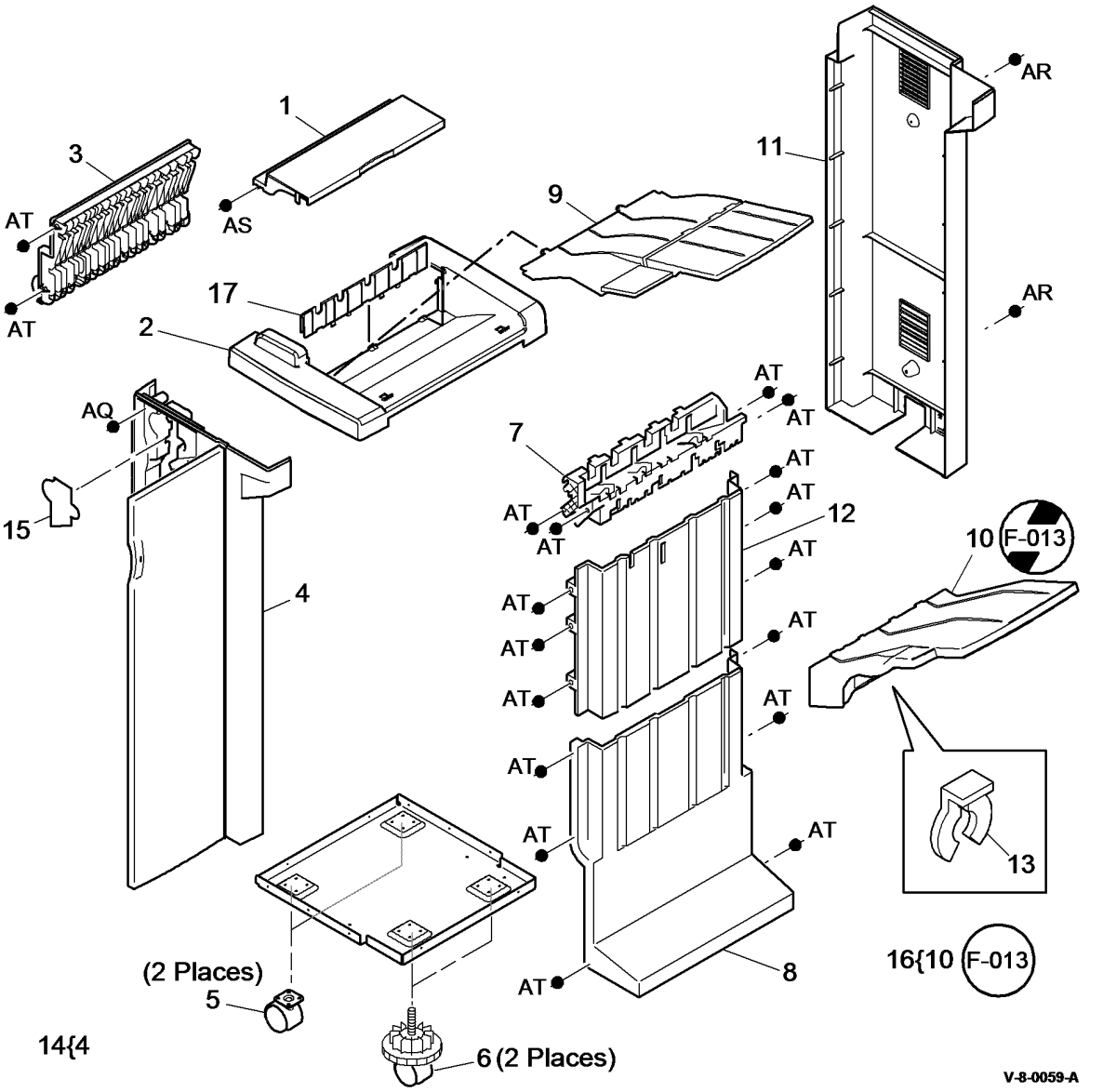
NOTE: *For the registration and halo bias contact, refer to PL 80.15 Item 23.*



PL 11.2 2K LCSS Covers

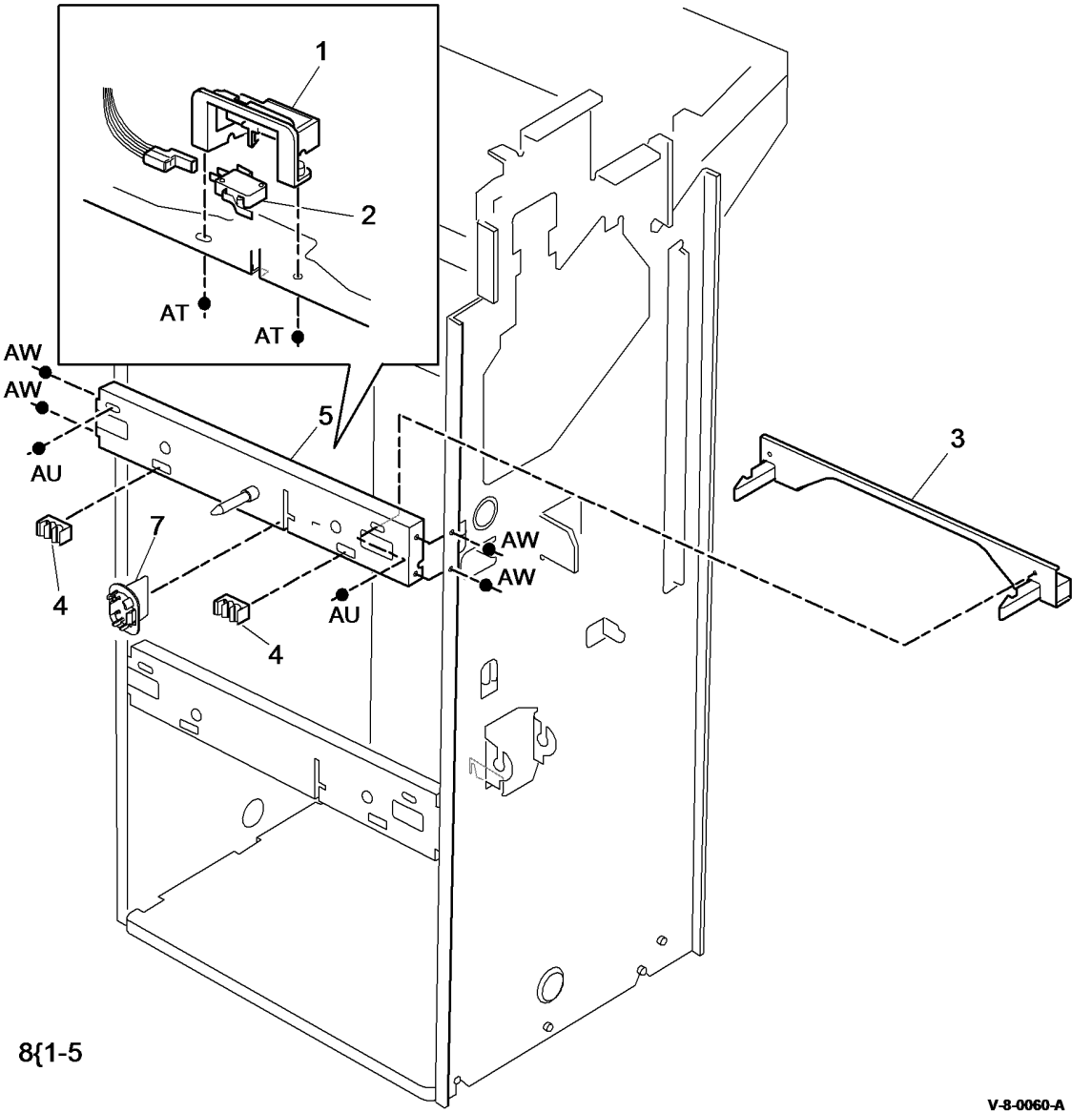
Item	Part	Description
1	802K48330	Exit cover (W/O TAG F-012)
–	038E47461	Exit cover (W/TAG F-012)
2	848K06190	Top cover (W/O TAG F-012) (REP 11.1-110)
–	848E97182	Top cover (W/TAG F-012)
3	–	Entry guide cover (REF: PL 11.24 Item 5) (REP 11.15-110)
4	–	Front door cover assembly (P/O PL 11.2 Item 14) (W/O TAG F-012) (REP 11.1-110)
–	848K98090	Front door assembly (W/TAG F-012)
5	017K03750	Fixed castor
6	017K04520	Adjustable castor
7	–	Output cover (Not Spared)
8	802K48320	Lower right cover
9	050K67380	Bin 0 (W/O TAG F-012)
–	050K75970	Bin 0 (W/TAG F-012)
10	050K68490	Bin 1 (W/O TAG F-012, TAG F-013) (ADJ 11.1-110)
–	050K75960	Bin 1 (W/TAG F-012)
11	848K06180	Rear cover assembly (W/O TAG F-012)
–	848K95900	Rear cover assembly (W/TAG F-012) (REP 11.1-110)
12	–	Upper right cover (Not Spared)
13	019K13380	Bin 1 alignment clip
14	–	2K LCSS front door cover assembly kit (REF: PL 31.12 Item 10)
15	–	Hole punch assembly cover (Not Spared)
16	–	Bin 1 tray kit (improved stacking) (REF: PL 31.11 Item 18) (W/TAG F-013)
17	848E97190	Top edge cover (W/TAG F-012)

NOTE: *Refer to ADJ 11.2-110 to align the 2K LCSS to the machine.*



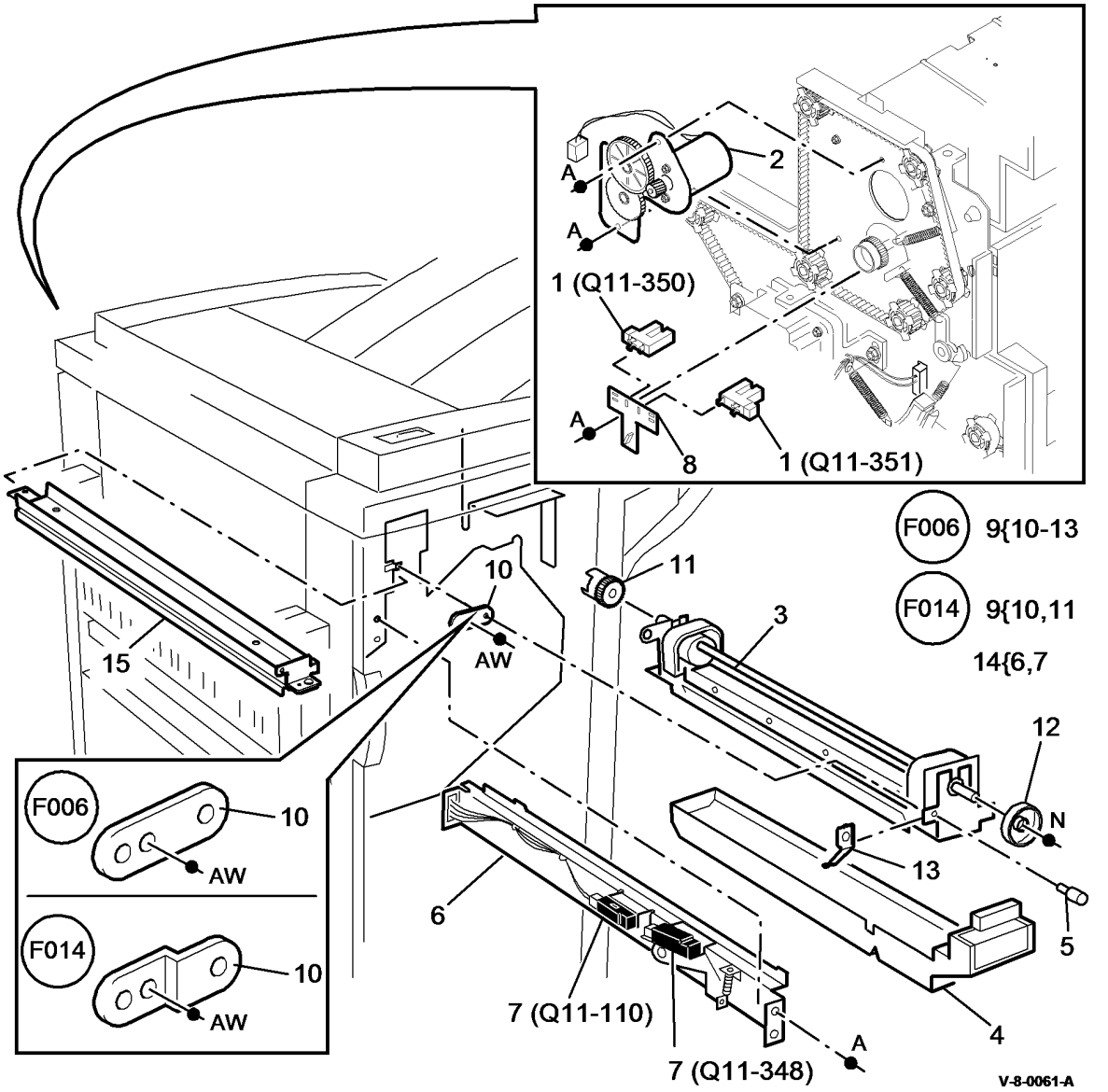
PL 11.4 2K LCSS Docking Latch

Item	Part	Description
1	–	Sensor cover (Not Spared)
2	110K13980	Docking interlock switch (S11-300)
3	003K20401	Link bracket assembly
4	–	Stopper (Not Spared)
5	–	Docking latch (P/O PL 11.4 Item 8)
6	–	Not used
7	120K02591	Docking actuator
8	003K20410	Docking latch assembly (REP 11.16-110)



PL 11.6 2K LCSS Hole Punch Unit

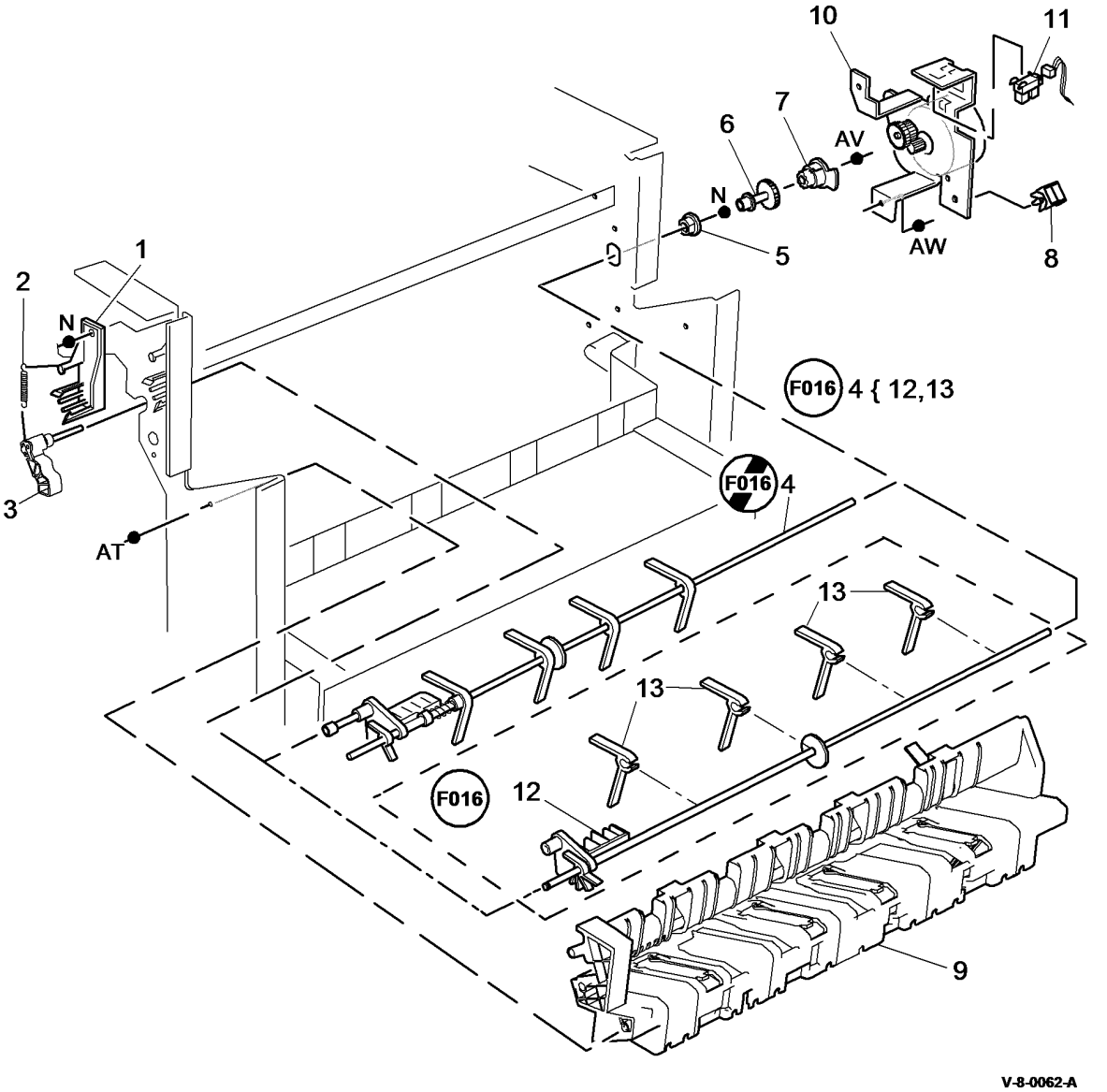
Item	Part	Description
1	130E10360	Punch head home sensor (Q11-350), Punch head present sensor (Q11-351) (REP 11.7-110)
2	127K55900	Hole punch motor assembly (MOT11-042) (REP 11.7-110)
3	–	Hole punch unit (see below for variants) (REP 11.7-110, ADJ 11.3-110)
–	180K00280	2 Hole (XE)
–	180K00320	2 Hole Legal
–	180K00200	3 Hole (USSG/XCL)
–	180K00310	4 Hole (Sweden)
–	180K00300	4 Hole (XE)
4	093E03821	Chad bin
5	–	Thumb screw (Not Spared)
6	–	Bracket (P/O PL 11.6 Item 14)
7	130E10380	Punch sensor (Q11-110), Chad bin level sensor (Q11-348) (REP 11.7-110)
8	–	Sensor bracket (Not Spared)
9	–	LCSS hole punch repair kit (REF: PL 31.13 Item 10) (W/TAG F-006) (ADJ 11.3-110)
–	–	LCSS hole punch repair kit (REF: PL 31.13 Item 10) (NASG) (W/TAG F-014) (ADJ 11.3-110)
10	–	Bracket (P/O PL 11.6 Item 9) (W/TAG F-014)
–	–	Bracket (P/O PL 11.6 Item 9) (W/TAG F-006)
11	–	Punch drive gear (P/O PL 11.6 Item 9) (W/TAG F-006)
–	–	Punch drive gear (P/O PL 11.6 Item 9) (W/TAG F-014)
12	–	Punch cam (P/O PL 11.6 Item 3) (W/O TAG F-014)
–	–	Punch cam (P/O PL 11.6 Item 9) (W/TAG F-006)
13	–	Punch spacer (P/O PL 11.6 Item 9) (W/TAG F-006)
14	–	Punch sensor assembly (Not Spared) (W/O TAG F-008)
–	–	Punch sensor assembly (W/TAG F-008)
15	014K10610	Hole punch assembly cover



PL 11.8 2K LCSS Paddle Wheel/Safety Gate

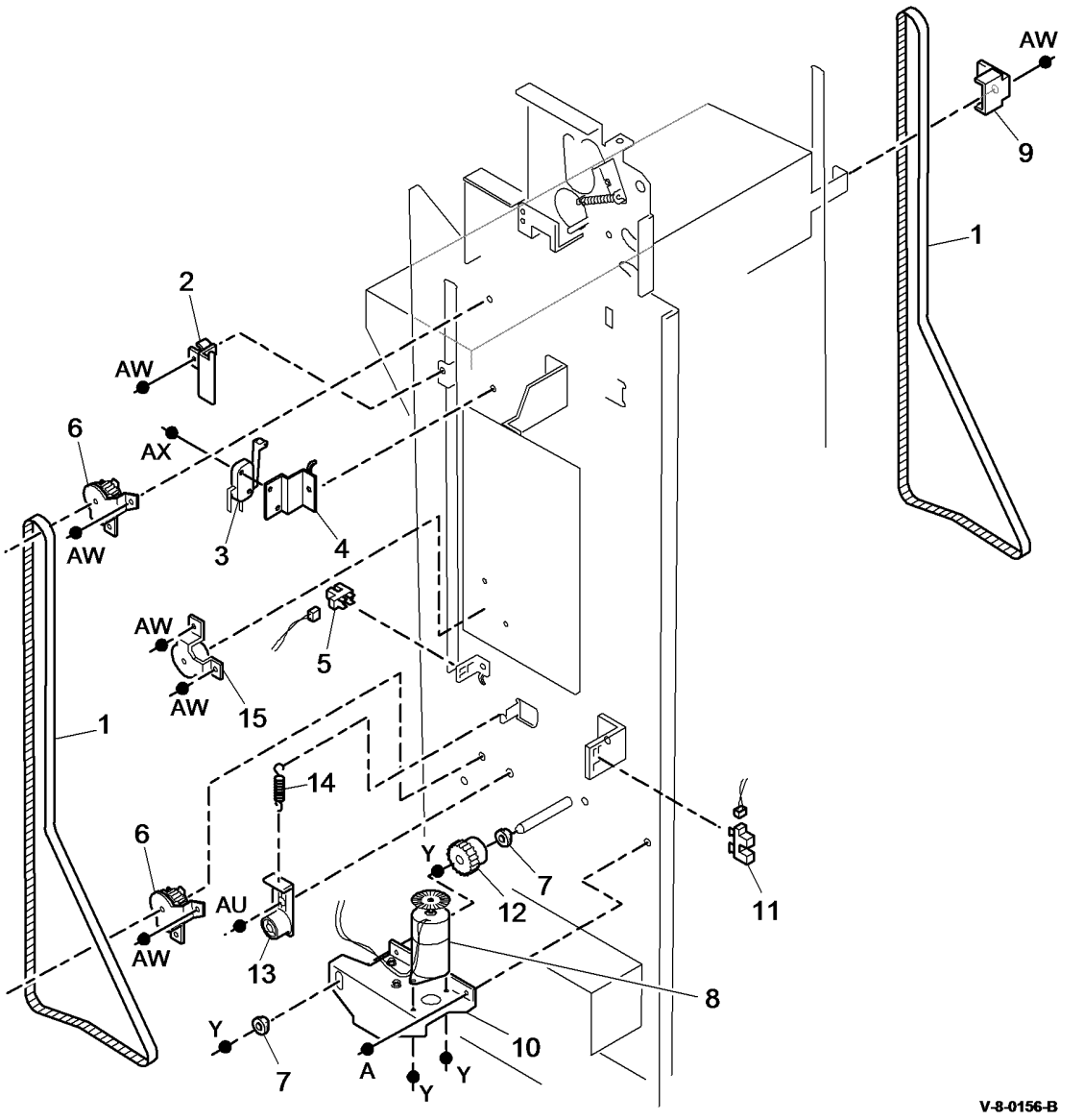
Item	Part	Description
1	–	Spring bracket (Not Spared)
2	–	Spring (Not Spared)
3	–	Switch actuator (Not Spared)
4	–	Paddle wheel shaft assembly (Not spared) (W/O TAG F-016) (REP 11.12-110)
–	–	Paddle wheel shaft assembly (P/O PL 31.12 Item 6) (W/TAG F-016)
5	013E25790	Bearing
6	–	Gear (Not Spared)
7	–	Flag (Not Spared)
8	–	Cable clamp (Not Spared)
9	–	Output cover (REF: PL 11.2 Item 7)
10	127K55881	Paddle motor assembly (MOT11-024)
11	130E10360	Paddle roll home sensor (Q11-326)
12	–	Shaft (P/O PL 11.8 Item 4) (W/TAG F-016)
13	–	Paddle (P/O PL 11.8 Item 4) (NOTE) (W/TAG F-016)

NOTE: *Paddles are also supplied (4 off) as a kit PL 31.12 Item 11.*



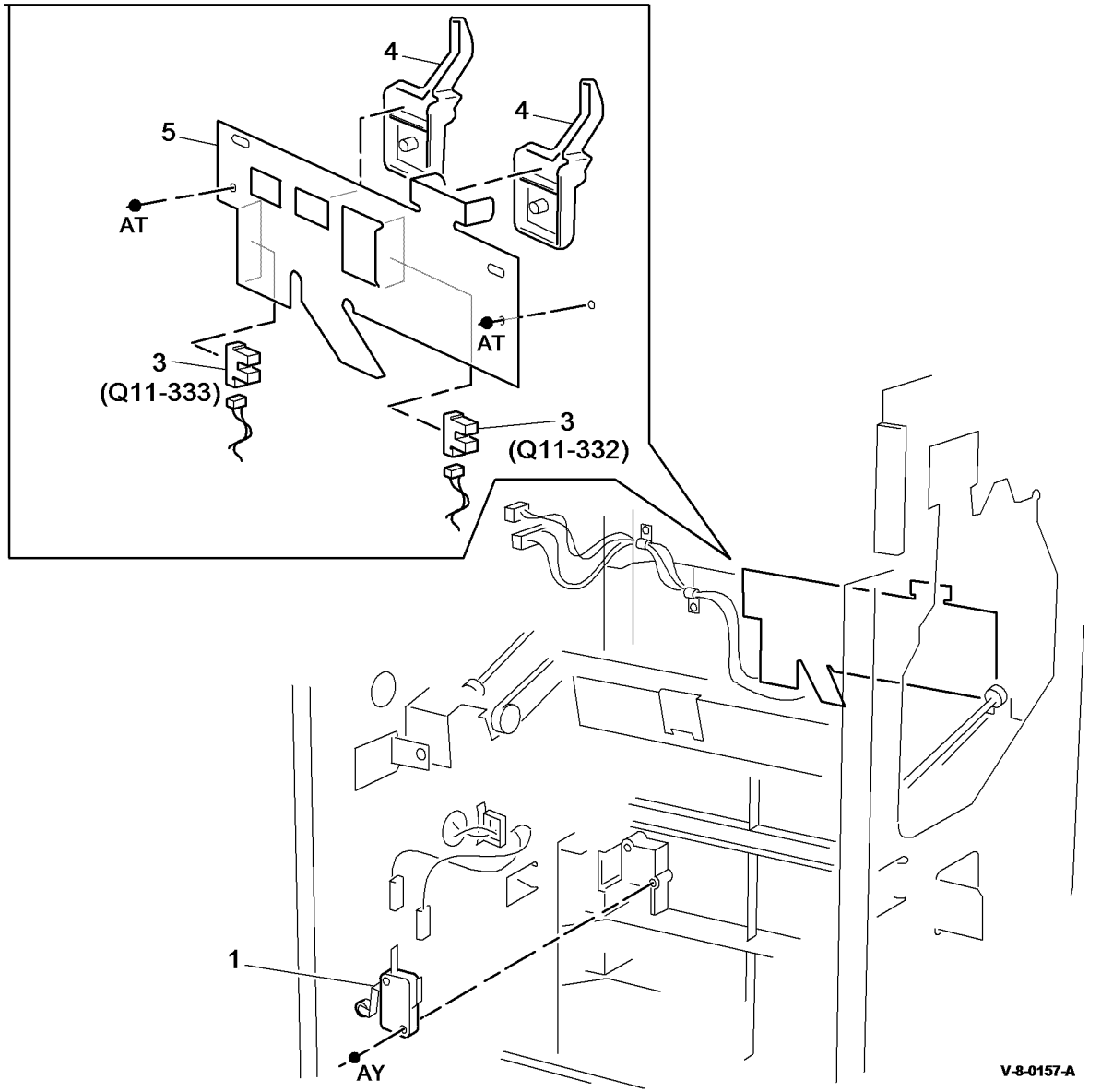
PL 11.10 2K LCSS Bin 1 Control Components (1 of 2)

Item	Part	Description
1	023E24320	Bin 1 drive belt (REP 11.5-110)
2	–	Rear belt clamp (Not Spared) (ADJ 11.1-110)
3	110E20180	Bin 1 upper limit switch (S11-334)
–	110K13990	Bin 1 upper limit switch (alternate) (S11-334)
4	–	Sensor bracket (Not Spared)
5	130E10360	Bin 1 90% full sensor (Q11-331)
6	–	Pulley (Not Spared)
7	013E37470	Bearing
8	127K55891	Bin 1 elevator motor (MOT11-030)
9	–	Front belt clamp (Not Spared) (ADJ 11.1-110)
10	–	Motor bracket (Not Spared)
11	130E20380	Bin 1 motor encoder sensor (Q11-336)
12	–	Pulley assembly (Not Spared)
13	–	Belt tensioner (Not Spared)
14	–	Spring (Not Spared)
15	–	Idler (Not Spared)



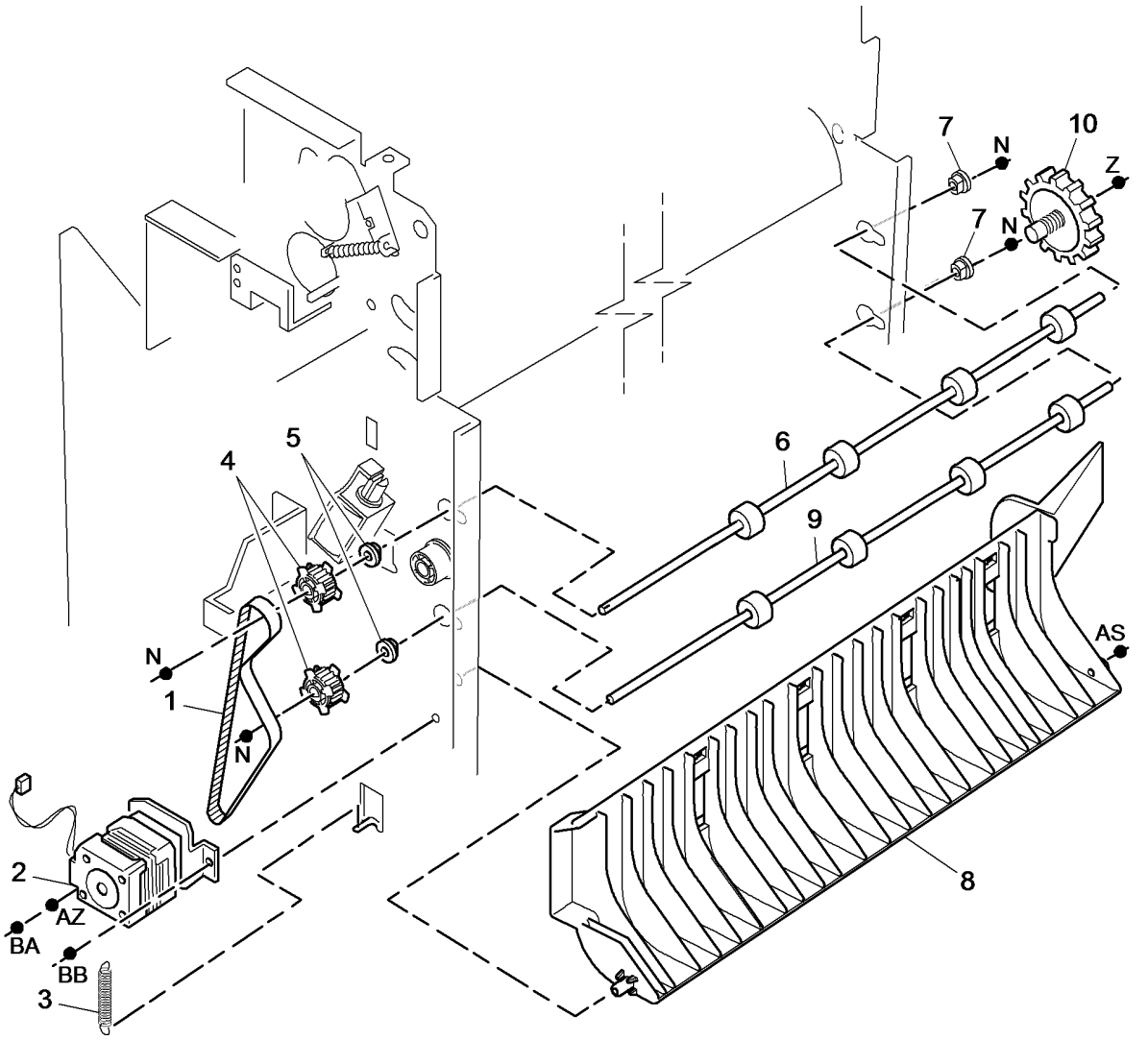
PL 11.12 2K LCSS Bin 1 Control Components (2 of 2)

Item	Part	Description
1	110K13990	Bin 1 lower limit switch (S11-335)
2	–	Not used
3	130E10360	Bin 1 Upper level sensor (Q11-332), Bin 1 Lower level sensor (Q11-333) (REP 11.11-110)
4	–	Actuator (Not Spared)
5	–	Sensor support assembly (Not Spared)



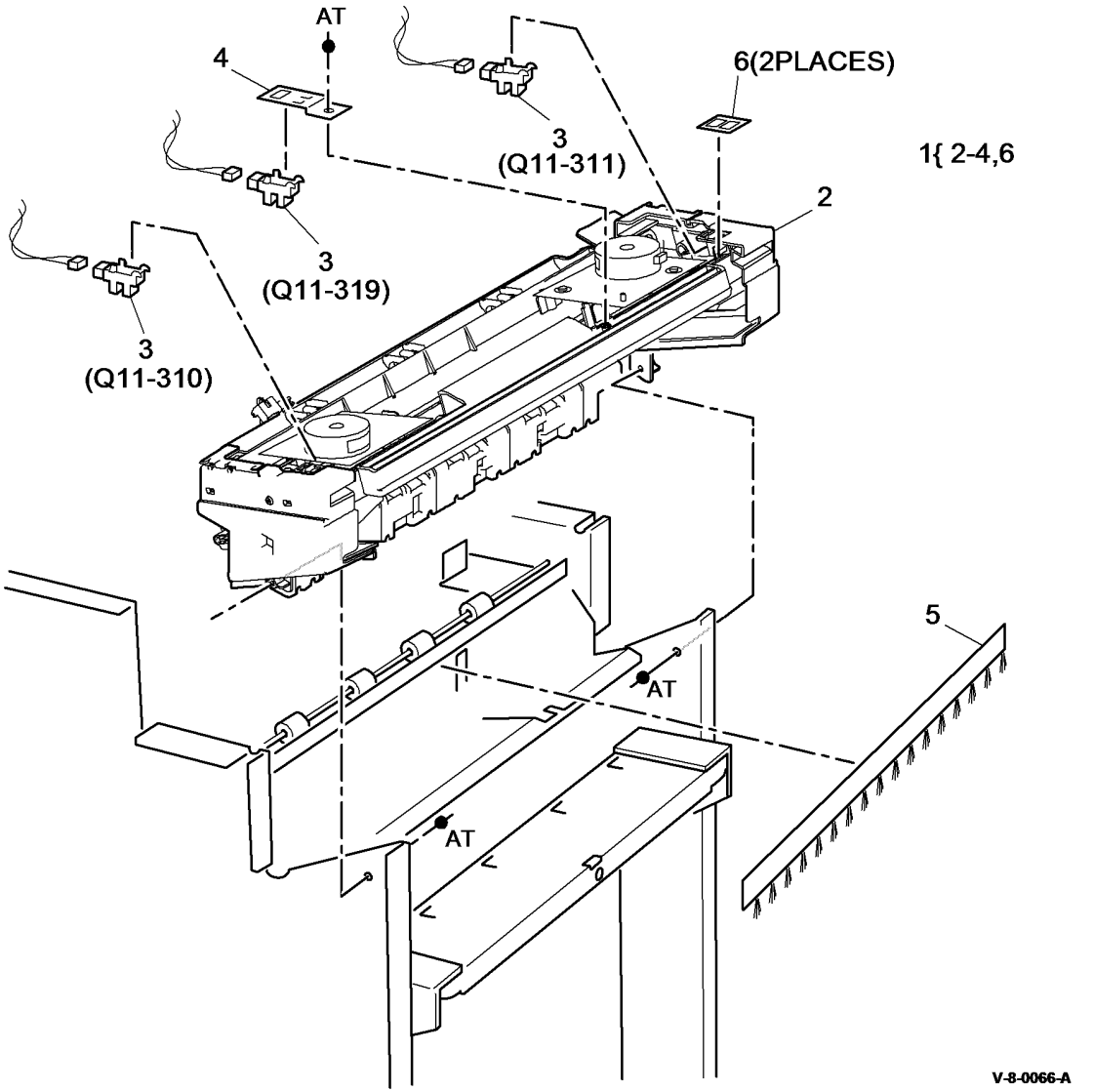
PL 11.14 2K LCSS Paper Entry Transport

Item	Part	Description
1	023E24340	Input drive belt (REP 11.2-110)
2	127K55860	Transport motor 1 (MOT11-000) (REP 11.2-110)
3	–	Spring (Not Spared)
4	–	Pulley (Not Spared)
5	013E25790	Nylon bearing
6	006K27980	Feed roll shaft (short)
7	013E37460	Bearing
8	–	Jam clearance guide (REF: PL 11.24 Item 1)
9	006K31670	Feed roll shaft (long)
10	–	Thumb wheel (Not Spared)



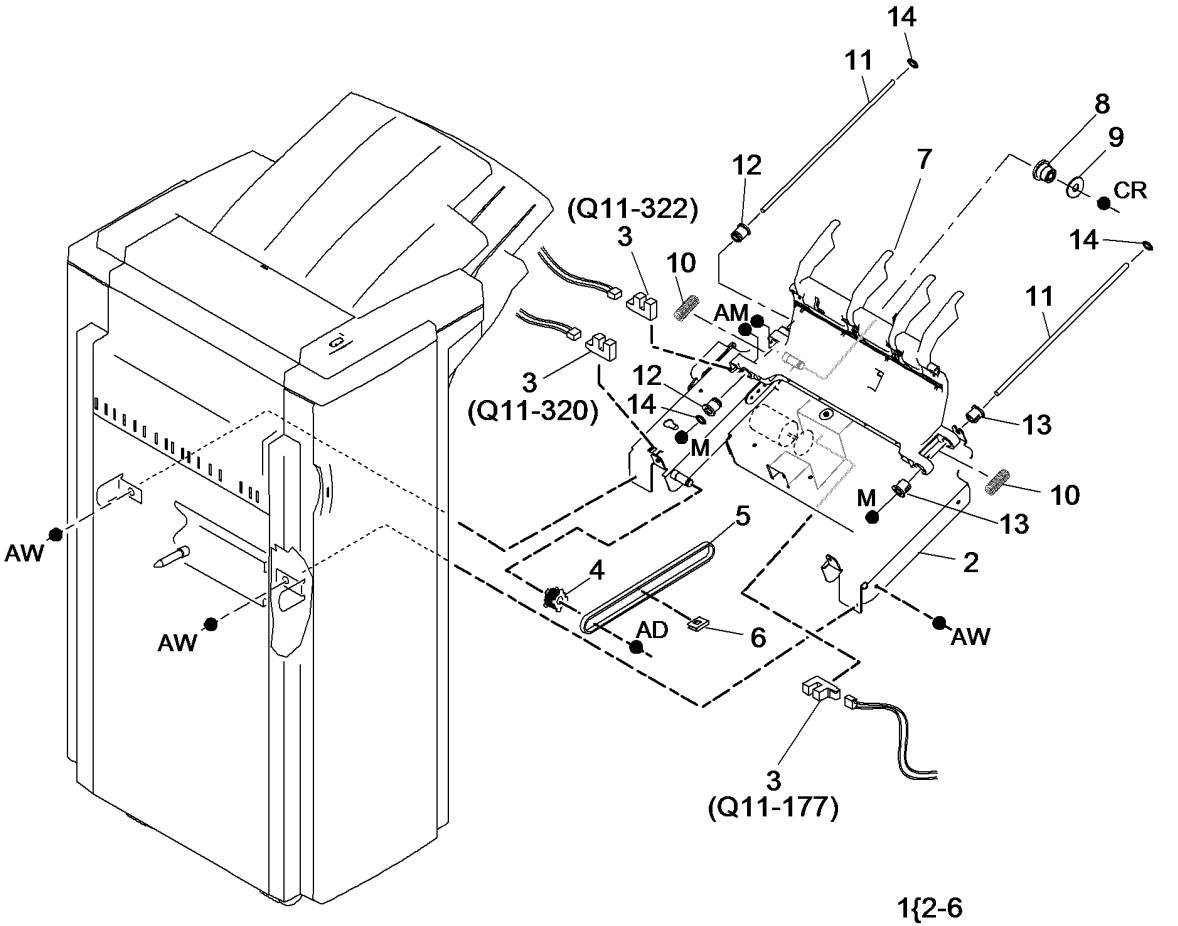
PL 11.16 2K LCSS Tamper Assembly

Item	Part	Description
1	068K54281	Tamper assembly (REP 11.6-110)
2	–	Tamper unit (P/O PL 11.16 Item 1)
3	130E10360	Front tamper home sensor (Q11-310), Rear tamper home sensor (Q11-311), Rear tamper away sensor (Q11-319)
4	–	Sensor bracket (P/O PL 11.16 Item 1)
5	–	Static eliminator (stacker) (REF: PL 11.23 Item 7)
6	–	Sensor retainer (P/O PL 11.16 Item 1)



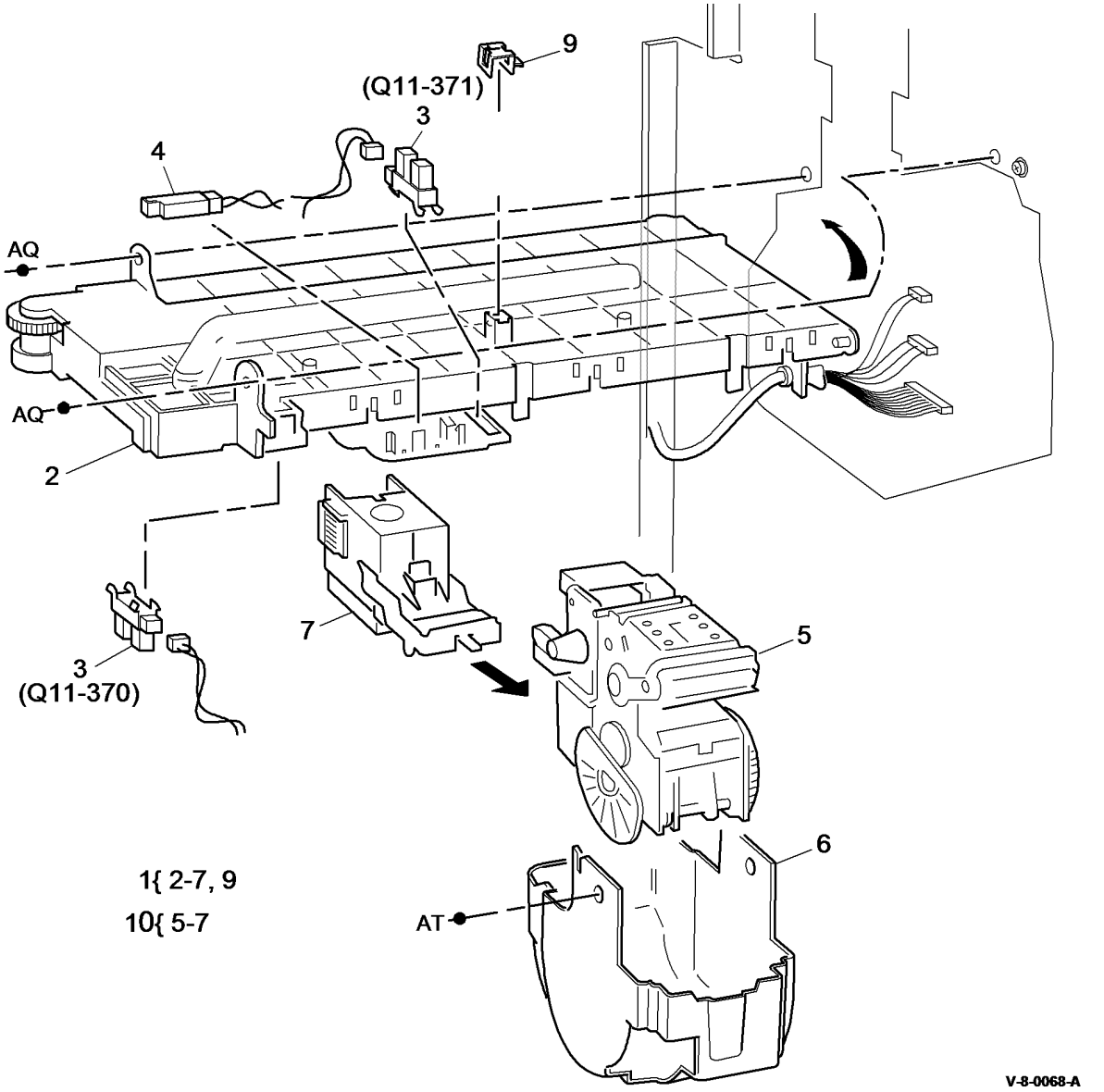
PL 11.18 2K LCSS Ejector Assembly

Item	Part	Description
1	054K43583	Ejector assembly (REP 11.10-110)
2	–	Ejector base (P/O PL 11.18 Item 1)
3	130E10360	Ejector home sensor (Q11-320), Ejector out sensor (Q11-322), Ejector motor encoder sensor(Q11-177) (REP 11.10-110)
4	–	Pulley (Not Spared)
5	023E24330	Ejector belt (REP 11.17-110)
6	–	Clip (P/O PL 11.18 Item 1)
7	019K13390	Support finger set (Qty. 4)
8	020K21490	Pulley drive gear
9	–	Washer (Not Spared)
10	–	Spring (P/O PL 11.18 Item 1)
11	–	Shaft (P/O PL 11.18 Item 1)
12	–	Slide ejector bearing (P/O PL 11.18 Item 15)
13	–	Wide slide ejector bearing (P/O PL 11.18 Item 15)
14	–	Cushion washer (P/O PL 11.18 Item 15)
15	604K67690	LCSS bearing assembly kit



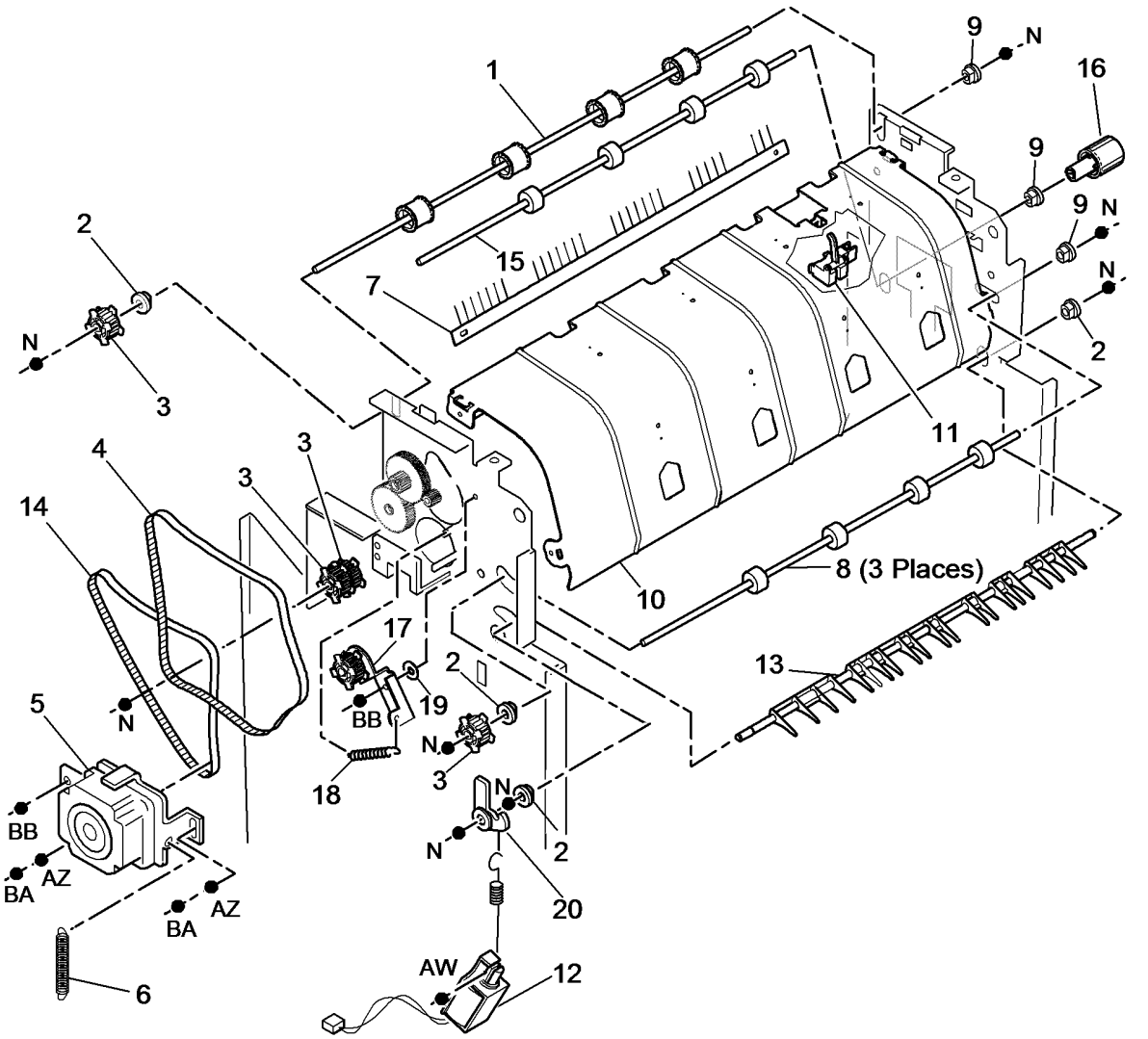
PL 11.20 2K LCSS Staple Head Unit/ Traverse Assembly

Item	Part	Description
1	014K11461	Stapler traverse assembly (REP 11.8-110)
2	–	Head traverse unit (P/O PL 11.20 Item 1)
3	130E10360	SU1 Home sensor (Q11-370), SU1 Front index sensor (Q11-371)
4	130E10380	SH1 Paper sensor (Q11-361)
5	029K04521	Staple head unit (REP 11.9-110)
6	–	Stapler cover (P/O PL 11.20 Item 1)
7	–	Staple cartridge (REF: PL 26.10 Item 11)
8	–	Not used
9	–	Sensor cover (P/O PL 11.20 Item 1)
10	–	Staple head assembly (P/O PL 11.20 Item 1)



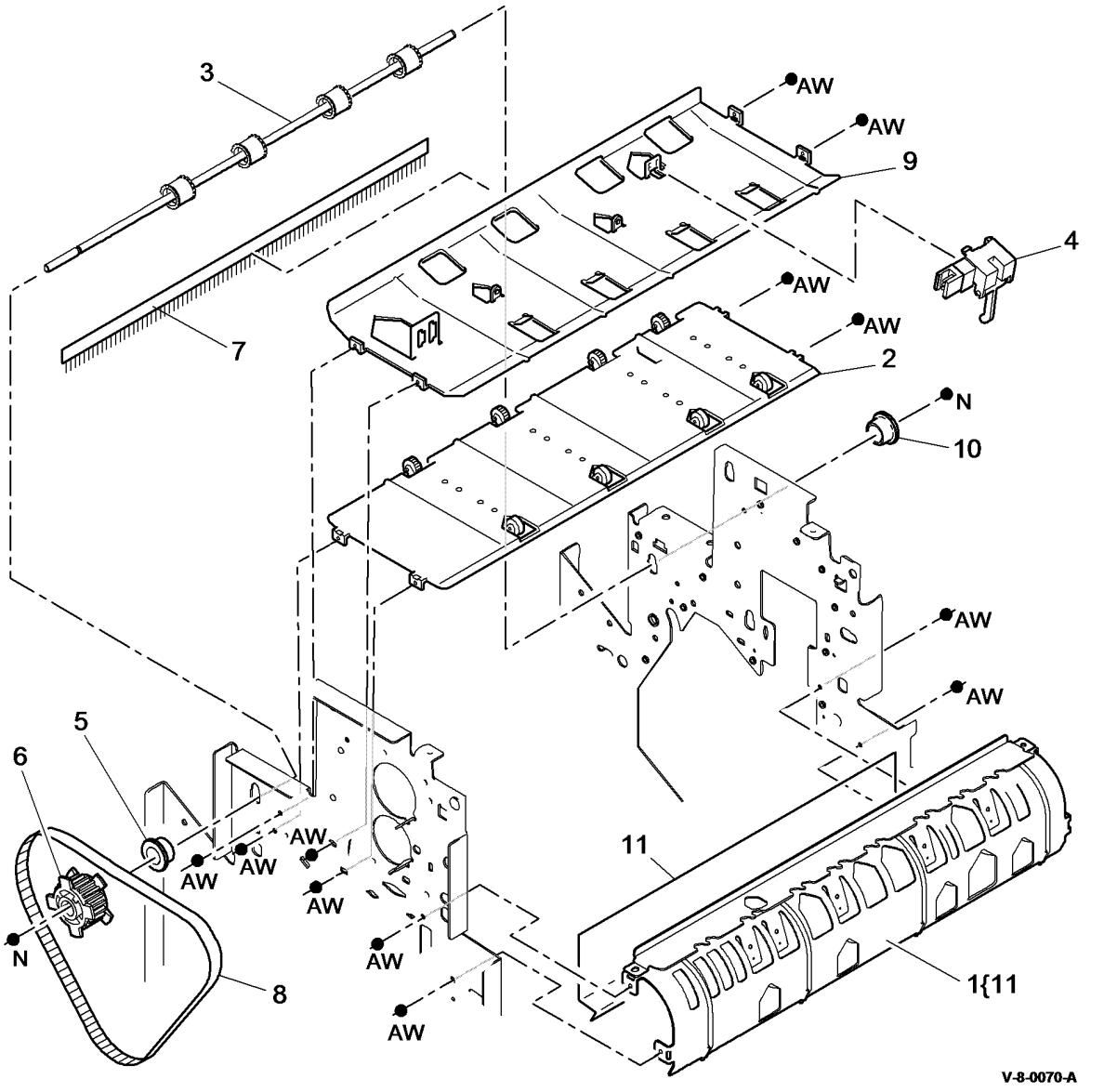
PL 11.22 2K LCSS Bin 0 Entry

Item	Part	Description
1	006K27960	Top tray exit shaft
2	013E25790	Nylon bearing
3	–	Pulley (Not Spared)
4	023E24330	Intermediate paper drive belt (REP 11.3-110)
5	127K55870	Transport motor 2 (MOT11-001) (REP 11.4-110)
6	–	Spring (Not Spared)
7	115E12830	Static eliminator
8	006K27980	Feed roll shaft (short)
9	013E37460	Bearing
10	032K04580	Paper guide (REP 11.18-110)
11	130E11440	Top exit sensor (Q11-130) (REP 11.18-110)
12	121K45010	Diverter solenoid (SOL11-002)
13	–	Shaft diverter assembly (P/O PL 31.13 Item 6) (W/TAG F-017)
14	023E24340	Paper output drive belt (REP 11.4-110)
15	006K27970	Drive shaft assembly
16	003K17531	Jam clearance knob
17	–	Belt tensioner (Not Spared)
18	–	Spring (Not Spared)
19	–	Washer (Not Spared)
20	–	Actuator (Not Spared)



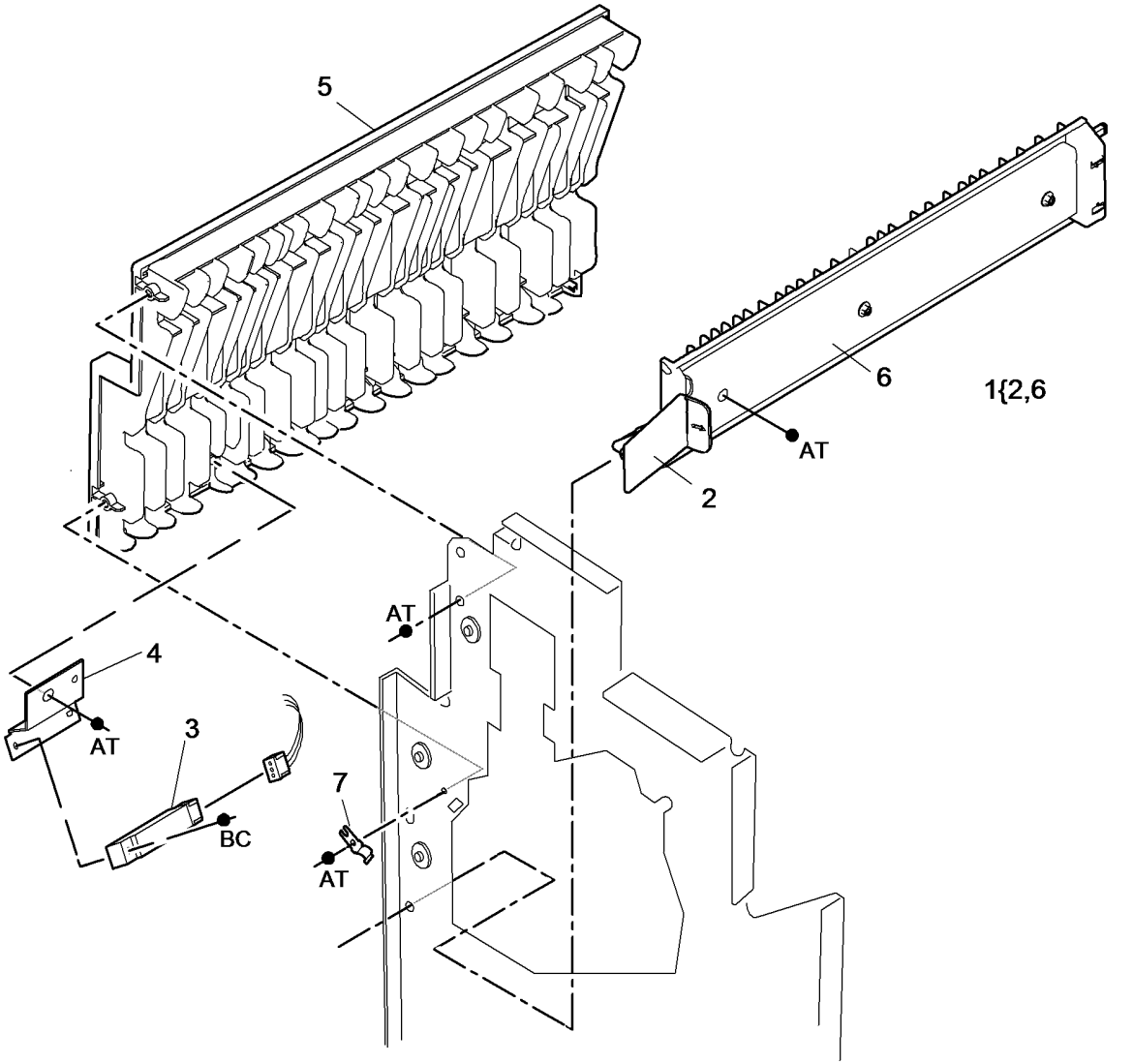
PL 11.23 2K LCSS Bin 1 Entry

Item	Part	Description
1	032K04610	Left paper guide
2	032K04590	Lower right paper guide
3	–	Ejector drive shaft (Not Spared)
4	130E11440	2nd to top exit sensor (Q11-140)
5	013E25790	Nylon bearing
6	–	Pulley (Not Spared)
7	115E11810	Static eliminator (stacker)
8	–	Paper output drive belt (REF: PL 11.22 Item 14)
9	–	Upper right paper guide (Not Spared)
10	013E37460	Bearing
11	–	Mylar safety cover (P/O PL 11.23 Item 1)



PL 11.24 2K LCSS Entry Guide Cover/ Jam Clearance Guide

Item	Part	Description
1	032K04601	Paper entry guide assembly
2	–	Jam clearance handle (P/O PL 11.24 Item 1)
3	130E10380	Entry sensor (Q11-100)
4	–	Sensor bracket (Not Spared)
5	848K06161	Entry guide cover (REP 11.15-110)
6	–	Jam clearance guide (P/O PL 11.24 Item 1)
7	809E78390	Latch

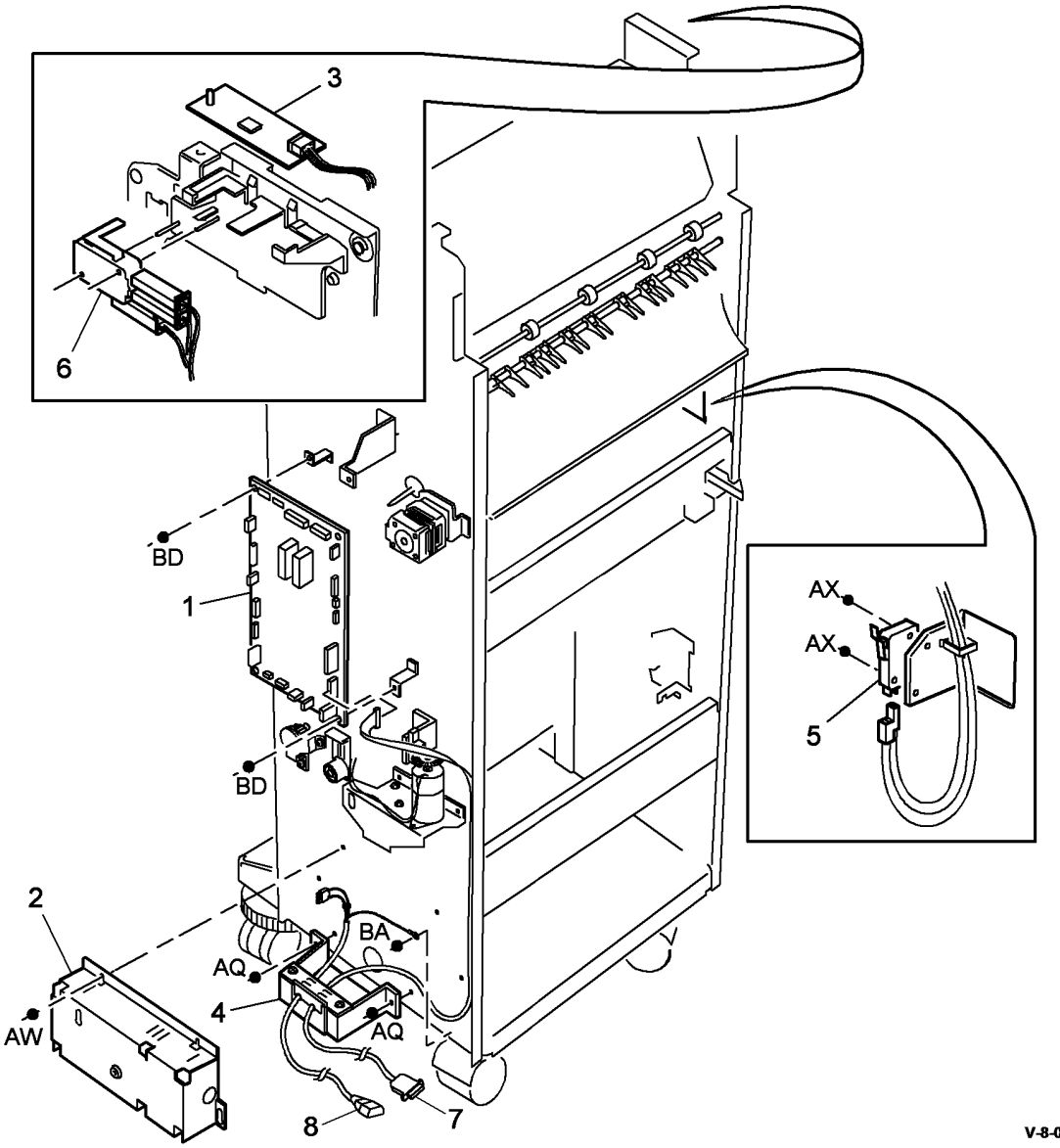


PL 11.26 2K LCSS Electrical

Item	Part	Description
1	–	2K LCSS PWB (P/O PL 31.14 Item 15) (CAUTION) (REP 11.14-110)
2	105K35842	Power supply module
3	960K34490	Pause to unload PWB
4	962K56952	Cord bracket assembly
5	110K13980	Front door interlock switch (S11-303)
6	110K13970	Top cover interlock switch (S11-302)
7	–	LCSS communications harness (P/O PL 11.26 Item 4)
8	–	LCSS power cord (P/O PL 11.26 Item 4)

CAUTION

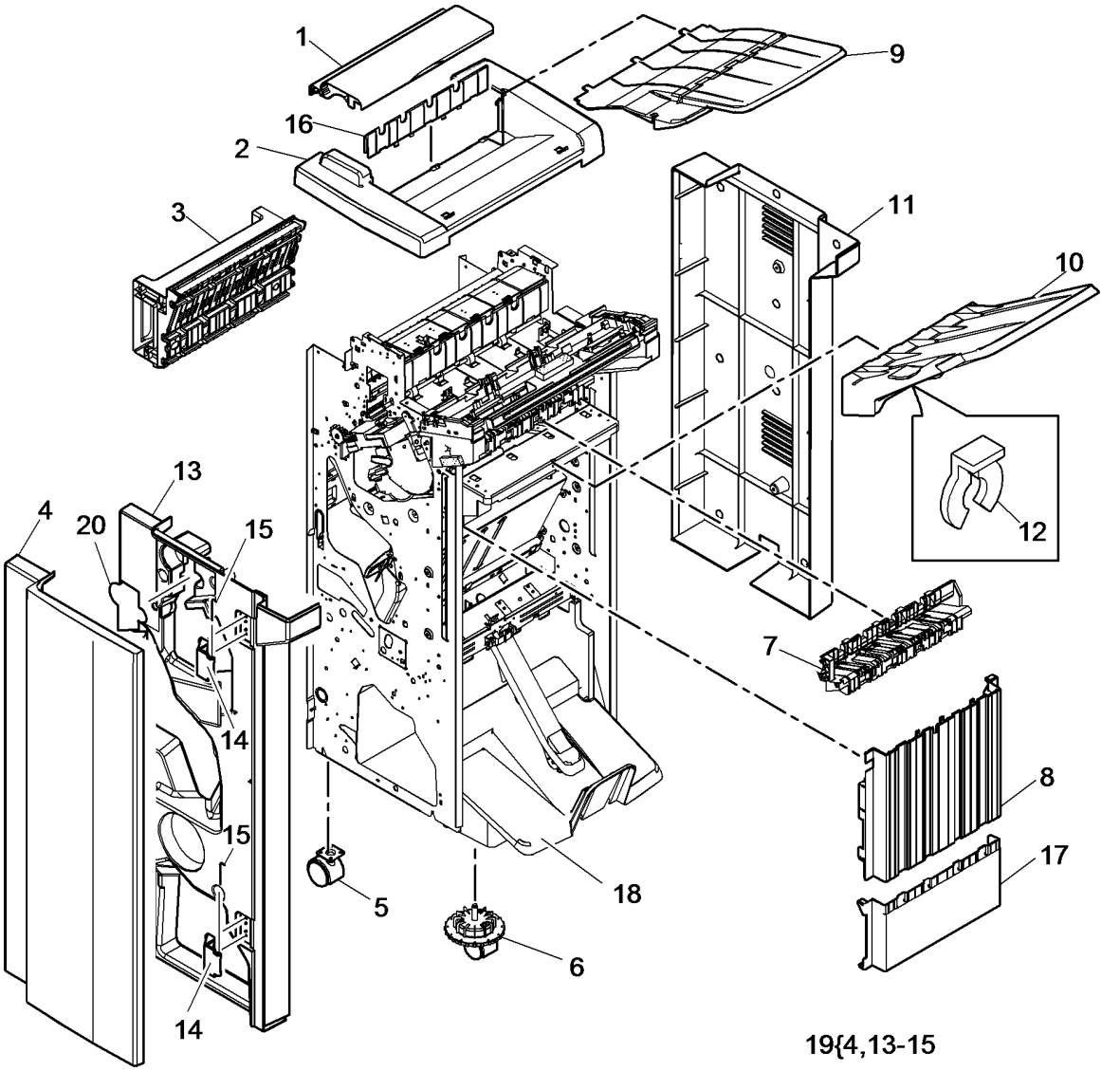
Do not install a new 2K LCSS PWB until the cause of the damage to the old 2K LCSS PWB has been determined. Go to the 311G-110 2K LCSS PWB Damage RAP.



PL 11.50 LVF BM - Covers

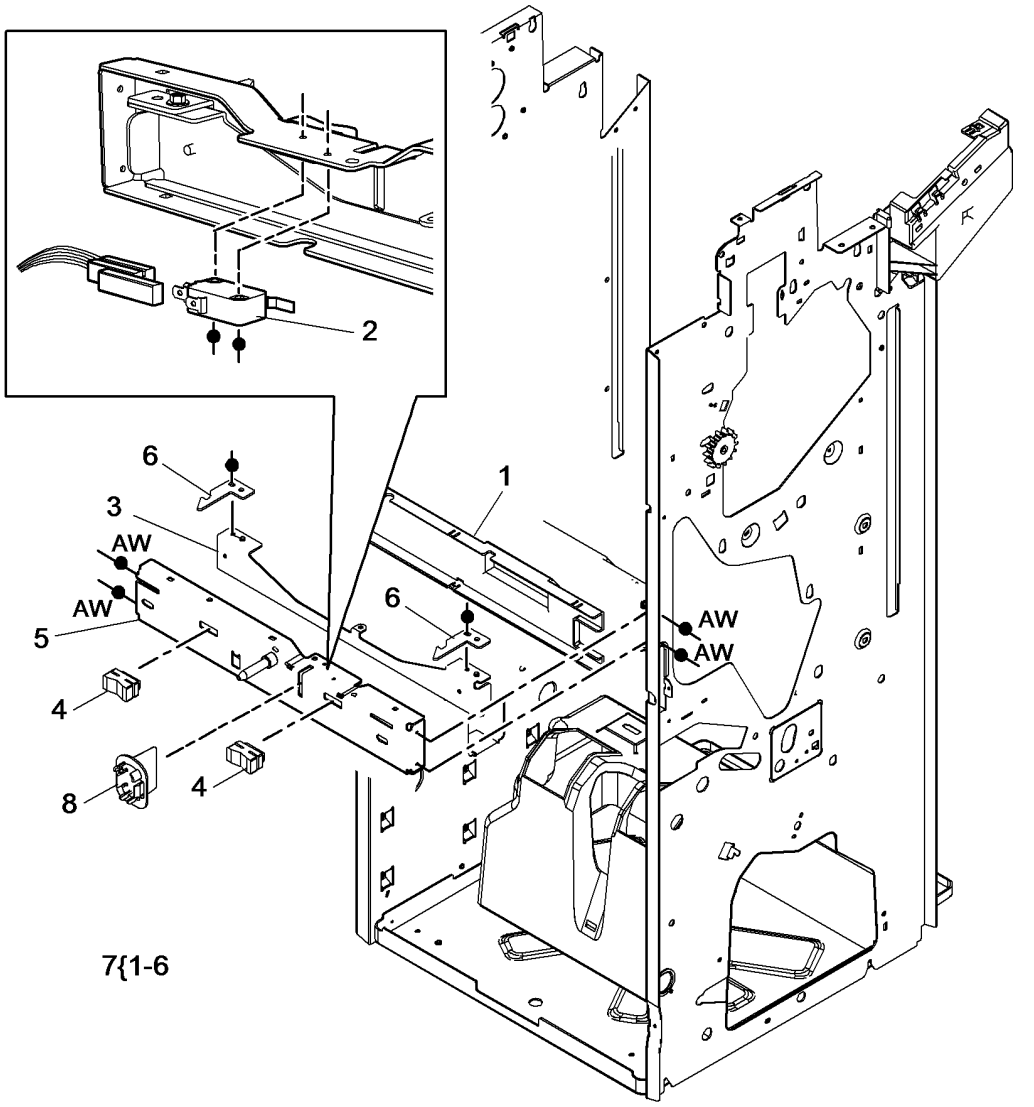
Item	Part	Description
1	038E47461	Exit cover
2	848E97182	Top cover (REP 11.1-150)
3	848K83720	Entry guide cover assembly (REP 11.15-150)
4	–	Front door (P/O PL 11.50 Item 19) (REP 11.1-150)
5	017K03750	Fixed castor
6	017K04520	Adjustable castor
7	–	Output cover (Not Spared)
8	–	Right cover (Not Spared)
9	050K75970	Bin 0
10	050K75960	Bin 1
11	848K98040	Rear cover assembly (REP 11.1-150)
12	019K13380	Bin 1 alignment clip
13	–	Front cover assembly (P/O PL 11.50 Item 19)
14	–	Hinge (P/O PL 11.50 Item 19)
15	–	Hinge pin (P/O PL 11.50 Item 19)
16	848E97190	Top edge cover
17	–	Lower right cover (REP 11.45-150)
18	–	Bin 2 (Not Spared)
19	848K98071	Front door cover assembly (REP 11.1-150)
20	–	Hole punch assembly cover (Not Spared)

NOTE: *Refer to ADJ 11.2-150 to align the LVF BM to the machine.*



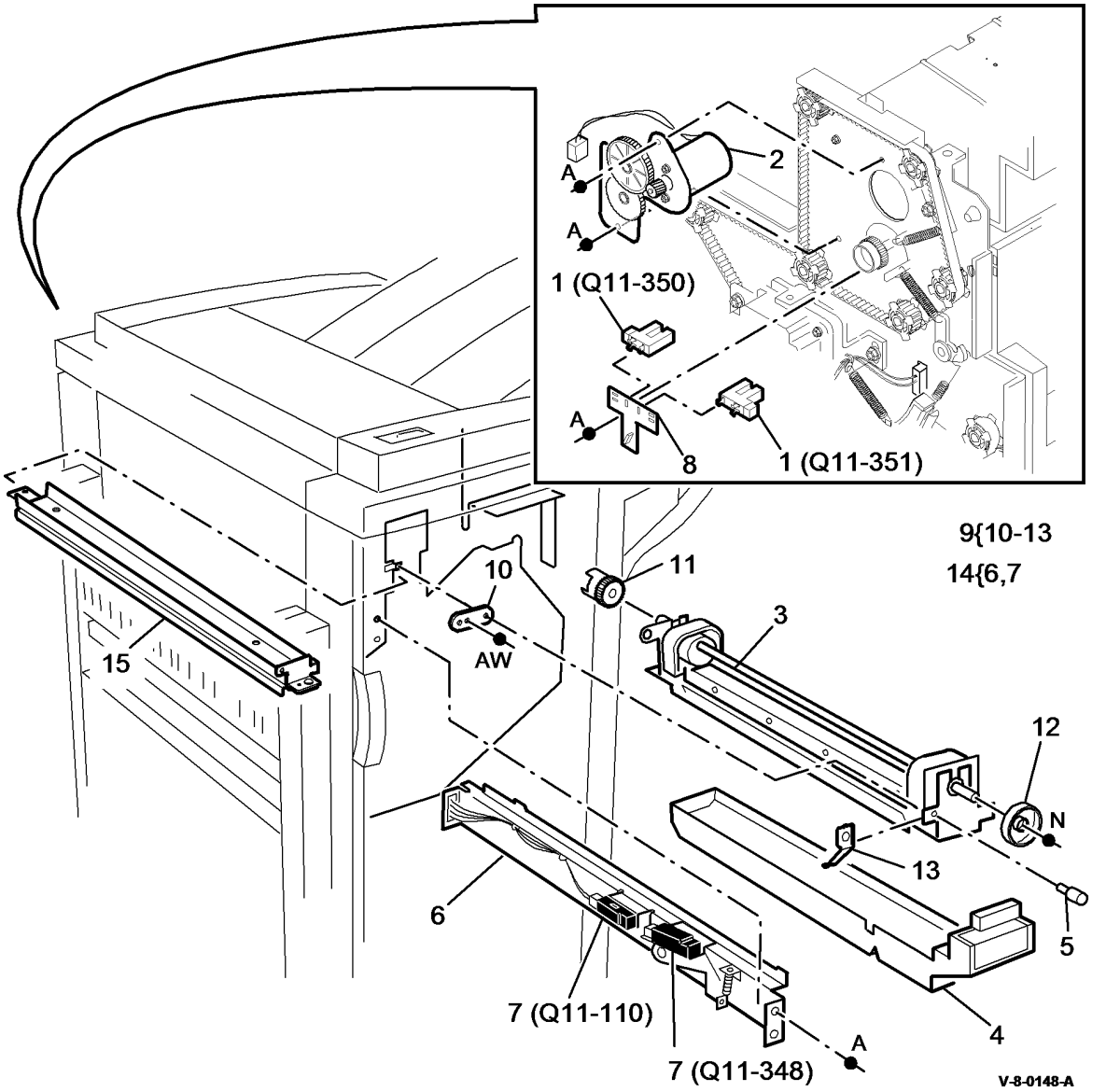
PL 11.52 LVF BM Docking Latch

Item	Part	Description
1	–	Docking latch cover (Not Spared)
2	110K13980	Docking interlock switch (S11-300)
3	003K20401	Link bracket assembly
4	–	Stopper (P/O PL 11.52 Item 7)
5	–	Docking latch (P/O PL 11.52 Item 7)
6	–	Latch hook (P/O PL 11.52 Item 7)
7	003K20410	Docking latch assembly (REP 11.16-150)
8	120K02591	Docking actuator



PL 11.54 LVF BM Hole Punch Unit

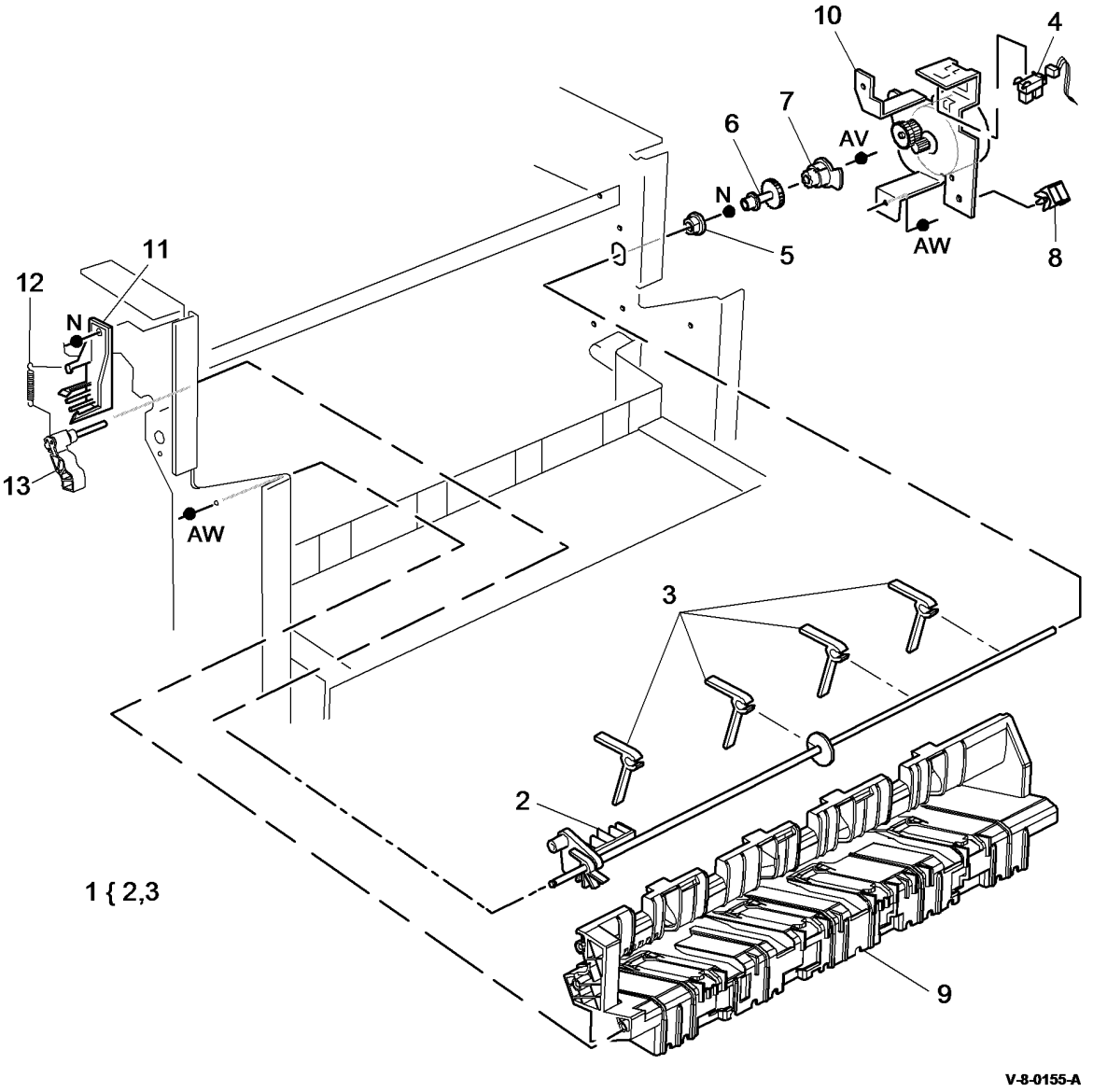
Item	Part	Description
1	130E10360	Punch head home sensor (Q11-350), Punch head present sensor (Q11-351) (REP 11.7-150)
2	127K55900	Hole punch motor assembly (MOT11-042) (REP 11.7-150)
3	–	Hole punch unit (see below for variants) (REP 11.7-110, ADJ 11.3-110)
–	180K00280	2 Hole (XE)
–	180K00320	2 Hole legal
–	180K00200	3 Hole (USSG/XCL)
–	180K00310	4 Hole (Sweden)
–	180K00300	4 Hole (XE)
4	093E03821	Chad bin
5	–	Thumb screw (Not Spared)
6	–	Bracket (P/O PL 11.54 Item 14)
7	130E10380	Punch sensor (Q11-110), Chad bin level sensor (Q11-348) (REP 11.7-150)
8	–	Sensor bracket (Not Spared)
9	–	LCSS hole punch repair kit (REF: PL 31.13 Item 10) (ADJ 11.3-110)
10	–	Bracket (P/O PL 11.6 Item 9)
11	–	Punch drive gear (P/O PL 11.54 Item 9) (W/TAG F-006)
12	–	Punch cam (P/O PL 11.54 Item 3) (W/O TAG F-014)
13	–	Punch spacer (P/O PL 11.54 Item 9) (W/TAG F-006)
14	–	Punch sensor assembly (Not Spared) (W/O TAG F-008)
15	014K10610	Hole punch blanking assembly



PL 11.56 LVF BM Paddle Shaft Assembly

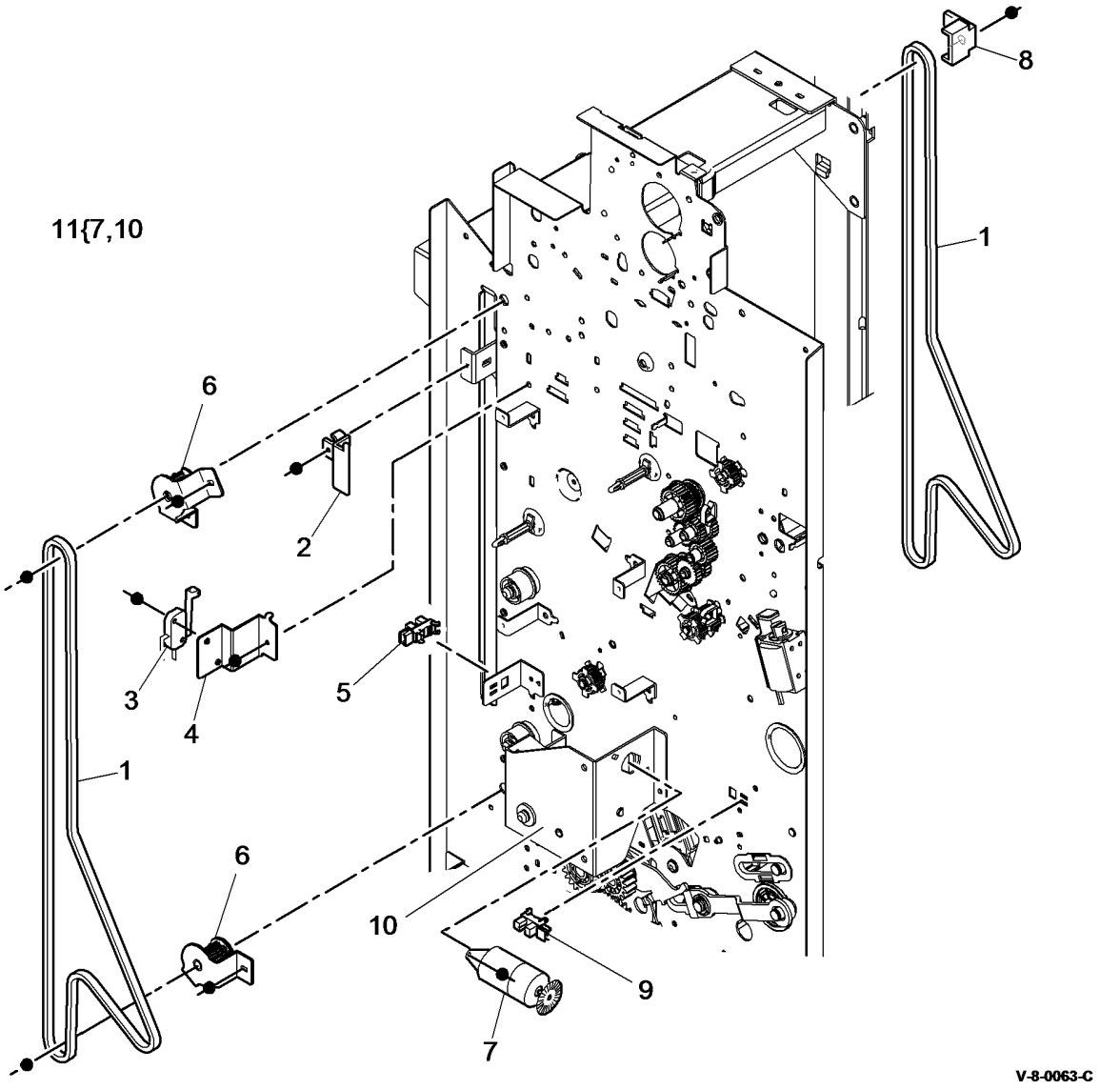
Item	Part	Description
1	–	Paddle shaft assembly (REF: PL 31.12 Item 6) (REP 11.12-150)
2	–	Shaft (P/O PL 11.56 Item 1)
3	–	Paddle (P/O PL 11.56 Item 1) (NOTE)
4	130E10360	Paddle roll home sensor (Q11-326)
5	013E25790	Bearing
6	–	Gear (Not Spared)
7	–	Flag (Not Spared)
8	–	Cable clamp (Not Spared)
9	–	Output cover (REF: PL 11.50 Item 7)
10	127K55881	Paddle motor assembly (MOT11-024) (REP 11.12-150)
11	–	Spring bracket (Not Spared)
12	–	Spring (Not Spared)
13	–	Switch actuator (Not Spared)

NOTE: *Paddles are also supplied (4 off) as a kit PL 31.12 Item 11.*



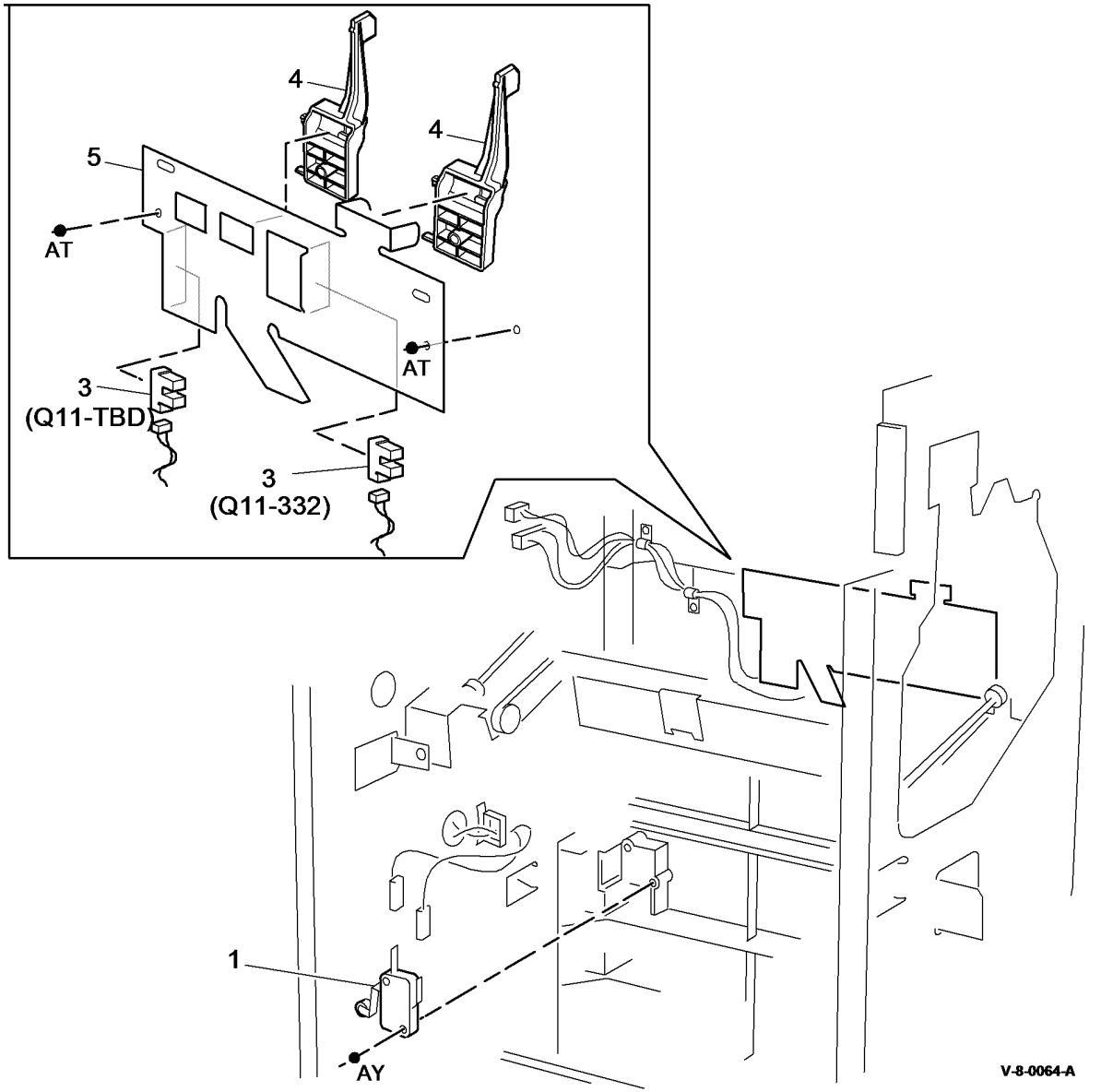
PL 11.58 LVF BM Bin 1 Control Components (1 of 2)

Item	Part	Description
1	023E24320	Bin 1 drive belt (REP 11.5-150)
2	–	Rear belt clamp (Not Spared) (ADJ 11.1-110)
3	110E20180	Bin 1 upper limit switch (S11-334)
4	–	Sensor bracket (Not Spared)
5	130E10360	Bin 1 90% full sensor (Q11-331)
6	–	Pulley (Not Spared) (ADJ 40.1)
7	127K55891	Bin 1 elevator motor (MOT11-030)
8	–	Front belt clamp (Not Spared) (ADJ 11.1-110)
9	130E20380	Bin 1 motor encoder sensor (Q11-336)
10	–	Stacker tray drive assembly (Not Spared)
11	007K20531	Stacker tray drive and motor assembly (REP 11.5-150)



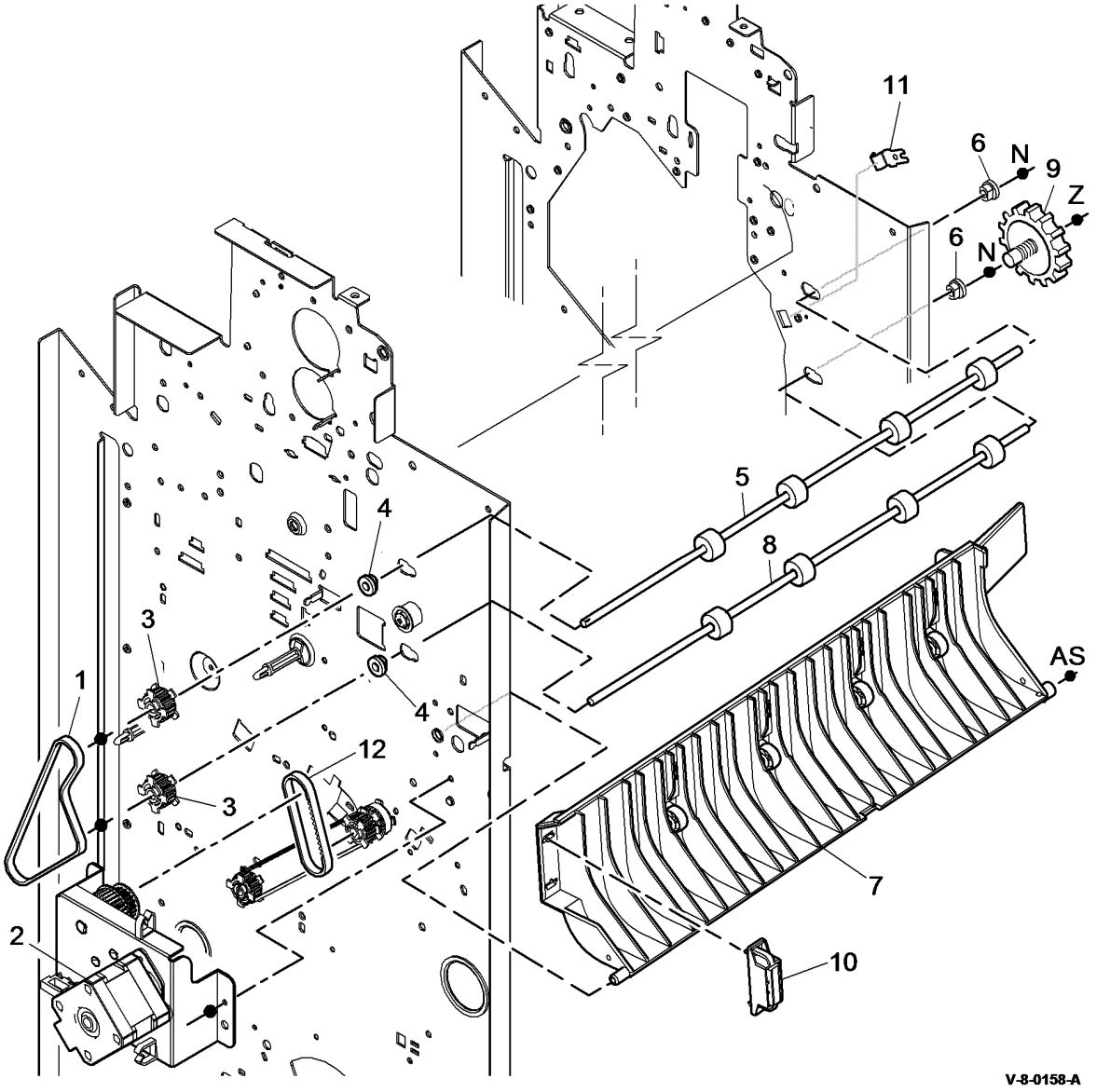
PL 11.60 LVF BM Bin 1 Control Components (2 of 2)

Item	Part	Description
1	110K13990	Bin 1 lower limit switch (S11-335) (REP 11.45-150)
2	–	Not used
3	130E10360	Bin 1 Upper level sensor (Q11-332), Bin 1 Lower level sensor (Q11-333) (REP 11.11-150)
4	–	Actuator (Not Spared)
5	–	Sensor support assembly (Not Spared)



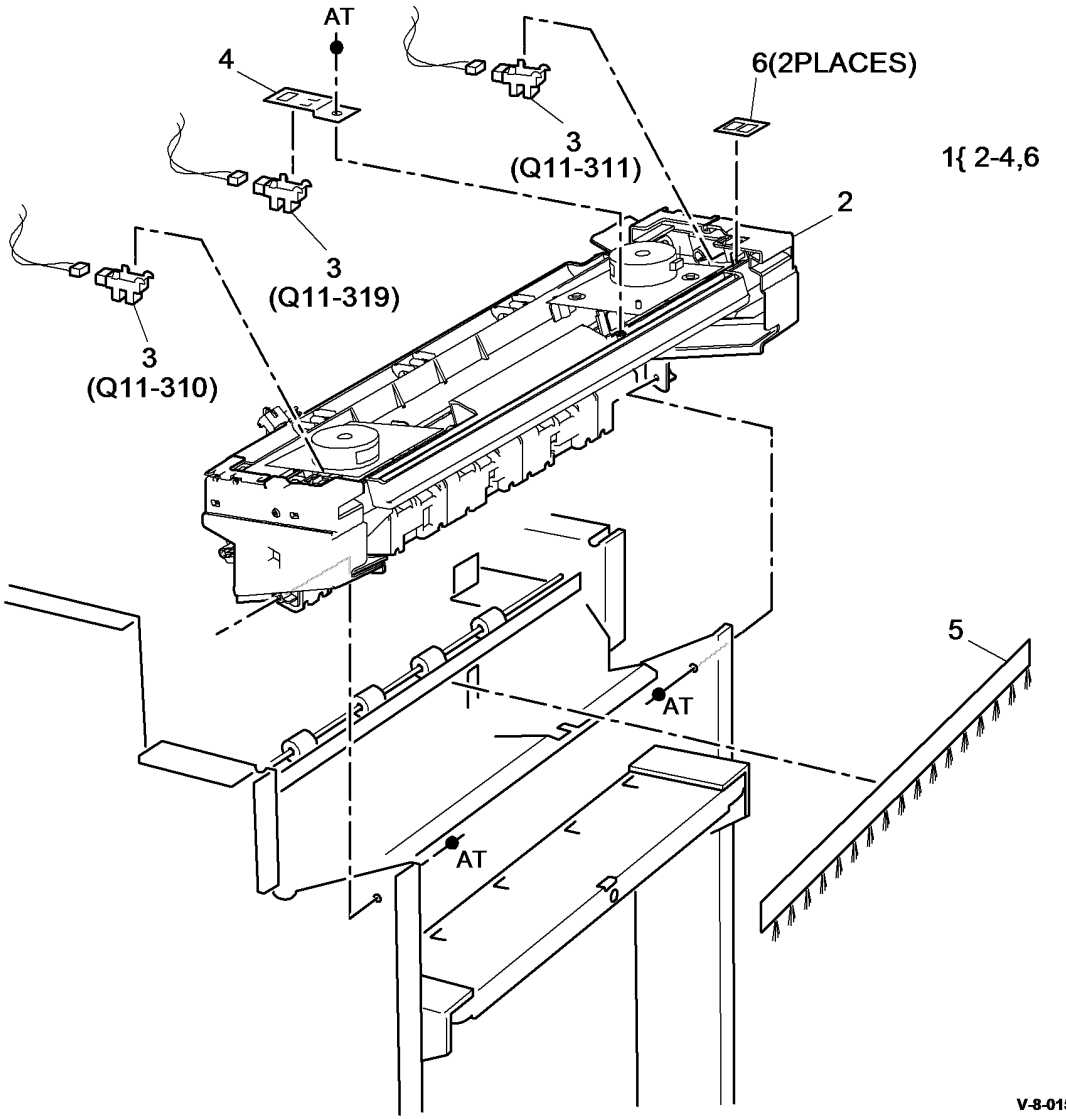
PL 11.62 LVF BM Paper Entry Transport

Item	Part	Description
1	023E24340	Input drive belt (REP 11.2-150)
2	927K01140	Transport motor 1 and gearbox assembly (MOT11-000) (REP 11.2-150)
3	–	Pulley (Not Spared)
4	013E25790	Nylon bearing
5	006K27980	Upper feed roll assembly
6	013E37460	Bearing
7	–	Paper entry guide assembly
8	006K31670	Lower feed roll assembly
9	–	Thumb wheel (Not Spared)
10	–	Magnet (P/O PL 11.62 Item 7)
11	–	Latch (Not Spared)
12	–	Compiler entrance drive belt 1 (REP 11.2-150)



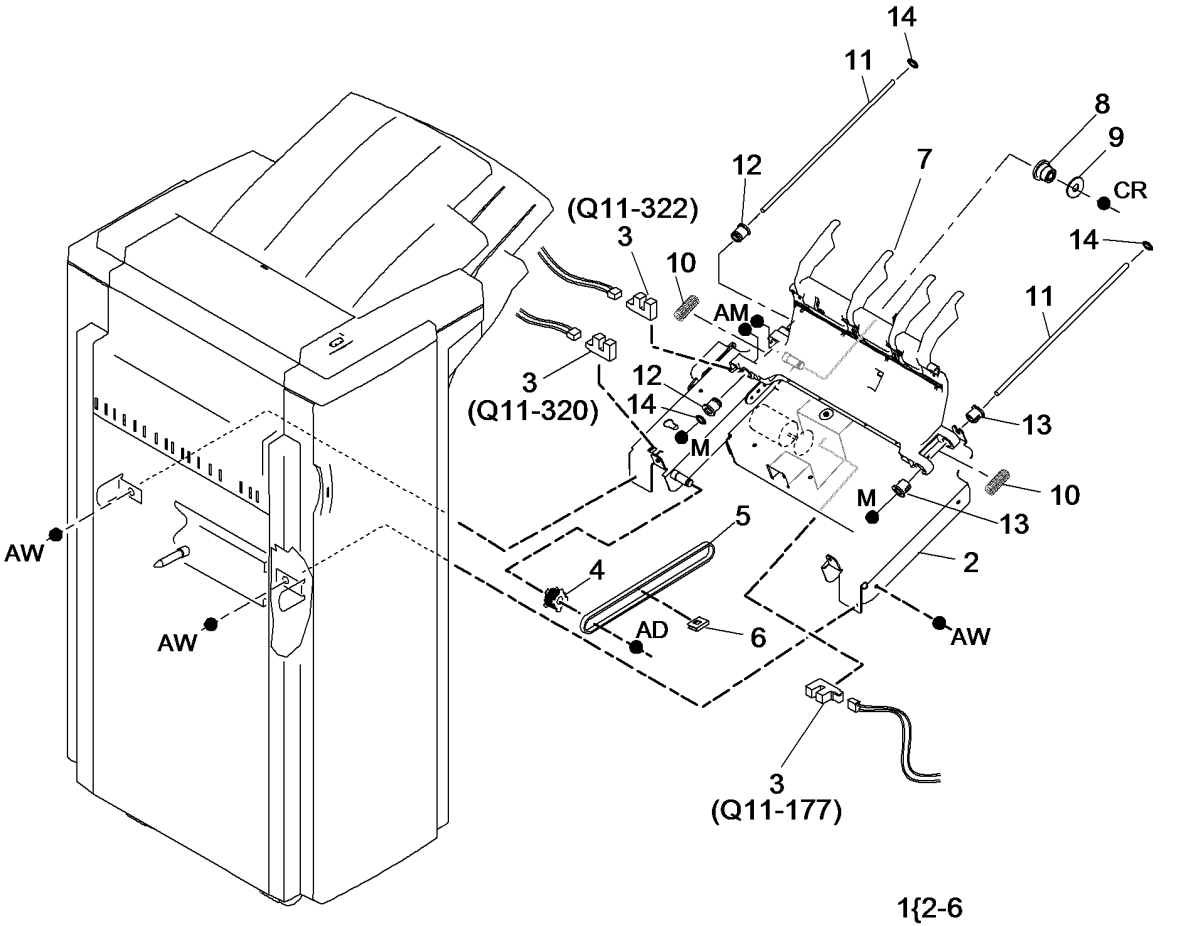
PL 11.64 LVF BM Tamper Assembly

Item	Part	Description
1	068K54281	Tamper assembly (REP 11.6-150)
2	–	Tamper unit (P/O PL 11.64 Item 1)
3	130E10360	Front tamper home sensor (Q11-310), Rear tamper home sensor (Q11-311), Rear tamper away sensor (Q11-319) (REP 11.6-150)
4	–	Sensor bracket (P/O PL 11.64 Item 1)
5	–	Static eliminator (stacker) (REF: PL 11.72 Item 7)
6	–	Sensor retainer (P/O PL 11.64 Item 1)



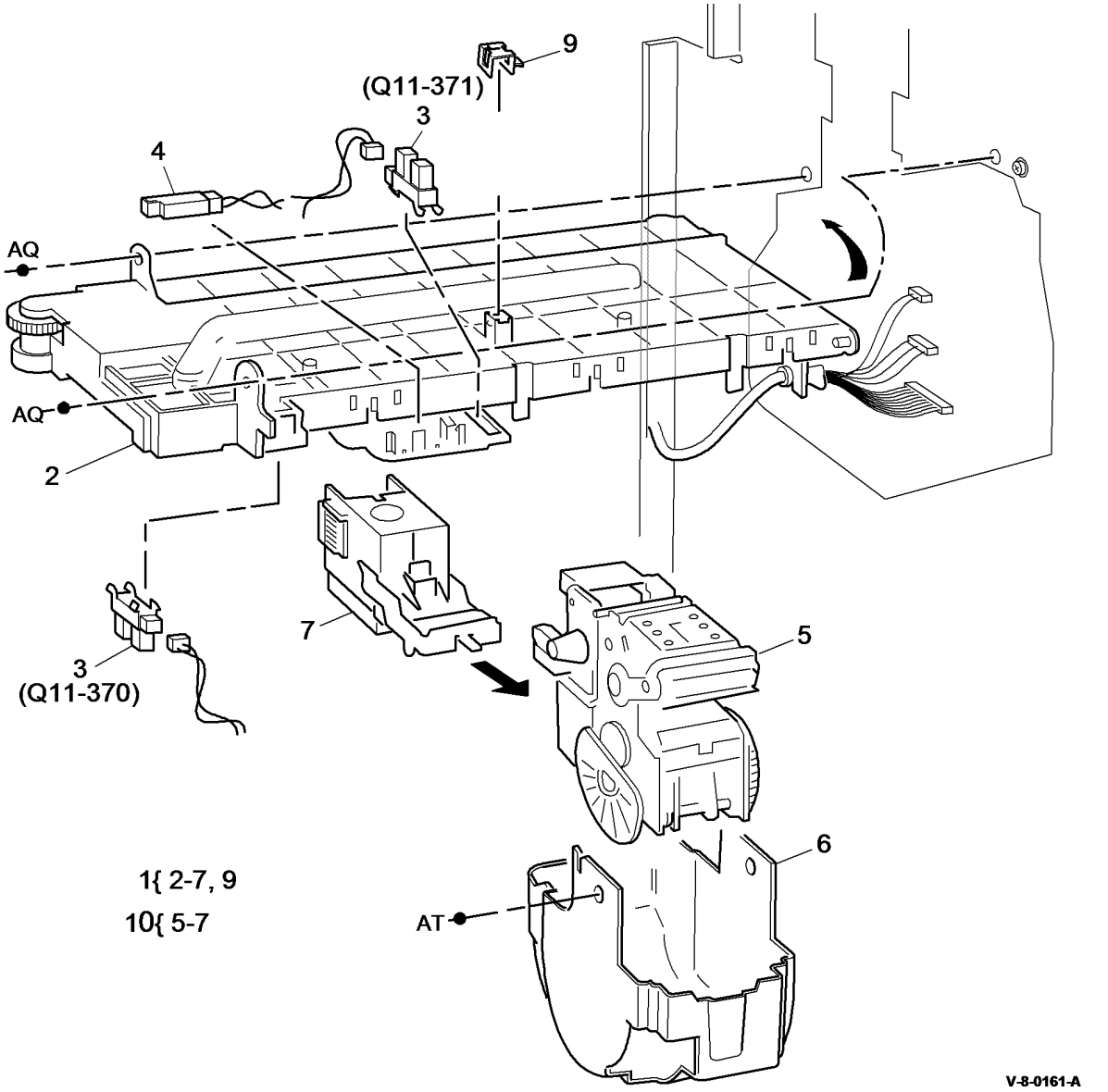
PL 11.66 LVF BM Ejector Assembly

Item	Part	Description
1	054K54273	Ejector assembly (REP 11.10-150)
2	–	Ejector base (P/O PL 11.66 Item 1)
3	130E10360	Ejector home sensor (Q11-320), Ejector out sensor (Q11-322), Ejector motor encoder sensor(Q11-177) (REP 11.10-150)
4	–	Pulley (Not Spared)
5	023E24330	Ejector belt (REP 11.17-150)
6	–	Clip (P/O PL 11.66 Item 1)
7	019K13390	Support finger (REP 11.10-150)
8	020K21490	Pulley drive gear
9	–	Washer (Not Spared)
10	–	Spring (P/O PL 11.66 Item 1)
11	–	Shaft (P/O PL 11.66 Item 1)
12	–	Slide ejector bearing (P/O PL 11.66 Item 15)
13	–	Wide slide ejector bearing (P/O PL 11.66 Item 15)
14	–	Cushion washer (P/O PL 11.66 Item 15)
15	604K67690	Bearing assembly kit



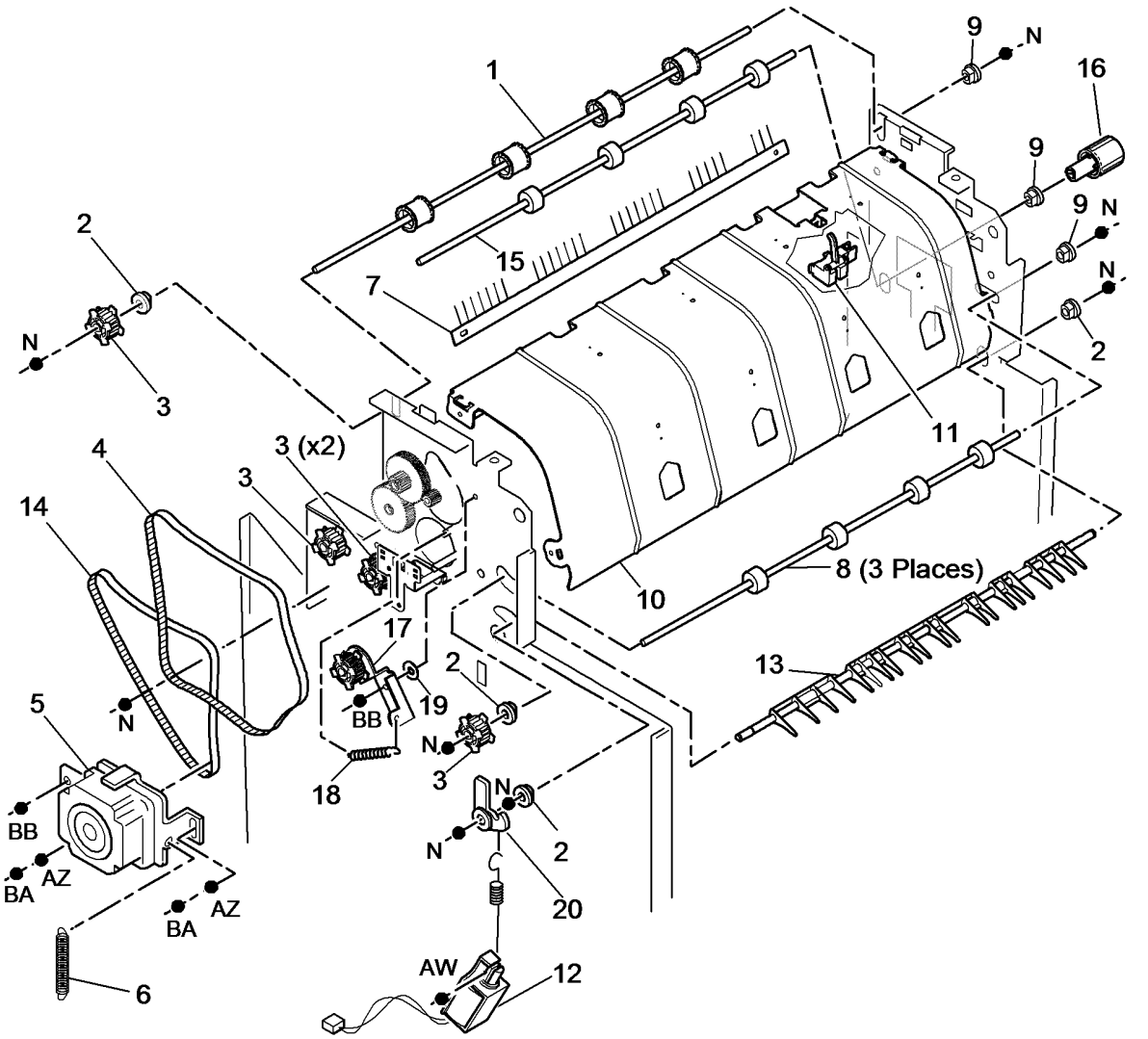
PL 11.68 LVF BM Staple Head Unit/ Traverse Assembly

Item	Part	Description
1	–	Stapler traverse assembly kit (REF: PL 31.12 Item 9) (REP 11.8-150)
2	–	Head traverse unit (P/O PL 11.68 Item 1)
3	130E10360	SU1 Home sensor (Q11-370), SU1 Front index sensor (Q11-371) (REP 11.8-150)
4	130E10380	SH1 Paper sensor (Q11-361) (REP 11.8-150)
5	029K04521	Staple head unit (REP 11.9-150)
6	–	Stapler cover (P/O PL 11.68 Item 1)
7	–	Staple cartridge (REF: PL 26.10 Item 11)
8	–	Not used
9	–	Sensor cover (P/O PL 11.68 Item 1)
10	–	Staple head assembly (P/O PL 11.68 Item 1)



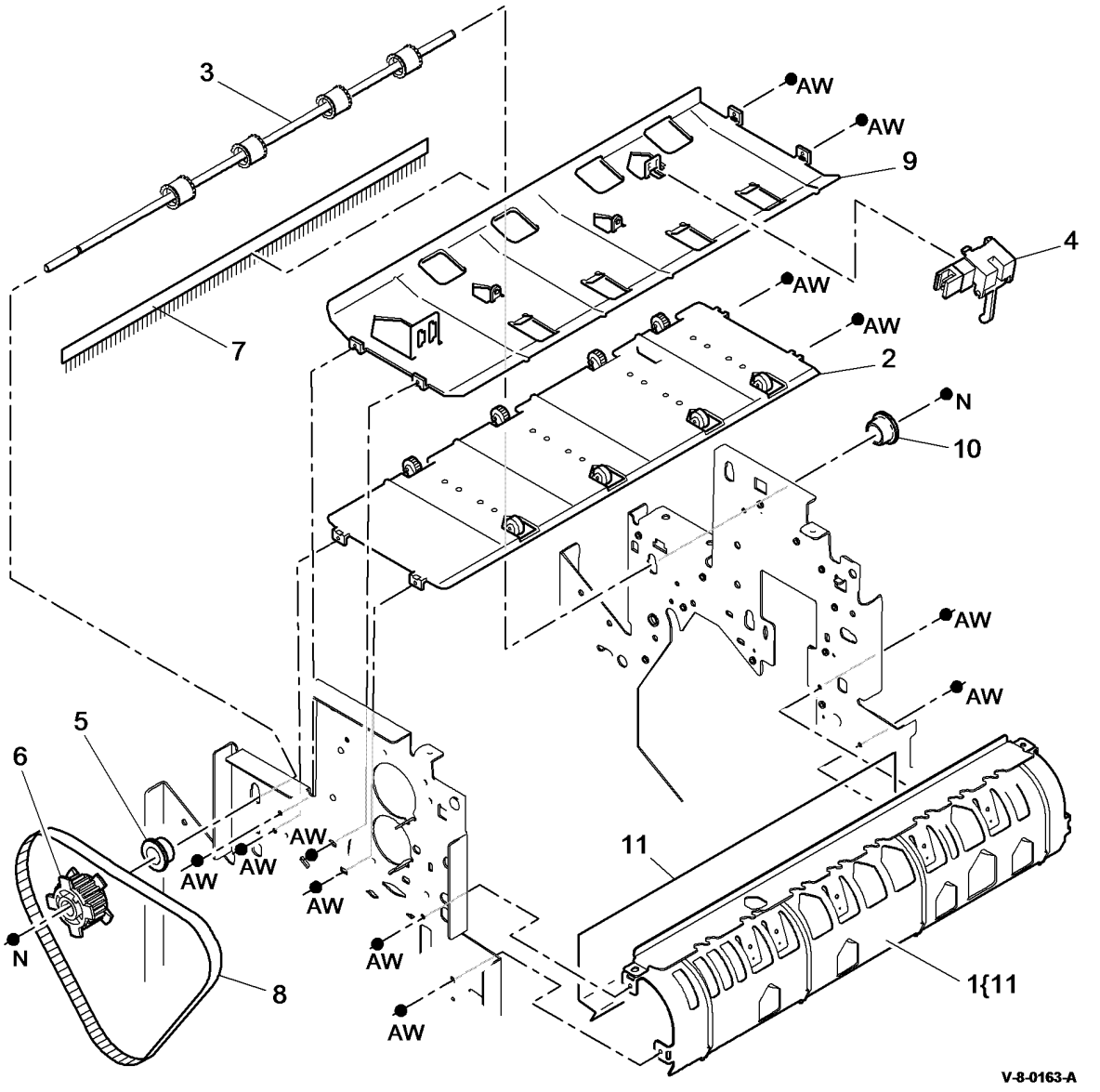
PL 11.70 LVF BM Bin 0 Entry

Item	Part	Description
1	006K27960	Top tray exit shaft
2	013E25790	Nylon bearing
3	–	Pulley (Not Spared)
4	023E24330	Intermediate paper drive belt (REP 11.3-150)
5	127K55870	Transport motor 2 (MOT11-001) (REP 11.4-150)
6	–	Spring (Not Spared)
7	115E12830	Static eliminator
8	006K27980	Feed roll shaft (short)
9	013E37460	Bearing
10	032K04580	Paper guide (REP 11.46-150)
11	130E11440	Top exit sensor (Q11-130) (REP 11.46-150)
12	121K45010	Bin 0/Bin 1 diverter solenoid (SOL11-002)
13	–	Bin 0/Bin 1 diverter assembly (P/O PL 31.13 Item 6)
14	023E24340	Paper output drive belt (REP 11.4-150)
15	006K27970	Drive shaft assembly
16	003K17531	Jam clearance knob
17	–	Belt tensioner (Not Spared) (ADJ 40.1)
18	–	Spring (Not Spared)
19	–	Washer (Not Spared)
20	–	Actuator (Not Spared)



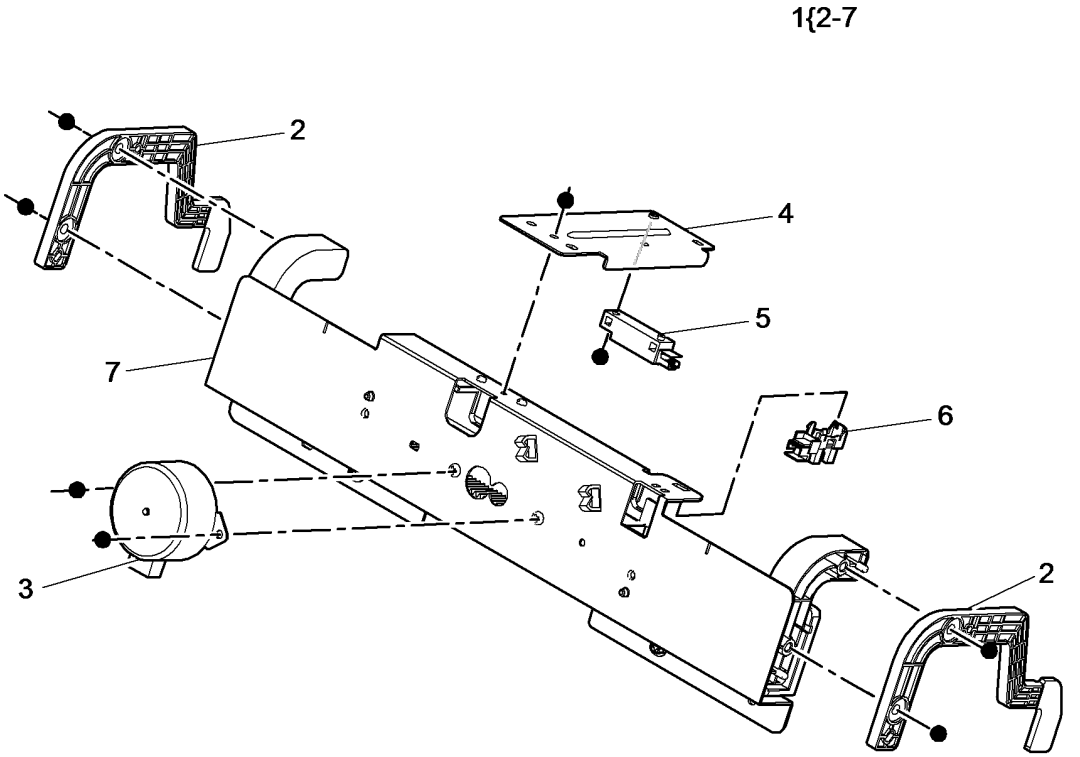
PL 11.72 LVF BM Bin 1 Entry

Item	Part	Description
1	032K04610	Left paper guide
2	032K04590	Lower right paper guide (REP 11.47-150)
3	–	Ejector drive shaft (Not Spared)
4	130E11440	2nd to top exit sensor (Q11-140)
5	013E25790	Nylon bearing
6	–	Pulley (Not Spared)
7	115E11810	Static eliminator (stacker)
8	–	Paper output drive belt (REF: PL 11.22 Item 14)
9	–	Upper right paper guide (Not Spared)
10	013E37460	Bearing
11	–	Mylar safety cover (P/O PL 11.72 Item 1)



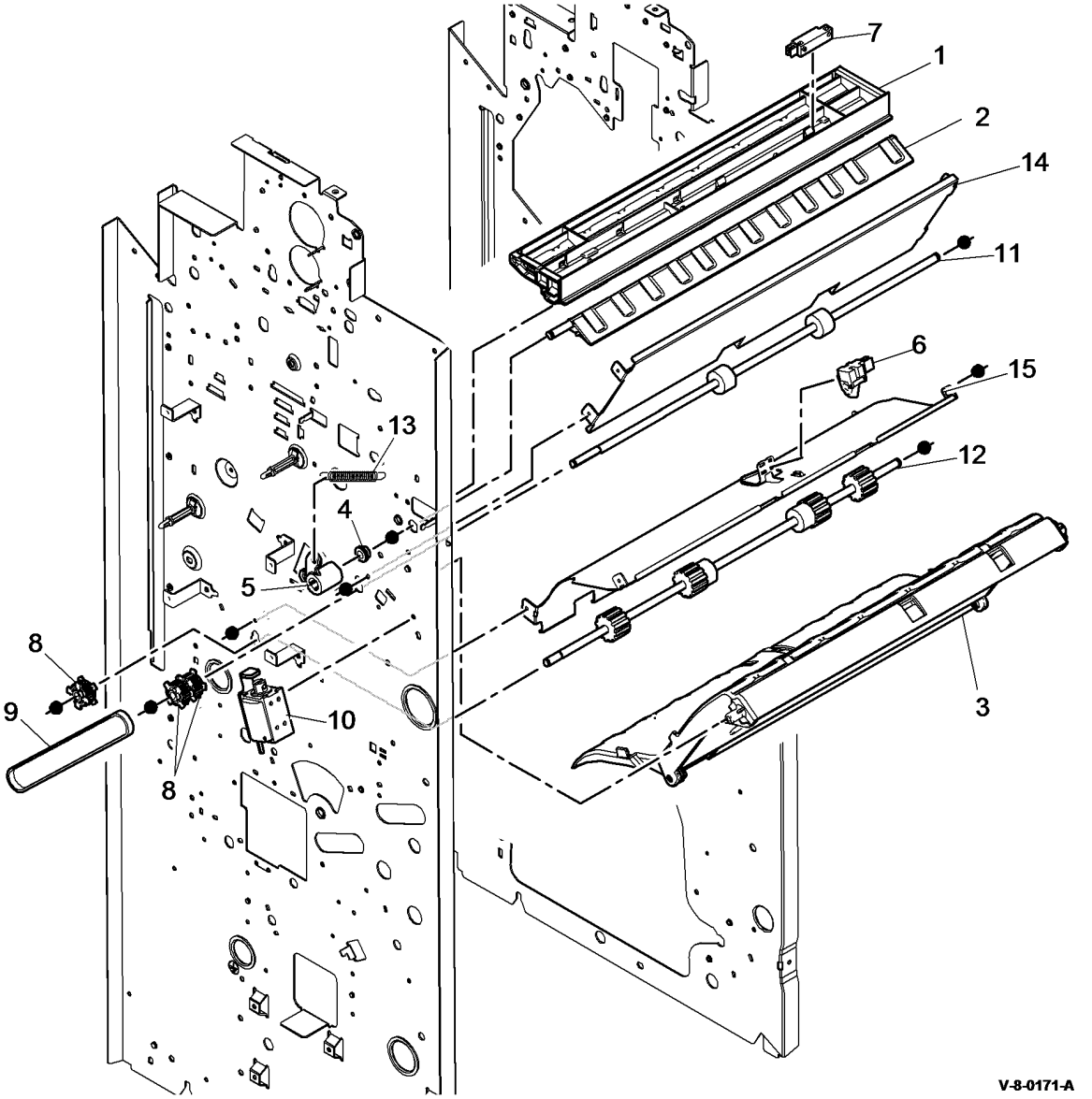
PL 11.74 LVF BM Booklet Tamper Assembly

Item	Part	Description
1	090K02590	Booklet tamper assembly (REP 11.38-150)
2	031E16740	Booklet tamper arm (REP 11.42-150)
3	127E17690	Booklet tamper motor (MOT11-066) (REP 11.41-150)
4	–	Sensor bracket (P/O item 1)
5	130E10380	Booklet staple paper detect sensor (Q11-444) (REP 11.43-150)
6	130E10360	Booklet tamper home sensor (Q11-384) (REP 11.40-150)
7	–	Booklet tamper frame (P/O item 1)



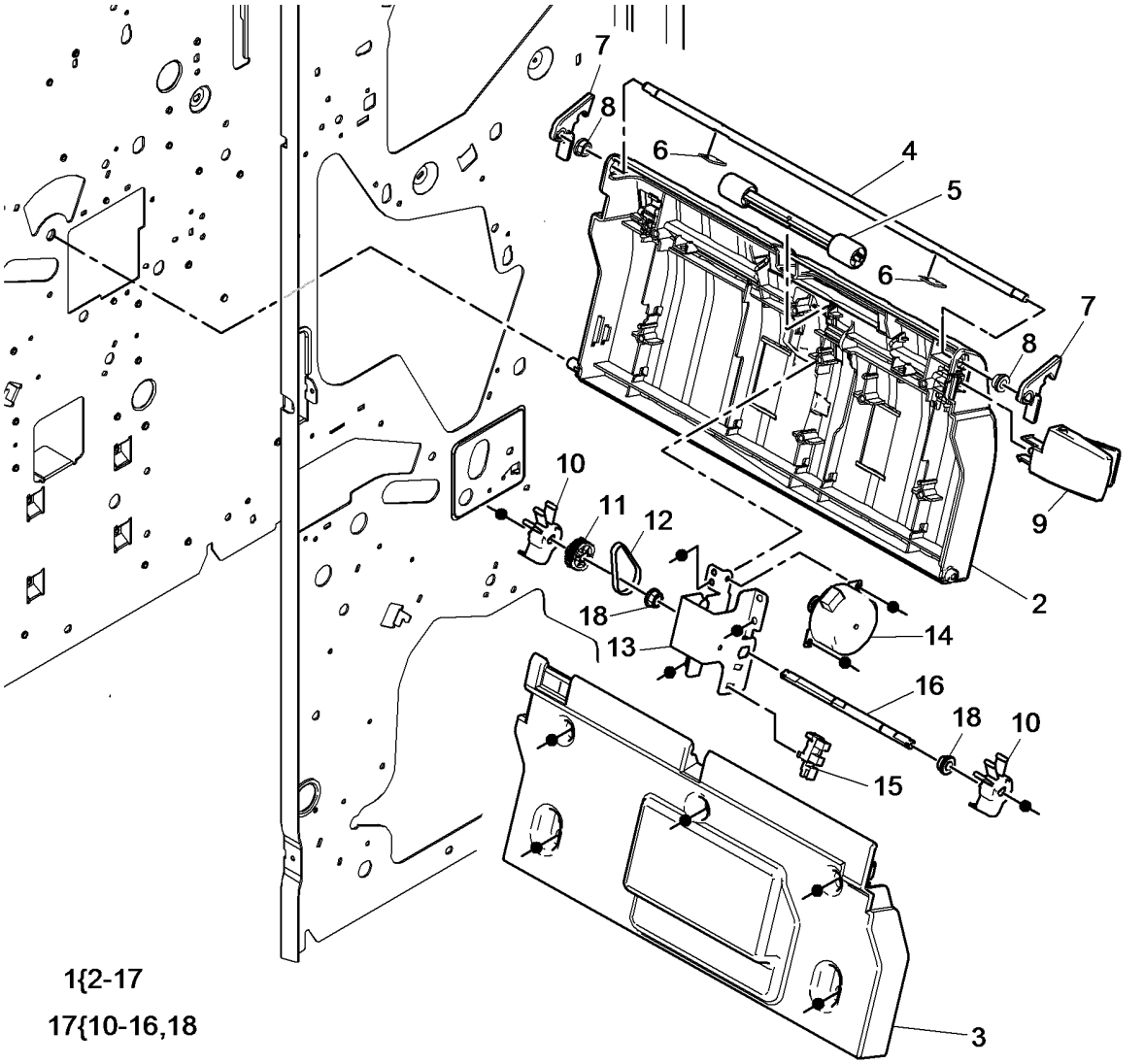
PL 11.75 LVF BM Compiler Entrance Guides

Item	Part	Description
1	–	BM upper entrance guide (REP 11.31-150)
2	050E29410	Booklet diverter gate (REP 11.33-150)
3	032K10350	BM entrance guide assembly (REP 11.32-150)
4	–	Bush (Not Spared)
5	–	Lever (Not Spared)
6	130E21610	BM Entry sensor (Q11-160) (REP 11.32-150)
7	130E10380	Finisher entry sensor (Q11-100) (REP 11.31-150)
8	–	Pulley (Not Spared)
9	–	Compiler entrance drive belt 2 (Not Spared) (REP 11.34-150)
10	121K45010	Booklet diverter gate solenoid (SOL11-074)
11	059K84790	1st feed roll assembly (REP 11.34-150)
12	059K84800	2nd feed roll assembly (REP 11.35-150)
13	–	Spring (Not Spared)
14	–	Upper guide (Not Spared)
15	–	Lower guide (Not Spared) (REP 11.32-150)



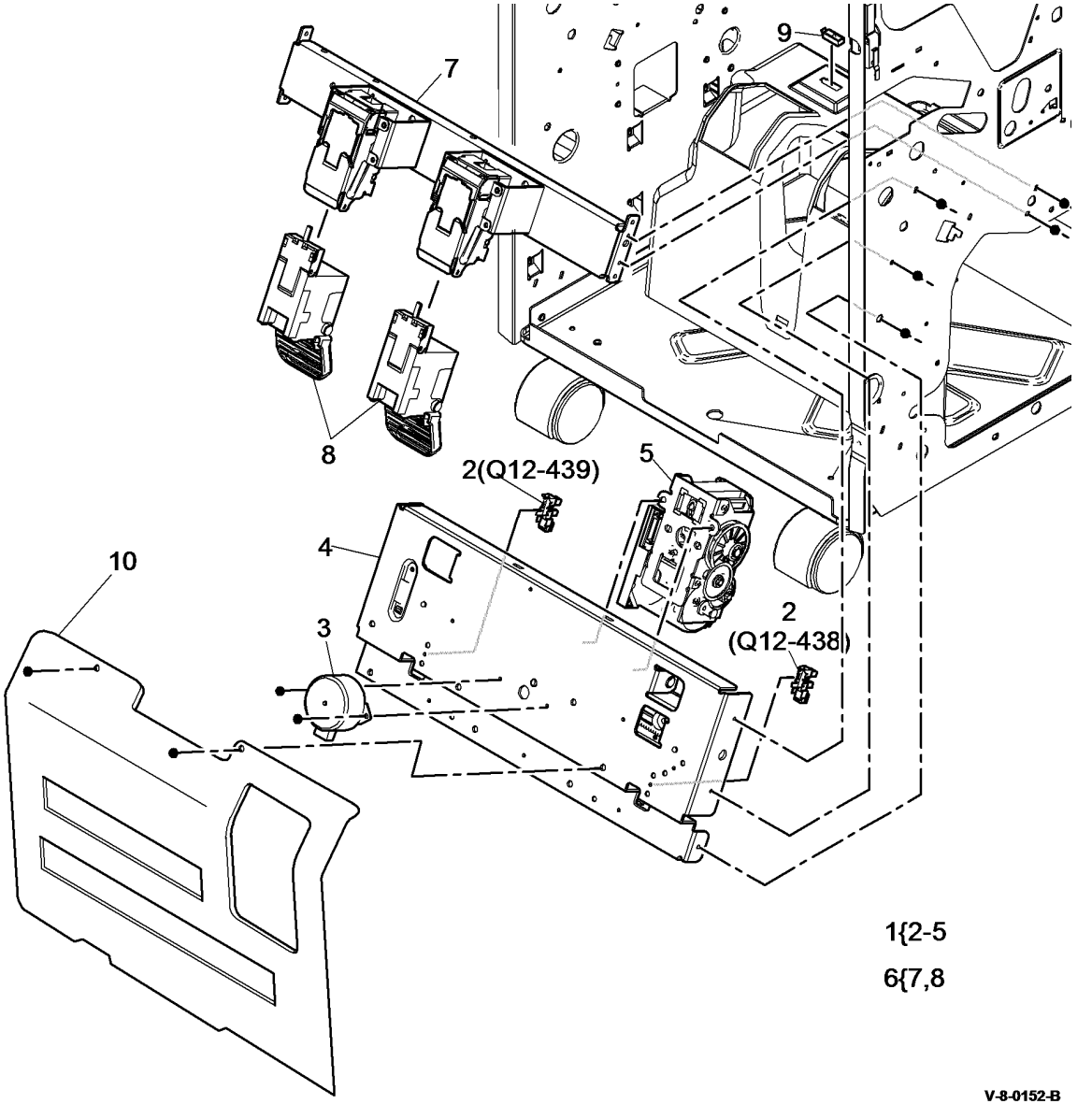
PL 11.76 LVF BM Compiler Guide Assembly

Item	Part	Description
1	055K45240	BM compiler guide assembly (REP 11.30-150)
2	–	Base (P/O PL 11.76 Item 1)
3	–	Cover (P/O PL 11.76 Item 1)
4	–	Shaft (P/O PL 11.76 Item 1)
5	–	Idler roll assembly (P/O PL 11.76 Item 1)
6	–	Static eliminator (P/O PL 11.76 Item 1)
7	–	Latch (P/O PL 11.76 Item 1)
8	–	Bearing (P/O PL 11.76 Item 1)
9	–	Handle (P/O PL 11.76 Item 1)
10	033K05270	BM compiler flapper (REP 11.30-150)
11	–	Pulley (P/O PL 11.76 Item 1)
12	–	Belt (P/O PL 11.76 Item 1)
13	–	Bracket (P/O PL 11.76 Item 1)
14	–	BM Flapper motor (MOT11-390) (P/O PL 11.76 Item 1)
15	130E10360	BM Flapper home sensor (Q11-391)
16	–	Drive shaft (P/O PL 11.76 Item 1)
17	055K44530	BM Flapper motor assembly (REP 11.30-150)
18	–	Bearing (P/O PL 11.76 Item 17)



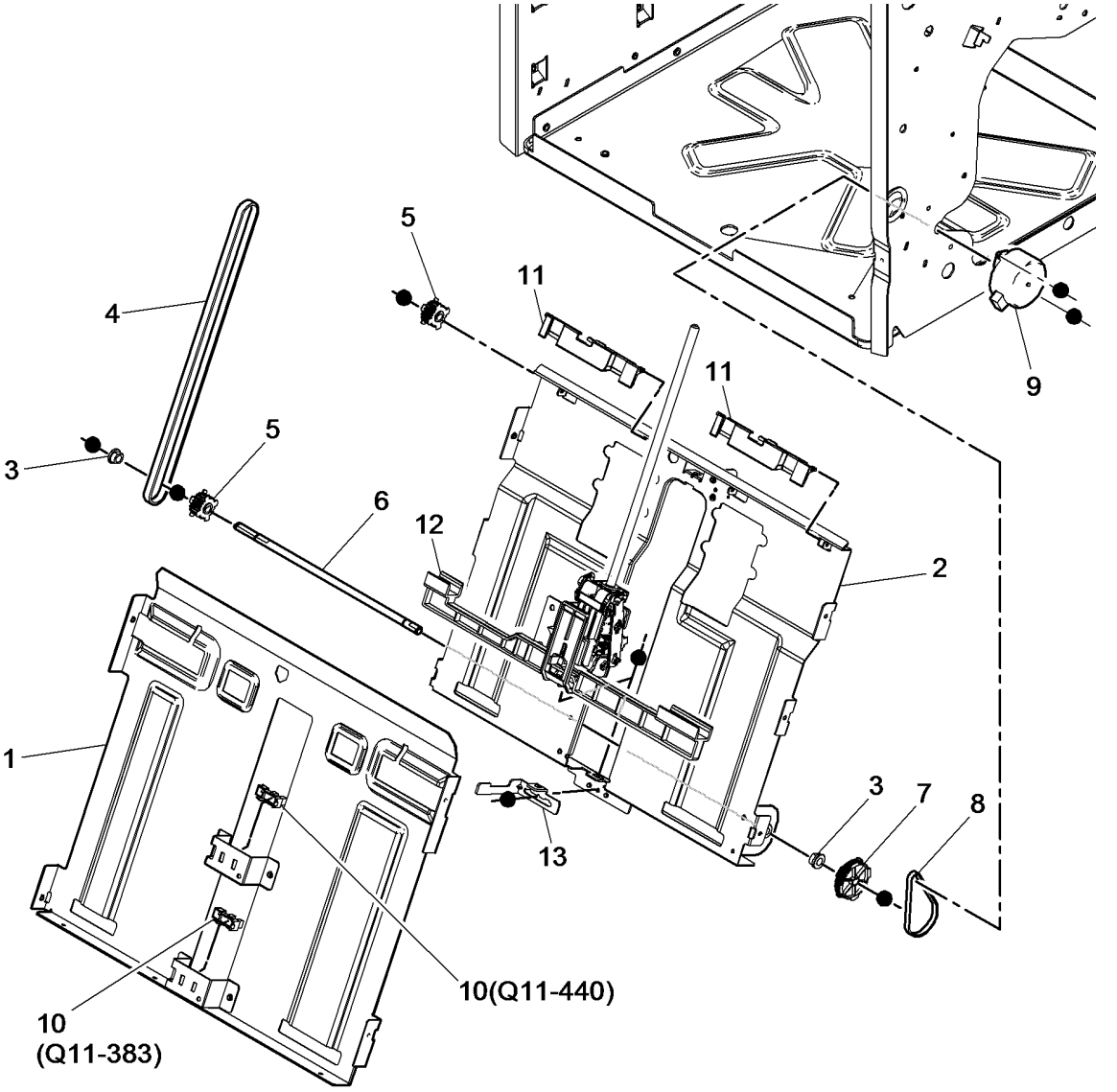
PL 11.78 LVF BM Booklet Stapler Assembly

Item	Part	Description
1	029K04812	BM stapler assembly (REP 11.38-150)
2	130E10360	Staple unit home sensor (Q11-438)/ Staple unit away sensor (Q11-439)(REP 11.48-150)
3	127E17680	BM staple unit move motor (MOT11-435)
4	–	BM stapler frame (P/O PL 11.78 Item 1)
5	077E00081	BM staple head assembly (REP 11.48-150)
6	029K04800	BM staple cartridge assembly (REP 11.37-150)
7	–	Bracket (P/O PL 11.78 Item 6)
8	029K04820	BM staple cartridge
9	107E35740	Staple cartridge LED (REP 11.39-150)
10	822E18810	LVF BM Back stop cover



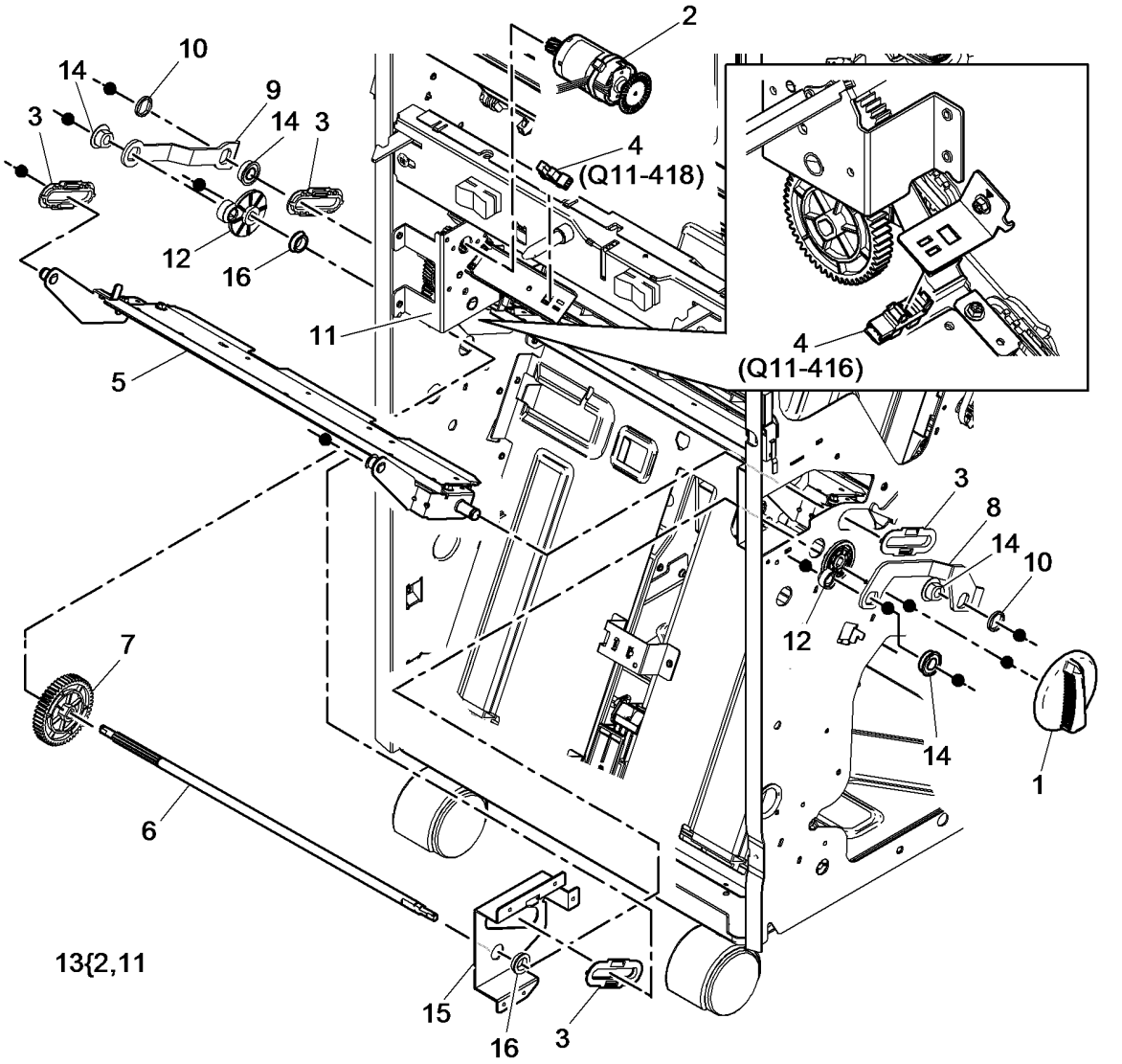
PL 11.80 LVF BM Back Stop Assembly

Item	Part	Description
1	–	Left guide (REP 11.19-150)
2	–	Right guide (REP 11.19-150)
3	–	Bearing (Not Spared)
4	–	Belt (Not Spared)
5	–	Pulley (Not Spared)
6	–	Shaft (Not Spared)
7	–	Drive pulley (Not Spared)
8	–	Drive Belt (Not Spared)
9	127K74620	Back stop motor (MOT11-065) (REP 11.18-150)
10	130E10360	BM guide home sensor (Q11-383)/ BM end-stop mid home sensor(Q11-440)(REP 11.20-150)
11	–	Stapler stop guide (Not Spared)
12	674K08890	Back stop assembly (REP 11.19-150)
13	–	Bracket (Not Spared)



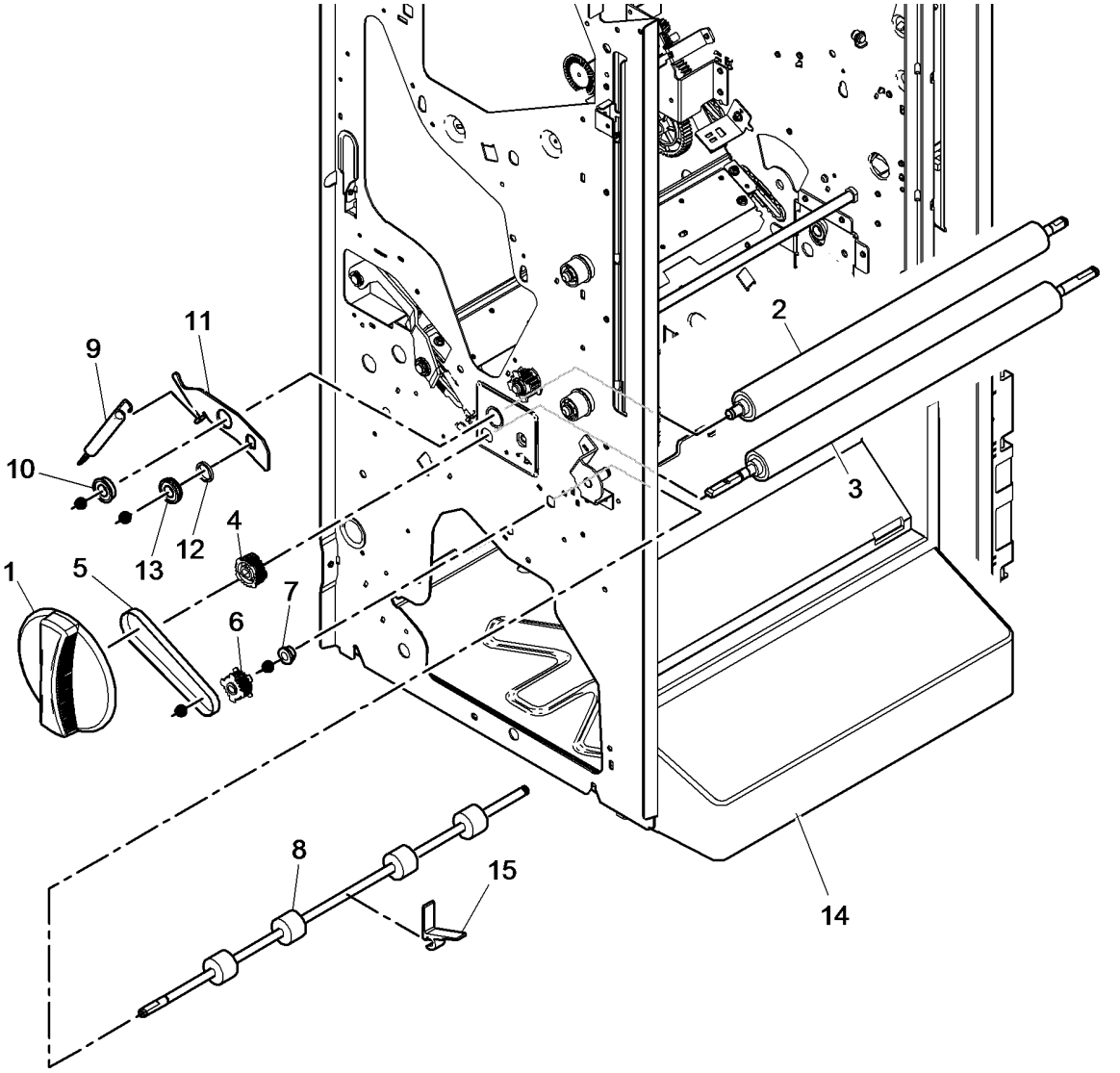
PL 11.82 LVF BM Crease Blade Assembly

Item	Part	Description
1	803E20900	Crease blade handle (REP 11.23-150)
2	127E17650	Crease blade motor (MOT11-061) (REP 11.21-150)
3	011E30810	Crease blade guide (REP 11.22-150)
4	130E10360	Crease blade home sensor (Q11-416)/Crease blade motor encoder sensor (Q11-418)(REP 11.21-150)
5	037K01490	Crease blade assembly (REP 11.22-150)
6	–	Crease blade shaft (Not Spared)
7	807E46760	Crease blade drive gear (REP 11.23-150)
8	–	Front blade arm (Not Spared)
9	–	Rear blade arm (Not Spared)
10	–	Spacer (Not Spared)
11	–	Crease blade gearbox assembly (P/O PL 11.82 Item 13) (REP 11.21-150)
12	008E08860	Blade crank (REP 11.23-150)
13	007K20511	Crease blade motor assembly (REP 11.21-150)
14	016E21260	Crease blade bearing (REP 11.23-150)
15	–	Bracket (Not Spared)
16	013E43930	Crease blade shaft bearing



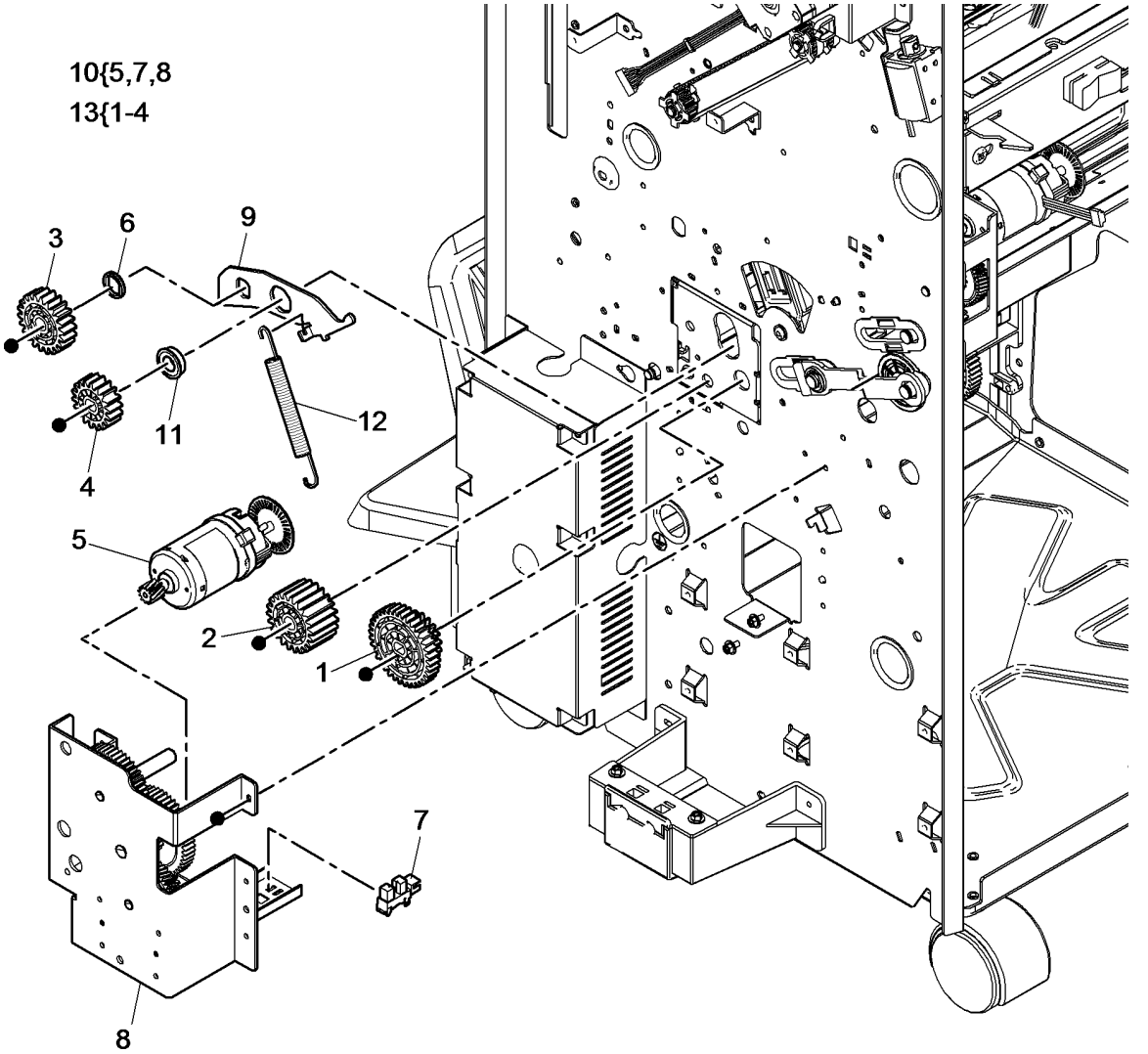
PL 11.84 LVF BM Crease Roll Assembly (1 of 3)

Item	Part	Description
1	803E20910	Crease roll handle (REP 11.24-150)
2	059E11860	Upper crease roll (REP 11.24-150)
3	059E11870	Lower crease roll (REP 11.24-150)
4	020E55510	Crease roll handle pulley (REP 11.24-150)
5	023E32470	Exit roll belt (REP 11.27-150)
6	020E55520	Exit roll pulley (REP 11.27-150)
7	016E21260	Bush (REP 11.27-150)
8	059K84780	BM exit roll assembly (REP 11.27-150)
9	899E07760	Crease roll spring (x2) (REP 11.24-150)
10	013E43940	Crease roll bearing (REP 11.24-150)
11	031E16710	Front crease roll lever (REP 11.24-150)
12	–	Spacer (Not Spared)
13	–	Bearing (Not Spared)
14	–	Bin 2 support (Not Spared) (REP 11.44-150)
15	–	Exit roll paddle (Not Spared) (REP 11.27-150)



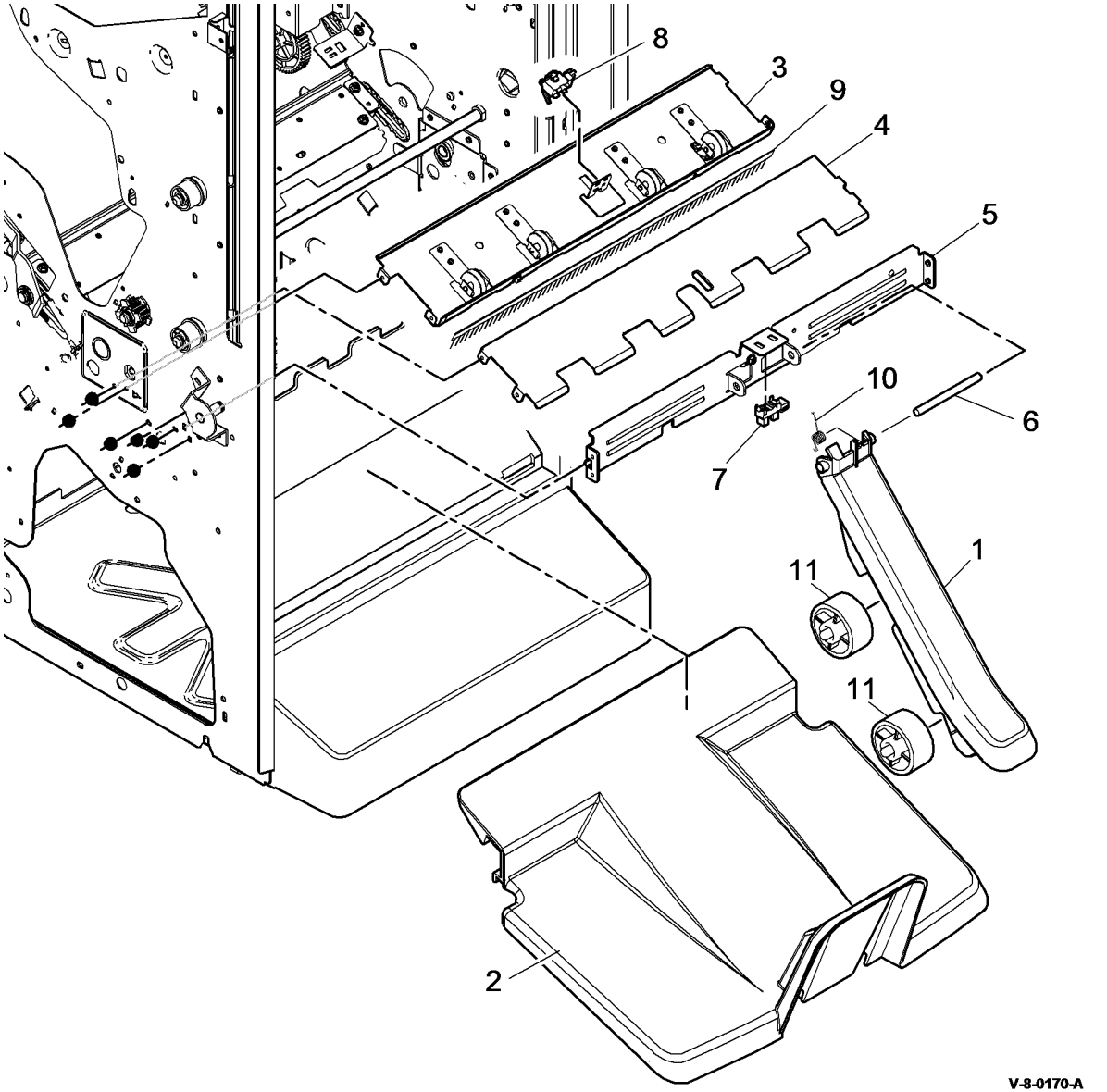
PL 11.86 LVF BM Crease Roll Assembly (2 of 3)

Item	Part	Description
1	–	Crease roll gear 1 (P/O item 13) (REP 11.26-150)
2	–	Crease roll gear 2 (P/O item 13) (REP 11.26-150)
3	–	Crease roll gear 3 (P/O item 13) (REP 11.26-150)
4	–	Crease roll gear 4 (P/O item 13) (REP 11.26-150)
5	127E17650	Crease roll motor (MOT11-062) (REP 11.25-150)
6	–	Spacer (Not Spared)
7	130E10360	Crease roll motor encoder sensor (Q11-419) (REP 11.25-150)
8	–	Crease roll gearbox assembly (P/O PL 11.86 Item 10)
9	031E16720	Rear crease roll lever (REP 11.24-150)
10	007K20520	Crease roll motor and gearbox assembly (REP 11.25-150)
11	013E43940	Crease roll bearing (REP 11.24-150)
12	899E07760	Crease roll spring (x2) (REP 11.24-150)
13	807E46770	Crease roll gear kit (REP 11.26-150)



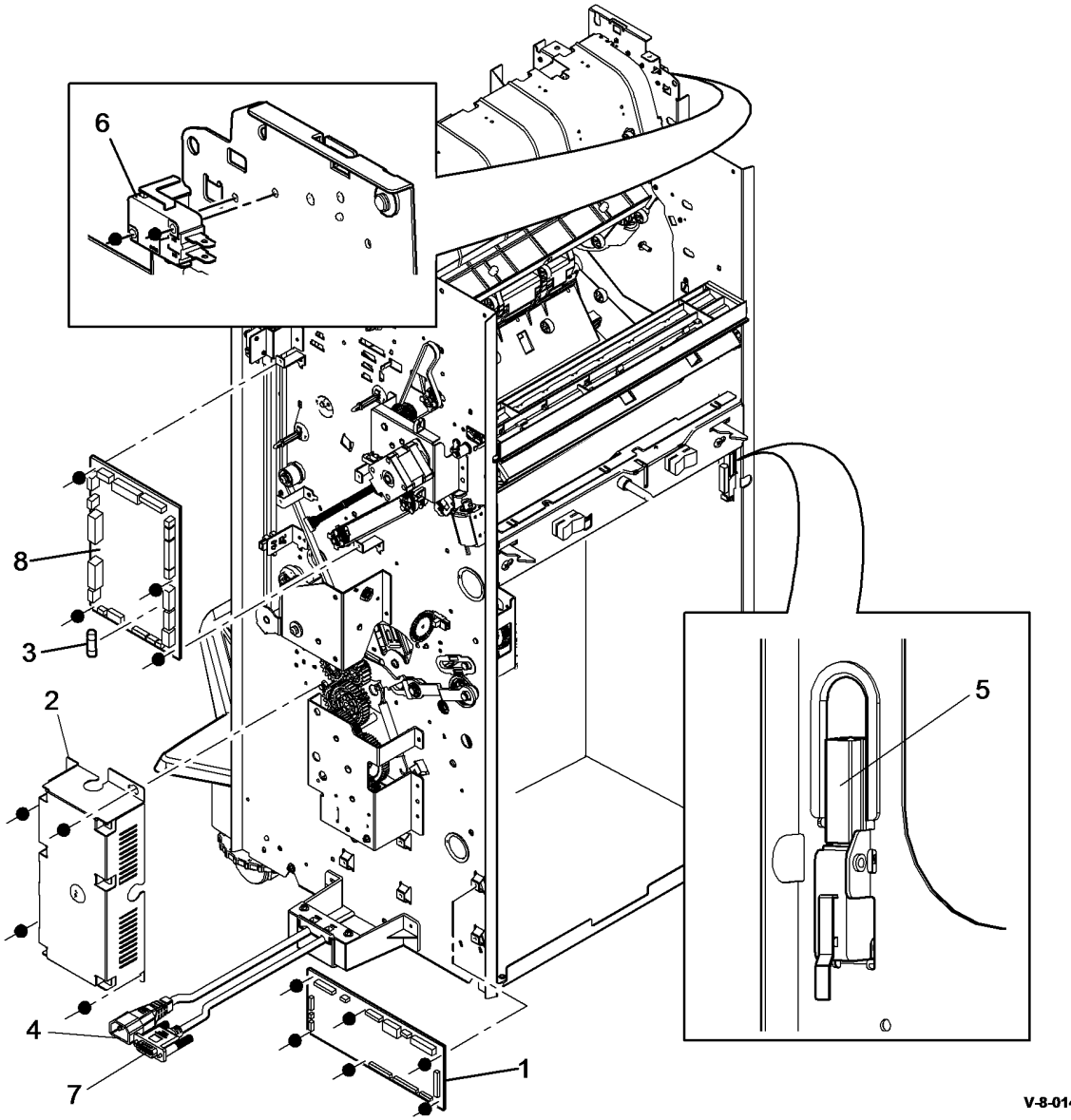
PL 11.88 LVF BM Crease Roll Assembly (3 of 3)

Item	Part	Description
1	031K09230	Bail arm assembly (REP 11.29-150)
2	050E29400	Bin 2
3	032K10330	Exit upper guide assembly (REP 11.28-150)
4	–	Exit lower guide (Not Spared)
5	–	Bail arm support bracket (P/O PL 11.88 Item 1)
6	–	Bail arm pin (P/O PL 11.88 Item 1)
7	130E10360	Bin 2 90% full sensor (Q11-389) (REP 11.29-150)
8	868E93710	BM exit sensor (Q11-409) (REP 11.28-150)
9	–	Static eliminator (P/O PL 11.88 Item 3)
10	899E07770	Bail arm spring (REP 11.29-150)
11	059E11880	Bail arm roller (x2) (REP 11.29-150)



PL 11.90 LVF BM Electrical

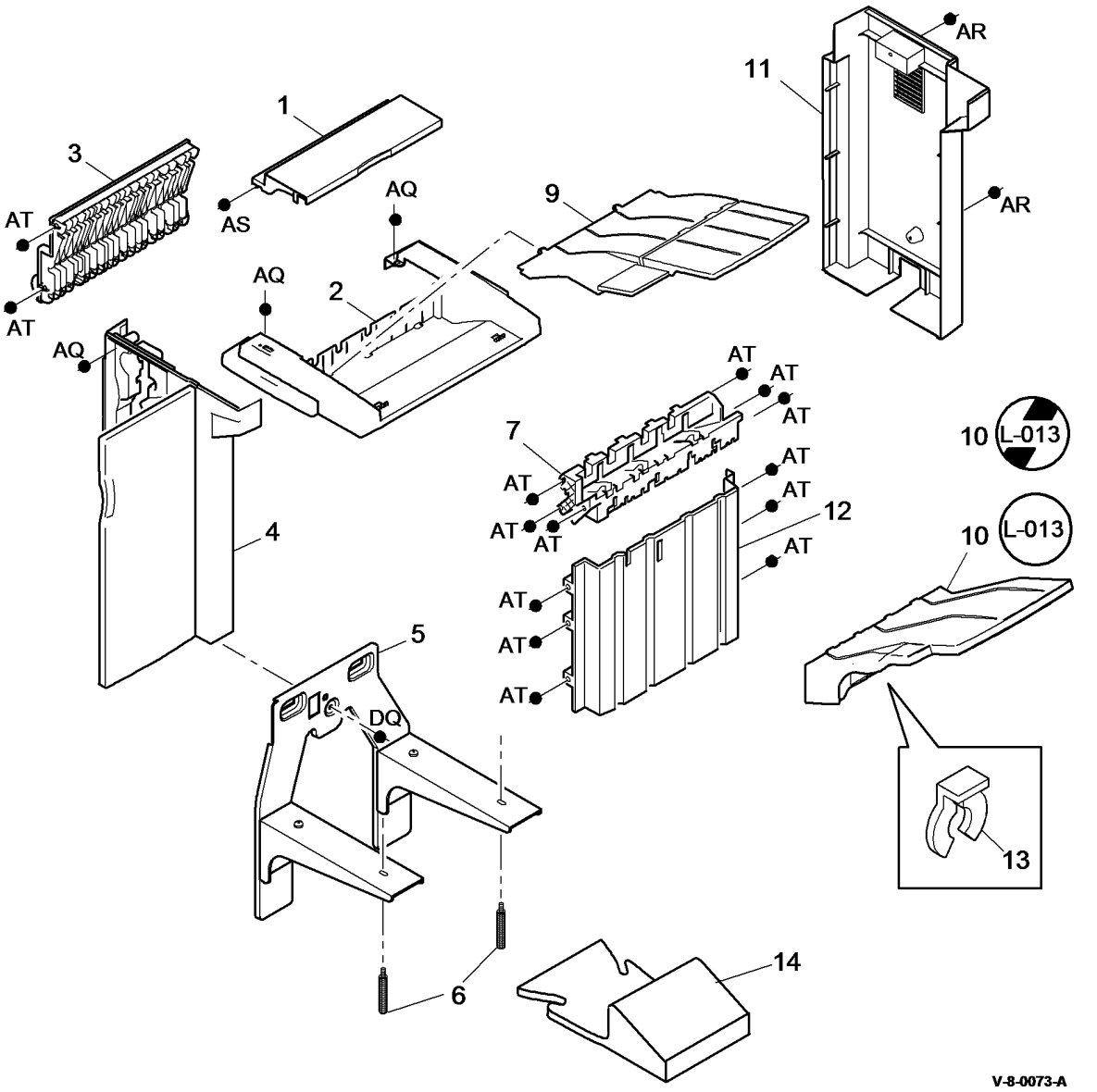
Item	Part	Description
1	960K73660	LVF BM PWB (REP 11.36-150)
2	105E24900	Power supply module
3	–	Fuse (Not Spared)
4	–	Power cable (Not Spared)
5	110K13980	Front door interlock switch (S11-303)
6	110K13970	Top cover interlock switch (S11-302)
7	–	Communications cable (Not Spared)
8	960K73670	LVF PWB (REP 11.14-150)



PL 11.100 1K LCSS Covers

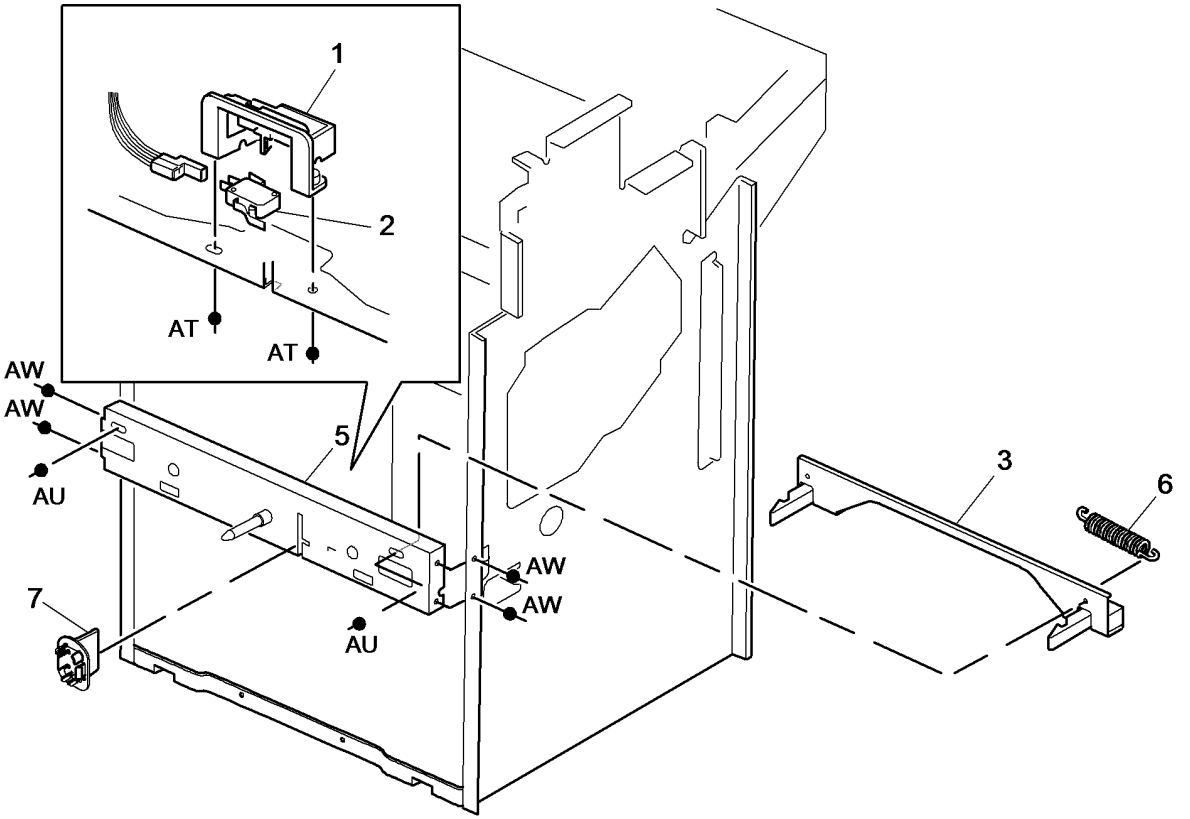
Item	Part	Description
1	802K48330	Exit cover
2	848K06150	Top cover (REP 11.1-120)
3	–	Entry guide cover (REF: PL 11.122 Item 5)
4	848K06130	Front door cover assembly (REP 11.1-120)
5	–	1K LCSS mounting bracket repair kit
6	–	Thumbscrew (Not Spared)
7	–	Output cover (Not Spared)
8	–	Not used
9	050K67380	Bin 0
10	050K68490	Bin 1 (W/O TAG L-013) (ADJ 11.1-120)
–	–	Bin 1 tray kit (improved stacking) (REF: PL 31.11 Item 18) (W/TAG L-013)
11	848K06140	Rear cover (REP 11.1-120)
12	–	Right cover (Not Spared)
13	019K13380	Bin 1 alignment clip
14	017E11260	Stability foot (REP 11.3-120)

NOTE: *W/TAG L-013 improves stacking on machines running large stacks of 8.5" x 11" or A4 LEF.*



PL 11.102 1K LCSS Docking Latch

Item	Part	Description
1	–	Sensor cover (P/O PL 11.102 Item 8)
2	110K13980	Docking interlock switch (S11-300) (REP 11.14-120)
3	003K20401	Link bracket assembly (REP 11.14-120)
4	–	Not used
5	–	Docking latch (P/O PL 11.102 Item 8) (REP 11.14-120)
6	–	Spring (P/O PL 11.102 Item 8)
7	120K02591	Docking actuator
8	003K20391	Docking latch assembly (REP 11.14-120)



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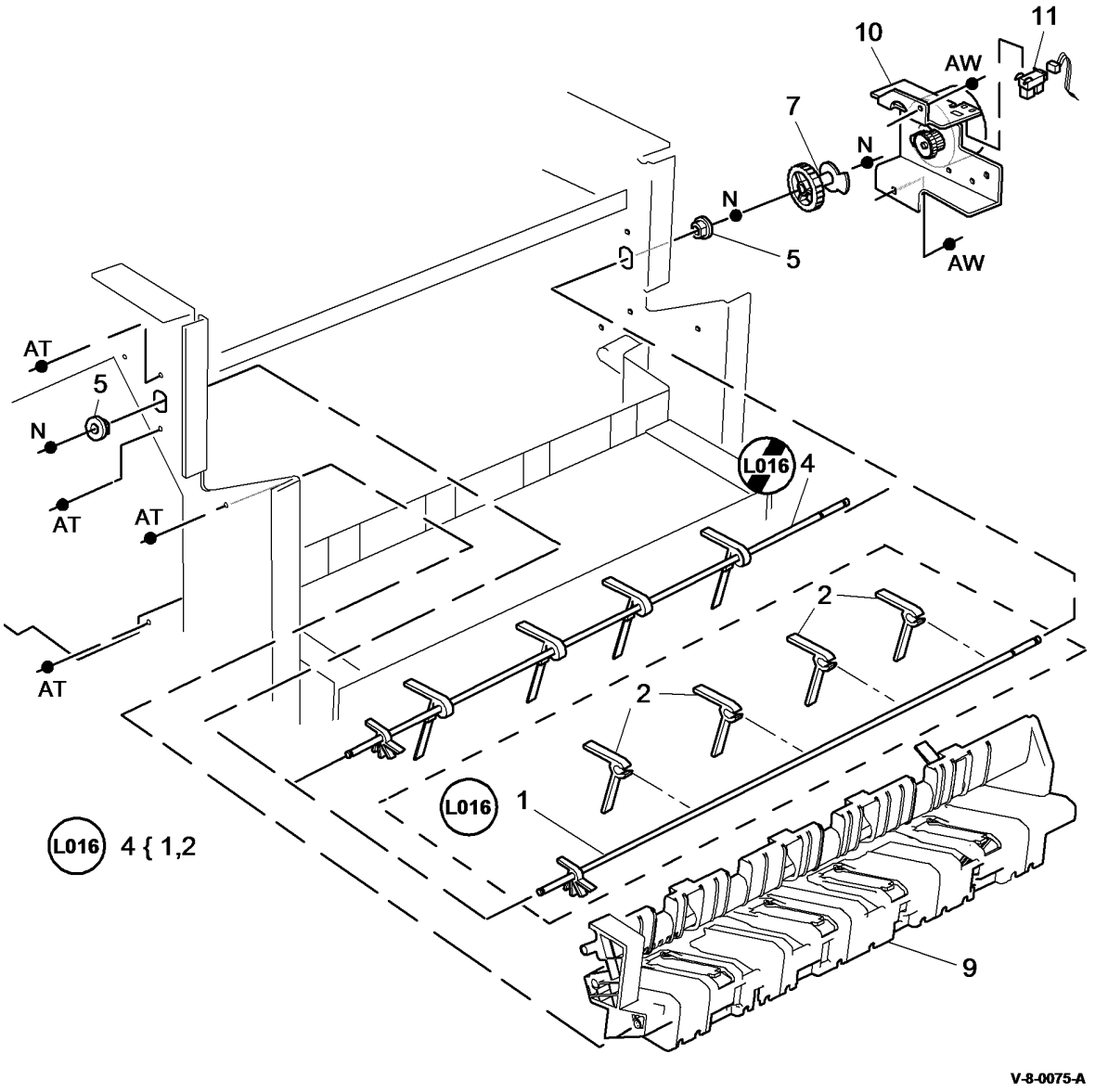
PL 11.104 1K LCSS Paddle Wheel/ Safety Gate

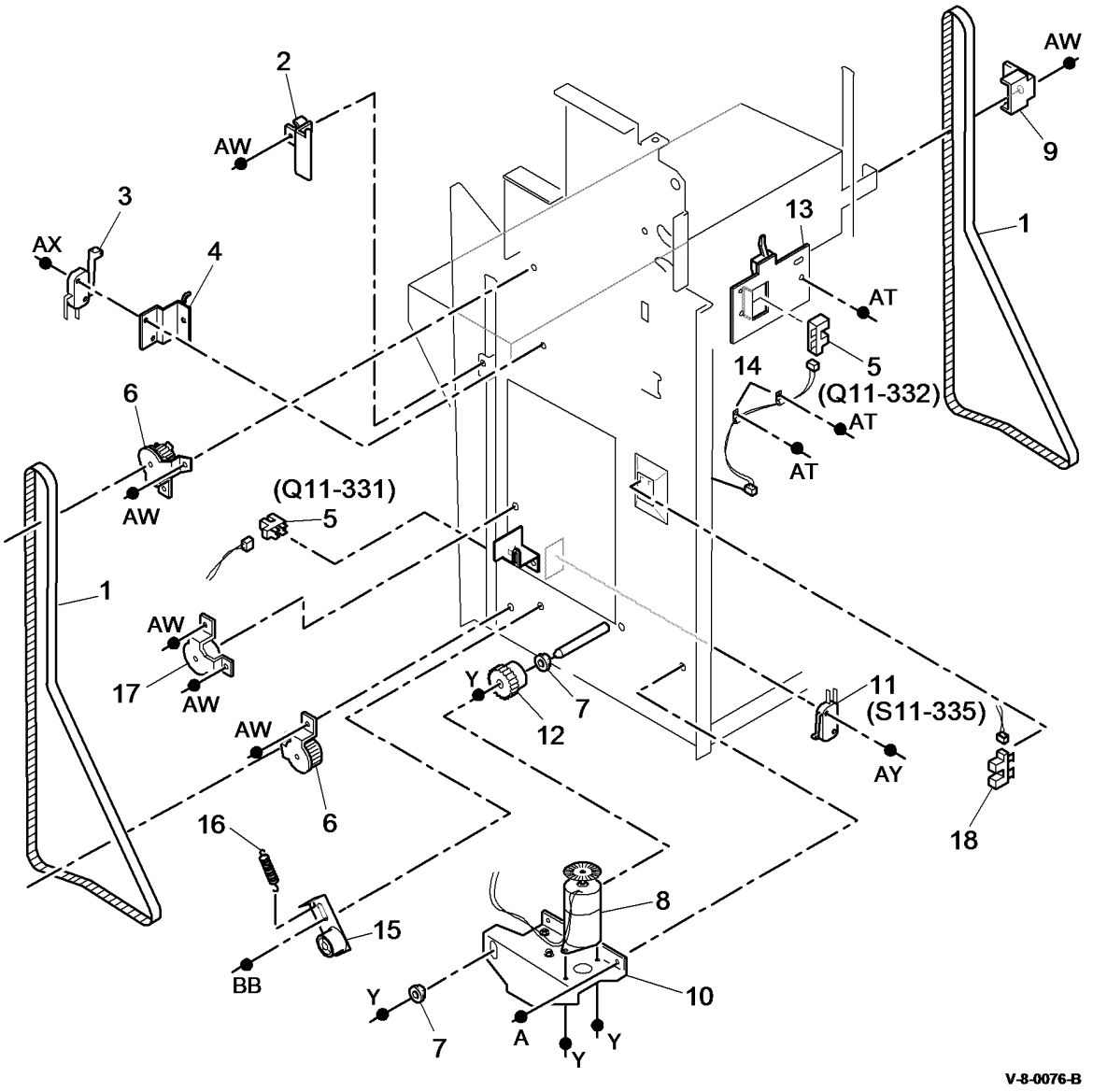
Item	Part	Description
1	–	Shaft (P/O PL 11.104 Item 4) (W/ TAG L-016)
2	–	Paddle wheel (P/O PL 31.12 Item 11) (NOTE) (W/TAG L-016)
3	–	Not used
4	–	Paddle wheel shaft assembly (Not spared) (W/O TAG L-016) (REP 11.10-120)
–	006K34580	Paddle wheel shaft assembly (W/ TAG L-016)
5	013E25790	Bearing
6	–	Not used
7	–	Flag/Gear (Not Spared)
8	–	Not used
9	–	Output cover (REF: PL 11.100 Item 7)
10	127K55840	Paddle motor assembly (MOT11-024)
11	130E10360	Paddle roll home sensor (Q11-326)

NOTE: *Paddles are also supplied (4 off) as a kit PL 31.12 Item 11.*



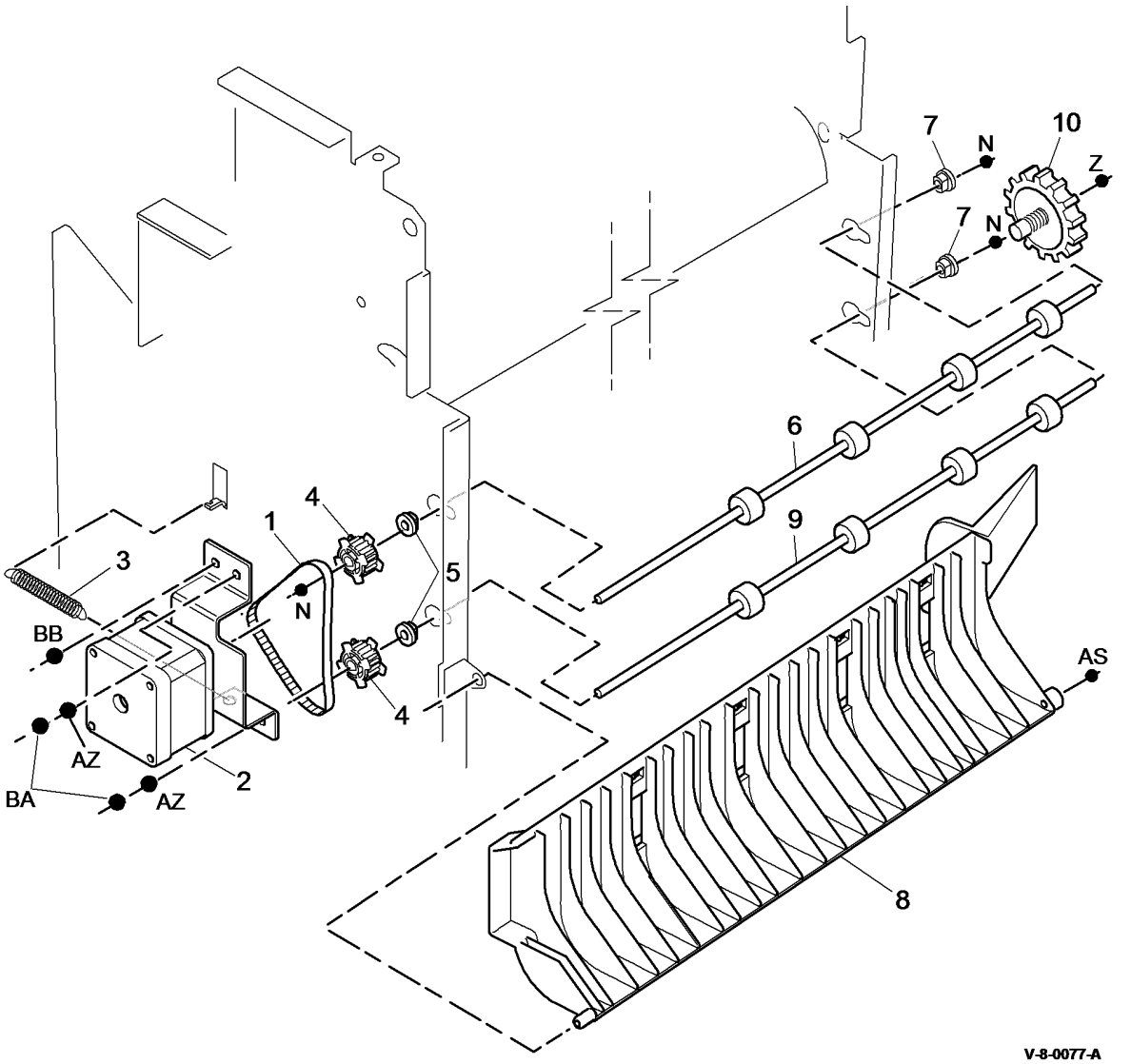
PL 11.106 1K LCSS Bin 1 Control Components

Item	Part	Description
1	023E30710	Bin 1 drive belt (REP 11.5-120)
2	–	Rear belt clamp (Not Spared) (ADJ 11.1-120)
3	110E20180	Bin 1 upper limit switch (S11-334)
4	–	Sensor bracket (Not Spared)
5	130E10360	Bin 1 90% full sensor (Q11-331), Bin 1 upper level sensor (Q11-332) (REP 11.9-120)
6	–	Pulley (Not Spared)
7	013E37470	Bearing
8	127K55891	Bin 1 elevator motor (MOT11-030)
9	–	Front belt clamp (Not Spared) (ADJ 11.1-120)
10	–	Motor bracket (Not Spared)
11	110K13990	Bin 1 lower limit switch (S11-335)
12	–	Pulley assembly (Not Spared)
13	–	Sensor support (Not Spared)
14	–	P-clamp (Not Spared)
15	–	Belt tensioner (Not Spared)
16	–	Spring (Not Spared)
17	–	Idler (Not Spared)
18	130E20380	Bin 1 motor encoder sensor (Q11-336)



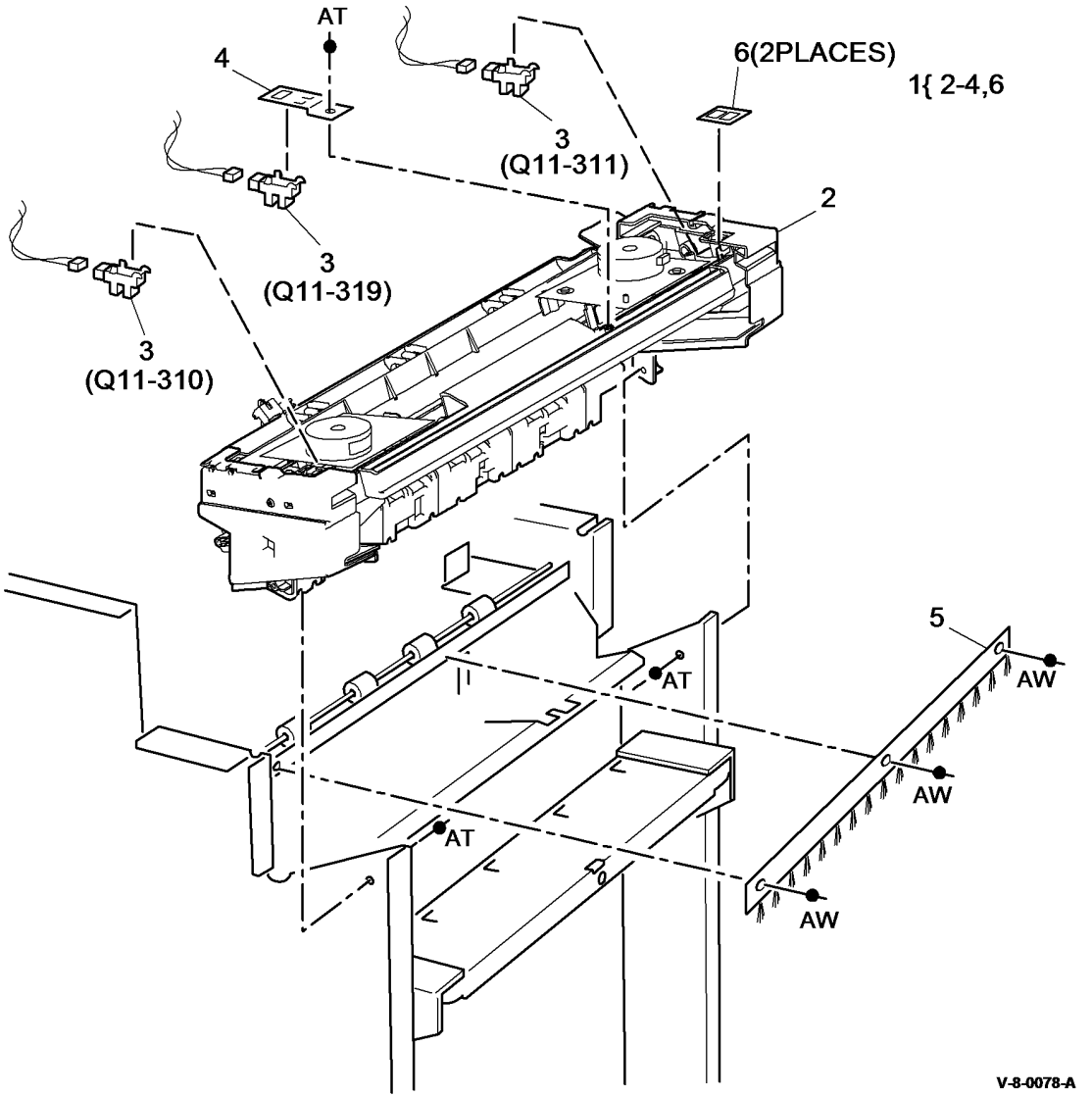
PL 11.110 1K LCSS Paper Entry Transport

Item	Part	Description
1	023E30690	Input drive belt (REP 11.2-120)
2	127K55820	Transport motor 1 (MOT11-000) (REP 11.2-120)
3	–	Spring (Not Spared)
4	–	Pulley (Not Spared)
5	013E25790	Nylon bearing
6	006K27980	Feed roll shaft (short)
7	013E37460	Bearing
8	–	Jam clearance guide (REF: PL 11.122 Item 1)
9	006K31670	Feed roll shaft (long)
10	–	Thumb wheel (Not Spared)



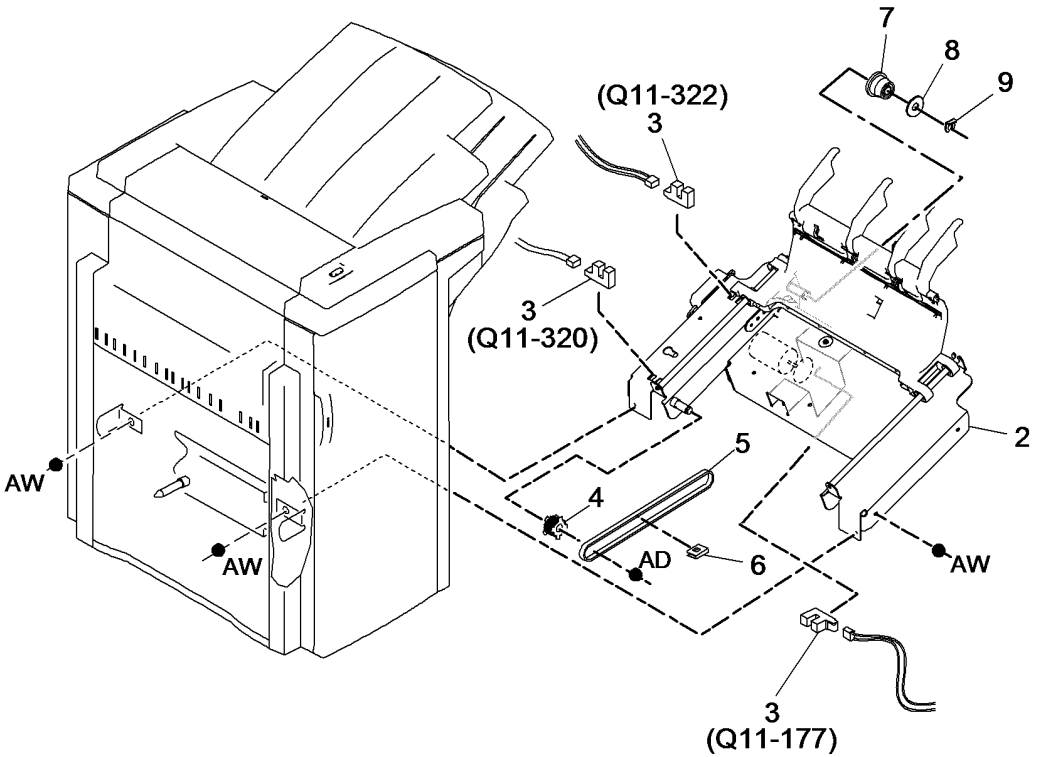
PL 11.112 1K LCSS Tamper Assembly

Item	Part	Description
1	068K54281	Tamper assembly (REP 11.6-120)
2	–	Tamper unit (P/O PL 11.112 Item 1)
3	130E10360	Front tamper home sensor (Q11-310), Rear tamper home sensor (Q11-311), Rear tamper away sensor (Q11-319)
4	–	Sensor bracket (P/O PL 11.112 Item 1)
5	–	Static eliminator (stacker) (REF: PL 11.120 Item 7)
6	–	Sensor retainer (P/O PL 11.112 Item 1)



PL 11.114 1K LCSS Ejector Assembly

Item	Part	Description
1	054K43583	Ejector assembly (REP 11.8-120)
2	–	Ejector base (P/O PL 11.114 Item 1)
3	130E10360	Ejector home sensor (Q11-320), Ejector out sensor (Q11-322), Ejector motor encoder sensor(Q11-177) (REP 11.8-120)
4	–	Pulley (Not Spared)
5	023E24330	Ejector belt (REP 11.15-120)
6	–	Clip (P/O PL 11.114 Item 1)
7	020K21490	Pulley drive gear
8	–	Washer (Not Spared)
9	–	KL-Clip (Not Spared)



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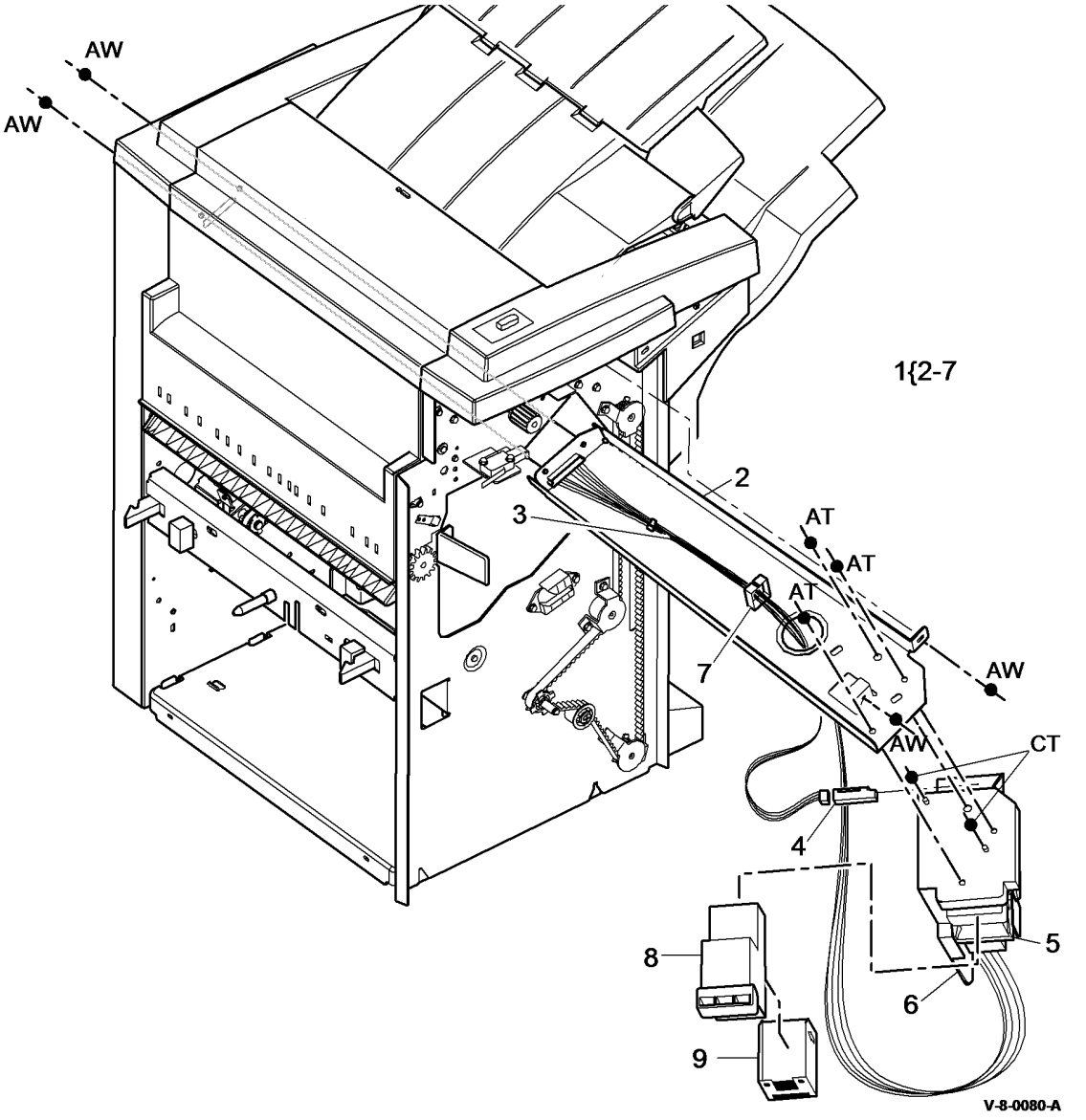
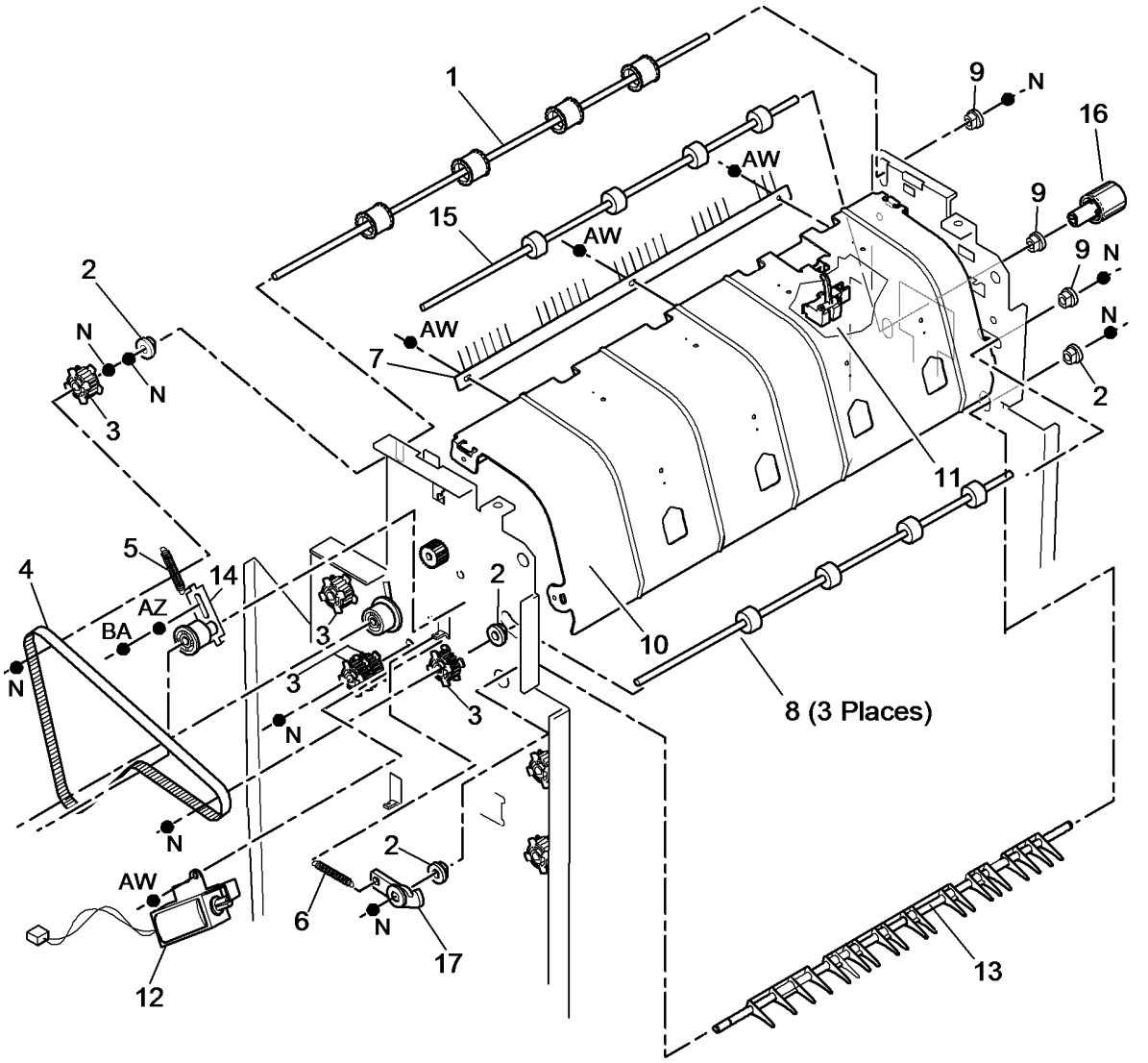
PL 11.116 1K LCSS Staple Head Assembly

Item	Part	Description
1	014K10100	Stapler assembly (REP 11.7-120)
2	–	Mounting bracket (P/O PL 11.116 Item 1)
3	–	Stapler harness (P/O PL 11.116 Item 1)
4	130E10380	SH1 Paper sensor (Q11-361) (REP 11.7-120)
5	–	Staple head unit (P/O PL 11.116 Item 1)
6	–	Stapler cover (P/O PL 11.116 Item 1)
7	–	Cable clamp (P/O PL 11.116 Item 1)
8	108R00682	Staple cartridge
9	108R00535	Staple refills



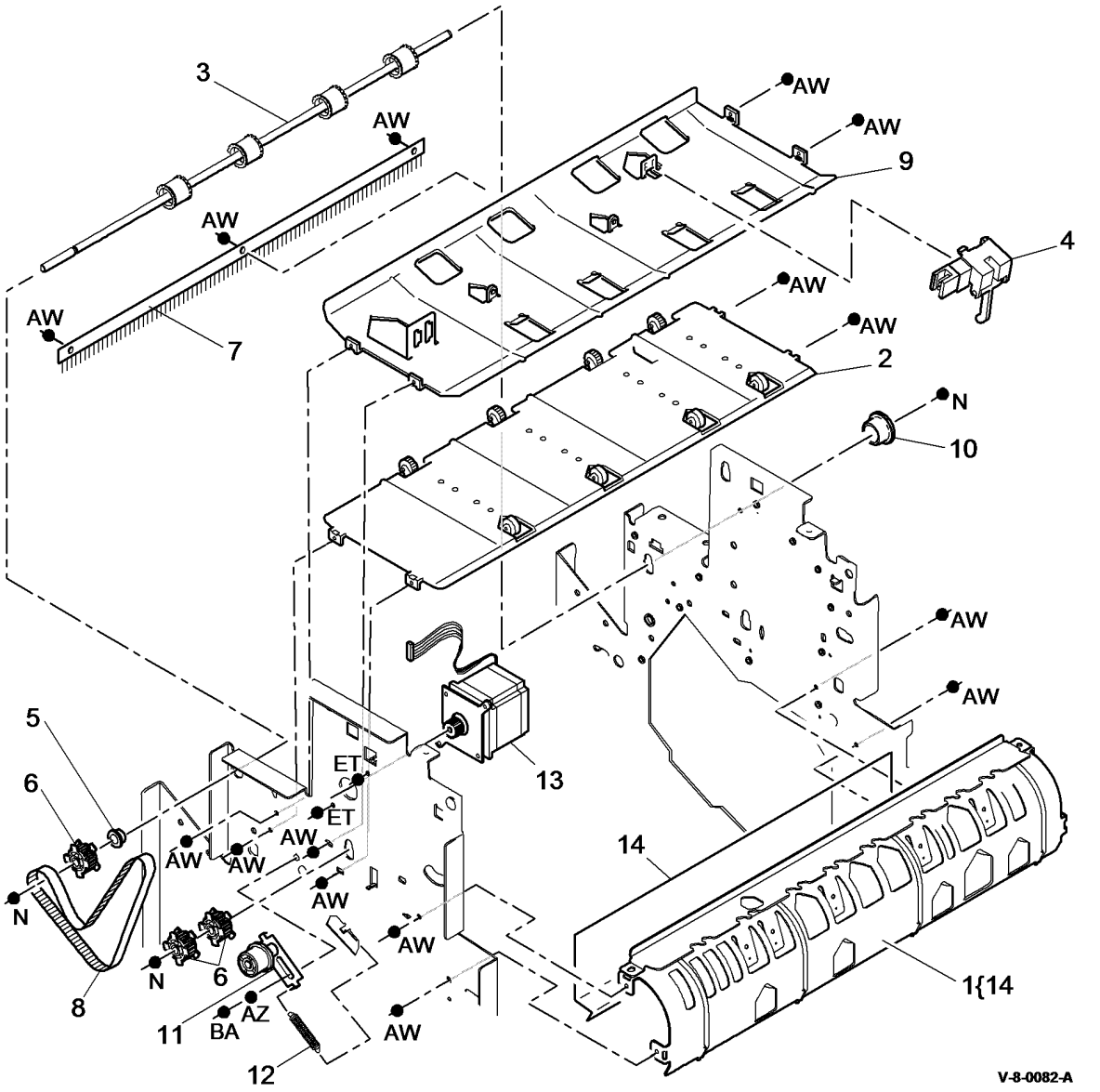
PL 11.118 1K LCSS Bin 0 Entry

Item	Part	Description
1	006K27960	Ejector drive shaft
2	013E25790	Nylon bearing
3	–	Pulley (Not Spared)
4	023E30700	Intermediate paper drive belt
5	–	Spring (Not Spared)
6	–	Spring (Not Spared)
7	115E12830	Static eliminator
8	006K27980	Feed roll shaft (short)
9	013E37460	Bearing
10	032K04550	Paper guide
11	130E11440	Top exit sensor (Q11-130)
12	121K45290	Diverter solenoid (SOL11-002)
13	–	Shaft diverter assembly (P/O PL 31.13 Item 6) (W/TAG L-003)
14	–	Belt tensioner (Not Spared)
15	006K27970	Drive shaft assembly
16	003K17531	Jam clearance knob
17	–	Actuator (Not Spared)



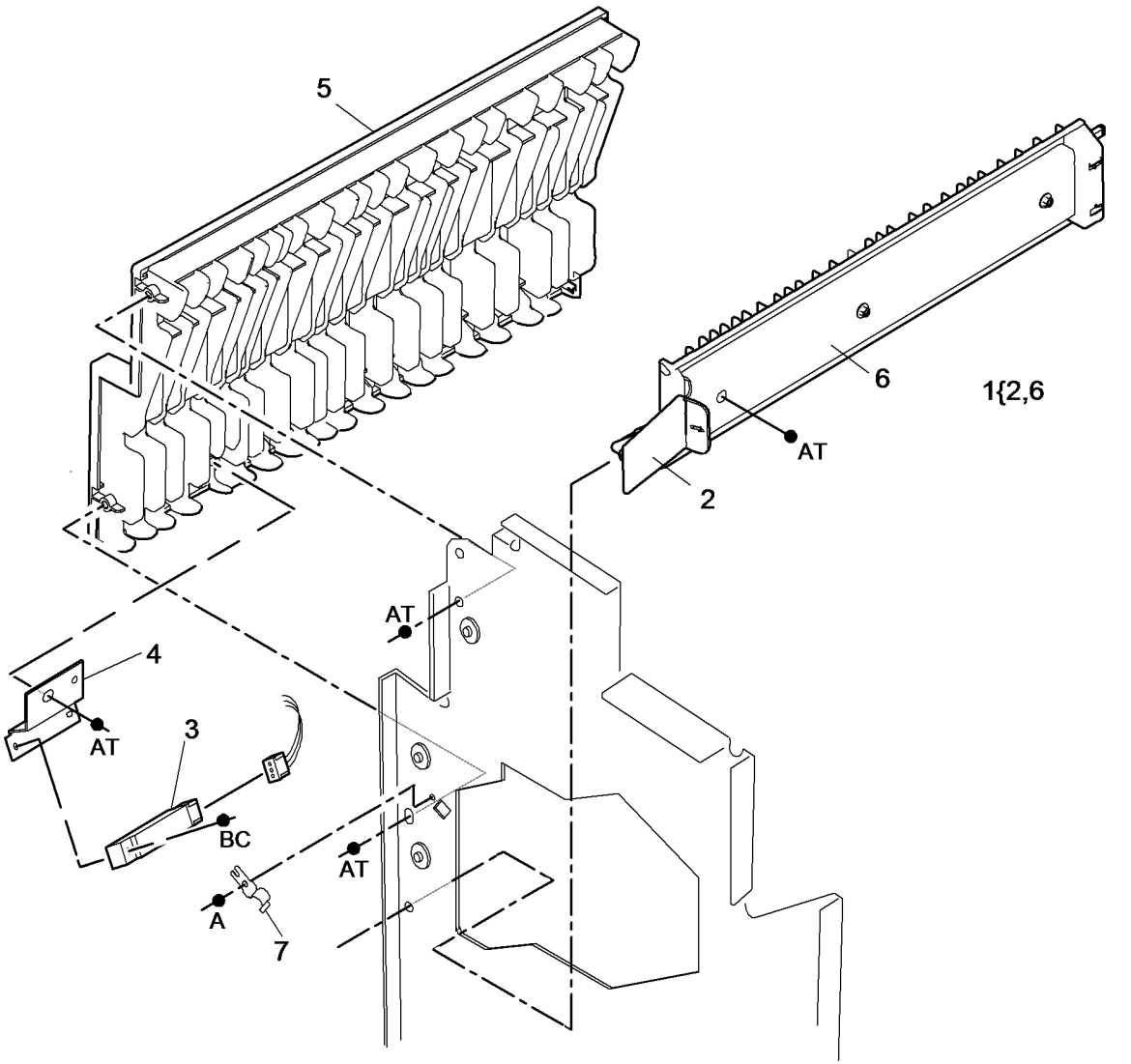
PL 11.120 1K LCSS Bin 1 Entry

Item	Part	Description
1	032K04570	Left paper guide
2	032K04560	Lower right paper guide
3	–	Ejector drive shaft (REF: PL 11.118 Item 1)
4	130E11440	2nd to top exit sensor (Q11-140)
5	013E25790	Nylon bearing
6	–	Pulley (Not Spared)
7	115E11810	Static eliminator (stacker)
8	023E24340	Paper output drive belt (REP 11.4-120)
9	–	Upper right paper guide (Not Spared)
10	013E37460	Bearing
11	–	Belt tensioner (Not Spared)
12	–	Spring (Not Spared)
13	127K55830	Transport motor 2 (MOT 11-001) (REP 11.4-120)
14	–	Mylar safety cover (P/O PL 11.120 Item 1)



PL 11.122 1K LCSS Entry Guide Cover/Jam Clearance Guide

Item	Part	Description
1	032K04601	Paper entry guide assembly
2	–	Jam clearance handle (P/O PL 11.122 Item 1)
3	130E10380	Entry sensor (Q11-100)
4	–	Sensor bracket (Not Spared)
5	848K06161	Entry guide cover (REP 11.13-120)
6	–	Jam clearance guide (P/O PL 11.122 Item 1)
7	809E78390	Latch

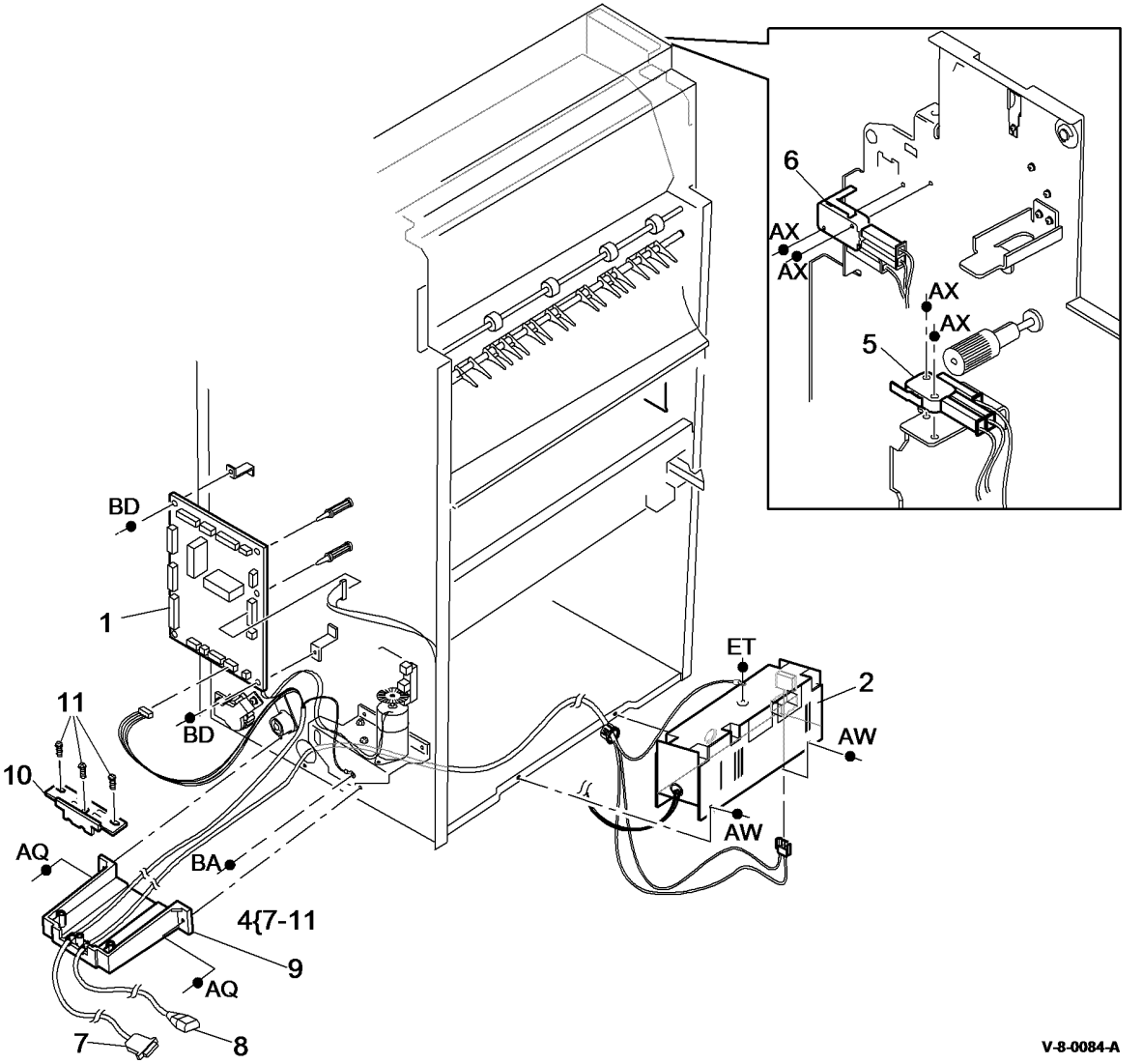


PL 11.124 1K LCSS Electrical

Item	Part	Description
1	960K21262	1K LCSS PWB (CAUTION) (W/ TAG L-001) (REP 11.12-120)
2	105K28272	Power supply module
3	–	Not used
4	962K56942	Cord bracket assembly
5	110K13980	Front door interlock switch (S11-303)
6	110K13970	Top cover interlock switch (S11-302)
7	–	1K LCSS communication harness (P/O PL 11.124 Item 4)
8	–	Power cord (P/O PL 11.124 Item 4)
9	–	Lower bracket (P/O PL 11.124 Item 4)
10	–	Upper bracket (P/O PL 11.124 Item 4)
11	–	Screw (P/O PL 11.124 Item 4)

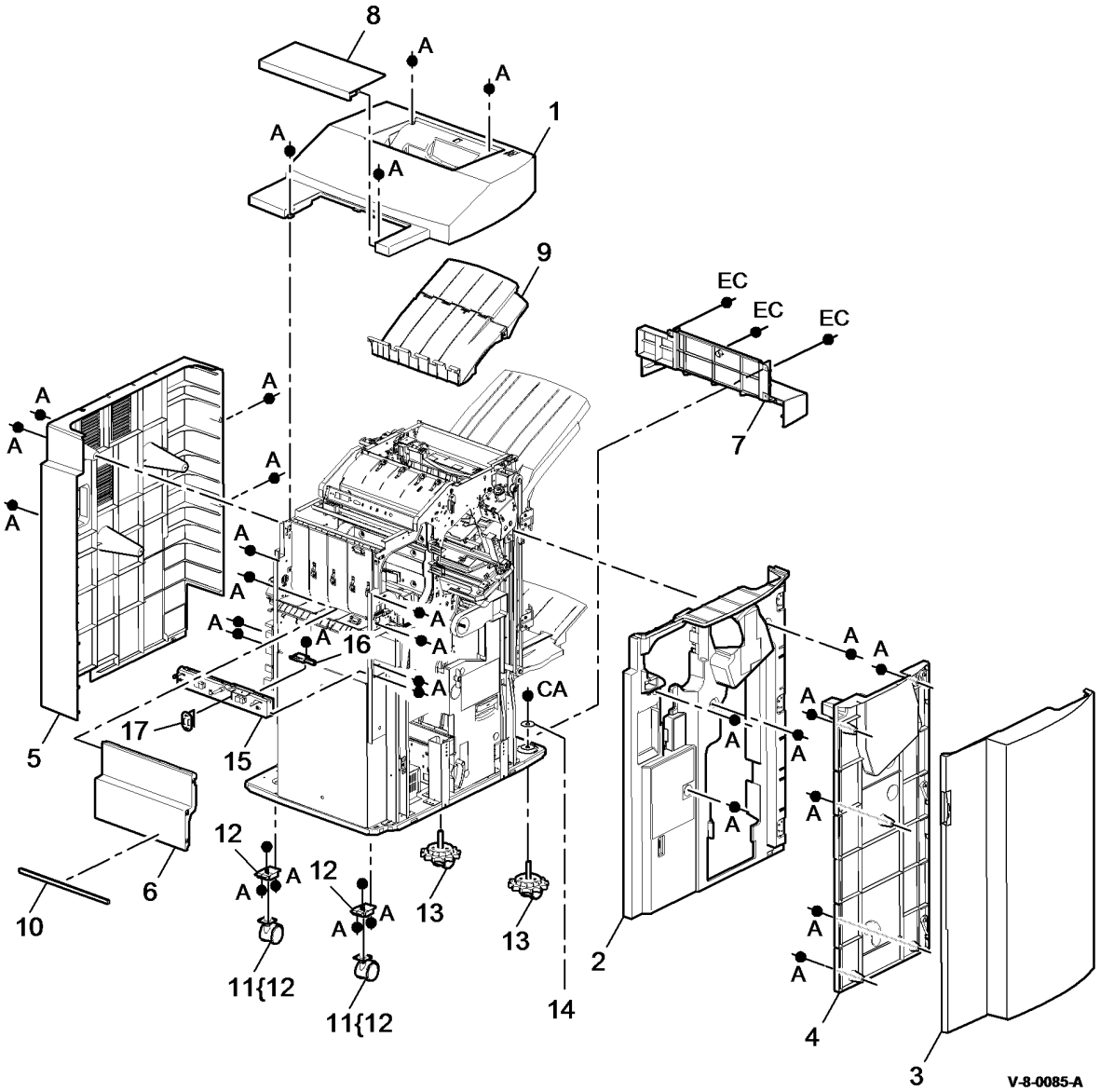
CAUTION

Do not install a new 1K LCSS PWB until the cause of the damage to the old LCSS PWB has been determined. Go to the 311G-120 LCSS PWB Damage RAP.



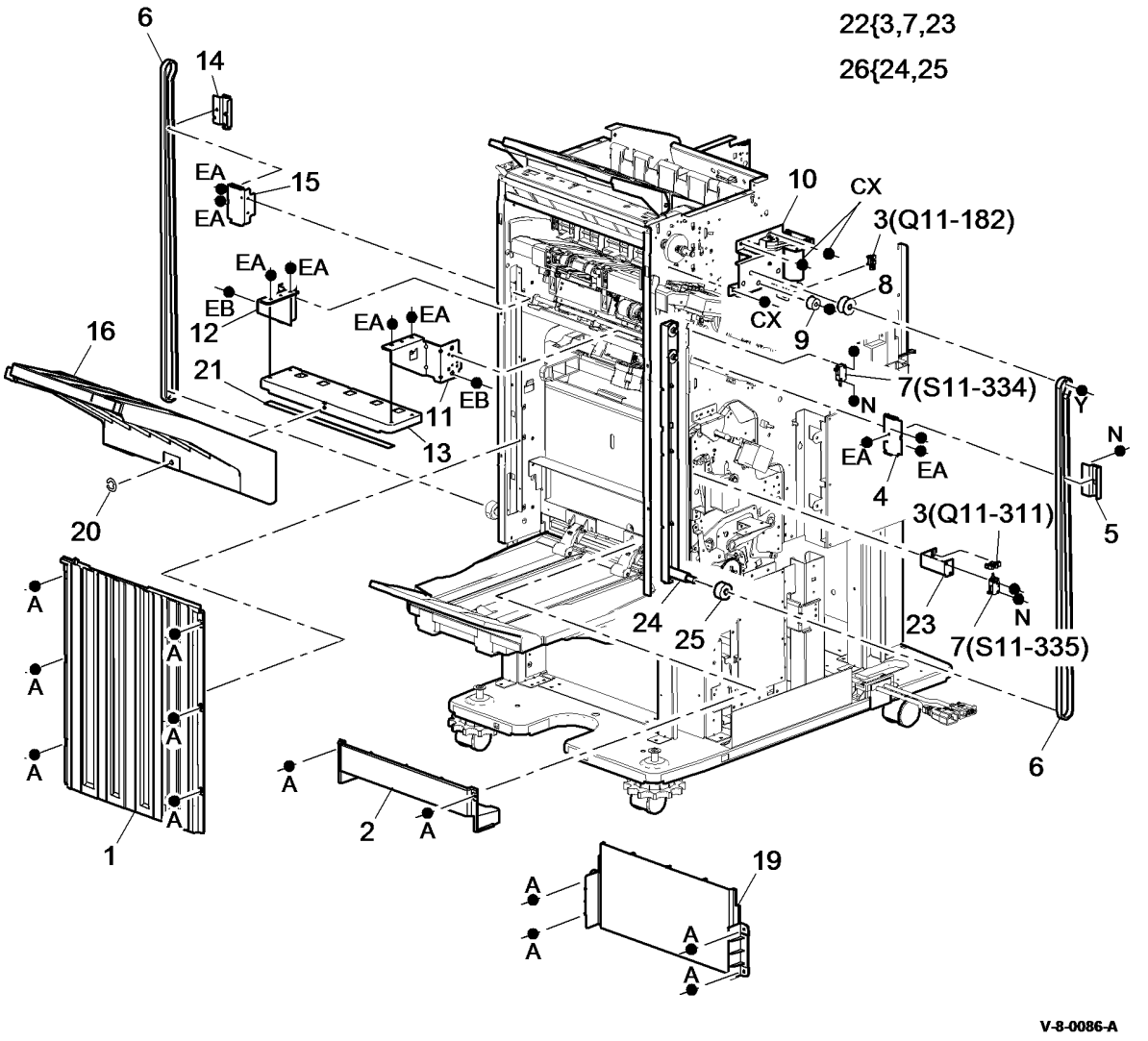
PL 11.130 HVF Covers and Docking

Item	Part	Description
1	848K12490	Top cover (REP 11.1-171)
2	848K12501	Foot cover (REP 11.1-171)
3	848E17790	Front door (REP 11.1-171)
4	848K12510	Door support (REP 11.1-171)
5	848K12520	Rear cover (REP 11.1-171)
6	848K12530	Vent cover (REP 11.1-171)
7	848E17800	Foot cover (REP 11.1-171)
8	848E17810	Inserter removable cover (REP 11.1-171)
9	848K12540	Top tray (REP 11.3-171)
10	–	Seal (Not Spared)
11	017K04830	Fixed castor assembly (REP 11.96-171)
12	–	Fixed castor bracket (P/O PL 11.130 Item 11)
13	017K04630	Adjustable castor (REP 11.96-171)
14	–	Adjustable castor washer (P/O PL 11.130 Item 13)
15	017K04641	Mounting bracket assembly
16	110K13970	Docking interlock switch (S11-300)
17	120K02591	Docking actuator



PL 11.135 HVF Stacker

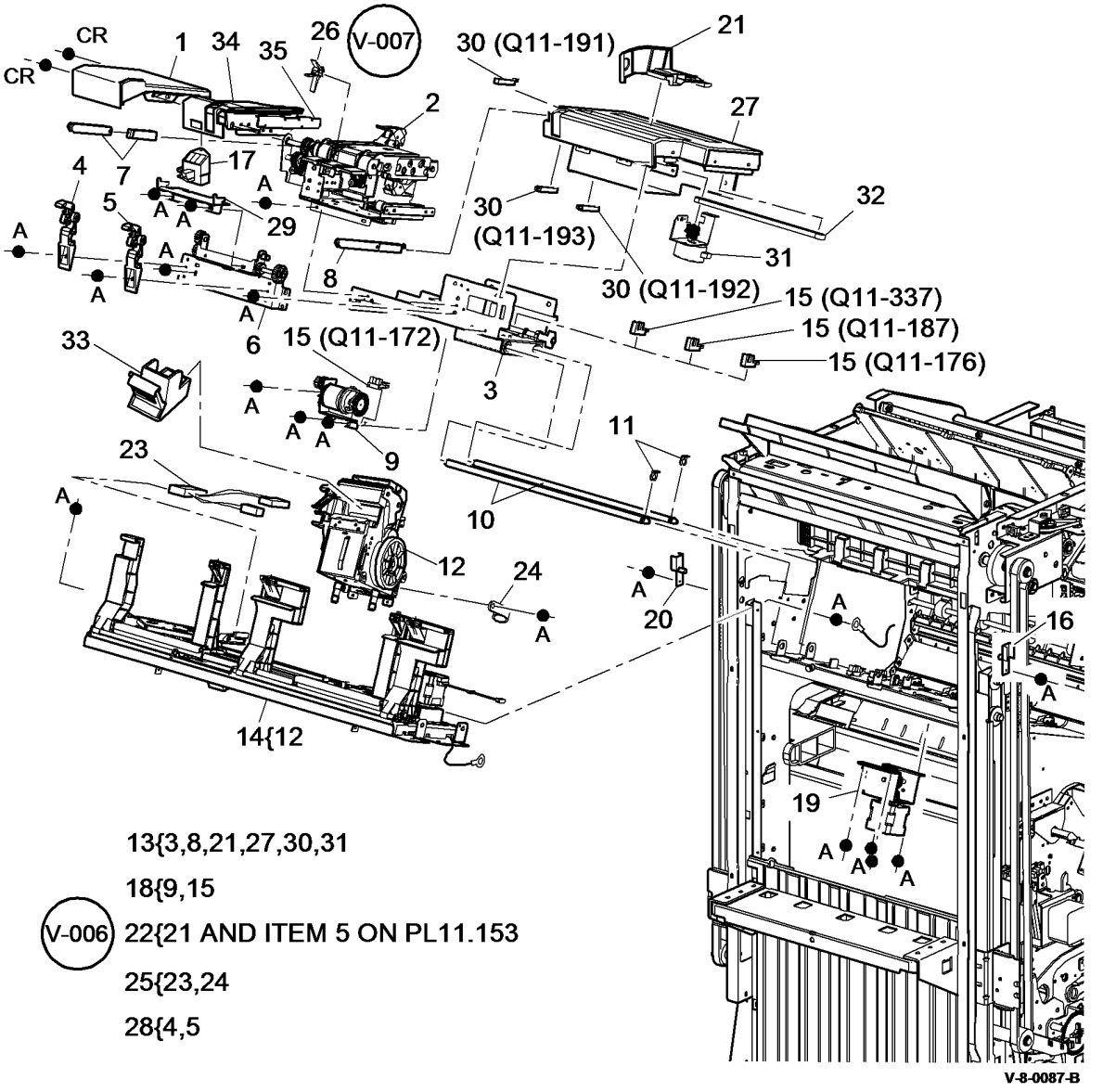
Item	Part	Description
1	848E17820	Upper right side cover (REP 11.5-171)
2	848E17840	Lower right side cover
3	130E12830	Bin 1 90% full sensor (Q11-311)/ Stacker unit encoder sensor (Q11-182)
4	–	Rear main belt clamp (1 of 2) (Not Spared)
5	–	Rear main belt clamp (2 of 2) (Not Spared)
6	023E31220	Bin 1 main drive belt (REP 11.38-171)
7	110K20890	Bin 1 upper limit switch (REP 11.75-171) (S11-334)/Bin 1 lower limit switch (REP 11.75-171) (S11-335)
8	–	Main belt pulley (Not Spared)
9	–	Main belt tensioner (Not Spared)
10	127K56592	Bin 1 elevator motor assembly (REP 11.12-171)
11	–	Bin 1 rear lift bar bracket (Not Spared)
12	–	Bin 1 front lift bar bracket (Not Spared)
13	–	Bin 1 lift bar (Not Spared)
14	–	Front main belt clamp (2 of 2) (Not Spared)
15	–	Front main belt clamp (1 of 2) (Not Spared)
16	050E23670	Bin 1 (REP 11.4-171)
17	–	Not used
18	–	Not used
19	848E17830	Middle right side cover
20	019K13380	Bin 1 retaining clip (REP 11.4-171)
21	–	Bin 1 lift bar brace (Not Spared)
22	110K20880	Stacker full sensor and lower limit switch assembly (REP 11.75-171)
23	–	Sensor/switch bracket (Not Spared)
24	–	Stacker tray guide (P/O PL 11.135 Item 26)
25	–	Stacker tray guide pulley (P/O PL 11.135 Item 26)
26	110K21060	Stacker tray guide assembly



PL 11.140 HVF Ejector, Pressing and Support (1 of 2)

Item	Part	Description
1	–	Ejector front cover (Not Spared)
2	–	Ejector assembly (P/O PL 31.14 Item 13) (REP 11.6-171)
3	–	Offset module (Not Spared) (REP 11.9-171)
4	–	Front pressing plate finger (P/O PL 11.140 Item 28) (REP 11.7-171)
5	–	Rear pressing plate finger (P/O PL 11.140 Item 28) (REP 11.7-171)
6	049K23160	Pressing plate bracket
7	003K20653	Front support finger (NOTE) (W/ TAG V-009) (REP 11.8-171)
8	003K20663	Rear support finger (NOTE) (W/ TAG V-009) (REP 11.8-171)
9	–	Support finger motor assembly (P/ O PL 11.140 Item 18)
10	–	Offset rod (Not Spared)
11	019K13380	Offset rod KL clip
12	–	Stapler module (P/O PL 11.140 Item 14) (REP 11.2-171)
13	032K09652	Rear tamper assembly (REP 11.15-171)
14	029K04631	Staple assembly (REP 11.2-171)
15	130E12830	Pressing and support encoder sensor (Q11-172), Bin 1 offset sensor (Q11-337), Offset index sensor (Q11-187), Offset away sensor (Q11-176)
16	130K75470	Bin 1 upper level sensor (receiver) (Q11-332) (REP 11.76-171)
17	130K75900	Bin 1 rear wall sensor (Q11-196)
18	127K56551	Motor encoder assembly
19	127K56580	Bin 1 offset motor (MOT11-034) (REP 11.9-171)
20	130K75480	Bin 1 upper level sensor (transmitter) (Q11-332) (REP 11.76-171)
21	032E35301	Rear tamper arm (W/O TAG V-006)
–	–	Rear tamper arm (reinforced) (P/O PL 11.140 Item 13) (W/TAG V-006)
22	032E35311	Tamper arm set (W/TAG V-006)
23	–	Stapler harness (P/O PL 11.140 Item 25)
24	–	P-clip (P/O PL 11.140 Item 25)
25	962K82410	Stapler harness and p-clip assembly
26	033K04850	Ejector paddle assembly (W/TAG V-007) (REP 11.100-171)
27	–	Rear tamper (P/O PL 11.140 Item 13)
28	003K21101	Pressing plate kit (NASG)
29	–	Ejector assembly safety cover (P/O PL 31.11 Item 15)
30	–	Support finger home sensor (Q11-192), Support finger init sensor (Q11-191), Support finger out sensor (Q11-193) (P/O PL 11.140 Item 13)
31	–	Rear tamper motor (MOT11-004) (P/O PL 11.140 Item 13)
32	–	Rear tamper drive belt (P/O PL 11.140 Item 13)
33	–	Staple cartridge (REF: PL 26.10 Item 22)
34	822E18820	Ejector belt cover (REP 11.6-171)
35	–	Front support finger guide

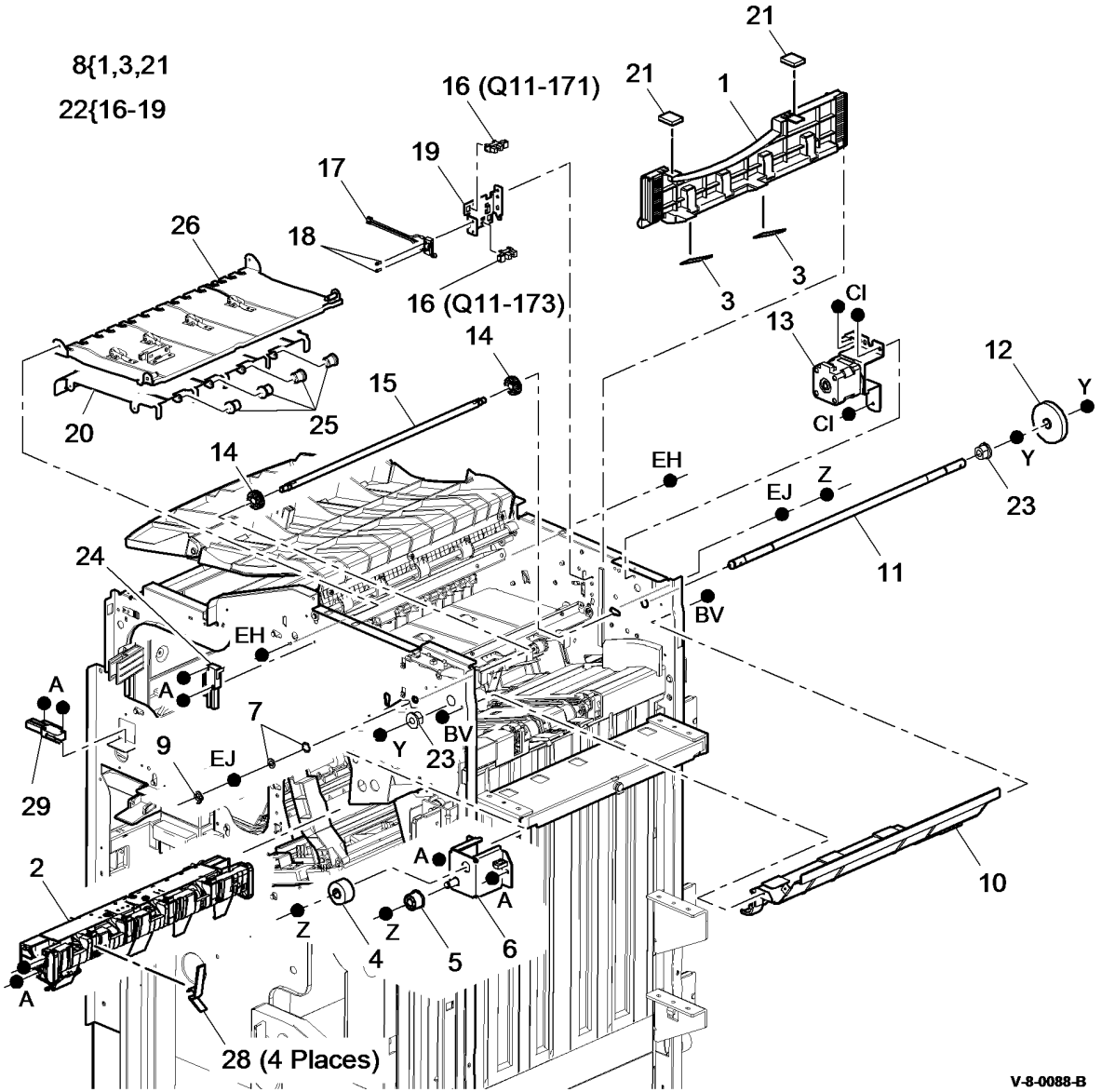
NOTE: *If both front and rear support finger assemblies are needed, then order PL 31.14 Item 16.*



PL 11.145 HVF Ejector, Pressing and Support (2 of 2)

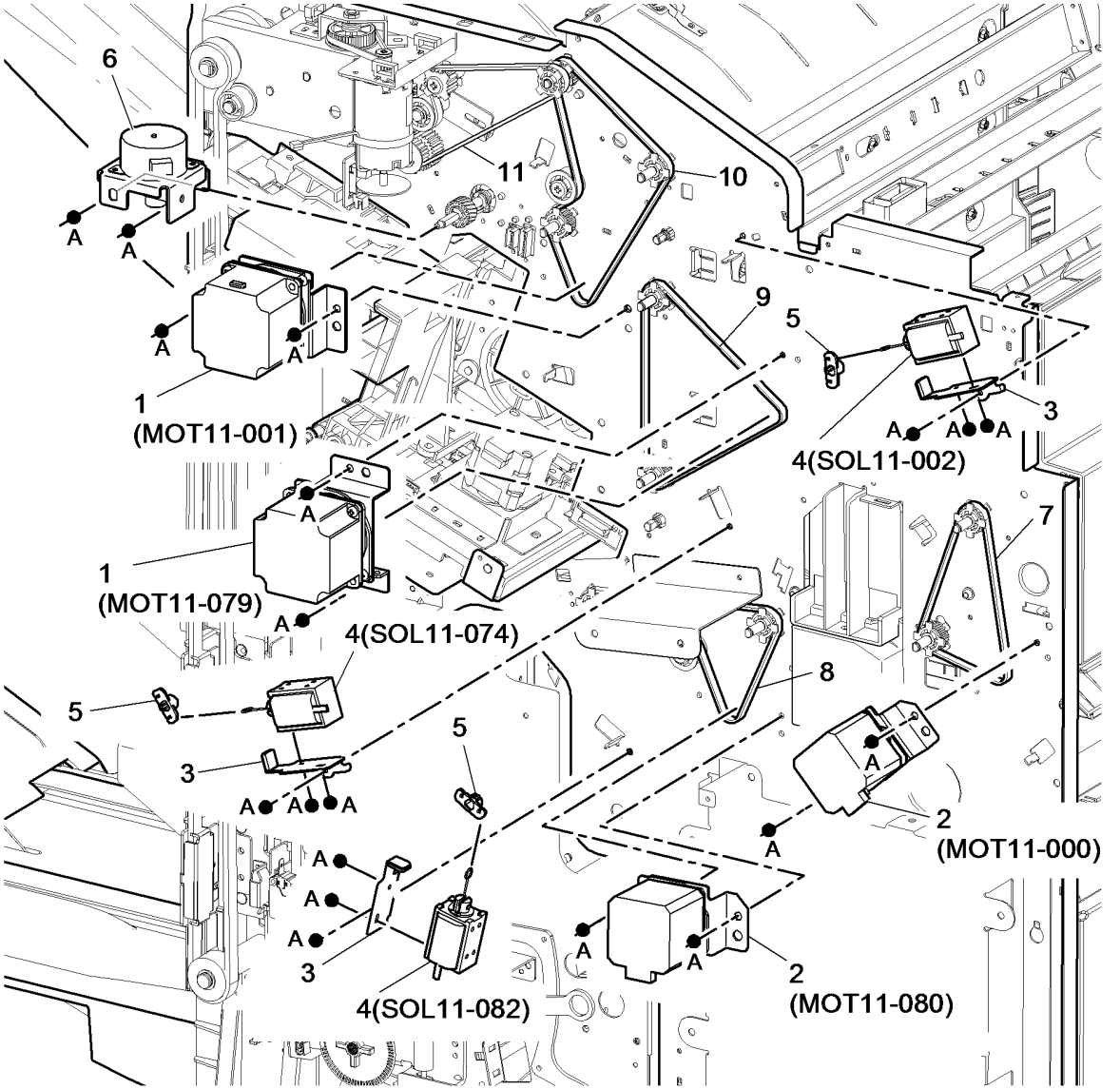
Item	Part	Description
1	–	Paper pusher (P/O PL 11.145 Item 8)
2	033K04414	Paddle module assembly (REP 11.49-171)
3	–	Pusher mylar (P/O PL 11.145 Item 8)
4	–	Timing belt pulley (Not Spared)
5	–	Timing belt tensioner (Not Spared)
6	–	Front stacker pulley bracket (Not Spared)
7	–	Thrust washer (Not Spared)
8	050K67801	Paper pusher assembly (REP 11.53-171)
9	–	Pinion gear E-clip (Not Spared)
10	–	Compile exit upper guide (Not Spared)
11	–	Stacker main drive gear shaft (Not Spared)
12	–	Stacker main drive gear (Not Spared)
13	674K03550	Paper pusher motor assembly (MOT11-083) (REP 11.51-171)
14	–	Pinion gear (Not Spared)
15	–	Pinion gear shaft (Not Spared)
16	130E12830	Paper pusher upper sensor (Q11-171)/Paper pusher lower sensor (Q11-173) (REP 11.54-171)
17	–	Stapler gate safety switch (S11-365) (P/O PL 11.145 Item 22)
18	–	Sensor screw (P/O PL 11.145 Item 22)
19	–	Sensor assembly bracket (P/O PL 11.145 Item 22)
20	–	Lower exit guide (Not Spared)
21	–	Pusher dampers (P/O PL 11.145 Item 8)
22	674K03541	Sensor assembly (REP 11.54-171)
23	013E37150	Stacker shaft bearing (plastic) (REP 11.37-171)
24	110K13970	Top cover interlock switch (S11-302)
25	006K33400	Stacker idler roll (REP 11.10-171)
26	–	Top jam clearance guide assembly (Not Spared) (REP 11.14-171)
27	–	Not used
28	033K04581	Paddle wheel (NOTE) (REP 11.101-171)
29	110K13980	Front door interlock switch (S11-303)

NOTE: *HFSI. To reset the HFSI count, refer to dC135.*



PL 11.150 HVF Main Drives

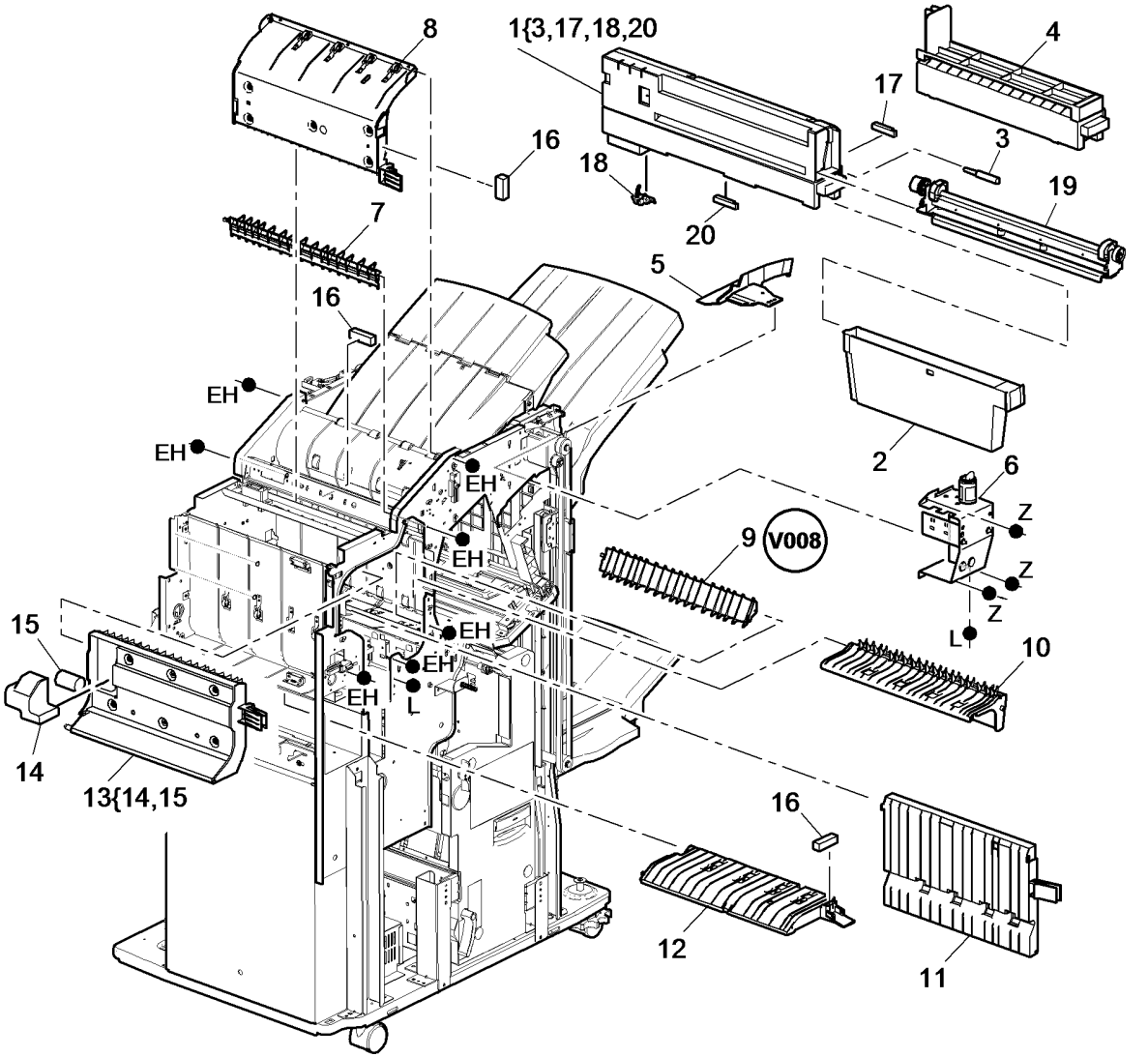
Item	Part	Description
1	127K56570	Buffer feed motor (MOT11-079) (REP 11.65-171)/Transport motor 2 (MOT11-001) (REP 11.66-171)
2	127K56560	Transport motor 1 (MOT11-000) (REP 11.63-171)/Bypass feed motor (MOT11-080) (REP 11.64-171)
3	–	Solenoid bracket (P/O PL 11.150 Item 4)
4	121K45290	BM diverter solenoid (SOL11-074) (ADJ 11.14-171)/Exit diverter solenoid (SOL11-002)/Buffer clamp solenoid (SOL11-082)
5	–	Solenoid connector (Not Spared)
6	127K56610	Paddle unit motor assembly (MOT11-027) (REP 11.48-171)
7	–	Transport motor 1 belt (Not Spared)
8	–	Bypass feed motor belt (Not Spared)
9	–	Buffer feed motor belt (Not Spared)
10	–	Exit feed motor 2 belt (A) (Not Spared)
11	–	Exit feed motor 2 belt (B) (Not Spared)



PL 11.153 HVF Feed Assembly and Punch (1 of 3)

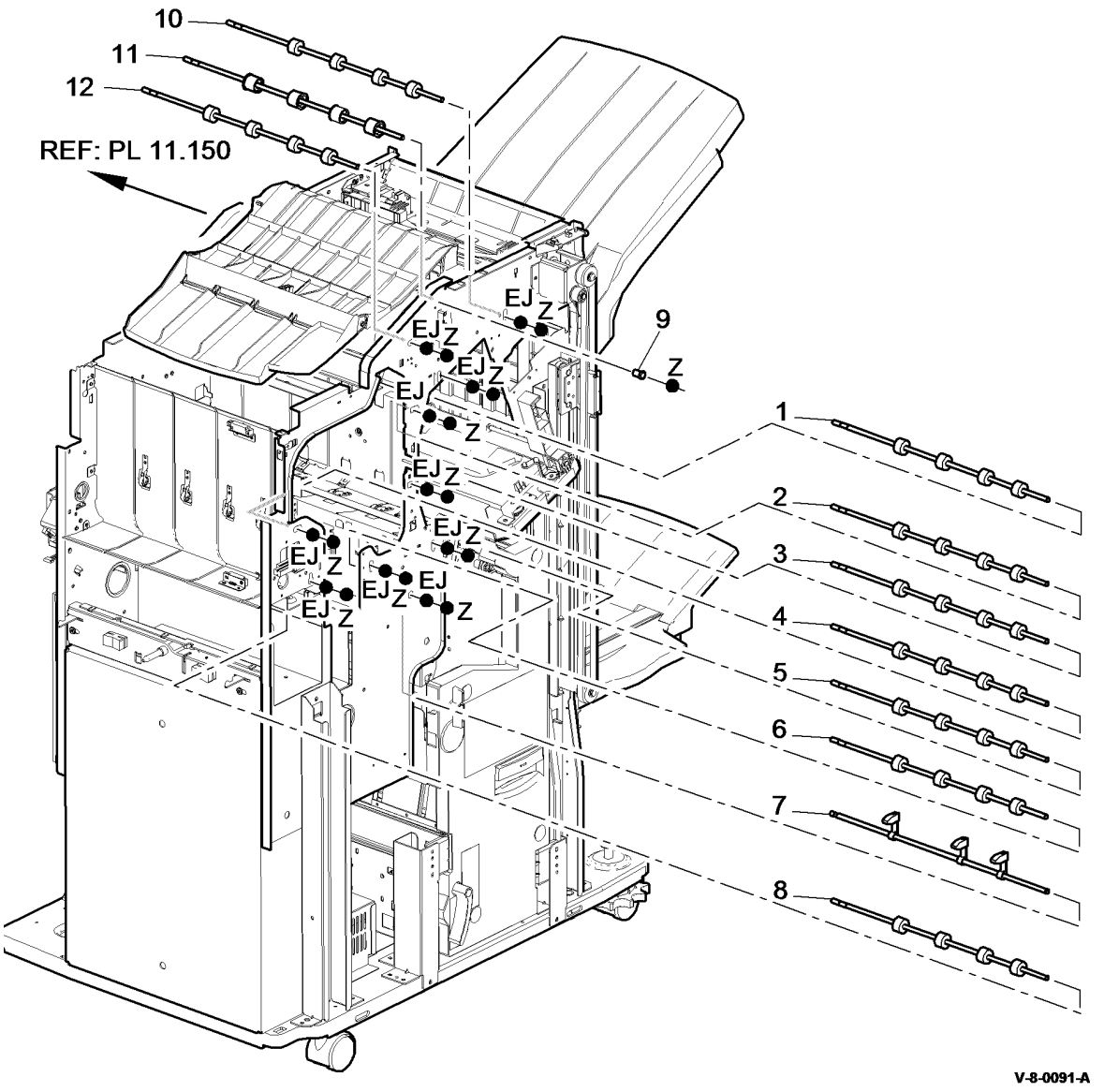
Item	Part	Description
1	604K54741	HVF hole punch carrier assembly
2	604K83750	HVF chad bin
3	–	Hole punch thumb screw (P/O PL 11.153 Item 1)
4	059K59551	Hole punch blanking assembly
5	868E05770	Front tamper arm (W/O TAG V-006)
–	–	Front tamper arm (reinforced) (P/O PL 11.140 Item 22) (W/TAG V-006)
6	127K56601	Front tamper motor assembly (MOT11-003) (REP 11.11-171)
7	038E40870	Diverter exit gate (REP 11.35-171)
8	059K59560	Upper exit guide (5c)
9	–	BM diverter gate (P/O PL 31.13 Item 13) (W/TAG V-008) (REP 11.39-171)
10	059K59531	Buffer pocket jam clearance guide (REP 11.33-171)
11	059K59540	Inserter jam clearance guide assembly (8a) (REP 11.34-171)
12	059K59521	Input jam clearance guide (5a) (REP 11.32-171)
13	059K59512	Buffer guide assembly (5b) (REP 11.31-171)
14	–	Nip split motor cover (P/O PL 11.153 Item 13)
15	–	Nip split motor (MOT11-081) (P/O PL 11.153 Item 13)
16	121K45300	Magnet
17	130E12810	Paper edge sensor (NOTE)
18	130E12840	Chad bin present sensor (Q11-112)
19	–	Hole punch unit (see below for variants)
–	180K00280	2 Hole (XE)
–	180K00320	2 Hole legal
–	180K00200	3 Hole (USSG/XCL)
–	180K00300	4 Hole (XE)
–	180K00310	4 Hole (Sweden)
20	130E10380	Chad bin level sensor (Q11-348)

NOTE: *There is no component control code for the paper edge sensor*



PL 11.155 HVF Feed Assembly and Punch (2 of 3)

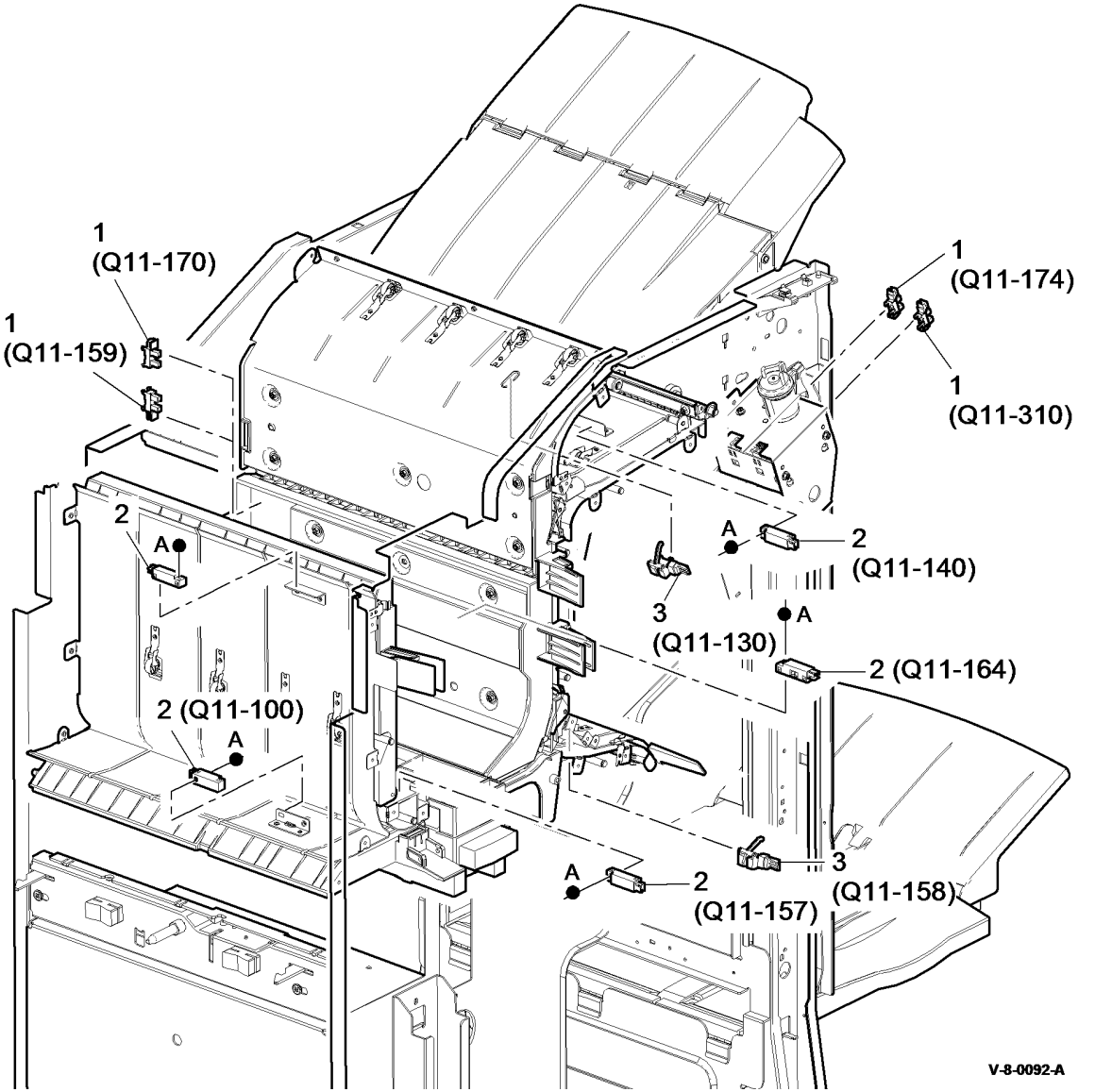
Item	Part	Description
1	006K32700	Stacker exit feed roll (REP 11.46-171)
2	–	Buffer upper roll (REF: PL 11.155 Item 1) (REP 11.45-171)
3	–	Buffer lower roll (REF: PL 11.155 Item 1) (REP 11.44-171)
4	–	Inserter guide roll (REF: PL 11.155 Item 1) (REP 11.41-171)
5	–	Booklet entrance roll (REF: PL 11.155 Item 1) (REP 11.43-171)
6	–	Buffer pocket roll (REF: PL 11.155 Item 1) (REP 11.42-171)
7	019K13660	Buffer clamp
8	–	Input roll (REF: PL 11.155 Item 1) (REP 11.40-171)
9	–	Bearing (Not Spared)
10	006K32690	Stacker exit roll
11	–	Top exit roll (Not Spared)
12	–	Top exit feed roll (REF: PL 11.155 Item 1) (REP 11.47-171)



PL 11.156 HVF Feed Assembly and Punch (3 of 3)

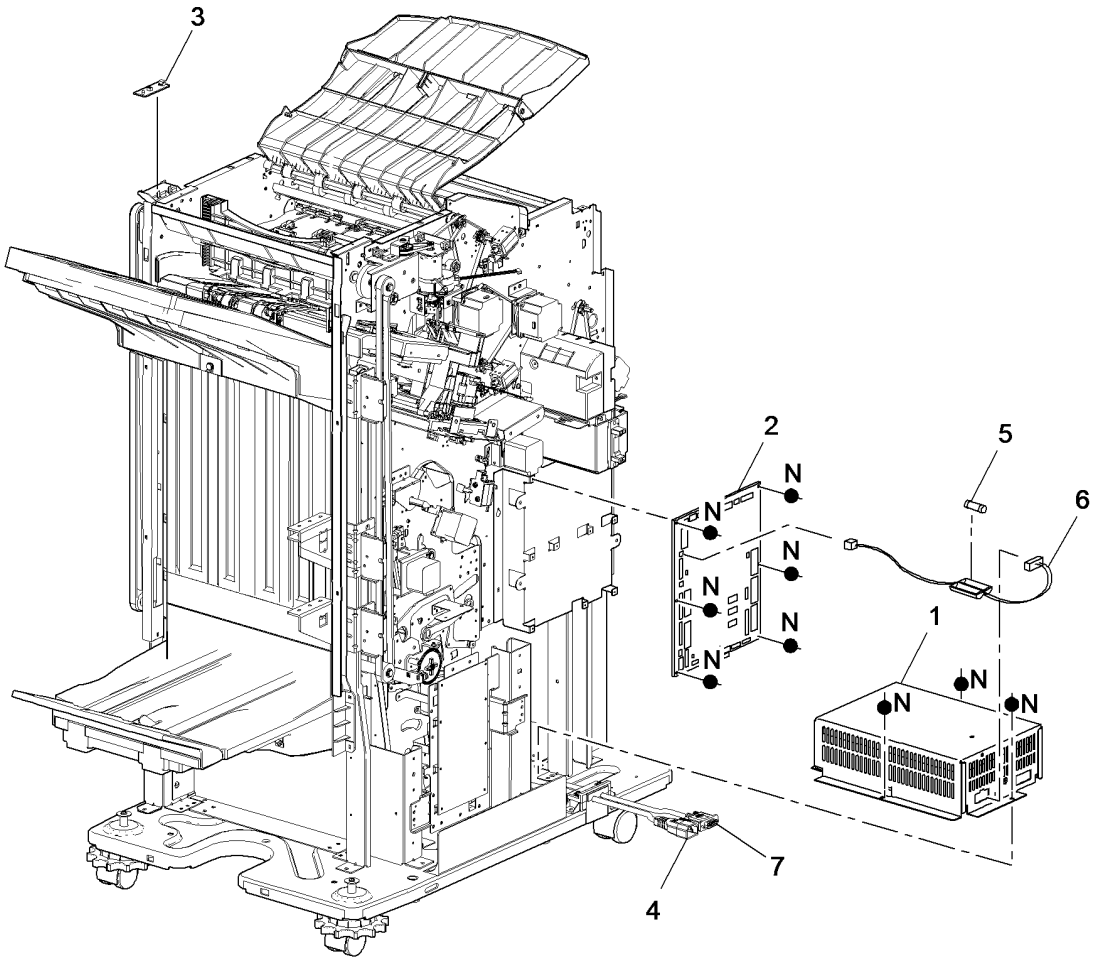
Item	Part	Description
1	130E12830	Front tamper home sensor (Q11-310)/Front tamper tray away sensor (Q11-174)/Nip split sensor (Q11-170)/Nip home sensor (Q11-159)
2	130E12810	Entry sensor (Q11-100)/2nd to top exit sensor (Q11-140)/Buffer position sensor (Q11-157)/Buffer path sensor (Q11-164)/Inserter sensor (NOTE)
3	130E12840	Top exit sensor (Q11-130)/Booklet exit sensor (Q11-158)

NOTE: *There is no component code number for the Inserter sensor*



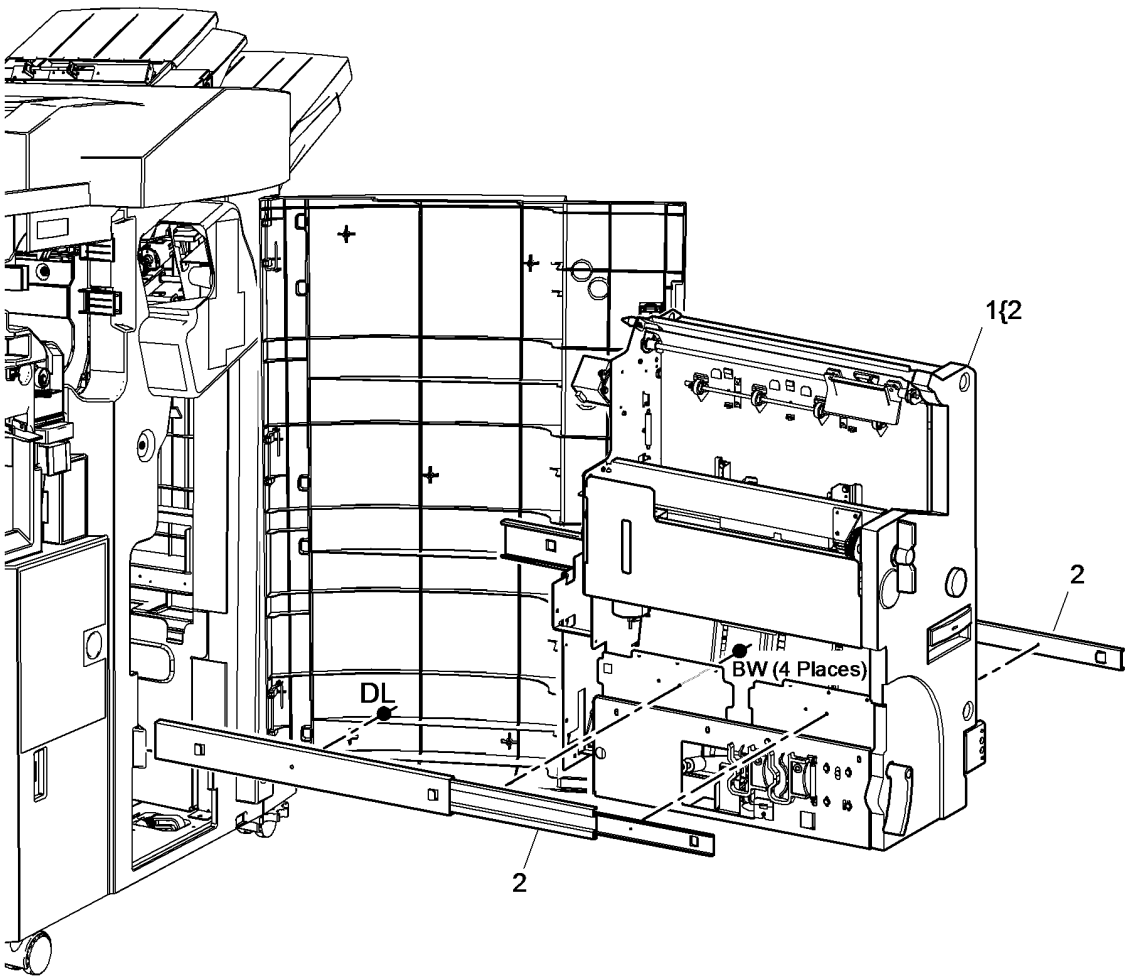
PL 11.157 HVF Power and Control

Item	Part	Description
1	105K30211	HVF power supply unit (REP 11.55-171)
2	960K41772	HVF control PWB (REP 11.57-171)
3	960K41780	Pause to unload PWB (REP 11.97-171)
4	105K36840	Power cord
5	–	Inline fuse (10A slo-blow) (Not Spared)
6	–	Harness (Not Spared)
7	952K00411	Power communications cable



PL 11.160 HVF BM Module (Complete)

Item	Part	Description
1	801K27251	BM Module (REP 11.61-171)
2	010K04360	Slide assembly (REP 11.62-171)



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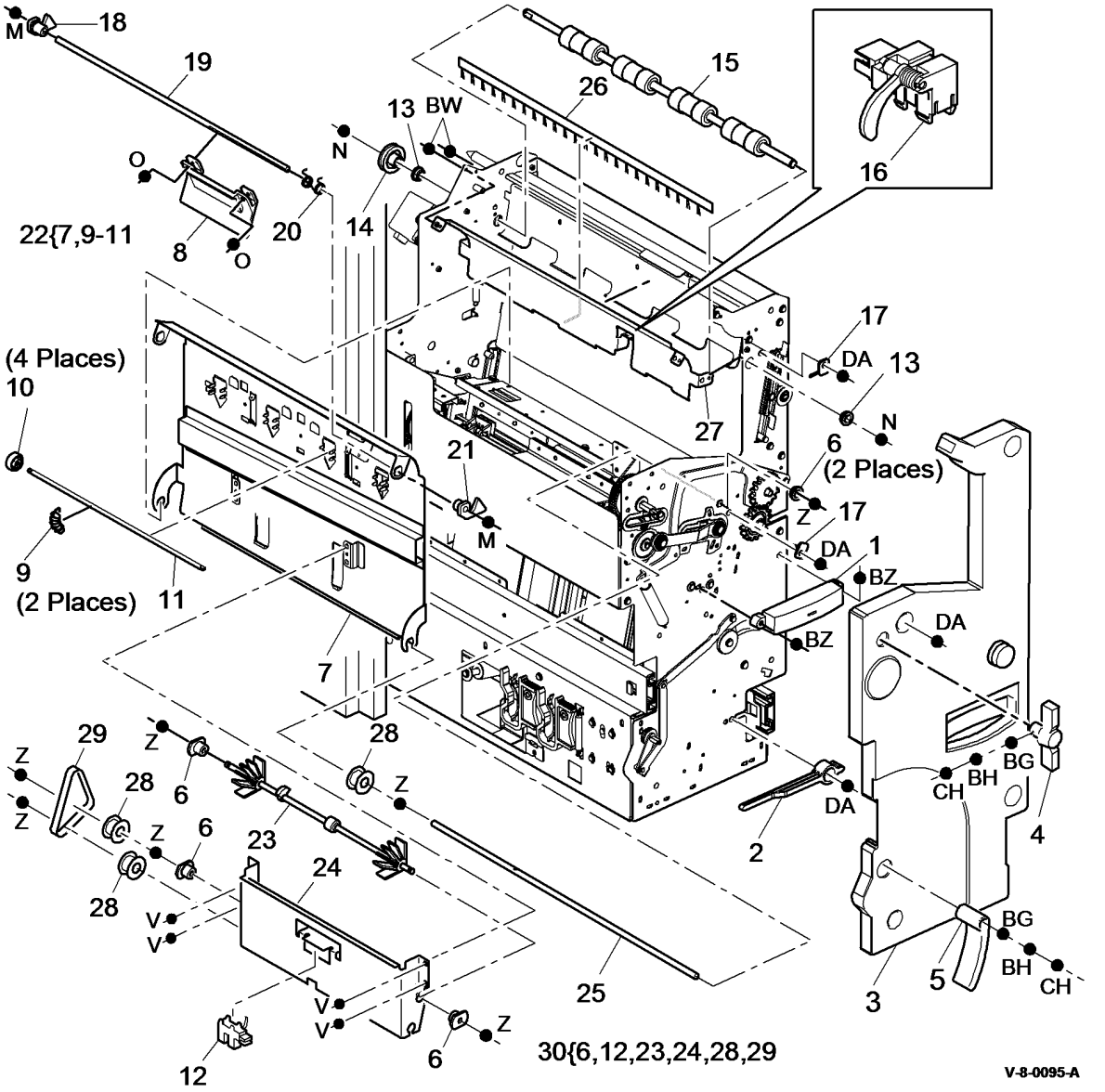
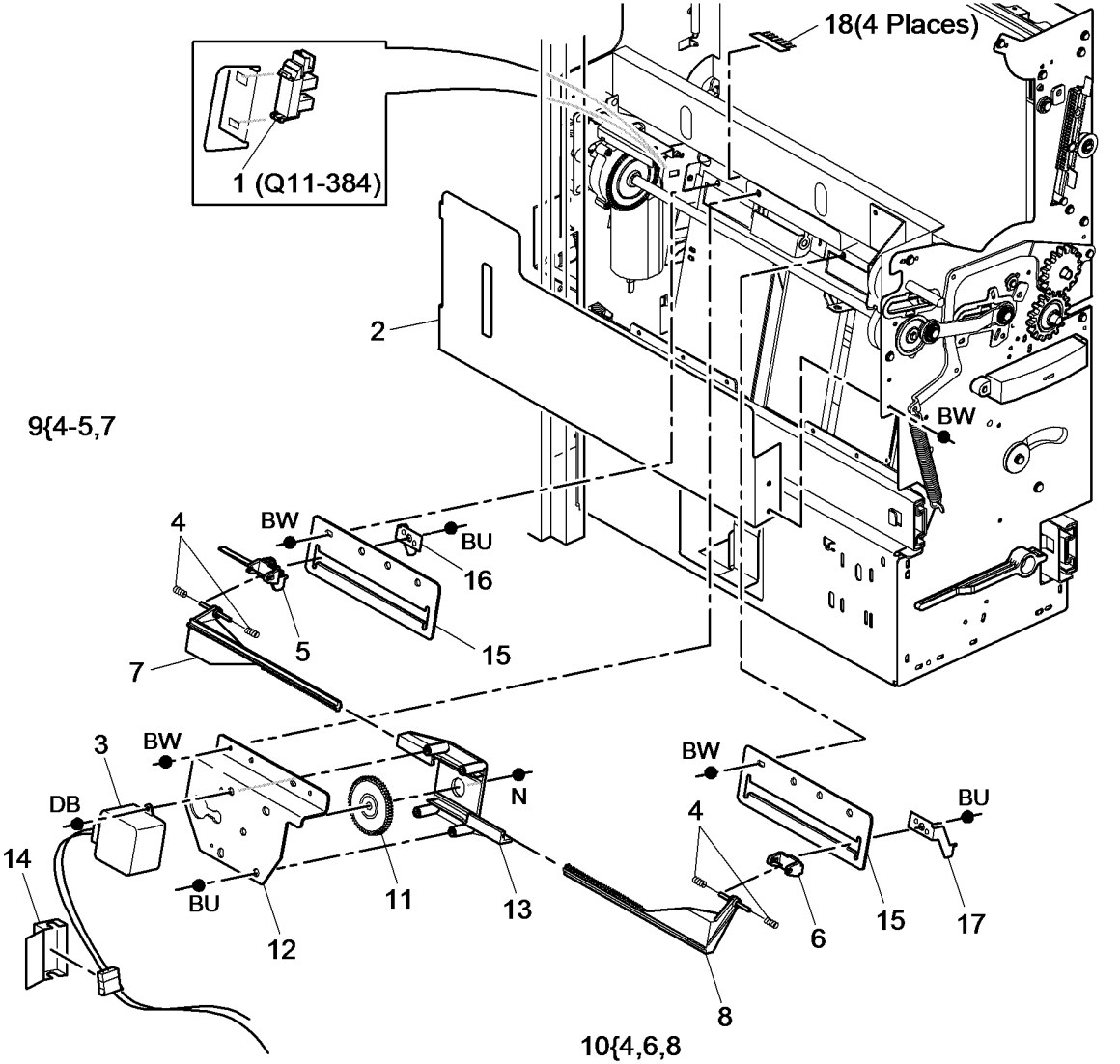
PL 11.161 HVF BM Entry and Front Cover

Item	Part	Description
1	003E69092	Drawer handle
2	809E46511	Crease roll leaf spring
3	802E66650	BM Front cover
4	003E69022	Crease blade knob (6d)
5	003E66010	Crease roll handle (6c)
6	013E12610	Nylon bearing
7	–	Paper guide (P/O PL 11.161 Item 22) (REP 11.60-171)
8	–	Jam clearance handle (Not Spared) (REP 11.60-171)
9	–	Nip spring (Not Spared) (REP 11.60-171)
10	022E30620	Nip roll (REP 11.60-171)
11	–	Nip shaft (P/O PL 11.161 Item 22) (REP 11.60-171)
12	130K74072	Flapper home sensor (Q11-391) (REP 11.16-171)
13	–	Bearing (Not Spared)
14	020E39990	BM Entry roll pulley (REP 11.22-171)
15	006K28660	BM Entry roll (REP 11.22-171)
16	130K74110	BM Entry sensor (Q11-160) (REP 11.23-171)
17	125E00430	Static eliminator
18	–	Rear latch (Not Spared)
19	–	Shaft (Not Spared)
20	809E46411	Latch spring
21	–	Front latch (Not Spared)
22	–	Entrance baffle assembly (Not Spared) (REP 11.60-171)
23	–	BM Flapper (P/O PL 11.161 Item 30) (REP 11.16-171)
24	–	BM flapper bracket (P/O PL 11.161 Item 30)
25	–	BM Compiler shaft (Not Spared)
26	125K03831	Static eliminator
27	–	Top baffle (Not Spared)
28	–	Pulley (Not Spared)
29	–	BM flapper drive belt (Not Spared)
30	–	BM Flapper assembly (Not Spared)



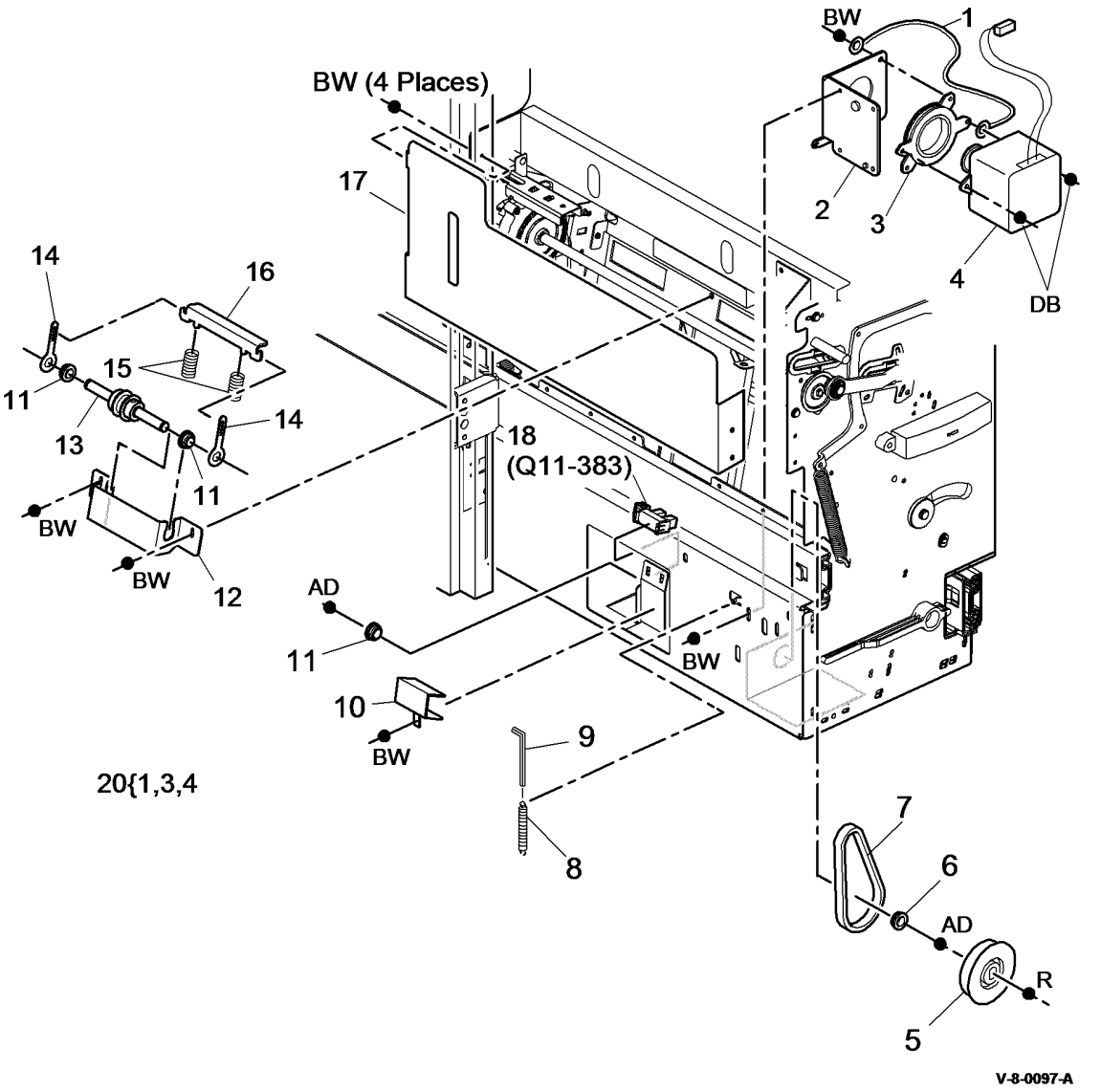
PL 11.162 HVF BM Tamper Assembly

Item	Part	Description
1	107E22600	BM Tamper 1 home sensor (Q11-384)
2	–	LH Frame plate (Not Spared)
3	127K47660	BM Tamper 1 motor (MOT 11-066) (REP 11.30-171)
4	–	BM Tamper spring (P/O PL 11.162 Item 10)
5	–	BM Rear tamper arm (P/O PL 11.162 Item 9) (REP 11.30-171)
6	–	BM Front tamper arm (P/O PL 11.162 Item 10) (REP 11.30-171)
7	–	BM Rear tamper rack (P/O PL 11.162 Item 9) (REP 11.30-171)
8	–	BM Front tamper rack (P/O PL 11.162 Item 10) (REP 11.30-171)
9	007K13190	BM Rear tamper assembly (REP 11.30-171)
10	007K13180	BM Front tamper assembly (REP 11.30-171)
11	807E15450	BM Tamper gear (REP 11.30-171)
12	–	BM Tamper bracket (Not Spared) (REP 11.30-171)
13	–	BM Tamper rack guide (Not Spared) (REP 11.30-171)
14	802E59410	BM Connector cover
15	–	BM Tamper guide plate (Not Spared) (REP 11.30-171)
16	–	BM Rear tamper finger (Not Spared) (REP 11.30-171)
17	–	BM Front tamper finger (Not Spared) (REP 11.30-171)
18	125K03593	BM Static eliminator



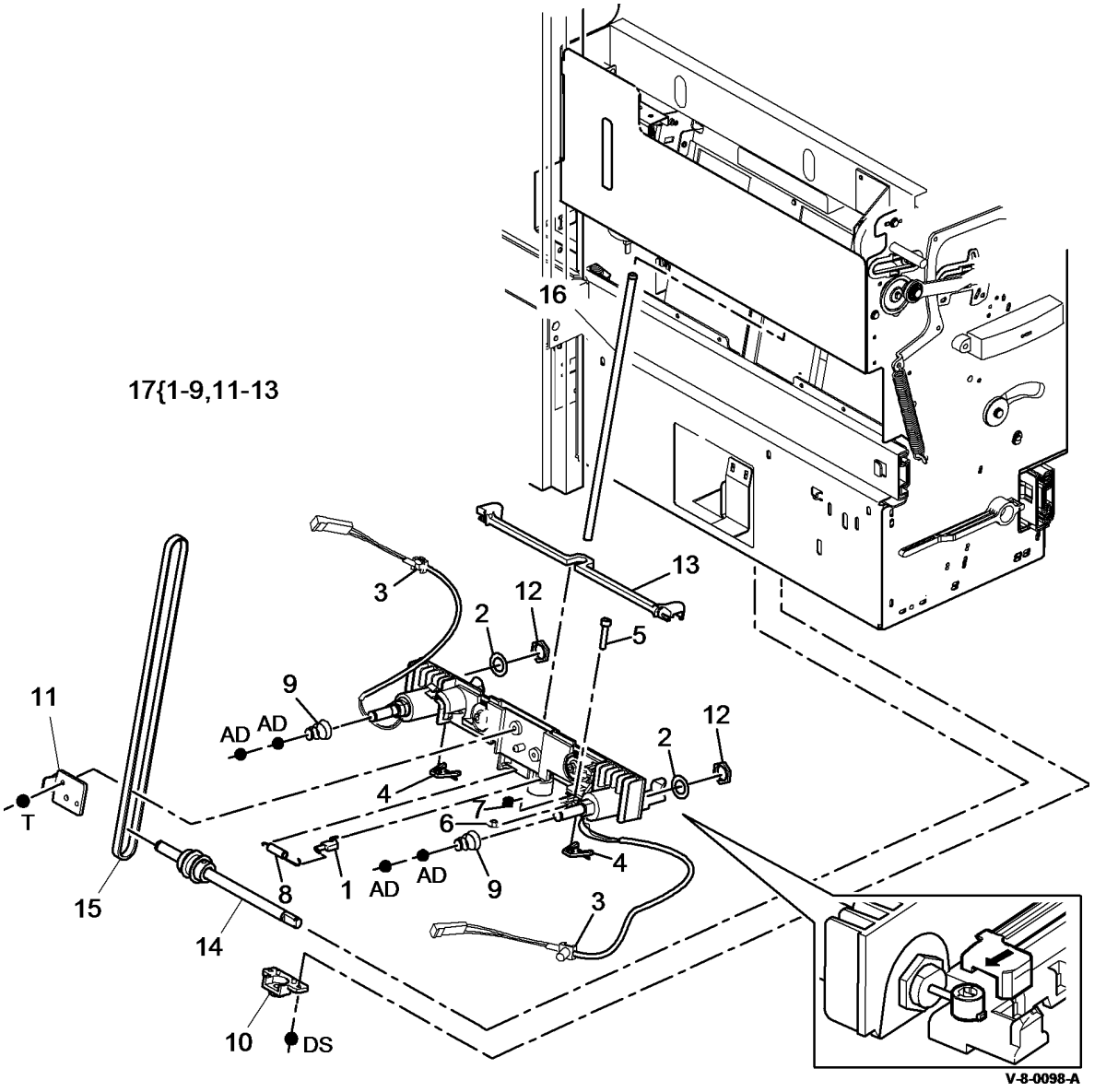
PL 11.163 HVF BM Back Stop Motor

Item	Part	Description
1	–	Ground wire (P/O PL 11.163 Item 20)
2	–	Motor bracket (Not Spared)
3	–	Motor damper (P/O PL 11.163 Item 20) (REP 11.20-171)
4	–	BM back stop motor (MOT11-065) (P/O PL 11.163 Item 20) (REP 11.20-171)
5	–	Pulley (Not Spared)
6	–	BM back stop bearing (Not Spared) (REP 11.26-171)
7	023E23300	BM back stop drive belt (REP 11.20-171)
8	809E78370	BM back stop tensioner spring (REP 11.20-171)
9	–	Allen key (3mm) (Not Spared)
10	802E59180	Sensor cover
11	–	BM back stop bearing (Not Spared) (REP 11.26-171)
12	–	BM back stop idler bracket (Not Spared) (REP 11.26-171)
13	–	BM back stop idler shaft (Not Spared)
14	–	BM back stop tensioner link (Not Spared)
15	809E25100	BM back stop link spring (REP 11.26-171)
16	012E20870	BM back stop link (REP 11.26-171)
17	–	LH frame plate (Not Spared)
18	107E22600	BM guide home sensor (Q11-383)
19	–	Not used
20	127K54710	BM back stop motor assembly (REP 11.20-171)



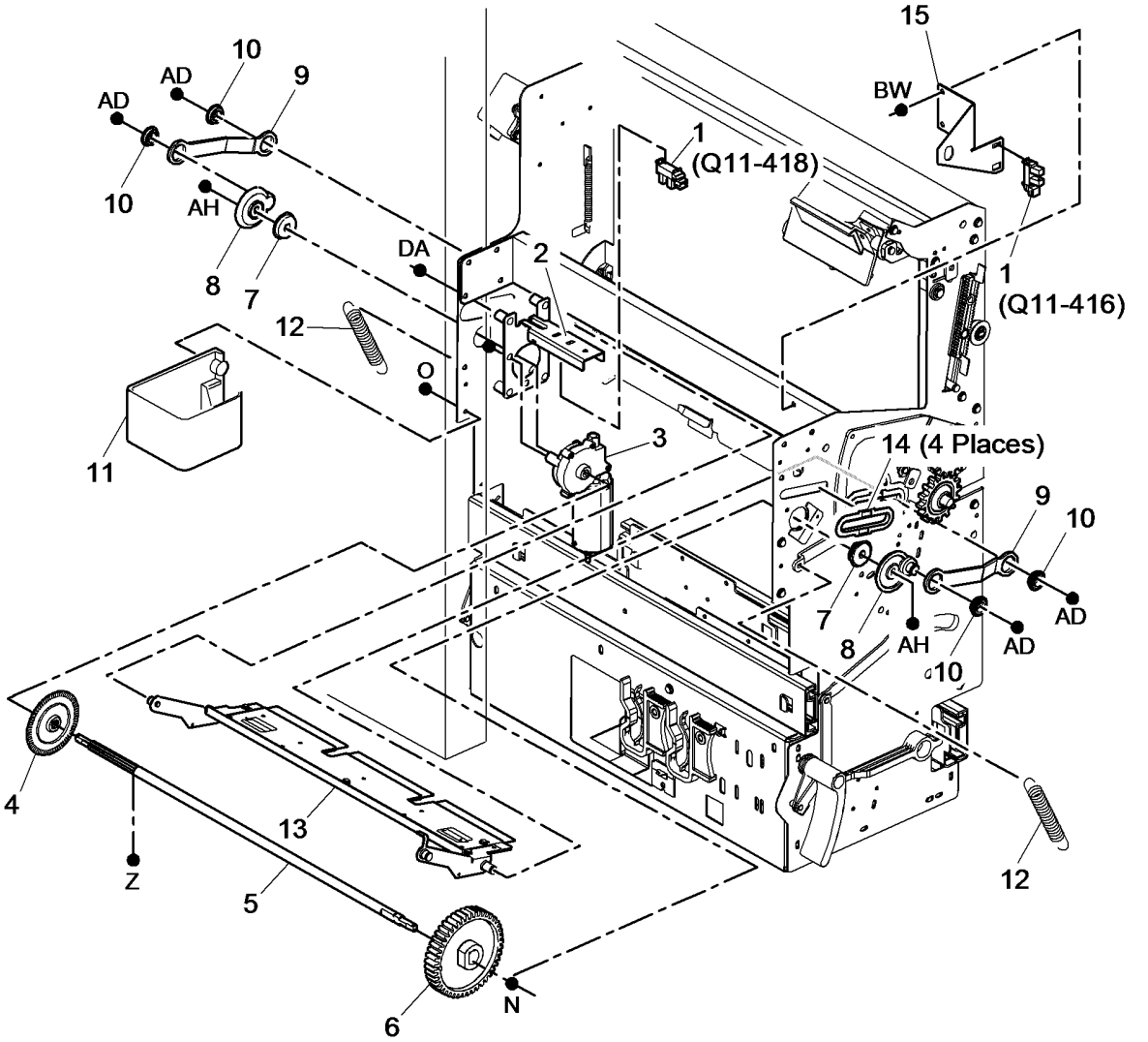
PL 11.164 HVF BM Back Stop Assembly

Item	Part	Description
1	019E74451	Anti-play shoe
2	–	BM back stop lock washer (P/O PL 11.164 Item 17)
3	–	Cable fastener (P/O PL 11.164 Item 17)
4	031E11300	Anti-rattle arm
5	–	Screw (P/O PL 11.164 Item 17)
6	–	Flanged hex nut (P/O PL 11.164 Item 17)
7	–	Back stop adjust spring (P/O PL 11.164 Item 17)
8	809E71970	Anti-play spring
9	–	Solenoid spring (P/O PL 11.164 Item 17)
10	–	Shaft support (Not Spared)
11	–	Belt clamp (P/O PL 11.164 Item 17)
12	–	BM back stop solenoid nut (P/O PL 11.164 Item 17)
13	–	Pivoting clamp (P/O PL 11.164 Item 17)
14	006K30790	BM back stop drive shaft (REP 11.26-171)
15	023E23140	BM back stop belt (REP 11.26-171)
16	–	BM back stop shaft (Not Spared)
17	019K13550	BM back stop assembly (P/O PL 31.12 Item 4) (REP 11.21-171)



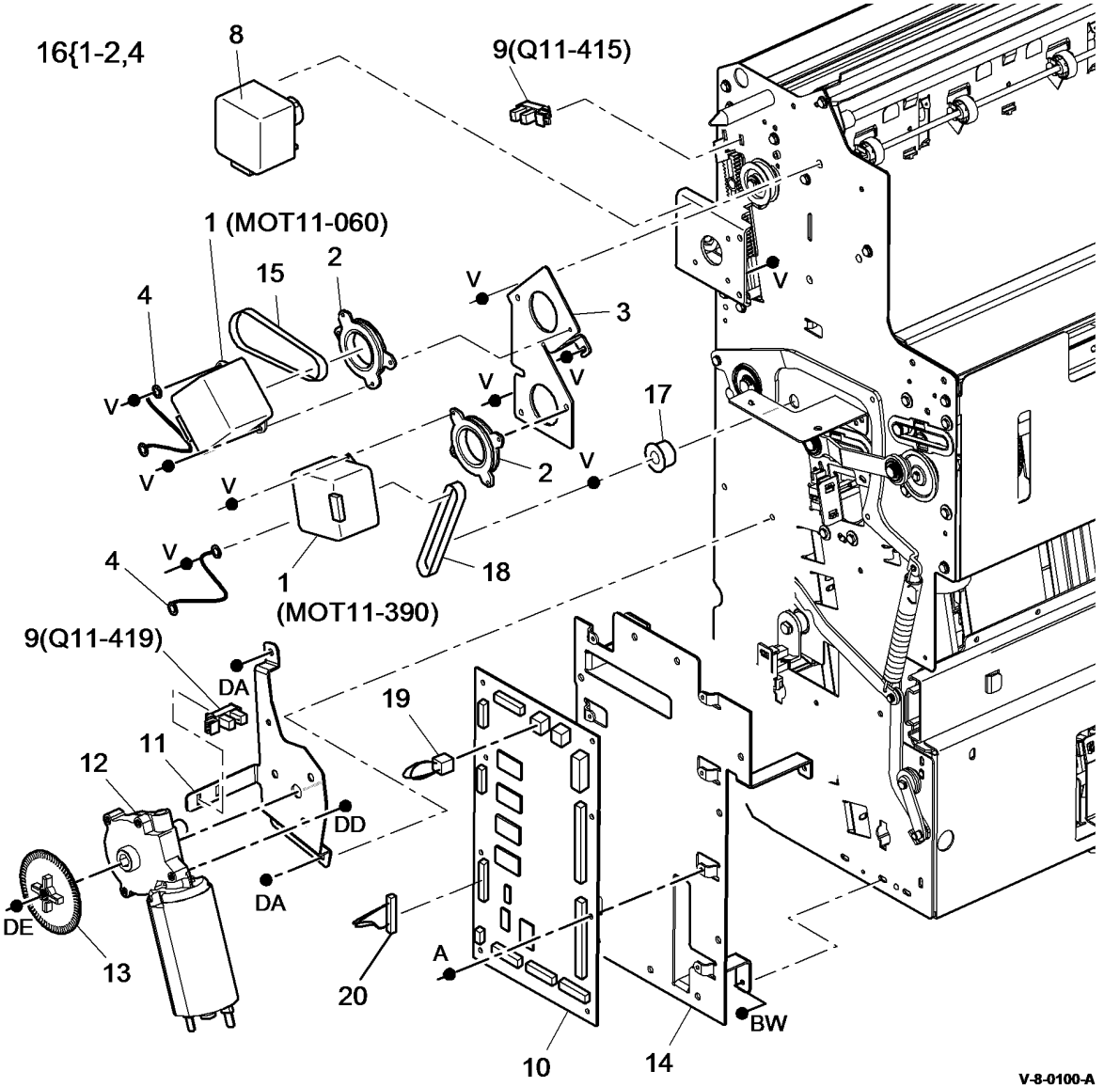
PL 11.165 HVF BM Crease Blade Motor

Item	Part	Description
1	107E22600	BM Crease blade motor encoder sensor (Q11-418), BM Crease blade home sensor (Q11-416) (Not Spared) (REP 11.18-171)
2	–	Motor bracket (P/O PL 11.165 Item 3)
3	127K54690	BM Crease blade motor assembly (MOT11-061) (REP 11.18-171)
4	014E47460	Motor encoder (REP 11.18-171)
5	–	Drive shaft (Not Spared)
6	007E69830	Drive gear
7	413W30654	Bearing (REP 11.18-171)
8	008E08220	Crank (REP 11.18-171)
9	012E20860	Connecting rod (REP 11.36-171)
10	–	Bearing (Not Spared)
11	802E59171	Motor cover
12	809E42861	Crease nip spring (REP 11.58-171)
13	815K11660	Crease blade assembly (REP 11.36-171)
14	032E19330	Crease blade support guide (REP 11.36-171)
15	–	Crease blade home sensor bracket (Not Spared)



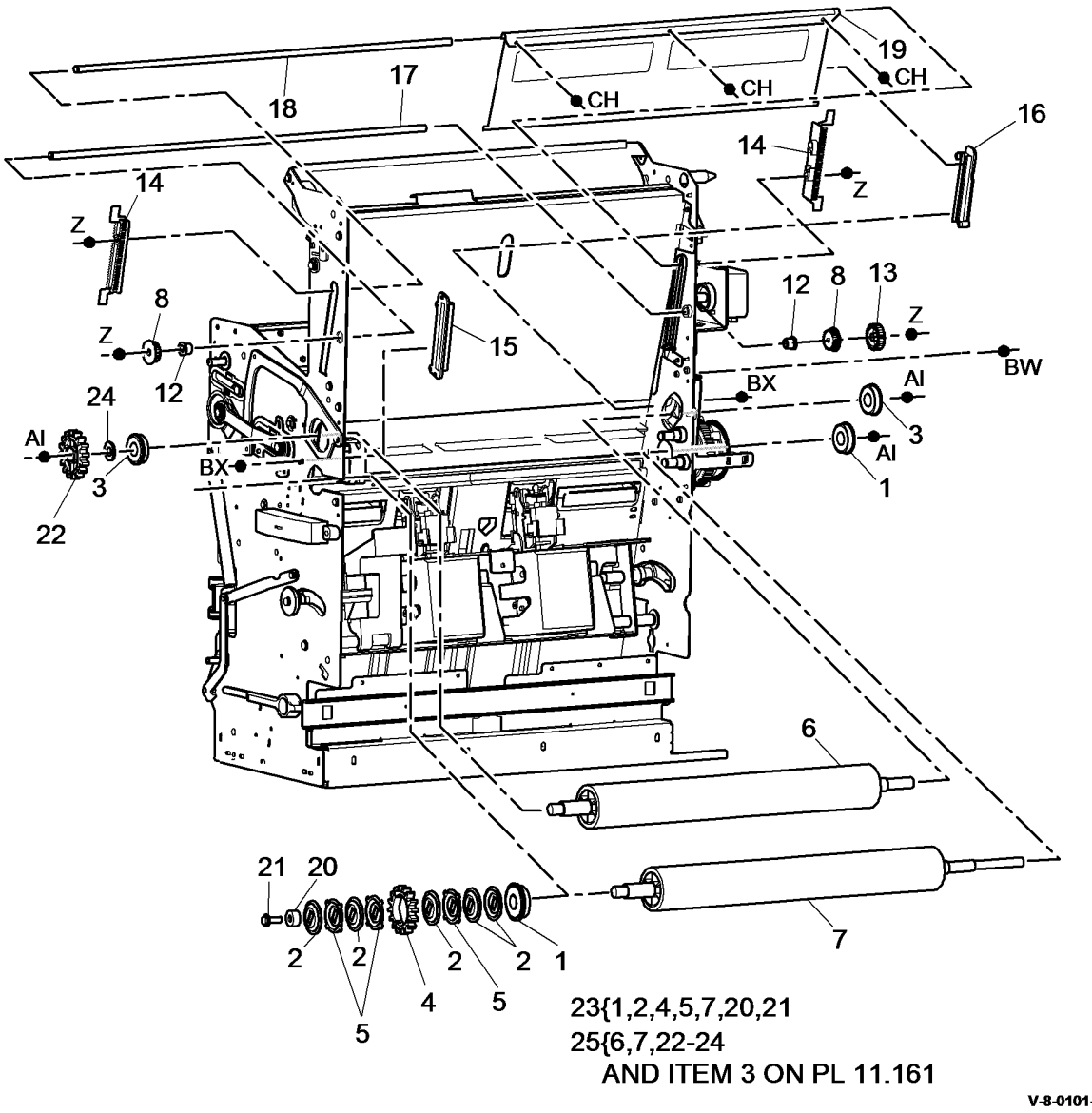
PL 11.166 HVF BM Crease Rolls Motor and PWB

Item	Part	Description
1	127K43751	BM Compiler motor (MOT11-060)/ BM flapper motor (MOT11-390) (REP 11.25-171)
2	–	Damper bracket (P/O PL 11.166 Item 16) (REP 11.25-171)
3	–	Motor bracket (Not Spared)
4	–	Ground wire (P/O PL 11.166 Item 16)
5	–	Not used
6	–	Not used
7	–	Not used
8	127K53620	Crease roll gate motor (MOT11-401) (REP 11.24-171)
9	107E22600	BM Crease roll gate home sensor (Q11-415), BM Crease roll motor encoder sensor (Q11-419)
10	960K42390	BM PWB (REP 11.17-171)
11	–	Motor bracket (P/O PL 11.166 Item 12)
12	127K54680	BM crease roll motor assembly (MOT11-062) (REP 11.19-171)
13	014E47460	BM Crease roll motor encoder
14	–	Support bracket (Not Spared)
15	023E25430	Belt
16	127K55520	BM Compiler motor assembly (REP 11.25-171)
17	–	BM flapper motor pulley (Not Spared)
18	–	BM flapper motor drive belt (Not Spared)
19	–	Tri-folder interlock cheat (Not Spared)
20	–	Tri-folder logic cheat (Not Spared)



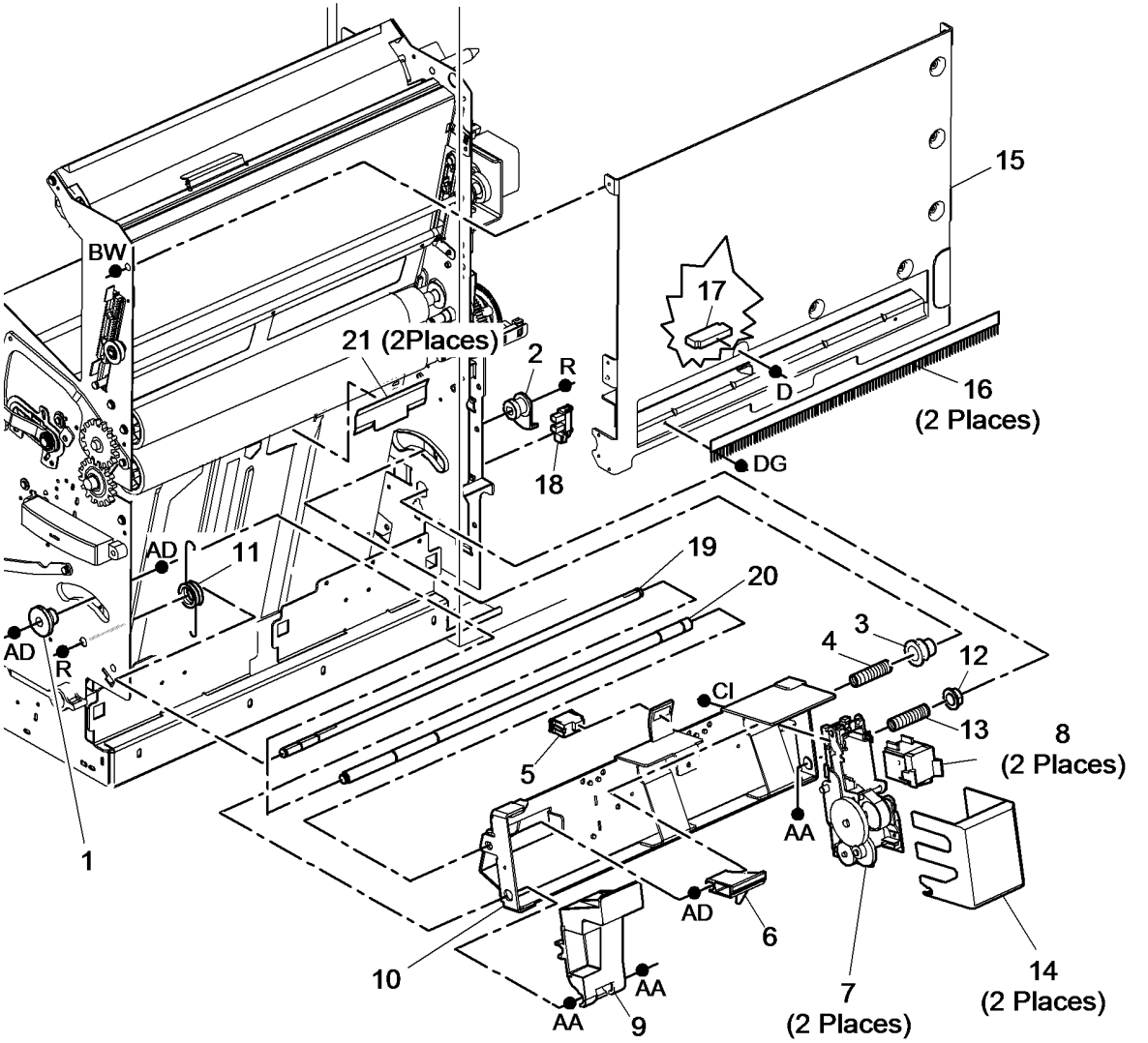
PL 11.167 HVF BM Crease Rolls and Support Leg

Item	Part	Description
1	–	Lower crease roll bearing (P/O PL 11.167 Item 23)
2	–	Shaft keyed clutch plate (P/O PL 11.167 Item 23)
3	413W31054	Crease roll bearing (REP 11.52-171)
4	–	Lower crease roll gear (P/O PL 11.167 Item 23)
5	–	Gear keyed clutch plate (P/O PL 11.167 Item 23) (REP 11.52-171)
6	006K29391	Upper crease roll (REP 11.52-171)
7	–	Lower crease roll (P/O PL 11.167 Item 25) (REP 11.52-171)
8	007E69081	Crease roll gate rack gear (REP 11.59-171)
9	–	Not used
10	–	Not used
11	–	Not used
12	–	Bearing (Not Spared)
13	007E69070	Crease roll gate rack drive gear (REP 11.59-171)
14	007E68951	Crease roll gate rack (REP 11.59-171)
15	020E38701	Crease roll gate front guide (REP 11.59-171)
16	020E38081	Crease roll gate rear guide (REP 11.59-171)
17	–	Crease roll drive shaft (Not Spared)
18	–	Crease roll gate shaft (Not Spared)
19	050E23160	Crease roll gate (REP 11.59-171)
20	–	Retainer (P/O PL 11.167 Item 23)
21	–	Screw (P/O PL 11.167 Item 23)
22	807E06040	Upper crease roll gear
23	–	Lower crease roll and clutch assembly (Not Spared)
24	–	Wavy washer (P/O PL 11.167 Item 25)
25	–	Crease roll repair kit (Not Spared)



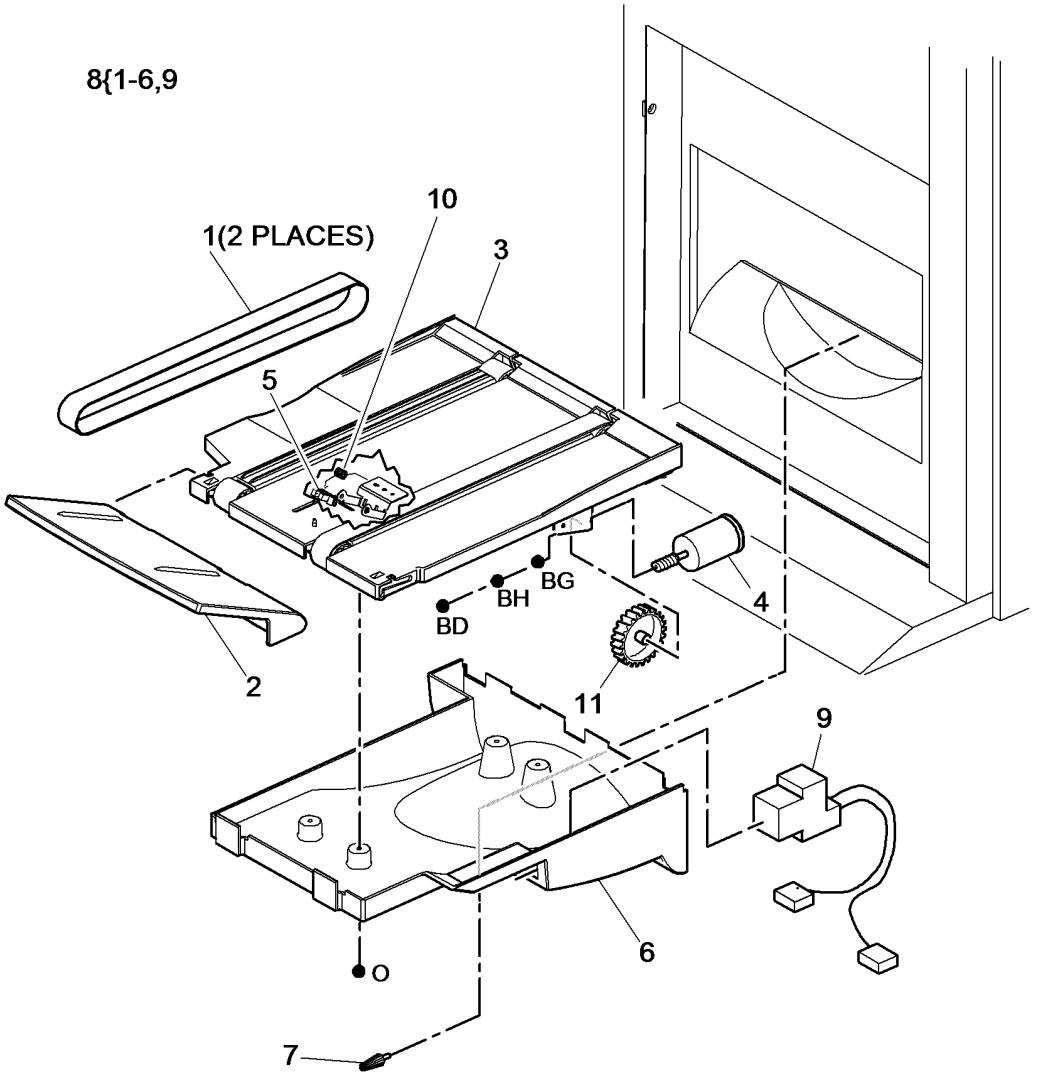
PL 11.168 HVF BM Stapler Assemblies

Item	Part	Description
1	020E38513	Front follower
2	016E17732	Actuator
3	–	Rear follower (Not Spared)
4	809E44010	Spring
5	130K74090	BM paper present sensor (Q11-190)
6	008E06850	Latch slide
7	029K03232	BM Staple head assembly (REP 11.27-171)
8	050K21270	Staples (1x 2000)
9	–	Staple bracket handle (Not Spared) (REP 11.28-171)
10	–	Stapler bracket assembly (Not Spared) (REP 11.28-171)
11	809E48830	Torsion spring (REP 11.28-171)
12	–	Bearing (Not Spared) (REP 11.28-171)
13	–	Spring (Not Spared) (REP 11.28-171)
14	802E42770	Staple head cover
15	–	BM Right cover (Not Spared) (REP 11.56-171)
16	125E02750	Static eliminator
17	130E11640	BM exit sensor (Q11-409) (REP 11.50-171)
18	107E22600	BM Stapler head carrier closed sensor (Q11-421) (REP 11.28-171)
19	–	Lower shaft (Not Spared) (REP 11.28-171)
20	–	Upper shaft (Not Spared) (REP 11.28-171)
21	055E51870	Mylar guide



PL 11.169 HVF BM Bin 2

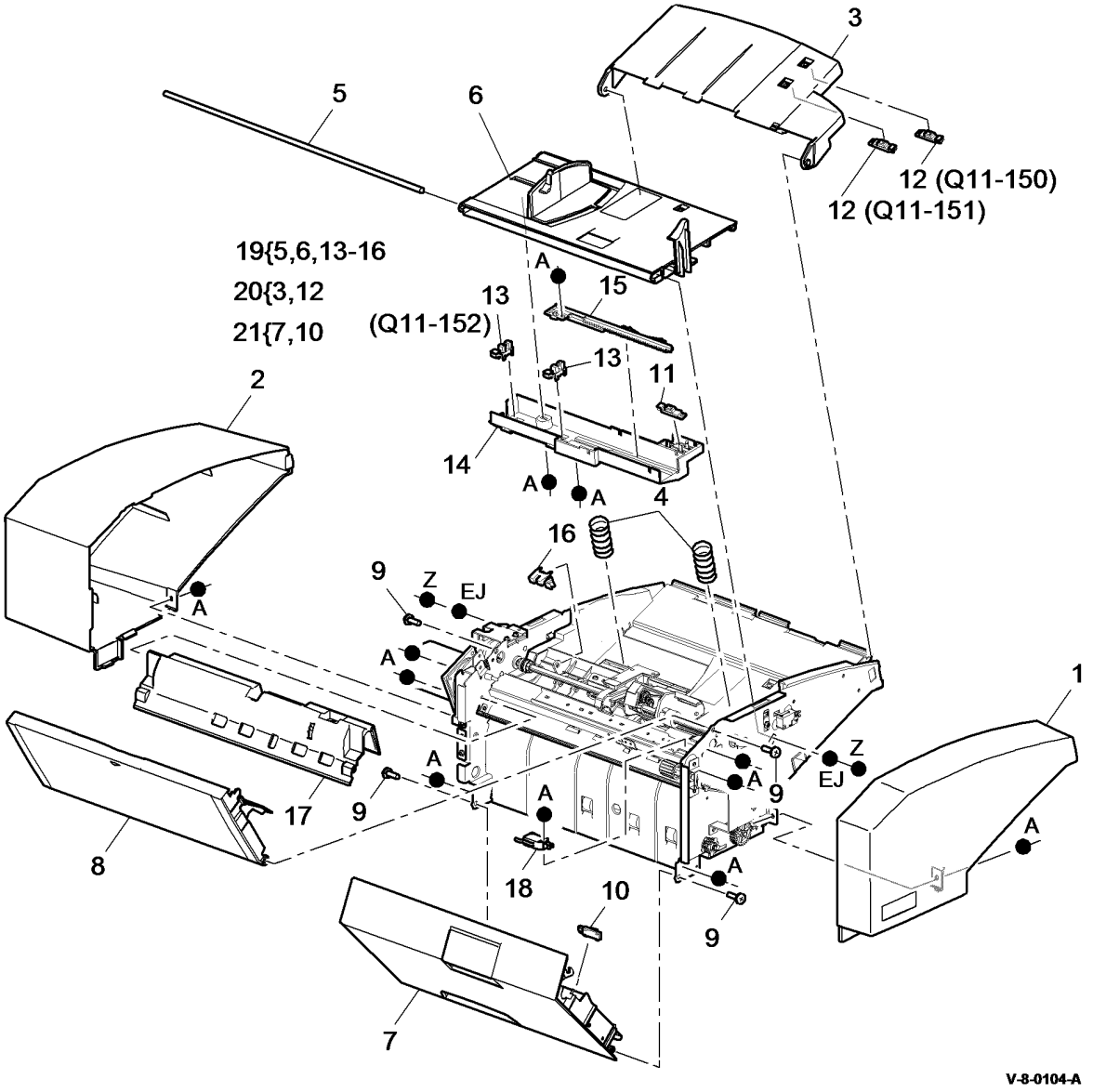
Item	Part	Description
1	023E18612	Conveyor belt (REP 11.29-171)
2	050E21971	HVF BM Bin 2 extension
3	–	HVF BM Bin 2 upper cover (P/O PL 11.169 Item 8)
4	127K53630	BM Conveyor belt drive motor (MOT11-402)
5	019E61171	HVF BM Bin 2 90% full sensor (Q11-389)
6	–	HVF BM Bin 2 lower cover (P/O PL 11.169 Item 8)
7	826E32840	Thumbscrew
8	–	HVF BM Bin 2 assembly (Not Spared)
9	–	HVF BM Bin 2 connector (Not Spared)
10	809E47341	HVF Bin 2 actuator spring
11	007E69000	Gear (50T)/pulley (24T)



PL 11.175 Inserter Covers

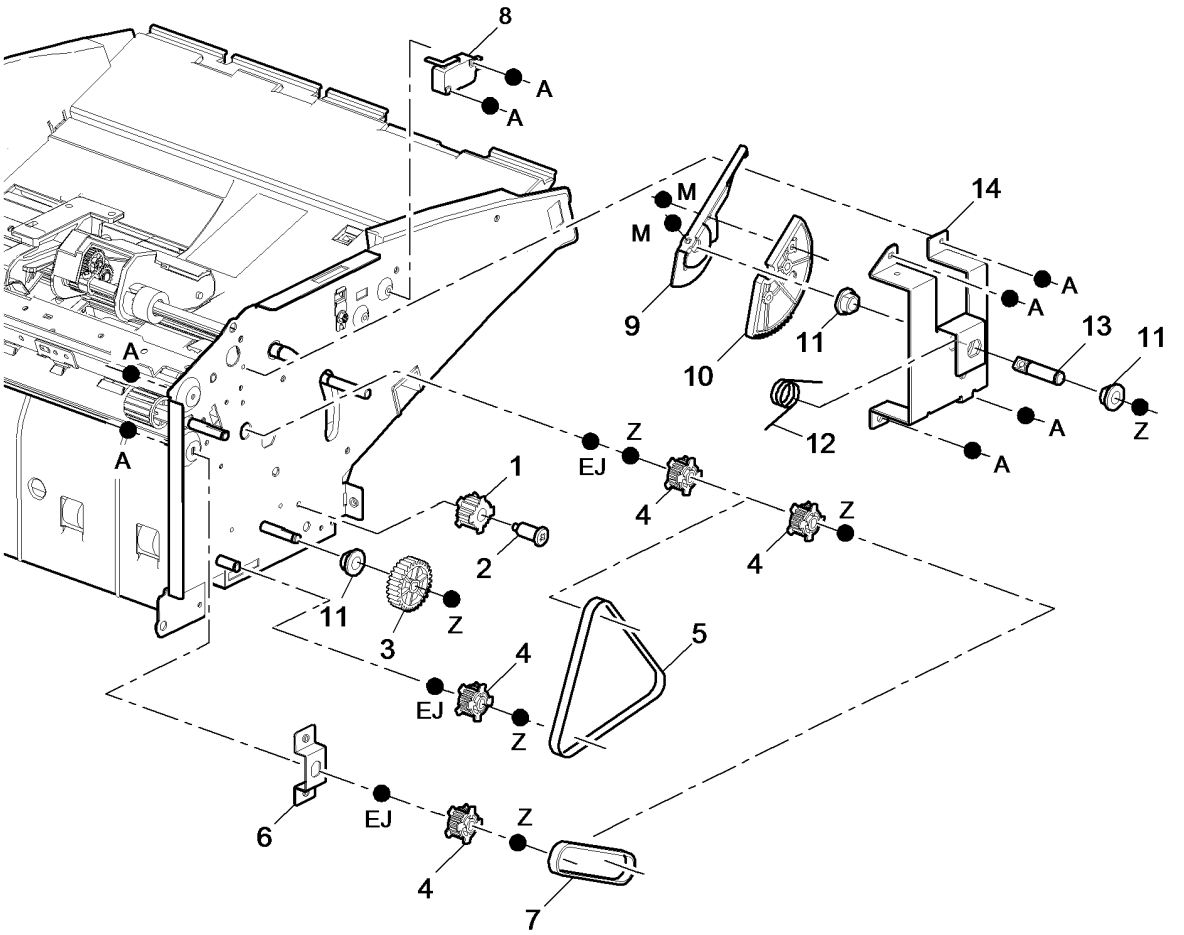
Item	Part	Description
1	–	Front cover (Not Spared) (REP 11.83-171)
2	–	Rear cover (Not Spared) (REP 11.83-171)
3	–	Sensor tray (P/O PL 11.175 Item 20) (REP 11.89-171)
4	–	Bottom tray spring (Not Spared)
5	–	Bottom tray shaft (P/O PL 11.175 Item 19)
6	–	Bottom tray (P/O PL 11.175 Item 19) (REP 11.90-171)
7	–	Top left door (P/O PL 11.175 Item 21) (REP 11.92-171)
8	–	Top cover door (P/O PL 11.179 Item 20)
9	–	Pivot pin (Not Spared)
10	–	Acceleration sensor (P/O PL 11.175 Item 21) (REP 11.92-171)
11	–	Unit empty sensor (Q11-153) (Not Spared) (REP 11.90-171)
12	–	Sheet size detector 1 (Q11-150)/ Sheet size detector 2 (Q11-151) (P/O PL 11.175 Item 20) (REP 11.89-171)
13	–	Inserter paper width sensor 1 (Q11-152) (P/O PL 11.175 Item 19) (REP 11.90-171)
–	–	Inserter paper width sensor 2 (P/O PL 11.175 Item 19) (NOTE) (REP 11.90-171)
14	–	Bottom tray bracket (P/O PL 11.175 Item 19)
15	–	Bottom tray rack (P/O PL 11.175 Item 19)
16	–	Bottom plate sensor (Q11-156) (P/O PL 11.175 Item 19) (REP 11.94-171)
17	–	Top cover (Not Spared)
18	–	Left door interlock switch (S11-431) (Not Spared) (REP 11.88-171)
19	050K68100	Bottom tray assembly (REP 11.90-171, REP 11.95-171)
20	848K19170	Sensor tray assembly (REP 11.89-171)
21	848K19180	Top left door assembly (REP 11.92-171)

NOTE: *Inserter paper width sensor 2 has no component control code.*



PL 11.177 Inserter Main Drives (1 of 3)

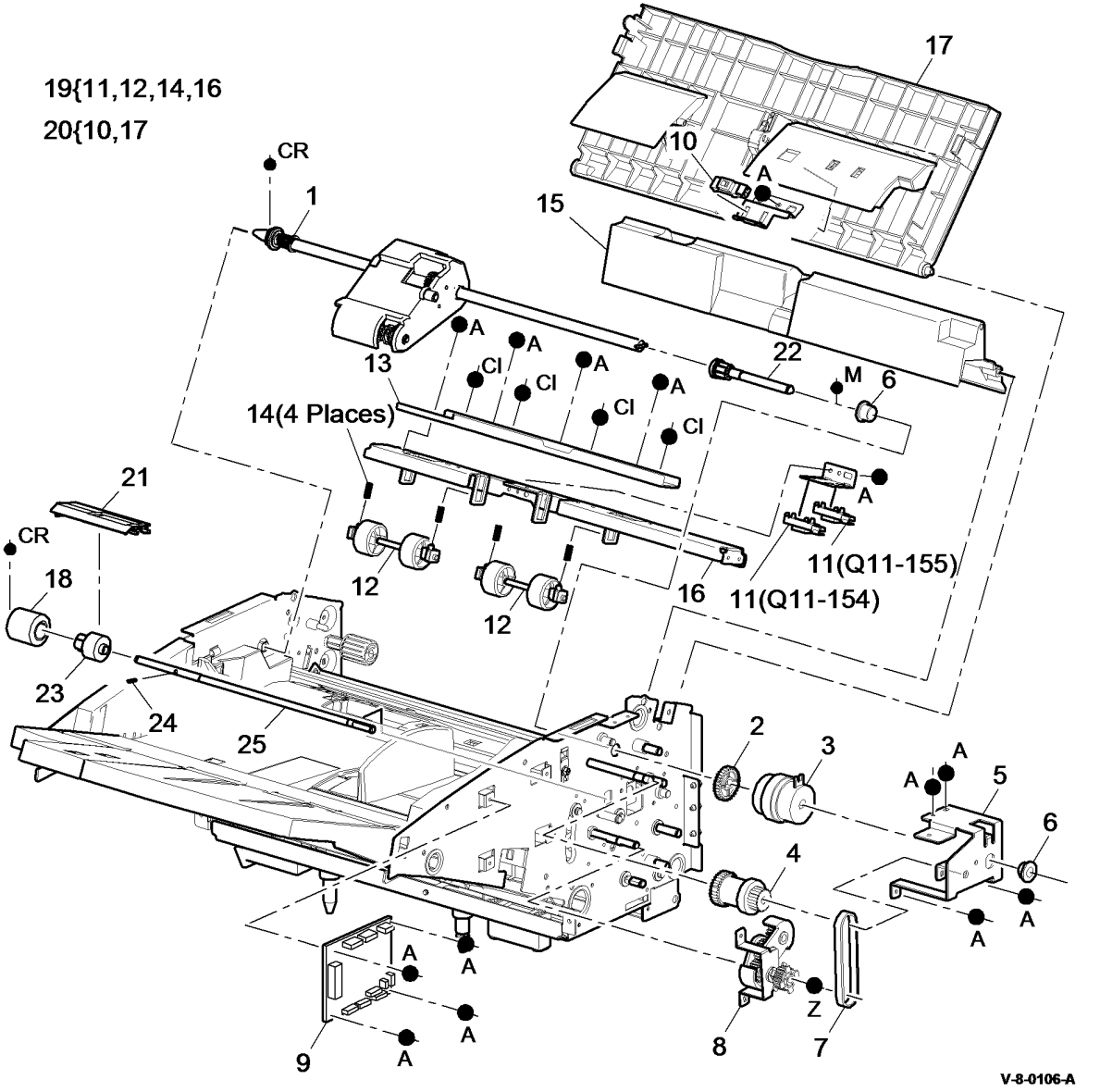
Item	Part	Description
1	–	Idler (Not Spared)
2	–	Idler pin (Not Spared)
3	–	Gear (Not Spared)
4	–	Pulley (Not Spared)
5	–	Belt (Not Spared)
6	–	Bracket (Not Spared)
7	–	Jam drive belt (Not Spared)
8	–	Top cover interlock switch (S11-306) (Not Spared) (REP 11.87-171)
9	–	Loading lever (Not Spared)
10	–	Loading gear (Not Spared)
11	–	Bearing (Not Spared)
12	–	Torsion spring (Not Spared)
13	–	Loading shaft (Not Spared)
14	–	Front loading bracket (Not Spared)



PL 11.179 Inserter Main Drives (2 of 3)

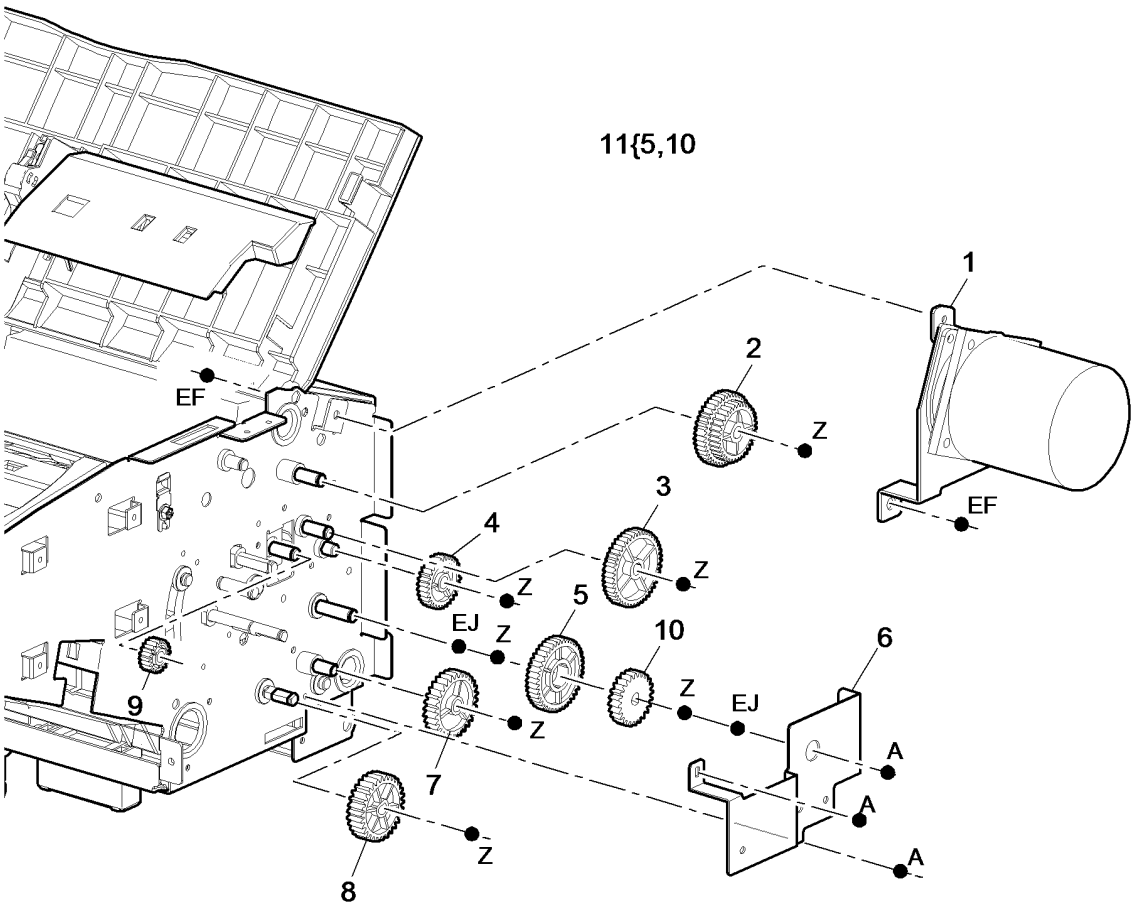
Item	Part	Description
1	050K68080	Pickup assembly (See NOTE) (REP 11.95-171)
2	–	Pickup gear (Not Spared)
3	005K12890	Inserter clutch (CL11-077) (REP 11.86-171)
4	–	Reverse roller drive idler (Not Spared)
5	–	Pickup assembly bracket (Not Spared)
6	–	Bearing (Not Spared)
7	–	Reverse roller drive belt (Not Spared)
8	–	Reverse roller drive (Not Spared)
9	960K46170	Inserter PWB (REP 11.85-171)
10	–	IDG pickup sensor (P/O PL 11.179 Item 20) (REP 11.91-171)
11	–	TE sensor (Q11-155) (REP 11.93-171)/LE sensor (Q11-154) (REP 11.93-171) (P/O PL 11.179 Item 19)
12	–	Idle roller assembly (P/O PL 11.179 Item 19) (REP 11.98-171)
13	–	Idler roller bracket (Not Spared)
14	–	Idler roller spring (P/O PL 11.179 Item 19)
15	–	Top inside cover (Not Spared)
16	–	Idler roller cover (P/O PL 11.179 Item 19)
17	–	Top cover door (P/O PL 11.179 Item 20) (REP 11.91-171)
18	050K68090	Reverse feed roller (REP 11.95-171)
19	006K32470	Idler roller assembly (REP 11.98-171)
20	848K19160	Top cover door assembly (REP 11.91-171)
21	848K37330	Retard cover
22	–	Drive coupling (Not Spared)
23	–	Reverse feed roll core (Not Spared)
24	–	Pin (Not Spared)
25	–	Shaft (Not Spared)

NOTE: *HFSI. To reset the HFSI count, refer to dC135.*



PL 11.181 Inserter Main Drives (3 of 3)

Item	Part	Description
1	127K61990	Inserter motor (MOT11-078) (REP 11.84-171)
2	–	Idler (Not Spared)
3	–	Driver gear (Not Spared)
4	–	Idler (Not Spared)
5	–	Tray down gear (Not Spared)
6	–	Gear cover bracket (Not Spared)
7	–	Idler (Not Spared)
8	–	Bottom shaft drive (Not Spared)
9	–	Feed roller drive gear (Not Spared)
10	–	Tray down clutch (Not Spared)
11	–	Tray down clutch assembly (Not Spared)



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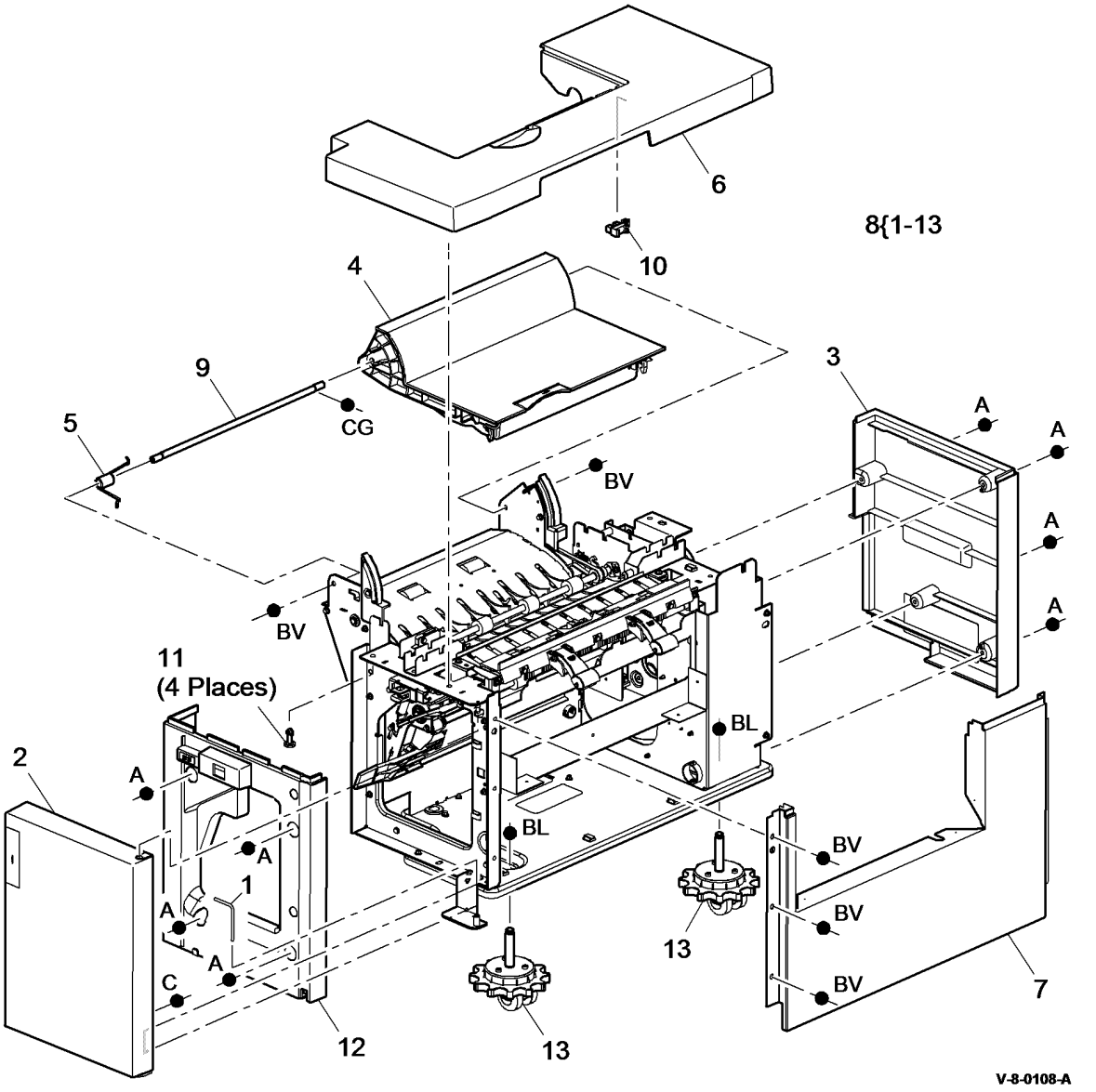
PL 11.190 Tri-Folder Covers

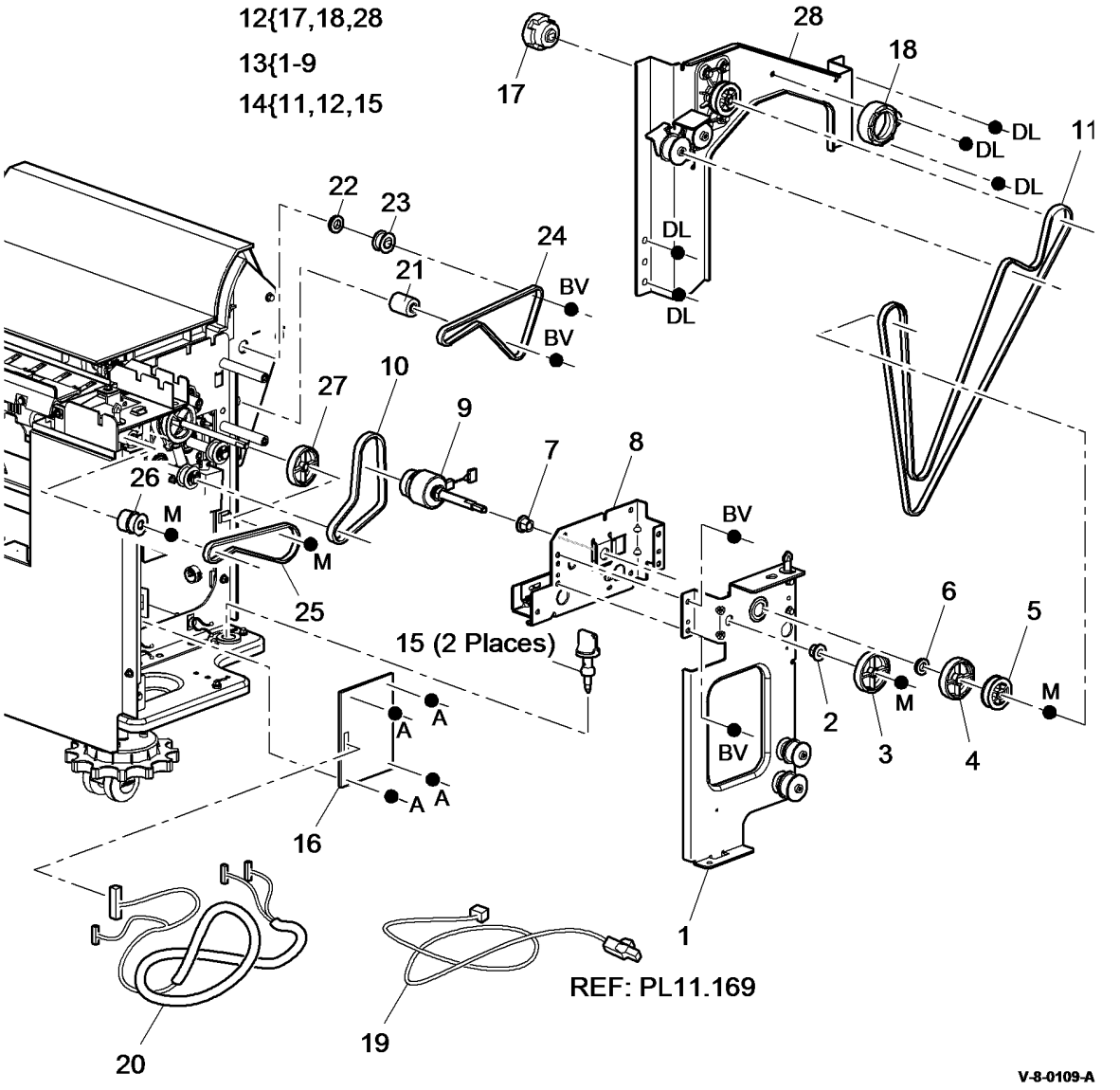
Item	Part	Description
1	–	Door pin (Not Spared)
2	802K94010	Front door (REP 11.67-171)
3	848K11740	Rear cover (REP 11.67-171)
4	–	Top cover door assembly (REF: PL 11.195 Item 10) (REP 11.73-171)
5	–	Top cover door assembly spring (P/O PL 11.190 Item 8)
6	802E93931	Top cover (REP 11.67-171)
7	848E17430	Right side cover (REP 11.67-171)
8	–	Tri-Folder (complete) (Not Spared)
9	–	Top cover door assembly shaft (P/O PL 11.190 Item 8)
10	107E26490	Top cover interlock sensor (Q11-394) (REP 11.77-171)
11	–	Top cover locking stud (Not Spared)
12	802E99581	Front cover
13	017K04190	Castor

NOTE: *For detail of bin 2, refer to PL 11.169.*



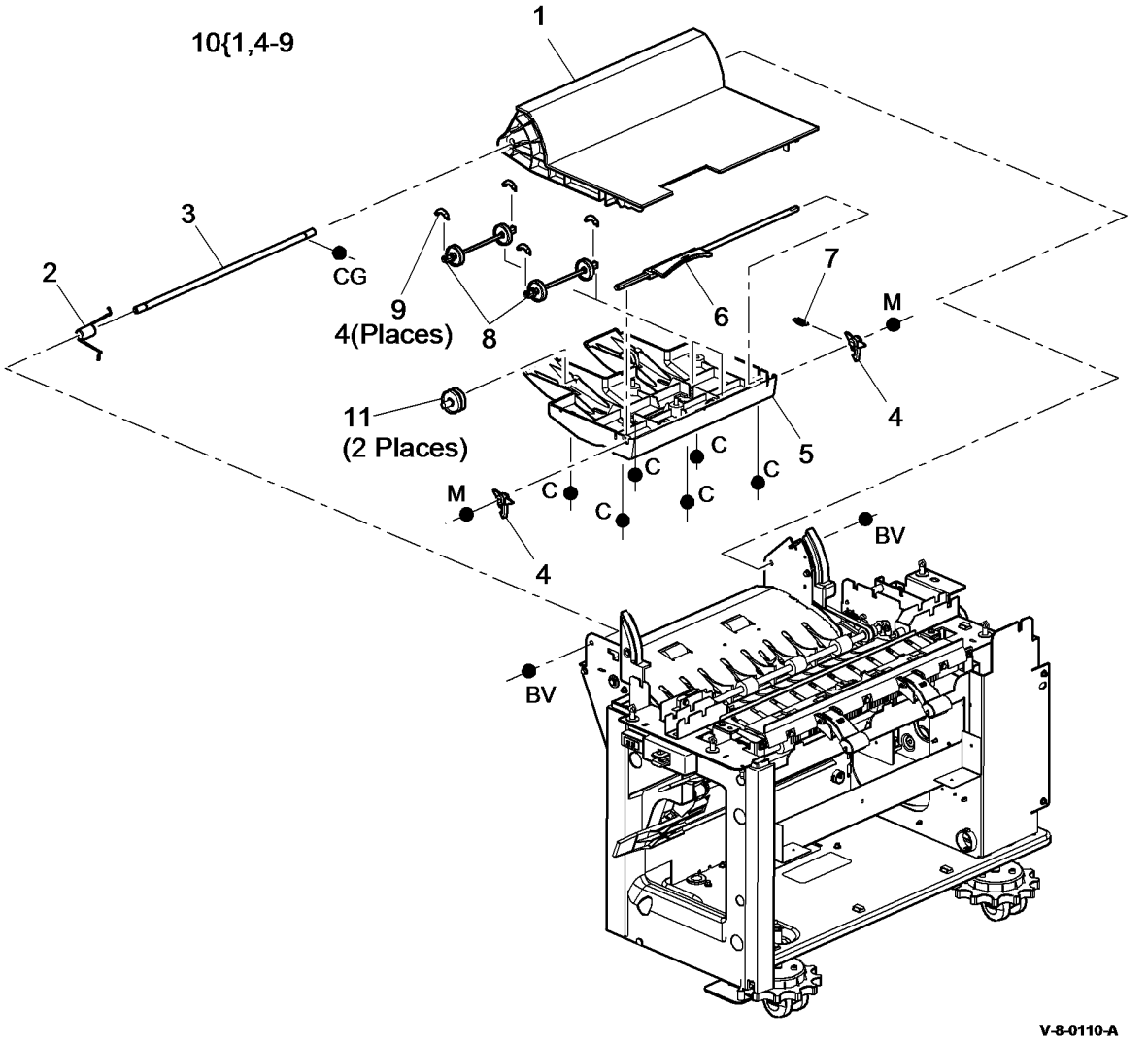
PL 11.193 Tri-Folder Drives module

Item	Part	Description
1	–	Drive coupling assembly bracket (P/O PL 11.193 Item 13)
2	–	Bearing (P/O PL 11.193 Item 13)
3	–	Feed/exit roll drive gear (40T) (P/O PL 11.193 Item 13)
4	–	Gear (40T) (Black) (P/O PL 11.193 Item 13)
5	–	Driven pulley (P/O PL 11.193 Item 13)
6	–	Bearing (P/O PL 11.193 Item 13)
7	–	Bearing (P/O PL 11.193 Item 13)
8	–	Idler assembly bracket (P/O PL 11.193 Item 13)
9	–	Drive clutch (CL11-087) (P/O PL 11.193 Item 13)
10	023E23290	Crease roll belt
11	023E30780	Coupler drive belt
12	007K14460	Drive assembly (REP 11.68-171)
13	005K12690	Drive coupling assembly (REP 11.69-171)
14	675K53640	Tri-Folder install kit (REP 11.68-171)
15	–	Thumb screw (P/O PL 11.193 Item 14)
16	960K24000	Tri-folder control PWB (REP 11.80-171)
17	–	Drive coupler (P/O PL 11.193 Item 12)
18	–	Align gauge coupler (P/O PL 11.193 Item 12)
19	962K49592	Bin 2 tray harness (REP 11.81-171)
20	962K49571	Tri-folder harness (REP 11.81-171)
21	–	Drive belt tensioner pulley (Not Spared)
22	–	Feed roller bearing (Not Spared)
23	–	Feed roll pulley (Not Spared) (REP 11.70-171)
24	–	Feed roll belt (Not Spared) (REP 11.70-171)
25	023E23370	Feed roll drive belt (REP 11.68-171)
26	020E39921	Pulley gear 19T/20T BM (REP 11.68-171)
27	020E39930	Pulley gear 38T (REP 11.68-171)
28	–	Drive assembly bracket (P/O PL 11.193 Item 12)



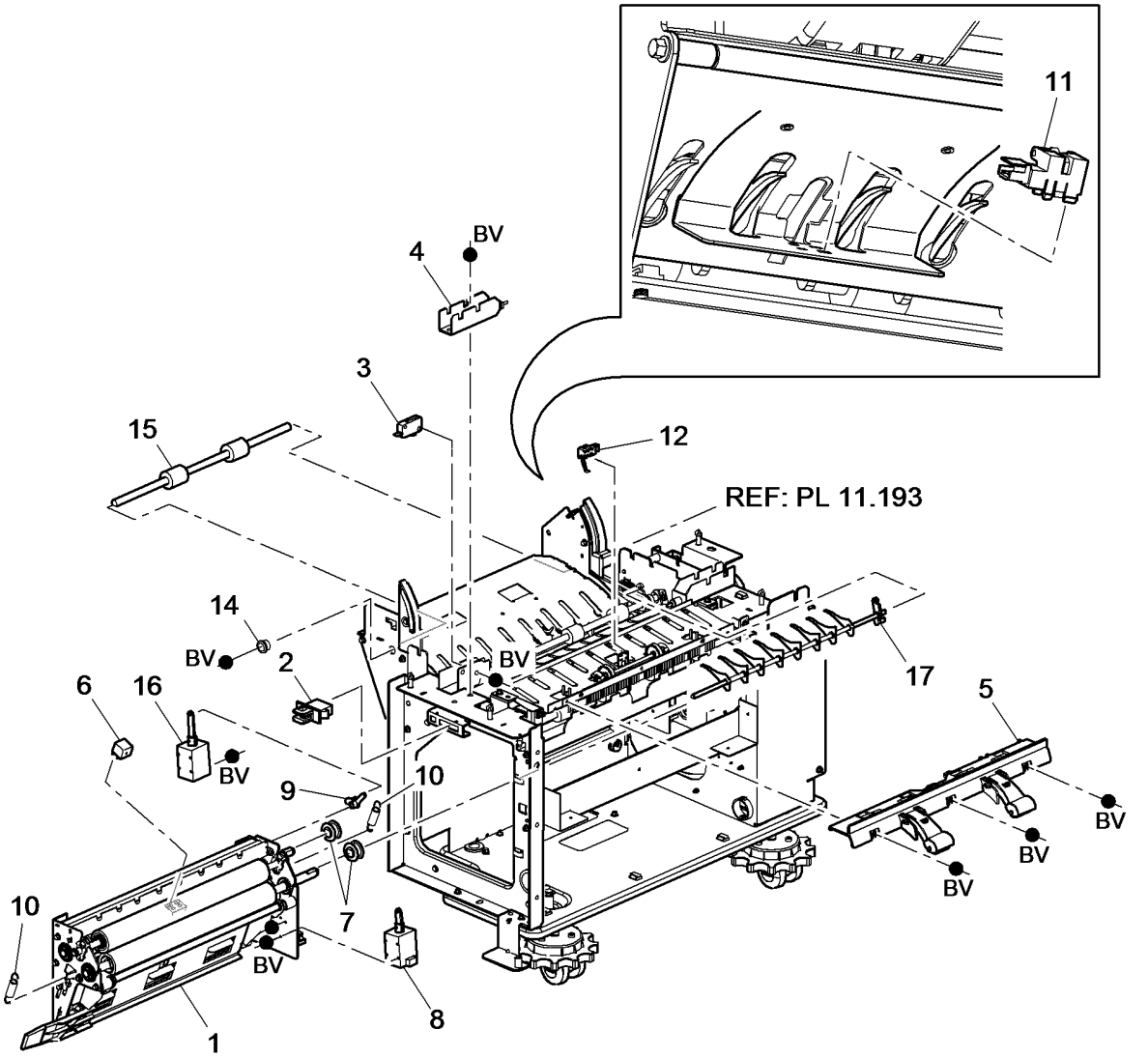
PL 11.195 Tri-Folder Top Door Cover Assembly

Item	Part	Description
1	–	Top access cover (P/O PL 11.195 Item 10)
2	–	Top cover door assembly spring (Not Spared)
3	–	Top cover door assembly shaft (Not Spared)
4	–	Latch hook (P/O PL 11.195 Item 10)
5	–	Top door cover assembly base (P/O PL 11.195 Item 10)
6	–	Latch handle (P/O PL 11.195 Item 10)
7	–	Latch spring (P/O PL 11.195 Item 10)
8	059K58690	Idler assembly (REP 11.73-171)
9	–	Idler spring (P/O PL 11.195 Item 10)
10	848K11680	Top cover door assembly (REP 11.73-171)
11	–	Idler assembly (Not Spared)



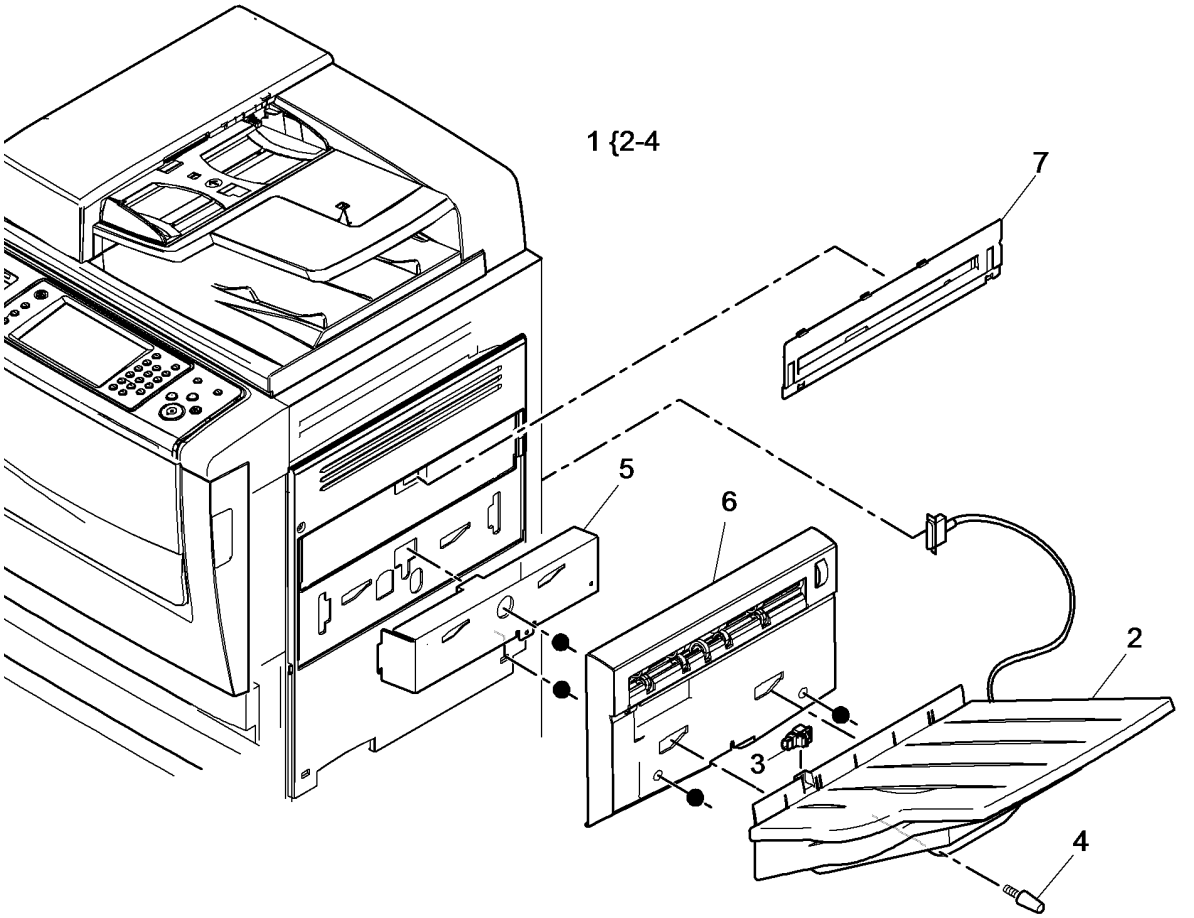
PL 11.197 Tri-Folder Main Drives Assembly

Item	Part	Description
1	–	Roller assembly (Not Spared) (REP 11.74-171)
2	110E19840	Front door interlock switch (S11-393) (REP 11.77-171)
3	110E19831	Top cover interlock switch (REP 11.77-171)
4	–	Top access cover docking catch (Not Spared)
5	–	Pressing and stacking assembly (Not Spared)
6	130E11861	Assist gate sensor (Q11-184) (REP 11.78-171)
7	020E38480	Crease roll pulley (REP 11.74-171)
8	121K44660	Assist gate solenoid (SOL11-086) (REP 11.71-171)
9	011E13832	Centerfold entry gate lever (REP 11.74-171)
10	809E44040	Crease roll spring (REP 11.72-171)
11	130K74920	Entry sensor (Q11-183) (REP 11.78-171)
12	130K74051	Exit sensor (Q11-185) (REP 11.79-171)
13	–	Not used
14	–	Feed roller bearing (Not Spared)
15	–	Feed roller (Not Spared) (REP 11.70-171)
16	121K44650	Diverter solenoid (SOL11-085) (REP 11.74-171)
17	050E23180	Diverter gate



PL 12.10 OCT

Item	Part	Description
1	050K77430	OCT (complete)
2	–	Tray (P/O PL 12.10 Item 1)
3	130E81311	OCT level sensor (Q12-304)
4	–	Thumbscrew (P/O PL 12.10 Item 1)
5	868E85870	Mounting bracket
6	059K83312	OCT transport assembly (REP 12.1)
7	–	Right cover infill panel (P/O PL 28.10 Item 4)



V-8-0112-A

PL 17.00 Secure Access Additions

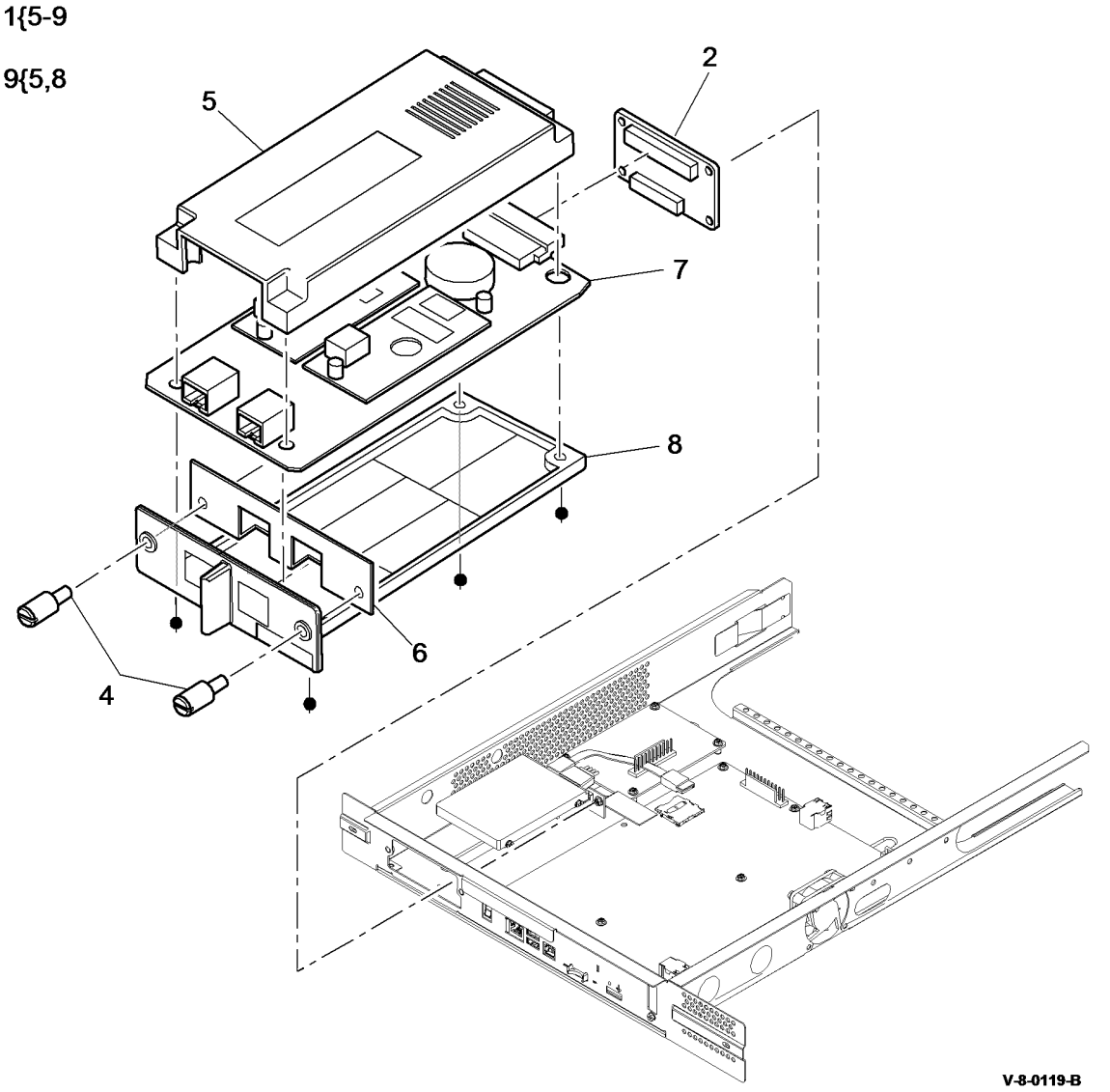
Item	Part	Description
1	101E28760	Secure access controller
2	105E24030	Xerox secure access power supply
3	–	Xerox secure access card reader (HID)
4	–	Xerox secure access card reader (MAGSTRIPE)
5	–	Xerox secure access card reader (MIFARE)
6	–	Xerox secure access card reader (LEGIC)
7	–	Xerox secure access power cord (NA)
8	–	Xerox secure access power cord (EU)
9	–	Xerox secure access power cord (UK)

NO EXPLODED VIEW PROVIDED

V-8-0118-A

PL 20.05 Fax Module

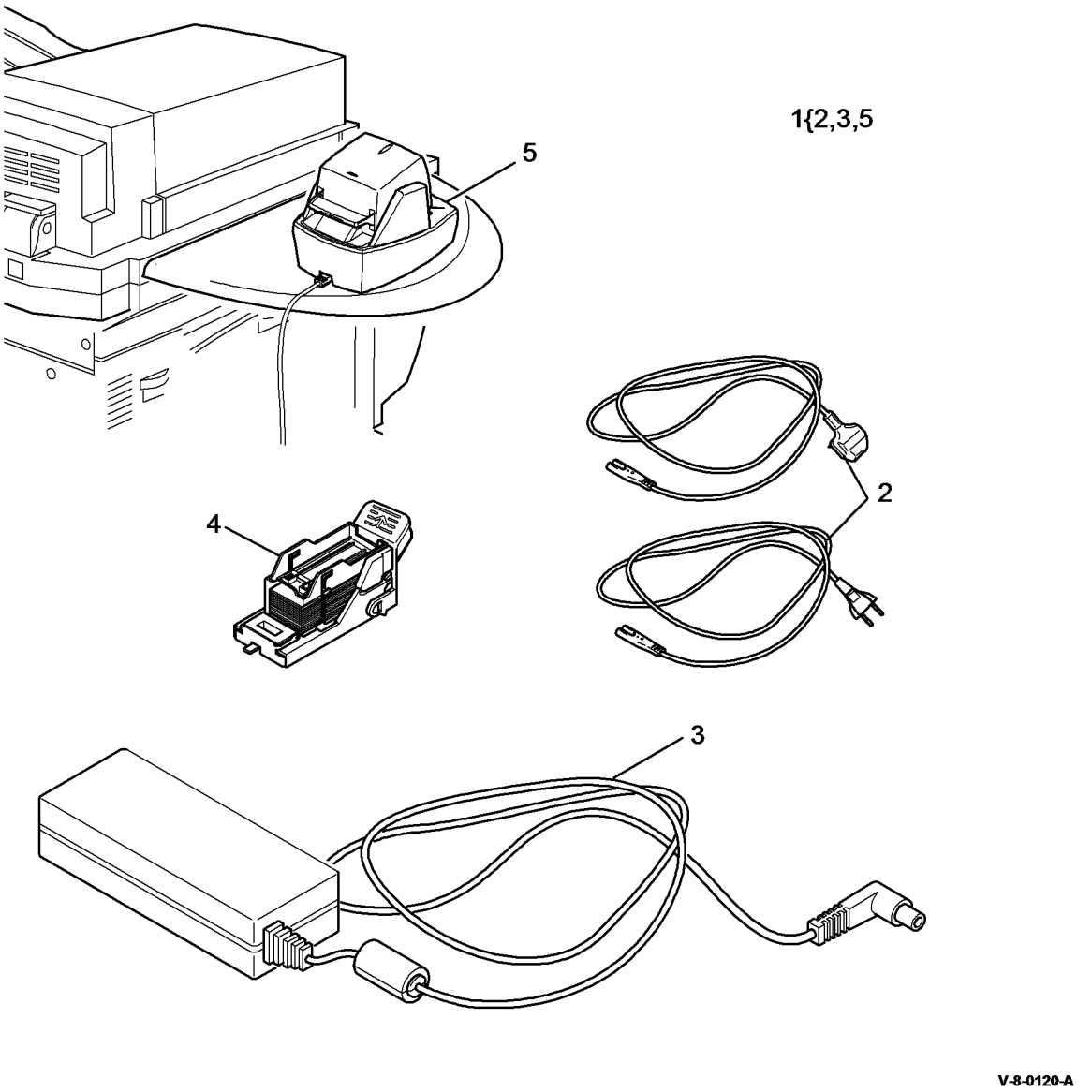
Item	Part	Description
1	–	Fax module
–	–	1 line (P/O PL 31.35 Item 1)
–	–	2 line (P/O PL 31.40 Item 1)
2	960K73340	Fax connector PWB
3	–	Telephone cable (not shown on illustration)
–	–	USSG/XCL
–	–	United Kingdom
–	–	Germany
–	–	Italy
–	–	Netherlands
–	–	Belgium
–	–	Switzerland
–	–	Denmark
–	–	Austria
–	–	Sweden
–	–	France
–	–	Norway
–	–	Portugal/Spain
–	–	Finland
4	–	Thumbscrew (Not Spared)
5	–	Front cover (P/O PL 20.05 Item 9)
6	–	Ground plate (P/O PL 20.05 Item 1)
7	–	Fax PWB (see below for variants)
–	–	1 line (W/O TAG X-001) (Not Spared)
–	–	2 line (W/O TAG X-001) (Not Spared)
–	–	1 line (W/TAG X-001) (P/O PL 31.35 Item 2)
–	–	2 line (W/TAG X-001) (P/O PL 31.40 Item 2)
–	–	1 line fax34 (W/TAG X-002) (P/O PL 31.35 Item 2)
–	–	2 line fax34 (W/TAG X-002) (P/O PL 31.40 Item 2)
8	–	Rear cover (P/O PL 20.05 Item 9)
9	848E74310	Covers assembly
10	962K82620	Fax connector PWB to Fax module harness



PL 25.10 Convenience Stapler

Item	Part	Description
1	–	Convenience stapler kit (REF: PL 31.11 Item 5) (NOTE)
2	–	Power cord (P/O PL 25.10 Item 1)
3	–	PSU (P/O PL 25.10 Item 1)
4	008R12964	Staple cartridge (1 cartridge 5000 staples)
–	008R12941	Staple cartridge refill (3 cartridges, 3 x 5000 staples)
5	–	Convenience stapler (P/O PL 25.10 Item 1) (XE)
–	–	Convenience stapler (USSG/XCL) (P/O PL 25.10 Item 1)

NOTE: *The convenience stapler has no serviceable parts.*



PL 26.10 Consumables and Tools (1 of 2)

Item	Part	Description
1	–	9 Way gender changer/Null modem adapter (Not Spared)
2	043P00048	Formula A cleaning fluid (WARNING)
3	600T02133	Line test tool
4	043P00045	Film remover (WARNING)
5	600T02231	USB Cable
6	600T02252	Ethernet crossover cable
7	600T02261	Finisher bypass connector
8	043E00550	Plastislip grease
9	043P00081	Lens and mirrors cleaner
10	099P03037	Disposable gloves (general protection) (Qty. 100) (WARNING)
11	108R00493	Staple cartridge (3 x 5000) (2K LCSS/LVF BM)
12	600T02058	Serial cable
13	035E56460	Wiper
14	082E02000	Test pattern (A3/11x17)
15	082E02010	Test pattern (A4)
16	082E02020	Test pattern (8.5x11)
17	082E08230	Test pattern (solid area density scale)
18	082P00448	Test pattern (visual scale)
19	008R90275	Antistatic fluid
20	070P00043	Molub grease 777
21	146E02700	USB Reader (HITAG)
22	008R12912	Staple cartridge (HVF) (1 x 5000)
23	600T91952	Mag seal repair tool
24	600T02332	Data cable
25	108R00682	1K LCSS staple cartridge

WARNING

Wear protective gloves, PL 26.10 Item 10 when using solvents and cleaning agents.

NO EXPLODED VIEW PROVIDED

V-8-0121-A

PL 26.11 Consumables and Tools (2 of 2)

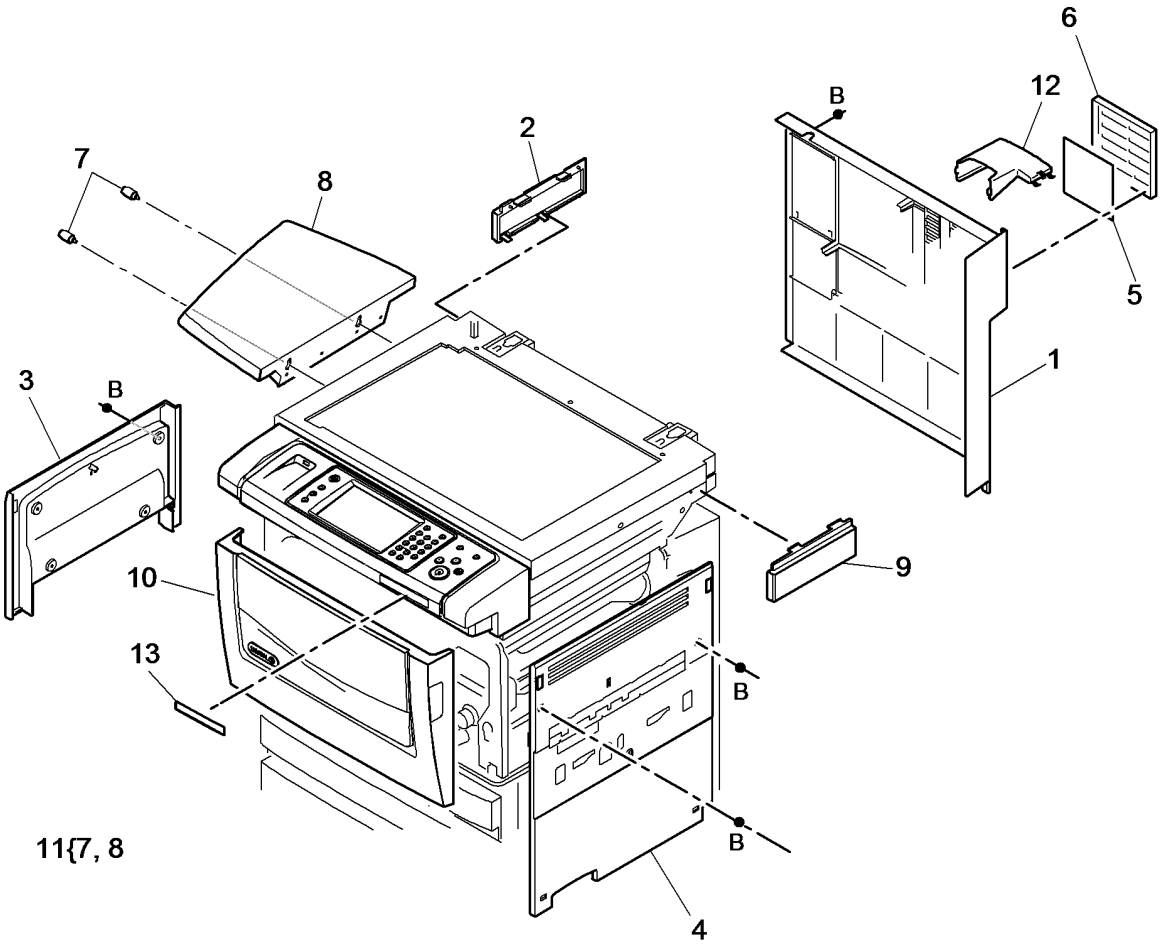
Item	Part	Description
1	008R12964	Convenience stapler cartridge (1 cartridge 5000 staples)
2	108R01158	Staple cartridge (LVF BM) (4 x 2000)
–	029K04820	Staple cartridge (LVF BM) (1 x 2000)
3	006R01551	Toner cartridge (2) pack (45-55 ppm)
–	006R01552	Toner cartridge (2) pack (65-90 ppm)
4	008R12941	Convenience stapler cartridge refill (staples only - 3 x 5000)
5	600T01937	Handset tool
6	008R12897	Staples (HVF BM) (8 x 2000)
7	600T02329	PFP stack height sensor & retard shield setting tool (W/TAG P-050, TAG P-051)
8	600T02331	LVPS test box
9	070P00072	Molykote silicone dry lubricant
10	070E00460	Moovit oil
11	070E01480	Hi-Lube grease (ADJ 40.1)

NO EXPLODED VIEW PROVIDED

V-8-0122-A

PL 28.10 Main Covers

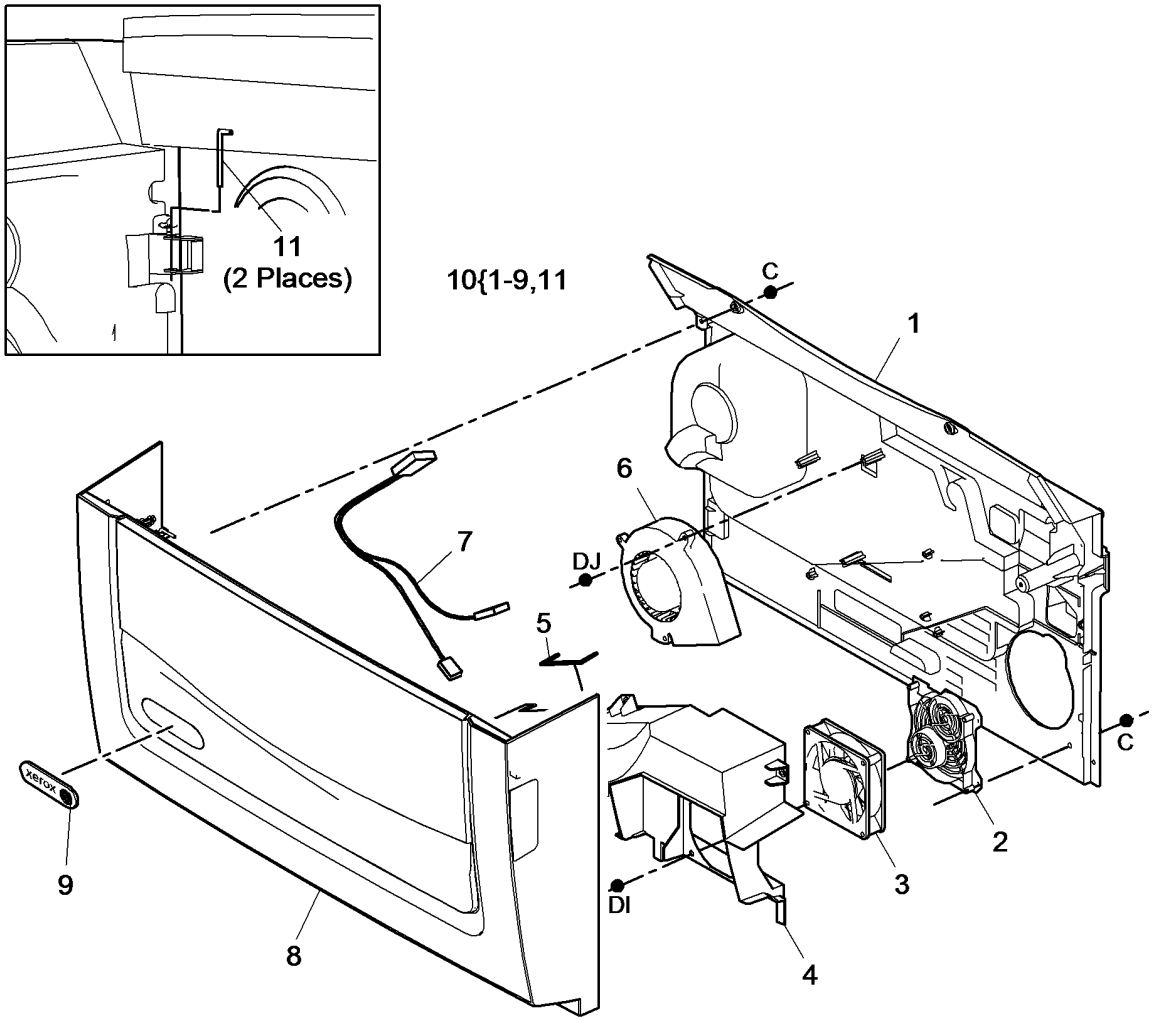
Item	Part	Description
1	802E93222	Rear cover
2	848E91101	Rear left infill panel
3	848E97020	Left cover
4	848K77530	Right cover
5	–	Ozone filter (Not Spared)
6	–	Ozone filter cover (Not Spared)
7	–	Thumbscrew (P/O PL 28.10 Item 11)
8	–	Work shelf (P/O PL 28.10 Item 11)
9	848E91081	Rear right infill panel
10	848K61023	Front door assembly (45-55 ppm)
–	–	Front door assembly (REF: PL 28.11 Item 10) (65-90 ppm)
11	–	Work shelf assembly kit (REF: PL 31.12 Item 14)
12	014E67571	Stand off cable holder
13	–	Speed label (see below for variants)
–	898E52982	45 ppm
–	898E52972	55 ppm
–	898E52962	65 ppm
–	898E52952	75 ppm
–	898E52942	90 ppm



V-8-0031-B

PL 28.11 Front Door Assembly (65-90 ppm)

Item	Part	Description
1	–	Internal cover (P/O PL 28.11 Item 10)
2	–	Grill (P/O PL 28.11 Item 10)
3	–	Paper path cooling fan 1 (P/O PL 28.11 Item 10)
4	–	Cooling duct (P/O PL 28.11 Item 10)
5	–	Foam seal (P/O PL 28.11 Item 10)
6	–	Paper path cooling fan 2 (P/O PL 28.11 Item 10)
7	–	Harness (P/O PL 28.11 Item 10)
8	–	Front door (P/O PL 28.11 Item 10)
9	–	Logo badge (P/O PL 28.11 Item 10)
10	848K61041	Front door assembly
11	–	Door hinge pin (P/O PL 28.11 Item 10)



PL 28.15 Covers

Item	Part	Description
1	–	SPDH covers (REF: PL 5.10)
2	–	Tray 3 and 4 assembly covers (REF: PL 70.26)
3	–	Main covers (REF: PL 28.10)
4	–	2K LCSS covers (REF: PL 11.2)
5	–	1K LCSS covers (REF: PL 11.100)
6	–	Stand covers (REF: PL 70.40)
7	–	Scanner covers (REF: PL 60.15)
8	–	HVF covers (REF: PL 11.130)
9	–	Tray 6 covers (REF: PL 70.60)
10	–	Inserter covers (REF: PL 11.175)
11	–	Tri-folder covers (REF: PL 11.190)
12	–	LVF BM covers (REF: PL 11.50)

NO EXPLODED VIEW PROVIDED

V-8-0123-A

PL 31.11 Maintenance/Installation/ Removal Kits (1 of 4)

Item	Part	Description
1	–	Fax adapter kit (see below for variants)
–	604K67590	UK, Ireland, Spain, Portugal, Greece
–	604K67600	France, Netherlands, Belgium
–	604K67610	Germany, Austria, Italy, Switzerland
–	604K67620	Sweden, Norway, Finland, Denmark
2	–	Hole punch kit (see below for variants)
–	498K10260	2 hole punch kit (LCSS/LVF)
–	–	4 hole punch kit (HVF) (Sweden) (Not spared)
–	498K17900	4 hole punch kit (HVF)
–	498K12090	2 hole punch kit (legal) (USSG/ XCL) (XE)
–	498K11400	2 hole punch kit (HVF)
–	498K10280	4 hole punch kit (LCSS/LVF) (USSG/XCL)
–	498K11411	3 hole punch kit (HVF)
–	498K10270	3 hole punch kit (USSG/XCL)
–	498K10310	4 hole punch kit (LCSS/LVF) (Sweden)
3	498K12130	Tray 6 paper feed kit (A3 SEF option)
4	498K12140	Tray 6 paper feed kit (A4 SEF option)
5	498K08260	Convenience stapler kit (XE)
–	498K08250	Convenience stapler kit (USSG/ XCL)
6	604K67700	Seal replacement kit
7	498K16091	Xerox copier assistant (XE)
–	–	Xerox copier assistant (USSG/XCL) (Not Spared)
8	604K84840	Tray 6 shaft and roll assembly kit
9	604K73040	Short paper path kit (W/TAG 001)
–	604K73360	Short paper path kit (W/O TAG 001)
10	497K13850	Paper tray security kit
11	049K00280	Tray 6 install kit
12	604K97840	ROS spares kit (REF: PL 60.10 Item 4) (45-55 ppm)
–	604K97880	ROS spares kit (REF: PL 60.10 Item 4) (65-90 ppm)
13	130K75140	LCSS stapler edge registration sensor kit
14	007K20550	Scanner drive kit
15	604K73230	HVF ejector assembly safety cover kit
16	059K85120	SPDH feed roll kit
17	604K48700	Paper tray lip kit
18	604K48150	Bin 1 tray kit (improved stacking)

NOTE: *Do not order 497/8K parts. 497/8K parts are customer install kits and are shown for reference only.*

NO EXPLODED VIEW PROVIDED

V-8-0124-A

PL 31.12 Maintenance/Installation/ Removal Kits (2 of 4)

Item	Part	Description
1	604K84550	Toner dispense module kit (45-55 ppm)
–	604K84560	Toner dispense module kit (65-90 ppm)
2	604K54010	Inverter transparency feed kit (45-55 ppm) (W/TAG 004)
3	604K24570	Trickle outlet shutter kit
4	604K42020	BM back stop repair kit
5	604K24650	Auger damper kit
6	604K73070	Paddle wheel shaft assembly (W/TAG F-016)
7	604K41110	4B latch kit
8	604K41120	Developer latch pin kit
9	604K41341	Stapler traverse assembly kit
10	604K41411	2K LCSS front door cover assembly kit
11	604K73050	LCSS paddle spares kit (W/TAG F-016)
12	604K96691	Feedhead assembly spares kit
13	604K67240	Registration clutch kit
14	497K11490	Work shelf assembly kit
15	604K42090	2K LCSS front door spares kit
16	604K96681	Tray 3 transport shaft kit
17	498K19200	20 amp adapter kit
18	604K55050	Paper feed module frame repair kit
19	604K83690	Exit shaft kit
20	497K09960	OCT accessory kit

NOTE: *Do not order 497/8K parts. 497/8K parts are customer install kits and are shown for reference only.*

NO EXPLODED VIEW PROVIDED

V-8-0126-A

PL 31.13 Maintenance/Installation/ Removal Kits (3 of 4)

Item	Part	Description
1	497K11500	Wireless network adapter kit
2	604K35371	Fuser latch pin kit
3	604K84510	Inverter decurler kit (45-55 ppm)
–	604K84520	Inverter decurler kit (65-90 ppm)
4	498K17550	Foreign device interface kit
5	604K55120	Decurler soft roll repair kit (REP 10.14)
6	604K83560	Shaft diverter assembly spares kit
7	604K55500	Skew bypass tray spares kit (x2 spring)
8	604K16890	Out of toner sensor kit
9	604K55571	Drive roll repair kit
10	604K53830	2K LCSS Hole punch field repair kit (W/TAG F-014)
–	604K21620	2K LCSS Hole punch repair kit (W/ TAG F-006)
11	498K17546	CAC enablement kit (USSG/XCL)
12	604K24930	Developer/Drives interface kit (REF: PL 90.15 Item 23)
13	604K73370	BM Diverter kit
14	604K83641	Feed/Nudger/Retard roll spares kit
15	604K55101	HCF Heater kit (W/TAG 111)
16	604K53940	XRU skids kit
17	604K84020	Stack height sensor and shim kit
18	604K54760	Envelope tray feeding kit
19	604K48340	Fuser stripper finger kit
20	604K96670	Tray 3 exit sensor spares kit

NOTE: *Do not order 497/8K parts. 497/8K parts are customer install kits and are shown for reference only.*

NO EXPLODED VIEW PROVIDED

V-8-0127-A

PL 31.14 Maintenance/Installation/ Removal Kits (4 of 4)

Item	Part	Description
1	–	Initialisation kits (see below for variants) (NOTE)
–	097S04422	45 ppm (DMO)
–	097S04423	55 ppm (DMO)
–	097S04424	65 ppm (DMO)
–	097S04425	75 ppm (DMO)
–	097S04426	90 ppm (DMO)
–	097S04429	45 ppm (XE)
–	097S04430	55 ppm (XE)
–	097S04431	65 ppm (XE)
–	097S04432	75 ppm (XE)
–	097S04433	90 ppm (XE)
–	097S04475	45 ppm (USSG/XCL)
–	097S04476	55 ppm (USSG/XCL)
–	097S04477	65 ppm (USSG/XCL)
–	097S04478	75 ppm (USSG/XCL)
–	097S04479	90 ppm (USSG/XCL)
2	–	SIM kits (Page Pack enabled) (XE) - see below for variants
–	604K95380	45 ppm
–	604K95390	55 ppm
–	604K95400	65 ppm
–	604K95410	75 ppm
–	604K95420	90 ppm
–	607K09660	Billing impression mode (65 ppm)
–	607K09670	Billing impression mode (75 ppm)
–	607K09680	Billing impression mode (90 ppm)
3	604K84190	FAR HCF bowl curl kit
4	604K94310	Tray 6 adjustable castor kit
5	604K97800	SBC PWB Jumper kit (W/TAG 003)
6	604K97833	SBC PWB kit (W/TAG 003)
7	604K95440	Idle gear shaft spare kit
8	607K03160	Doc present sensor actuator kit
9	607K03210	SPDH last sheet out sensor filter kit
10	607K03190	HCF exit sensor kit
11	607K04310	SPDH last sheet out sensor kit (W/ TAG D-002)
12	604K96640	SPDH input tray upper assembly spares kit (W/TAG D-002)
13	607K08141	Ejector assembly kit
14	607K06880	Adjustable retard shield kit
15	607K01040	2K LCSS PWB kit
16	607K07950	HVF support finger kit (W/TAG V-009)
17	607K06930	Tray 6 lower feedhead kit (W/TAG P-051)
18	607K09420	SPDH Mylar kit (W/TAG 004)
19	607K09430	Separation assembly kit (W/TAG 004)

NOTE: *097S parts are customer install kits and are shown for reference only.*

NO EXPLODED VIEW PROVIDED

V-8-0128-B

PL 31.35 Line 1 Fax Kits

Item	Part	Description
1	–	Line 1 Fax kits (see below for variants) (NOTE)
–	497K06250	XE & South Africa
–	497K06230	USSG/XCL
–	497K06060	United Kingdom, Spain, Greece, Ireland, Portugal
–	497K06090	Austria, Germany, Switzerland, Italy
–	497K06070	Netherlands, Belgium, France
–	497K06080	Sweden, Norway, Finland, Denmark
–	497K11280	Brazil
–	497K16410	CFax (XE)
–	497K16430	CFax (USSG/XCL)
–	497K16470	CFax34 (United Kingdom, Spain, Greece, Ireland, Portugal)
–	497K16480	CFax34 (Netherlands, Belgium, France)
–	497K16490	CFax34 (Austria, Germany, Switzerland, Italy)
–	497K16500	CFax34 (Sweden, Norway, Finland, Denmark)
–	497K16550	CFax34 (Brazil)
2	–	Line 1 Fax PWB kits (see below for variants)
–	607K08120	CFax (W/TAG X-001)
–	607K09570	CFax34 (W/TAG X-002) (See NOTE 2)

NOTE: *Do not order 497/8K parts. 497/8K parts are customer install kits and are shown for reference only.*

NOTE: *2. Ensure the system software of the machine is at version 073.xxx.xxx.xxx before installing this fax kit.*

NO EXPLODED VIEW PROVIDED

V-8-0133-B

PL 31.40 Line 2 Fax Kits

Item	Part	Description
1	–	Line 2 Fax kits (see below for variants) (NOTE)
–	497K06260	XE & South Africa
–	497K06240	USSG/XCL
–	497K06100	United Kingdom, Spain, Greece, Ireland, Portugal
–	497K06130	Austria, Germany, Switzerland, Italy
–	497K06110	Netherlands, Belgium, France
–	497K06120	Sweden, Norway, Finland, Denmark
–	497K11290	Brazil
–	497K16420	CFax (XE)
–	497K16440	CFax (USSG/XCL)
–	497K16510	CFax34 (United Kingdom, Spain, Greece, Ireland, Portugal)
–	497K16520	CFax34 (Austria, Germany, Switzerland, Italy)
–	497K16530	CFax34 (Sweden, Norway, Finland, Denmark)
–	497K16540	CFax34 (Netherlands, Belgium, France)
–	497K16560	CFax34 (Brazil)
2	–	Line 2 Fax PWB kits (see below for variants)
–	607K08130	CFax (W/TAG X-001)
–	607K09580	CFax34 (W/TAG X-002) (See NOTE 2)

NOTE: *Do not order 497/8K parts. 497/8K parts are customer install kits and are shown for reference only.*

NOTE: *2. Ensure the system software of the machine is at version 073.xxx.xxx.xxx before installing this fax kit.*

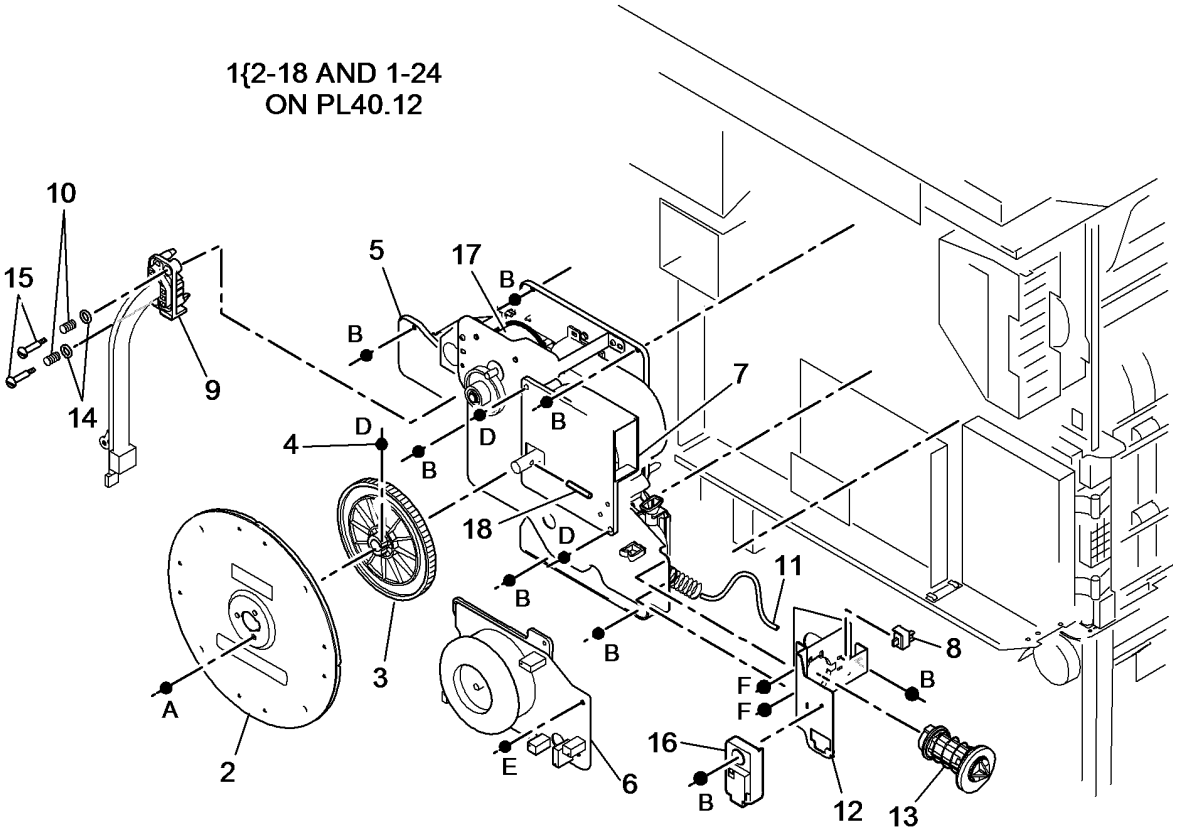
NO EXPLODED VIEW PROVIDED

V-8-0134-B

PL 40.10 Main Drive Module (65-90 ppm) (1 of 2)

Item	Part	Description
1	007K14325	Main drive module (REP 40.5)
2	–	Flywheel (P/O PL 40.10 Item 1)
3	807E09920	Photoreceptor drive gear (REP 40.4)
4	–	Dowel pin (P/O PL 40.10 Item 1)
5	–	Main drive (P/O PL 40.10 Item 1)
6	–	Main drive motor and PWB assembly (MOT42-010) (Not Spared) (NOTE) (REP 40.6)
7	–	Ozone fan (MOT42-030) (REF: PL 90.25 Item 1)
8	130E10530	Waste toner door switch (S93-380)
9	114E18630	Fuser connector assembly
10	–	Spring (P/O PL 40.10 Item 1)
11	–	Auger damper kit (REF: PL 31.12 Item 5) (REP 90.10)
12	–	Mounting bracket (P/O PL 40.10 Item 1)
13	055K36091	Shutter assembly (REP 90.10)
14	–	Washer (P/O PL 40.10 Item 1)
15	–	Screw (P/O PL 40.10 Item 1)
16	–	Waste toner full sensor (Q93-350) (REF: PL 90.10 Item 2)
17	–	Photoreceptor drive motor (MOT91-010) (P/O PL 40.10 Item 1)
18	–	Dowel pin (P/O PL 40.10 Item 1)

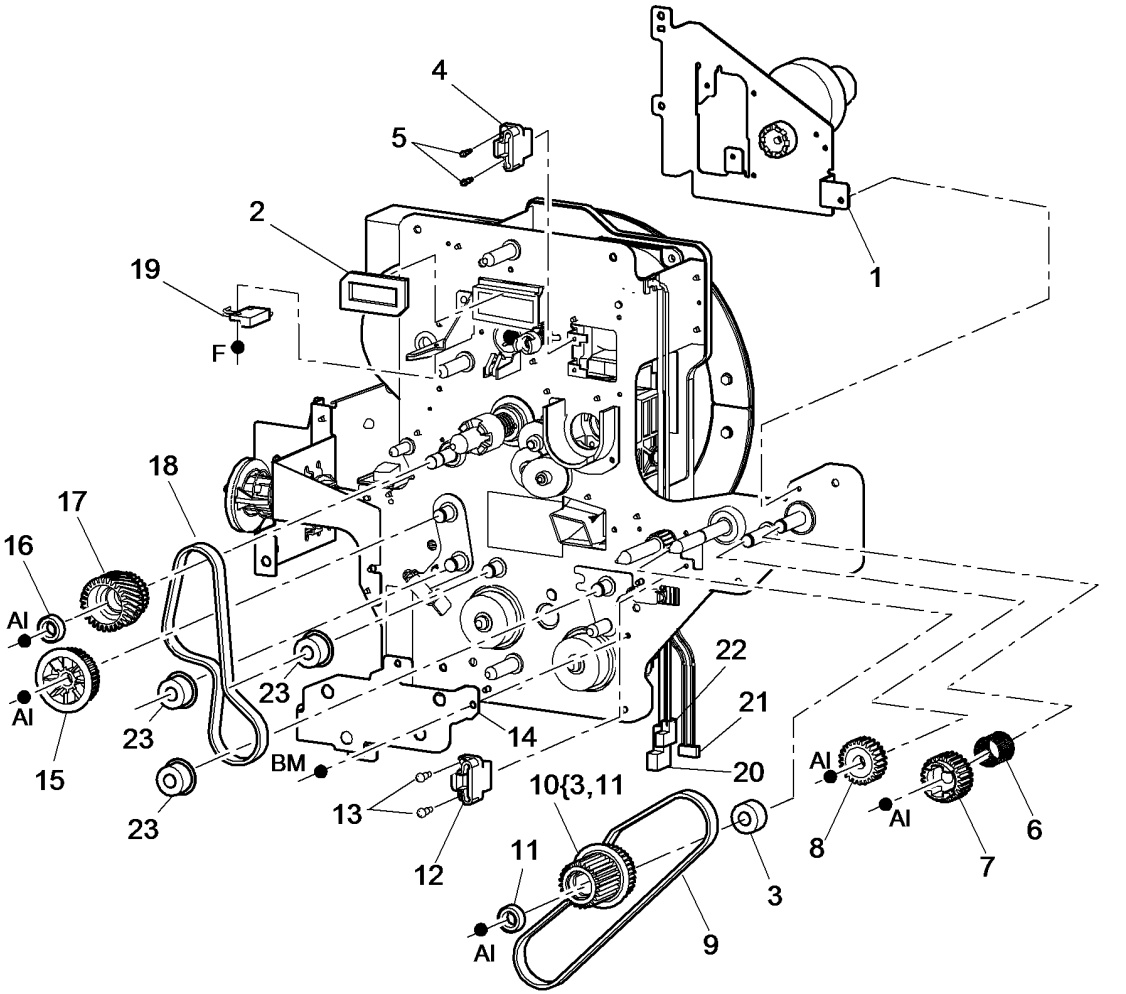
NOTE: *The main drive motor is an integral part of the main drive PWB.*



V-8-0007-A

PL 40.12 Main Drive Module (65-90 ppm) (2 of 2)

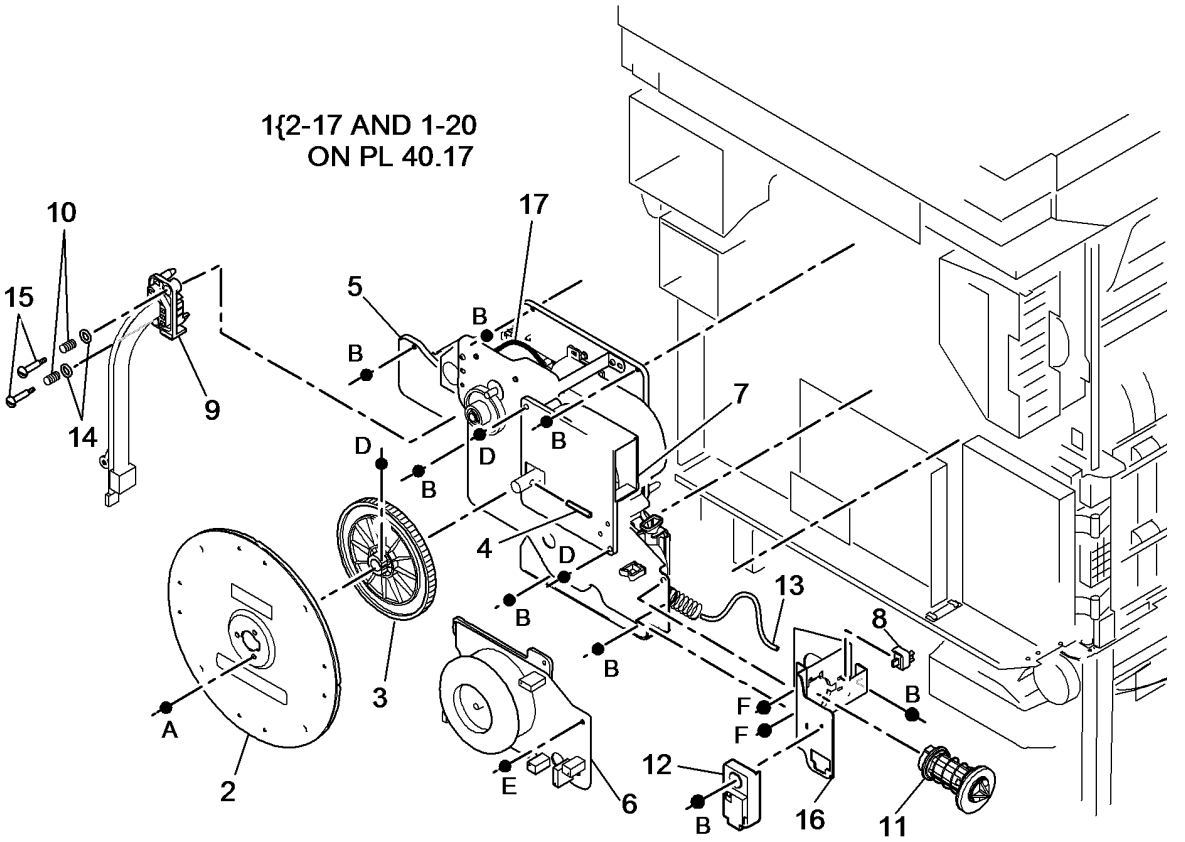
Item	Part	Description
1	127K55430	Fuser web motor assembly (MOT10-010) (REP 10.13)
2	–	Ozone seal (P/O PL 31.11 Item 6)
3	–	Bearing (P/O PL 40.12 Item 10)
4	–	Xerographic CRUM connector (P/O PL 40.10 Item 1)
5	–	Xerographic CRUM connector screw (P/O PL 40.10 Item 1)
6	–	Spring (P/O PL 40.10 Item 1)
7	807E09931	Output paper path drive gear (REP 40.7)
8	–	Intermediate drive gear (Not Spared) (REP 40.7)
9	023E25040	Main drive belt 2 (REP 40.7)
10	807E06462	Fuser drive gear/pulley assembly (REP 40.7)
11	–	Bearing (P/O PL 40.12 Item 10)
12	114E18810	Fuser CRUM connector
13	–	Screw (P/O PL 40.10 Item 1)
14	–	Support plate (P/O PL 40.10 Item 1)
15	807E05670	Registration transport drive pulley (REP 40.7)
16	–	Bearing (P/O PL 40.12 Item 17)
17	007K21830	Developer drive gear/pulley assembly (P/O PL 90.15 Item 23) (REP 40.7)
18	023E25050	Main drive belt 1 (REP 40.7)
19	–	Scorotron cleaner home sensor (Q91-070) (P/O PL 40.10 Item 1)
20	–	Charge scorotron harness (P/O PL 40.10 Item 1)
21	–	Charge scorotron grid harness (P/O PL 40.10 Item 1)
22	–	Auto cleaner harness (P/O PL 40.10 Item 1)
23	–	Idler (P/O PL 40.10 Item 1)



PL 40.15 Main Drive Module (45-55 ppm) (1 of 2)

Item	Part	Description
1	007K14339	Main drive module (REP 40.1)
2	–	Flywheel (P/O PL 40.15 Item 1)
3	807E06601	Photoreceptor drive gear (REP 40.4)
4	–	Dowel pin (P/O PL 40.15 Item 1)
5	–	Main drive (P/O PL 40.15 Item 1)
6	127K55421	Main drive motor and PWB assembly (MOT42-010) (NOTE) (REP 40.2)
7	–	Ozone fan (MOT42-030) (REF: PL 90.25 Item 1)
8	130E10530	Waste toner door switch (S93-380)
9	114E18630	Fuser connector assembly
10	–	Spring (P/O PL 40.15 Item 1)
11	055K36091	Shutter assembly (REP 90.10)
12	–	Waste toner full sensor (Q93-350) (P/O PL 90.10 Item 2)
13	–	Auger damper kit (REF: PL 31.12 Item 5) (REP 90.10)
14	–	Washer (P/O PL 40.15 Item 1)
15	–	Screw (P/O PL 40.15 Item 1)
16	–	Mounting bracket (P/O PL 40.15 Item 1)
17	–	Photoreceptor drive motor (MOT91-010) (P/O PL 40.15 Item 1)

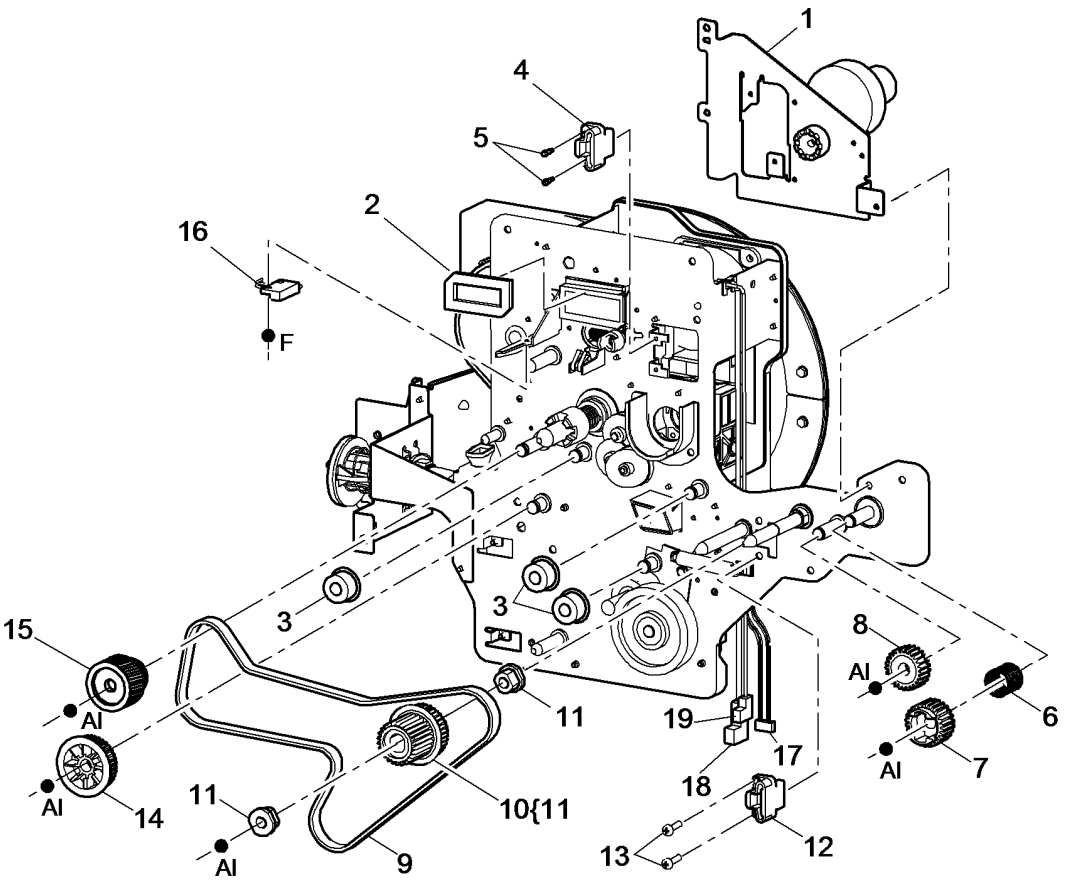
NOTE: *The main drive motor is an integral part of the main drive PWB.*



V-8-0009-A

PL 40.17 Main Drive Module (45-55 ppm) (2 of 2)

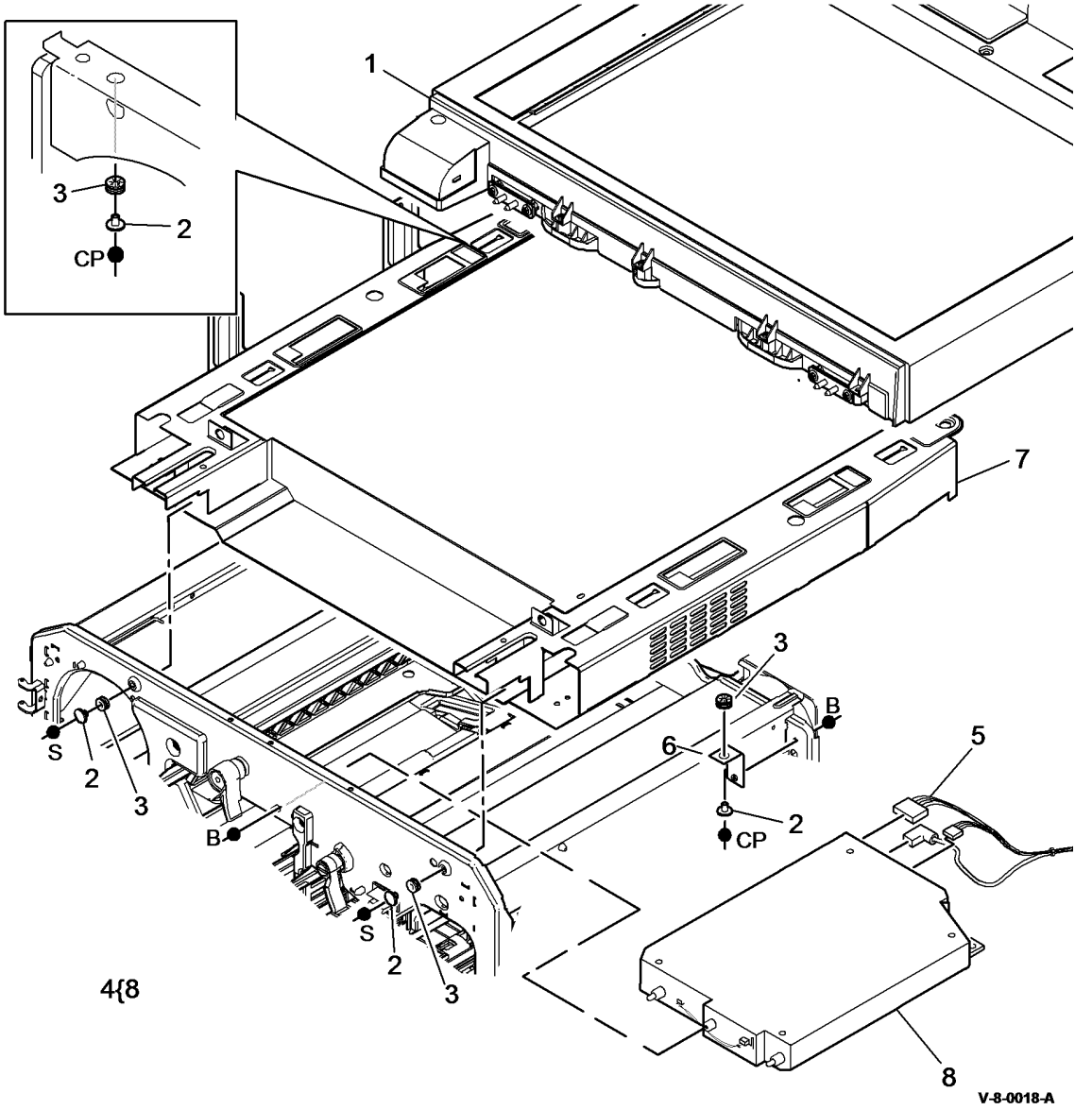
Item	Part	Description
1	127K55430	Fuser web motor assembly (MOT10-010) (REP 10.13)
2	–	Ozone seal (P/O PL 31.11 Item 6)
3	–	Idler (P/O PL 40.15 Item 1)
4	–	Xerographic CRUM connector (P/O PL 40.15 Item 1)
5	–	Xerographic CRUM connector screw (P/O PL 40.15 Item 1)
6	–	Spring (P/O PL 40.15 Item 1)
7	807E09931	Output paper path drive gear (REP 40.3)
8	–	Intermediate drive gear (Not Spared) (REP 40.3)
9	023E30740	Main drive belt (REP 40.3)
10	007K13202	Fuser drive gear (REP 40.3)
11	–	Bearing (P/O PL 40.17 Item 10)
12	114E18810	Fuser CRUM connector
13	–	Screw (P/O PL 40.15 Item 1)
14	807E05670	Registration transport drive pulley (REP 40.3)
15	007K21830	Developer drive gear (REP 40.3)
16	–	Scorotron cleaner home sensor (Q91-070) (P/O PL 40.15 Item 1)
17	–	Auto cleaner harness (P/O PL 40.15 Item 1)
18	–	Charge scorotron harness (P/O PL 40.15 Item 1)
19	–	Charge scorotron grid harness (P/O PL 40.15 Item 1)



V-8-0010-A

PL 60.10 ROS

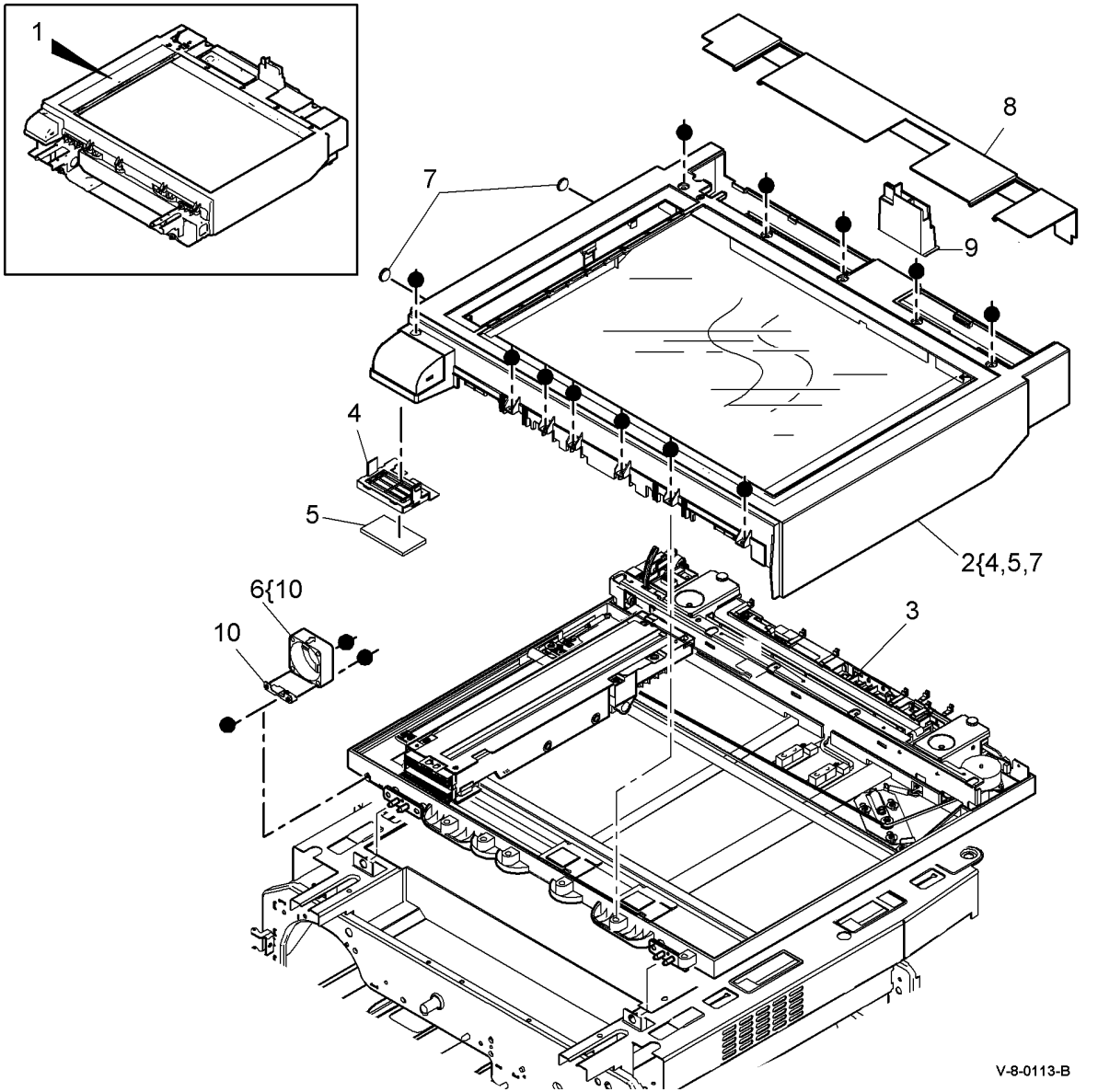
Item	Part	Description
1	–	Scanner module (REF: PL 60.15 Item 1)
2	–	Spacer (Not Spared)
3	–	Grommet (Not Spared)
4	–	ROS spares kit (REF: PL 31.11 Item 12) (45-55 ppm)
–	–	ROS spares kit (REF: PL 31.11 Item 12) (65-90 ppm)
5	952K43150	ROS Power distribution/ Communication harness (45-55 ppm)
–	952K43160	ROS Power distribution/ communication harness (65-90 ppm)
6	–	Scanner frame securing bracket (Not Spared)
7	–	Scanner module mounting frame (Not Spared) (REP 60.16)
8	–	ROS (P/O PL 60.10 Item 4) (REP 60.15)



PL 60.15 Scanner Module, CVT/ Document Glass

Item	Part	Description
1	062K28532	Scanner module (REP 60.2)
2	848K83740	Top cover assembly (REP 60.3)
3	–	Base (P/O PL 60.15 Item 1)
4	019E89100	Fan filter housing (REP 60.14)
5	053E08560	Fan filter (REP 60.14)
6	127K69240	Cooling fan (MOT62-029) (REP 60.14)
7	–	Top cover plug (P/O PL 60.15 Item 1)
8	848K83750	Rear cover (REP 60.1)
9	–	SPDH harness guide (P/O PL 60.15 Item 1) (REP 5.19)
10	–	Fan bracket (P/O PL 60.15 Item 6)

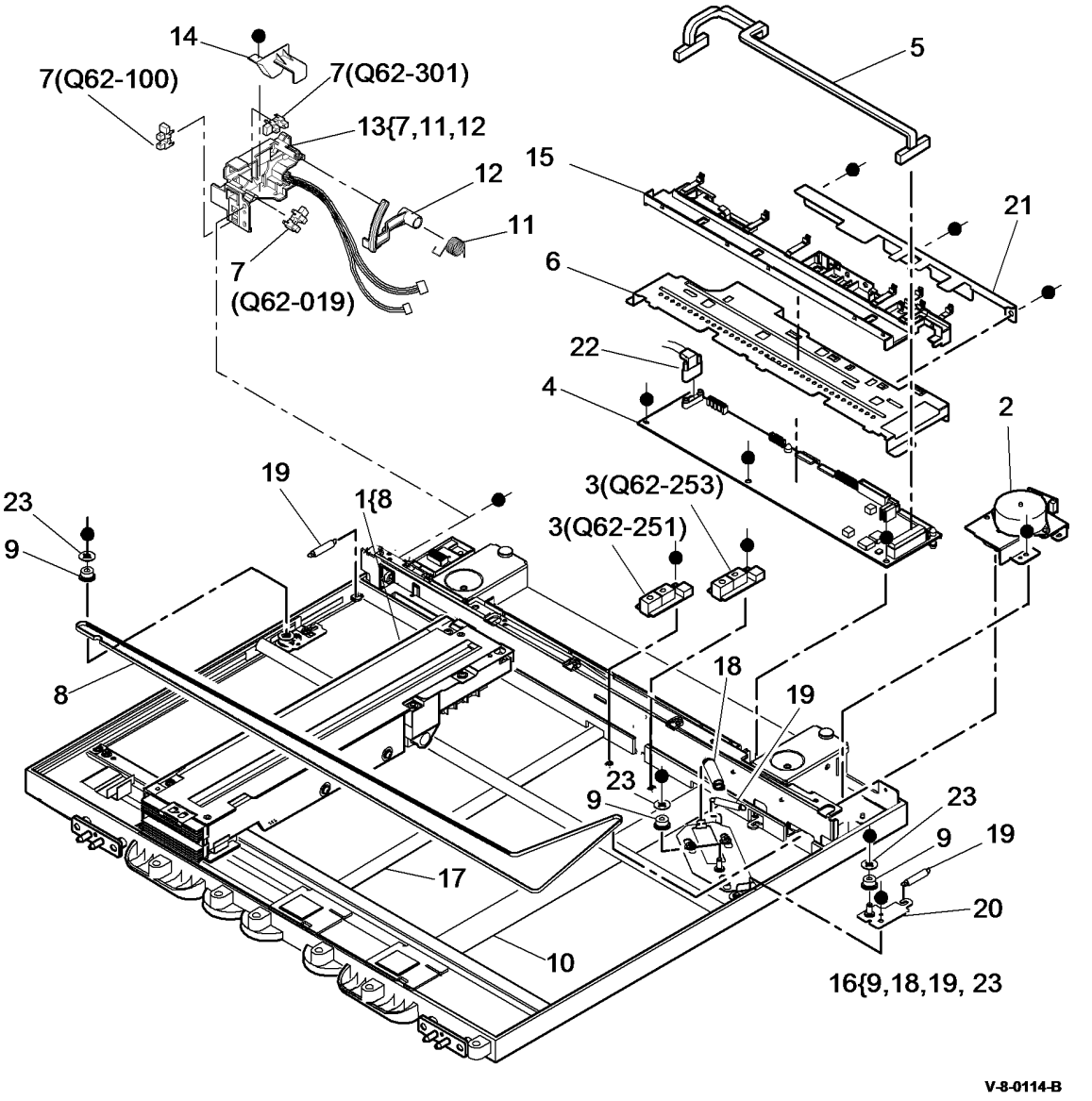
NOTE: *Refer to ADJ 60.3 for the optics cleaning procedure.*



PL 60.20 Scanner Electrical Components

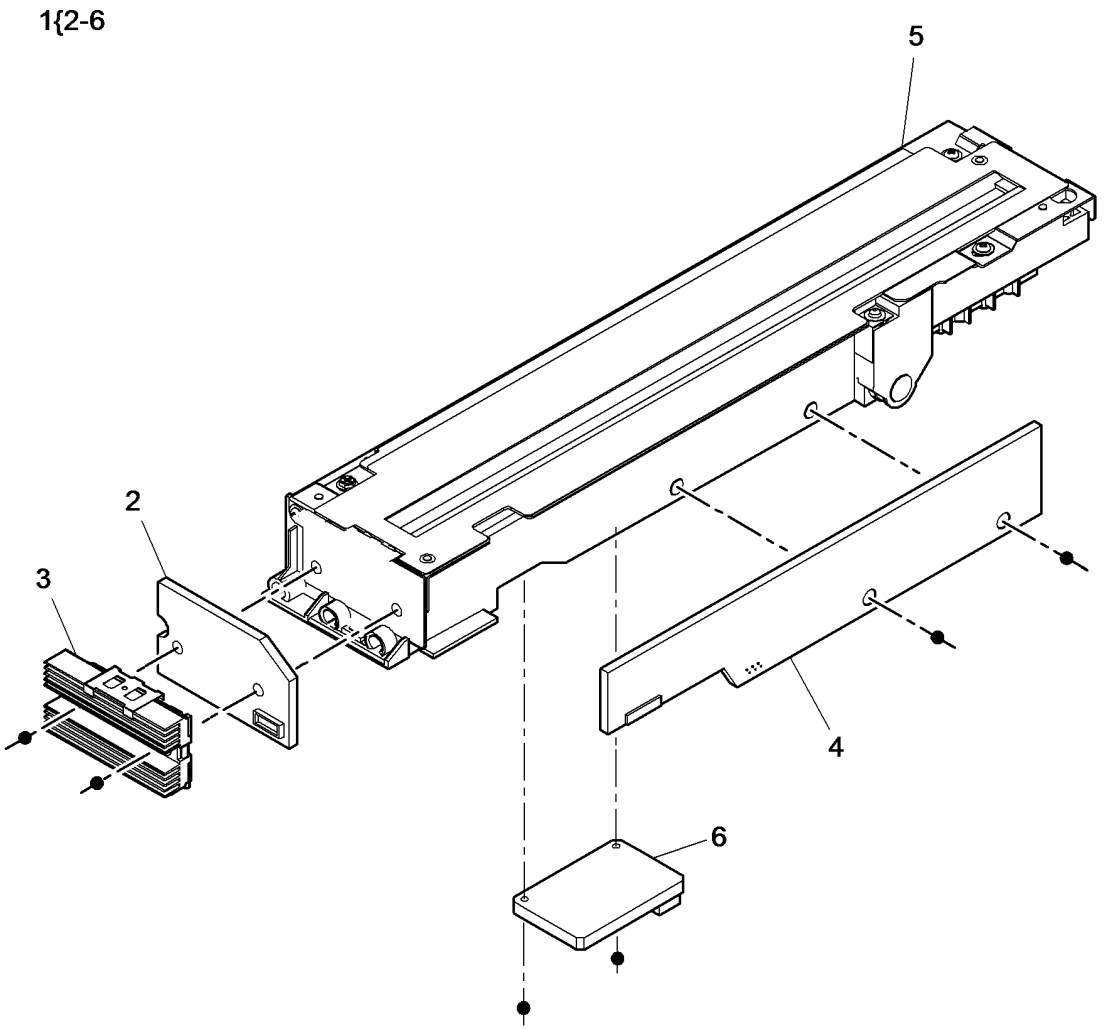
Item	Part	Description
1	–	Scan carriage assembly (REF: PL 60.25 Item 1) (REP 60.5)
2	127K69280	Scan carriage motor assembly (MOT62-031) (REP 60.10)
3	130E19050	Document size sensor 1 (Q62-251), Document size sensor 2 (Q62-253) (REP 60.13)
4	960K72462	Scanner PWB (REP 60.4)
5	–	Power distribution PWB/Scanner PWB comms/power harness (REF: PL 3.22 Item 19) (REP 60.4)
6	–	Scanner PWB cover (Not Spared) (REP 60.4)
7	130E19040	Carriage home sensor (Q62-100)/ SPDH angle sensor(Q62-301)(REP 60.9)/SPDH platen down sensor (Q62-019)
8	–	Scan carriage drive belt (P/O PL 60.20 Item 16) (REP 60.11)
9	–	Scan carriage idler pulley (P/O PL 60.20 Item 16) (REP 60.12)
10	117E43811	Scan carriage power ribbon cable (REP 60.7)
11	–	Actuator spring (P/O PL 60.20 Item 13)
12	–	SPDH angle sensor actuator (P/O PL 60.20 Item 13) (REP 60.9)
13	120K03740	Actuator support (REP 60.9)
14	–	Cable shield (Not Spared) (REP 60.9)
15	–	Harness guide (Not Spared) (REP 60.4)
16	–	Scanner drive kit (REF: PL 31.11 Item 14)
17	117E43821	Scan carriage data ribbon cable (REP 60.8)
18	–	Tension spring (P/O PL 60.20 Item 16)
19	–	Ground spring (P/O PL 60.20 Item 16)
20	–	Mounting plate (Not Spared)
21	–	Faraday shield (Not Spared) (REP 60.1)
22	–	SBC PWB/Scanner PWB data cable (REF: PL 3.22 Item 20)
23	–	Pulley flange (P/O PL 60.20 Item 16)

NOTE: *Refer to ADJ 60.3 for the optics cleaning procedure.*



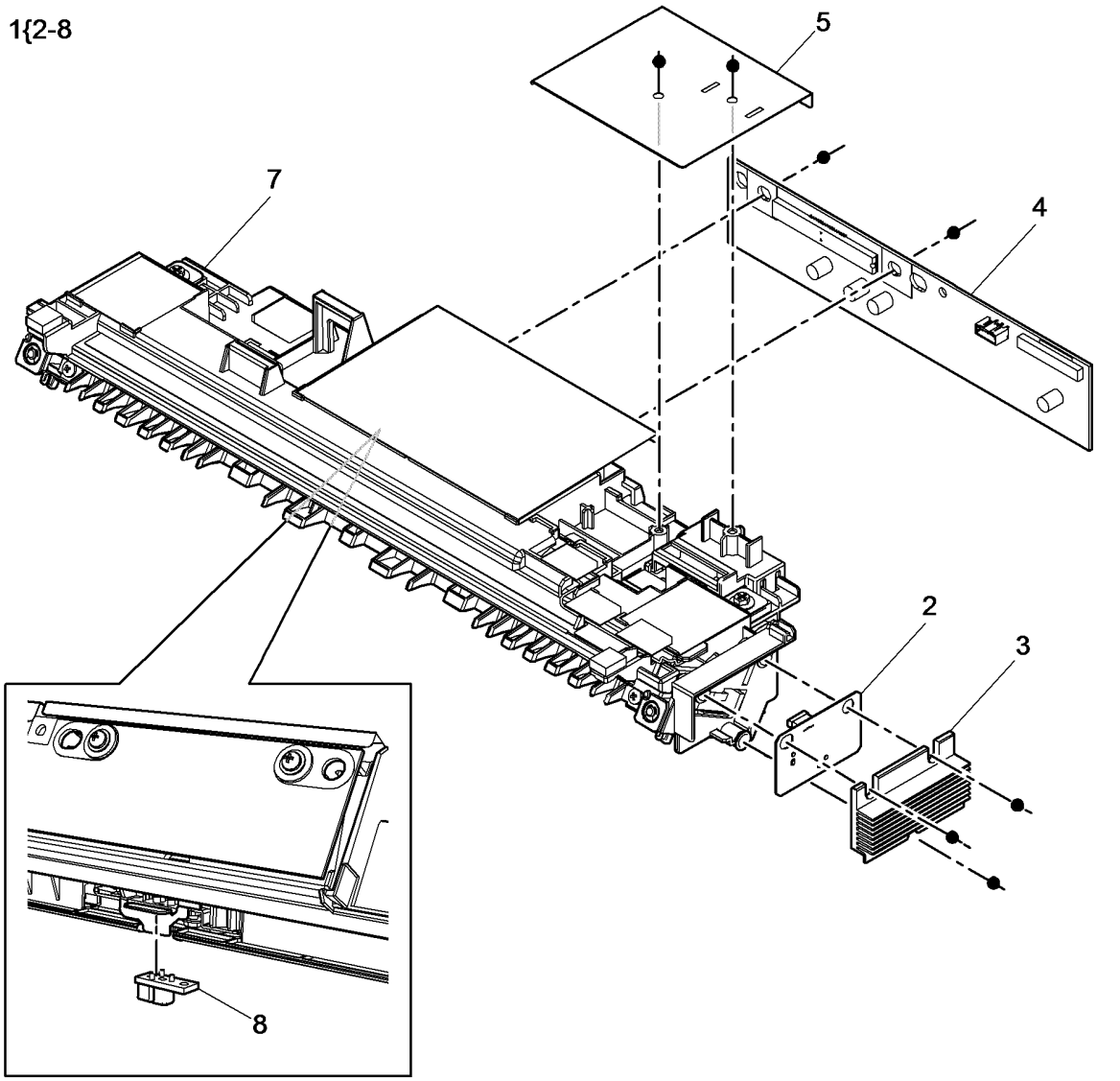
PL 60.25 Scan Carriage Assembly

Item	Part	Description
1	041K06841	Scan carriage assembly (REP 60.5)
2	–	Scanner LED lamp PWB (P/O PL 60.25 Item 1)
3	–	LED lamp assembly (P/O PL 60.25 Item 1)
4	–	Scanner CCD PWB (P/O PL 60.25 Item 1)
5	–	Scan carriage unit (P/O PL 60.25 Item 1)
6	–	Scanner LED drive PWB (P/O PL 60.25 Item 1)



PL 60.30 Side 2 Scan Assembly

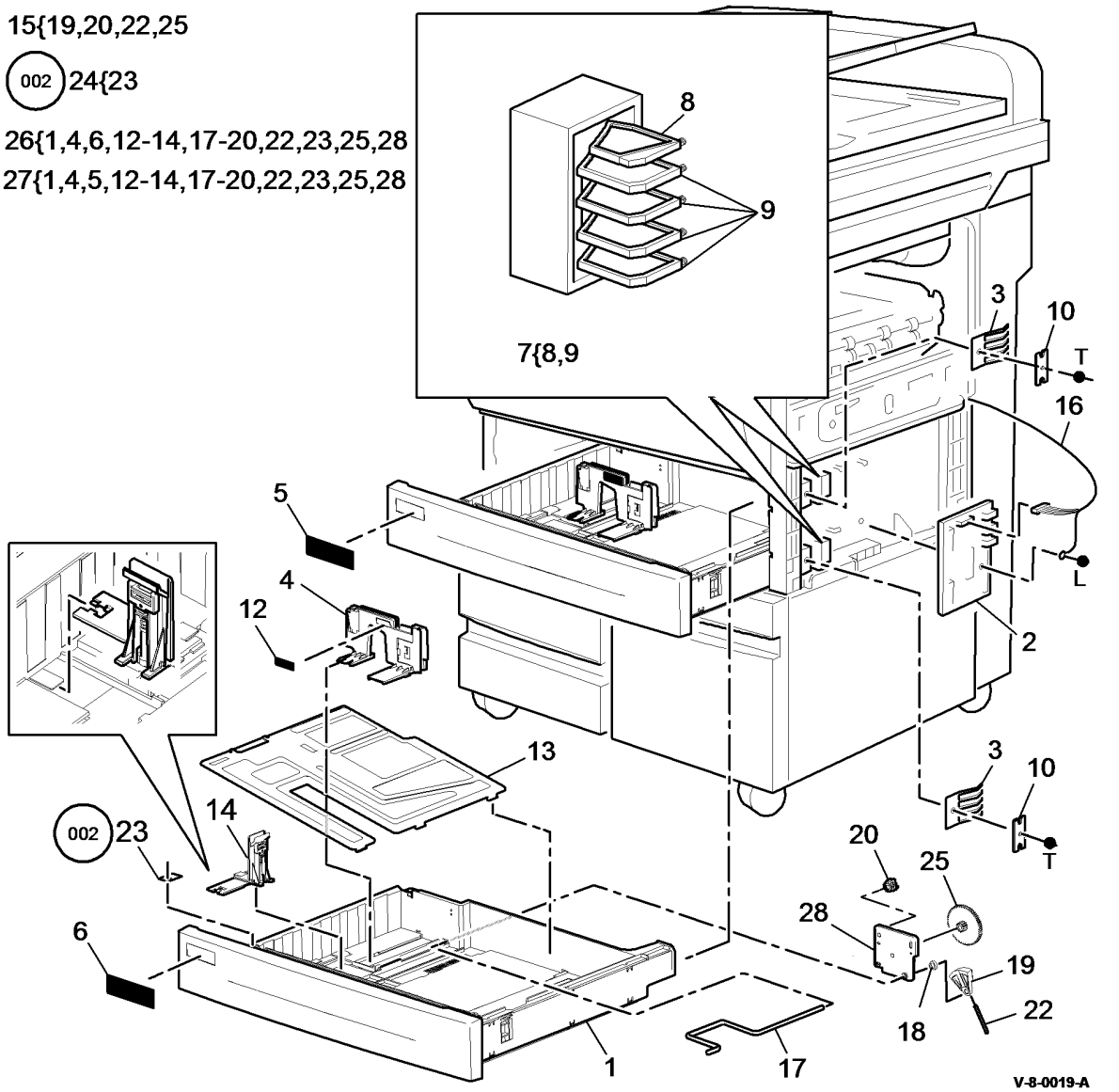
Item	Part	Description
1	041K06851	Side 2 scan assembly (REP 60.6, ADJ 60.4)
2	–	Side 2 LED lamp PWB (P/O PL 60.30 Item 1)
3	–	Side 2 LED lamp assembly (P/O PL 60.30 Item 1)
4	–	Side 2 CCD PWB (P/O PL 60.30 Item 1)
5	–	Side 2 LED drive PWB cover (P/O PL 60.30 Item 1)
6	–	Not used
7	–	Scan carriage unit (P/O PL 60.30 Item 1)
8	130E19060	Side 2 reg sensor (Q05-343)



PL 70.10 Tray 1 and 2 Assembly

Item	Part	Description
1	–	Tray housing (P/O PL 70.10 Item 26, PL 70.10 Item 27)
2	960K42122	Tray 1 and 2 control PWB
3	809E84170	Leaf spring (REP 70.4)
4	059K59261	Paper guide latch assembly (REP 70.3)
5	–	Label tray 1 (P/O PL 70.10 Item 26)
6	–	Label tray 2 (P/O PL 70.10 Item 27)
7	059K59230	Cam assembly (REP 70.4)
8	–	Tray home cam (P/O PL 70.10 Item 7)
9	–	Paper size cam (P/O PL 70.10 Item 7)
10	–	Retaining plate (Not Spared)
11	–	Not used
12	–	MAX Fill label (P/O PL 70.10 Item 4)
13	–	Tray 1 and 2 paper lift plate (P/O PL 70.10 Item 26, PL 70.10 Item 27)
14	059K59270	Paper stop assembly
15	059K59221	Lift gear kit (REP 70.12)
16	–	IOT-PFM Harness (Not Spared) (REP 70.13)
17	025E07320	Paper tray 1 & 2 lift arm
18	–	Bearing (P/O PL 70.10 Item 26, PL 70.10 Item 27)
19	–	Quadrant gear (60T) (P/O PL 70.10 Item 15)
20	–	Gear (13T) (P/O PL 70.10 Item 15)
21	–	Not used
22	–	Lift arm pin (P/O PL 70.10 Item 15)
23	–	Paper tray lip (P/O PL 70.10 Item 24)
24	–	Paper tray lip kit (REF: PL 31.11 Item 17) (W/TAG 002)
25	–	Gear (60T) (P/O PL 70.10 Item 15)
26	050K68570	Tray 1 assembly (See NOTE) (REP 70.1)
27	050K68580	Tray 2 assembly (See NOTE) (REP 70.1)
28	–	Lift arm bracket (P/O PL 70.10 Item 26, PL 70.10 Item 27)

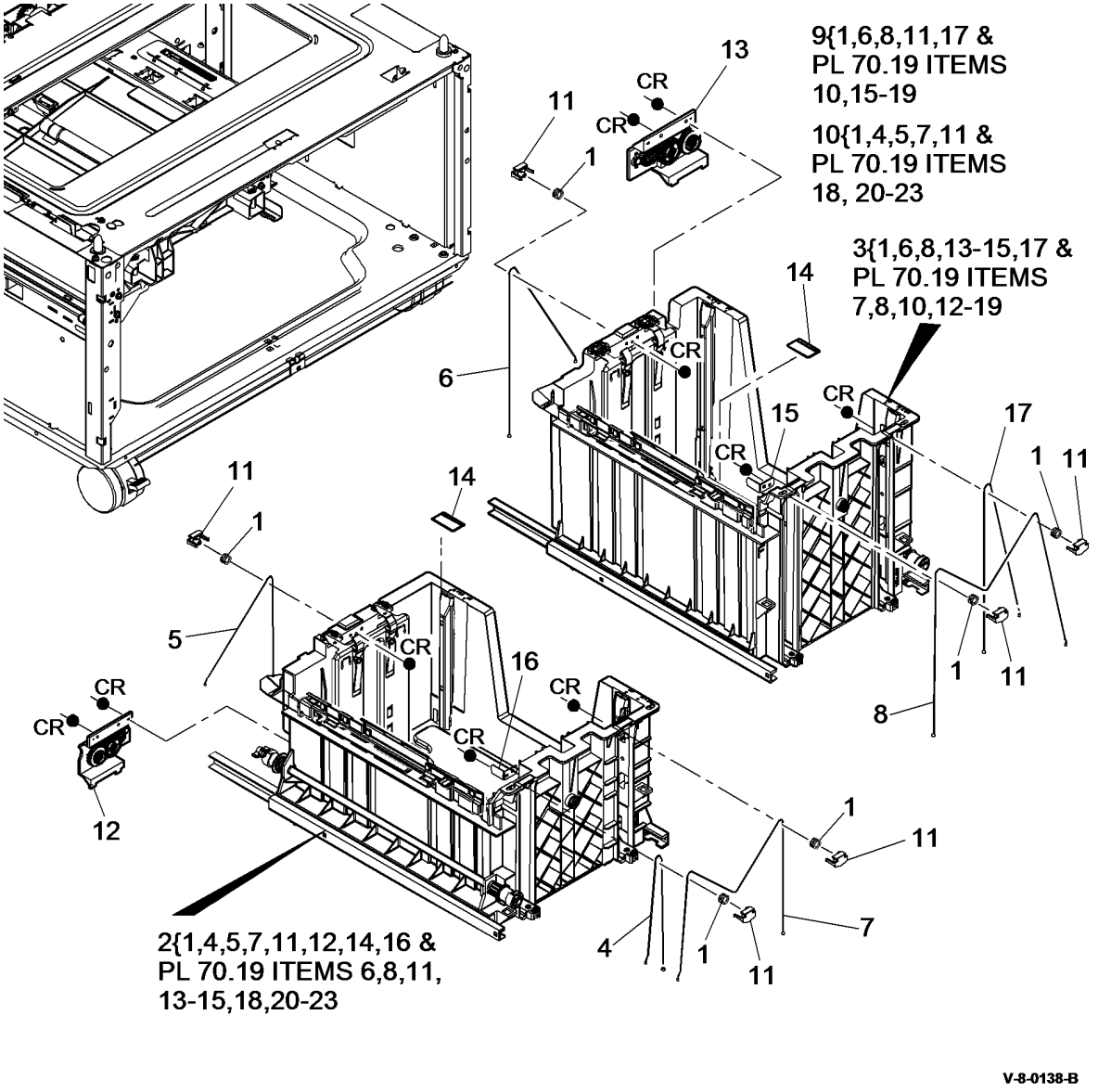
NOTE: *For the envelope tray feeding kit, refer to PL 31.13 Item 18.*



PL 70.18 Tray 3 and 4 Assembly (1 of 2)

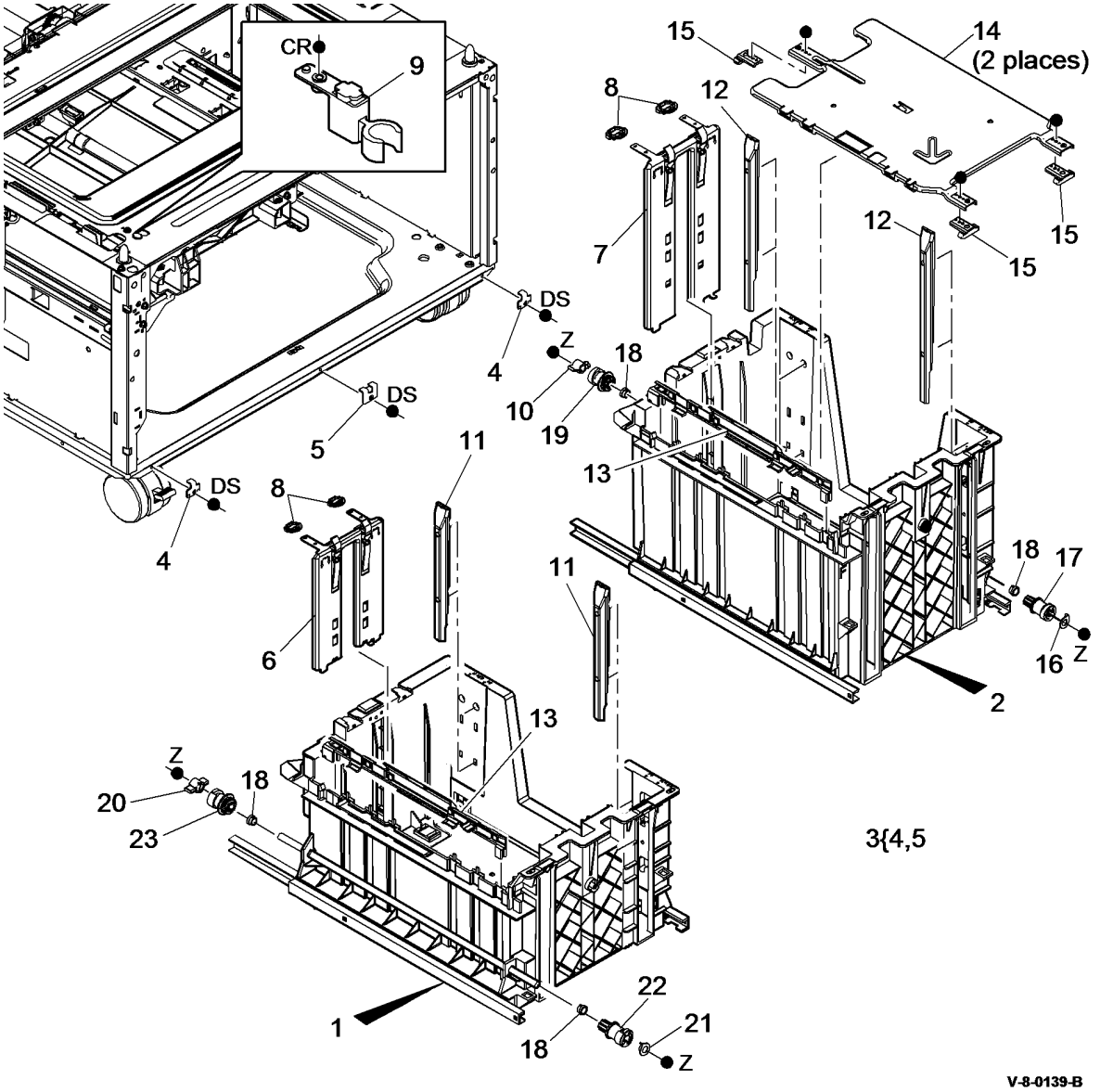
Item	Part	Description
1	–	Tray hoist pulley (Not Spared)
2	050K77170	Tray 4 assembly
3	050K77160	Tray 3 assembly
4	–	Front short elevator cable (Tray 4) (P/O PL 70.18 Item 9)
5	–	Rear elevator cable (tray 4) (P/O PL 70.18 Item 10)
6	–	Rear elevator cable (tray 3) (P/O PL 70.18 Item 9)
7	–	Front long elevator cable (tray 4) (P/O PL 70.18 Item 10)
8	–	Front long elevator cable (tray 3) (P/O PL 70.18 Item 9)
9	604K84081	Tray 3 elevator cable kit (REP 70.16)
10	604K84091	Tray 4 elevator cable kit (REP 70.16)
11	–	Pulley carrier (Not Spared)
12	004K07860	Tray 4 elevate damper assembly
13	004K07870	Tray 3 elevate damper assembly
14	–	Retard pad (Not Spared)
15	868E87140	Tray 3 skew bracket (NOTE)
16	868E87150	Tray 4 skew bracket (NOTE)
17	–	Front short elevator cable (Tray 3) (P/O PL 70.18 Item 10)

NOTE: *Also part of PL 31.12 Item 12, PL 31.14 Item 3.*



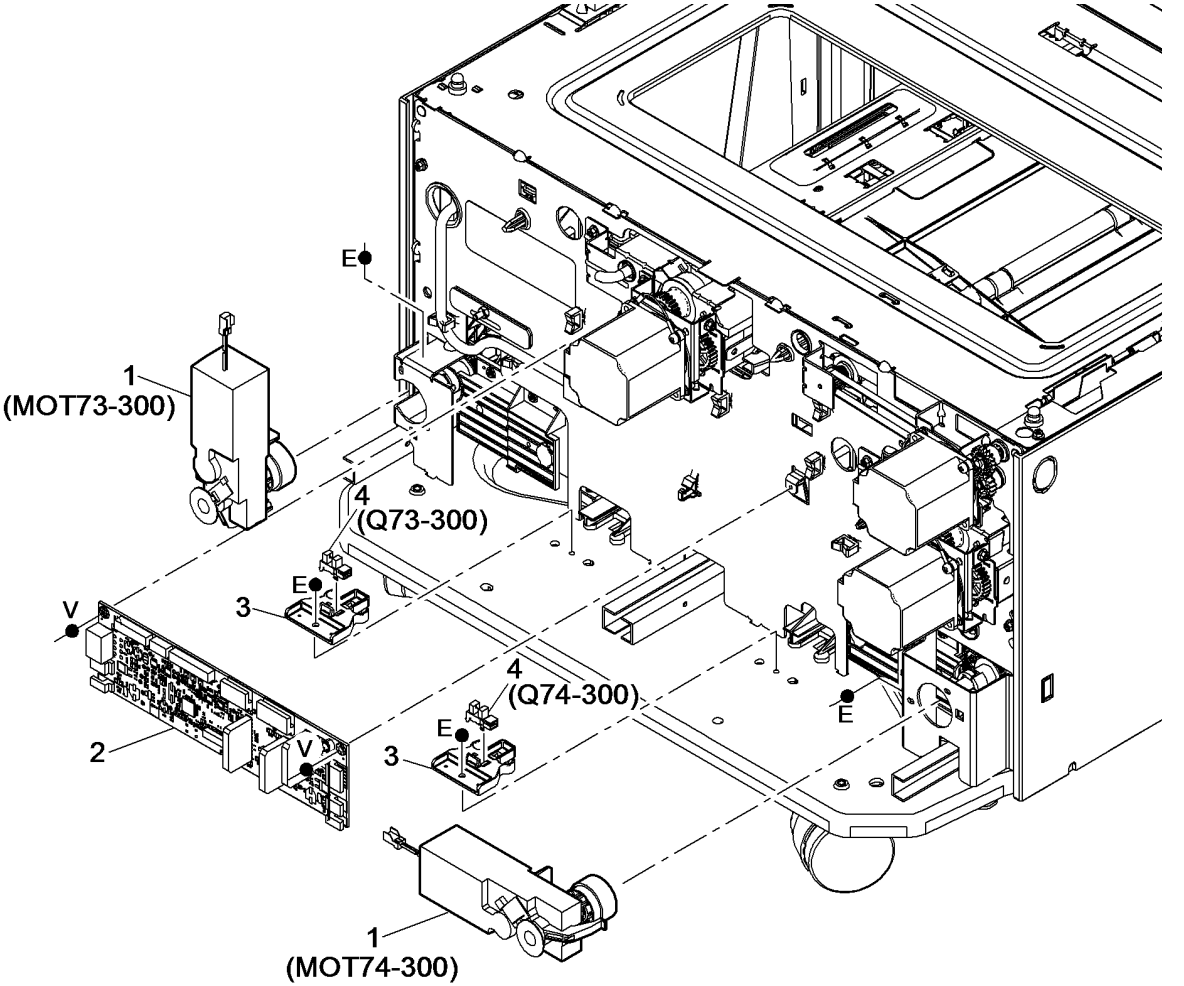
PL 70.19 Tray 3 and 4 Assembly (2 of 2)

Item	Part	Description
1	–	Tray 4 assembly (REF: PL 70.18 Item 2)
2	–	Tray 3 assembly (REF: PL 70.18 Item 3)
3	604K83671	Tray 3 and 4 clamp kit
4	–	Side clamp (2 off) (P/O PL 70.19 Item 3)
5	–	Centre clamp (P/O PL 70.19 Item 3)
6	–	Tray 4 paper tray guide (P/O PL 70.18 Item 2)
7	–	Tray 3 paper tray guide (P/O PL 70.18 Item 3)
8	019E74532	Retaining clips
9	819E20420	Front clip
10	–	Tray 3 elevator drives gear coupling (P/O PL 70.18 Item 9)
11	–	Tray 4 paper guide (P/O PL 70.18 Item 2)
12	–	Tray 3 paper guide (P/O PL 70.18 Item 3)
13	815E92301	Separation strip
14	–	Lift plate (P/O PL 70.10 Item 1, PL 70.10 Item 2)
15	–	Guide plate (P/O PL 70.18 Item 9, PL 70.18 Item 10)
16	–	Spacer (P/O PL 70.18 Item 9)
17	–	Tray 3 elevator pulley (P/O PL 70.18 Item 9)
18	–	Bearing (Not Spared)
19	–	Tray 3 elevator gear (P/O PL 70.18 Item 9)
20	–	Tray 4 elevator drives gear coupling (P/O PL 70.18 Item 10)
21	–	Spacer (P/O PL 70.18 Item 10)
22	–	Tray 4 elevator pulley
23	–	Tray 4 elevator gear (P/O PL 70.18 Item 10)



PL 70.21 Elevator Motor and Control PWB

Item	Part	Description
1	127K78351	Tray 3 elevator motor (MOT73-010)/ Tray 4 elevator motor (MOT74-010)
2	960K84462	HCF control PWB
3	819E21570	Sensor holder
4	–	Tray 3 home sensor (Q73-300)/ Tray 4 home sensor (Q74-300) (P/O PL 31.13 Item 17) (REP 70.18)



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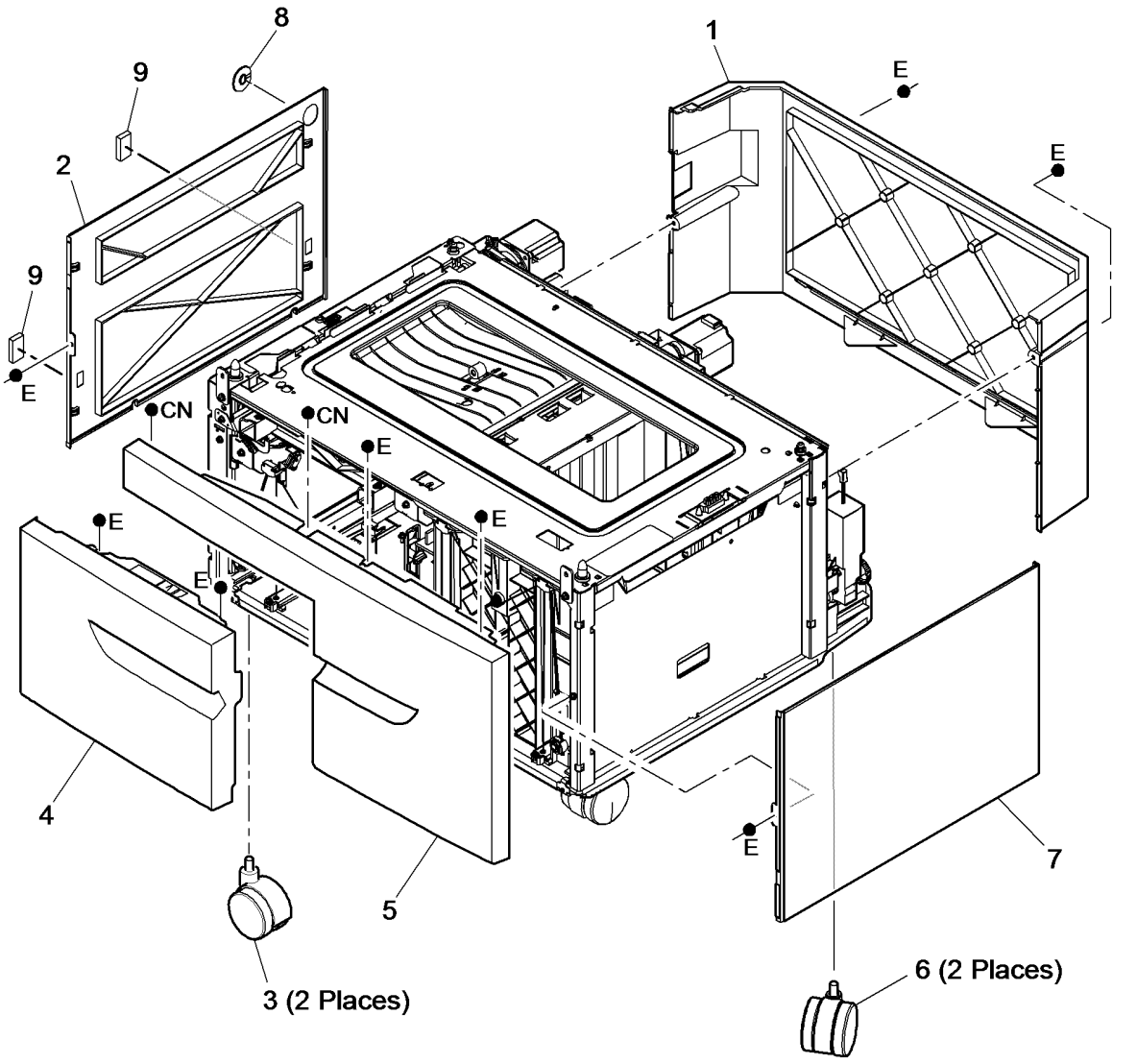
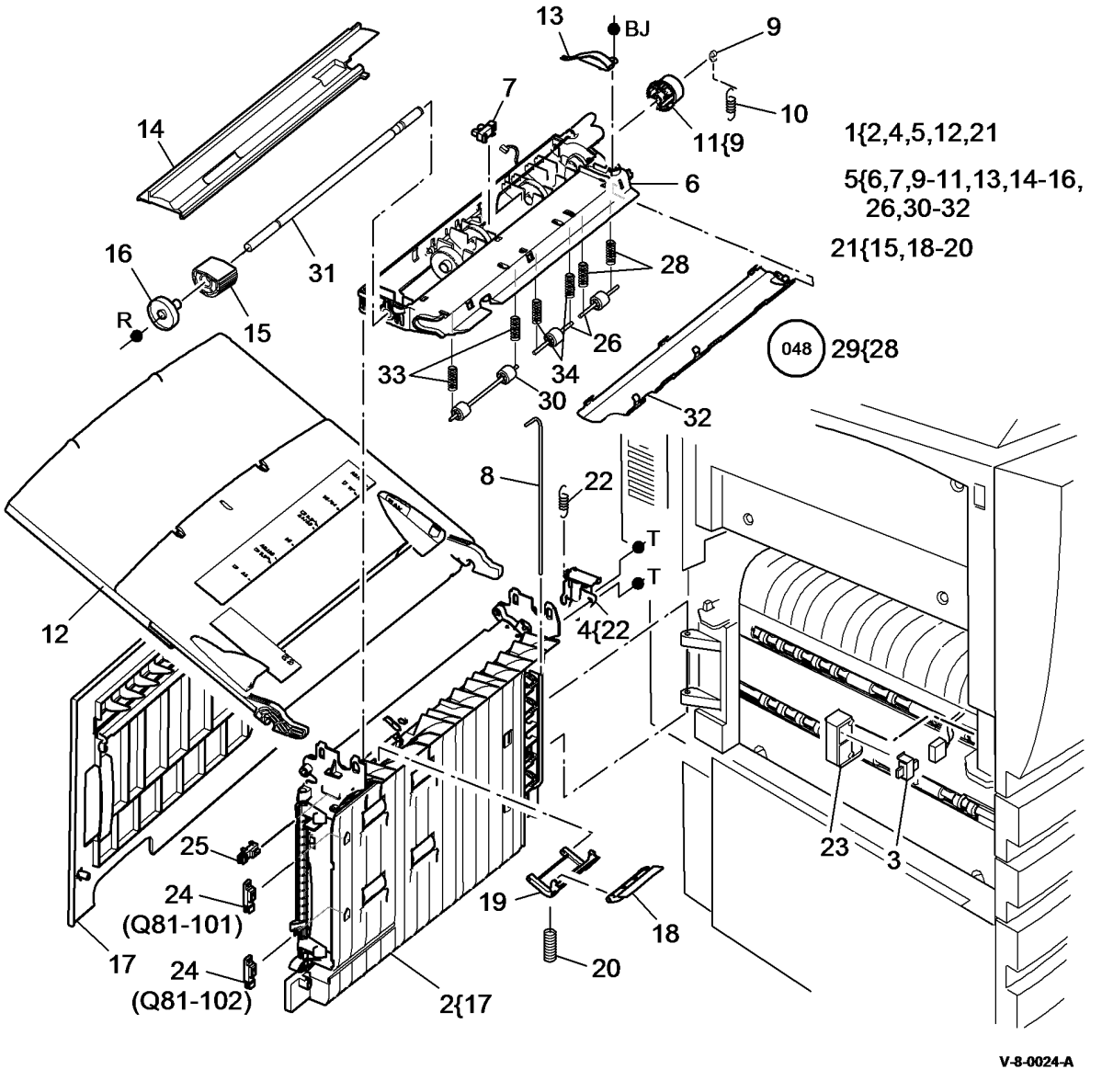
PL 70.26 Tray 3 and 4 Assembly
Covers

Item	Part	Description
1	848E63676	Rear cover
2	822E26830	Left cover
3	859K03060	Castor (locking)
4	604K83651	Tray 4 front cover
5	604K83660	Tray 3 front cover
6	–	Castor (Not spared)
7	822E26820	Right cover
8	–	Cover infill 1 (P/O PL 70.26 Item 2)
9	–	Cover infill 2 (P/O PL 70.26 Item 2)



PL 70.30 Bypass Tray and Left Door Assembly

Item	Part	Description
1	050K67883	Bypass tray and left door assembly (45-55 ppm) (REP 70.2)
2	–	Left door (P/O PL 70.30 Item 1)
3	110E19990	Left door interlock (S01-305)
4	121E25680	Bypass feed solenoid (SOL81-050) (REP 80.7)
5	–	Feed head assembly (P/O PL 70.30 Item 1) (REP 80.13)
6	–	Feed head (P/O PL 70.30 Item 5) (REP 80.13)
7	130E20360	Bypass empty sensor (Q75-320) (REP 80.17)
8	–	Hinge pin (Not Spared)
9	–	Spring retainer (P/O PL 70.30 Item 11)
10	809E57640	Spring drive gear
11	807E05311	Drive gear assembly (REP 80.14)
12	–	Bypass tray (P/O PL 70.30 Item 1)
13	809E84190	Ground spring
14	–	Feed head top cover (P/O PL 70.30 Item 5)
15	–	Feed roll (P/O PL 70.30 Item 21) (REP 80.15)
16	–	Nip roll (P/O PL 70.30 Item 5)
17	–	Left door cover (P/O PL 70.30 Item 2)
18	–	Retard pad bracket (P/O PL 70.30 Item 21)
19	–	Retard pad assembly (P/O PL 70.30 Item 21) (REP 80.16)
1C	050K67893	Bypass tray and left door assembly (65-90 ppm) (REP 70.2)
20	–	Retard pad spring (P/O PL 70.30 Item 21)
21	059K39862	Feed roll and retard pad assembly (See NOTE 2) (REP 80.16)
22	–	Solenoid spring (P/O PL 70.30 Item 4)
23	003E78141	Interlock cover
24	130E12770	Tray 1 feed sensor (Q81-101)/Tray 2 feed sensor (Q81-102) (REP 80.18)
25	130E11610	Wait Sensor (Q81-100) (65-90 ppm) (See NOTE 1) (REP 80.11)
26	–	Nip roll (Not Spared)
27	–	Not used
28	–	Pre-reg nip roll spring (P/O PL 70.30 Item 29)
29	–	Skew bypass tray spares kit (x2 spring) (REF: PL 31.13 Item 7) (W/ TAG 048)
30	–	Nip roller (Not Spared)
31	–	Shaft (Not Spared)
32	–	Lower cover (Not Spared)
33	–	Front pre-nip roll spring (Not Spared)
34	–	Middle pre-nip roll spring (Not Spared)



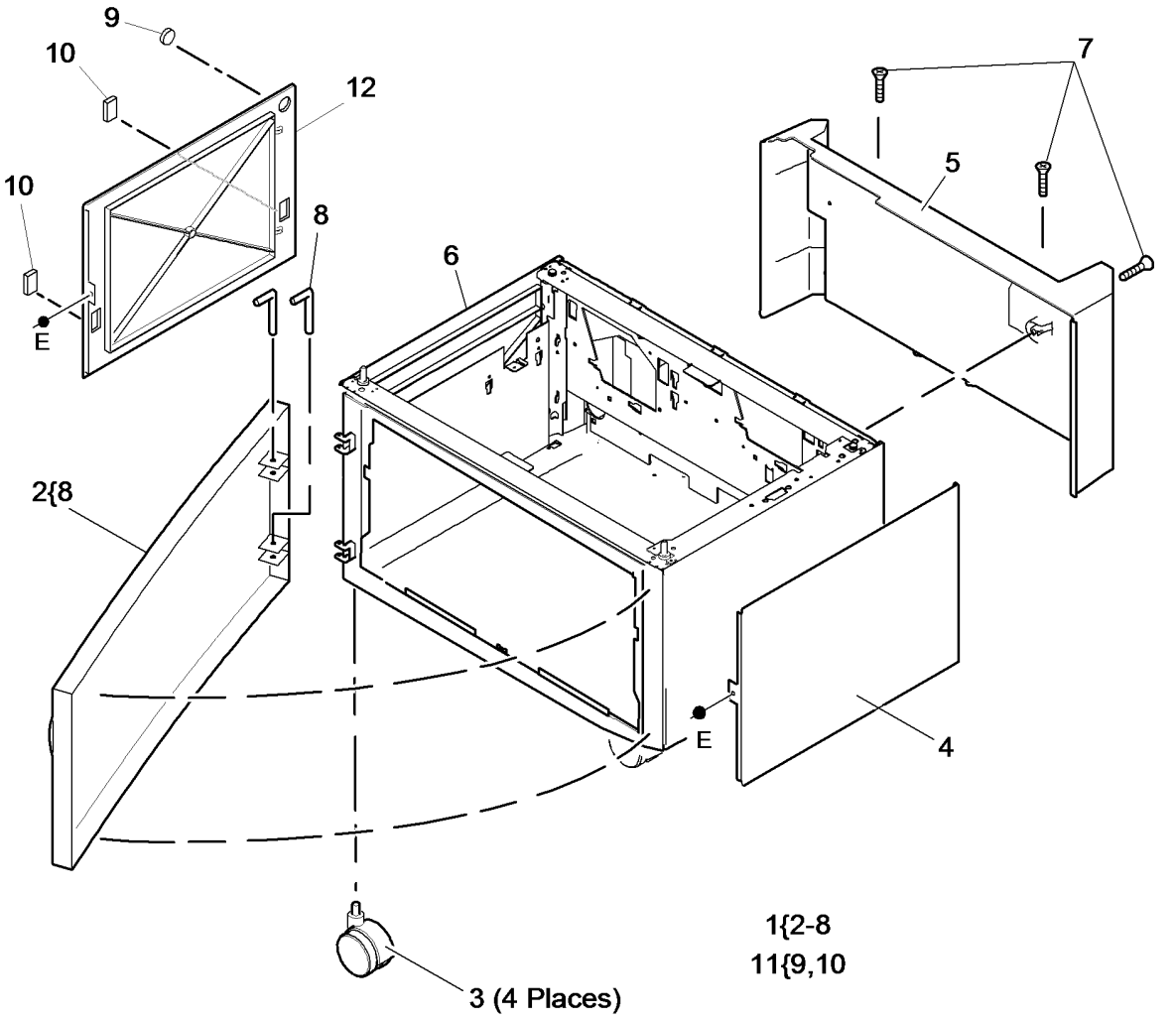
NOTE: *1.Refer to PL 80.15 Item 3 for the 45-55 ppm wait sensor.*

NOTE: *2.HFSI. To reset the HFSI count, refer to dC135.*

PL 70.40 Stand Assembly

Item	Part	Description
1	–	Stand unit (complete) (Not Spared)
2	–	Front door (Not Spared) (NOTE)
3	859K03060	Castor (locking)
4	822E26820	Right cover
5	–	Rear cover (Not Spared)
6	–	Stand base (Not Spared)
7	–	Screw (M6x30)
8	–	Door hinge pin (P/O PL 70.40 Item 2)
9	–	Cover infill 1 (P/O PL 70.40 Item 11)
10	–	Cover infill 2 (P/O PL 70.40 Item 11)
11	–	Cover infill kit (Not Spared)
12	–	Left cover (Not Spared)

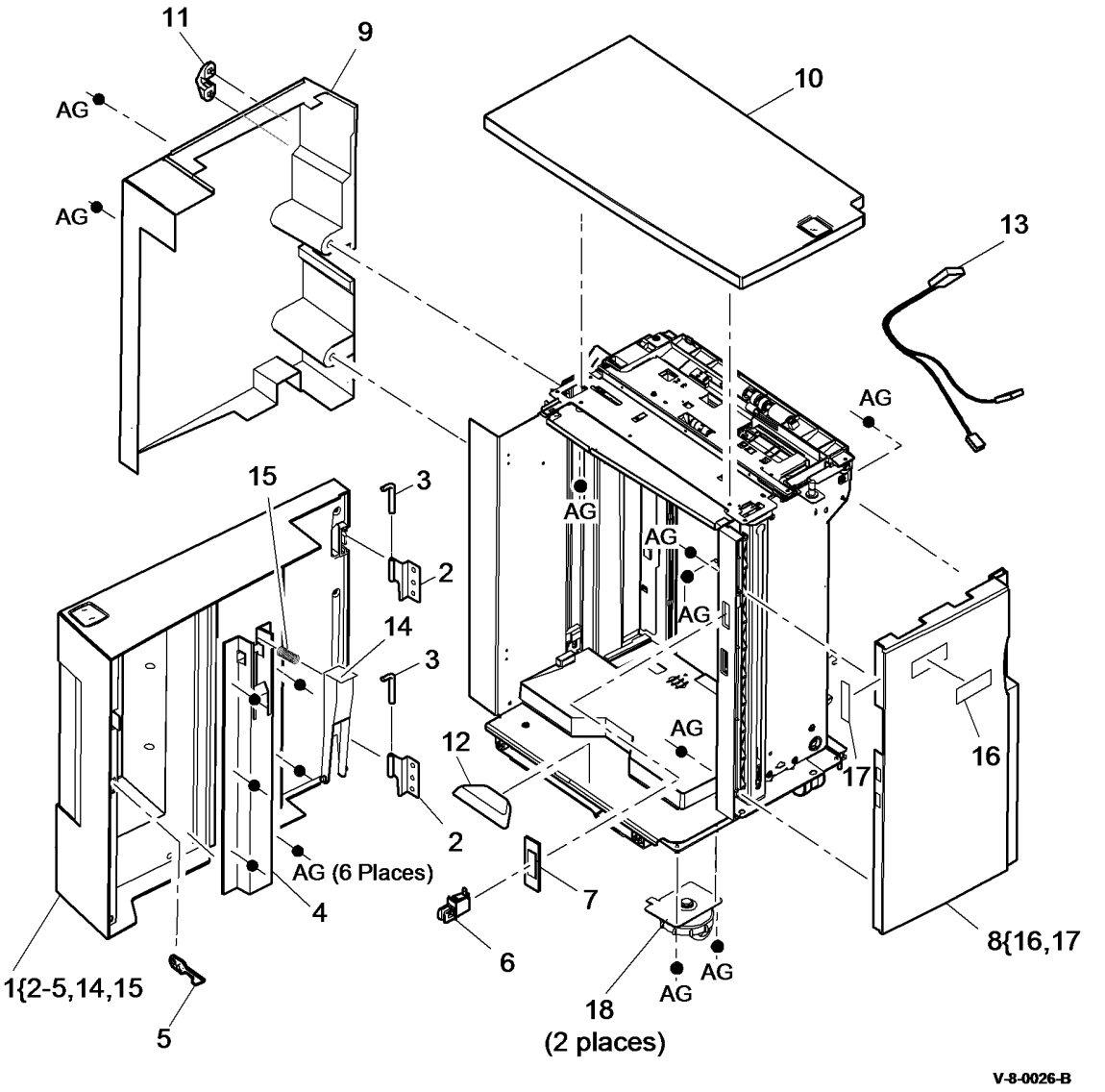
NOTE: *Hinge pins (PL 70.40 Item 8) are supplied with the front door.*



PL 70.60 Tray 6 Covers

Item	Part	Description
1	802K93561	Front door assembly
2	–	Front door hinge (P/O PL 70.60 Item 1)
3	–	Front door hinge pin (P/O PL 70.60 Item 1)
4	–	Trail edge guide assembly (P/O PL 70.60 Item 1)
5	–	Front door latch (P/O PL 70.60 Item 1)
6	110E20570	Front door interlock switch (S76-300)
–	110E07300	Front door interlock switch (S76-300) (See Note)
7	–	Interlock switch plate (Not Spared)
8	848K19110	Front cover
9	802E82351	Rear cover
10	802E82363	Top cover
11	–	Cable clamp (P/O PL 70.60 Item 9)
12	848E05863	Base knuckle cover
13	–	Front door interlock harness (Not Spared)
14	–	Tamper guide lever (P/O PL 70.60 Item 1)
15	–	Tamper lever compression spring (P/O PL 70.60 Item 1)
16	–	Label (Tray 6) (P/O PL 70.60 Item 8)
17	–	Label (Max) (P/O PL 70.60 Item 8)
18	–	Adjustable castor (P/O PL 31.14 Item 4)

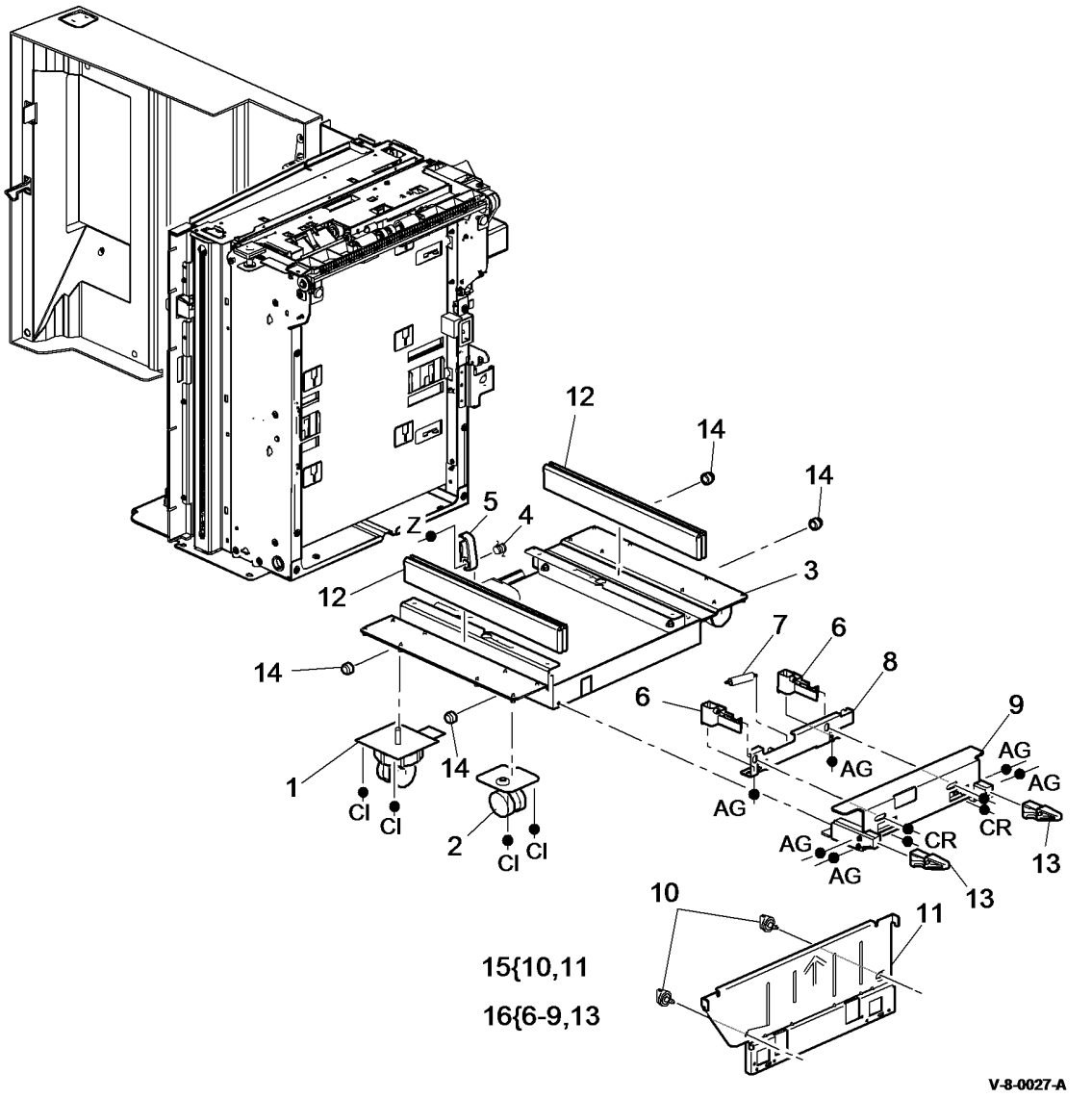
NOTE: *For use with all tray 6 SEF option kits*



PL 70.62 Tray 6 Base

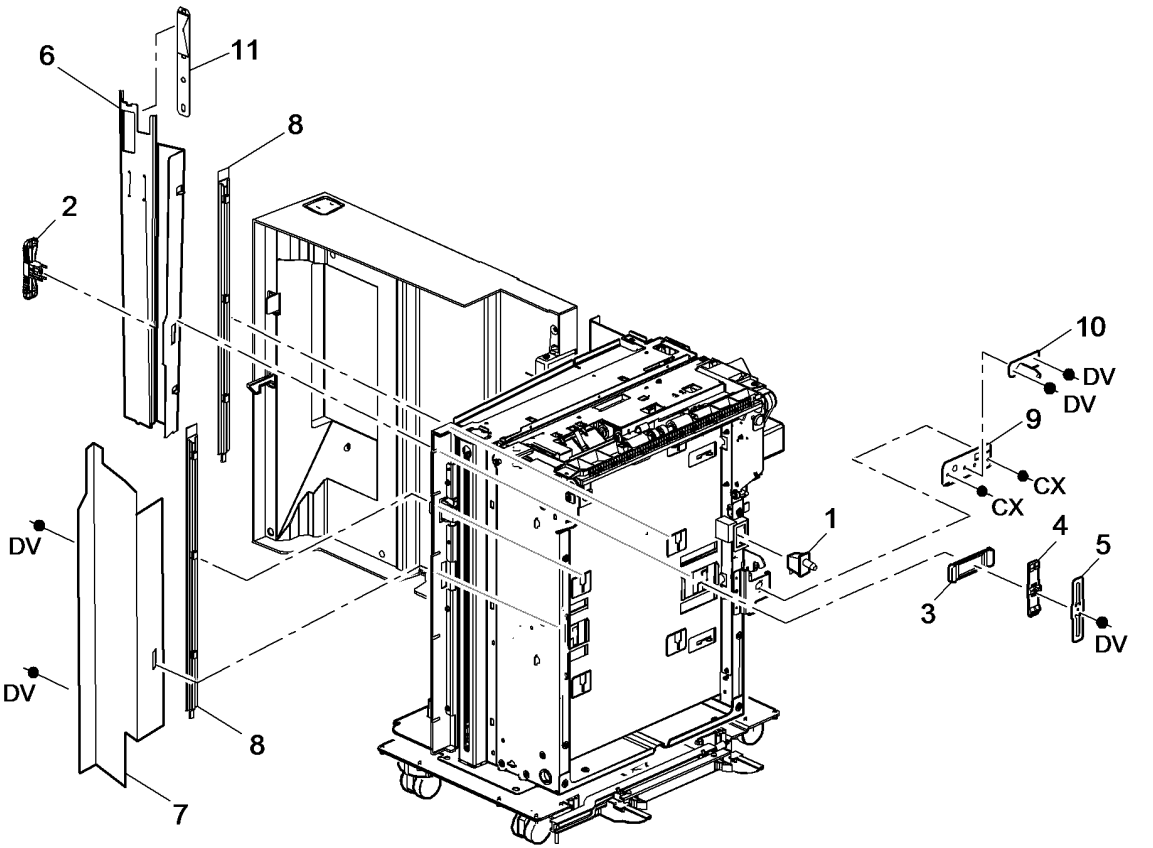
Item	Part	Description
1	–	Adjustable castor (P/O PL 31.14 Item 4)
2	–	Castor (Not Spared)
3	–	Platform assembly (Not Spared)
4	009E74211	Spring bias
5	003E76870	Latch bias
6	003E78020	Docking latch
7	–	Docking latch spring (P/O PL 70.62 Item 16)
8	–	Docking latch bracket (P/O PL 70.62 Item 16)
9	–	Docking latch main bracket (P/O PL 70.62 Item 16)
10	803E13680	Docking latch thumb screw (See NOTE)
11	068K54920	Docking plate (See NOTE)
12	–	Slide assembly (Not Spared)
13	–	Docking guides (P/O PL 70.62 Item 16)
14	–	Slide assembly locking nut (Not Spared)
15	–	Docking plate assembly (P/O PL 31.11 Item 11)
16	003K20681	Latch assembly

NOTE: *This part is can also be ordered as part of a kit PL 31.11 Item 11.*



PL 70.64 Tray 6 Guides

Item	Part	Description
1	110E07300	Docking interlock switch (S76-310)
2	–	Handle latch (Not Spared)
3	–	Latch spacer (Not Spared)
4	–	Slide latch (Not Spared)
5	–	Spring leaf (Not Spared)
6	–	Rear guide (P/O PL 70.64 Item 12)
7	–	Front guide assembly (Not Spared)
8	038E34402	Guide strip
9	–	Adjustment plate (P/O PL 70.64 Item 13)
10	–	Docking pin (P/O PL 70.64 Item 13)
11	–	Rear guide assembly spring (P/O PL 70.64 Item 12)
12	038K16403	Rear guide assembly
13	029K04680	Docking pin assembly



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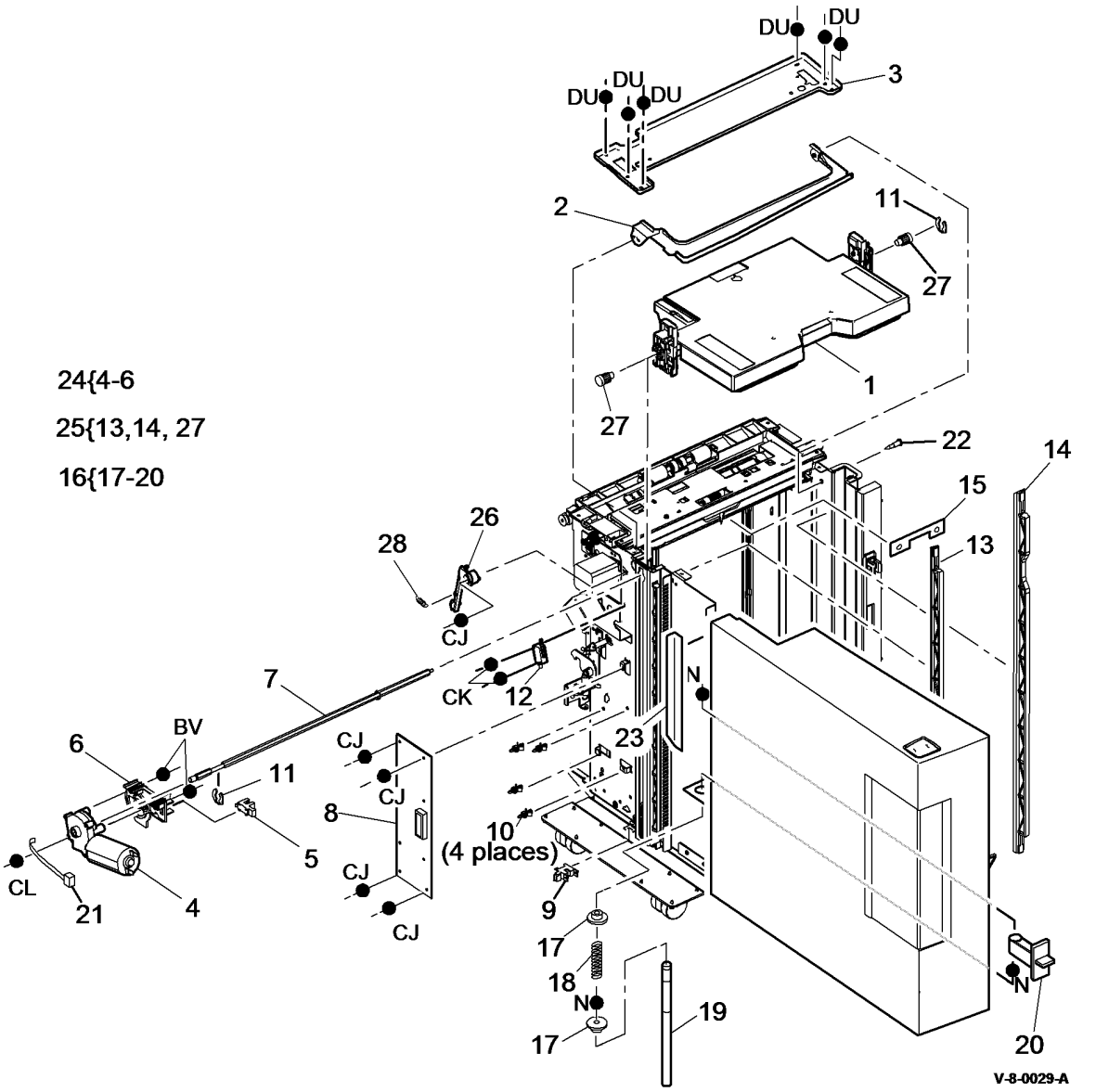
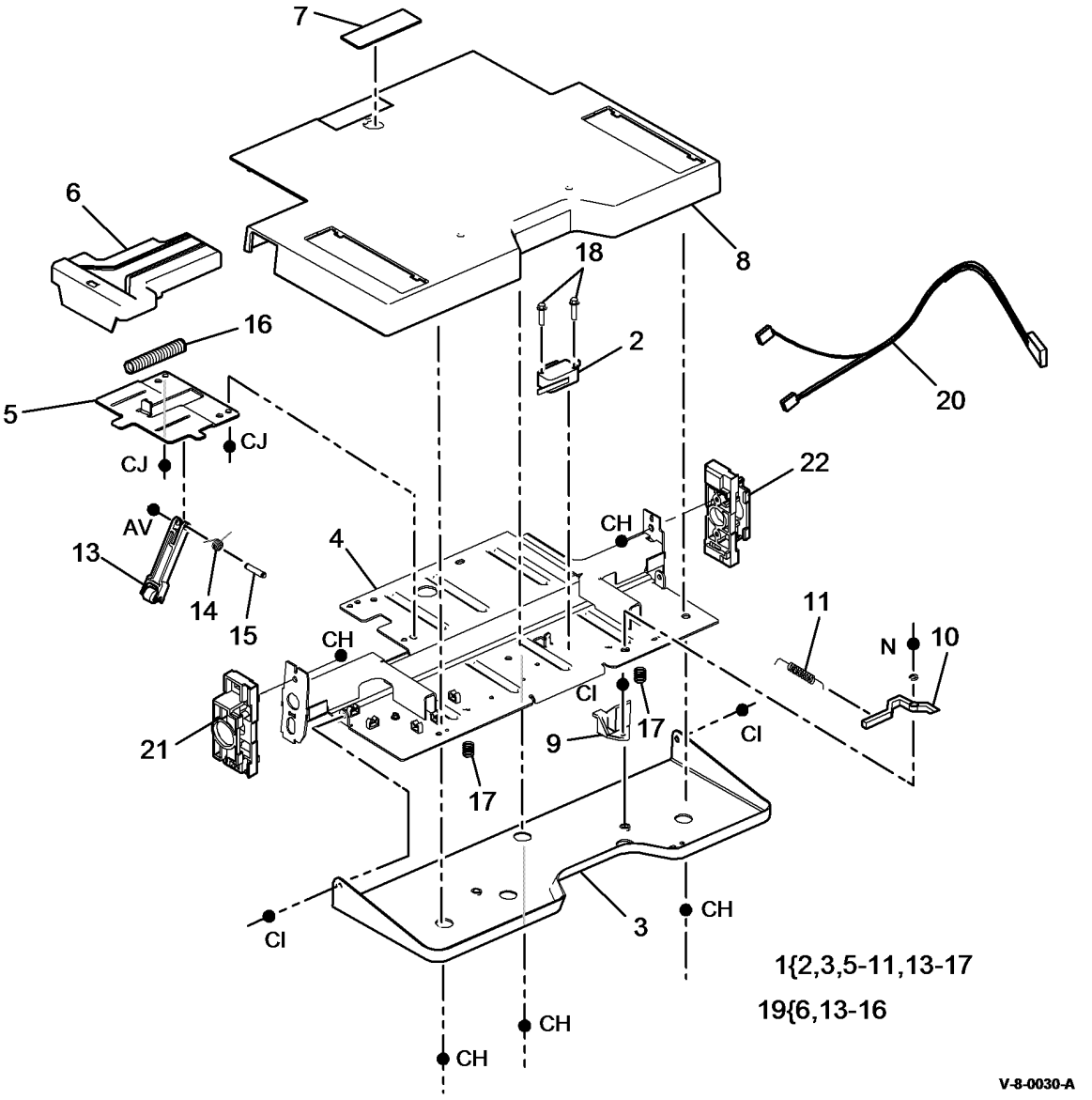
PL 70.68 Tray 6 Lift assembly (1 of 2)

Item	Part	Description
1	–	Tray assembly (complete) (REF: PL 70.70 Item 1)
2	–	Crash bar (Not Spared)
3	–	Frame top brace (Not Spared)
4	–	Elevator motor (MOT76-010) (P/O PL 70.68 Item 24) (REP 70.8)
5	130K74380	Elevator motor encoder sensor (Q76-340) (REP 70.7)
6	–	Elevator motor bracket (P/O PL 70.68 Item 24)
7	–	Elevator motor shaft (Not Spared)
8	960K35024	Tray 6 control PWB
9	130K75511	Stack down sensor (Q76-335) (REP 70.15)
10	–	Standoff (Not Spared)
11	–	Tray level drive gear clip (Not Spared)
12	110E06961	Upper limit switch (S76-412) (REP 70.9)
13	–	Rear elevator rack (P/O PL 70.68 Item 25) (REP 70.13)
14	–	Front elevator rack (P/O PL 70.68 Item 25) (REP 70.13)
15	–	Retard roller shield (P/O PL 80.47 Item 1)
16	003K20950	Shipping handle assembly
17	–	Shipping pin bearing (P/O PL 70.68 Item 16)
18	–	Shipping pin spring (P/O PL 70.68 Item 16)
19	–	Shipping pin (P/O PL 70.68 Item 16)
20	–	Shipping pin handle (P/O PL 70.68 Item 16)
21	–	Cable tie (Not Spared)
22	–	Clinch stud (Not Spared)
23	–	Cable holder (Not Spared)
24	127K56330	Elevator motor assembly (REP 70.8)
25	007K19660	Elevator rack assembly (REP 70.13)
26	–	Upper limit switch actuator (Not Spared)
27	–	Tray level drive gear (P/O PL 70.68 Item 25) (REP 70.13)
28	–	Actuator spring (Not Spared)



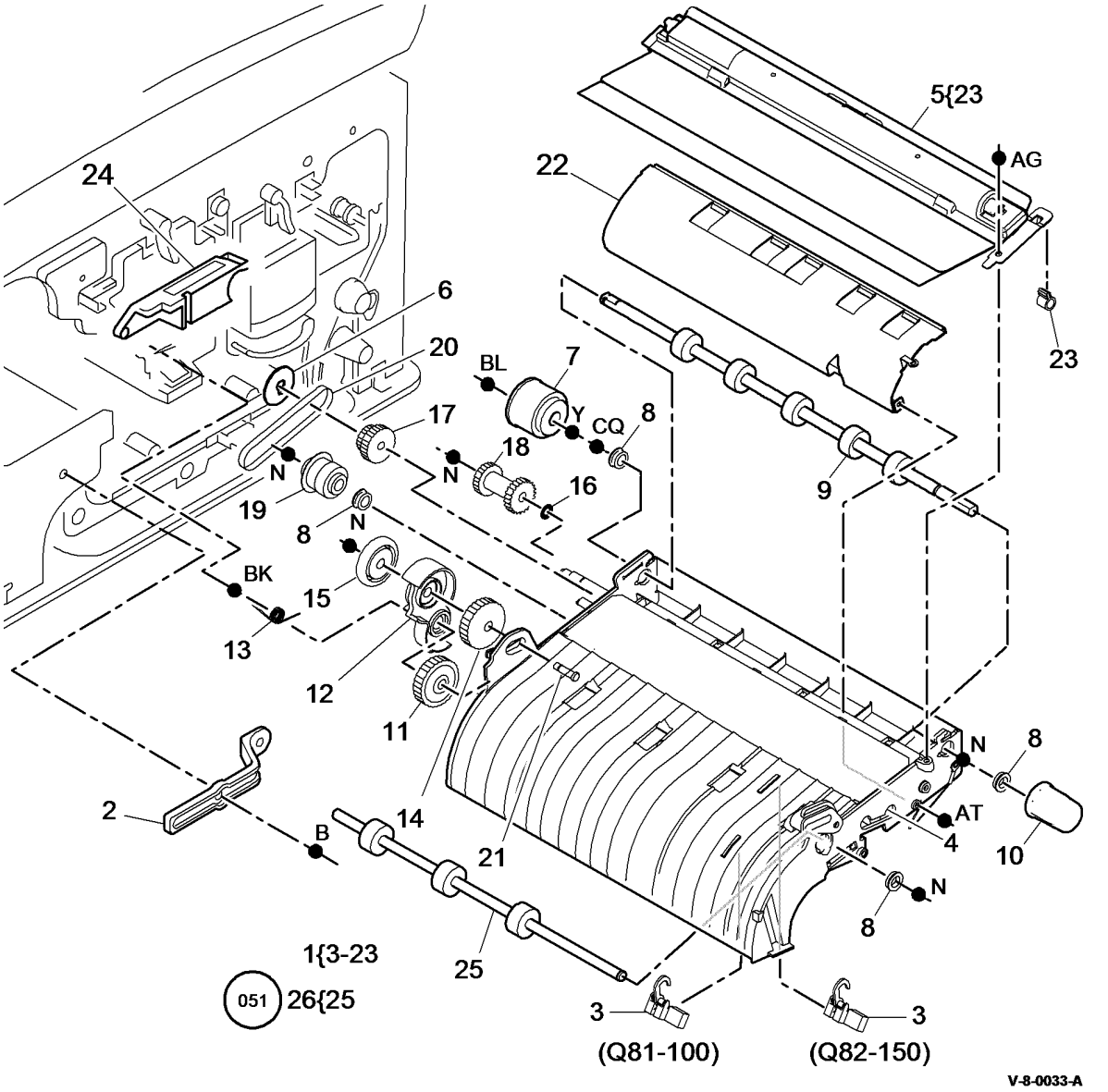
PL 70.70 Tray 6 Lift assembly (2 of 2)

Item	Part	Description
1	–	Tray lift assembly (Not Spared)
2	110E06961	Tray down limit switch (S76-415) (REP 70.10)
3	025E06871	Lower safety bar
4	–	Lift plate (Not Spared)
5	–	Fixing plate (Not Spared)
6	–	Infill plate (P/O PL 70.70 Item 19)
7	019K13470	Cork pad
8	–	Tray lift top cover (Not Spared)
9	–	Lift plate crash bar actuator 2 (Not Spared)
10	–	Lift plate crash bar actuator 1 (Not Spared)
11	–	Crash bar actuator spring (Not Spared)
12	–	Not used
13	–	Infill actuator arm (P/O PL 70.70 Item 19)
14	–	Infill actuator arm spring (P/O PL 70.70 Item 19)
15	–	Infill actuator arm pin (P/O PL 70.70 Item 19)
16	–	Infill plate spring (P/O PL 70.70 Item 19)
17	–	Lower safety spring (Not Spared)
18	612W25655	Tray down limit switch screw
19	815K11380	Infill plate assembly
20	962K50461	Tray 6 elevator harness
21	032E29800	Rear elevator tray guide
22	032E29790	Front elevator tray guide



PL 80.15 Registration Transport (45-55 ppm)

Item	Part	Description
1	059K60041	Registration transport assembly (REP 80.2, ADJ 80.1)
2	–	Retainer bracket (Not Spared)
3	130E11430	Wait sensor (Q81-100), Registration sensor (Q82-150) (NOTE 2) (REP 80.4)
4	–	Registration transport guide (P/O PL 80.15 Item 1)
5	059K52341	Registration nip assembly
6	028E16630	Snap on washer (M6)
7	–	Registration clutch (CL82-070) (P/O PL 31.12 Item 13) (REP 80.3, ADJ 80.1, ADJ 40.1)
8	013E36980	Bearing
9	806E18030	Drive roll assembly (REP 80.20)
10	–	Jam clearance knob (P/O PL 80.15 Item 1)
11	–	Gear (26T) (P/O PL 80.15 Item 1)
12	–	Spring arm (P/O PL 80.15 Item 1)
13	–	Torsion spring (P/O PL 80.15 Item 1)
14	–	Gear (28T) (P/O PL 80.15 Item 1)
15	–	Ring pitch (P/O PL 80.15 Item 1)
16	–	Black nylon washer (P/O PL 80.15 Item 1)
17	–	Gear (22G/28T) (P/O PL 80.15 Item 1) (ADJ 40.1)
18	–	Gear (23T) (P/O PL 80.15 Item 1) (ADJ 40.1)
19	–	Gear (22G/20T) (P/O PL 80.15 Item 1)
20	–	Drive belt (P/O PL 80.15 Item 1) (REP 80.21)
21	–	Spring arm pin (P/O PL 80.15 Item 1)
22	–	Lower bias guide (P/O PL 80.15 Item 1)
23	835E05350	Bias contact (NOTE 1)
24	–	Clutch cover (P/O PL 31.12 Item 13)
25	–	Drive shaft (P/O PL 80.15 Item 26)
26	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)

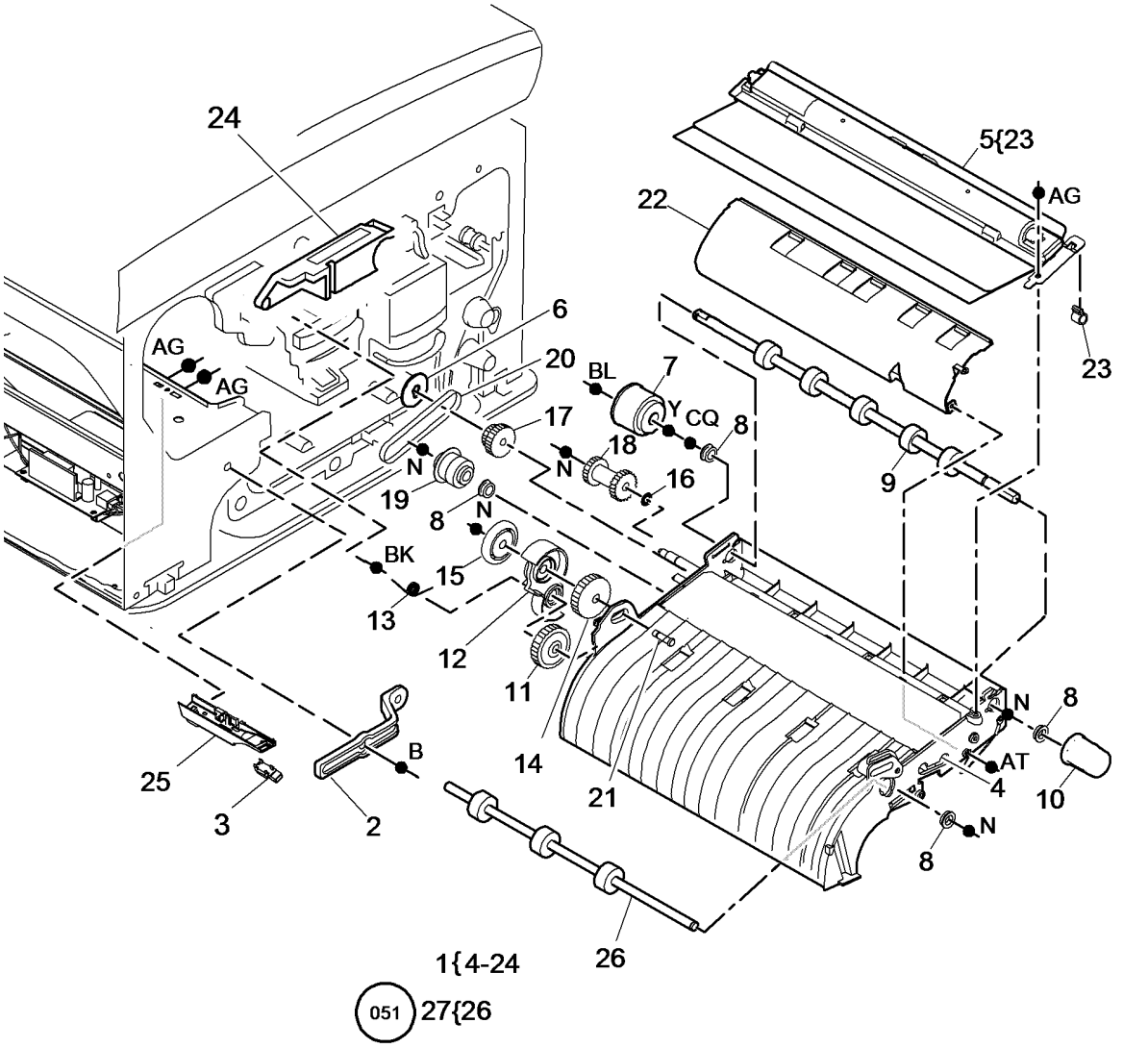


NOTE: *1. HFSI. To reset the HFSI count, refer to dC135.*

NOTE: *2. Sensor reference Q08-110 may also be seen when the tray 6 is present.*

PL 80.17 Registration Transport (65-90 ppm)

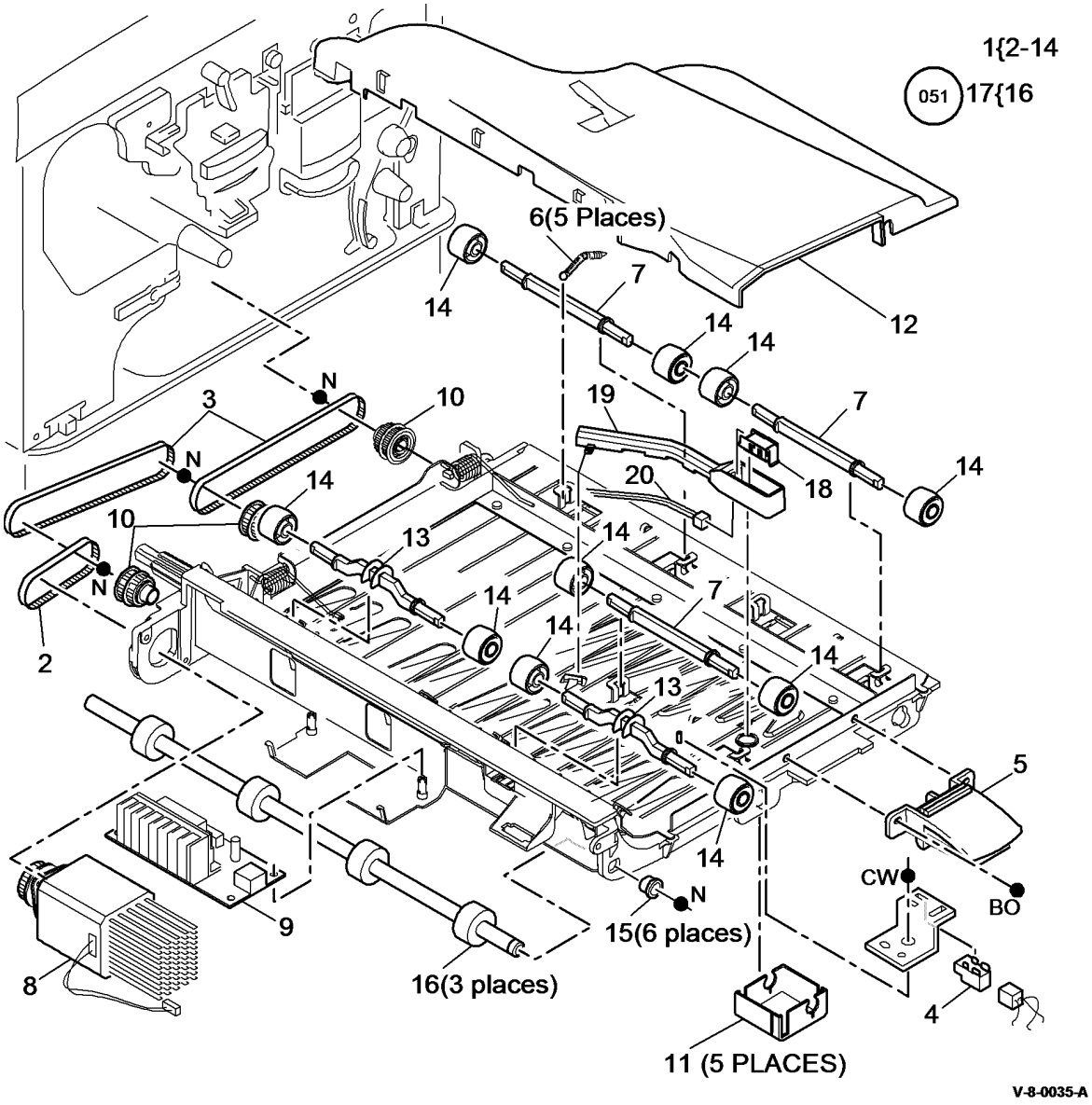
Item	Part	Description
1	059K60051	Registration transport assembly (REP 80.2, ADJ 80.1)
2	–	Retainer bracket (Not Spared)
3	130E11610	Registration sensor (Q82-150) (REP 80.9)
4	–	Registration transport guide (P/O PL 80.17 Item 1)
5	059K52341	Registration nip assembly
6	028E16630	Snap on washer (M6)
7	–	Registration clutch (CL82-070) (P/O PL 31.12 Item 13) (REP 80.3, ADJ 80.1, ADJ 40.1)
8	013E36980	Bearing
9	806E18030	Drive roll assembly (REP 80.20)
10	–	Jam clearance knob (P/O PL 80.17 Item 1)
11	–	Gear (26T) (P/O PL 80.17 Item 1)
12	–	Spring arm (P/O PL 80.17 Item 1)
13	–	Torsion spring (P/O PL 80.17 Item 1)
14	–	Gear (28T) (P/O PL 80.17 Item 1)
15	–	Ring pitch (P/O PL 80.17 Item 1)
16	–	Black nylon washer (P/O PL 80.17 Item 1)
17	–	Gear (22G/28T) (P/O PL 80.17 Item 1) (ADJ 40.1)
18	–	Gear (23T) (P/O PL 80.17 Item 1) (ADJ 40.1)
19	–	Gear (22G/20T) (P/O PL 80.17 Item 1)
20	–	Drive belt (P/O PL 80.17 Item 1) (REP 80.27)
21	–	Spring arm pin (P/O PL 80.17 Item 1)
22	–	Lower bias guide (P/O PL 80.17 Item 1)
23	835E05350	Bias contact (NOTE)
24	–	Clutch cover (P/O PL 31.12 Item 13)
25	–	Registration sensor bracket (Not Spared)
26	–	Drive shaft (P/O PL 80.17 Item 27)
27	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)



NOTE: *HFSI. To reset the HFSI count, refer to dC135.*

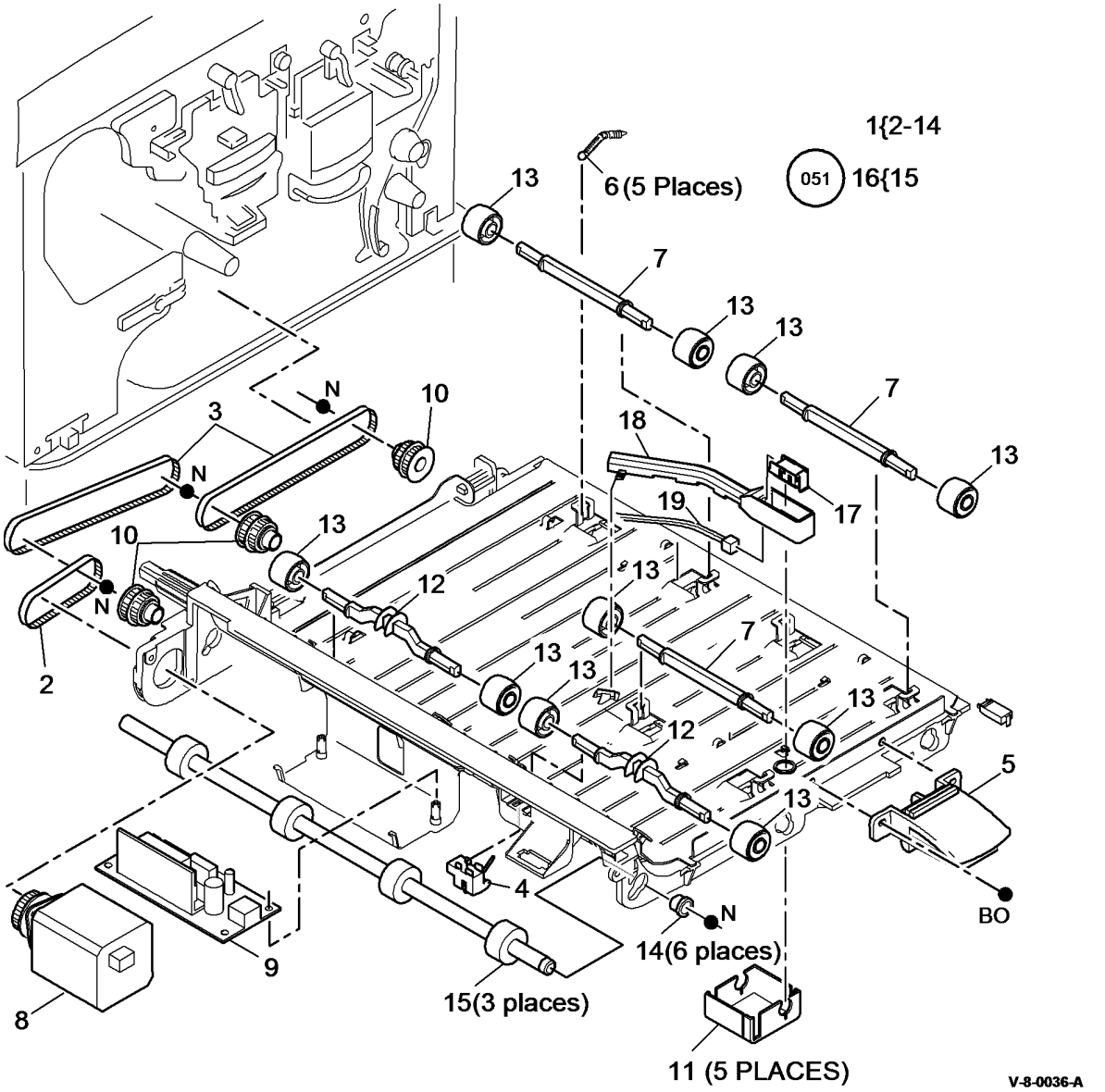
PL 80.20 Duplex Transport (65-90 ppm)

Item	Part	Description
1	059K84730	Duplex transport (REP 80.5)
2	–	Drive belt (76T) (P/O PL 80.20 Item 1) (REP 80.6)
3	–	Drive belt (285T) (P/O PL 80.20 Item 1) (REP 80.6)
4	130E11610	Duplex sensor (Q83-160) (REP 80.22)
5	003K20760	Jam clearance latch
6	–	Spring (P/O PL 80.20 Item 1)
7	–	Nip roll shaft (P/O PL 80.20 Item 1)
8	127K62340	Duplex motor (MOT83-060) (REP 80.6)
9	960K32880	Duplex motor driver PWB (REP 80.6)
10	–	Drive pulley (P/O PL 80.20 Item 1)
11	–	Lower cover (P/O PL 80.20 Item 1)
12	–	Duplex duct (P/O PL 80.20 Item 1)
13	–	Duplex nip roll shaft (P/O PL 80.20 Item 1)
14	059K49400	Nip roll assembly
15	–	Bearing (P/O PL 80.20 Item 1)
16	–	Duplex drive roll shaft (P/O PL 80.20 Item 17)
17	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)
18	123E02481	Duplex transport LED (REP 80.48)
19	–	LED harness guide (Not Spared)
20	–	Duplex transport LED harness (Not Spared)



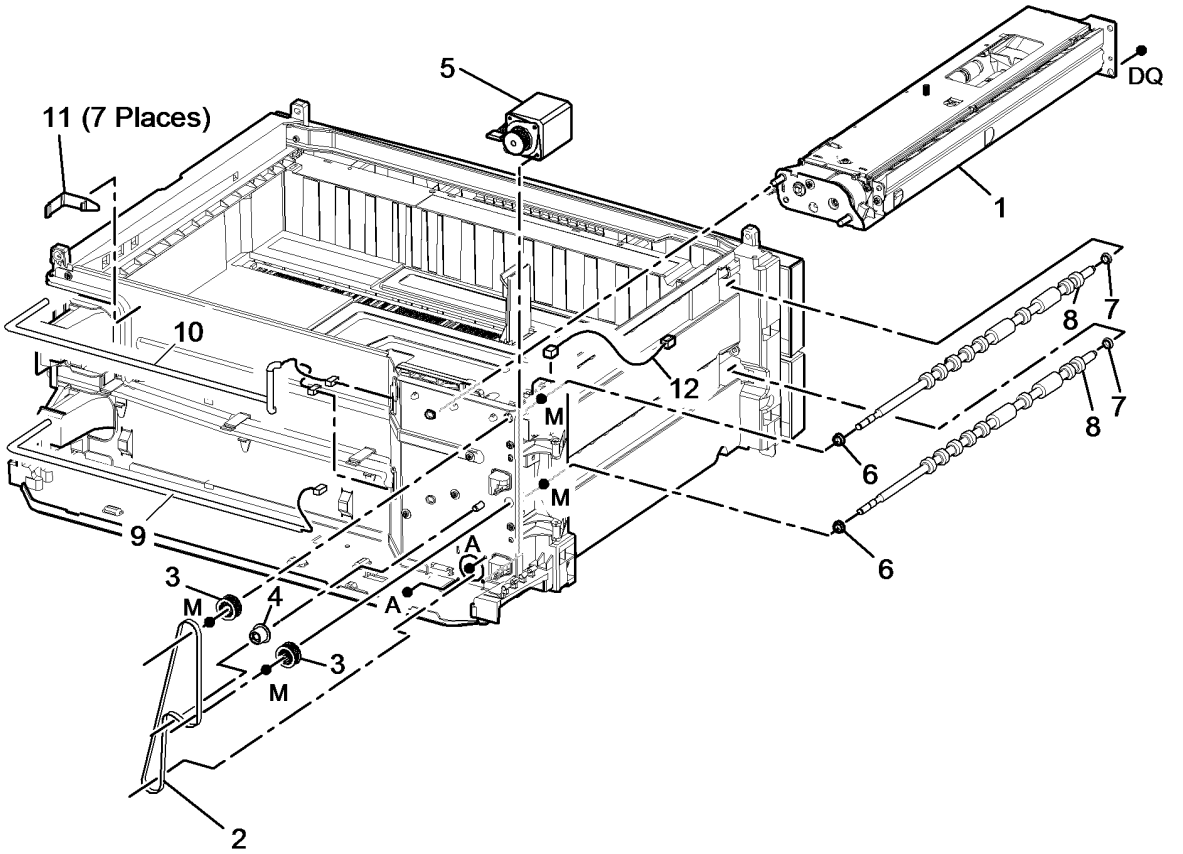
PL 80.22 Duplex Transport (45-55 ppm)

Item	Part	Description
1	059K84720	Duplex transport (REP 80.5)
2	–	Drive belt (76T) (P/O PL 80.22 Item 1) (REP 80.6)
3	–	Drive belt (285T) (P/O PL 80.22 Item 1) (REP 80.6)
4	130E12070	Duplex sensor (Q83-160) (REP 80.22)
5	003K20760	Jam clearance latch
6	–	Spring (P/O PL 80.22 Item 1)
7	–	Nip roll shaft (P/O PL 80.22 Item 1)
8	127K53190	Duplex motor (MOT83-060) (REP 80.6)
9	960K52720	Duplex motor driver PWB (REP 80.6)
10	–	Drive pulley (P/O PL 80.22 Item 1)
11	–	Lower cover (P/O PL 80.22 Item 1)
12	–	Duplex nip roll shaft (P/O PL 80.22 Item 1)
13	059K49400	Nip roll assembly
14	–	Bearing (P/O PL 80.22 Item 1)
15	–	Duplex drive roll shaft (P/O PL 80.22 Item 16)
16	–	Drive roll repair kit (REF: PL 31.13 Item 9) (W/TAG 051)
17	123E02481	Duplex transport LED (REP 80.48)
18	–	LED harness guide (Not Spared)
19	–	Duplex transport LED harness (Not Spared)



PL 80.25 Tray 1 and 2 Paper Feed Assembly (1 of 2)

Item	Part	Description
1	–	Tray 1 or 2 paper feed assembly (REF: PL 80.26 Item 1)
2	023E31270	Transport drive belt (REP 80.8)
3	020E54150	Pulley
4	020E48680	Pulley idler
5	127K61842	Transport roll drives motor (MOT81-025) (REP 80.12)
6	013E37480	Rear transport roll bearing (REP 80.10)
7	013E37490	Front transport roll bearing (REP 80.10)
8	059K70070	Transport roll (REP 80.10)
9	962K64030	Power harness
10	962K64020	Signal harness
11	120E36130	Cable holder
12	–	Connection harness (Not Spared)



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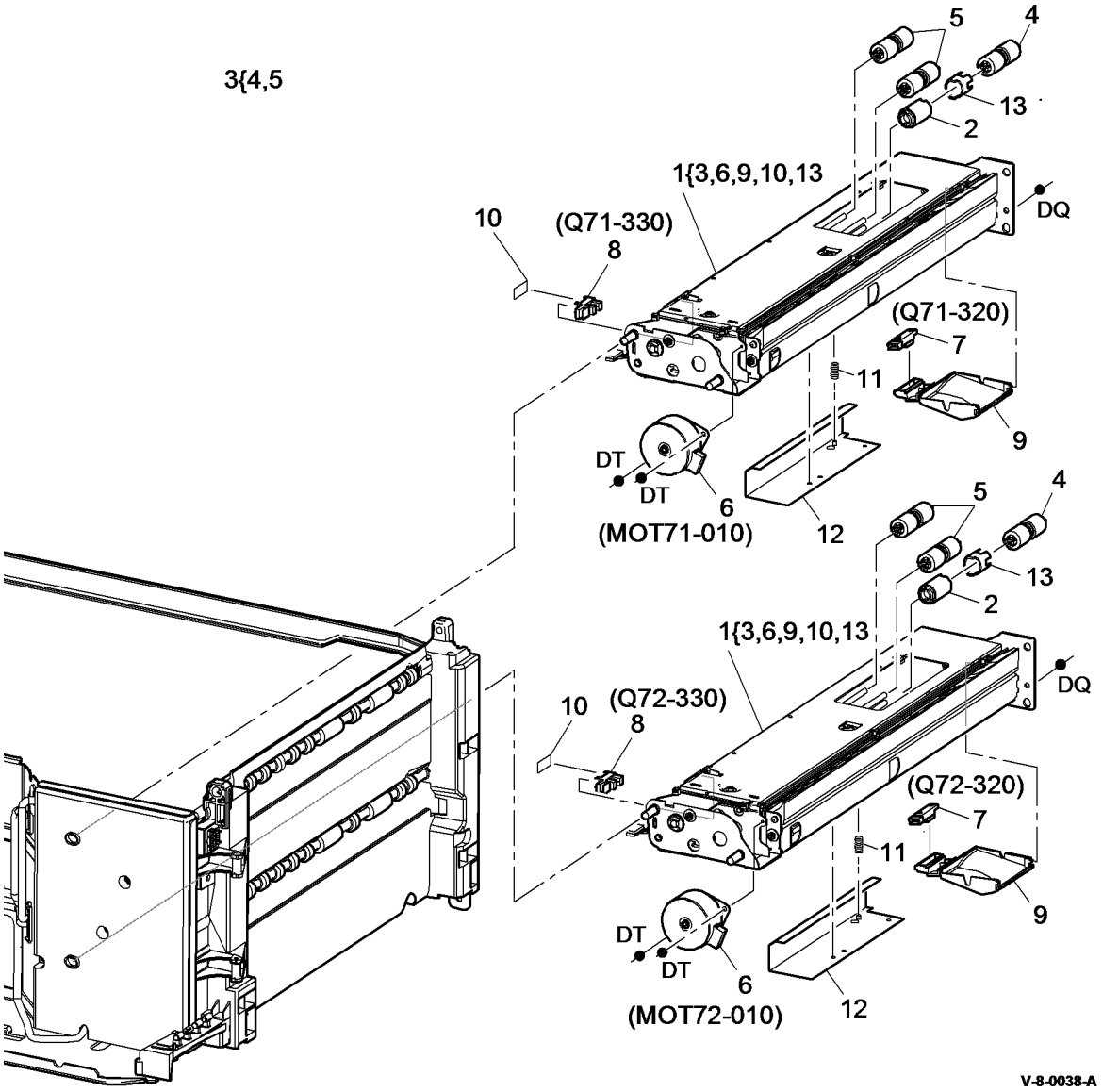
PL 80.26 Tray 1 and 2 Paper Feed Assembly (2 of 2)

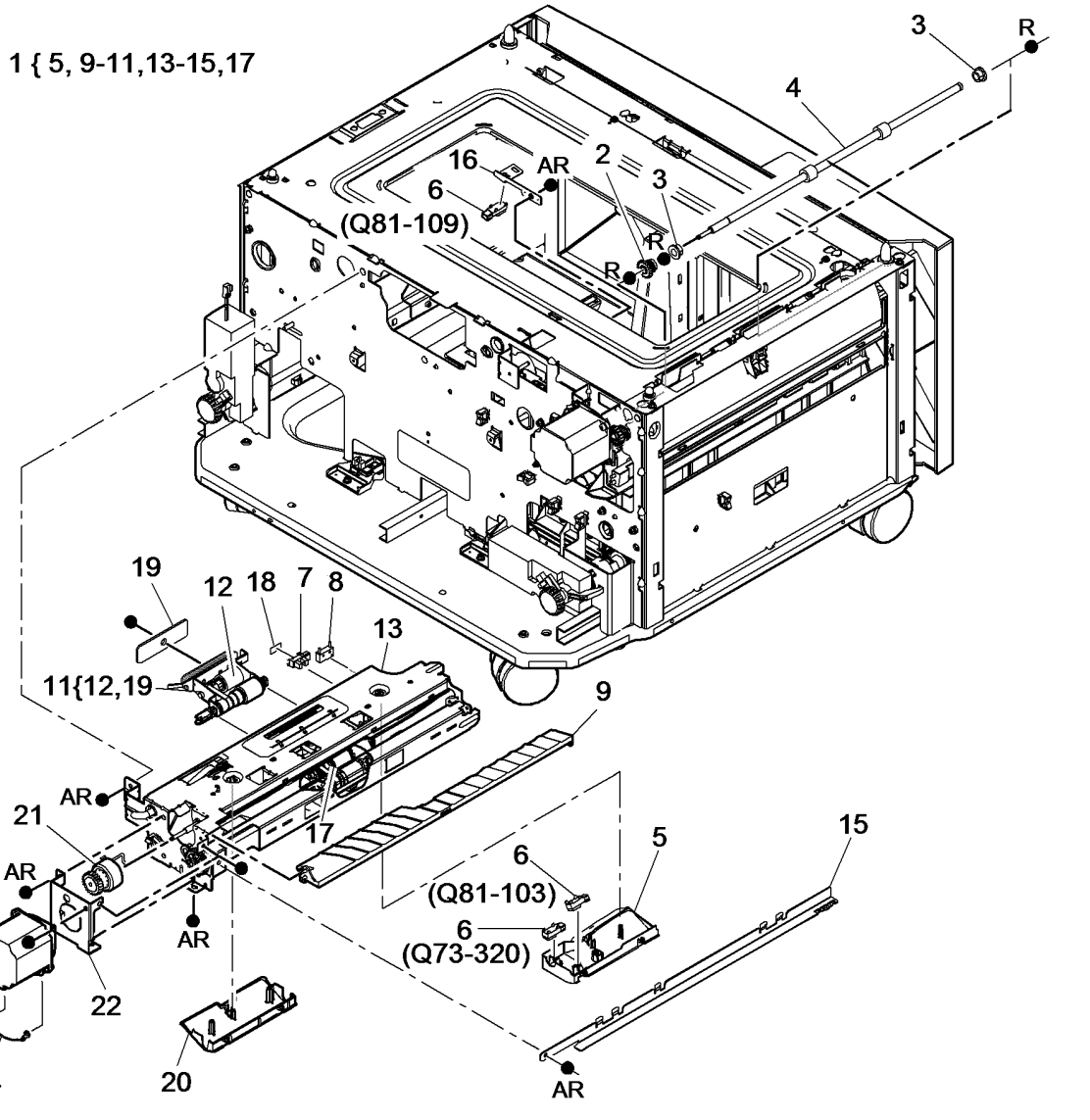
Item	Part	Description
1	604K61761	Tray 1 or 2 paper feed assembly (REP 80.1)
2	005K12242	Friction clutch (REP 80.29)
3	059K69800	Roll assembly (3 rolls) (See NOTE) (REP 80.25)
4	–	Retard roll (P/O PL 80.26 Item 3)
5	–	Feed Nudger roll assembly (P/O PL 80.26 Item 3)
6	127K61850	Tray 1 elevator motor (MOT71-010)/Tray 2 elevator motor (MOT72-010)
7	130E12770	Tray 1 empty sensor (Q71-320)/ Tray 2 empty sensor (Q72-320)
8	130E19350	Tray 1 stack height sensor (Q71-330)/Tray 2 stack height sensor (Q72-330)
9	–	Guide (P/O PL 80.26 Item 1)
10	014E67650	Shim sensor
11	809E84180	Retard roll gate spring
12	–	Retard roll gate (P/O PL 80.26 Item 1)
13	–	Clutch coupling (P/O PL 80.26 Item 1) (REP 80.29)

NOTE: *HFSI. To reset the HFSI count, refer to dC135.*



PL 80.32 Tray 3 Paper Feed Assembly

Item	Part	Description
1	–	Tray 3 paper feed assembly (P/O PL 31.12 Item 12) (REP 80.30)
2	007K20321	Gear (NOTE 3) (REP 80.37)
3	–	Bearing (P/O PL 31.12 Item 19)
4	–	Tray 3 and 4 transport roll (P/O PL 31.12 Item 19) (See NOTE) (REP 80.37)
5	–	Sensor mounting (P/O PL 80.32 Item 1) (REP 80.39, REP 80.40)
6	130E11610	Tray 3 empty sensor (Q73-320)(REP 80.39)/Tray 3 feed sensor (Q81-103)(REP 80.40)/Tray 3 exit sensor (Q81-109)(REP 80.35) (NOTE 2)
7	–	Tray 3 stack height sensor (Q73-330) (P/O PL 31.13 Item 17) (REP 70.17)
8	110E21540	Tray 3 over elevate switch
9	–	Tray 3 paper guide (P/O PL 80.32 Item 1) (REP 80.45)
10	–	Tray 3 feed motor (MOT81-030) (P/O PL 80.32 Item 1)
11	–	Feed roll assembly (P/O PL 31.13 Item 14) (See NOTE) (REP 80.44)
12	–	Nudger roll (P/O PL 80.32 Item 11) (REP 80.44, ADJ 80.4)
13	–	Feed frame assembly (P/O PL 80.32 Item 1) (REP 80.30)
14	–	Earth cable (P/O PL 80.32 Item 1)
15	–	Support bracket (P/O PL 31.13 Item 20) (REP 80.30)
16	–	Tray 3 exit sensor bracket (P/O PL 31.13 Item 20) (REP 80.35)
17	–	Retard roll (P/O PL 31.13 Item 14) (See NOTE) (REP 80.44, ADJ 80.3)
18	–	Shim (P/O PL 31.13 Item 17 & PL 31.13 Item 20)
19	–	Nudger roll weight (P/O PL 80.32 Item 11)
20	–	Gull wing cover (P/O PL 31.14 Item 3)
21	121E27552	Feed clutch (CL81-033) (REP 80.49)
22	–	Bracket (P/O PL 80.32 Item 1) (REP 80.49)



NOTE: *1.HFSI. To reset the HFSI count, refer to dC135.*

NOTE: *2. The tray 3 exit sensor is also part of PL 31.13 Item 20.*

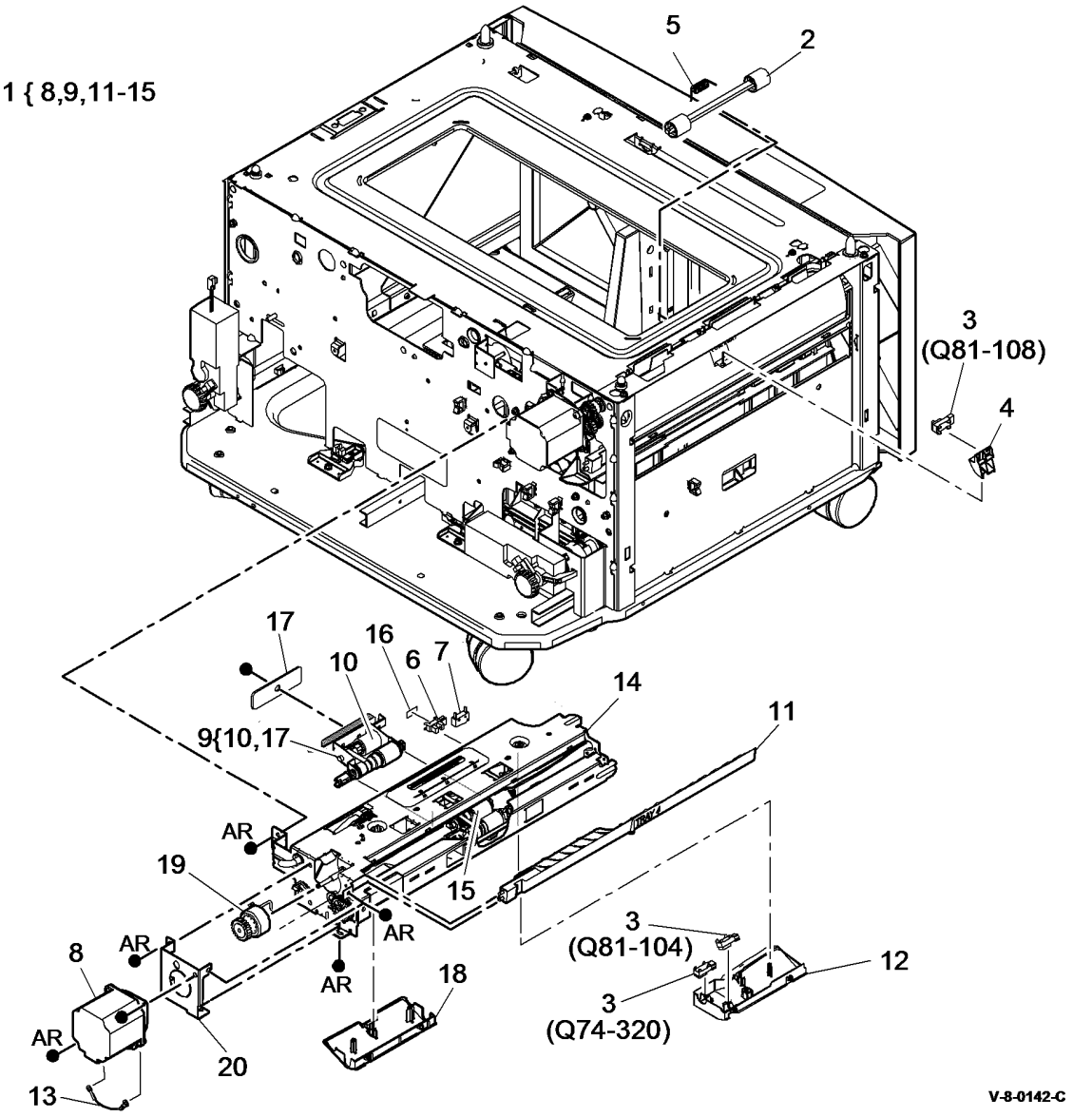
NOTE: *3. Also part of PL 80.36 Item 16.*

PL 80.33 Tray 4 Paper Feed Assembly

Item	Part	Description
1	–	Tray 4 paper feed assembly (P/O PL 31.12 Item 12) (REP 80.31)
2	059K85140	Idler roll assembly (metal shaft) (REP 80.37)
–	–	Idler roll assembly (plastic shaft) (Not Spared) (REP 80.46)
3	130E11610	Tray 4 empty sensor (Q74-320)(REP 80.42) / Tray 4 feed sensor (Q81-104) (REP 80.43)/ HCF exit sensor (Q81-108) (NOTE 2)
4	–	HCF exit sensor bracket (P/O PL 31.14 Item 10)
5	–	Spring (Not Spared)
6	–	Tray 4 stack height sensor (Q74-330) (P/O PL 31.13 Item 17) (REP 70.17)
7	110E21540	Tray 4 over elevate switch
8	–	Tray 4 feed motor (MOT81-040) (P/O PL 80.33 Item 1)
9	–	Feed roll assembly (P/O PL 31.13 Item 14) (See NOTE) (REP 80.44)
10	–	Nudger roll (P/O PL 80.33 Item 9) (REP 80.44, ADJ 80.4)
11	–	Tray 4 paper guide (P/O PL 80.33 Item 1) (REP 80.46)
12	–	Sensor mounting (P/O PL 80.33 Item 1) (REP 80.42, REP 80.43)
13	–	Earth cable (P/O PL 80.33 Item 1)
14	–	Feed frame assembly (P/O PL 80.33 Item 1) (REP 80.31)
15	–	Retard roll (P/O PL 31.13 Item 14) (See NOTE) (REP 80.44, ADJ 80.3)
16	–	Shim (P/O PL 31.13 Item 17)
17	–	Nudger roll weight (P/O PL 80.33 Item 9)
18	–	Gull wing cover (P/O PL 31.14 Item 3)
19	121E27552	Feed clutch (CL81-043) (REP 80.49)
20	–	Bracket (P/O PL 80.33 Item 1)

NOTE: *1.HFSI. To reset the HFSI count, refer to dC135.*

NOTE: *2. The HCF exit sensor is part of PL 31.14 Item 10.*

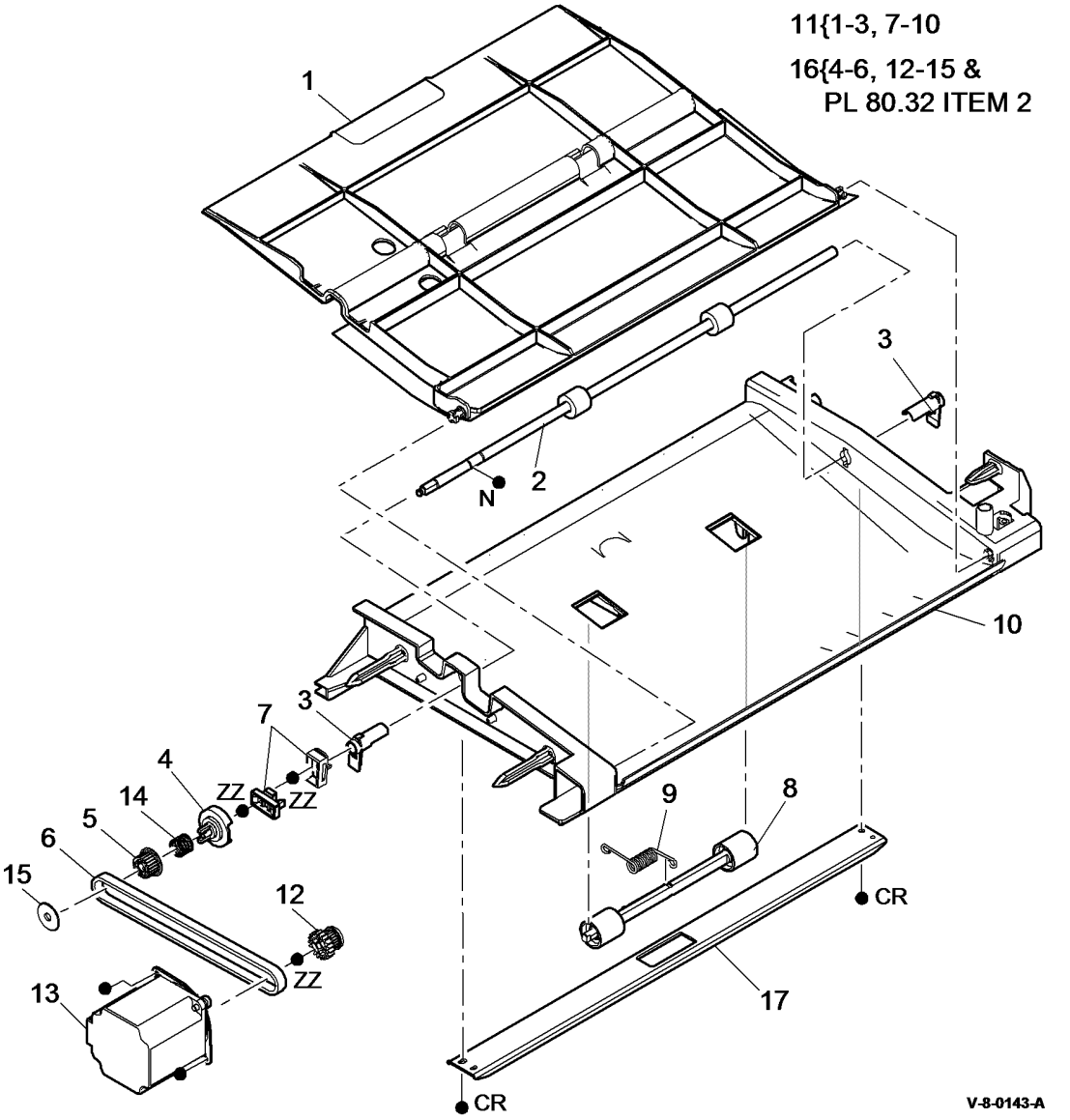


PL 80.36 Tray 3 Transport Assembly

Item	Part	Description
1	–	Jam clearance door (P/O PL 80.36 Item 11)
2	–	Takeaway roll assembly (P/O PL 31.12 Item 16) (REP 80.36)
3	–	Takeaway roll bearing (P/O PL 31.12 Item 16) (REP 80.36)
4	–	Clutch drive (P/O PL 80.36 Item 16) (REP 80.47)
5	–	Pulley (P/O PL 80.36 Item 16) (REP 80.47)
6	–	Drive belt (P/O PL 80.36 Item 16) (REP 80.47)
7	–	Drive coupling (P/O PL 31.12 Item 16) (REP 80.36)
8	859K04280	Idler roll assembly (metal shaft) (REP 80.36)
–	–	Idler roll assembly (plastic shaft) (Not spared) (REP 80.36)
9	–	Spring (P/O PL 80.36 Item 11)
10	–	Base (P/O PL 80.36 Item 11)
11	038K24380	Tray 3 transport assembly (NOTE 1) (REP 80.34)
12	–	Transport gear pulley (P/O PL 80.36 Item 16) (NOTE 2) (REP 80.33)
13	–	HCF transport motor (MOT81-045) (P/O PL 80.36 Item 16) (REP 80.32)
14	–	Spring (P/O PL 80.36 Item 16) (REP 80.47)
15	–	Pulley flange (P/O PL 80.36 Item 16) (REP 80.47)
16	604K97740	Transport motor and drives kit
17	–	Tray 3 transport brace (Not Spared)

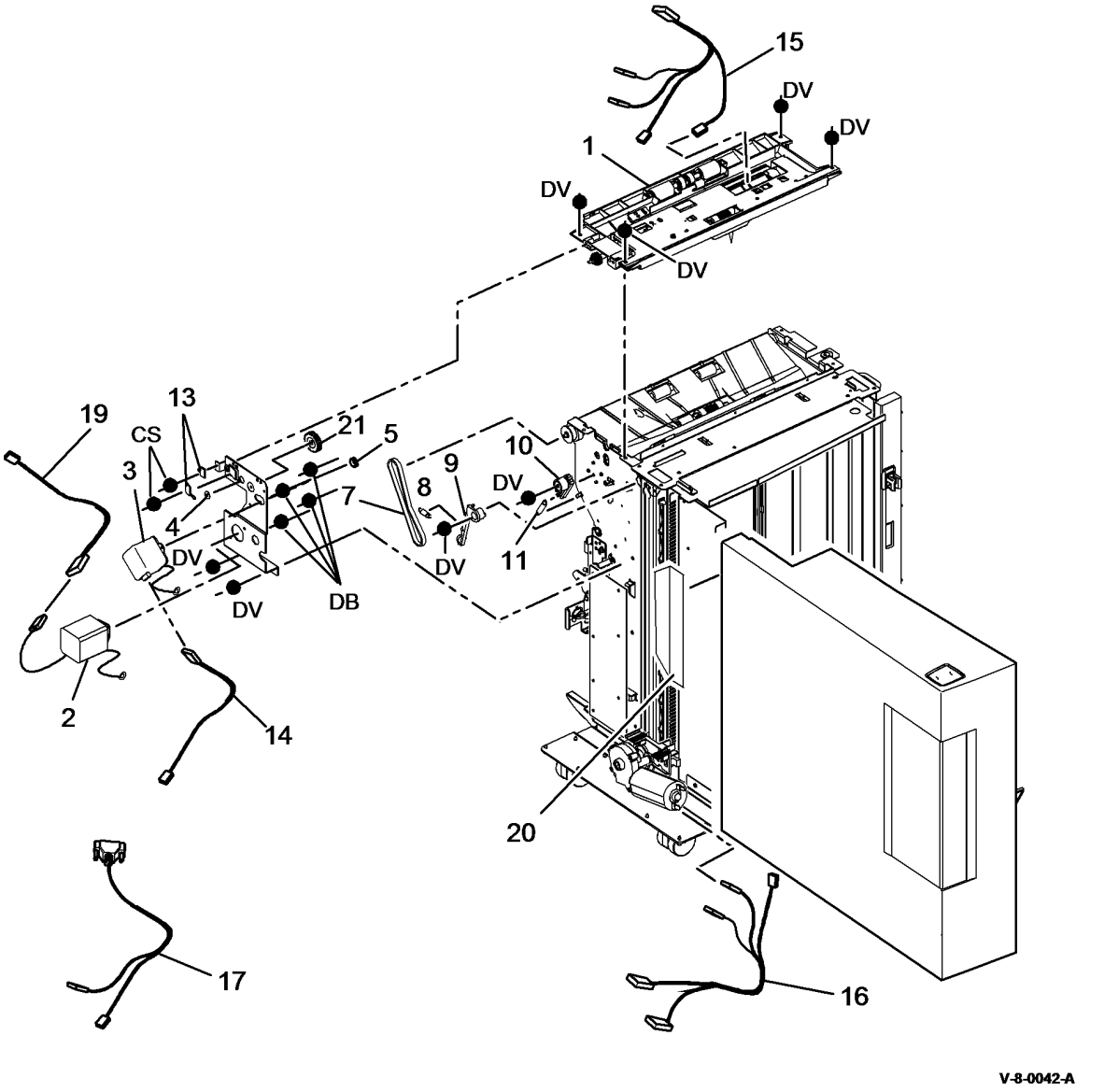
NOTE: *1. Also part of PL 31.13 Item 20.*

NOTE: *2. Also part of PL 31.14 Item 7.*



PL 80.40 Tray 6 Feed Assembly (1 of 3)

Item	Part	Description
1	–	Upper feeder assembly (REF: PL 80.45 Item 1) (REP 80.28)
2	127K56453	Transport motor (MOT81-065) (REP 80.27)
3	127K61980	Feed motor (MOT81-060) (REP 80.26)
4	–	Bearing (Not Spared)
5	–	Gear (P/O PL 80.40 Item 3)
6	–	Not used
7	423W09050	Drive belt (REP 80.23)
8	–	Upper limit actuator spring (Not Spared)
9	–	Upper limit actuator (Not Spared)
10	–	Belt tensioner (Not Spared)
11	–	Belt tensioner spring (Not Spared)
12	–	Not used
13	125E00430	Static eliminator
14	–	Transport motor harness (Not Spared)
15	–	Tray 6 upper feeder assembly harness (Not Spared)
16	962K50475	Elevator motor harness
17	962K63351	IOT to tray 6 harness
18	–	Not used
19	–	Feed/elevator motor harness (Not Spared)
20	–	Elevator harness shield (Not Spared)
21	007K14401	Gear 30T bearing



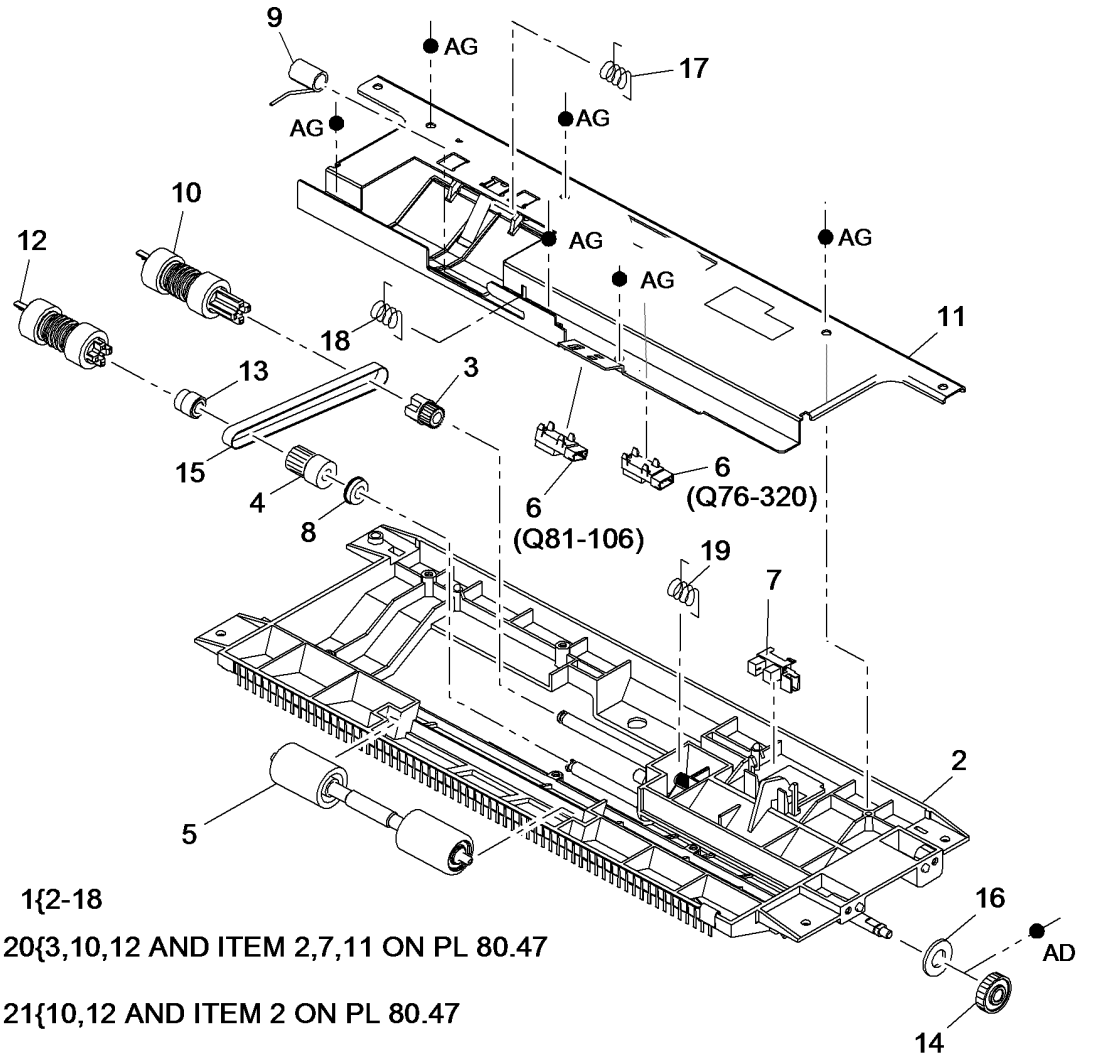
PL 80.45 Tray 6 Feed Assembly (2 of 3)

Item	Part	Description
1	059K69991	Upper feed assembly (REP 80.28)
2	–	Upper feed assembly base (P/O PL 80.45 Item 1)
3	–	One way gear (P/O PL 80.45 Item 20)
4	–	One way coupling (P/O PL 80.45 Item 20)
5	–	Take away idler roller (P/O PL 31.11 Item 8)
6	130E11610	Empty sensor (Q76-320)/Feed sensor (Q81-106)(REP 80.19)
7	130E20360	Stack height sensor (Q76-330) (REP 70.6)
8	013E93370	Bearing
9	–	Torsion spring (P/O PL 80.45 Item 1)
10	–	Nudger roll (P/O PL 80.45 Item 20 & PL 80.45 Item 21)
11	–	Upper feed assembly top cover (P/O PL 80.45 Item 1)
12	–	Feed roll (P/O PL 80.45 Item 20 & PL 80.45 Item 21)
13	–	Clutch (P/O PL 80.45 Item 20)
14	–	Gear (29T) (P/O PL 80.45 Item 1)
15	–	Roller belt (P/O PL 80.45 Item 1)
16	–	Washer (P/O PL 80.45 Item 1)
17	–	Torsion chute spring (P/O PL 80.45 Item 1)
18	–	Housing spring (P/O PL 80.45 Item 1)
19	–	Torsion nudger spring (P/O PL 80.45 Item 1)
20	604K84480	Feed roll retrofit kit (See NOTES 1 & 3) (W/TAG P-002)
21	604K55480	Feed roll kit (Pack of 3) (See NOTES 2 & 3) (W/TAG P-002) (REP 80.24)

NOTE: *1. Kit installs reduced miss-feed (different colour) rolls and associated parts.*

NOTE: *2. Replaces the rolls installed with the feed roll retrofit kit, PL 80.45 Item 20.*

NOTE: *3. HFSI. To reset the HFSI count, refer to dC135.*



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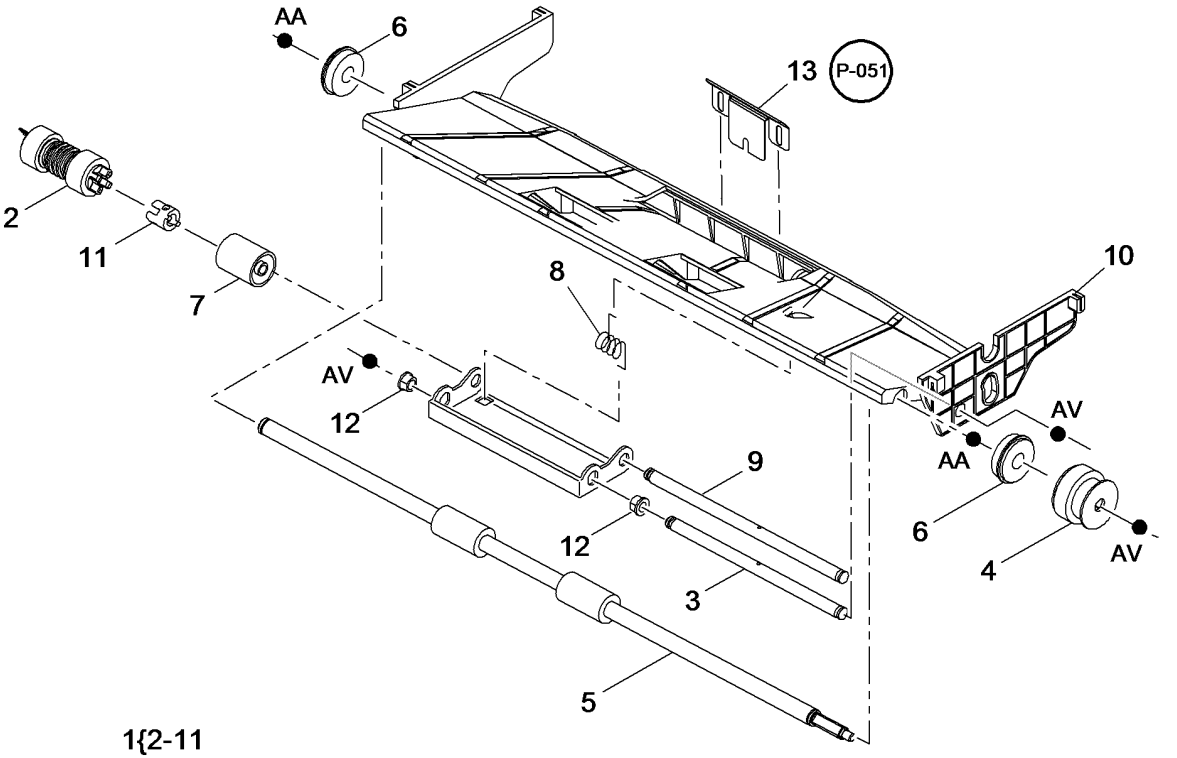
PL 80.47 Tray 6 Feed Assembly (3 of 3)

Item	Part	Description
1	–	Lower feed assembly (P/O PL 31.14 Item 17) (W/TAG P-051) (REP 80.28)
2	–	Retard roll (P/O PL 80.45 Item 20 & PL 80.45 Item 21)
3	–	Actuator pivot shaft (P/O PL 80.47 Item 1)
4	–	One way pulley clutch (P/O PL 80.47 Item 1)
5	–	Take away roller (P/O PL 31.11 Item 8) (REP 80.28)
6	–	Bearing (P/O PL 80.47 Item 1)
7	005E29040	Clutch (NOTE)
8	–	Torsion retard spring (P/O PL 80.47 Item 1)
9	–	Retard roller shaft (P/O PL 80.47 Item 1)
10	–	Lower feed assembly base (P/O PL 80.47 Item 1)
11	–	Clutch coupling (P/O PL 80.45 Item 20)
12	–	Actuator pivot shaft bearing (P/O PL 80.47 Item 1)
13	–	Retard shield (P/O PL 31.14 Item 14) (W/TAG P-051) (ADJ 70.5)

NOTE: *Also supplied as part of PL 80.45 Item 20.*

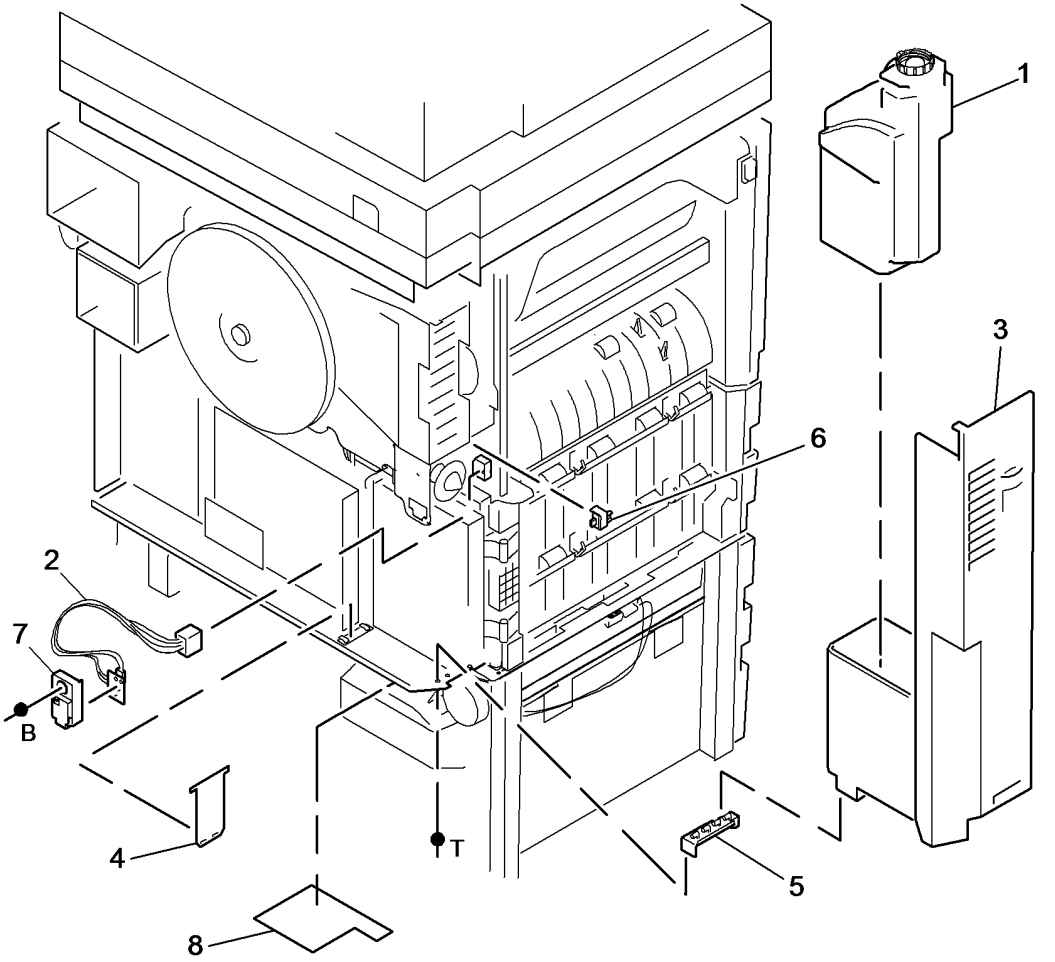


V-8-0044-B

PL 90.10 Waste Toner Bottle Assembly

Item	Part	Description
1	008R12896	Waste toner bottle
2	130K74702	Waste toner full sensor (Q93-350) (REP 90.4)
3	–	Waste toner door (Not Spared) (REP 90.1)
4	003E77450	Strap (NOTE)
5	803E03180	Hinge block
6	–	Waste toner door switch (S93-380) (REF: PL 40.10 Item 8, PL 40.15 Item 8)
7	–	Sensor cover (Not Spared)
8	848E96690	Toner cover

NOTE: *Refer to REP 90.1 for the waste toner bottle assembly.*



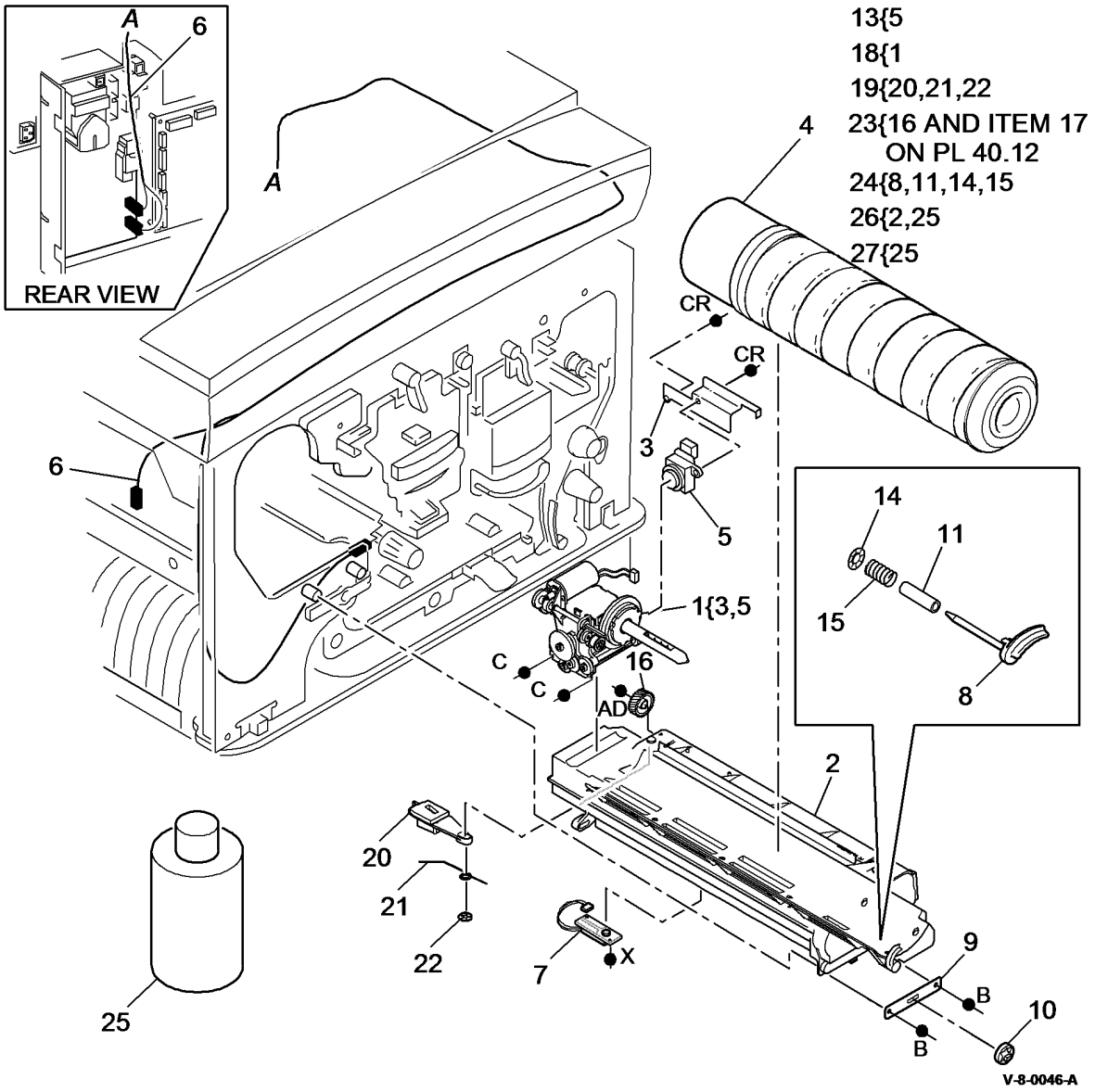
V-8-0045-A

PL 90.15 Developer Assembly (65-90 ppm)

Item	Part	Description
1	–	Toner dispense module (P/O PL 90.15 Item 18) (REP 90.5)
2	–	Developer module (P/O PL 90.15 Item 26) (REP 90.2)
3	–	Retaining bracket (P/O PL 90.15 Item 1)
4	–	Toner cartridge (REF: PL 26.11 Item 3) (See NOTE 1)
5	–	Low toner sensor (Q93-310) (P/O PL 90.15 Item 13)
6	962K25641	Registration/Developer bias harness
7	–	Toner concentration sensor (Q92-601) (P/O PL 90.15 Item 2)
8	–	Toner cartridge latch (P/O PL 90.15 Item 24)
9	–	Retaining plate (P/O PL 90.15 Item 2)
10	–	Speed nut (P/O PL 90.15 Item 2)
11	–	Sleeve (P/O PL 90.15 Item 24)
12	–	Not used
13	–	Out of toner sensor kit (REF: PL 31.13 Item 8)
14	–	Push on fastener (P/O PL 90.15 Item 24)
15	–	Spring (P/O PL 90.15 Item 24)
16	–	Main drive gear (P/O PL 90.15 Item 23) (See NOTE 2)
17	–	Not used
18	–	Toner dispense module kit (REF: PL 31.12 Item 1)
19	–	Trickle outlet shutter kit (REF: PL 31.12 Item 3)
20	–	Shutter assembly (P/O PL 90.15 Item 19)
21	–	Shutter spring (P/O PL 90.15 Item 19)
22	–	Push on fastener (P/O PL 90.15 Item 19)
23	–	Developer/Drives interface kit (REF: PL 31.13 Item 12) (See NOTE 2)
24	604K18510	Developer latch repair kit
25	–	Developer material (P/O PL 90.15 Item 26, PL 90.15 Item 27)
26	604K84580	Developer spares kit (includes developer)
27	604K84590	Developer charge kit

NOTE: *1. A waste toner bottle, PL 90.10 Item 1 is supplied with the toner cartridges.*

NOTE: *2. The main drive gear PL 90.15 Item 16 and developer drive gear/pulley PL 40.12 Item 17, must always be replaced as a pair.*

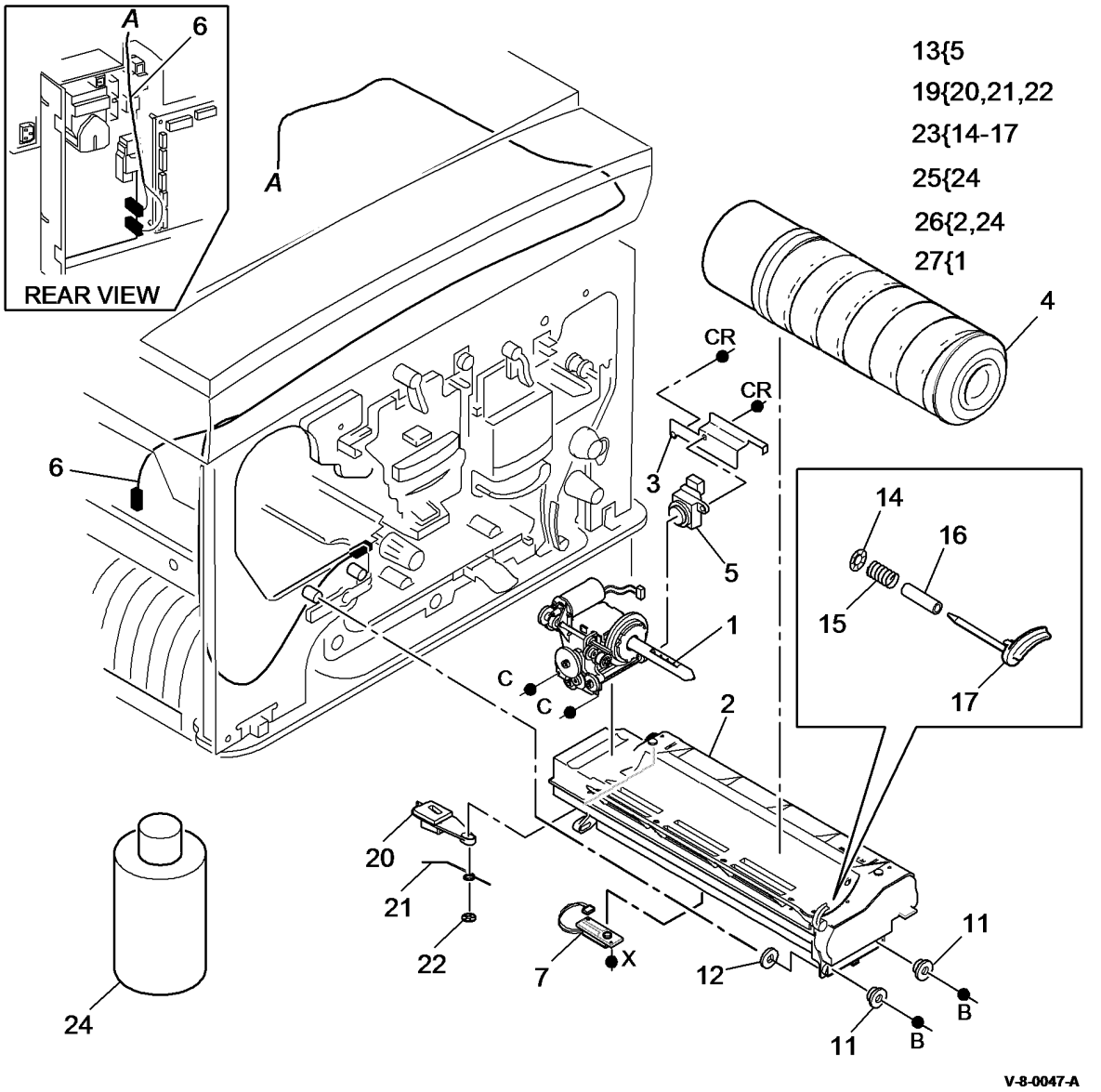


PL 90.17 Developer Assembly (45-55 ppm)

Item	Part	Description
1	–	Toner dispense module (P/O PL 90.17 Item 27) (REP 90.5)
2	–	Developer module (P/O PL 90.17 Item 26) (See NOTE 1) (REP 90.2)
3	–	Retaining bracket (Not Spared)
4	–	Toner cartridge (REF: PL 26.11 Item 3) (See NOTE 2)
5	–	Low toner sensor (Q93-310) (P/O PL 90.17 Item 13)
6	–	Registration/Developer bias harness (Not Spared)
7	–	Toner concentration sensor (Q92-601) (P/O PL 90.17 Item 2)
8	–	Not used
9	–	Not used
10	–	Not used
11	–	Stepped washer (Not Spared)
12	–	Washer (Not Spared)
13	–	Out of toner sensor kit (REF: PL 31.13 Item 8)
14	–	Push on fastener (P/O PL 90.17 Item 23)
15	–	Spring (P/O PL 90.17 Item 23)
16	–	Sleeve (P/O PL 90.17 Item 23)
17	–	Toner cartridge latch (P/O PL 90.17 Item 23)
18	–	Not used
19	–	Trickle outlet shutter kit (REF: PL 31.12 Item 3)
20	–	Shutter assembly (P/O PL 90.17 Item 19)
21	–	Shutter spring (P/O PL 90.17 Item 19)
22	–	Push on fastener (P/O PL 90.17 Item 19)
23	604K30560	Developer latch repair kit
24	–	Developer material (P/O PL 90.17 Item 25, PL 90.17 Item 26)
25	604K84590	Developer charge kit
26	604K84570	Developer spares kit (includes developer)
27	–	Toner dispense module kit (REF: PL 31.12 Item 1)

NOTE: *1. To remove and replenish the developer material, refer to the developer charge kit, PL 90.17 Item 25.*

NOTE: *2. A waste toner bottle, PL 90.10 Item 1 is supplied with the toner cartridges.*

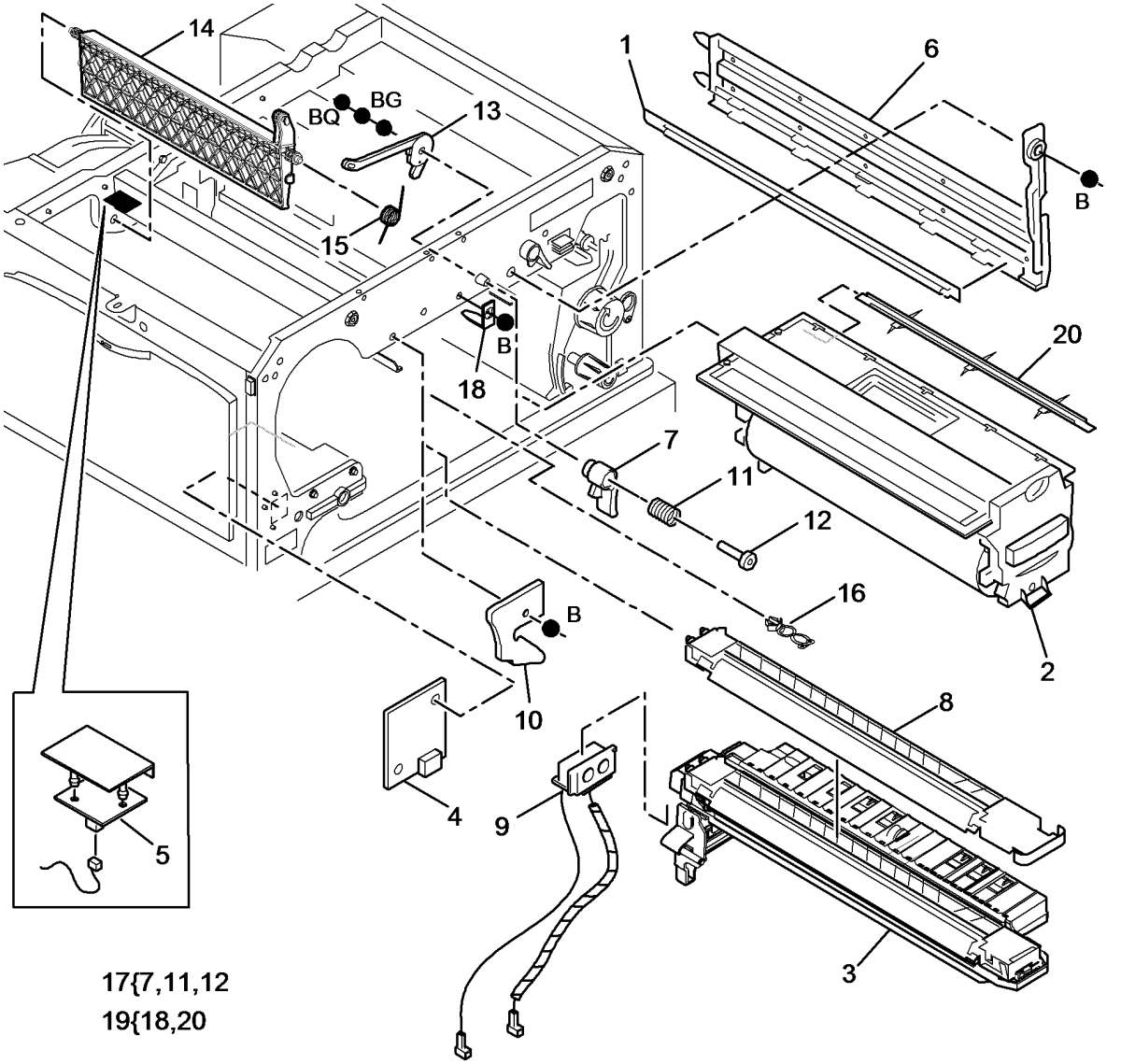


PL 90.20 Xerographic Module and Short Paper Path Assembly

Item	Part	Description
1	122K02660	Erase lamp (REP 90.9)
2	–	Xerographic module (see below for variants, see also NOTE 1, NOTE 2 and NOTE 3)
–	113R00672	Metered (USSG/XCL/XE)
–	113R00673	Sold (XE)
–	113R00674	Sold (USSG/XCL)
3	–	Short paper path assembly (REF: PL 10.25 Item 1) (NOTE 1)
4	130E10510	Humidity sensor (Q91-601)/ Ambient temperature sensor (Q91-602)
5	960K40570	Developer temperature sensor (Q92-602)
6	055E68280	Erase lamp support
7	–	Xerographic module latch (P/O PL 90.20 Item 17) (REP 90.6)
8	504K12320	Transfer/Detack corotron (NOTE 1) (ADJ 90.1)
9	113K03330	Transfer/Detack harness
10	815E79891	Pivot plate
11	–	Latch spring (P/O PL 90.20 Item 17)
12	–	Latch pin (P/O PL 90.20 Item 17)
13	–	Latch plate (Not Spared)
14	031E11102	Developer paddle (REP 90.7)
15	809E69220	Spring
16	–	Curly clip (Not Spared)
17	–	Developer latch pin kit (REF: PL 31.12 Item 8) (REP 90.6)
18	–	Bracket stabiliser (P/O PL 90.20 Item 19)
19	–	XRU skids kit (REF: PL 31.13 Item 16)
20	–	Stripper finger assembly (P/O PL 90.20 Item 19)

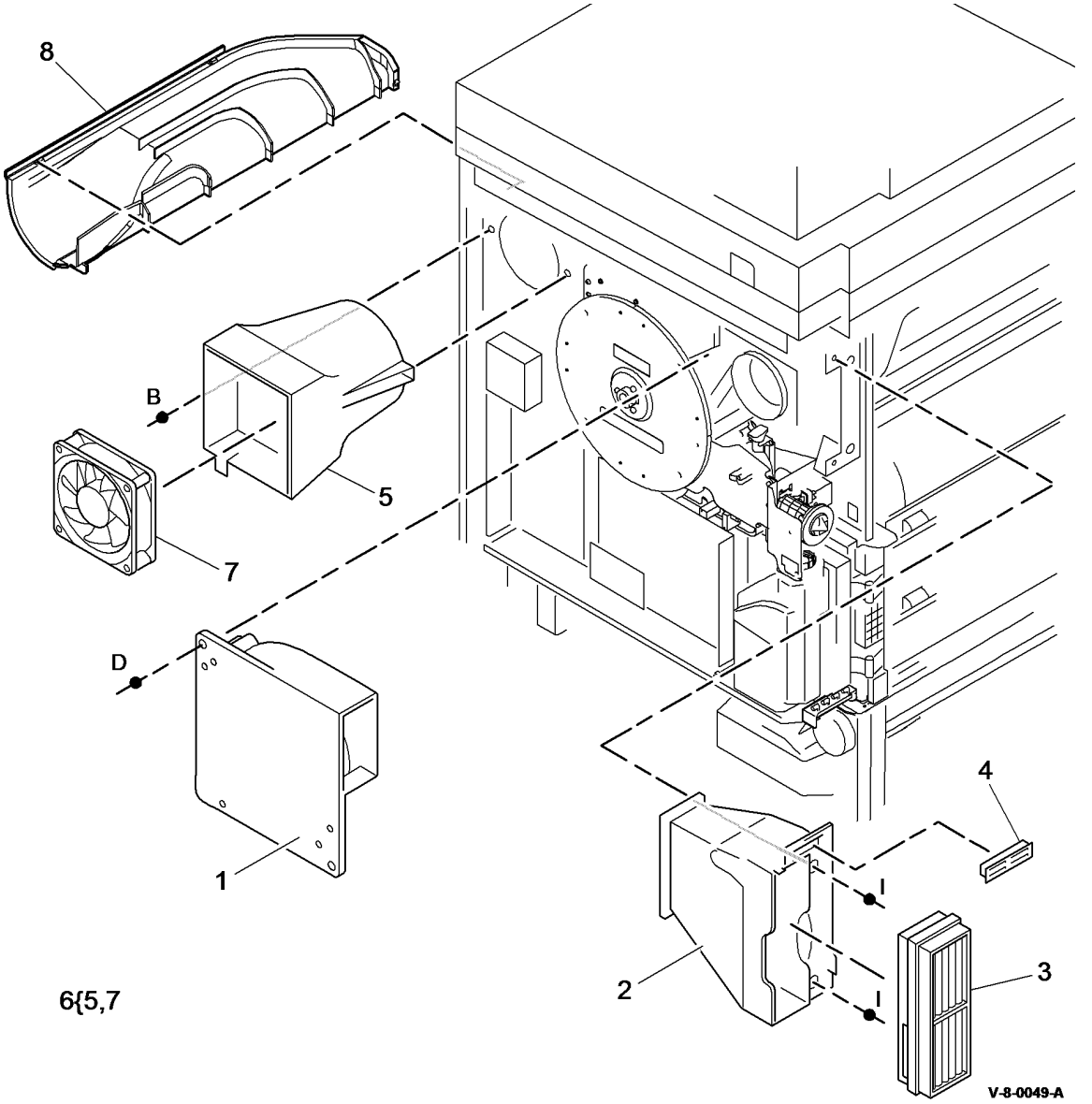
NOTE: *1. A transfer/detack corotron PL 90.20 Item 8 is supplied with the xerographic module.*

NOTE: *2. For the charge scorotron and the charge scorotron grid harnesses, refer to PL 40.17 or PL 40.12.*



PL 90.25 Ozone Fan and Photoreceptor Fan

Item	Part	Description
1	127K42790	Ozone fan (MOT42-030) (REP 90.3)
2	054E33051	Ozone duct
3	053K04960	Ozone filter
4	–	Magnet (P/O PL 90.25 Item 2)
5	–	Photoreceptor duct (P/O PL 90.25 Item 6)
6	127K53200	Photoreceptor fan assembly
7	–	Fan (P/O PL 90.25 Item 6)
8	054E33001	Lower duct



Common Hardware

Item	Part	Description
A	–	Screw M3x6 Taptite (Zinc finish)
B	–	Screw M4x8 Taptite
C	–	Screw M4x12 Self Tapping
D	–	Screw M3.9.5 Taptite
E	–	Screw M3x8 Taptite
F	–	Screw M3x7.5 Taptite
G	–	Screw M4x12 Self Tapping
H	–	Screw M3x4.5 Machine
I	–	Screw M4x16 Self Tapping
J	–	Screw M3x14 Self Tapping (Countersunk)
K	–	Screw M3x16 Self Tapping
L	–	Screw M4x10 Self Tapping
M	–	E-Clip M4
N	–	E-Clip M5
O	–	Screw M4x12 Self Tapping
P	–	Screw M4x12 Taptite
Q	–	Screw M4x11 Self Tapping
R	–	KL Clip M6
S	–	Screw M4x30 Taptite
T	–	Screw M3x10 Self Tapping
U	–	Screw M3x10 Taptite
V	–	Screw M3x6 Taptite
W	–	Screw M3x16 Self Tapping
X	–	Screw M3x6 Self Tapping
Y	–	E-Clip M8
Z	–	E-Clip M4
AA	–	E-Clip M7
AB	–	Screw M3x25 Self Tapping
AC	–	Screw M3x4 Taptite
AD	–	E-Clip M6
AE	–	Washer M8
AF	–	Spring Washer M6
AG	–	Screw M3.5x10 Self Tapping
AH	–	Circlip M5
AI	–	Circlip M8
AJ	–	Star Washer M4
AK	–	Screw M4x9.5 Machine
AL	–	Screw M5x18 Self Tapping
AM	–	Star Washer M3.5
AN	–	Screw M3.5x5.5 Machine
AO	–	Screw M3.5x6 Machine
AP	–	Screw M5x11 Taptite
AQ	–	Screw M3x8 Taptite
AR	–	Screw M4x8 Machine
AS	–	Screw M4x10 Self Tapping
AT	–	Screw M4x10 Self Tapping
AU	–	Screw M3x5 Machine
AV	–	E-Clip M3.5
AW	–	Screw M3x5.5 Taptite
AX	–	Screw M3x14 Machine
AY	–	Screw M3x18 Self Tapping
AZ	–	Washer M4
BA	–	Screw M4x16 Machine
BB	–	Screw M4x5 Machine
BC	–	Screw M3x10 Machine
BD	–	Screw M3x6 Machine
BE	–	Screw M4x7.5 Machine
BF	–	Screw M3x5.5 Machine
BG	–	Washer M3
BH	–	Spring Washer M3
BI	–	Screw M3x6 Machine
BJ	–	Screw M3x22 Self Tapping
BK	–	Retaining Ring (Skiffy) M7
BL	–	Circlip M10
BM	–	Screw M3x8 Machine
BN	–	Screw M4x8 Self Tapping
BO	–	Screw M3x6 Taptite
BP	–	Screw M3x4 Machine (Countersunk)
BQ	–	Screw M3x16 Machine
BR	–	Screw M3x9.5 Self Tapping
BS	251W16355	Washer M4
BT	–	Screw M4x8 Self Tapping
BU	–	Screw M3x5.5 Self Tapping
BV	–	Screw M4x7 Taptite
BW	–	Screw M3x6 Self Tapping
BX	–	Screw M3x8 Self Tapping
BY	–	Screw M4x8 Self Tapping
BZ	–	Screw M4x16 Taptite
CA	–	Screw M3x8 Self Tapping
CB	–	Screw M4x10 Self Tapping
CC	–	Screw M4x8 Self Tapping
CD	–	Screw M3x10 Self Tapping
CE	–	Screw M3x12 Self Tapping
CF	–	Screw M4x5 Taptite
CG	–	Circlip M6
CH	–	Screw M3x10 Machine
CI	–	Screw M4x5 Machine
CJ	–	Screw M3x11 Self Tapping
CK	–	E-clip M2.5
CL	–	Washer M5
CM	–	Screw M4x9 Self Tapping
CN	–	Screw M3x14 Self Tapping
CO	–	Screw M3x8 Self Tapping
CP	–	Screw M4x15 Taptite
CQ	–	Spring Washer M8
CR	–	Screw M3x8 Self Tapping
CS	–	Screw M4x8 Machine
CT	–	Screw M3x5.5 Machine
CU	–	Screw M3x9 Self Tapping
CV	–	Nut M3
CW	–	Nut M3

CX	–	Screw M4x6 Machine
CY	–	Screw M4x11.5 Taptite
CZ	–	Screw M3x7.5 Taptite
DA	–	Screw M4x7 Self Tapping
DB	–	Screw M3x6 Self Tapping
DC	–	Screw M3x12 Self Tapping
DD	–	Screw M5x12 Self Tapping
DE	–	Circlip M7
DF	–	Screw M3x6 Machine
DG	–	Screw M3x7.5 Self Tapping
DH	–	Screw M4x7 Self Tapping
DI	–	Screw M4x34 Self Tapping
DJ	–	Screw M4x16 Self Tapping
DK	–	Screw M4x7 Self Tapping
DL	–	Screw M4x6 Taptite
DM	–	M3 Star Washer
DN	–	Screw M4x6 Machine
DO	–	Screw M3x6 Self Tapping
DP	–	M3 Nut (Washer Head)
DQ	–	Screw M4x11 Machine
DR	–	Washer M8 (Nylatron)
DS	–	Screw M3 x 8
DT	–	Screw M3x17 Taptite
DU	–	Screw M2.5x8 Taptite
DV	–	Screw M3.5x10 Torx
DW	–	Screw M3.5x10 Taptite
EA	–	Screw M4x6 Machine
EB	–	Screw M4x10 Machine
EC	–	Screw M4x8 Machine
EF	–	Screw M5x6 machine
EH	–	Pivot pin M4X10 Hex Head
EI	–	Nylon bearing
EJ	–	6mm x 10mm x 13mm bush (bronze)
ET	–	M4 x 5.5 Screw/Machine/Pozi/Wash Hd Brass
EU	–	M3x16 Screw/Machine/Pozi/Pan Hd
EV	–	KL Clip M4
EW	–	Screw M4 x 25 Self Tapping
EX	–	KL Clip M7
ZZ	–	E-clip M3

6 General Procedures/Information

GP 1 Service Mode

Purpose

This procedure describes how to enter and exit service mode and the available service routines.

NOTE: *When service mode is entered, all existing copy jobs are cancelled and an 'Offline' screen message is displayed. When exiting service mode an 'Online' screen message is displayed.*

How to Enter Service Mode

NOTE: *Entry to service mode is not possible with an EIP application running. To exit the EIP application, press the Services Home button.*

1. Switch on the machine, GP 14.
2. When the machine is ready, press and hold the 0 (zero) button for 5 seconds, then simultaneously press the Start button.
3. Enter the passcode, 6789. Touch the Enter button on the UI.

   NOTE: *Five incorrect entries cause the entry screen to lock for three minutes.*

4. Select the relevant tab:
   - Service Info Tab
   - Diagnostics Tab
   - Adjustments Tab
   - Maintenance Tab
   - Call Closeout Tab
   - Service Copy Mode

Service Info Tab

The service info routines are used to track faults that have occurred in the machine. Refer to Table 1.

Table 1 Service Info Tab

Routine	Description
dC104	Usage Counters
dC108	Software Version
dC120	Fault Counters
dC122	Fault History
dC135	CRU/HSFI Status

Diagnostics Tab

The diagnostic routines are used to test specific areas of the machine. Refer to Table 2.

Table 2 Diagnostics Tab

Routine	Description
dC140	Analog Monitor
dC312	Network Echo Test

Table 2 Diagnostics Tab

Routine	Description
dC330	Component Control
dC612	Print Test Pattern

Adjustments Tab

Adjustment routines are used to modify the set-up or to calibrate specific areas of the machine. Refer to Table 3.

Table 3 Adjustments Tab

Routine	Description
dC131	NVM Read / Write
dC301	NVM Initialization
dC361	NVM Save and Restore
dC604	Registration Setup
dC608	Document Feeder Registration
dC609	Document Glass Registration
dC610	CCD Lamp Profile Adjustment
dC905	TC Sensor Setup
dC945	ITT Calibration

Maintenance Tab

Refer to Table 4.

Table 4 Maintenance Tab

Routine	Description
dC120	Fault Counters
dC122	Fault History
dC132	Serial Number
dC134	Market Region
dC135	CRU/HSFI Status
dC136	Service Plan
dC137	Page Pack

Call Closeout Tab

NOTE: *Do not exit service mode until the machine has recovered from all diagnostic routines.*

1. Touch the Call Closeout tab to exit service mode.
2. Touch the appropriate button to complete the exit procedure.
   - Reset Waste Counter.
   - Reset Counters.
   - Exit Only. If the button is touched the machine will exit service mode.
   - Exit and Reboot. If the button is touched, the network controller is reset.

NOTE: *If the machine is rebooted, the exit time from service mode is increased.*

NOTE: *It will be necessary to select Exit and Reboot to clear a system fault from the UI and return the machine to an operational state.*

Service Copy Mode

Service copy mode provides access to the machine that is greater than that of a user but less than that of the system administrator. This mode allows the CSE to perform a number of checks and run copies without compromising the customer's security settings. This mode can be used if the administrator user name and passcode are not at the default, and the administrator is not available to enter the admin passcode. Perform the following:

1. Press and hold the 0 (zero) button for 5 seconds, then simultaneously press the Start button.
2. Enter the passcode 2732. Touch the Enter button on the UI.

   NOTE: *The tools available in this mode are a subset of those available in administrator mode. CSE service copy mode remains active until the log in/out button is pressed again. When finished with tools, always log out of administrator mode by pressing the log in/out button and confirming logout.*

GP 2 Fault Codes and History Files

Purpose

To describe access to fault history information and explain the fault code structure.

- History files can be accessed from the UI using the Machine Status Button or from Service Mode under the Service Info tab, refer to Fault Data Available from Service Mode.
- For information on fault codes, refer to Function, Fault, Component Codes.
- For information on status codes, refer to OF4 Status Codes and Messages RAP.
- For information on power on self test (POST) refer to OF2 POST Error RAP.

Machine Status Button

The most recent fault and status codes can be displayed on the UI by pressing the Machine Status button. Touch the Active Messages tab on the UI then select the appropriate option:

- Fault History.
- From the pull down menu:
  - Faults and Alerts
  - Faults
  - Alerts

Fault Data Available from Service Mode

The Service Info tab in Service Mode (GP 1) gives access to the following fault history options:

- Fault Counters (dC120) - Displays the titles of all faults separated into chains, sortable by chain or frequency.
- Fault History (dC122) - Displays the last 40 faults. Selecting a fault will display it in detail.

Function, Fault, Component Codes

Refer to:

- Table 1 Function and fault code prefixes. Also known as the chain code.
- Table 2 Finisher fault code and status code suffixes.

For example. Displayed code 373-215-00 Tray 3 hoist failure:

- 3 - Indicates that this is a Discovery 2 software platform fault code. All 5890F fault codes begin with a three.
- 73 - The fault is located in chain 7, ‘Paper supply and tray 3’. Refer to Table 1.
- 215 - This is the link code. These numbers have no significant meaning for the CSE.
- 00 - This is the extension code. These numbers have no significant meaning for the CSE.

NOTE: *Where possible, the component related fault codes are the same as the component control codes.*

Table 1 Function and fault code prefixes

Chain Code	Function
01	Standby power
02	User interface
03	Machine run control
05	Document transportation
10	Fusing and copy/print transportation
11	Finishers
12	Offsetting catch tray
16	Network controller
19	Video image manipulation
20	Fax
22	System Errors
4X	Main drives, fans and cooling
6X	ROS, scanner
7X (X = tray No.)	Paper supply (paper trays and bypass)
8X	Paper feed and transport
9X	Xerographics

Table 2 Finisher fault code and status code suffix numbers

Suffix No.	Finisher Identifier
110	2K LCSS
120	1K LCSS
150	LVF BM
171	HVF
172	HVF BM (see NOTE)
173	HVF BM + tri-fold (see NOTE)
174	HVF BM + inserter (see NOTE)
175	HVF BM + tri-fold (see NOTE)
176	HVF BM + tri-fold + inserter (see NOTE)

NOTE: *The finisher fault and status code suffix numbers are not normally visible. Throughout this manual, the suffix code 171 is used for all HVF variants.*

GP 3 Service Information

Purpose

To provide machine hardware and software information.

Service Information From The Service Mode Screen

Enter Service Mode, GP 1. Select the Service Info tab. This gives the following options:

- Information Routines.
  dC104 Usage Counters
  dC108 Software Version
  dC120 Fault Counters
  dC122 Fault History
  dC135 CRU/HFSI Status
- General Information
  - Product Code:
  - Serial Number:
  - Total Images:
  - Images since Last Call:
  - Software Set Version:
  - IP Address:

Service Information From The UI Machine Information Tab

Press the machine information key to the left of the UI to display the machine information tab. This gives the following options:

- General Information
  - Customer Support
    Website: www.xerox.com
  - Serial Number. Refer to dC132 Serial Number.
  - Current System Software
    000.00.000
  - IPv4 Address
  - IPv6 Address
  - Host Name
- Paper Tray Status
- Information Pages
- Installed Options
- Maintenance Assistant

Serial Numbers

Machine serial number

The machine serial number is displayed on the UI machine information tab and is also labeled onto the front, top right of the IOT frame.

The serial number for the US markets is in the format

The serial number for the XC markets is in the format: XXX ######. Where XXX is the product code (see Product Code) and ###### is the serial number.

The serial number for the XE markets is in the format: MMM######C. MMM is the manufacturing location code, ###### is the serial number and C is the check digit, for example 2327020103.

Other Serial Number Locations

The SPDH module. Lift up the SPDH top cover assembly. The serial number plate is located on the inside of the top cover on the outboard side.

The scanner module. The serial number plate is located on the front of the scanner top covercover. Remove the UI surround PL 2.10 Item 12 to view the serial number plate.

The 2K LCSS module. Un-dock the 2K LCSS. Refer to REP 11.13-110. The serial number plate is located in the base pan of the 2K LCSS.

The LVF BM module. Undock the LVF BM module. Refer to REP 11.13-150. The serial number plate is located on the booklet tamper assembly, PL 11.74 Item 1.

Product Code

Primary Build Machines

Primary build machines are supplied as WorkCentres. Configuration changes to faster speeds and output modules are carried out as secondary build upgrades.

Malaysia built machines:

- EX6: 40-55ppm, SPDH, (50Hz).
- EX8: 60-90ppm, SPDH, (50Hz).
- EX7: 40-55ppm, SPDH, (60Hz).
- EX9: 60-90ppm, SPDH, (60Hz).

Singapore built machines:

- EX6N: 40-55ppm, SPDH, (50Hz).
- EX8N: 60-90ppm, SPDH, (50Hz).
- EX7N: 40-55ppm, SPDH, (60Hz).
- EX9N: 60-90ppm, SPDH, (60Hz).

Secondary Build Upgrades

- HLX: 2K LCSS
- HLB: 1K LCSS
- XK4: LVF BM
- YFV: HVF
- YFW: HVF BM
- YFY: Inserter
- YGD: Tri-folder
- NX7: Tray 6

GP 4 Machine Software

Purpose

To provide machine software information and explain the software loading procedures.

Description

Software sets are compilations of the various software modules and together with a SCD (software compatibility database) are bundled into a DLM file.

Refer to the following items for additional information about machine software:

- Modules
- Software Compatibility Database (SCD)
- Common Upgrade Behavior
- Software Loading Procedures
- Normal Software Loading Procedure
- AltBoot Software Loading Procedure
- Forced AltBoot Software Loading Procedure

Modules

A software module is defined as a programmable piece of software existing as a file in its own right. Software modules reside on hardware modules.

The following hardware modules contain firmware and cannot have software upgrades loaded:

- Paper feed module.
- High capacity feeder.

NOTE: *The software for the paper feed module or high capacity feeder can only be upgraded by installing a newer version of the relevant PWB on each hardware module.*

Software Compatibility Database (SCD)

The SCD is used to describe the machine system software.

The SCD comprises of the system software version in the format WorkCentre_5845-5890_system-sw#(AAa)(PPS)(TTY)(DDD)(RR)#.dlm and a list of software versions for the different modules.

The description of the system software file name is:

- AA - major architecture release number (range 00 to 24).
- a - minor architecture release number (range 0 to 9).
- PP - product code (range 00 to 24).
- S - service maintenance pack (SMP) release number (range 0 to 9)
- TT - release type (range 0 to 24).
- Y - release year (range 0 to 9).
- DDD - release day, in the year (range 001 to 366).
- RR - daily revision number (range 00 to 99).

NOTE: *The system software version is displayed on the UI under Machine Details and on the Service Info screen in service mode.*

The primary function of an SCD is to ensure that all software on the machine is compatible.

Common Upgrade Behavior

A software upgrade is requested if a new hardware module is installed which has an earlier or later software version.

When an upgrade has been initiated the machine will reboot with all modules in upgrade mode. Progress and errors are displayed on the UI touch screen. When the upgrade is complete, the machine will reboot.

When a machine is switched on, the single board controller PWB module compares its SCD with the software in the hardware modules. If necessary, a software upgrade or downgrade is instigated by the single board controller PWB module.

NOTE: *If a component is installed that has a later version of software than the software set on the single board controller PWB module, at machine startup the software on the new component is downgraded.*

The SCD is updated on successful completion of the upgrade.

Software Loading Procedures

Loading of machine software can be initiated either:

- locally from a PWS or USB flash drive.
- remotely via a network connection.

There are various methods of loading the machine software for the WC5890F machines. Refer to Table 1 to select the appropriate procedure.

Table 1 Software loading procedures

Software upgrading procedure type	Software upgrade application
Software Loading Via the Customers Network	Use on a good working machine.
Software Loading From the PWS	Use on a good working machine.
Software Loading From a USB Flash Drive	Use to only upgrade software on a good working machine. See above Note.
PWS Altboot Procedure	Use as directed on a faulty machine.
USB AltBoot Procedure	Use as directed on a faulty machine.
USB Forced AltBoot Procedure	Use as directed on a faulty machine.
PWS Forced Altboot Procedure	Use as directed on a faulty machine.

Software Loading Progress

During the software loading procedure, a progress screen is displayed on the UI, Figure 10. The display has the following features:

- A progress bar is assigned to each of the hardware modules.
- For the upgrade of each hardware module to be successful, the green box with a white tick must be displayed. During the upgrade, one of the following conditions is displayed:
  - Green progress bar, an upgrade is in progress.
  - Green box with a white tick, an upgrade has completed.
  - Red progress bar, a module has failed to be upgraded.

Normal Software Loading Procedure

Use this procedure to load software onto a good, working machine.

Initial Requirements

- Before software is loaded, ensure that the machine is in a fully operational condition. Any active faults or jams must be resolved before loading software.

  NOTE: *The procedure will take approximately 35 minutes.*

- If the software loading procedure fails, enter dC122 Fault History. Check for chain 95 fault codes. Perform the relevant RAPs.

Procedure

There are three methods to load software, go to the relevant procedure:

- Software Loading Via the Customers Network.
- Software Loading From the PWS.
- Software Loading From a USB Flash Drive

Software Loading Via the Customers Network

The software is loaded via the customers network. As the software loading instructions are subject to change, a read me file is available at the same location as the software. Refer to the read me file for the software loading procedure.

The progress of the software loading procedure is displayed on the UI. For more information, refer to Software Loading Progress.

If the machine does not go into the software loading procedure, check the following:

- The relevant cabling to the machine.
- The functionality of the PC being used to perform the procedure.

Software Loading From the PWS

Perform the following:

1. Print a configuration report.
2. Set the proxy server on the PWS, refer to GP 34 How to Set the IP Address of the PWS. Be aware of the following:
   - Before changing the proxy server settings, record the original IP address and Subnet mask. The original settings are reset at the end of this procedure.
   - Refer to the configuration report. Set the IP address of the PWS one number higher than the machine. For example, if the IP address of the machine is 192.168.196.112, set the IP address of the PWS to 192.168.196.113.
   - Refer to the configuration report. Set the Subnet mask of the PWS to the same as the Subnet mask of the machine.
   - A default gateway setting is not required.
   - If any settings are changed, reboot the PWS.
3. Switch on the machine, GP 14.
4. Disconnect the ethernet cable from the machine.
5. Connect the ethernet crossover cable, PL 26.10 Item 6 between the machine and the PWS.

NOTE: *The machine has a network 802.1x Authentication option. If this option is enabled the PWS will not connect to the machine. To make a successful connection, perform the following:*

a. Enter Customer Administration Tools, GP 24.

b. Press the Machine Status button.

c. Select Tools / Advanced Settings / 802.1X.

d. Disable 802.1X.

6. If the web browser on the PWS is set to use a proxy server, it will not connect to the machines web page. Perform the following:
   a. Open the web browser on the PWS.
   b. Select Tools, then select Internet Options.
   c. Select the Connections tab.
   d. Click on the LAN settings button. The LAN settings dialog box will now be displayed.
   e. The 'Use a proxy server for your LAN' box should not be checked.
7. Open the web browser. Enter the machines IP address in the web browsers Address field, then press the enter key. The machines web page will open.

   NOTE: *Refer to the configuration report for the machines IP address.*
8. In the machines web page, click on the Properties tab.
9. Login as the administrator, i.e. Login: Admin. Password: 1111 (default).
10. Open the General Setup folder, then the Machine Software folder.
11. Select Manual Upgrade.

    NOTE: *If necessary, enable manual software upgrades.*
12. Click the browse button in the middle of the screen.
13. Browse to the correct location of the DLM file, then click open.
14. Click on the Install Software button.
15. The DLM is displayed in the machines print queue. The upgrade begins in approximately 10 minutes. The progress of the software loading procedure will be displayed on the UI. For more information, refer to Software Loading Progress.
16. When the upgrade has completed, Figure 11, the machine will reboot automatically.

    NOTE: *When the machine reboots, the connection to the machines web page is lost.*
17. After the machine has rebooted, a configuration report will be printed. Check the software version against the software version in the machine details screen on the user interface.
18. Compare the configuration reports. Ensure that the configuration report generated after the upgrade shows the same machine configuration as before the upgrade.
19. If the proxy server setting on the PWS was changed, return the setting to the original value.
20. Connect the customers network cable to the machine. Switch off the machine, then switch on the machine, GP 14.

Software Loading From a USB Flash Drive

NOTE: *The Software Loading From a USB Flash Drive procedure can only be used to upgrade machine software to a higher version. The procedure will fail and generate a fault code if an attempt is made to install machine software of the same version. If it is necessary to reload machine software of the same version via a USB flash drive, the AltBoot Software Loading Procedure must be used.*

Perform the following:

1. Create a top level folder on the USB flash drive named upgrade (this is not case sensitive).
2. Copy the WorkCentre_5845-5890_system-sw#ppp.mmm.yyy.dddrr#.dlm file from the system software CD into the upgrade folder of the USB flash drive.

   NOTE: *Ensure there is only one file in the upgrade folder.*

   NOTE: *Ensure the Windows "safely remove hardware device" process is followed, before removing the USB drive.*
3. If possible, complete or delete all pending print jobs. If the prints jobs cannot be deleted, warn the customer that all pending jobs will be lost.
4. Check the Release Notes and the current software already loaded on the machine. Ensure that the upgrade can be applied.
5. Check that the USB ports are enabled. Perform the USB Port Security Setting Check.
6. Connect the USB flash drive into any of the USB ports.

   NOTE: *It is not necessary to switch off the machine to perform a software upgrade.*

   Occasionally the USB flash drive will be incompatible with the machine. Replace the USB flash drive with a Xerox approved model. Restart the process.
7. The upgrade start screen is displayed, Figure 9.
8. The upgrade will begin and the progress screen will open, Figure 10.
9. The system upgrade process should complete after approximately 5 minutes, Figure 11, and the machine will come to a ready state.
10. If the system upgrade process fails, perform an Altboot. Refer to AltBoot Software Loading Procedure.
11. The machine will reboot several times before returning to a ready state. The machine may also display the upgrade progress screen, Figure 10. If the power on failure screen is displayed, switch off, then switch on the machine, GP 14.
12. After the software has upgraded, a software upgrade report will be printed.
13. If the USB port security setting was changed at the beginning of this procedure, reset it, then switch off, then switch on the machine, GP 14.

AltBoot Software Loading Procedure

Use this procedure to load software onto a faulty machine. Only use this procedure if directed.

If the software loading procedure fails, enter dC122 Fault History. Check for chain 95 fault codes. Perform the relevant RAPs.

CAUTION

The AltBoot software loading procedure erases the SMart eSolutions and the wireless settings. These will be automatically re-loaded at the end of the Altboot procedure.

***NOTE:** Altboot upgrades should be performed with the device in wired connectivity mode. Upgrades attempted while the device is in wireless mode may result in unpredictable network/ device behavior that will require a reset to default configuration action, then a device reboot in order to resolve issues.*

***NOTE:** If the optional features McAfee Integrity Control of XPS fail automatically to re-load after an Altboot, refer to GP 17 How to Re-Enter Optional Feature Installation Keys.*

There are two methods of performing an Altboot. Go to the relevant procedure:

- USB AltBoot Procedure
- PWS Altboot Procedure

USB AltBoot Procedure

Hardware requirements:

- USB Flash drive.

Software requirements:

- The DLM file to be loaded.

Perform the following:

1. Create a top level folder on the USB Flash drive named “AltBoot”.
2. Copy the WorkCentre_5845-5890_system-sw#ppp.mmm.yyy.dddrr#.dlm file from the system software CD into the AltBoot folder of the USB flash drive.

   ***NOTE:** If there is more than 1 version of a DLM file in the AltBoot folder on the USB flash drive the machine will always access the latest version.*

3. If possible, perform a NVM save, refer to dC361 NVM Save and Restore.
4. Check that the USB ports are enabled. Perform the USB Port Security Setting Check.
5. Switch off the machine, GP 14.
6. Connect the USB flash drive to the front USB port or either of the 2 USB ports in the rear of the single board controller PWB module.
7. Switch on the machine GP 14. The Software Upgrade start screen will display on the UI, Figure 9.

   ***NOTE:** If the Upgrade Failed screen, Figure 13, displays at this time, it is an indication of hard disk drive failure. Go to the 303C Hard Disk Failure RAP.*

8. After approximately 3 minutes, the upgrade will begin and the progress screen will open, Figure 10.

   ***NOTE:** If the upgrade process screen is not displayed after 5 minutes, restart the process.*

9. The AltBoot process should complete after approximately 5 minutes and the AltBoot complete screen will open, Figure 12. Follow the on screen instructions.
10. If the AltBoot process fails, the AltBoot failed screen will open, Figure 13. Follow the on screen instructions. Restart the procedure and refer to Troubleshooting as necessary.
11. The UI displays the Data Encryption/Decryption in progress screen, Figure 14.

    ***NOTE:** Do not switch off the machine until directed to on the UI. During the reboot, the hard disk drive is encrypted. Switching off the machine can cause only partial encryption of the hard disks partitions. The AltBoot process may need to be re-run if power is removed at this step.*

12. Before returning to a ready state, the machine will reboot several times as the previous settings are re-loaded. The previous settings message screen will display, Figure 15. If a power on failure screen appears, switch off, then switch on the machine, GP 14.
13. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
14. Perform a NVM restore, refer to dC361 NVM Save and Restore.
15. Switch off, then switch on the machine, GP 14.

PWS Altboot Procedure

Hardware requirements:

- Data cable, PL 26.10 Item 24.
- Ethernet crossover cable, PL 26.10 Item 6.

Software requirements:

- vega.uImage - Linux kernal file.
- vega_ramdisk.uboot - Linux root file system file.
- The DLM file to be loaded.

Perform the following:

1. Print a configuration report.
2. If possible, perform a NVM save, refer to dC361 NVM Save and Restore.
3. Switch off the machine, GP 14.
4. Disable the wireless network on the PWS.
5. Set the proxy server on the PWS, refer to GP 34 How to Set the IP Address of the PWS. Be aware of the following:
   - Before changing the proxy server settings, record the original IP address and Subnet mask. The original settings are reset at the end of this procedure.
   - Set the IP address of the PWS to 192.168.0.2.
   - Set the Subnet mask of the PWS to 255.255.255.0.
   - A default gateway setting is not required.
   - If any settings are changed, reboot the PWS.
6. Disconnect the ethernet cable from the machine.
7. Connect the crossover ethernet cable from the PWS network port to the machine network port. Connect the data cable from the PWS USB port to the machine data cable connector, Figure 1.

   ***NOTE:** When connecting the data cable, ensure that the ground connector (marked GND) is aligned with arrow on the rear of the SBC module. Also, ensure that the data cable terminals are not misaligned with the PJ44 pins.*

8. Start the PWS AltBoot tool.
9. Browse to and highlight the folder that contains the upgrade files, Figure 2. Select OK.
10. If a **Connection Failed** window appears, Perform the following:
    a. Open the PWS Control Panel window.
    b. Select System Security, then System, then Device Manager.

c. In the Device Manager window select Ports (COM and LPT1). Note the USB serial port (COM#) number displayed.

NOTE: *If the COM# is not between 1 and 4, right click on Communications Port (COM#). In the Communications Port (COM#) Properties window select Advanced. In the Advanced settings for COM# window select the COM Port Number drop down list and select a COM port between 1 and 4.*

d. Close the Device Manager window and the Control Panel window.

e. Click OK in the Connection Failed window, the SBC Alternate Boot window appears.

f. Select Settings, then COM Port Select. Change the COM port number to that noted in step c.

g. Select OK.

11. Switch on the machine, GP 14. After approximately 10 seconds, the transfer of the uImage and uboot files will begin.
12. After file transfer, the settings menu is displayed in the terminal window, Figure 3.

NOTE: *Check that the 'Received packet' line is displayed and that the IP address is set one digit away from the packet was received from address.*

Press 'y' at the prompt and continue. If the valid netmask is not set, press 'n' and change it to the value shown in Figure 3.

13. From the next menu, Figure 4, select action 5, Install ESS software.
14. At the proceed prompt, Figure 5, select 'Y'.
15. At the second proceed prompt, Figure 6, select 'Y'.
16. From the next menu, Figure 7, select option 4, Continue.
17. From the next menu, Figure 8, select the correct DLM file to download to the machine. A transfer progress window will then open.
18. After the DLM file has been downloaded to the machine, the Software Upgrade start screen will display on the UI, Figure 9.

NOTE: *If the Upgrade Failed screen, Figure 13 displays at this time, it is an indication of hard disk failure. Refer to the 303C Hard Disk Failure RAP.*

19. After approximately 2 minutes, the upgrade will begin and the progress screen will open, Figure 10.

NOTE: *If the upgrade process screen is not displayed after 5 minutes, restart the process.*

20. The AltBoot process should complete after approximately 5 minutes and the AltBoot complete screen will open, Figure 12. Ignore the instruction to remove the USB flash drive, press 0 to continue.
21. If the AltBoot process fails, the AltBoot failed screen will open, Figure 13. Follow the on screen instructions. Restart the procedure and refer to Troubleshooting as necessary.
22. The UI displays the Data Encryption/Decryption in progress screen, Figure 14.

NOTE: *Do not switch off the machine until directed to on the UI. During the reboot, the hard disk drive is encrypted. Switching off the machine can cause only partial encryption of the hard disks partitions. The AltBoot process may need to be re-run if power is removed at this step.*

23. Before returning to a ready state, the machine will reboot several times as the previous settings are re-loaded. The previous settings message screen will display, Figure 15. If a power on failure screen appears, switch off, then switch on the machine, GP 14.
24. Disconnect the data cable and the special crossover ethernet cable from the PWS and the machine.
25. Connect the ethernet cable to the machine.
26. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
27. If the NVM was saved at the beginning of this procedure, perform a NVM restore, refer to dC361 NVM Save and Restore.

Forced AltBoot Software Loading Procedure

Use this procedure to load software onto a faulty machine. Only use this procedure if directed.

CAUTION

Do not perform a forced AtlBoot unless absolutely necessary. If a problem occurs during the upgrade, some PWBs could be irretrievably damaged and new components will have to be installed.

CAUTION

The AltBoot software loading procedure erases the SMart eSolutions and the wireless settings. These must re-loaded at the end of the forced Altboot procedure.

NOTE: *If the optional features McAfee Integrity Control of XPS fail to re-load, refer to GP 17 How to Re-Enter Optional Feature Installation Keys.*

There are two methods of performing a Forced Altboot. Go to the relevant procedure:

- USB Forced AltBoot Procedure
- PWS Forced Altboot Procedure

USB Forced AltBoot Procedure

Hardware requirements:

- USB Flash drive.

Software requirements:

- The FORCED_UPGRADE file.
- The DLM file to be loaded.

Perform the following:

1. Create a folder named AltBoot on a USB Flash drive (not case sensitive).
2. Locate the FORCED_UPGRADE file (file size = 0 KB) in GSN library 10215.
3. Unzip then copy the FORCED_UPGRADE file into the AltBoot folder on the USB Flash drive.
4. Copy the DLM file into the AltBoot folder on the USB Flash drive.
5. If possible, perform a NVM save, refer to dC361 NVM Save and Restore.
6. Check that the USB ports are enabled. Perform the USB Port Security Setting Check.
7. Switch off the machine, GP 14.
8. Connect the USB flash drive to the front USB port or either of the 2 USB ports in the rear of the single board controller PWB module.

9. Switch on the machine, GP 14.
10. Follow the instructions on the user interface touch screen until the software loading is complete.
11. When the software loading is complete, enter Customer Administration tools, GP 24. Select Tools / Device Settings / General / Revert to Previous Settings. This will re-load the customer optional services.

    NOTE: *If the optional features McAfee Integrity Control of XPS fail to re-load, refer to GP 17 How to Re-Enter Optional Feature Installation Keys.*

12. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
13. If the NVM was saved at the beginning of this procedure, perform a NVM restore, refer to dC361 NVM Save and Restore.
14. Reset the USB port security setting if it was changed at the beginning of this procedure.
15. Switch off, then switch on the machine, GP 14.
16. If the Forced AltBoot process fails, restart the procedure and refer to Troubleshooting if necessary.

PWS Forced Altboot Procedure

Hardware requirements:

- Data cable, PL 26.10 Item 24.
- Ethernet crossover cable, PL 26.10 Item 6.

Software requirements (available in GSN library 13047, WC58xx Altboot support files):

- vega.uImage - Linux kernal file.
- vega_ramdisk.uboot - Linux root file system file.
- The DLM file to be loaded.

Perform the following:

1. Print a configuration report.
2. If possible, perform a NVM save, refer to dC361 NVM Save and Restore.
3. Switch off the machine, GP 14.
4. Disable the wireless network on the PWS.
5. Set the proxy server on the PWS, refer to GP 34 How to Set the IP Address of the PWS. Be aware of the following:
   - Before changing the proxy server settings, record the original IP address and Subnet mask. The original settings are reset at the end of this procedure.
   - Set the IP address of the PWS to 192.168.0.2.
   - Set the Subnet mask of the PWS to 255.255.255.0.
   - A default gateway setting is not required.
   - If any settings are changed, reboot the PWS.
6. Disconnect the ethernet cable from the machine.
7. Connect the crossover ethernet cable from the PWS network port to the machine network port. Connect the data cable from the PWS USB port to the machine data cable connector, Figure 1.

   NOTE: *When connecting the data cable, ensure that the ground connector (marked GND) is aligned with arrow on the rear of the SBC module. Also, ensure that the data cable terminals are not misaligned with the PJ44 pins.*

8. Start the PWS AltBoot tool.
9. Browse to and highlight the folder that contains the upgrade files, Figure 2. Select OK.
10. If a **Connection Failed** window appears, Perform the following:
    a. Open the PWS Control Panel window.
    b. Select System Security, then System, then Device Manager.
    c. In the Device Manager window select Ports (COM and LPT1). Note the USB serial port (COM#) number displayed.

       NOTE: *If the COM# is not between 1 and 4, right click on Communications Port (COM#). In the Communications Port (COM#) Properties window select Advanced. In the Advanced settings for COM# window select the COM Port Number drop down list and select a COM port between 1 and 4.*

    d. Close the Device Manager window and the Control Panel window.
    e. Click OK in the Connection Failed window, the SBC Alternate Boot window appears.
    f. Select Settings, then COM Port Select. Change the COM port number to that noted in step c.
    g. Select OK.
11. Switch on the machine, GP 14. After approximately 10 seconds, the transfer of the uImage and uboot files will begin.
12. After file transfer, the settings menu is displayed in the terminal window, Figure 3.

    NOTE: *Check that the 'Received packet' line is displayed and that the IP address is set one digit away from the packet was received from address.*

    Press 'y' at the prompt and continue. If the valid netmask is not set, press 'n' and change it to the value shown in Figure 3.
13. From the next menu, Figure 4, select action 11, Forced Install ESS software.
14. At the proceed prompt, Figure 5, select 'Y'.
15. At the second proceed prompt, Figure 6, select 'Y'.
16. From the next menu, Figure 7, select option 4, Continue.
17. From the next menu, Figure 8, select the correct DLM file to download to the machine. A transfer progress window will then open.
18. After the DLM file has been downloaded to the machine, the Software Upgrade start screen will display on the UI, Figure 9.

    NOTE: *If the Upgrade Failed screen, Figure 13 displays at this time, it is an indication of hard disk failure. Refer to the 303C Hard Disk Failure RAP.*

19. After approximately 3 minutes, the upgrade will begin and the progress screen will open, Figure 10.

    NOTE: *If the upgrade process screen is not displayed after 5 minutes, restart the process.*

20. The Forced AltBoot process should complete after approximately 35 minutes and the AltBoot complete screen will open, Figure 12. Ignore the instruction to remove the USB flash drive, press 0 to continue.
21. If the Forced AltBoot process fails, the AltBoot failed screen will open, Figure 13. Follow the on screen instructions. Restart the procedure and refer to Troubleshooting as necessary.

22. The UI displays the Data Encryption/Decryption in progress screen, Figure 14.

    NOTE: *Do not switch off the machine until directed to on the UI. During the reboot, the hard disk drive is encrypted. Switching off the machine can cause only partial encryption of the hard disks partitions. The Forced AltBoot process may need to be re-run if power is removed at this step.*

23. The machine will reboot several times before returning to a ready state. If a power on failure screen appears, switch off, then switch on the machine, GP 14.
24. Disconnect the data cable and the special crossover ethernet cable from the PWS and the machine.
25. Connect the ethernet cable to the machine.
26. Enter Customer Administration tools, GP 24. Select Tools / Device Settings / Revert to Previous Settings. This will re-load the customer optional services.

    NOTE: *If the optional features McAfee Integrity Control of XPS fail to re-load, refer to GP 17 How to Re-Enter Optional Feature Installation Keys.*

27. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
28. If the NVM was saved at the beginning of this procedure, perform a NVM restore, refer to dC361 NVM Save and Restore.
29. Switch off, then switch on the machine, GP 14.

Troubleshooting

Listed below are possible problems that may stop AltBoot software loading:

Possible causes and solutions are:

- Incompatible USB flash drive. Use a Xerox approved model of USB flash drive.
- Corrupt .dlm file. Replace the .dlm file.
- Incorrect spelling of the AltBoot directory on USB flash drive.
- Bad data connection to a HDD. Re-seat the HDD cable, PL 3.22 Item 4.
- Hard disk drive corruption or failure.
- USB port damage. Use a different USB port.
- UI failure. Refer to 302A Touch Screen Failure RAP.
- Single board controller PWB failure, PL 3.22 Item 3.

When an upgrade fails, the SCD module version that failed to upgrade is printed on the software upgrade report. Refer to Table 2.

NOTE: *If an upgrade report is printed that shows an SCD module version that is not listed in Table 2, no service action is necessary.*

Table 2 Software module numbers

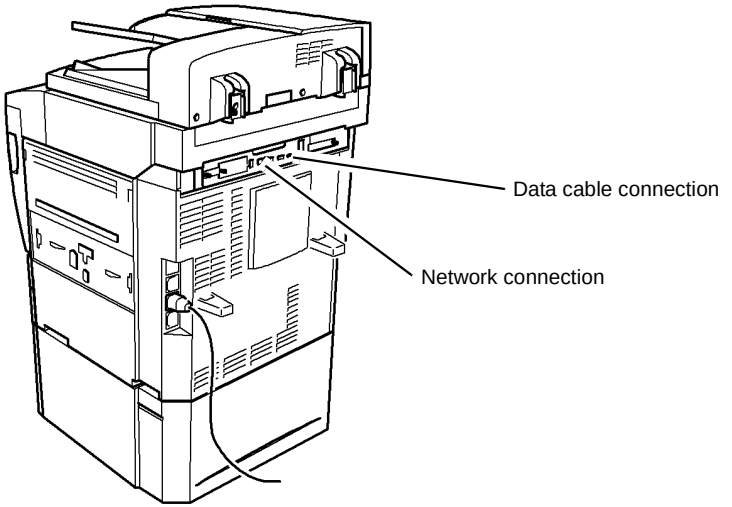
Module	SCD Module Versions	Go to
SBC PWB	0, 1, 2, 8, 9, 11, 140, 214, 216, 217, 226	395-000-00 to 395-009-00 SBC Software Upgrade Errors 1 RAP
IOT PWB	40, 41, 42, 43, 44, 45, 46	395-040-00 to 395-042-00 IOT Software Upgrade Errors RAP
UI PWB	19	395-016-00, 395-019-00 UI Software Upgrade Errors RAP
Fax	38	395-030-00 to 395-038-00, 395-151-00 Fax Software Upgrade Errors RAP
Scanner PWB	155, 163, 164, 166, 169, 227	395-150-00 to 395-156-00, 395-170-00 Scanner Software Upgrade Errors RAP395-150-00 to 395-156-00, 395-170-00
SPDH PWB	167, 168, 228, 229	395-020-00, 395-022-00 SPDH Software Upgrade Errors RAP
1K LCSS PWB	50	395-050-00 1K LCSS Software Upgrade Error RAP
2K LCSS PWB	60	395-060-00, 395-065-00 2K LCSS Software Upgrade Errors RAP
LVF PWB	222	395-221-00, 395-222-00 LVF Software Upgrade Errors RAP
LVF BM PWB	224	395-223-00, 395-224-00 LVF BM Software Upgrade Errors RAP
HVF PWB	192	395-192-00, 395-194-00 HVF Software Upgrade Errors RAP
HVF BM PWB	193, 195	395-193-00, 395-195-00 HVF BM Software Upgrade Errors RAP
Tray 6 PWB	191	395-191-00, 395-196-00 PFP Software Upgrade Errors RAP

USB Port Security Setting Check

Perform the following:

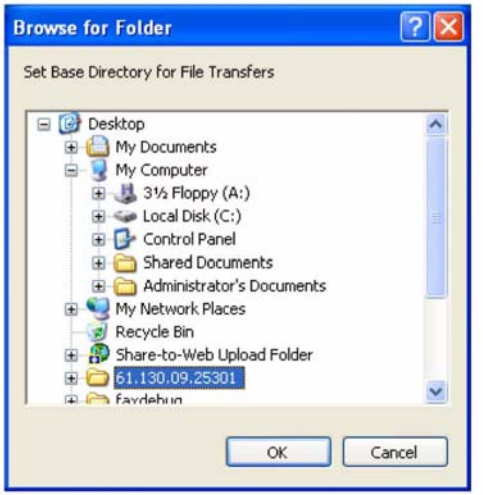
1. Login to Customer Administration Tools, GP 24.
2. Press the **Machine Status** button.
3. Select the **Tools** tab, the tools pathway menus are displayed.
4. Select **Security Settings**.
5. Select **USB Port Security**.
6. If necessary, change the setting to **Enabled**.
7. Exit Customer Administration Tools. If the USB port security setting was changed, switch off, then switch on the machine, GP 14.

NOTE: *If it is not possible to access Customer Administration Tools, or the USB flash drive is not recognised, update the software from the PWS.*



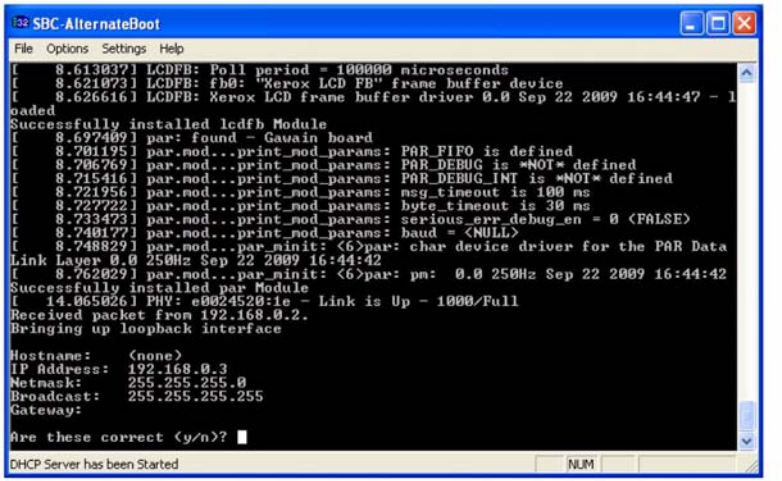
V-1-1375-A

Figure 1 Data cable connection



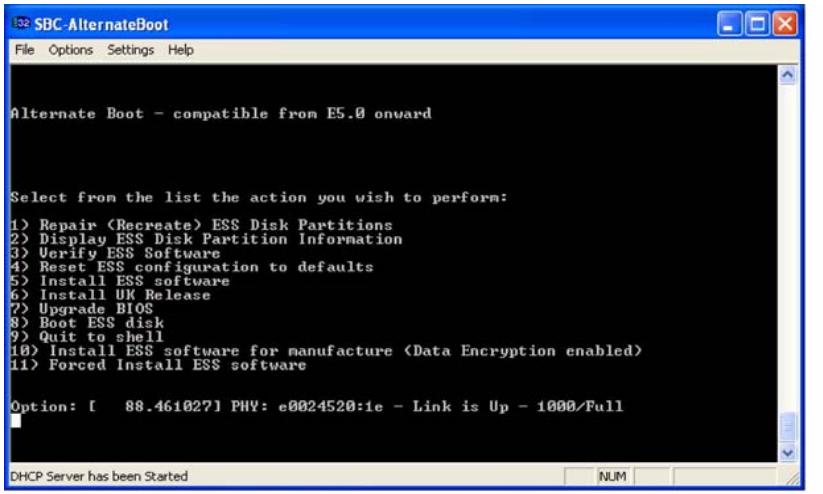
V-1-1120-A

Figure 2 Browse for folder



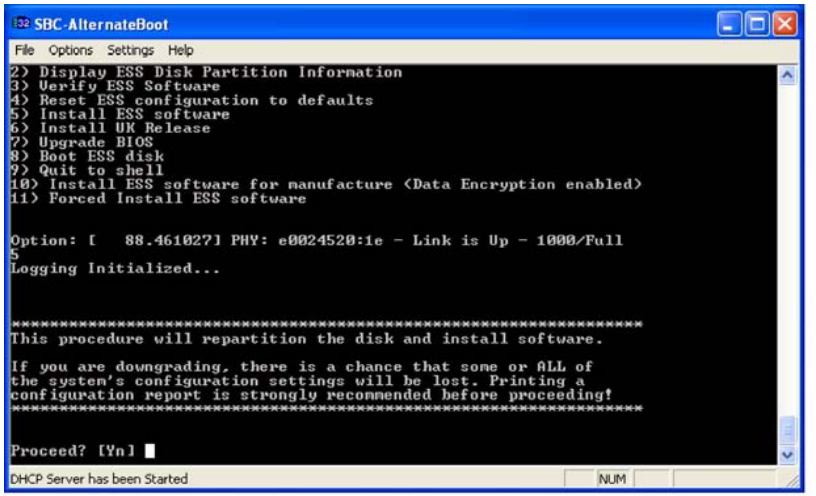
V-1-1121-A

Figure 3 Settings menu



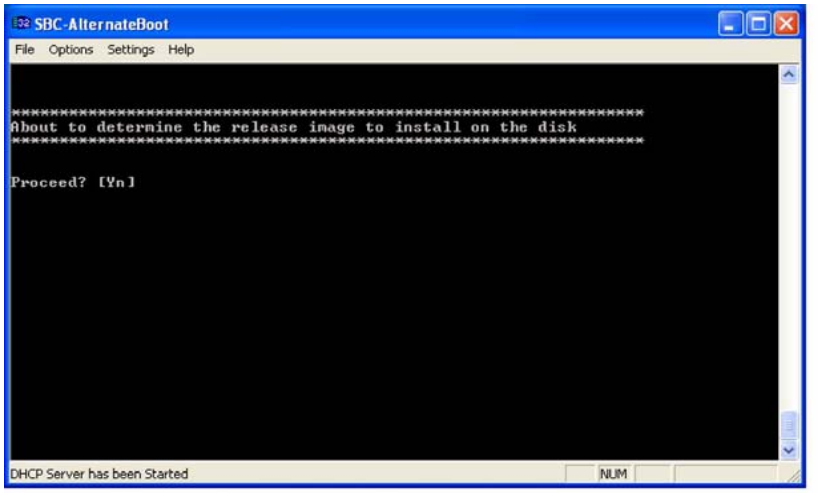
V-1-1122-A

Figure 4 Action menu



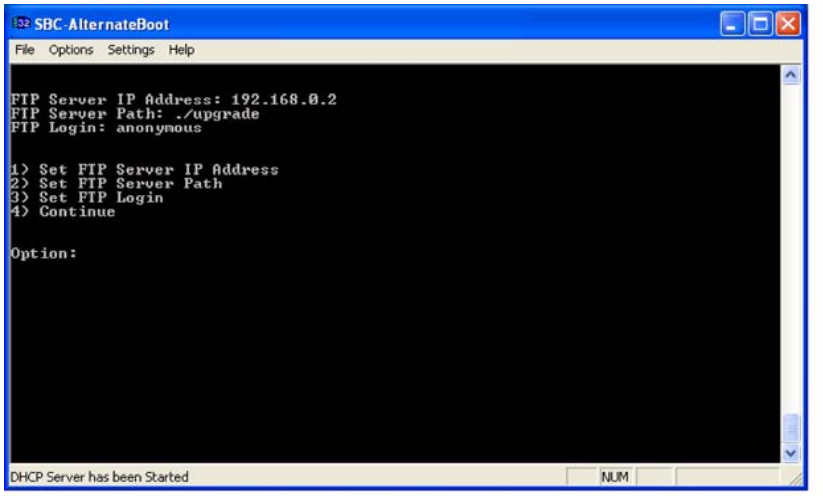
V-1-1123-A

Figure 5 Install confirmation window



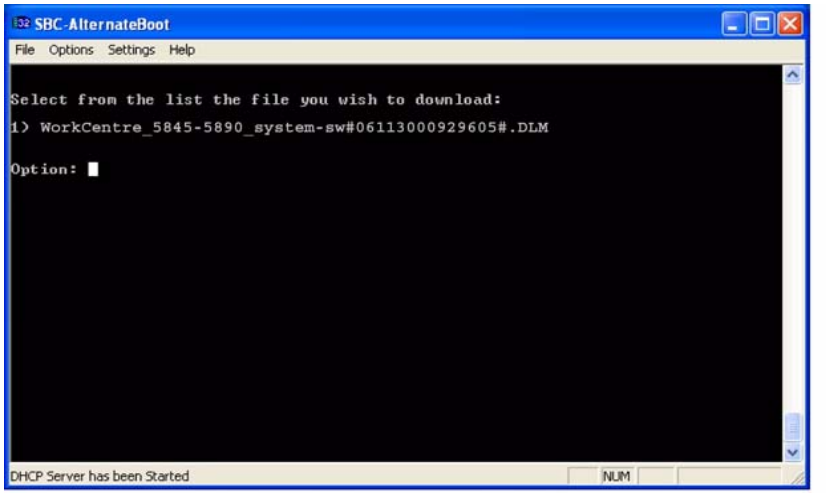
V-1-1124-A

Figure 6 Release image install window



V-1-1125-A

Figure 7 Option menu



V-1-1126-A

Figure 8 DLM list

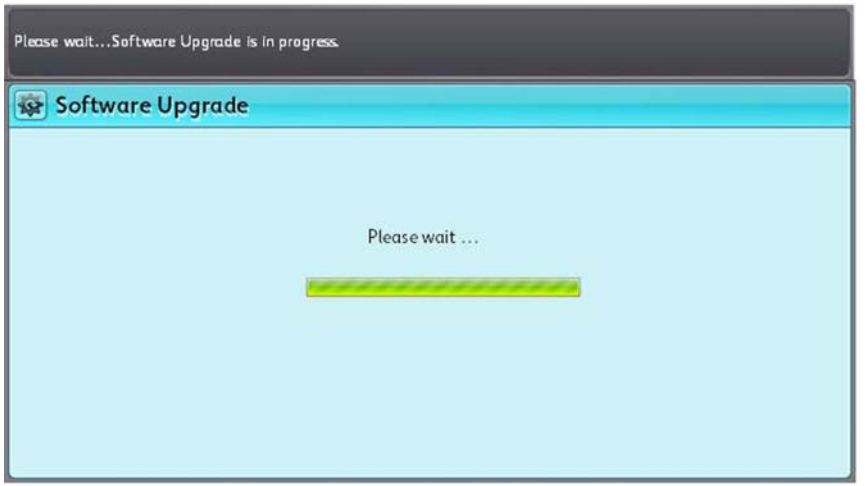


Figure 9 Software upgrade

Figure 10 Start of upgrade

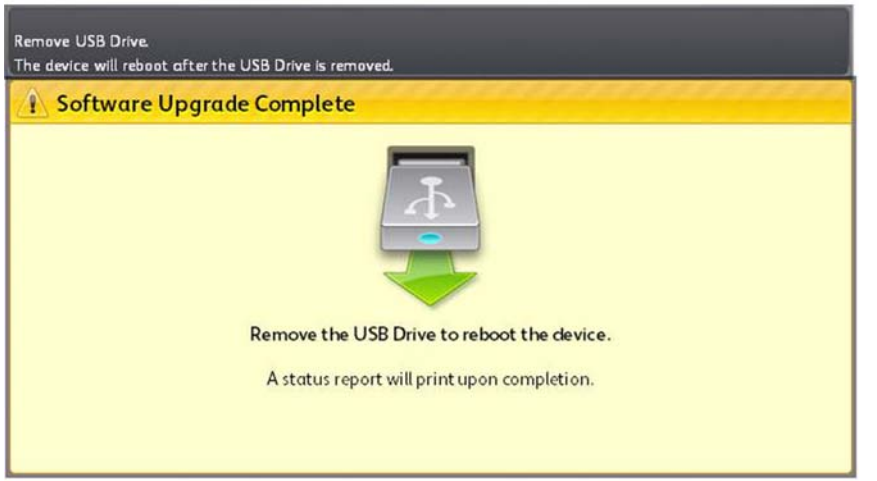


Figure 11 DLM upgrade complete

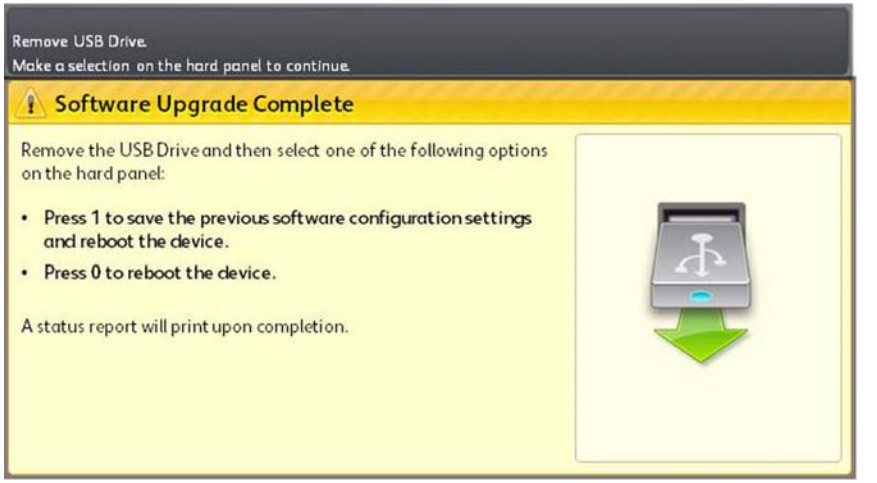


Figure 12 Altboot upgrade complete

Figure 13 Upgrade failed

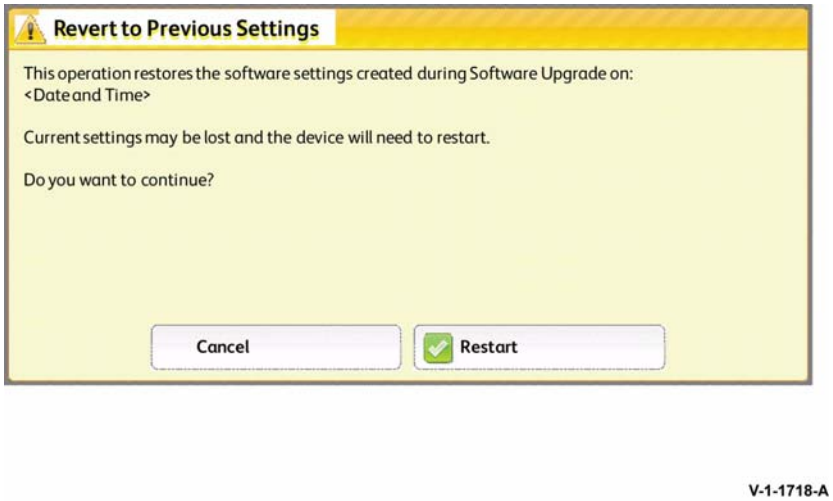


Figure 15 Revert to previous settings

Figure 14 Encryption progress

GP 5 Portable Work Station and Tools

Purpose

To describe the PWS diagnostic tools that are available for use with the WorkCentre 5890F machines.

Description

The only PWS Diagnostic Tool that is available is the SBC Altboot Tool.

SBC Altboot Tool

Use this tool to perform a Altboot software load when the USB flash drive method can not be used. Refer to GP 4 Machine Software.

GP 6 Screw Usage

Purpose

To prevent damage to parts that may be damaged by screws not being installed correctly.

Procedure

Replacing Existing Screws

Always use the correct driver for the type of screw head. Use a nut driver if possible; this gives a better grip than a slotted or cross-head driver.

Take care not to install self-tapping screws into machine-screw holes, or machine-screws into self-tapper holes.

When replacing self-tapping screws into plastic components, turn the screw counterclockwise to engage the original thread, then turn the screw clockwise. Do not overtighten. If a new thread is cut, the plastic component will lose the ability to hold the screw as firmly, and eventually not at all. This also applies, to a lesser degree, to metal components.

NOTE: *Reverse the direction of turn for left-hand threads.*

Use the same method for machine thread screws and nuts to avoid cross threading.

Inserting a Screw into an Un-threaded Hole

Some new components are supplied with fastening holes that do not have the screw thread pre-cut. It is the insertion of the first screw into the hole that forms the thread.

CAUTION

Use the following procedure to avoid broken screws and damaged holes:

1. Ensure that the screw is a thread forming screw, refer to Figure 1.

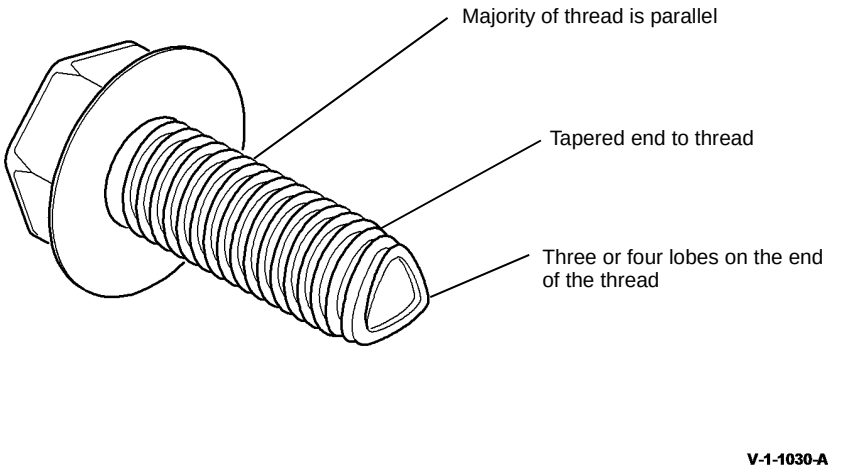


Figure 1 Thread forming screw

If the screw that is used to fasten the component does not appear to be a thread forming screw, temporarily use a thread forming screw from another location on the machine.

2. Do not assemble the new part into the machine yet, form the screw threads first.
3. Use the correct screw driver or nut driver to ensure a good grip on the head of the screw.
4. Using a moderate axial force, insert the screw to form the thread in the hole, then remove the screw.
5. Repeat step 4 as necessary until all fastening holes in the new component are threaded
6. Assemble the component on the machine.

GP 7 Miscellaneous Checks

Purpose

To indicate which types of problems to look for when checking or inspecting parts of the machine.

Procedure

1. Assess the fault. Check if the part is broken, too loose or too tight. Check if it needs cleaning or lubricating.
2. Check the following components as appropriate:
   - Actuators
   - Bearings
   - Drive Belts
   - Gears
   - Gravity Fingers and Stripper Fingers
   - Harnesses and Wiring
   - Rollers
   - Shafts

Actuators

- Free movement.
- Damage
- Contamination.

Bearings

- Wear.
- Damage.
- Contamination.

Drive Belts

- Wear.
- Damaged teeth.
- Correct tension.
- Contamination of tension rollers and support shafts.

Gears

- Contamination.
- Chips or cracks.
- Wear.
- Misalignment.

Gravity Fingers and Stripper Fingers

- Free movement.
- Missing fingers.
- Damage.
- Contamination on the fingers, rollers or on the pivot shaft.

Harnesses and Wiring

- Continuity.

- Short-circuits caused by physical damage or contamination of conductors, terminals or connectors.
- Overheated insulation.
- Damaged insulation near moving parts and sharp edges.
- Pin and receptacle damage on connectors.

NOTE: *For making harness and wiring repairs, refer to REP 1.2.*

Rollers

- Flats.
- Tears.
- Contamination.
- Secure E-clips and other retainers.

Shafts

- Contamination.
- Misalignment.
- Rotates without binding.

GP 8 Special Tools and Consumables

Description

Refer to the following:

WARNING

Wear protective gloves when using solvents and cleaning agents, PL 26.10 Item 10.

- Data cable, PL 26.10 Item 24.
- Xerox approved USB pen drive.
- Serial cable, PL 26.10 Item 12.
  - PWS to machine.
- USB cable, PL 26.10 Item 5.
  - PWS (portable work station) to single board controller PWB.
- Ethernet crossover cable, PL 26.10 Item 6.
  - PWS to machine.
- Finisher bypass harness, PL 26.10 Item 7.
  - Electrical cheat for PJ151.
- 9 way gender changer/null modem adapter PL 26.10 Item 1.
  - PWS to machine.
- LVPS Test box, PL 26.11 Item 8.
- Antistatic fluid, PL 26.10 Item 19.
  - Cleaning agent.
- Disposable gloves, PL 26.10 Item 10.
  - General protection.
- Film remover, PL 26.10 Item 4.
  - Cleaning agent.
- Formula A cleaning fluid, PL 26.10 Item 2.
  - General cleaning.
- Lens and mirror cleaner, PL 26.10 Item 9.
  - Optics cleaning.
- Micro fiber wiper, PL 26.10 Item 13.
  - General cleaning.
- Plastislip grease, PL 26.10 Item 8.
  - Lubrication for plastic gears and components.
- 1K LCSS Staple cartridge, PL 26.10 Item 25.
- 2K LCSS/LVF BM Staple cartridge, PL 26.10 Item 11.
- LVF BM staple cartridge (booklet maker), PL 11.78 Item 8.
- HVF staple cartridge, PL 26.10 Item 22.
- HVF BM staple cartridge, PL 11.168 Item 8.
- Convenience stapler cartridge, PL 26.11 Item 1.
- Test pattern, A3/11X17, PL 26.10 Item 14.
  - IQS 1 Solid Area Density and IQS 2 Background.

- Test pattern, A4, PL 26.10 Item 15.
  - IQS 1 Solid Area Density and IQS 2 Background.
- Test pattern, 8.5 X 11, PL 26.10 Item 16.
  - IQS 1 Solid Area Density and IQS 2 Background.
- Test pattern, solid area density scale, PL 26.10 Item 17.
  - IQS 1 Solid Area density.
- Test pattern, visual scale, PL 26.10 Item 18.
  - IQS 2 Background.

GP 9 Machine SIM Card Matrix

Purpose

To identify the SIM cards, Figure 1.

Procedure

Install a SIM card, PL 3.22 Item 17 that is compatible with the speed of machine and the Pagepack requirement:

- PagePack enabled SIMs are indicated by a star.
- PagePack not enabled SIMs are indicated by a triangle.

Refer to Figure 1. Be aware of the points that follow:

- The PagePack function is enabled in all XE installations. Depending on the customer's full service maintenance agreement, the PagePack function may need to be enabled when a USSG/XCL machine is installed in an XE region.
- A new SIM is pre-programmed with the machine speed and either PagePack enabled or not enabled. When the SIM is installed, the machine serial number is permanently written to the SIM. The SIM can not be reused in another machine.
- On the reverse of each SIM card is printed the batch code.

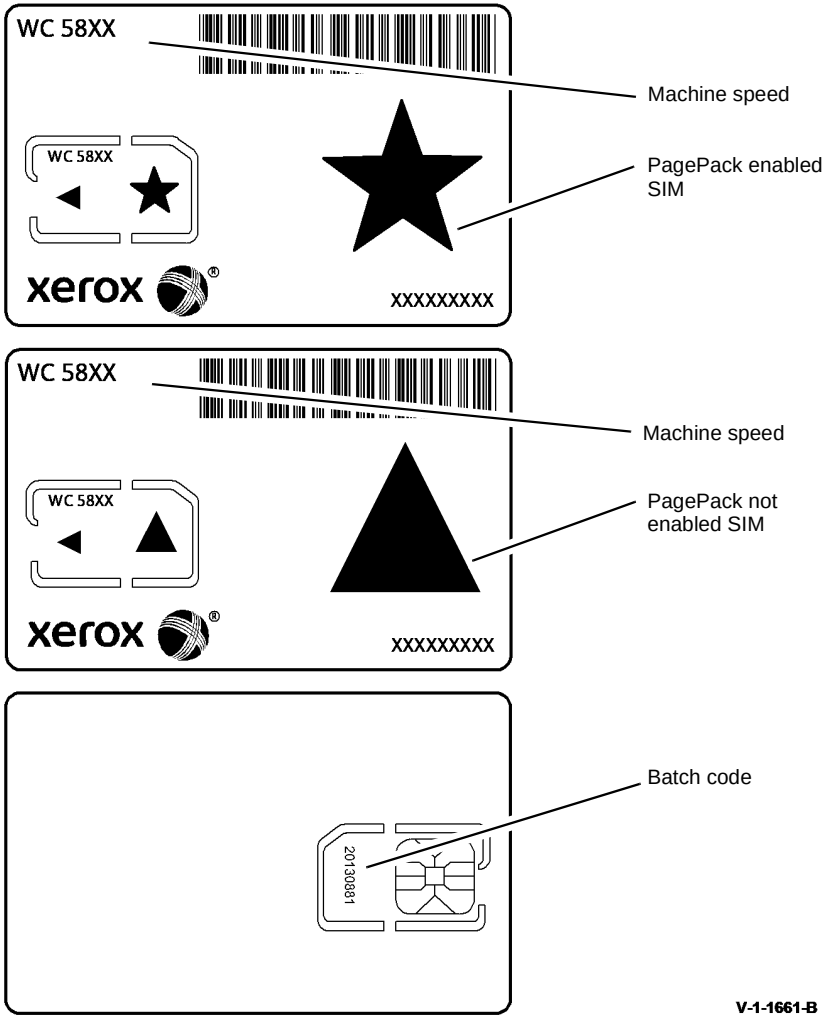


Figure 1 SIM card matrix

GP 10 How to Check a Motor

This procedure describes how to check the following motors:

- Two Wire DC Motors.
- Four Wire Stepper Motor
- Six Wire Stepper Motor.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Check that the motor is free to rotate.
2. Check that all the motors mechanisms are clean, free to move and lubricated correctly.
3. Enter the component control code for the motor, refer to dC330. Run the motor for 30 seconds, if the motor shows signs of or can be heard to slow down, then the motor is defective. Replace the motor.
4. Perform the appropriate procedure:
   - Two Wire DC Motors.
   - Four Wire Stepper Motor.
   - Six Wire Stepper Motor.

   NOTE: *The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the circuit diagram in the RAP for the correct information.*

   NOTE: *For the motors supplied through the IOT PWB, refer to the OF7 IOT Diagnostics RAP.*

Two Wire DC Motors

NOTE: *In cases where the motor may be driven forward or backward, the same two feed wires are used, but the voltages on them are reversed, to reverse the motor direction. Such motors may have two component control codes, for forward and reverse. A typical application is a tray lift motor with a tray-up and a tray-down direction.*

- Go to Flag 2. Disconnect PJB. Check that +24V is measured when the component control code for the motor is entered.
- Go to Flag 1. Disconnect PJA. Check for +24V on the LVPS.
- Go to Flag 3. Disconnect PJC. Check that the signal changes on the IOT PWB when the component control code for the motor is entered.
- Check the wiring and the connectors for the motor circuit.

References:

- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

Four Wire Stepper Motor

NOTE: *A stepper motor with an internal open circuit may appear to be fully functional under dC330 component control. However, under normal operation it will run with intermittent failure. Use the standard digital meter to check that the resistance of the stepper motor coils are similar.*

NOTE: *In some service manuals, the phase winding wires, A, /A, B and /B may be marked: A+, A-, B+ and B-, or as: phase A+, phase A-, phase B+ and phase B-.*

- Go to Flag 6. Disconnect PJH. Check the motor on pulses on the harness when the component control code for the motor is entered.
- Go to Flag 6. Disconnect PJJ. Check the motor on pulses on the harness when the component control code for the motor is entered.
- Check the wiring and the connectors for the motor circuit.

References:

- 301G +24V Distribution RAP.
- 301B 0V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

Six Wire Stepper Motor

NOTE: *A stepper motor with an internal open circuit may appear to be fully functional under dC330 component control. However, under normal operation it will run with intermittent failure. Use the standard digital meter to check that the resistance of the stepper motor coils are similar.*

NOTE: *In some service manuals, the phase winding wires, A, /A, B and /B may be marked: A+, A-, B+ and B-, or as: phase A+, phase A-, phase B+ and phase B-.*

- Go to Flag 5. Disconnect PJF. Check the +24V supply and the motor on pulses when the component control code for the motor is entered.
- Go to Flag 4. Disconnect PJD. Check the +24V, +5V and 0V supplies.
- Go to Flag 4. Check the clock pulses.
- Go to Flag 4. Check that the signal on PJD pin 13 changes when the component control code for the motor is entered.
- Check the wiring and the connectors for the motor circuit.

References:

- 301G +24V Distribution RAP.
- 301E +5V distribution RAP.
- 301B 0V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

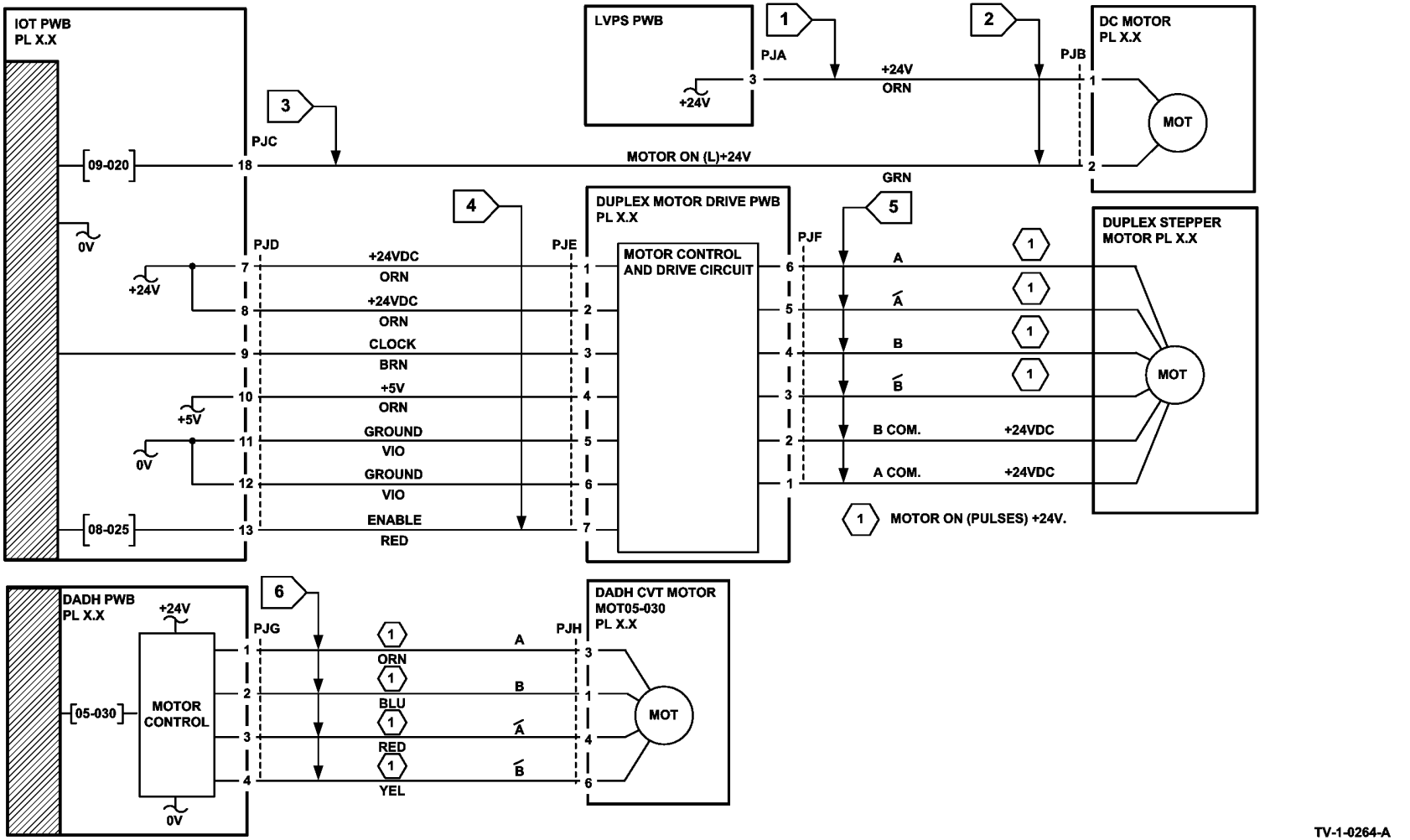


Figure 1 Circuit diagram

GP 11 How to Check a Sensor

Description

Use this procedure to check the operation of all types of sensor except adaptive reflective sensors.

To check the operation of adaptive reflective sensors, refer to GP 36.

NOTE: *The upper circuit diagram, in Figure 1 shows a flag sensor. Some sensors have a resistor within the sensor, other sensors require a resistor on the PWB, such as R1 in Figure 1. The resistor limits the current through the LED. This decreases the voltage on the sensor LED to 1.2V, typically.*

NOTE: *The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the circuit diagram in the RAP for the correct information.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Make sure that the sensor is installed correctly.
2. Clean the sensor and the area around the sensor.
3. If a flag actuator is installed, check that it has free movement.
4. Check that the paper path is clear.
5. If the sensor activates by a surface that reflects, check that the surface is clean. Also make sure that there is not an obstruction between the sensor and the surface.
6. If the sensor actuates by an encoder disc, ensure the holes or gaps in the disc are aligned correctly with the sensor.

Sensor Action

In the upper sensor, in Figure 1, when light from the LED is allowed to fall on the photo-sensitive transistor, the sensing line, PJA, pin2, is low. When light from the LED is blocked by the flag, the sensing line is high.

In the lower sensor in Figure 1, when light from the LED is reflected by the paper onto the photo-sensitive transistor, the sensing line, PJE, pin 2 is low. When no paper is present, no light falls on the transistor and the sensing line is high.

Quick Sensor Check

Enter the component control code for the sensor, refer to dC330. Activate the sensor. If the display changes, the sensor operates correctly. If the display does not change, perform the procedure.

Procedure

For the upper sensor in Figure 1:

- Go to Flag 1. Disconnect PJA. Check for +3.3V and 0V at PJA on the harness.
- Go to Flag 2. Disconnect PJC. Check the wiring and the connectors for the sensor circuit.
- Go to Flag 2. Check for +3.3V and 0V at PJC on the IOT PWB.
- If necessary, install new components or repair the wiring.

References:

- 301B 0V Distribution RAP.
- 301D +3.3V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

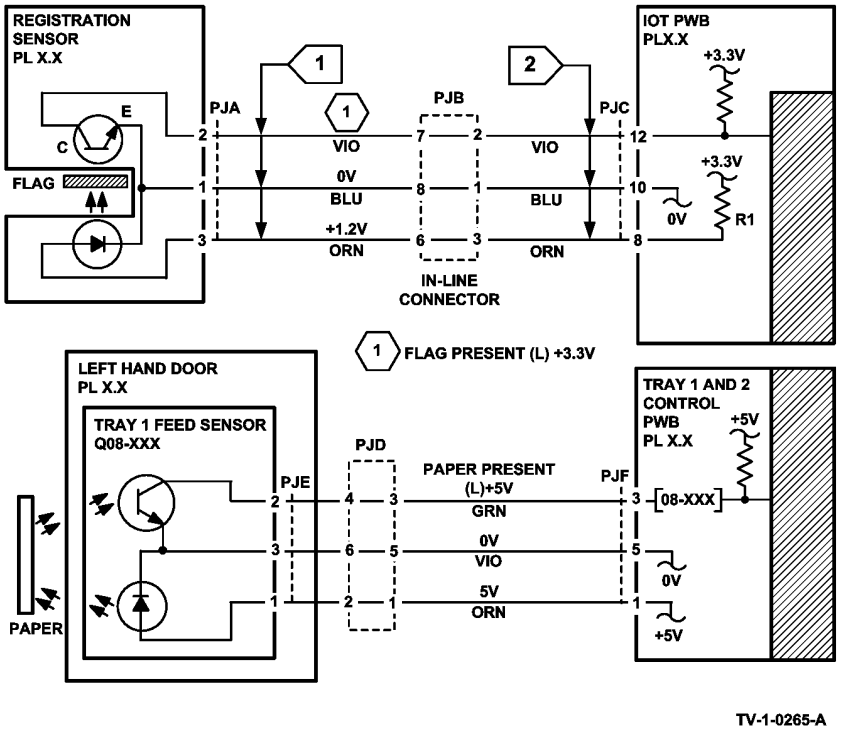


Figure 1 Circuit diagram

GP 12 How to Check a Solenoid or Clutch

Description

Use this procedure to check a clutch or solenoid.

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a clutch, check that the mechanical components are clean, free to move and are lubricated correctly
2. For a solenoid, check that the armature and associated mechanical components are free to move.

Procedure

NOTE: *The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the circuit diagram in the RAP for the correct information.*

NOTE: *When a solenoid is energized in service mode, armature movement is seen. When a clutch is energized in service mode, the sound of the clutch action is heard. If possible, energize the motor connected to the clutch to confirm when the clutch is energized.*

- Go to Flag 1. Check that the signal changes on the IOT PWB when the component control code for the clutch or solenoid is entered.
- Go to Flag 2. Disconnect PJC. Check that +24V is measured when the component control code for the clutch or solenoid is entered.
- Go to Flag 3. Disconnect PJD. Check for +24V on the LVPS.
- Check the wiring and the connectors for the clutch or solenoid circuit.

References:

- 301B 0V Distribution RAP.
- 301G +24V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

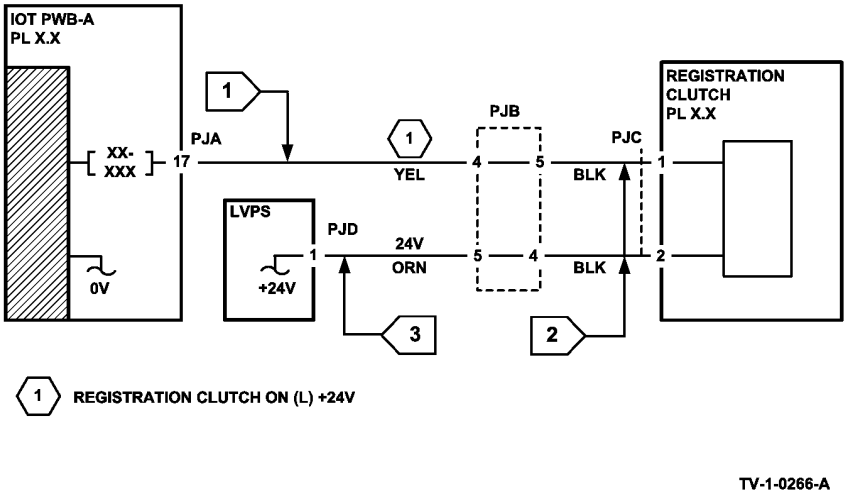


Figure 1 Circuit diagram

GP 13 How to Check a Switch

Description

Use this procedure to check the operation of a switch.

NOTE: *The circuit in Figure 1 shows an interlock switch activated by the closing of a door.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Manually check that the switch operates. Ensure that the magnet or other actuator has enough mechanical movement to operate the switch.

NOTE: *The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the circuit diagram in the RAP for the correct information.*

Procedure

- Go to Flag 1. Disconnect PJA. Check the electrical operation of the switch.
- Go to Flag 1. Disconnect PJB. Check for +5V and 0V on the IOT PWB.
- Go to Flag 1. Check the wiring and the connectors for the switch circuit.

References:

- 301B 0V Distribution RAP.
- 301E +5V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

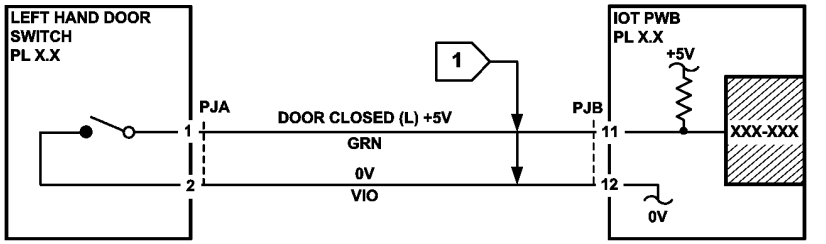


Figure 1 Circuit diagram

GP 14 How to Switch Off the Machine or Switch On the Machine

Purpose

To show how to switch off or switch on the machine, without the loss of customer data or damage to the system hardware.

WARNING

Do not use the power button as a safety disconnect device. The power button is not a disconnect device. Disconnect the power cord from the supply to isolate the equipment.

Refer to:

- Switch Off Procedure
- Switch Off Failure Procedure
- Quick Restart
- Switch On Procedure
- Energy Saver Mode

Switch Off Procedure

CAUTION

Do not disconnect the power lead or interrupt the electricity supply before the power down is complete unless advised. The data and software can become damaged.

1. Press the Power button on the UI, Figure 1. The power down options window will display.

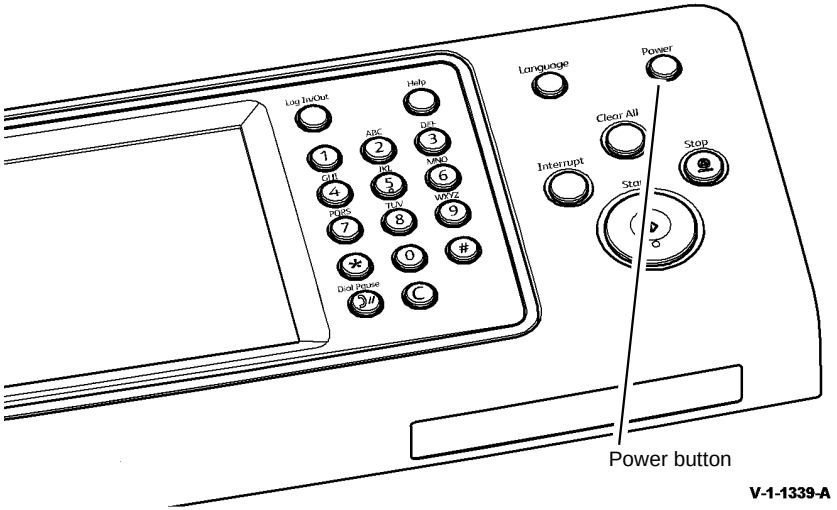


Figure 1 Power button

2. Touch the Power Off button on the UI touch screen.
3. When the machine has switched off, remove the power lead from the outlet.
4. If the machine does not switch off, go to the Switch Off Failure Procedure.

General

1. When Power Off is selected, the machine should power down automatically. This should take approximately 30 seconds. The Powering Down screen will be displayed.
2. If possible, the system finishes all jobs.
3. The machine stops processing all jobs that remain in the queue.
4. A warning message displays on the UI.
5. If a module does not respond and the power down is possible, the power down completes after a maximum of 2 minutes.

Switch Off Failure Procedure

1. If the machine fails to switch off, press the Power button, Figure 1, for approximately 6 seconds. The machine should switch off immediately.
2. If the machine still fails to switch off, disconnect the power cord.
3. If necessary, reconnect the power cord after two minutes.
4. If the machine fails to power down again, perform the 303F Switch Off Failure RAP.

Quick Restart

The quick restart causes the system to reset the software of the single board controller PWB, the IOT PWB and the GUI.

1. Press the Power button on the UI, Figure 1. The power down options window will display.
2. Touch the Quick Restart button on the UI touch screen.

Switch On Procedure

1. After the machine has been switched off, wait a minimum of two minutes before the machine is switched on.
2. After a service call, ensure that all service tools are removed from the machine.
3. Connect the power lead from the power supply outlet to the machine.
4. Press the Power button on the UI, Figure 1.
5. The machine will perform a power on self test (POST). The POST checks that the hardware resources are available to run the operating system. If a POST fault is detected, the machine is prevented from booting. The fault is communicated via a 7-Segment LED display unit on the rear of the machine attached to the SBC PWB. Refer to the OF2 POST Error Rap.
6. If the machine does not initialize, go to the appropriate RAP as follows:
   - If the machine switches on, but the UI is blank, go to the 302A UI Touch Screen Failure RAP.
   - If the machine does not respond, go to the OF3 Dead Machine RAP.
   - If the machine switches on, but does not respond, go to the OF5 Boot Up Failure RAP.

General

1. When the power lead is connected, the LVPS +3.3VSB supply is energized. The LVPS +3.3VSB supply provides +3.3VSB to the IOT PWB.
2. When the Power button is pressed, the LVPS is energized. The +3.3V, +5V, +12V, +24V and AC voltage for the auxiliary output sockets and fuser module is distributed.
3. Each module manages its power-on self-test (POST) and power-up sequence.

NOTE: *Refer to GP 22 Electrical Power requirements for further information.*

Energy Saver Mode

Energy Saver mode is selected from the Power Down window. When pressed, the machine should enter Energy Saver mode within 30 seconds.

NOTE: *If the energy saver feature is disabled, the option is not displayed. Refer to GP 22 Electrical Power Requirements for further information.*

GP 15 Remote Diagnostics

Purpose

To show how to remotely log onto the machine and use diagnostics.

Procedure

1. Before starting this procedure, contact the customer to check that remotely accessing the machine is convenient. Also ask the customer for the IP address of the machine.

   NOTE: *The IP address of the machine is printed on the configuration report.*

   It may also be necessary to get access to the machine through the customers firewall. This procedure may be OPCO dependent. Contact your local OPCO.

   NOTE: *If the machine UI is busy, session timer active, then the remote diagnostics will need to be accepted at the machine UI. Alternatively, wait until the machine UI is not busy.*

2. Make sure that remote diagnostic login is enabled. Perform the following:
   a. Open a web browser. Enter the machine's IP address in the web browser Address field, then press the enter key. The machine's web page will open.
   b. Select Support.
   c. Select Remote Control Panel, then Edit.
   d. In the Login window, enter the User Name 'admin' (case sensitive) and the Password '1111' (default setting). Click Login.
   e. In the Enablement window, select Enable, then For Admin and Diagnostic Users Only. Click on Save.

      NOTE: *Remote UI is disabled by default.*

   f. To prevent a local user overriding remote selections, in the Access window, select Block Local Control Panel (user can only observe).
   g. Select Logout, Figure 1. In the Logout window, click on Logout.

Figure 1 Logout / Login

3. Access remote diagnostics. Perform the following;
   a. Select Login, Figure 1.
   b. In the Login window, enter the User Name ‘diag’ (case sensitive) and the Password ‘3424’. Select Login.
   c. Select Remote Control Panel.
   d. To prevent a local user overriding remote selections, in the Access window, select Block Local Control Panel (user can only observe). Click on Open Remote Control Panel.
   e. The remote UI will now open and a Service Diagnostics button is available on the remote UI, Figure 2.

NOTE: *The message ‘Remote session is active’ is displayed to inform local users that the machine is being accessed remotely.*

Figure 2 Service Diagnostics button

   f. Click on Service Diagnostics. In the Login window, enter the passcode ‘6789’. Select Enter.
   g. The machine will enter diagnostics (Service Mode). All diagnostic functions are available, refer to GP 1 Service Mode.
   h. To exit Service Mode, select Call Closeout, then Exit.

      NOTE: *If the remote UI session is closed without exiting diagnostics, the machine will remain in diagnostics and the remote UI will not be accessible.*

   i. Close the remote UI window.
   j. Select Login, Figure 1. In the Logout window, click on Logout.

GP 16 How to Safely Lift or Move Heavy Modules

Purpose

Use this procedure when lifting or moving heavy modules.

Procedure

When removing heavy modules from the machine, the following instructions must be observed:

1. Ensure that a suitable stable surface to support the module after removal is located in close proximity to the machine.

   NOTE: *Other parts of the machine are not a suitable stable surface.*

2. Ensure that the height of the support surface is between 750mm and 1000mm (30 inches and 39 inches).
3. Ensure that there are no hazards or obstacles between the machine and the support surface.
4. If instructed to remove the module toward the rear of the machine and only one person is available, the module must be removed while standing at the rear of the machine. If two people are available, the module may be removed while standing at the front of the machine.
5. Two people are required if the module is to be lifted on to the floor or lifted from the floor.

GP 17 How to Re-Enter Optional Feature Installation Keys

Purpose

To explain how to re-enter optional feature installation keys if they fail to reload after an Altboot.

NOTE: *McAfee Integrity Control and XPS are the optional features available on the WorkCentre 5890F.*

Procedure

Perform the following:

1. Obtain the valid Feature Installation key(s) by either:
   a. Asking the customer.
   b. Logging onto the SWAP portal, www.xeroxlicensing.xerox.com/fik. From the Welcome screen, select Find an existing key. Enter the machine serial number in the window, then select Next.
   c. Contacting the Licensing Admin Centre (USSG/XCL) or the Xerox sales representative (XE/DMO).
2. Enter the Feature Installation key(s). Perform the following:
   a. Press the Machine Status key.
   b. Select the Tools tab.
   c. Select Device Settings, then General.
   d. Select Feature Installation. Enter the Feature Installation key, then select OK. If necessary, enter the second Feature Installation key.

GP 18 Machine Lubrication

Purpose

To give information on the use of lubricants.

Procedure

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Only use lubricants as directed. Incorrect use of lubricants could seriously affect the performance of the machine.

Take the following precautions when performing machine lubrication:

- Wear disposable gloves, PL 26.10 Item 10.
- Only use lubricants that are specified in the Parts List.
- Only lubricate parts of the machine as directed in the relevant RAPs, Repairs and Adjustments, etc.
- Apply only the smallest amount of lubricant, sufficient to lubricate the parts. To prevent contamination, remove any surplus lubricant before the machine is run.
- Take great care not to contaminate other parts of the machine with the lubricant.

GP 19 Network Clone Procedure

Purpose

To save and restore the customers unique network configuration setting.

The clone file (to hard disk) must be performed at the first service call and whenever the customer changes the network settings or after the system software is changed.

Procedure

How to Save a Clone File

1. On the customer's workstation, open the web browser. Enter the machines IP address in the web browser Address field, then press the enter key. The machine web page will open.

   ***NOTE:** . Refer to the configuration report for the machines IP address.*

2. Click on Properties.
3. Enter the Administrator User ID and Password. Refer to GP 24 Customer Administration Tools.
4. Select General Setup.
5. Select Cloning.
6. Select the relevant settings to clone.
7. Click on Clone.
8. In the Cloning Instructions area, right click on the (Cloning.dlm) link. Select Save Target As.
9. Ask the customer to specify a file name and location.

   ***NOTE:** . Ensure the file extension is .dlm.*

10. Select Save.

How to Install a Clone File - Option 1

1. On the customers workstation, open the web browser. Enter the machine IP address in the web browser address field. Then press the Enter key. The machine web page will open.

   ***NOTE:** . Refer to the configuration report for the machine IP address.*

2. Click on Status.
3. Select Welcome.
4. Click on I Have A Cloning File.
5. Enter the Administrator User ID and Password.
6. Scroll down to the Install Clone File area. Click on Browse to locate the relevant clone file.
7. Click on Save.

   ***NOTE:** . The machine will reboot and be unavailable for several minutes.*

How to Install a Clone File - Option 2

1. On the customers workstation, open the web browser. Enter the machine IP address in the web browser address field. Then press the Enter key. The machine web page will open.

   ***NOTE:** Refer to the configuration report for the machine IP address.*

2. Click on Properties, then General Setup, then Cloning.
3. Scroll down to the Install Clone File area. Click on Browse to locate the relevant clone file.
4. Click on Install.

   ***NOTE:** . The machine will reboot and be unavailable for several minutes.*

GP 20 Paper and Media Size Specifications

Purpose

To list the paper and media size specifications.

Specifications

The baseline papers used in this specification, are defined as:

- Xerox 4200 (20lb / 75 gsm) 8.5 x 11 inch paper.
- Xerox Premier TCF 80 gsm A4 paper.

The machine design and performance is optimized for these papers.

NOTE: *Check that the paper tray settings match the paper size in the tray.*

Refer to the following:

- Table 1 Performance indication. Use this table to determine the meaning of the alpha numeric codes in Table 2 and Table 3.
- Table 2 European papers.
- Table 3 American papers.
- Table 4 U.S. paper weight conversion. Use this table to determine approximate equivalent points in weight specifications other than for U.S. bond weight.
- Table 5 Input / output paper sizes. The table defines the paper sizes that are recognized by the SPDH, document glass and the paper trays when using an OCT output device.
- Table 6 1K LCSS output paper sizes. The table defines the paper sizes that can be delivered to the output trays of a 1K LCSS.
- Table 7 2K LCSS output paper sizes. The table defines the paper sizes that can be delivered to the output trays of a 2K LCSS.
- Table 8 HVF output paper sizes. The table defines the paper sizes that can be delivered to the output bins of the HVF.
- Table 9LVF BM output paper sizes. The table defines the paper sizes that can be delivered to the output bins of the LVF BM.
- Table 10 Output stock performance. The table shows the media (stock) performance constraints for the output. Performance will not be guaranteed for media not listed in the table. Media that is smaller than 139 mm (5.5 inches) in either the process or cross process direction cannot be duplexed.
- Table 11 Input document material definitions.
- Table 12 Input document quality definitions.
- Envelope Specifications

Table 1 Performance indication

Code	Description
3	Excellent performance
2	Good performance (Good image quality, some jams and poor stacking)
1	Degraded performance (Image quality defects, increased jams or bad stacking)
X	Not recommended (outside of specification)
N	Size unrecognized and not acceptable
U	Size unrecognized but acceptable
Y	Size recognized and accepted

Table 2 European papers

Paper Size	Paper Weight gsm	Feed Direction	Paper Type	Tray 1/2	Tray 3/4	Bypass	Duplex		Defects
A4	60	LEF	Plain paper	2	2	2	2	2	Duplex show through
A4	60	SEF	Plain paper	2	X	2	2	X	Duplex show through
A4	61 - 120	LEF	Plain paper	3	3	3	3	3	None
A4	61 - 120	SEF	Plain paper	3	X	3	3	X	None
A4	121 - 200	LEF	Plain paper	2	2	2	2	2	None
A4	121 - 200	SEF	Plain paper	2	X	2	2	X	None
A4	201 - 216	LEF / SEF	Plain paper	X	X	2	X	X	None
A4	-	LEF / SEF	Labels (see NOTE 2)	X	X	2	X	X	None
A4	-	LEF / SEF	Plain transparency	X	X	2	X	X	None
A4	-	LEF	White strip transparency	X	X	2	X	X	None
A4	-	SEF	White strip transparency	X	X	X	X	X	Out of specification
A4	-	LEF	Paper backed transparency	X	X	2	X	X	None
A4	-	SEF	Paper backed transparency	X	X	X	X	X	Out of specification
Oversize A4	-	LEF	Tabs	2	X	2	X	X	Productivity reduction
Oversize A4	-	LEF	Covers	2	X	2	X	X	Productivity reduction

Table 2 European papers

Paper Size	Paper Weight gsm	Feed Direction	Paper Type	Tray 1/2	Tray 3/4	Bypass	Duplex		Defects
A3	60	SEF	Plain paper	2	X	2	1	X	Curl
A3	61 - 120	SEF	Plain paper	3	X	3	3	X	None
A3	120 - 161	SEF	Plain paper	2	X	2	2	X	None
A3	161 - 200	SEF	Plain paper	2	X	2	1	X	Mis-registration and skew
A5	60	LEF	Plain paper	2	X	2	1	X	Curl
A5	60	SEF	Plain paper	X	X	2	1	X	Curl
A5	61 - 120	LEF	Plain paper	3	X	3	3	X	None
A5	61 - 120	SEF	Plain paper	X	X	3	3	X	None
A5	121 - 200	LEF	Plain paper	2	X	2	2	X	None
A5	121 - 200	SEF	Plain paper	X	X	2	1	X	Mis-registration and skew
A6	60	LEF	Plain paper	X	X	X	X	X	Out of specification.
A6	60	SEF	Plain paper	X	X	2	X	X	Out of specification.
A6	61 - 120	LEF	Plain paper	X	X	X	X	X	Out of specification.
A6	61 - 120	SEF	Plain paper	X	X	3	X	X	Out of specification.
A6	121 - 200	LEF	Plain paper	X	X	X	X	X	Out of specification.
A6	121 - 200	SEF	Plain paper	X	X	1	X	X	Out of specification.
A4	60	LEF / SEF	Nekosa	1	1	1	1	1	Jams
8.5 x 12.4 inch	All	SEF	Spanish Folio	2	X	2	2	X	Not tested
A4	200	LEF / SEF	Premier TCF	2	2	2	2	2	Poor fusing on 45-65 ppm machines.
All	All	LEF / SEF	Envelopes (see NOTE 1)	2	X	2	X	X	Wrinkle
All	100	LEF / SEF	Conqueror finely ridged laid	2	2	2	2	2	Poor fusing on 45-65 ppm machines.
All	80	LEF / SEF	Recycled	1	1	1	1	1	Excessive curl
Any	Any	LEF / SEF	Jobs with covers	1	X	1	1	X	Rear cover of stapled sets of more than 35 sheets plus 2 covers, may be mis-registered in the 1K LCSS, 2K LCSS and LVF BM.
All	200	LEF / SEF	Colortech (coated paper)	2	2	2	2	2	Stapling more than 10 sheets not recommended
A4	200	LEF / SEF	Beaverboard	2	2	2	2	2	Poor fusing on 45-65 ppm machines.

NOTE: *1. An optional envelope tray kit is required to feed envelopes from tray 2.*

NOTE: *2. Enablement required to feed labels from tray 1 or tray 2.*

Table 3 American papers

Paper Size inches	Paper Weight US bond lb.	Feed Direction	Paper Type	Tray 1/2	Tray 3/4	Bypass	Duplex		Defects
8.5 x 11	16	LEF	Plain paper	2	2	2	2	2	Duplex show through
8.5 x 11	16	SEF	Plain paper	2	X	2	2	X	Duplex show through
8.5 x 11	20 - 32	LEF	Plain paper	3	3	3	3	3	None
8.5 x 11	20 - 32	SEF	Plain paper	3	X	3	3	X	None
8.5 x 11	34 - 53	LEF	Plain paper	2	2	2	2	2	None
8.5 x 11	34 - 53	SEF	Plain paper	2	X	2	2	X	None

Table 3 American papers

Paper Size inches	Paper Weight US bond lb.	Feed Direction	Paper Type	Tray 1/2	Tray 3/4	Bypass	Duplex		Defects
8.5 x 11	57	LEF / SEF	Plain paper	X	X	2	X	X	None
8.5 x 11	-	LEF / SEF	Labels (see NOTE 2)	2	X	2	X	X	None
8.5 x 11	-	LEF / SEF	Plain transparency	X	X	2	X	X	None
8.5 x 11	-	LEF	White strip transparency	X	X	2	X	X	None
8.5 x 11	-	SEF	White strip transparency	X	X	X	X	X	Out of specification
8.5 x 11	-	LEF	Paper backed transparency	X	X	2	X	X	None
8.5 x 11	-	SEF	Paper backed transparency	X	X	X	X	X	Out of specification
Oversize 8.5 x 11	-	LEF	Tabs	2	X	2	X	X	Productivity reduction
Oversize 8.5 x 11	-	LEF	Covers	2	X	2	X	X	Productivity reduction
11 x 17	16	SEF	Plain paper	2	X	2	1	X	Curl
11 x 17	20 - 32	SEF	Plain paper	3	X	3	3	X	None
11 x 17	34 - 53	SEF	Plain paper	2	X	2	1	X	Mis-registration and skew
8.5 x 14	16	SEF	Plain paper	2	X	2	1	X	Curl
8.5 x 14	20 - 32	SEF	Plain paper	3	X	3	3	X	None
8.5 x 14	34 - 53	SEF	Plain paper	2	X	2	1	X	Mis-registration and skew
8.5 x 5.5	16	LEF	Plain paper	2	X	2	1	X	Not tested
8.5 x 5.5	16	SEF	Plain paper	X	X	2	1	X	Not tested
8.5 x 5.5	20 - 32	LEF	Plain paper	3	X	3	3	X	Not tested
8.5 x 5.5	20 - 32	SEF	Plain paper	X	X	3	3	X	Not tested
8.5 x 5.5	34 - 53	LEF	Plain paper	2	X	2	2	X	Not tested
8.5 x 5.5	34 - 53	SEF	Plain paper	X	X	2	1	X	Not tested
5.5 x 4.25	16	LEF	Plain paper	X	X	X	X	X	Out of specification.
5.5 x 4.25	16	SEF	Plain paper	X	X	2	X	X	Out of specification.
5.5 x 4.25	20 - 32	LEF	Plain paper	X	X	X	X	X	Out of specification.
5.5 x 4.25	20 - 32	SEF	Plain paper	X	X	3	X	X	Out of specification.
5.5 x 4.25	34 - 53	LEF	Plain paper	X	X	X	X	X	Out of specification.
5.5 x 4.25	34 - 53	SEF	Plain paper	X	X	1	X	X	Out of specification.
All	All	LEF / SEF	Envelopes (see NOTE 1)	2	X	2	X	X	Wrinkle
11 x 17	32	SEF	Domtar (10% recycled)	1	X	1	1	X	Bad stacking due to curl
8.5 x 11	110	LEF / SEF	Bristol Vellum	2	2	2	2	2	Poor fusing on 45-65 ppm machines.
Any	Any	LEF / SEF	Jobs with covers	1	1	1	1	1	Rear cover of stapled sets of more than 35 sheets plus 2 covers, may be mis-registered in the 1K LCSS, 2K LCSS and LVF BM.

NOTE: *1. An optional envelope tray kit is required to feed envelopes from tray 2.*

NOTE: *2. Enablement required to feed labels from tray 1 or tray 2.*

Table 4 U.S. paper weight conversion

US post card thickness (mm) (see NOTE)	US bond weight (lb.)	US text / book weight (lb.)	US cover weight (lb.)	US Bristol weight (lb.)	US index weight (lb.)	US tag weight (lb.)	Metric weight (gsm)
-	16	41	22	27	33	37	60
-	17	43	24	29	35	39	64
-	20	50	28	34	42	46	75
-	21	54	30	36	44	49	80
-	22	56	31	38	46	51	83
-	24	60	33	41	50	55	90
-	27	68	37	45	55	61	100
-	28	70	39	49	58	65	105
-	32	80	44	55	67	74	120
-	34	86	47	58	71	79	128
-	36	90	50	62	75	83	135
0.18	39	100	55	67	82	91	148
0.19	42	107	58	72	87	97	158
0.20	43	110	60	74	90	100	163
0.23	47	119	65	80	97	108	176
0.25	51	128	70	86	105	117	190
0.26	53	134	74	90	110	122	199
0.27	54	137	75	93	113	125	203
0.29	58	146	80	98	120	133	216
0.32	65	165	90	111	135	150	244
0.33	66	169	92	114	138	154	250
0.34	67	171	94	115	140	155	253
0.35	70	178	98	120	146	162	264
0.36	72	183	100	123	150	166	271

NOTE: *U.S. Post Card measurements are approximate. Use for reference only.*

Table 5 Input / output Paper sizes

Paper size			Orientation	Paper tray size sensing				SPDH size sensing			Document glass size sensing			Output device	Notes
Common Name	Inch (W x L) +/-1/32 inch	mm (W x L) +/-1 mm	LEF / SEF	Tray 1 and 2	Bypass tray	Tray 3 and 4	Tray 6	NASG	Eur / Asia	Latin	NASG	Eur / Asia	Latin	OCT	-
Letter	8.5 x 11	216 x 279	SEF	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	-
Letter	8.5 x 11	216 x 279	LEF	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	-

Table 5 Input / output Paper sizes

Paper size			Orientation	Paper tray size sensing				SPDH size sensing			Document glass size sensing			Output device	Notes
Common Name	Inch (W x L) +/-1/32 inch	mm (W x L) +/-1 mm	LEF / SEF	Tray 1 and 2	Bypass tray	Tray 3 and 4	Tray 6	NASG	Eur / Asia	Latin	NASG	Eur / Asia	Latin	OCT	-
Ledger	11 x 17	279 x 432	SEF	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	-
Invoice (statement)	8.5 x 5.5	216 x 138	SEF	N	Y	N	N	Y*	Y*	Y*	Y	Y	Y	Y	*ISO A5 or 8.5 x 5.5 depends on NVM 2 setting
Invoice (statement)	8.5 x 5.5	216 x 138	LEF	Y	Y	N	N	Y*	Y*	Y*	Y	Y	Y	Y	*ISO A5 or 8.5 x 5.5 depends on NVM 2 setting
Postcard	4.25 x 5.5	108 x 139	SEF	N	Y	N	N	N	N	N	Y	U	U	Y	-
Postcard	4.25 x 5.5	108 x 139	LEF	N	N	N	N	N	N	N	U	U	U	N	Cannot be fed in IOT
Legal	8.5 x 14	216 x 356	SEF	Y	Y	N	N	Y	Y	Y	Y	U	U	Y	-
ISO A4	8.26 x 11.69	210 x 297	SEF	Y	Y	N	N	Y*	Y*	Y*	Y	Y	Y	Y	*ISO A4 or 8.5 x 13 depends on NVM 1 setting
ISO A4	8.26 x 11.69	210 x 297	LEF	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	-
ISO A3	11.69 x 16.54	297 x 420	SEF	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	-
ISO A5	5.83 x 8.27	148 x 210	SEF	N	Y	N	N	Y*	Y*	Y*	U	Y	U	Y	*ISO A5 or 8.5 x 5.5 depends on NVM 2 setting
ISO A5	5.83 x 8.27	148 x 210	LEF	Y	Y	N	N	Y*	Y*	Y*	U	Y	U	Y	*ISO A5 or 8.5 x 5.5 depends on NVM 2 setting
ISO A6	4.13 x 5.83	105 x 148	SEF	N	Y	N	N	N	N	N	U	Y	Y	Y	-
ISO A6	4.13 x 5.83	105 x 148	LEF	N	N	N	N	N	N	N	U	U	U	N	-
Foolscap or Euroletter	8.5 x 13	216 x 330	SEF	Y	Y	N	N	Y*	Y*	Y*	U	Y	Y	Y	*ISO A4 or 8.5 x 13 depends on NVM 1 setting
JIS B5	7.17 x 10.12	182 x 257	SEF	U	Y	N	N	U*	U*	U*	Y	Y	Y	Y	* Detected as ISO B5
JIS B5	7.17 x 10.12	182 x 257	LEF	U	Y	N	N	U*	U*	U*	Y	Y	Y	Y	* Detected as ISO B5
JIS B4	10.12 x 14.33	257 x 364	SEF	U	Y	N	N	U*	U*	U*	Y	Y	Y	Y	* Detected as ISO B4
JIS B6	5.08 x 7.17	128 x 182	SEF	N	Y	N	N	N	N	N	Y	Y	Y	Y	-
JIS B6	5.08 x 7.17	128 x 182	LEF	N	N	N	N	U*	U*	U*	U	U	U	Y	* Detected as ISO B5
ISO B5	6.93 x 9.84	176 x 250	SEF	N	U	N	N	Y	Y	Y	U	U	U	Y	-
ISO B5	6.93 x 9.84	176 x 250	LEF	U	U	N	N	Y	Y	Y	U	U	U	Y	-
ISO B4	9.84 x 13.9	250 x 353	SEF	U	U	N	N	Y	Y	Y	Y	Y	Y	Y	-
SB4	9.9 x 14.09	252 x 358	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4
Postcard Lakes	4.5 x 6	114 x 152	SEF	N	U	N	N	N	N	N	U	U	U	Y	-
Postcard Lakes	4.5 x 6	114 x 152	LEF	N	N	N	N	U*	U*	U*	U	U	U	N	* Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting
Postcard	5 x 7	127 x 178	SEF	N	U	N	N	N	N	N	U	U	U	Y	-
Postcard	5 x 7	127 x 178	LEF	N	N	N	N	U*	U*	U*	U	U	U	N	* Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	SEF	N	U	N	N	U*	U*	U*	U	U	U	Y	* Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting

Table 5 Input / output Paper sizes

Paper size			Orientation	Paper tray size sensing				SPDH size sensing			Document glass size sensing			Output device	Notes
Common Name	Inch (W x L) +/-1/32 inch	mm (W x L) +/-1 mm	LEF / SEF	Tray 1 and 2	Bypass tray	Tray 3 and 4	Tray 6	NASG	Eur / Asia	Latin	NASG	Eur / Asia	Latin	OCT	-
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting
6 x 9 inch	6 x 9	152 x 229	SEF	N	U	N	N	U*	U*	U*	U	U	U	U	*Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting
6 x 9 inch	6 x 9	152 x 229	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A5 or 8.5 x 5.5 depending on NVM 2 setting
Royal Octavo	6 x 9.5	152 x 241	SEF	N	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A5 or 8.5 x 5.5 depends on NVM 2 setting
Royal Octavo	6 x 9.5	152 x 241	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B5
Foolscap Quarto	6.5 x 8.25	165 x 206	SEF	N	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B5
Foolscap Quarto	6.5 x 8.25	165 x 206	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
Crown Quarto	7.25 x 9.5	184 x 241	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B5
Crown Quarto	7.25 x 9.5	184 x 241	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B5
Executive	7.25 x 10.5	184 x 267	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
Executive	7.25 x 10.5	184 x 267	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
16K Taiwan	7.64 x 10.51	194 x 267	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
16K Taiwan	7.64 x 10.51	194 x 267	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
Quarto	8 x 10	203 x 254	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
Quarto	8 x 10	203 x 254	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8 x 10.5	203 x 267	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8 x 10.5	203 x 267	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
8 x 13 inch foolscap	8 x 13	203 x 330	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8.26 x 10	210 x 254	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8.26 x 10	210 x 254	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8.26 x 10.63	210 x 270	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8.26 x 10.63	210 x 270	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
-	8.26 x 13	210 x 330	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting
Foolscap Folio	8.25 x 13.06	209 x 333	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting
Demi Quarto	8.46 x 10.7	215 x 273	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11
Demi Quarto	8.46 x 10.7	215 x 273	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as 8.5 x 11

Table 5 Input / output Paper sizes

Paper size			Orientation	Paper tray size sensing				SPDH size sensing			Document glass size sensing			Output device	Notes
Common Name	Inch (W x L) +/-1/32 inch	mm (W x L) +/-1 mm	LEF / SEF	Tray 1 and 2	Bypass tray	Tray 3 and 4	Tray 6	NASG	Eur / Asia	Latin	NASG	Eur / Asia	Latin	OCT	-
-	8.46 x 10.83	215 x 275	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting
-	8.46 x 10.83	215 x 275	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting
Folio (Spain)	8.46 x 12.4	215 x 315	SEF	Y#	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting. #Detected as 8.5 x 13
-	8.66 x 13	220 x 330	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting.
-	8.75 x 11.69	223 x 297	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting.
-	8.75 x 11.69	223 x 297	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting.
Arch A	9 x 12	229 x 305	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO A4 or 8.5 x 13 depends on NVM 1 setting.
SB4	9.92 x 14.09	252 x 258	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4
SB4	9.92 x 14.09	252 x 258	LEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4
Accounting	10 x 14	254 x 356	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4
-	10 x 15	254 x 381	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4
8K Taiwan	10.51 x 15.28	267 x 388	SEF	U	U	N	N	U*	U*	U*	U	U	U	Y	*Detected as ISO B4

Table 6 1K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Bin 0	Bin 1	Corner
Letter	8.5 x 11	216 x 279	SEF	Y	Y	Y
Letter	8.5 x 11	216 x 279	LEF	Y	Y	Y
Ledger	11 x 17	279 x 432	SEF	Y	Y	Y
Invoice (statement)	8.5 x 5.5	216 x 140	SEF	Y	Y	Y
Invoice (statement)	8.5 x 5.5	216 x 140	LEF	Y	Y	Y
Postcard	4.25 x 5.5	108 x 140	SEF	Y	N	N
Postcard	4.25 x 5.5	108 x 140	LEF	N	N	N
Legal	8.5 x 14	216 x 356	SEF	Y	Y	Y
ISO A4	8.26 x 11.69	210 x 297	SEF	Y	Y	Y
ISO A4	8.26 x 11.69	210 x 297	LEF	Y	Y	Y
ISO A3	11.69 x 16.54	297 x 420	SEF	Y	Y	Y
ISO A5	5.83 x 8.27	148 x 210	SEF	Y	Y	Y
ISO A5	5.83 x 8.27	148 x 210	LEF	Y	Y	Y

Table 6 1K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Bin 0**	**Bin 1**	**Corner**
ISO A6	4.13 x 5.83	105 x 148	SEF	Y	N	N
ISO A6	4.13 x 5.83	105 x 148	LEF	N	N	N
Foolscap or Euroletter	8.5 x 13	216 x 330	SEF	Y	Y	Y
JIS B5	7.17 x 10.12	182 x 257	SEF	Y	Y	Y
JIS B5	7.17 x 10.12	182 x 257	LEF	Y	Y	Y
JIS B4	10.12 x 14.33	257 x 364	SEF	Y	Y	Y
JIS B6	5.08 x 7.17	128 x 182	SEF	Y	N	N
JIS B6	5.08 x 7.17	128 x 182	LEF	N	N	N
ISO B5	6.93 x 9.84	176 x 250	SEF	Y	Y	Y
ISO B5	6.93 x 9.84	176 x 250	LEF	Y	Y	Y
ISO B4	9.84 x 13.9	250 x 353	SEF	Y	Y	Y
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	Y
ISO A4 Cover or Tab	8.78 x 11.69	297 x 223	SEF	Y	Y	Y
ISO A4 Cover or Tab	8.78 x 11.69	297 x 223	LEF	Y	Y	Y
Letter Cover or Tab	9 x 11	229 x 279	SEF	Y	Y	Y
Letter Cover or Tab	9 x 11	229 x 279	LEF	Y	Y	Y
Postcard-Lakes	4.5 x 6	114 x 152	SEF	Y	N	N
Postcard-Lakes	4.5 x 6	114 x 152	LEF	N	N	N
Postcard	5 x 7	127 x 178	SEF	Y	N	N
Postcard	5 x 7	127 x 178	LEF	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	SEF	Y	Y	Y
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	LEF	Y	Y	Y
6 x 9 inch	6 x 9	152 x 229	SEF	Y	Y	Y
6 x 9 inch	6 x 9	152 x 229	LEF	Y	Y	Y
Royal Octavo	6 x 9.5	152 x 241	SEF	Y	Y	Y
Royal Octavo	6 x 9.5	152 x 241	LEF	Y	Y	Y
Foolscap Quarto	6.5 x 8.25	165 x 206	SEF	Y	Y	Y
Foolscap Quarto	6.5 x 8.25	165 x 206	LEF	Y	Y	Y
Crown Quarto	7.25 x 9.5	184 x 241	SEF	Y	Y	Y
Crown Quarto	7.25 x 9.5	184 x 241	LEF	Y	Y	Y
Executive	7.25 x 10.5	184 x 267	SEF	Y	Y	Y
Executive	7.25 x 10.5	184 x 267	LEF	Y	Y	Y
16K Taiwan	7.64 x 10.51	194 x 267	SEF	Y	Y	Y
16K Taiwan	7.64 x 10.51	194 x 267	LEF	Y	Y	Y
Quarto	8 x 10	203 x 254	SEF	Y	Y	Y
Quarto	8 x 10	203 x 254	LEF	Y	Y	Y
-	8 x 10.5	203 x 267	SEF	Y	Y	Y
-	8 x 10.5	203 x 267	LEF	Y	Y	Y
-	8 x 13	203 x 330	SEF	Y	Y	Y

Table 6 1K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Bin 0**	**Bin 1**	**Corner**
-	8.26 x 10	210 x 254	SEF	Y	Y	Y
-	8.26 x 10	210 x 254	LEF	Y	Y	Y
-	8.26 x 10.63	210 x 270	SEF	Y	Y	Y
-	8.26 x 10.63	210 x 270	LEF	Y	Y	Y
Foolscap Folio	8.25 x 13.06	209 x 333	SEF	Y	Y	Y
	8.26 x 13	210 x 330	SEF	Y	Y	Y
Demi Quarto	8.46 x 10.7	215 x 273	SEF	Y	Y	Y
Demi Quarto	8.46 x 10.7	215 x 273	LEF	Y	Y	Y
-	8.46 x 10.83	215 x 275	SEF	Y	Y	Y
-	8.46 x 10.83	215 x 275	LEF	Y	Y	Y
Folio (Spain)	8.46 x 12.4	215 x 315	SEF	Y	Y	Y
-	8.66 x 13	220 x 330	SEF	Y	Y	Y
-	8.75 x 11.69	223 x 297	SEF	Y	Y	Y
-	8.75 x 11.69	223 x 297	LEF	Y	Y	Y
Arch A	9 x 12	229 x 305	SEF	Y	Y	Y
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	Y
Accounting	10 x 14	254 x 356	SEF	Y	Y	Y
-	10 x 15	254 x 381	SEF	Y	Y	Y
8K Taiwan	10.51 x 15.28	267 x 388	SEF	Y	Y	Y

Table 7 2K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position			Option
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Bin 0**	**Bin 1**	**Front**	**Rear**	**Dual**	**Hole punch (all types)**
Letter	8.5 x 11	216 x 279	SEF	Y	Y	Y	Y	N	Y
Letter	8.5 x 11	216 x 279	LEF	Y	Y	Y	N	Y	Y
Ledger	11 x 17	279 x 432	SEF	Y	Y	Y	N	Y	Y
Invoice (statement)	8.5 x 5.5	216 x 140	SEF	Y	Y	Y	N	N	N
Invoice (statement)	8.5 x 5.5	216 x 140	LEF	Y	Y	Y	Y	N	Y
Postcard	4.25 x 5.5	108 x 140	SEF	Y	N	N	N	N	N
Postcard	4.25 x 5.5	108 x 140	LEF	N	N	N	N	N	N
Legal	8.5 x 14	216 x 356	SEF	Y	Y	Y	Y	N	Y
ISO A4	8.26 x 11.69	210 x 297	SEF	Y	Y	Y	Y	N	N
ISO A4	8.26 x 11.69	210 x 297	LEF	Y	Y	Y	N	Y	Y
ISO A3	11.69 x 16.54	297 x 420	SEF	Y	Y	Y	N	Y	Y
ISO A5	5.83 x 8.27	148 x 210	SEF	Y	Y	Y	N	N	N
ISO A5	5.83 x 8.27	148 x 210	LEF	Y	Y	Y	N	N	N
ISO A6	4.13 x 5.83	105 x 148	SEF	Y	N	N	N	N	N

Table 7 2K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position			Option
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Bin 0**	**Bin 1**	**Front**	**Rear**	**Dual**	**Hole punch (all types)**
ISO A6	4.13 x 5.83	105 x 148	LEF	N	N	N	N	N	N
Foolscap or Euroletter	8.5 x 13	216 x 330	SEF	Y	Y	Y	Y	N	Y
JIS B5	7.17 x 10.12	182 x 257	SEF	Y	Y	Y	N	N	N
JIS B5	7.17 x 10.12	182 x 257	LEF	Y	Y	Y	N	N	N
JIS B4	10.12 x 14.33	257 x 364	SEF	Y	Y	Y	N	N	N
JIS B6	5.08 x 7.17	128 x 182	SEF	Y	N	N	N	N	N
JIS B6	5.08 x 7.17	128 x 182	LEF	N	N	N	N	N	N
ISO B5	6.93 x 9.84	176 x 250	SEF	Y	Y	Y	N	N	N
ISO B5	6.93 x 9.84	176 x 250	LEF	Y	Y	Y	N	N	N
ISO B4	9.84 x 13.9	250 x 353	SEF	Y	Y	Y	N	N	N
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	Y	N	N	N
ISO A4 Cover or Tab	8.78 x 11.69	297 x 223	SEF	Y	Y	Y	N	N	N
ISO A4 Cover or Tab	8.78 x 11.69	297 x 223	LEF	Y	Y	Y	N	N	N
Letter Cover or Tab	9 x 11	229 x 279	SEF	Y	Y	Y	N	N	N
Letter Cover or Tab	9 x 11	229 x 279	LEF	Y	Y	Y	N	N	N
Postcard-Lakes	4.5 x 6	114 x 152	SEF	Y	N	N	N	N	N
Postcard-Lakes	4.5 x 6	114 x 152	LEF	N	N	N	N	N	N
Postcard	5 x 7	127 x 178	SEF	Y	N	N	N	N	N
Postcard	5 x 7	127 x 178	LEF	N	N	N	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	SEF	Y	Y	Y	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	LEF	Y	Y	Y	Y	N	N
6 x 9 inch	6 x 9	152 x 229	SEF	Y	Y	Y	N	N	N
6 x 9 inch	6 x 9	152 x 229	LEF	Y	Y	Y	N	N	N
Royal Octavo	6 x 9.5	152 x 241	SEF	Y	Y	Y	N	N	N
Royal Octavo	6 x 9.5	152 x 241	LEF	Y	Y	Y	N	N	N
Foolscap Quarto	6.5 x 8.25	165 x 206	SEF	Y	Y	Y	N	N	N
Foolscap Quarto	6.5 x 8.25	165 x 206	LEF	Y	Y	Y	Y	N	N
Crown Quarto	7.25 x 9.5	184 x 241	SEF	Y	Y	Y	N	N	N
Crown Quarto	7.25 x 9.5	184 x 241	LEF	Y	Y	Y	N	N	N
Executive	7.25 x 10.5	184 x 267	SEF	Y	Y	Y	N	N	N
Executive	7.25 x 10.5	184 x 267	LEF	Y	Y	Y	N	N	N
16K Taiwan	7.64 x 10.51	194 x 267	SEF	Y	Y	Y	N	N	N
16K Taiwan	7.64 x 10.51	194 x 267	LEF	Y	Y	Y	N	N	N
Quarto	8 x 10	203 x 254	SEF	Y	Y	Y	Y	N	N
Quarto	8 x 10	203 x 254	LEF	Y	Y	Y	N	N	N
-	8 x 10.5	203 x 267	SEF	Y	Y	Y	Y	N	N
-	8 x 10.5	203 x 267	LEF	Y	Y	Y	N	N	N
-	8 x 13	203 x 330	SEF	Y	Y	Y	Y	N	N
-	8.26 x 10	210 x 254	SEF	Y	Y	Y	Y	N	N

Table 7 2K LCSS output paper sizes

Paper Size			Orientation	Output		Staple position			Option
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Bin 0**	**Bin 1**	**Front**	**Rear**	**Dual**	**Hole punch (all types)**
-	8.26 x 10	210 x 254	LEF	Y	Y	Y	N	N	N
-	8.26 x 10.63	210 x 270	SEF	Y	Y	Y	Y	N	N
-	8.26 x 10.63	210 x 270	LEF	Y	Y	Y	N	N	N
Foolscap Folio	8.25 x 13.06	209 x 333	SEF	Y	Y	Y	Y	N	N
	8.26 x 13	210 x 330	SEF	Y	Y	Y	Y	N	N
Demi Quarto	8.46 x 10.7	215 x 273	SEF	Y	Y	Y	Y	N	N
Demi Quarto	8.46 x 10.7	215 x 273	LEF	Y	Y	Y	N	N	N
-	8.46 x 10.83	215 x 275	SEF	Y	Y	Y	Y	N	N
-	8.46 x 10.83	215 x 275	LEF	Y	Y	Y	N	N	N
Folio (Spain)	8.46 x 12.4	215 x 315	SEF	Y	Y	Y	Y	N	N
-	8.66 x 13	220 x 330	SEF	Y	Y	Y	Y	N	N
-	8.75 x 11.69	223 x 297	SEF	Y	Y	Y	N	N	N
-	8.75 x 11.69	223 x 297	LEF	Y	Y	Y	N	Y	Y
Arch A	9 x 12	229 x 305	SEF	Y	Y	Y	N	N	N
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	Y	N	N	N
Accounting	10 x 14	254 x 356	SEF	Y	Y	Y	N	N	N
-	10 x 15	254 x 381	SEF	Y	Y	Y	N	N	N
8K Taiwan	10.51 x 15.28	267 x 388	SEF	Y	Y	Y	N	N	N

Table 8 HVF output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	**Inch (W x L)**	**mm (W x L)**	**LEF / SEF**	**Top Tray**	**Bin 1**	**Bin 2**	**Front**	**Rear**	**Dual**	**Multiple**	**Hole punch (all types)**
Letter	8.5 x 11	216 x 279	SEF	Y	Y	Y	Y	Y	Y	Y	Y
Letter	8.5 x 11	216 x 279	LEF	Y	Y	N	Y	Y	Y	Y	Y
Ledger	11 x 17	279 x 432	SEF	Y	Y	Y	Y	Y	Y	Y	Y
Invoice (statement)	8.5 x 5.5	216 x 140	SEF	Y	Y	N	N	N	N	N	N
Invoice (statement)	8.5 x 5.5	216 x 140	LEF	Y	Y	N	Y	Y	Y	Y	Y
Postcard	4.25 x 5.5	108 x 140	SEF	Y	N	N	N	N	N	N	N
Postcard	4.25 x 5.5	108 x 140	LEF	N	N	N	N	N	N	N	N
Legal	8.5 x 14	216 x 356	SEF	Y	Y	Y	Y	Y	Y	Y	Y
ISO A4	8.26 x 11.69	210 x 297	SEF	Y	Y	Y	Y	Y	Y	Y	N
ISO A4	8.26 x 11.69	210 x 297	LEF	Y	Y	N	Y	Y	Y	Y	Y
ISO A3	11.69 x 16.54	297 x 420	SEF	Y	Y	Y	Y	Y	Y	Y	Y
ISO A5	5.83 x 8.27	148 x 210	SEF	Y	Y	N	N	N	N	N	N
ISO A5	5.83 x 8.27	148 x 210	LEF	Y	Y	N	Y	Y	Y	Y	N
ISO A6	4.13 x 5.83	105 x 148	SEF	Y	N	N	N	N	N	N	N

Table 8 HVF output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Top Tray	Bin 1	Bin 2	Front	Rear	Dual	Multiple	Hole punch (all types)
ISO A6	4.13 x 5.83	105 x 148	LEF	N	N	N	N	N	N	N	N
Foolscap or Euroletter	8.5 x 13	216 x 330	SEF	Y	Y	Y	Y	Y	Y	Y	Y
JIS B5	7.17 x 10.12	182 x 257	SEF	Y	Y	N	Y	Y	Y	Y	N
JIS B5	7.17 x 10.12	182 x 257	LEF	Y	Y	N	Y	Y	Y	Y	N
JIS B4	10.12 x 14.33	257 x 364	SEF	Y	Y	N	Y	Y	Y	Y	N
JIS B6	5.08 x 7.17	128 x 182	SEF	Y	N	N	N	N	N	N	N
JIS B6	5.08 x 7.17	128 x 182	LEF	N	N	N	N	N	N	N	N
ISO B5	6.93 x 9.84	176 x 250	SEF	Y	Y	N	Y	N	N	N	N
ISO B5	6.93 x 9.84	176 x 250	LEF	Y	Y	N	Y	Y	Y	Y	N
ISO B4	9.84 x 13.9	250 x 353	SEF	Y	Y	N	Y	Y	Y	Y	N
ISO A4 Cover	8.78 x 11.69	297 x 223	SEF	Y	Y	N	Y	Y	Y	Y	N
ISO A4 Cover	8.78 x 11.69	297 x 223	LEF	Y	Y	N	Y	Y	Y	Y	N
ISO A4 Tab Stock	-	-	LEF	Y	Y	N	Y	Y	Y	Y	Y
Letter Cover	9 x 11	229 x 279	SEF	Y	Y	N	Y	Y	Y	Y	N
Letter Cover	9 x 11	229 x 279	LEF	Y	Y	N	Y	Y	Y	Y	N
8.5 x 11 inch Tab Stock	-	-	LEF	Y	Y	N	Y	Y	Y	Y	Y
Postcard-Lakes	4.5 x 6	114 x 152	SEF	Y	Y	N	N	N	N	N	N
Postcard-Lakes	4.5 x 6	114 x 152	LEF	N	N	N	N	N	N	N	N
Postcard	5 x 7	127 x 178	SEF	Y	Y	N	N	N	N	N	N
Postcard	5 x 7	127 x 178	LEF	N	N	N	N	N	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	SEF	Y	Y	N	N	N	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	LEF	Y	Y	N	Y	Y	Y	Y	N
6 x 9 inch	6 x 9	152 x 229	SEF	Y	Y	N	N	N	N	N	N
6 x 9 inch	6 x 9	152 x 229	LEF	Y	Y	N	Y	Y	Y	Y	N
Royal Octavo	6 x 9.5	152 x 241	SEF	Y	Y	N	N	N	N	N	N
Royal Octavo	6 x 9.5	152 x 241	LEF	Y	Y	N	Y	Y	Y	Y	N
Foolscap Quarto	6.5 x 8.25	165 x 206	SEF	Y	Y	N	N	N	N	N	N
Foolscap Quarto	6.5 x 8.25	165 x 206	LEF	Y	Y	N	Y	Y	Y	Y	N
Crown Quarto	7.25 x 9.5	184 x 241	SEF	Y	Y	N	Y	Y	Y	Y	N
Crown Quarto	7.25 x 9.5	184 x 241	LEF	Y	Y	N	Y	Y	Y	Y	N
Executive	7.25 x 10.5	184 x 267	SEF	Y	Y	N	Y	Y	Y	Y	N
Executive	7.25 x 10.5	184 x 267	LEF	Y	Y	N	Y	Y	Y	Y	N
16K Taiwan	7.64 x 10.51	194 x 267	SEF	Y	Y	N	Y	Y	Y	Y	N
16K Taiwan	7.64 x 10.51	194 x 267	LEF	Y	Y	N	Y	Y	Y	Y	N
Quarto	8 x 10	203 x 254	SEF	Y	Y	N	Y	Y	Y	Y	N
Quarto	8 x 10	203 x 254	LEF	Y	Y	N	Y	Y	Y	Y	N
-	8 x 10.5	203 x 267	SEF	Y	Y	N	Y	Y	Y	Y	N
-	8 x 10.5	203 x 267	LEF	Y	Y	N	Y	Y	Y	Y	N

Table 8 HVF output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Top Tray	Bin 1	Bin 2	Front	Rear	Dual	Multiple	Hole punch (all types)
-	8 x 13	203 x 330	SEF	Y	Y	N	Y	Y	Y	N	N
-	8.26 x 10	210 x 254	SEF	Y	Y	N	Y	Y	Y	Y	N
-	8.26 x 10	210 x 254	LEF	Y	Y	N	Y	Y	Y	Y	N
-	8.26 x 10.63	210 x 270	SEF	Y	Y	N	Y	Y	Y	Y	N
-	8.26 x 10.63	210 x 270	LEF	Y	Y	N	Y	Y	Y	Y	N
Foolscap Folio	8.25 x 13.06	209 x 333	SEF	Y	Y	N	Y	Y	Y	Y	N
-	8.26 x 13	210 x 330	SEF	Y	Y	N	Y	Y	Y	Y	N
Demi Quarto	8.46 x 10.7	215 x 273	SEF	Y	Y	N	Y	Y	Y	N	N
Demi Quarto	8.46 x 10.7	215 x 273	LEF	Y	Y	N	Y	Y	Y	Y	N
-	8.46 x 10.83	215 x 275	SEF	Y	Y	N	Y	Y	Y	Y	N
-	8.46 x 10.83	215 x 275	LEF	Y	Y	N	Y	Y	Y	Y	N
-	8.66 x 13	220 x 330	SEF	Y	Y	N	Y	Y	Y	Y	N
Arch A	9 x 12	229 x 305	SEF	Y	Y	N	Y	Y	Y	Y	N
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	N	Y	Y	Y	Y	N
SB4	9.92 x 14.09	252 x 358	LEF	N	N	N	N	N	N	N	N
Accounting	10 x 14	254 x 356	SEF	Y	Y	N	Y	Y	Y	Y	N
-	10 x 15	254 x 381	SEF	Y	Y	N	Y	Y	Y	Y	N
8K Taiwan	10.51 x 15.28	267 x 388	SEF	Y	Y	N	Y	Y	Y	Y	N
Custom size, cross process direction (minimum)	4.13	105	-	Y	N	N	N	N	N	N	N
Custom size, process direction (minimum)	5.5	138	-	Y	N	N	N	N	N	N	N
Custom size, cross process direction (maximum)	11.69	297	-	Y	N	N	N	N	N	N	N
Custom size, process direction (maximum)	17.01	432	-	Y	N	N	N	N	N	N	N

Table 9 LVF BM output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Bin 0	Bin 1	Bin 2	Front edge	Front corner	Dual	Rear	Hole punch (all types)
Letter	8.5 x 11	216 x 279	SEF	Y	Y	Y	Y	Y	N	Y	Y
Letter	8.5 x 11	216 x 279	LEF	Y	Y	N	Y	Y	Y	N	Y
Ledger	11 x 17	279 x 432	SEF	Y	Y	Y	Y	Y	Y	N	Y
Invoice (statement)	8.5 x 5.5	216 x 140	SEF	Y	Y	N	Y	Y	N	N	N
Invoice (statement)	8.5 x 5.5	216 x 140	LEF	Y	Y	N	Y	Y	N	Y	N
Postcard	4.25 x 5.5	108 x 140	SEF	Y	N	N	N	N	N	N	N

Table 9 LVF BM output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Bin 0	Bin 1	Bin 2	Front edge	Front corner	Dual	Rear	Hole punch (all types)
Postcard	4.25 x 5.5	108 x 140	LEF	N	N	N	N	N	N	N	N
Legal	8.5 x 14	216 x 356	SEF	Y	Y	Y	Y	Y	N	Y	Y
ISO A4	8.26 x 11.69	210 x 297	SEF	Y	Y	Y	Y	Y	N	Y	N
ISO A4	8.26 x 11.69	210 x 297	LEF	Y	Y	N	Y	Y	Y	N	Y
ISO A3	11.69 x 16.54	297 x 420	SEF	Y	Y	Y	Y	Y	Y	N	Y
ISO A5	5.83 x 8.27	148 x 210	SEF	Y	Y	N	Y	Y	N	N	N
ISO A5	5.83 x 8.27	148 x 210	LEF	Y	Y	N	Y	Y	N	Y	N
ISO A6	4.13 x 5.83	105 x 148	SEF	Y	N	N	N	N	N	N	N
ISO A6	4.13 x 5.83	105 x 148	LEF	N	N	N	N	N	N	N	N
Foolscap or Euroletter	8.5 x 13	216 x 330	SEF	Y	Y	Y	Y	Y	Y	N	Y
JIS B5	7.17 x 10.12	182 x 257	SEF	Y	Y	N	Y	Y	N	N	N
JIS B5	7.17 x 10.12	182 x 257	LEF	Y	Y	N	Y	Y	N	N	N
JIS B4	10.12 x 14.33	257 x 364	SEF	Y	Y	N	Y	Y	N	N	N
JIS B6	5.08 x 7.17	128 x 182	SEF	Y	N	N	N	N	N	N	N
JIS B6	5.08 x 7.17	128 x 182	LEF	N	N	N	N	N	N	N	N
ISO B6	4.92 x 6.93	125 x 176	SEF	Y	N	N	N	N	N	N	N
ISO B5	9.84 x 6.93	250 x 176	SEF	Y	Y	N	Y	Y	N	N	N
ISO B5	6.93 x 9.84	176 x 250	LEF	Y	Y	N	Y	Y	N	N	N
ISO B4	9.84 x 13.9	250 x 353	SEF	Y	Y	N	Y	Y	N	N	N
SB4	9.92 x 14.09	252 x 358	SEF	Y	N	N	N	N	N	N	N
ISO A4 Cover	8.78 x 11.69	297 x 223	SEF	Y	Y	N	Y	Y	N	N	Y
ISO A4 Cover	8.78 x 11.69	297 x 223	LEF	Y	Y	N	Y	Y	N	N	Y
ISO A4 Tab Stock	-	-	LEF	Y	Y	N	Y	Y	N	N	Y
Letter Cover	9 x 11	229 x 279	LEF	Y	Y	N	Y	Y	N	N	Y
8.5 x 11 inch Tab Stock	-	-	LEF	Y	Y	N	Y	Y	Y	N	Y
Postcard-Lakes	4.5 x 6	114 x 152	SEF	Y	N	N	N	N	N	N	N
Postcard-Lakes	4.5 x 6	114 x 152	LEF	N	N	N	N	N	N	N	N
Postcard	5 x 7	127 x 178	SEF	Y	N	N	N	N	N	N	N
Postcard	5 x 7	127 x 178	LEF	N	N	N	N	N	N	N	N
Postcard	5.5 x 7	139.7 x 178	SEF	Y	N	N	N	N	N	N	N
Postcard	5.5 x 7	139.7 x 178	LEF	Y	N	N	N	N	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	SEF	Y	Y	N	Y	Y	N	N	N
Oufuku-Hagaki Postcard	5.83 x 7.87	148 x 200	LEF	Y	Y	N	Y	Y	N	Y	N
6 x 9 inch	6 x 9	152 x 229	SEF	Y	Y	N	N	Y	N	N	N
6 x 9 inch	6 x 9	152 x 229	LEF	Y	Y	N	N	Y	N	N	N
Royal Octavo	6 x 9.5	152 x 241	SEF	Y	Y	N	Y	Y	N	N	N
Royal Octavo	6 x 9.5	152 x 241	LEF	Y	Y	N	Y	Y	N	N	N
Foolscap Quarto	6.5 x 8.25	165 x 206	SEF	Y	Y	N	Y	Y	N	N	N

Table 9 LVF BM output paper sizes

Paper Size			Orientation	Output			Staple position				Option
Common Name	Inch (W x L)	mm (W x L)	LEF / SEF	Bin 0	Bin 1	Bin 2	Front edge	Front corner	Dual	Rear	Hole punch (all types)
Foolscap Quarto	6.5 x 8.25	165 x 206	LEF	Y	Y	N	Y	Y	N	Y	N
Crown Quarto	7.25 x 9.5	184 x 241	SEF	Y	Y	N	Y	Y	N	N	N
Crown Quarto	7.25 x 9.5	184 x 241	LEF	Y	Y	N	Y	Y	N	N	N
Executive	7.25 x 10.5	184 x 267	SEF	Y	Y	N	Y	Y	N	N	N
Executive	7.25 x 10.5	184 x 267	LEF	Y	Y	N	Y	Y	N	N	N
16K Taiwan	7.64 x 10.51	194 x 267	SEF	Y	Y	N	N	Y	N	N	N
16K Taiwan	7.64 x 10.51	194 x 267	LEF	Y	Y	N	Y	Y	N	N	N
Quarto	8 x 10	203 x 254	SEF	Y	Y	N	N	Y	N	Y	N
Quarto	8 x 10	203 x 254	LEF	Y	Y	N	Y	Y	N	N	N
-	8 x 10.5	203 x 267	SEF	Y	Y	N	Y	Y	N	Y	N
-	8 x 10.5	203 x 267	LEF	Y	Y	N	Y	Y	N	N	N
-	8 x 13	203 x 330	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.26 x 10	210 x 254	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.26 x 10	210 x 254	LEF	Y	Y	N	Y	Y	N	N	N
-	8.26 x 10.63	210 x 270	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.26 x 10.63	210 x 270	LEF	Y	Y	N	Y	Y	N	N	N
Foolscap Folio	8.25 x 13.06	209 x 333	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.26 x 13	210 x 330	SEF	Y	Y	N	Y	Y	N	Y	N
Demi Quarto	8.46 x 10.7	215 x 273	SEF	Y	Y	N	Y	Y	N	Y	N
Demi Quarto	8.46 x 10.7	215 x 273	LEF	Y	Y	N	Y	Y	N	N	N
-	8.46 x 10.83	215 x 275	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.46 x 10.83	215 x 275	LEF	Y	Y	N	Y	Y	N	N	N
Folio (Spain)	8.46 x 12.4	215 x 315	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.66 x 13	220 x 330	SEF	Y	Y	N	Y	Y	N	Y	N
-	8.75 x 11.69	223 x 297	SEF	Y	Y	N	Y	Y	N	N	N
-	8.75 x 11.69	223 x 297	LEF	Y	Y	N	Y	Y	Y	N	N
Arch A	9 x 12	229 x 305	SEF	Y	Y	N	Y	Y	N	N	N
SB4	9.92 x 14.09	252 x 358	SEF	Y	Y	N	Y	Y	Y	Y	N
SB4	9.92 x 14.09	252 x 358	LEF	N	N	N	N	N	N	N	N
Accounting	10 x 14	254 x 356	SEF	Y	Y	Y	Y	Y	N	N	N
-	10 x 15	254 x 381	SEF	Y	Y	N	Y	Y	N	N	N
8K Taiwan	10.51 x 15.28	267 x 388	SEF	Y	Y	N	Y	Y	N	N	N
-	12 x 18	305 x 457	SEF	Y	N	N	N	N	N	N	N
SRA3	12.6 x 17.72	320 x 450	SEF	Y	N	N	N	N	N	N	N
Custom sizes	Various	Various	-	Y	N	N	N	N	N	N	N

Table 10 Output stock performance

Stock Type	Trays 1 and 2	Bypass	Trays 3 and 4	Tray 6	Duplex	Offset	Stack	Staple	Hole punch	Booklet Maker	Tri-folder	Inserter	Notes
Bond/standard 70 gsm to 90 gsm (16lbs to 24lbs)	Y	Y	Y	Y	Y	Y	Y(1)	Y(2)	Y	Y	Y	Y	(1) Possible performance degradation if small documents and stacked on large. (2) For stapled sets, staple build up may affect stack quality.
Index	Y	Y	Y	Y	Y	Y	Y(1)	Y(2)	Y	Y	Y	Y	
Recycled	Y	Y	Y	Y	Y	Y	Y(1)	Y(2)	Y	Y	Y	Y	
Transparency (non paper backed)	N	Y	N	N	N	Y(1)(2)	Y(1)	N	N	N	N	N	(1) An increase in set scatter or set to set registration may occur with greater than 20 sheets. (2) LCSS only.
Transparency (paper backed) (3)	N	Y	N	N	N	Y(1)(2)	Y(1)	N	N	N	N	N	Must be fed with sealed edge leading. Must not be inverted. (1) An increase in set scatter or set to set registration may occur with greater than 20 sheets. (2) LCSS only. (3) Must be fed into the output device sealed edge first.
Labels (1)	N (3)	Y	N	N	N	N	N	Y(2)	N	N	N	N	(1) Must not be inverted. (2) LCSS and LVF BM = top tray only. (3) Except for hospital labels.
Card stock, 120 gsm to 200 gsm	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y(2)	N	Y	(1) Pro-rata reduction in capacity with weight of stock. (2) One cover may be included within the quoted sheet capacity consistent with paper weight of the body of the booklet.
Card stock, 216 gsm	N	Y	N	N	Y	N	Y	Y	Y	Y(2)	N	Y	
Tabs (1)	Y	Y	N	N	N	N	Y	Y(2)	Y	N	N	N	(1) Tabs must be on trail edge when fed from trays and bypass, but lead edge when arriving at the output. Therefore tab stock will be inverted before output. Hole punch registration performance may be degraded. (2) Cannot be stapled in the LVF BM
Punched	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	-
Perforated	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	-
Envelopes (1)	Y(2)(3)	Y	N	N	N	N	N	Y	N	N	N	N	(1) Must not be inverted. (2) ID #10 envelopes can be fed from tray 2 if the optional envelope kit is installed. (3) LCSS = Top tray only.
Carbonless paper	N	N	N	N	N	N	N	N	N	N	N	N	

Table 11 Input document material definitions

Category	Material	Image Type
Group I. Common usage input.	80 gsm (20lb.) to 120gsm (32lb.) or equivalent weight range (rag bond offset and ledger paper). This group includes 4040 paper.	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.
Group II. Heavy weight common usage input.	121gsm (32.1lb.) to 200gsm (110lb.) index or equivalent weight range (rag bond and ledger paper).	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.
Group III. Light weight common usage input.	60gsm (16lb) to 79gsm (19.9lb.) bond or equivalent weight range (rag bond, offset, mimo/duplicator, and NCR paper).	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.
Group IV. Common surface finished paper.	60gsm (16lb) to 200gsm (110lb.) index or equivalent (Bristol text, magazine, cover, vellum, safety paper)	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.
Group V. Uncommon and other input.	80 gsm (20lb.) to 200gsm (110lb.) or equivalent weight: plastic laminated paper: metallic cover stock: tag stock: plastic transparencies: Telecopier paper: label stock: silver photographic paper: Electrofax paper (ZnO) race-erase: paste ups with loose edges type 1, 2 and 3: XE approved punched or perforated stock: Continuous computer forms.	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen. Liquid developed electrostatic image.
Group VI. Light weight input.	49gsm (13lb.) to 59gsm 15.9lb.) bond or equivalent weight range (rag bond, ledger mimeo or GSE papers).	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.
Group VII.	34gsm (9lb) to 48gsm (12.9lb) bond or equivalent weight range (rag bond, ledger mimeo or GSE papers).	Impact typewriter, offset image, Xerographic image, gravure image, Letter-press image, pencil 2H or harder, ballpoint pen, ink pen.

Table 12 Input document quality definitions

Defect	Acceptable	Marginal	Unacceptable	Notes
Holes.	Maximum of three cleanly punched holes up to 6mm. (0.25 inch) diameter.	Four to nine cleanly punched holes.	Rough or torn holes.	-
Staples.	Cleanly removed staples.	Poorly removed staples resulting in dog-ears*.	Staples not removed.	
Edge defects.	None.	Any cut or tear near a corner less than 3mm. (0.125 inch) in length.	Any cut or tear not at a corner or greater than 3 mm. (0.125 inch) in length,	-
Folds* (in the feed direction).	Two letter folds less than 1.5 mm. (0.062 inch) high.	Two letter folds less than 3mm. (0.125 inch) high.	Any fold greater than 3mm. (0.125 inch) high.	* Folds must be flattened to within 6mm (0.25 inch) height before placing in the input device.
Folds* (across the feed direction)	None.	One fold not to exceed 3mm. (0.125 inch) high.	Any fold greater than 3mm. (0.125 inch) high.	* Folds must be flattened to within 6mm (0.25 inch) height before placing in the input device.
Curl (measured from a flat surface).	None.	In-ream or inherent curl up to 13mm. (0.5 inch) maximum.	Curl greater than 13mm.	
Wrinkle.	None.	Multiple moderate wrinkles, up to 38mm. (1.5 inch) long in any direction, 3mm. (0.125 inch) in height.	Severe wrinkles greater than 38mm. (1.5 inch) long in any direction, greater than 3mm. (0.125 inch) in height	-
Foreign material on the surface.	None.	Hole reinforcement, correction fluid or dry glue no greater than 13 square millimeters. (0.02 square inch) per correction.	Correction tape major paste-up or correction fluid greater than 13 square millimeters. (0.02 square inch) per correction.	-

Table 12 Input document quality definitions

Defect	Acceptable	Marginal	Unacceptable	Notes
Bent corners (“dog-ears”)*	No bent corners	One bent corner up to 75mm. (3 inch) diagonal length	One or more bent corner exceeding 75mm. (3 inch) diagonal length.	* Dog ears must be flattened to within 6mm (0.25 inch) height before placing in the input device.
Computer fan fold sheets	-	Perforated tractor feed edges cleanly removed.	Perforated tractor feed edges not removed.	-

Envelope Specifications

Tray 2 (With Optional Kit)

Refer to Table 13 and Table 14 for the envelope sizes that can be fed from tray 2 if the optional envelope kit is installed.

Table 13 European envelope sizes

ID	Size	Flap minimum length	Flap maximum length	Feed orientation
DL	110 x 220mm (4.33 x 8.66 inch)	25mm (1.0 inch)	55mm (2.1 inch)	LEF, open trailing flap
C5	162 x 229mm (6.38 x 9.02 inch)	-	55mm (2.1 inch)	LEF, open non-leading flap

Table 14 American envelope sizes

ID	Size	Flap minimum length	Flap maximum length	Feed orientation
7 3/4 (Monarch)	98 x 190mm (3.87 x 7.5 inch)	36mm (1.4 inch)	55mm (2.1 inch)	LEF, open trailing flap
10	105 x 241mm (4.12 x 9.5 inch)	29mm (1.1 inch)	55mm (2.1 inch)	LEF, open trailing flap

Bypass Tray

Refer to Table 15 and Table 16 for the envelope sizes that can be fed from the bypass tray.

Table 15 European envelope sizes

ID	Size	Flap minimum length	Flap maximum length	Feed orientation
DL	110 x 220mm (4.33 x 8.66 inch)	25mm (1.0 inch)	55mm (2.1 inch)	LEF, open trailing flap
C5	162 x 229mm (6.38 x 9.02 inch)	-	55mm (2.1 inch)	LEF, open non-leading flap

Table 16 American envelope sizes

ID	Size	Flap minimum length	Flap maximum length	Feed orientation
7 3/4 (Monarch)	98 x 190mm (3.87 x 7.5 inch)	36mm (1.4 inch)	55mm (2.1 inch)	LEF, open trailing flap
9	98 x 225mm (3.87 x 8.87 inch)	36mm (1.4 inch)	55mm (2.1 inch)	LEF, open trailing flap
10	105 x 241mm (4.12 x 9.5 inch)	29mm (1.1 inch)	55mm (2.1 inch)	LEF, open trailing flap

NOTE: *All sizes quoted are with the flap closed. Except for C5 envelopes, only envelopes with flaps on the long edge are acceptable. Envelopes must not be inverted. Some wrinkle is expected on the back of envelopes.*

Acceptable flap types:

- Diamond/Banker
- Pocket
- Wallet

Weight:

- Lightweight
- Medium weight

Acceptable sealing:

- Gummed
- Press and seal

Exclusions:

- No windows
- No board backed
- No gusset type
- No padded
- No peel and seal

GP 21 Installation Space Requirements

Purpose

To outline the general space requirements to enable safe use and adequate access for service.

WARNING

Do not work in a confined space. 1 m (39 inches) space is needed for safe working.

WARNING

USA and Canada. Do not install this machine in a hallway or exit route that does not have 1.12 m (44 inches) of space additional to the normal space requirements in front of the machine. To conform with fire regulations this additional 1.12 m (44 inches) of space is needed in front of the machine in hallway and exit routes.

Machine Height

- Machine height with the SPDH lowered = 1104mm (43.5 inches)
- Machine height with the SPDH raised = 1440mm (56.7 inches)

Machine Weight

45-55 ppm

- Fully configured machine weight = 120 kg (264.5 lb)

NOTE: *Machine weight does not include the weight of the finisher or tray 6.*

65-90 ppm

- Fully configured machine weight = 123 kg (271 lb)

NOTE: *Machine weight does not include the weight of the finisher or tray 6.*

Optional Tray

- Tray 6 = 30 kg (66 lb)

Finishers

- OCT = 3.3 kg (7.2 lb)
- 1K LCSS = 25 kg (55 lb)
- 2K LCSS = 29.5 kg (65 lb)
- LVF BM = 45.4 kg (100 lb)
- HVF = 82 kg (181 lb)
- HVF BM = 109 kg (240 lb)
- HVF BM with PPI = 116.2 kg (256 lb)
- HVF BM with PPI and Tri-folder = 136.5 kg (301 lb)

Machine Dimensions and Installation Space Requirements

Table 1 shows the dimensions of the 5890F machines and the installation space required for safe operation.

NOTE: *The installation dimensions in Table 1 allow for a 1 metre (39.4 inches) minimum safety work space around the machine. To acquire this minimum safety work space it may be necessary to move the machine within the area specified.*

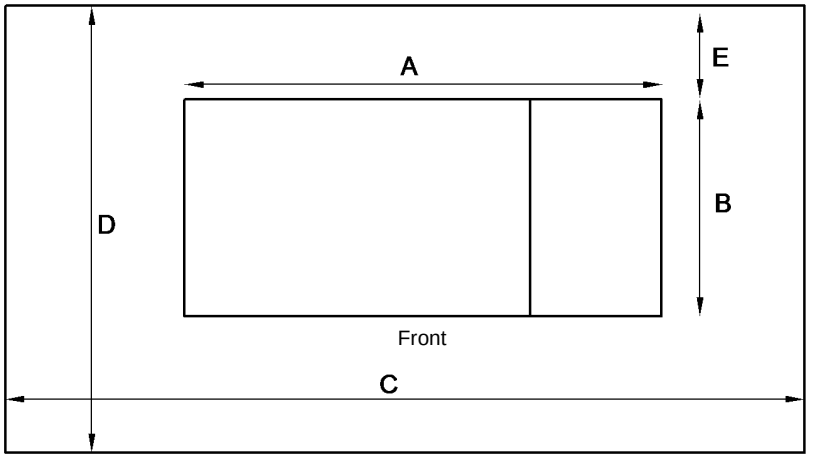
A gap of 100 mm is required at the rear of the IOT for airflow to the fans. This is also be sufficient for the SPDH when raised.

Figure 1 represents a plan view of a machine installation and is to be read in conjunction with Table 1. The dimensions A and B outline a footprint of the machine within the boundary of safe operation, dimensions C and D. The dimension E indicates the area required for airflow / work space at the rear of the machine.

Table 1 Dimensions and space requirements

Configuration	Machine width (A) mm / inches	Machine depth (B) mm / inches	Install width required (C) mm / inches		Install depth required (D) mm / inches		Install airflow / service work space (E) mm / inches	
			Moveable	Fixed	Moveable	Fixed	Moveable	Fixed
45-55ppm with OCT and media shelf	1272 / 50	650 / 25.5	2272 / 89.5	3272 /129	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with OCT and tray 6	1376 / 54	650 / 25.5	2376 / 93.5	3379 / 133	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with 1K LCSS, 2K LCSS or LVF BM and media shelf	1556 / 61.5	650 / 25.5	2556 / 100.5	3556 / 140	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with 1K LCSS, 2K LCSS or LVF BM and tray 6	1603 / 63	650 / 25.5	2603 / 102.5	3603 / 142	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF and media shelf	1935 / 76	650 / 25.5	2935 / 115.5	3935 / 155	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF and tray 6	2039 / 80	650 / 25.5	3039 /120	4039 / 159	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF BM and media shelf	1955 / 77	650 / 25.5	2955 /116.5	3955 / 156	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF BM and tray 6	2059/ 81	650 / 25.5	3059 / 120.5	4059 / 160	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF BM and tri-fold and media shelf	2315 / 91	650 / 25.5	3315 / 130.5	4315 / 170	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
45-55ppm with HVF BM, tri-fold and tray 6	2419 / 95	650 / 25.5	3419 / 135	4419 / 174	1650 / 65	2650 / 104	100 / 4	1000 / 39.5
65-75ppm with 2K LCSS or LVF BM and media shelf	1556 / 61.5	725 / 28.5	2556 / 100.5	3556 / 140	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-75ppm with 2K LCSS or LVF BM and tray 6	1603 / 63	725 / 28.5	2603 / 102.5	3603 / 142	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF and media shelf	1935 / 76	725 / 28.5	3039 /120	4039 / 159	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF and tray 6	2039 / 80	725 / 28.5	2955 /116.5	3955 / 156	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF BM and media shelf	1955 / 77	725 / 28.5	3059 / 120.5	4059 / 160	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF BM and tray 6	2059/ 81	725 / 28.5	3315 / 130.5	4315 / 170	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF BM, tri-fold and media shelf	3315 / 91	725 / 28.5	3419 / 135	4419 / 174	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5
65-90ppm with HVF BM, tri-fold and tray 6	2419 / 95	725 / 28.5	3039 /120	4039 / 159	1725 / 68	2725 / 107.5	100 / 4	1000 / 39.5

Figure 1 Installation plan



GP 22 Electrical Power Requirements

Power Requirements

Refer to Table 1 and Table 3.

Table 1 Electrical power requirements

Nominal Voltage	Average current		Comments
	45-55 ppm	65-90 ppm	
110VAC (60Hz) Plus 6% minus 10%	Less than or equal to 15A RMS.	Less than or equal to 20A RMS.	Specific XLA markets only.
127VAC (60Hz) Plus 6% minus 10%	Less than or equal to 15A RMS.	Less than or equal to 20A RMS.	Mandatory for Saudi Arabia only.
127VAC (60Hz) Plus 6% minus 10%	Less than or equal to 15A RMS.	Less than or equal to 20A RMS.	To operate at 127VAC +10% for long periods. Mandatory for Mexico only.
120VAC (60Hz) Plus 6% minus 10%	Less than or equal to 12A RMS.	Less than or equal to 16A RMS.	Run mode, USA and Canada.
120VAC (60Hz) Plus 6% minus 10%	Less than or equal to 15A RMS.	Less than or equal to 20A RMS.	Warm up, All 60Hz markets including USA and Canada.
220VAC (50Hz) Plus 6% minus 10%	Less than or equal to 10A RMS.	Less than or equal to 10A RMS.	Europe and other 50Hz markets.
230VAC (50Hz) Plus 6% minus 10%	Less than or equal to 10A RMS	Less than or equal to 10A RMS.	Europe and other 50Hz markets.
240VAC (50Hz) Plus 6% minus 10%	Less than or equal to 10A RMS.	Less than or equal to 10A RMS.	Europe and other 50Hz markets.

Power Save Modes

There are two power save modes which are entered after pre-set timers have expired, low power mode and sleep mode. Both of these power modes are initially set to factory default time values but are customer adjustable. Entry to both modes can set by the customer to be either ‘job activated’ or ‘intelligent ready’. The machine will automatically enter low power, then sleep mode after a period of inactivity exceeds a timer value, refer to Table 2. If ‘intelligent ready’ is set, the default value for the timer is preset but is adjusted by the machine based on customer usage.

Low Power Mode

Low power mode is automatically entered after a period of inactivity (determined by timer setting) whilst in standby/ready mode. Timer setting range is from 1 to 120 minutes, refer to Table 2 for the default settings. Single board controller disk off, IOT +24V disabled, ROS motor off, fuser to low power. The mode of power is returned to standby following a user request, a key pressed on the user interface, offline staple button, document in the SPDH, SPDH opened, incoming Fax or print job.

Sleep Mode

Sleep mode is automatically entered after a period of inactivity (determined by timer setting) whilst in Low Power Mode. Timer setting range is from 10 to 120 minutes, refer to Table 2 for the default settings. The mode of power is returned to standby following a user request, a key press on the user interface, incoming Fax or print job.

Table 2 Default settings

Speed	Standby to low power mode (mins.)	Low power mode to sleep mode (mins.)
45 ppm	1	1
55 ppm	1	1
65 ppm	5	30
75 ppm	5	30
90 ppm	5	30

Power consumption

Refer to Table 3 for power the consumption in all modes:

Table 3 Power consumption in all modes

Configuration	Run mode (Watt)	Standby (Watt)	Low power (Watt)	Sleep (Watt)	Plug-in/off mode (Watt)	EPA Typical Energy Consumption Value (Kwh/week)
45 ppm	1150	290	Less than 125	Less than 9	Less than or equal to 0.9	5.7
55 ppm	1250	290	Less than 125	Less than 9	Less than or equal to 0.9	6.7
65 ppm	1550	310	Less than 160	Less than 9	Less than or equal to 0.9	8.0
75 ppm	1600	310	Less than 160	Less than 9	Less than or equal to 0.9	9.0
90 ppm	1650	310	Less than 160	Less than 9	Less than or equal to 0.9	10.0
Additional power for 1K LCSS	70	10	0	0	0	N/A
Additional power for 2K LCSS (45-55 ppm)	80	10	0	0	0	N/A
Additional power for 2K LCSS (65-90 ppm)	90	10	0	0	0	N/A
Additional power for LVF BM (45-55 ppm)	80	10	0	0	0	N/A
Additional power for LVF BM (65-90 ppm)	90	10	0	0	0	N/A
Additional power for HVF BM (45-55 ppm)	160	30	0	0	0	N/A
Additional power for HVF BM (65-90 ppm)	190	30	0	0	0	N/A

GP 23 Environmental Data

Operating

- Temperature range: 10 to 32 degrees C (50 to 90 degrees F)
- Humidity: 15% to 85% RH.
- Noise:

  NOTE: *Blue Angel Europe criteria measured in accordance with RAL-UZ 122.*

  – Table 1 contains the maximum value in decibels of noise that can be generated by the basic machine.
  – Table 2 contains the maximum value in decibels of noise that can be generated by the machine in other configurations.

Table 1 Maximum noise limits, basic machine

PPM	Standby (dBA)	Run continuous (dBA)	Run impulse (dBA)
45	35	56	59
55	35	56	61
65	35	57	62
75	35	57	62
90	35	58	63

Table 2 Maximum noise limits, all configurations

PPM	Standby (dBA)	Run continuous (dBA)	Run impulse (dBA)
45	35	59	63
55	35	59	63
65	35	59	63
75	35	60	63
90	35	61	64

- Altitude: 0 to 3200 metres (0 to 10500 feet)

Storage

Temperature and humidity range:

- 55 degrees C (131 degrees F) 85% RH max.
- -25 degrees C (-13 degrees F) 15% RH max.

GP 24 Customer Administration Tools

Purpose

To gain access to customer administration tools.

How to Enter Customer Administrator Tools

Perform the following:

1. Switch on the machine, GP 14.
2. When the machine is ready, press the **Log in/out** (key symbol) button on the control panel.
3. The Authentication Required screen displays. Enter User Name ‘admin’ (case sensitive). Select **Next**.
4. Enter the Password ‘1111’ (default setting). Select **Done**. If the password is not 1111, ask the customer for the current password. If the customer does not know the password, go to Admin Password Reset.
5. Press the **Machine Status** button.
6. Select the **Tools** tab, the tools pathway menus are displayed.

NOTE: *After entering customer administration tools, all existing copy jobs are cancelled. The network controller will stop accepting jobs and a ‘Offline’ screen message is displayed. When exiting Customer Administration Tools, an ‘Online’ screen message is displayed.*

NOTE: *If the machine is password protected and the customer is not available, login into service copy mode, refer to GP 1.*

The customer administration tools feature contents are listed below:

- Device Settings
  – Paper Type and Color
  – Paper Substitution
  – Paper Size Preference
  – Tray Settings
  – Tray Contents
- Service Settings
  – Service Registration
  – Device Address Book
  – Copy Service
  – ID Card Copy Service
  – Embedded Fax Settings
  – Job Sheets
  – Weblet Settings
  – Service Plan
- Network Settings
  – Online/Offline
  – Network Connectivity
  – TCP/IP Settings
  – Advanced Settings

  - Network Logs
  - USB Settings
- Accounting Settings
  - Accounting Mode
  - Copy Activity Report
- Security Settings
  - USB Port Security
  - Audit Log
  - Authorization
  - Image Overwrite Security
  - Change Admin Password
  - IPsec
  - Valid Recipients
- Troubleshooting
  - Xerographic Module Cleaning
  - Resets
  - Network
  - Fax

Call Closeout

Perform the following:

1. Select **Admin** in the top right corner of the UI to exit Customer Administration Tools.
2. Select **Logout**.

Admin Password Reset

Resetting the admin password will require the following:

- Physical access to the machine user interface
- The serial number of the machine
- The current total page count on the machine
- The ability for the customer to talk to someone at a Xerox Support office that has access to the Admin Password Reset Tool application or for a Xerox person to run the Admin Password Reset Tool application.

  NOTE: *The Admin Password Reset Tool runs with gsnlock so it can only be run by authorized Xerox employees. However, it may be convenient for the Xerox person to run the tool in their office or on the laptop, then give the customer the code over the phone.*

  The Admin Password Reset Tool is located in the GSN library number 12239.

Xerox Support or the Xerox Technician must perform the following:

1. Run the Admin Password Reset Tool.
2. Enter the serial number of the device with no punctuation or spaces.
3. Enter the total page count from the device.
4. Press **Calculate**.
5. Note the 12 digit reset code.

The Customer at the Device must perform the following:

1. Press the **Machine Status** button.
2. Select **Tools**.
3. Select **General**.
4. Select **Feature Installation**.
5. Enter the 12 digit reset code obtained above.
6. Press **Enter**.

If the reset code matches the correct one for that serial number and page count, the admin password will be reset to the factory default (1111).

NOTE: *An entry is made in the customer Audit log, if enabled and via email alert to the SA and in engineering logs whether successful, or not.*

The System Administrator has the ability to lock out this function so that it will not work. If they do that, an error message stating -The System Administrator has disabled this function

NOTE: *The passcode formula has some flexibility on the page count in case the machine is used to print or copy while this reset code is being entered. However if the machine is in heavy use it may be necessary to update the calculation as The page count changes.*

GP 25 First Copy / Print Out Time and Power On / Off Time

The first copy out time (FCOT) is the duration from the start copy request to the delivery of the first copy in the OCT. Values in Table 1 are based on a standard job where the original is copied at 100% from the document glass or SPDH onto A4 LEF paper fed from the bypass tray.

The first print out time (FPOT) is the duration from the print job request to the delivery of the print in the OCT. FPOT values in Table 1 are based on a 1 byte ASCII text file sent using TCP/IP and LPR, from a Pentium II 128Mb NT 4.0 PC with 100Mb Ethernet.

Table 1 Machine timing

Description	Response time					Notes
	45 ppm	55 ppm	65 ppm	75 ppm	90 ppm	
FCOT from the document glass	3.4 seconds	3.4 seconds	2.7 seconds	2.7 seconds	2.7 seconds	A4 sheet, to OCT, no invert.
FCOT from the SPDH	7.3 seconds	7.3 seconds	5.9 seconds	5.9 seconds	5.9 seconds	A4 sheet, to OCT, no invert.
FPOT	7.0 seconds	7.0 seconds	5.5 seconds	5.5 seconds	5.5 seconds	A4 sheet, to OCT, no invert.
Recovery from low power mode.	Less than or equal to 10 seconds.	Less than or equal to 10 seconds.	Less than or equal to 10 seconds.	Less than or equal to 10 seconds.	Less than or equal to 10 seconds.	From low power mode to ready to copy, print or fax.
Recovery from sleep mode.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	From sleep mode to ready to print or copy.
Power on time to ready to copy.	Less than or equal to 3 minutes and 50 seconds.	Less than or equal to 3 minutes and 50 seconds.	Less than or equal to 3 minutes and 50 seconds.	Less than or equal to 3 minutes and 450 seconds.	Less than or equal to 3 minutes and 50 seconds.	Ready to copy is indicated by the message “Ready to Scan” being displayed on the user interface.
Power on time to ready to print.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Print is indicated by the message “Machine Online” being displayed on the user interface.
Power on time to ready to fax.	Less than or equal to 2 minutes and 55 seconds.	Less than or equal to 2 minutes and 55 seconds.	Less than or equal to 2 minutes and 55 seconds.	Less than or equal to 2 minutes and 55 seconds.	Less than or equal to 2 minutes and 55 seconds.	Fax ready is indicated by the presence of the Fax icon being displayed on the user interface.
Power off time, multi functional machine.	Less than or equal to 36 seconds.	Less than or equal to 36 seconds.	Less than or equal to 36 seconds.	Less than or equal to 36 seconds.	Less than or equal to 36 seconds.	-
Quick restart to ready to copy time.	Less than or equal to 4 minutes and 31 seconds.	Less than or equal to 4 minutes and 31 seconds.	Less than or equal to 4 minutes and 31 seconds.	Less than or equal to 4 minutes and 31 seconds.	Less than or equal to 4 minutes and 31 seconds.	From re-start option confirmed, to ready to copy.
Quick restart to ready to print time.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	Less than or equal to 2 minutes and 50 seconds.	From re-start option confirmed, to ready to print.
Quick restart to ready to fax time.	Less than or equal to 3 minutes and 36 seconds.	Less than or equal to 3 minutes and 36 seconds.	Less than or equal to 3 minutes and 36 seconds.	Less than or equal to 3 minutes and 36 seconds.	Less than or equal to 3 minutes and 36 seconds.	From re-start option confirmed, to ready to fax.
Recovery from sleep mode time.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	Less than or equal to 28 seconds.	-

GP 26 Restriction of Hazardous Substances (RoHS)

Purpose

To give information on the RoHS Directive.

The RoHS Directive restricts the use of certain hazardous substances in electrical and electronic equipment. It applies to equipment placed in the European Union (EU) market. The directive takes effect from 1st July 2006.

NOTE: *Currently these restrictions are only for the European Union (EU) market and some associated countries. For more information go to www.Xerox.com. However Xerox has mandated that all WorkCentre 5890F machines must be maintained as RoHS compliant.*

The hazardous substances are:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr 6+, Cr [VI])
- Polybrominated Diphenyl Ethers (PBDE's)
- Polybrominated Biphenyls (PBB's)

Identification of a RoHS Compliant Machine

Xerox will maintain a central list of RoHS compliant machines.

All WorkCentre 5890F machines are RoHS compliant at time of manufacture.

Procedure

CAUTION

Failure to comply with RoHS guidelines can result in product recalls, imprisonment, fines or penalties.

Use only spares that are listed in the WorkCentre 5890F Spare Parts List. Do not use spare parts from other similar machines, even if the parts look identical. All WorkCentre 5890F machines are RoHS compliant at time of manufacture and must be maintained as RoHS compliant.

GP 27 Machine Configuration Control and Recovery

Purpose

To install and maintain the core configuration parameters of the machine i.e, serial number, machine speed, market region and service plan.

The following information details the machine install and use of the SIM (Subscriber Identity Module), and the recovery methods for each of the core configuration parameters. Refer to GP 9 to identify the SIM card types.

NOTE: *The Subscriber Identity Module (SIM) is also reffered to as a software option key (SOK), occasionally within this service manual.*

Pre-requisite

For the recovery of the core configuration parameters it is fundamental that all machines are delivered to the customer in a fully tested and defined state. This defined state includes a default speed, a valid serial number, default service plan, market region and machine class, set to match the configuration of the machine.

During the install procedure the copy, print, scan and fax services are not made available to the customer until a compatible SIM has been installed.

SIM and machine configuration

There are two chassis types of the WC5890F machines (B and C) that deliver a range of five available speeds, refer to Table 1.

Table 1 Chassis types

North America XC 60Hz		**European XE 50Hz**	
B speed chassis capable of running at 45 & 55 ppm	C speed chassis cable of running at 65, 75 & 90 ppm	B speed chassis capable of running at 45 & 55 ppm	C speed chassis cable of running at 65, 75 & 90 ppm

The install process sets the speed of a machine using a new un-serialised secure SIM card, programmed to set a single speed on a specific machine class. The machine speed will only be set if the programmed SIM matches the machine class of the machine. If a SIM card is used to set the speed on an incompatible class of machine it will result in a nonfunctional system. When a SIM card is successfully used to set the speed of a machine the relevant NVMs are updated with the appropriate settings. The serial number of that machine is then written to that SIM card to prevent it being used on any another machine.

Once the core configuration parameters of the machine i.e, serial number, machine speed, market region and service plan have been set, they are stored in 3 physical locations i.e, hard disk, IOT PWB and the scanner PWB.

Two unique versions of SIM card are available for each speed of machine, i.e with PagePack enablement and without PagePack enablement, refer to GP 9 Machine SIM Card Matrix.

Configuration Parameters and Machine Recovery

The core configuration parameters of a machine are stored in 3 different physical locations. This safeguards the configuration values against being inadvertently lost, in the event of a failure or replacement by the CSE of either the hard disk, IOT PWB or the scanner PWB.

At power on the machine's system reconciles the core configuration parameters in all 3 locations. If all 3 locations report the same values the machine will continue with normal operation. If there are any discrepancies then the machine will implement a recovery procedure. If any one location should lose a value then the other locations will provide correction. Should any two locations lose their values the other locations may provide correction, Table 2.

Table 2 Recovery matrix

Hard disk	IOT PWB	Scanner PWB	SIM	Machine reaction
A	A	A	A	None, machine is correct
B	A	A	A	Hard disk will be corrected
A	B	A	A	IOT PWB will be corrected
A	A	B	A	Scanner PWB will be corrected
A	B	C	A	Machine recovers from locked SIM speed only, perform Manual Recovery from step 2.
Key: A = parameters are good and from the expected machine. B = parameters are bad from a different machine. C = parameters are bad from a different machine.				

There are scenarios when the core parameters are not machine correctable, especially when a PWB containing NVM values is replaced with a PWB that has been previously installed on another machine, Table 3.

Table 3 Non recovery matrix

Hard disk	IOT PWB	Scanner PWB	SIM	Machine reaction
A	B	C	Missing	Machine stops and asks for the SIM to be inserted, perform Manual Recovery.
Key: A = parameters are good and from the expected machine. B = parameters are bad from a different machine. C = parameters are bad from a different machine.				

Manual Recovery

1. Recover the machine speed, insert either;
   - the locked SIM that was used during the installation of the machine.
   - a new unlocked blank SIM with a compatible speed for the machine's chassis type, refer to dC132 Serial Number.

     NOTE: *If a new unlocked SIM is to be ordered and installed, check if the customer requires the PagePack service plan function, refer to GP 9.*
2. Recover the machine's service plan, refer to dC136 Service Plan.
3. Recover the market region, refer to dC134 Market Region.

Best Practises

- Do not remove the SIM card from the machine once installed.
- Do not replace the hard disk and the SD card at the same time.
- Do not replace more than one of the following components at a time without switching on the machine first, hard disk, SD card, IOT PWB or the scanner PWB.
- If a configuration problem occurs use the dC routines to correct it.
- Save the NVM to an external USB pen drive prior to any major maintenance. Refer to dC361 NVM Save and Restore.
- Save the NVM regularly to the hard disk at a time when you know the machine is working well, e.g at the end of every service call. Refer to dC361 NVM Save and Restore.
- If the machine displays a message for an incompatible xerographic or fuser unit, check the core configuration parameters and machine settings. It may be that the machine is calculating that it is of a different class and chassis type.

GP 28 USB Connection Mode

Purpose

To set the USB connection mode.

NOTE: *In order to use the CAT/PWS tools the USB print option must be set to Xerox Copier Assistant/PWS Service Tool.*

Procedure

Perform the following:

1. Enter Customer Administration Tools, GP 24.
2. Press the **Machine Status** button.
3. Select **Tools**.
4. Select **Network Settings**.
5. Select **USB Settings**.
6. Select **Software Tool**s.
7. Select **Save**.
8. Exit Customer Administration Tools, GP 24.

GP 29 Embedded Customer Documentation

Purpose

To explain how to print the embedded customer documentation.

Procedure

Perform the following:

1. Press the **Machine Status** button.
2. Select **Machine Information**.
3. Select **Information Pages**.
4. Select **Quick Use Guide**, then select **Print**.

GP 30 How to Disable the Firewall of the PWS

Procedure

Go to the relevant procedure:

- Windows 7
- Windows XP

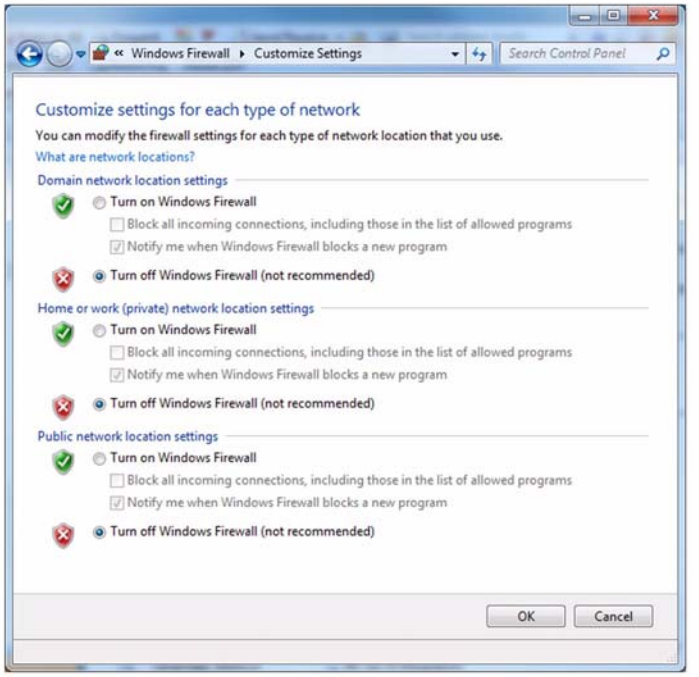
Purpose

To disable the firewall of the PWS.

Windows 7

Perform the following:

1. Open Start / Control Panel / Windows Firewall.
2. From the left pane, select Turn Windows Firewall on or off.
3. Select all three Turn off Windows Firewall (not recommended) radio buttons to disable the windows firewall, Figure 1.



V-1-1455-A

Figure 1 Settings buttons

4. Select OK.

Windows XP

Perform the following:

1. On the PWS, right click on the My Network Places desktop icon or select Start, then My Network Places. Select Properties from the menu. The Network and Dial-up Connections window will open.
2. Check if the firewall is enabled or disabled. If the Local Area Connection icon has a padlock symbol, the firewall is enabled, Figure 2. If the firewall is enabled, continue with this procedure.

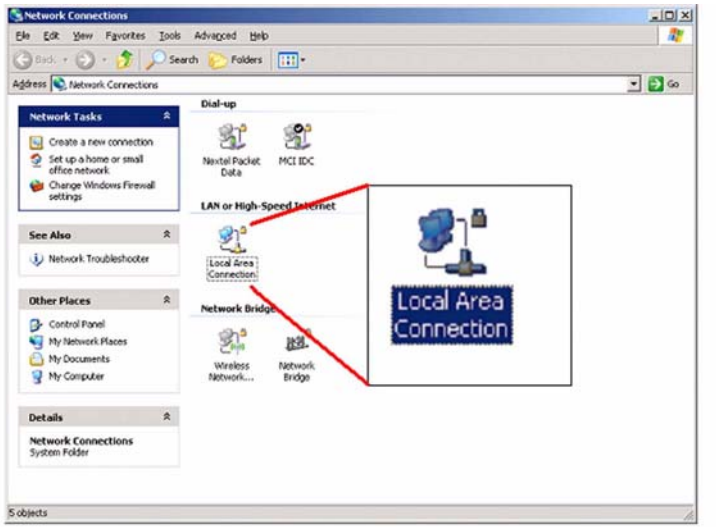


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Figure 2 Padlock symbol

3. Right click on Local Area Connection icon, then select Properties. The Local Area Connection Properties window will open, Figure 3.

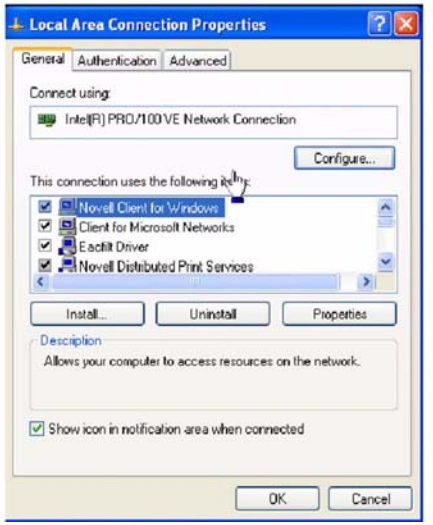

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Figure 3 Properties window

4. Select the Advanced tab, then the Settings button, Figure 4. If available, uncheck Protect my computer and network by limiting or preventing access to the computer from the Internet. Select OK. The Windows Firewall window will open.

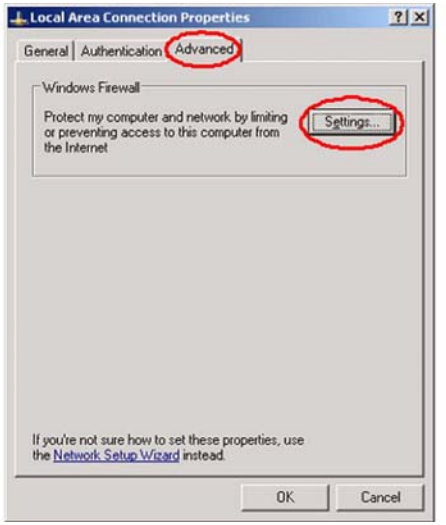

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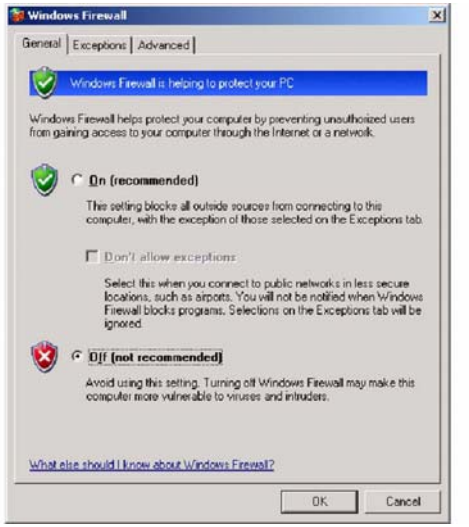
Figure 4 Settings button

5. Select the Off (not recommended) radio button to disable the windows firewall, Figure 5.



V-1-1149-A

Figure 5 Settings button

6. Close all open windows.
7. Disable any other Firewall software or utilities that may be running.

GP 31 How to Set the Date and Time

Purpose

To set the machines date and time.

Procedure

Perform the following:

1. Enter Customer Administration Tools, GP 24.
2. Press the Machine Status button.
3. Select the Tools tab.
4. Select Device Settings.
5. Select the General folder.
6. Set the correct Time Zone, Date and Time, then select Save.
7. Log out of Customer Administration Tools.

GP 32 How to Enable HTTP

Purpose

To enable the hyper text transfer protocol (HTTP) networking protocol.

Procedure

Perform the following:

1. Enter Customer Administration Tools, GP 24.
2. Press the Machine Status button.
3. Select the Tools tab.
4. Select Network Settings.
5. Select Advanced Settings.
6. Select HTTP Settings.
7. Select Enable.
8. Select Save.
9. Select Close.
10. Log out of Customer Administration Tools.

GP 33 How to Configure the PWS to Ping a Device

Purpose

To configure the PWS to ping a device on a network.

Procedure

Perform the following:

1. Set the IP address of the PWS one digit higher or lower than the device to be pinged. For example, if the IP address of the device is 192.168.10.15, set the PWS to 192.168.10.14 or 192.168.10.16. To set the IP address of the PWS, refer to GP 34.
2. Set the subnet mask of the PWS the same as the devise to be pinged.
3. Open a command window, for Windows 7, go to Step 4. For Windows XP, go to Step 5.
4. **Opening a command window in Windows 7 Only**. perform the following:
   a. Select the Windows Start icon.
   b. In the Search programs and files dialog box, type cmd.
   c. Select OK. A command window will open.
5. **Opening a command window in Windows XP Only**. perform the following:
   a. Select Start, then Run.
   b. In the Run dialog box, type cmd.
   c. Press return. A command window will open.
6. In the command window, type ping and the address of the device. Refer to number 1 in Figure 1.
7. If the ping command is successful, a reply from the devise will be received. Refer to number 2 in Figure 1.

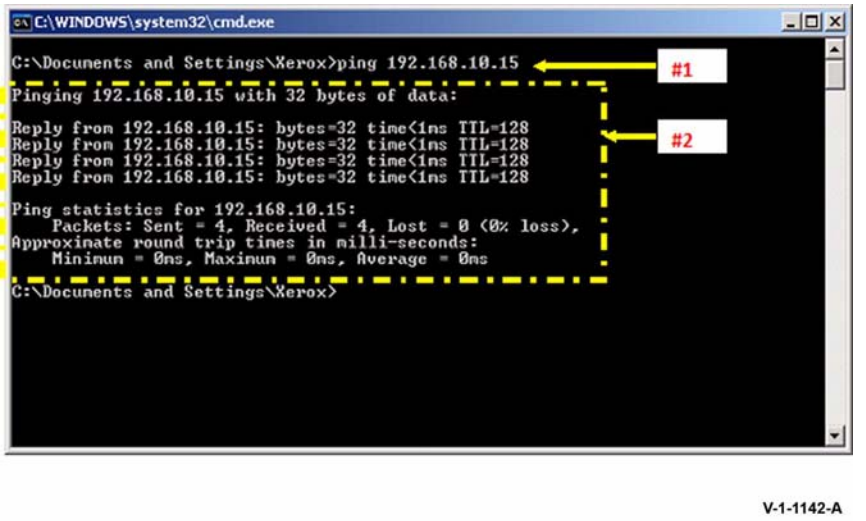


Figure 1 Successful ping command

8. If the ping command is unsuccessful, a timed out message will be received, Figure 2.

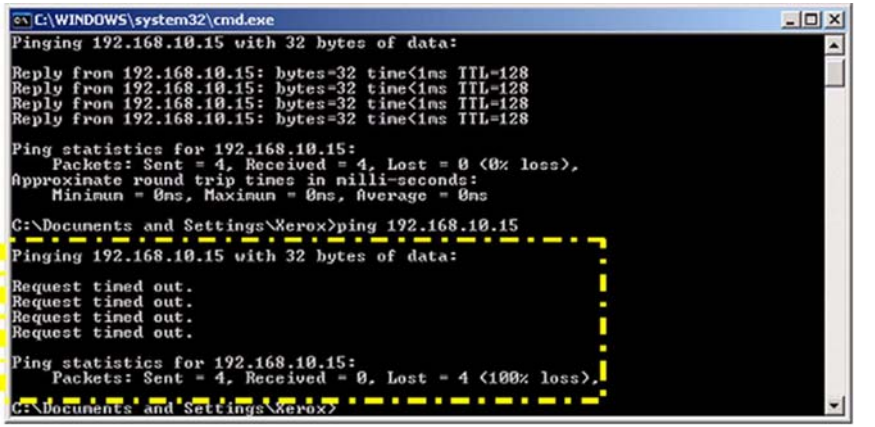


Figure 2 Unsuccessful ping command

GP 34 How to Set the IP Address of the PWS

Purpose

To set the IP address of the PWS.

Procedure

Go to the relevant procedure:

- Windows 7
- Windows XP

Windows 7

Perform the following:

1. Open Start / Control Panel / Network and Sharing Centre.
2. From the left pane, select Change adapter settings.
3. Right click on Local Area Connection icon, then select Properties. The Local Area Connection Properties window will open.
4. Highlight Internet Protocol Version 4 (TCP/IPv4). then select Properties, refer to Figure 1. The Internet Protocol Version 4 (TCP/IPv4) Properties window will open.

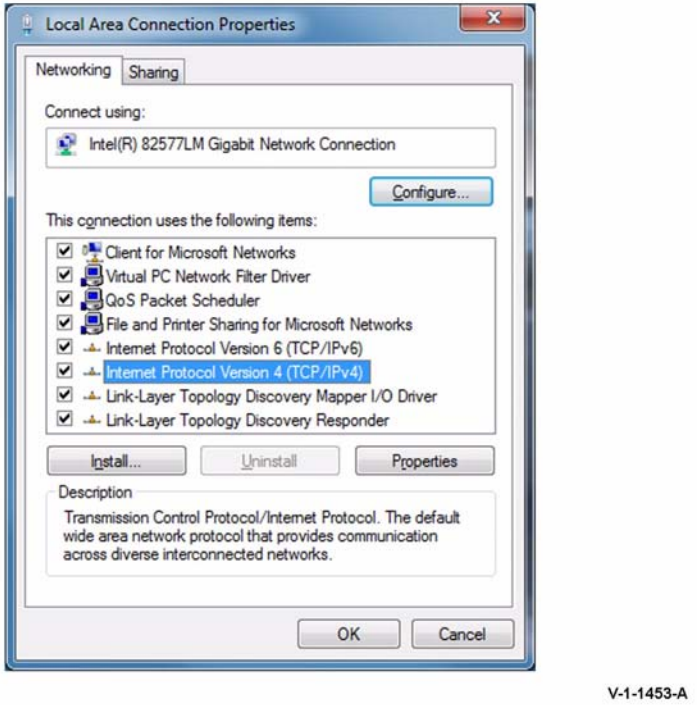


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Figure 1 Properties window

5. Double-click the entry Internet Protocol Version 4 (TCP/IPv4).
6. Select Use the following IP address. Enter the IP address and Subnet mask, Figure 2.

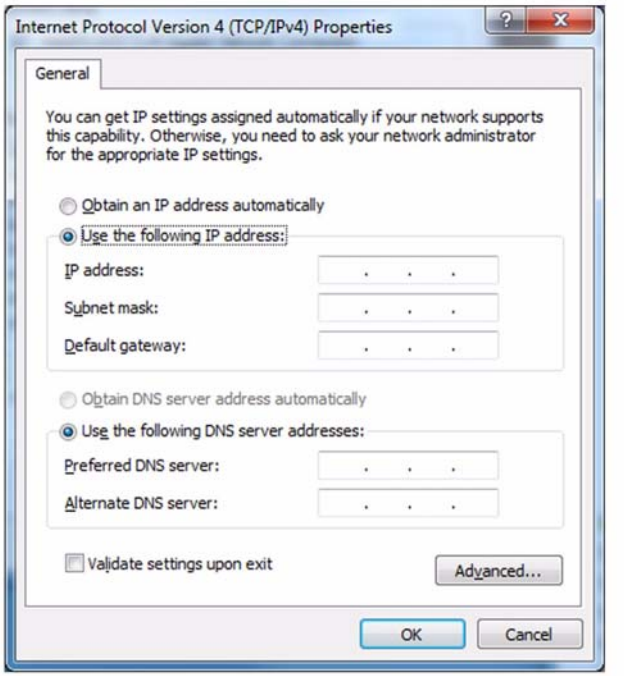

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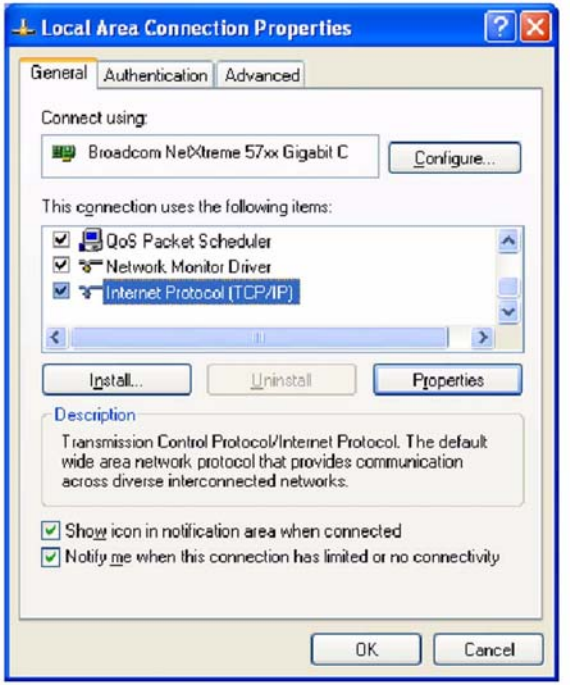
Figure 2 Properties window

7. Click on OK to close the properties dialog box, then OK to close the second properties dialog box.
8. Close the Local Area Connection Status dialog box.

Windows XP

Perform the following:

1. Open Start / Control Panel / Network Settings.
2. Right click on Local Area Connection icon, then select Properties. The Local Area Connection Properties window will open.
3. Highlight Internet Protocol (TCP/IP), then select Properties, refer to Figure 3. The Internet Protocol (TCP/IP) Properties window will open.



V-1-1144-A

Figure 3 Properties window

4. Select Use the following IP address. Enter the IP address and Subnet mask, Figure 4.

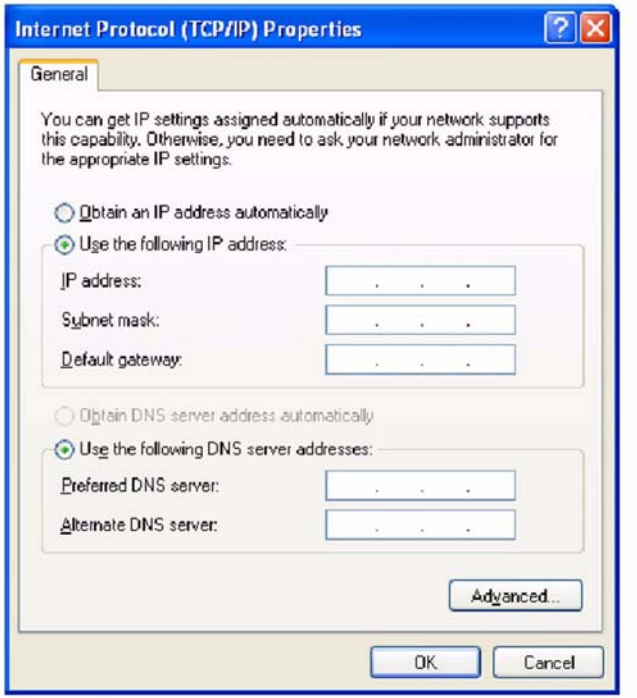


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Figure 4 Properties window

5. Select OK to close the Internet Protocol (TCP/IP) Properties window.
6. Select OK to close the Local Area Connection Properties window.

GP 35 How to Change Ethernet Speed

Purpose

To change the machines ethernet speed.

Procedure

Perform the following:

1. Enter Customer Administration Tools, GP 24.
2. Press the Machine Status button.
3. Select the Tools tab.
4. Select Network Settings.
5. Select Advanced Settings.
6. Select Ethernet Physical Media.
7. Select the speed, then Save.
8. Log out of Customer Administration Tools.

GP 36 How to Check an Adaptive Sensor

Purpose

Use this procedure to check the operation of adaptive reflective sensors.

To check the operation of all other sensors, refer to GP 11 How to Check a Sensor.

NOTE: *The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the circuit diagram in the RAP for the correct information.*

Initial Actions

WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 14. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that the sensor is installed correctly.
2. Clean the sensor and the area around the sensor.
3. Check that the mirror surface is clean. Also ensure that there is not an obstruction between the sensor and the mirror.
4. Check that the paper path is clear.

Sensor Action

Refer to Figure 1. When light from the LED is reflected back to the photo-sensitive transistor, the sensing line, PJA, pin 2, is high. When light from the LED is blocked by a sheet of paper, no light is reflected back to the photo-sensitive transistor, and the sensing line is low.

During initialisation the sensor drive voltage, PJC, pin 3, is adjusted to provide a sensing line output in the range of +1.3V to +1.6V when no paper is detected.

Quick Sensor Check

Enter the component control code for the sensor. Refer to dC330. Activate the sensor. If the display changes, the sensor operates correctly. If the display does not change, perform the procedure.

Procedure

- Go to Flag 1. Check for:
  - +3.3V at PJC, pin 1.
  - +2.15V at PJC, pin 3.
  - +1.3V to +1.6V at PJC, pin 2 when no paper is present.
- Disconnect PJA and PJC. Check the harness for continuity between PJA and PJC.

References:

- 301D +3.3V Distribution RAP.
- REP 1.2 Wiring Harness Repairs.

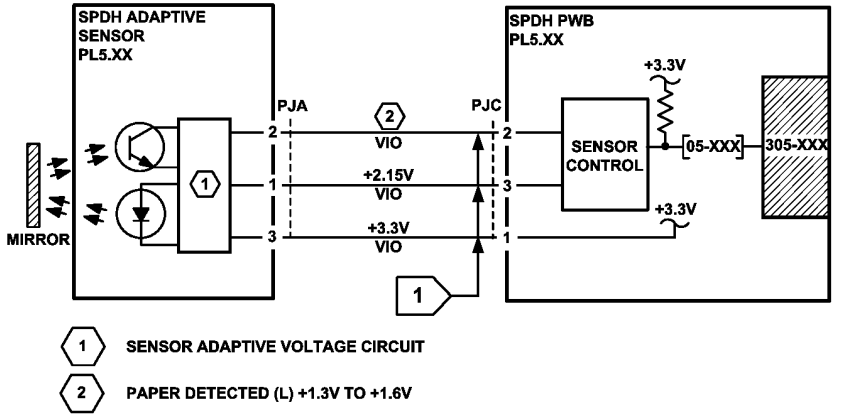


Figure 1 Circuit diagram

GP 40 Glossary of Terms, Acronyms and Abbreviations

Where possible unit designations as appear in ISO 1000 (International Organization for Standardization) and Xerox Standard MN2-905 have been used. All measurement appear in ISO units followed by any conversion in brackets e.g.; 22.5mm (0.885 inches)

Refer to Table 1.

Table 1 Abbreviations

Term	Description
AAA	Authentication, Authorisation and Accounting
ABS	Automatic Background Suppression.
ACK	Acknowledge
AGC	Automatic Gain Control
AHA	Advanced Hardware Architecture
AMCV	Average Monthly Copy Volume
AMPV	Average Monthly Print Volume
AMR	Automatic Meter Read
AMS	Automatic Magnification Selection
ANSAM	Answer Tone, Amplitude Modulated
ANSI	American National Standards Institute
API	Application Programming Interface
APS	Auto Paper Selection
ARP	Address Resolution Protocol. Converts an IP address to a MAC address. See RARP.
ASIC	Application Specific Integrated Circuit
ASP	Authorized Service Provider
ASTM	American Standard Test Method
ATPD	Across The Process Direction
AZAP	Any Zone Any Paper
B	Bels (applies to sound power level units)
B (A)	Bels (A weighted) (applies to sound power level units)
B (A) I	Bels (A weighted) Impulse response (applies to sound power level units)
BABT	British Approvals Board for Tele-Communication
BAM	Bundes Anstalt fur Materialprufung
BEUI	BIOS Extended User Interface
Binding	Part of the communication between modules.
Bluetooth	Wireless local area network
BM	Booklet Maker
BootP	Boot Protocol. AN IP protocol for automatically assigning IP addresses.
BPS	Bits Per Second
BS	Behavior Specification
BT	Busy Tone
C	Celsius

Table 1 Abbreviations

Term	Description
CAT	Customer Admin Tool
CB	Certification Bodies
CCA	Cenelec Certification Agreement
CCA	Customer Call Assistance
CCD	Charged Coupled Device
CCITT	Comite Consultatif International Telegraphique et Telephonique
CCM	Copy Controller Module
CCR	Change Control Request
CCS	Copy Controller Service
CD	Copy Darker. A copy density setting
CD-ROM	Compact Disk - Read Only Memory
CDS	Charge - deficient spot. A photo conductor defect that as a very small black spot (image quality parameter).
CED	Called Station Identification
CEH&S	Corporate Environmental Heath and Safety
CentreWare	CentreWare internet services is the embedded HTTP server application that is available on network enabled machines. It enables access to printing, faxing and scanning over the internet.
CFR	Confirmation To Receive
CISPR	Comite International Special des Perturbations
CID	Command Identification
CIG	Calling Subscriber Identification
CIS	Contact Image Sensor
CL	Copy Lighter. A copy density setting
Click Charge	Charge by copy/print rate
COD	Customer Operating Division
CPHI	Calls Per Hundred Installs
CQ	Copy Quality
CR	Change Request
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Monitor
CSE	Customer Service Engineer
CSF	Call Service Fault
CSMS	Customer Satisfaction Management System
Customer Drivers	Customer drivers are specially developed generally made with a driver toolkit. These drivers can provide a full set of features for Xerox printers. In the past, customers drivers have been provided for all major operating systems. A customer print driver is costly to develop, and does not used standard operating system components. For this reason, PPD / GPD solutions will be used in future whenever possible.
CTC	Continue To Correct
CTF	Contrast Transfer Function

Table 1 Abbreviations

Term	Description
CTR	Response For Continue To Correct
CTS	Clear To Send
CVT	Constant Velocity Transport
CW	CentreWare
CWW	CentreWare Web
DADF	Duplex Automatic Document Feeder (feeds documents to a different stack)
DADH	Duplex Automatic Document Handler (feeds documents to bottom of existing feed stack)
DB	Database
dB	Decibel (applies to sound pressure level units)
dB(A)	Decibels (A weighted) (applies to sound pressure level units)
dB(A)I	Decibels (A weighted) Impulse response (applies to sound pressure level units)
dC	Diagnostic code
DC	Device Controller, generic term for any module that acts as a image handling device e.g., SIP. Digital Copier
DC	Direct Current
DCN	Disconnect
DCS	Digital Command Signal
DDF	Device Description File
DHCP	Dynamic Host Config Protocol (similar to BootP)
DIMM	Dual In Line Memory Module
DIN	Deutches Institute fur Normung
DLM	Dynamically Loadable Module
DMO-E	Developing Markets Operations East (was part of RX)
DMO-W	Developing Markets Operations West (was part of ACO)
DOS	Disk Operating Systems
DPHM	Defects Per Hundred Machines
DIS	Digital Identification Signal
DM	Document Manager
DMA	Direct Memory Access
DMO	Developing Markets Operations
DOF	Direction Of Feed, paper width sensors
DPI	Dots per inch
DRAM	Dynamic Random Access Memory
DRS	Drum to Roll Spacing
DSR	Data Set Ready
DST	Daylight Saving Time
DT	Dial Tone
DTC	Digital Transmit Command

Table 1 Abbreviations

Term	Description
DTMF	Dual Tone Multiple Frequency
DU	Density Units
DUI	Display User Interface
Dust Off	Routine to return machine to pre-install state
EAA	Electron Auditron Administrator
EBS	Electronic Billing Service
EC	European Community
ECE	External Customer Engagement
ECM	Error Correction Mode. Electronic Counter Measure
EEC	European Economic Community
EET	Edge Enhancement Technology
EH&S	Environmental Health and Safety
ELOG	Electronic Log
EMC	Electromagnetic Compatibility
Embedded Fax	A fax system included in a system device
EME	Electromagnetic Emission
EN	European Norm
ENS	Event Notification Service. Used by a software module to alert another module of an event.
EOL	End Of Line
EOM	End Of Message
EOP	End Of Procedure
EOR	End Of Retransmission
EPA	Environmental Protection Agency
EPC	Electronic Page Collation (memory dedicated to temporary retention of images captured from the scanner and network controller)
EPROM	Erasable / Programmable Read Only Memory
EP-SV	Electronic Partnership Supervisor (kit)
ERR	End Retransmission Response
ERU	Engineer Replaceable Unit
ESD	Electrostatic Discharge
ESG	European Solutions Group
ESS	Electronic Sub-System. For this machine use NC
ETP	Electronic Test Pattern
EU	European Union
EUR	Europe
FAX	Facsimile
FAR	Fully Active Retard feeder
FCC	Federal Communications Commission
FCD	Facsimile Coded Data
FCS	Facsimile Checking Sequence

Table 1 Abbreviations

Term	Description
FCOT	First Copy Out Time
FD	Functional Description
FDI	Foreign Device Interface
FER	Feature Enhancement Request
FDI	Foreign Device Interface
FIF	Facsimile Information Field
FIFO	First In First Out
FireWire	IEEE 1349. High speed serial communications system, comprising hardware plus protocol. Operates at 100, 200 or 400Mbits/s, with 800Mbits/s under development. See USB and RS-232
Firmware	Software in a ROM
FLASH	On board erasable and re-programmable non volatile memory
FOIP	FAX Over Internet Protocol
FPGA	Field Programmable Gate Array
FPOT	First Print Out Time
FRU	Fuser Replacement Unit
FSK	Frequency Shift Keying
FSMA	Field Service Maintenance Agreement
FTP	File Transfer Protocol
FTT	Failure To Train
FX	Fuji Xerox
G3	Group 3
GC	Group Command
GDI	Graphical Display Interface
GI	Group Identification
GLCD	Graphic Liquid Crystal Display
GND	Ground
GPD Minidrivers	A Generic Printer Description file has a function similar to PPD files. This format was developed by Microsoft to provide a simple method to develop drivers for non-postScript printers. Standard GPD minidrivers share the same lamentations as the PPD minidrivers, but they too can be enhanced using plug-ins. GPD Minidrivers are a new technology introduced for Windows 2000 and they will also be supported Windows NT 4. In Windows 95/98, a similar, but less powerful ‘unidriver’ format was used.
GS	German safety
GSM	Grams per square metre
GUI	Graphical User Interface
GWA	Green World Alliance
HC	High Capacity
HCF	High Capacity Feeder
HDD	Hard Disk Drive

Table 1 Abbreviations

Term	Description
HDLC	High Level Data Link Control
HFLEN	High - Frequency (random) Line - Edge Noise. image quality metric.
HFSI	High Frequency Service Intervals
HLD	High Level Design. A document that defines the software high level design.
HTTP	Hyper Text Transfer Protocol
HUI	Hybrid User Interface
HVF	High Volume Finisher
HVF / BM	High Volume Finisher Booklet Maker
HVPS	High Voltage Power Supply
Hz	Hertz
IB or I/B	InBoard
I2C-bus	Inter Integrated Circuit bus. This provides a simple bidirectional 2-wire bus for efficient inter-IC control. All I2C-bus compatible devices incorporate an interface which allows them to communicate directly with each other via the I2C-bus.
ICAT	Internal Customer Acceptance Test
ICE	Internal Customer Engagement
ID	Identification
IEC	International Electrotechnical Commission
IDG	Inter document gap
IEE	Institute of Electrical Engineers
IEEE 1284	Parallel port communication
IETF	Internal Engineering Task Force
IFAX	Internet Fax
IIT	Image Input Terminal
IM	Interim Maintenance
Intlk	Interlock
IOT	Image Output Terminal
IOTC	Image Output Terminal Controller (IOT PWB, LVPS and HVPS). Sometimes referred to as the Power and Control Assembly.
IP	Internet Protocol
IPA	Image Processing Accelerator. Used by the machine scanning services to convert scanned images to a standard format e.g. for scan to file / scan to E-mail for network transmission.
IPM	Incremental Preventative Maintenance
IPM	Images per minute
IPP	Internet Printing Protocol
IPS	Image Processing Service
IPS1	Image Processing System
IPX	Internetwork Protocol eXchange
IQ	Image Quality

Table 1 Abbreviations

Term	Description
IR	Infrared
ISDN	Integrated Services Digital Network / International Standard Data Network
ISIL	Inter and Side Image Lamp
ISO	International Standards Organization
ITP	Internal Test Pattern
ITTCC	International Telegraph and Telephone Consultative Committee
ITU -T	International Telecommunications Union - Telecommunication
JBA	Job Based Accounting (Network Accounting)
JBIG	Joint Bi-Level Image Experts Group file interchange format
Jitter	A line of missing or corrupted information in the fast scan direction.
JPEG	Joint Photographic Experts Group file interchange format
kg	kilogram
kHz	kilohertz
Kill All	Routine to return all NVM, including protected NVM, to a virgin state. Factory use only
KO	Key Operator
LAA	Local Area Addressing
LAN	Local Area Network
LCD	Liquid Crystal Display
LCDM	Liquid Crystal Display Module
LCS	Line Conditioning Signal
LCSS	Low Capacity Stapler Stacker
LDAP	Lightweight Directory Access Protocol (allows sharing of corporate phone book information)
LE	Lead edge
LED	Light Emitting Diode
LEF	Long Edge Feed
LEISUS	Low End Interface Unsolicited Status-B
LG	Legal
LOA	Load Object Attributes
lpi	Lines per inch
LSI	Large Scale Integration
LT	Letter
LVPS	Low Voltage Power Supply
Lwr	Lower
LUI	Local user Interface
m	metre

Table 1 Abbreviations

Term	Description
MAC Address	Media Access Code. This is the basic, unique identifier of a networked device. An incoming message is analysed and an address in another form, such as an IP address, is resolved by a lookup table to a MAC address. The message is then directed to, and accepted by the equipment thus identified. It is the burnt-in, hardware address of a NIC.
Mark Service	Mark Service is the software module that tells the hardware to put toner on paper.
MB	Megabyte (one MB = 1,048,576 bytes = 1024 kilobytes). Mail Box
Mb	Mega bit (one million bits)
MCF	Message Confirmation
Mem-Mem	Memory to Memory
MF	Multifunction
MFLEN	Mid - Frequency (random) Lines - Edge Noise
MH	Modified Huffman
MIB	Machine Information Block. SNMP database element
MJ	Modular Jack
mm	millimetre
MMC	Microsoft Management Console
MMR	Modified Modified Read compression
MN	Multi - National
Modem	MOdulator/DEModulator. Hardware unit that converts the ‘one’ and ‘zero’ binary values from the computer to two frequencies for transmission over the public telephone network (modulation). It also converts the two frequencies received from the telephone network to the binary values for the computer (demodulation).
Moire	Image quality defect caused by interference between patterned originals and the digital imaging process. Moire patterns are repetitive and visible as bands, plaids or other texture.
MPS	Multi-Page Signal
MR	Modified Read compression
MRC	Modified Read Compression
MSG	Management Steering Group
ms	millisecond
MSI	Multi-Sheet Inserter
MSO	Mixed Size Originals
MX	Modi Xerox
N	Newton
NA	North America
nC	nano Coulomb
NC	Network Controller (equivalent to ESS).
NC	Normal Contrast. Copy contrast setting
NCP	Network Core Protocol

Table 1 Abbreviations

Term	Description
NCR	No Copying Required
NCU	Network Control Unit
NDS	NetWare Domain Services or Novell Directory Services
NDS Context	NetWare Domain Services Context
NDS Tree	NetWare Domain Services Tree
NetBEUI	NetBIOS Extended User Interface. A network device driver or transport protocol that is the transport driver supplied with LAN Manager. It can bind with as many as eight media access control drivers.
NetBIOS	Network Basic Input / Output System. Software developed by IBM that provides the interface between the PC operating system, the I?O bus, and the network. Since its design, NetBIOS has become a de facto standard.
NGI	Next Generation Infrastructure (new files and mail servers)
NIC	Network Interface Card. Converts the data to a form suitable for transmission and reception. Uses ARP and RARP.
Nm	Newton metre
NOHAD	Noise, Ozone, Heat, Airflow and Dust
NP	Printer configuration
NS	Normal Sharpness. Copy sharpness setting
NSC	Non-Standard Facilities Command
NSF	Non-Standard Facilities
NSS	Non-Standard Set-Up
NSSD	Network. The SESS and CentreWare development team based in Rochester NY. This group is now named CDDU.
NVM	Non-Volatile Memory
OA	Open Architecture
OB or O/B	Out Board
OCT	Offsetting Catch Tray
OEM	Original Equipment Manufacturer
OGM	On Going Maintenance
OOP	Out Of Paper
OpCo	Operating Company
OS	Operating System
OSA	Online support Assistant
OSCG	Office Systems Component Group
P/R	Photoreceptor
PABX	Private Automatic Branch Exchange
PC	Personal Computer
PC Fax	Personal Computer Fax
PCI	Peripheral Component Interface
PCI	Personal Computer Interface
PCL	Printer Control Language

Table 1 Abbreviations

Term	Description
PCMCIA	Personal Computer Memory Card International Association
PD	Process Direction
PDF	Adobe Acrobat Portable Document Format
PDL	Page Description Language
PDT	Product Delivery Team
Pels	Picture Data (Pixel)
PFM	Paper Feed Module
PFP	Paper Feed Platform
PHI	per Hundred Installs
PIN	Procedural Interrupt Negative
PIN	Personal Identification Number
ping	Packet InterNet Groper. Tool to test connections between nodes by sending and returning test data.
PIP	Procedural Interrupt Positive
PJL	Printed Job Language. Hewlett Packard page description language.
PMC	Programme Management Committee
POPO	Power Off Power On
POO or P of O	Principles of Operation
POST	Power On Self Test
PPC	Power PC. A EPROM manufacturer
PPD	Postscript Printer Description. A PPD file is a simple formatted text file that contains a description of the printers features and the corresponding PostScript ‘code’ needed to activate each feature. Apple LaserWrite drivers and application programs such as Adobe PageMaker can use PPD files. With a OOD file, many of the printing features of a network printer can be made available to users. However advanced features such as LAN Fax, Accounting and Exception Page Programming cannot be provided.
PPD Minidrivers	PPD minidrivers are available in Windows operating systems (from Windows 95 onwards). With these, a Xerox - supplied PPD file is used in conjunction with an operating system supplied driver ton create a PostScript driver tailored for a specific device. In windows 95/98, a driver provided by this method has lamentations and not all devices features can be made available to the user. With Windows NT 4 and Windows 2000, it is possible to make more features available by using a user interface rendering plug - in. In this document, if the driver is to be provided with If no plug-ins are provided, then it is called a standard minidriver.
PPHI	Problems Per Hundred Installs
PPI	Post Process Inserter
PPM	Prints per minute / Parts Per Million
PPR	Partial page Request
pps	Partial Page Signal / pulses per second
PPS	Product Performance Specification

Table 1 Abbreviations

Term	Description
PR	Photo-Receptor
PRI-EOM	Procedure Interrupt-EOM
PRI-EOP	Procedure Interrupt-EOP
PRI-MPS	Procedure Interrupt-MPS
Process Death	A process has stopped working.
PSM1	Power Save Mode 1 (low power mode)
PSM 3	Power Save Mode 3 (sleep mode)
PS	Post Script
PSTN	Private Switched Telephone Network
PSW	Portable Service Workstation
Pthread	Process Thread. A very low level operating system concept for code execution.
PTT	Post, Telephone, Telegraph (national public utilities)
PVC	Poly Vinyl Chloride
PVT	Product Verification Test
PWB	Printed Wiring Board
PWS	Portable Work Station
QIT	Quality Improvement Team
RAM	Random Access Memory
RARP	Reverse Address Resolution. Reverse of ARP. Converts a MAC address to an IP address. The document centre resolves its address using RARP. See also MAC, NIC and ARP.
RBT	Ring Back Tone
RCA	Remote Customer Assistance
RDT	Remote Data Transfer
R/E	Reduction / Enlargement
Registration Service	Monitors when RPC services go on and offline.
REN	Ringer Equivalence Number
RFC	Request for comment. An IETF standard reference.
RPC	Remote Procedure Call. How the device communicates internally between software modules.
RH	Relative humidity
RIC	Remote Interactive Communications
RIS	Raster Input Scanner
Riser PWB	A card that increases the number of PCI slots.
RJ 45	Phone type network connector
RM	Requirements Management
RMS	Root Mean Square (AC effective voltage)
RNR	Receive Not Ready
RO	Regional Operations

Table 1 Abbreviations

Term	Description
ROM	Read Only Memory
ROS	Raster Output Scanner
RR	Receive Ready
RRB	Requirements Review Board
RS-232, RS-423, RS-422, RS-485	Series of standards for serial communication of data by wire. RS-232 operates at 20kbits/s, RS-423 operates at 100kbits/s, RS-422 and RS-485 operate at 10Mbits/s. See FireWire and USB.
RTN	Retrain Negative
RTP	Retrain Positive
RTS	Request To Send
Rx	Receive
S2E	Scan-to-E-mail
S2F	Scan-to-File
S2X	Scan-to-Export
SA	Systems Administration
SAD	Solid Area Density
SAKO	Systems Administration Key Operator
SAP	Service Advertising Protocol. A network device will broadcast its capabilities onto the network at a defined intervals.
SAF	Safety
SAP	Service Advertising Protocol
SAR	Semi-Active Retard feeder
SBC	Single board controller
SCD	Software Compatibility Database
SCM	Software Configuration Management
SCN	Specification Change Notice
SCR	Software Change Request
SCSI	Small computer Systems Interface
SCT	Simple Catch Tray
S/D	Shut Down
SDK	Software Development Kit
SDP	Software Development Plan
SDR	Shut Down Rate
SDRAM	Static Dynamic Remote Access Memory
Server Fax	A fax system that uses a remote Fax server. Faxes transmit as a Scan to File job sent to the server. Fax receive as print jobs submitted to the Connection Device.
SEF	Short Edge Feed
Semaphore	A variable or abstract data type.
SESS	Strategic Electronic Sub-System
SIM	Scanner Input Module

Table 1 Abbreviations

Term	Description
SIM	Subscriber Identity Module (also known as a SOK-Software Option Key)
Single board controller PWB	Copy, print and UI controllers all on one PWB within the image processing module.
SIP	Scanning and Image Processing
SIR	Standard Image Reduction
Sixth Sense	A single device and group management tool
SLP	Service Location Protocol (finds servers)
SM	Scheduled Maintenance
SMART	Systematic Material Acquisition Release Technique
SMB	Server Message Block. Microsoft Server / Client Communications protocol
SMP1	Service Maintenance Pack 1 (contains a software package)
SPAR	Software Problem Action Request
SPDH	Single Pass Document Handler
SNMP	Simple Network Management Protocol
Snr	Sensor
SOD	System Operating Description
SOK	Software Option Key (also known as a SIM- Subscriber Identity Module
SPL	Sound Pressure Level
SPP	Short Paper Path
spi	Spots per inch
SPI	Service Provider Interface. Steps to process a job.
SPID	Service Profile Identification
SQA	Software Quality Assurance
SR	Service Representative
SRAM	Static Random Access Memory
SRC	Software Requirements
SRS	Service Registry Service
SS or S/S	Sub System
ST	System Terminal Device. Multi-functional device as defined by Energy Star (includes DC / NC and DC / NC / Fax)
STP	Standard Test Pattern
STS	Side To Side, paper width sensors
SW	Switch
SW or S/W	Software
SWL	Sound Power Level
system kernel	Minimal operating system
T & M	Time and Materials
TAR	Take Away Roll
TAR	File Format for archiving (derived from ‘tape archive’).
TBC	To Be Confirmed

Table 1 Abbreviations

Term	Description
TBD	To Be Defined
TCP / IP	Transmission Control Protocol / Internet Protocol
TE	Trail Edge
Template	A collection of Scan to File attributes that can be conveniently re-used.
TC	Toner Concentration
TCF	Training Check Field
TDT	Transfer Detack
TEC	Typical Electricity Consumption
TEI	Terminal Endpoint Identifier
TIFF	Tagged Image File Format
TIFF FX	TIFF Fax eXtended
TIFFX	Tagged Image File Format - for internet FAX
TP	Test Point
TOS	Teflon over Silicon
TPM	Technical Programme Manager
Transmissive LCD	Liquid Crystal Display lit from the back
TRC	Toner Reproduction Curve
Tri-Folder	Output device that creates C and Z folds
TRN	Train
TSH	Technical Service Hours
TSI	Transmit Subscriber Identification
TTY	Teletype Terminal
TUI	Textual User Interface
Tx	Transmit
UGD	An upgrade file, i.e. filename.ugd
UART	Universal Asynchronous Receiver Transmitter
UDP	User Datagram Protocol
UI	User Interface (display screen)
UK	United Kingdom
UM	Unscheduled Maintenance
UMR	Unscheduled Maintenance Rate
URL	Universal Resource Locator
USB	Universal Serial Bus. High speed successor to parallel port for local device communications. Operates at 12Mbits/s. See FireWire and RS-232.
USCO	United States Customer Operations
USSG	United States Solutions Group
UTP	Un-shielded Twisted Pair
V.17 / V.29 / V.34	Modem standards
VALO	Value Added Logistic Organization
VAR	Value Added Reseller

Table 1 Abbreviations

Term	Description
VDE	Verband Deutscher Elektrotechniker
VGA	Video Graphics Array
VOIP	Voice Over Internet Protocol
WC	WorkCentre
WC + PS	WorkCentre + PostScript print drivers
WEB UI	CentreWare Internet Services
WINS	Window Internet Name Service
XAP	Xerox Asia Pacific
XCL	Xerox Canada Limited
XCMI	Xerox Common Management Interface
XCRU	Xerographic CRU (also known as XRU)
XE	Xerox Europe
XI	Xerox Initiated
XL	Xerox Limited
XLA	Xerox Latin America
XOG	Xerox Office Group
XRU	Xerographic Replacement Unit
XSA	Xerox Standard Accounting
XUL	Xerox Unique Login enables use of the xerox corporate directory

dC104 Usage Counters

Purpose

To display the various usage counters.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Service Info tab.
3. Select dc104 Usage Counters.
4. Select the relevant counters from the pull down menu.
5. Select Close to exit the routine.
6. Select Call Closeout to exit Service Mode.

dC108 Software Version

Purpose

To identify the version of the installed software on all major modules.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Service Info tab.
3. Select dc108 Software Versions.

   The dc108 Software Versions screen will display the software and version numbers installed on the machine.
4. Select Close to exit the routine.
5. Select Call Closeout to exit Service Mode.

dC120 Fault Counters

Purpose

To view the faults raised by the machine. dC120 Fault Counters records the number of occurrences of a fault, allows the counters to be sorted by occurrences and allows a specific fault to be found by chain.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Service Info tab.
3. Select dc120 Fault Counters.

   NOTE: *There will be a delay while the machine retrieves the fault counter data.*

4. A list of faults that have occurred on the machine is displayed.
   - The list can be sorted by number of occurrences and to include zero occurrences. Selecting these options will resort the list upon selection.

     NOTE: *When selecting Include Zero Occurrences, there may be a delay as the list is reconfigured.*

   - The list can be sorted by chain.
     a. Select the chain field.
     b. Enter a 3 digit chain number on the numeric keypad.
     c. Select Find.
5. Select Close to exit the routine.
6. Select Call Closeout to exit Service Mode.

dC122 Fault History

Purpose

To view shutdown faults in chronological order and more detail than is shown in dC120 Fault Counters.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Service Info tab.
3. Select dc122 Fault History.
4. The dC122 Fault History screen is displayed with the last 40 faults shown in chronological order. The most recent fault is at the top of the list.
5. To observe the details of the fault, select the fault and select Details on the pop-up window. Select Close to return to the fault table.
6. Select Close to exit the routine.
7. Select Call Closeout to exit Service Mode.

dC131 NVM Read/Write

Purpose

To review and modify values within the machine configuration and control parameters stored in NVM.

NOTE: *This does not include customer administration or accounting data, these are accessible from the billing and auditron facilities, refer to the User Guide.*

Description

Each NVM item is identified using an NVM ID and NVM index numbers in the form XXX-XXX, where XXX- is the ID prefix, and -XXX is the NVM ID. Index numbers range from 0 to 999. For example 610-001. Refer to GP 2 Fault Codes and History Files.

Procedure

1. Save the NVM to disk, refer to NVM Save and Restore, dC361.
2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dC131 NVM Read/Write.

- To read NVM:
  1. Enter the required 3 digit NVM ID in the first field.
  2. Enter the NVM Index in the second field.
  3. Select Read.
  4. Use the Up/Down arrows to move between memory locations.
- To write NVM:
  1. Enter the required 3 digit NVM ID in the first field.
  2. Enter the NVM Index in the second field.
  3. Enter a new value in the field beneath the heading ‘Value of xxxx’ where xxxx is the description of the NVM location.

     NOTE: *Select +/- to switch between positive and negative values.*

  4. Select write.

Refer to the tables that follow for NVM locations and parameters:

- NVM Tables for the HVF, IIT, CCS and IOT, refer to NVM Read / Write Tables.

NOTE: *The Edoc CD must be in the CD drive to use the link below.*

- For the fax NVM tables, refer to the Fax NVM Document.

When NVM values have been changed, select Close to exit the routine, Select Call Closeout to exit Service Mode. select Exit and Reboot, GP 14.

NOTE: *If the NVM default characters exceed 10 characters only the first eight characters are displayed in the list. The full string is displayed in the Read/Write window.*

NOTE: *Selecting Reset will cause the selected NVM location to be reset to its default value. Selecting Cancel closes the window and cancels any changes made in the now closed window.*

NOTE: *NVM that contains customer administrative or accounting data can not be read or modified.*

NOTE: *The Read Only (protected) NVM can only be changed using a password obtained from Xerox. Protected NVM cannot be reset from dC132 NVM initialisation.*

NVM Read / Write Tables

1. Refer to the following for NVM parameters:
   - CCS NVM ID 600-001 to 600-205, Table 1
   - CCS NVM ID 602-001 to 603-049, Table 2
   - CCS NVM ID 604-001 to 604-160, Table 3
   - CCS NVM ID 604-397 to 604-983, Table 4
   - CCS NVM ID 605-001 to 605-036, Table 5
   - CCS NVM ID 606-001 to 606-269, Table 6
   - CCS NVM ID 606-272 to 607-002, Table 7
   - CCS NVM ID 608-442 to 608-999, Table 8
   - CCS NVM ID 609-001 to 609-373, Table 9
   - CCS NVM ID 610-001 to 610-052, Table 10
   - CCS NVM ID 612-001 to 612-005, Table 11
   - CCS NVM ID 616-001 to 616-335, Table 12
   - CCS NVM ID 617-001 to 617-007, Table 13
   - CCS NVM ID 620-001 to 620-033, Table 14
   - CCS NVM ID 620-101 to 620-199, Table 15
   - CCS NVM ID 620-200 to 620-299, Table 16
   - CCS NVM ID 620-300 to 620-399, Table 17
   - CCS NVM ID 620-400 to 620-499, Table 18
   - CCS NVM ID 620-500 to 620-587, Table 19
   - CCS NVM ID 621-001 to 641-002, Table 20
   - CCS NVM ID 648-001 to 648-002, Table 21
   - CCS NVM ID 649-001 to 649-014, Table 22
   - CCS NVM ID 652-001 to 652-084, Table 23
   - CCS NVM ID 656-001 to 657-001, Table 24
   - CCS NVM ID 658-001 to 658-153, Table 25
   - CCS NVM ID 665-001 to 665-006, Table 26
   - CCS NVM ID 671-001 to 671-020, Table 27
   - CCS NVM ID 672-017 to 672-017, Table 28
   - CCS NVM ID 673-001 to 673-023, Table 29
   - CCS NVM ID 674-001 to 674-004, Table 30

- Finisher NVM ID 712-003 to 712-103, Table 31
- IOT NVM ID 710-001 to 710-095, Table 32
- IOT NVM ID 711-001 to 775-004, Table 33
- IOT NVM ID 781-004 to 782-001, Table 34
- IOT NVM ID 783-001 to 789-002, Table 35
- IOT NVM ID 791-001 to 791-089, Table 36
- IOT NVM ID 793-004 to 793-045, Table 37
- IIT NVM ID 800-005 to 801-215, Table 38
- IIT NVM ID 803-001 to 803-213, Table 39
- IIT NVM ID 805-001 to 805-032, Table 40

Table 1 CCS NVM ID 600-001 to 600-205

NVM ID	NVM Name	NVM Description	Settings	Default
600-001	Compression Mode	Compression Mode	Range = 0 to 1	0
600-002	Reserved Blocks	Reserved blocks	Range = 0 to 5	0
600-003	Megs of Memory	Megs of memory	Range = 0 to 65535	16
600-004	EPC memory low percent	EPC memory low percent	Range = 1 to 99	38
600-005	Disk Mode	Disk Mode	Range = 0 to 1	1
600-006	Memory Out Bound	Memory Out Bound	Range = 0 to 6	6
600-007	EPC memory full percent	EPC memory full percent	Range = 1 to 99	12
600-008	Use Partial Blocks	Use Partial Blocks	Range = 0 to 1	1
600-009	BlockSize in K	Block size in K	Range = 200 to 200	200
600-010	Initial Blocks	initial blocks	Range = 12 to 24	12
600-011	Blocks Needed	Blocks Needed	Range = 8 to 20	8
600-012	Frame Size	Frame Size	Range = 923 to 923	923
600-013	Percent of Frame Size	Percent of frame size	Range = 1 to 99	70
600-014	Making mode when EPC full	Making mode when EPC full	Range = 0 to 3	0
600-015	Ram Size Mismatch Fault	Fault counter 19-750-00: Video EPC Size Mismatch Cntr	Range = 0 to 255	0
600-016	Disk Mode Mismatch Fault	Fault counter 19-754-00: Video Disk Mismatch Cntr	Range = 0 to 255	0
600-017	Out Memory Fault - StrNC docFC	Fault counter 19-401-00: Out memory fault - stress document	Range = 0 to 255	0
600-018	Compressor DVMA Timeout Fault	Fault counter 19-402-00: Fault Video DVMST Timeout fault (Compressor DVMA timeout fault)	Range = 0 to 255	0

Table 1 CCS NVM ID 600-001 to 600-205

NVM ID	NVM Name	NVM Description	Settings	Default
600-019	Memory on Target	Amount of EPC memory	Range = 0 to 65535	512
600-020	AHA End of Record Fault	Fault counter 22-300-00: AHA end of record fault	Range = 0 to 255	0
600-021	Disk spin up delay time	Time before image disk receives power (sec)	Range = 0 to 30	10
600-022	Platinum Board Full Concurrency	Platinum board full concurrency	Range = 0 to 1	1
600-023	Image disk partition size	Image disk partition size	Range = 0 to 30	4
600-024	Image Disk Dirty	Image Disk Dirty	Range = 0 to 1	0
600-025	IJO Enabled	IJO Enabled	Range = 0 to 1	1
600-026	Disk Dirty at power up	Disk Dirty at power up	Range = 0 to 1	0
600-027	Maximum network read attempts	Value of maximum network read attempts	Range = 1 to 255	3
600-028	KDrumPixelCount	K Drum Pixel Count	Range = 0 to 4294967295	0
600-029	CDrumPixelCount	C Drum Pixel Count	Range = 0 to 4294967295	0
600-030	MDrumPixelCount	M Drum Pixel Count	Range = 0 to 4294967295	0
600-031	YDrumPixelCount	Y Drum Pixel Count	Range = 0 to 4294967295	0
600-032	vramLevel1RecThreshhold	vram Level1 Rec Threshold	Range = 0 to 4294967295	471859200
600-033	vramLevel1TripThreshhold	vram Level 1 Trip Threshold	Range = 0 to 4294967295	419430400
600-034	vramLevel2RecThreshhold	vram Level 2 Rec Threshold	Range = 0 to 4294967295	367001600
600-035	vramLevel2TripThreshhold	vram Level 2 Trip Threshold	Range = 0 to 4294967295	314572800
600-036	vramLevel3RecThreshhold	vram Level 3 Rec Threshold	Range = 0 to 4294967295	256901120
600-037	vramLevel3TripThreshhold	vram Level 3 Trip Threshold	Range = 0 to 4294967295	209715200
600-038	vramLevel4RecThreshhold	vram Level 4 Rec Threshold	Range = 0 to 4294967295	175112192
600-039	vramLevel4TripThreshhold	vram Level 4 Trip Threshold	Range = 0 to 4294967295	140509184
600-040	vramLevel5RecThreshhold	vram Level 5 Rec Threshold	Range = 0 to 4294967295	105906176
600-041	vramLevel5TripThreshhold	vram Level 5 Trip Threshold	Range = 0 to 4294967295	70254592

Table 1 CCS NVM ID 600-001 to 600-205

NVM ID	NVM Name	NVM Description	Settings	Default
600-042	vramLevel6RecThreshhold	vram Level 6 Rec Threshold	Range = 0 to 4294967295	35651584
600-043	vramLevel6TripThreshhold	vram Level 6 Trip Threshold	Range = 0 to 4294967295	1048576
600-044	cacheAllImagesToDisk	CacheAllImagesToDisk	Range = 0 to 1	0
600-045	Total Black Pixel Count Low	Total black pixel count low	Range = 0 to 4294967295	0
600-046	Total Black Pixel Count Up	Total black pixel count up	Range = 0 to 4294967295	0
600-053	Total Black Run Mode AC INT	Total Black Run Mode AC INT	Range = 0 to 4294967295	0
600-058	Toner Coverage Plane1-1	Toner Coverage Plane1-1	Range = 0 to 4294967295	0
600-059	Toner Coverage Plane1-2	Toner Coverage Plane1-2	Range = 0 to 4294967295	0
600-060	Toner Coverage Plane1-3	Toner Coverage Plane1-3	Range = 0 to 4294967295	0
600-061	Toner Coverage Plane1-4	Toner Coverage Plane1-4	Range = 0 to 4294967295	0
600-062	Toner Coverage Plane1-5	Toner Coverage Plane1-5	Range = 0 to 4294967295	0
600-063	Toner Coverage Plane1-6	Toner Coverage Plane1-6	Range = 0 to 4294967295	0
600-064	Toner Coverage Plane1-7	Toner Coverage Plane1-7	Range = 0 to 4294967295	0
600-065	Toner Coverage Plane1-8	Toner Coverage Plane1-8	Range = 0 to 4294967295	0
600-066	Toner Coverage Plane1-9	Toner Coverage Plane1-9	Range = 0 to 4294967295	0
600-067	Toner Coverage Plane1-10	Toner Coverage Plane1-10	Range = 0 to 4294967295	0
600-068	Toner Coverage Plane1-11	Toner Coverage Plane1-11	Range = 0 to 4294967295	0
600-069	Toner Coverage Plane1-12	Toner Coverage Plane1-12	Range = 0 to 4294967295	0
600-070	Toner Coverage Plane1-13	Toner Coverage Plane1-13	Range = 0 to 4294967295	0
600-071	Toner Coverage Plane1-14	Toner Coverage Plane1-14	Range = 0 to 4294967295	0
600-072	Toner Coverage Plane1-15	Toner Coverage Plane1-15	Range = 0 to 4294967295	0
600-073	Toner Coverage Plane1-16	Toner Coverage Plane1-16	Range = 0 to 4294967295	0

Table 1 CCS NVM ID 600-001 to 600-205

NVM ID	NVM Name	NVM Description	Settings	Default
600-074	Toner Coverage Plane1-17	Toner Coverage Plane1-17	Range = 0 to 4294967295	0
600-075	Toner Coverage Plane1-18	Toner Coverage Plane1-18	Range = 0 to 4294967295	0
600-076	Toner Coverage Plane1-19	Toner Coverage Plane1-19	Range = 0 to 4294967295	0
600-134	Total Black Marked Images	Total Black Marked Images	Range = 0 to 4294967295	0
600-139	Total Black Run Mode AC FP	Total Black Run Mode AC FP	Range = 0 to 4294967295	0
600-143	Total Black Color Mode AC FP	Total Black Color Mode AC FP	Range = 0 to 4294967295	0
600-145	10 to 11% Black Area Coverage	Black area coverage impressions > 10 to 11% Total number of impressions between 10 - 11% Black page coverage. Image area coverage Plane 1-20	Range = 0 to 4294967295	0
600-147	11 to 12% Black Area Coverage	Black area coverage impressions > 11 to 12% Total number of impressions between 11 - 12% Black page coverage. Image area coverage Plane 1-21	Range = 0 to 4294967295	0
600-149	13 to 16% Black Area Coverage	Black area coverage impressions > 13 to 16% Total number of impressions between 13 - 16% Black page coverage. Image area coverage Plane 1-22	Range = 0 to 4294967295	0
600-151	17 to 20% Black Area Coverage	Black area coverage impressions > 17 to 20% Total number of impressions between 17 - 20% Black page coverage. Image area coverage Plane 1-23	Range = 0 to 4294967295	0
600-205	Current K Toner Cart Coverage	Current K toner cartridge coverage Identifies the percent of current toner coverage for the current black toner cartridge.	Range = 0 to 16777215	0

Table 2 CCS NVM ID 602-001 to 603-049

NVM ID	NVM Name	NVM Description	Settings	Default
602-001	DiagJobIDGenerator		Range = 1 to 999	1
603-001	ARPSPaperSizeinterval	Interval of APS recognition of standard size (mm)	Range = 1 to 65535	5
603-002	APSStandardSizeRequired	Determines weather APS requires input to be a standard size.	0 = False (off) 1 = True (On) Range = 0 to 1	0
603-003	CopySimplexOutputStart	Number of images inputted before simplex copy job is released for marking	Range = 0 to 65535	1
603-004	CopyDuplexOutputStart	Number of images inputted before duplex copy job is released for marking	Range = 0 to 65535	4
603-005	CopyJobPriority	The priority set by SA / KO of copy job (used for job contention)	Range = 0 to 65535	3
603-006	NextCopyJobID	Value of next copy jobs ID	Range = 1 to 999	1
603-007	Counter-COPY-Markedimages-COPYMarkedImages	Counter - copy marked images -copy marked images	Range = 0 to 16777215	0
603-008	COPYMarkedImagesDisplayable	Determines whether copy marked images counter is displayedable.	0 = False 1 = True Range = 0 to 1	1
603-009	Counter-COPY-Sheets	Counter-COPY Sheets	Range = 0 to 16777215	0
603-010	COPYSheetsDisplayable	Determines whether copy sheets counter is displayable	0 = False 1 = True Range = 0 to 1	0
603-011	Counter-COPY-DuplexSheets	Counter-COPY Duplex Sheets	Range = 0 to 16777215	0
603-012	COPYDuplexSheetsDisplayable	Determines whether copy duplex sheets counter is displayable	0 = False 1 = True Range = 0 to 1	0
603-013	Counter-COPY-LargeSheets	Counter-COPY large sheets	Range = 0 to 16777215	0
603-014	COPY-LargeSheetsDisplayable	Determines whether copy 11x17 inch and A3 sheets counter is displayable	0 = False 1 = True Range = 0 to 1	0
603-015	Not displayed	Counter-COPY simplex platen jobs	Range = 0 to 16777215	0

Table 2 CCS NVM ID 602-001 to 603-049

NVM ID	NVM Name	NVM Description	Settings	Default
603-016	Not displayed	Counter-COPY duplex platen jobs	Range = 0 to 16777215	0
603-017	Not displayed	Counter-COPY SPDH jobs	Range = 0 to 16777215	0
603-018	Not displayed	Counter-COPY build jobs	Range = 0 to 16777215	0
603-019	Not displayed	Counter-COPY set from jobs	Range = 0 to 16777215	0
603-020	Not displayed	Counter-COPY single set jobs	Range = 0 to 16777215	0
603-021	Not displayed	Counter-COPY platen scans	Range = 0 to 16777215	0
603-022	Not displayed	Counter-COPY SPDH side 1 scans	Range = 0 to 16777215	0
603-023	Not displayed	Counter-COPY SPDH side 2 scans	Range = 0 to 16777215	0
603-024	crashRecoveryEnabled	Determines whether copy job recovery is enabled	0 = False 1 = True Range = 0 to 1	1
603-025	ABSPrescanAllowed	Disable and enable ABS prescan	0 = False 1 = True Range = 0 to 1	0
603-026	Not displayed	Counter-Copy Job CR Data	Range = 0 to 0	0
603-027	Not displayed	Counter-Scan document programme data	Range = 0 to 0	0
603-028	Not displayed	Counter-Processing document programme	Range = 0 to 0	0
603-029	Not displayed	Counter-Mark document programme data	Range = 0 to 0	0
603-030	Not displayed	Counter-Job programme data	Range = 0 to 0	0
603-031	Not displayed	Counter-Scan Job CR Data	Range = 0 to 0	0
603-032	Not displayed	Counter-Processing job programme	Range = 0 to 0	0
603-033	Not displayed	Counter-Mark job programme data	Range = 0 to 0	0
603-034	Not displayed	Counter-Copy job defaults	Range = 0 to 0	0
603-035	Not displayed	Counter-Copy documents default	Range = 0 to 0	0
603-036	COPYMarkedColorImagesDisplay	Determines whether copy image counter is displayable	0 = False 1 = True Range = 0 to 1	1
603-039	COPYLargeColorSheetsDisplay	Determines whether large copy sheets counter is displayable	0 = False 1 = True Range = 0 to 1	0

Table 2 CCS NVM ID 602-001 to 603-049

NVM ID	NVM Name	NVM Description	Settings	Default
603-044	Not displayed	Counter-SJ job info	Range = 0 to 0	0
603-045	Not displayed	Counter-SJ doc info	Range = 0 to 0	0
603-048	Platen Copied Lifetime Images	Platen copied lifetime images. Number of images that have been scanned off the platen glass that were for copy jobs.	Range = 0 to 16777215	0
603-049	ADF Copied Life-time Images	SPDH copied lifetime images. Number of images that have been scanned from the SPDH that were for copy jobs.	Range = 0 to 16777215	0

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-001	Feeder Module Type	Defines the feeder module types	0 = Invalid Module 55 = SMH 57 = HCF 58 = HCF with covers 60 = PFP (tray 6) 62 = Envelope Feeder 221 = Standard PFP (tray 5) 223 = Large Kit PFP A4 LEF / A3 SEF 224 = Short edge kit A4 SEF 225 = Short edge kit Letter SEF / Legal SEF Range = 0 to 250	0
604-002	Finisher Module Type	Defines the finisher module type that has been detected by the system (Read only)	65 = OCT 100 = No finisher 110 = 2K LCSS 120 = 1K LCSS 238 = LVF 171 = HVF 172 = HVF BM 173 = HVF inserter 174 = HVF BM Inserter 175 = HVF Tri-folder 176 = HVF Tri-folder Inserter 239 = LVF BM Range = 65 to 250	100

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-004	MSDefaultColor	Defines the default color	0 = White 1 = Green 2 = Buff 3 = Yellow 4 = Golden rod 5 = Blue 6 = Pink 7 = Transparent 8 = Ivory 9 = Gray 10 = Red 11 = Orange Range = 0 to 20	0
604-006	MSDefaultType	Defines default type	0 = Standard 1 = Drilled (pre-punched) 2 = Envelopes 4 = Transparency 5 = Letter head 6 = Labels 7 = Recycled Range = 0 to 60	0
604-008	MSDefaultWeight	Defines medium weight (not used) (gsm)	Range = 56 to 203	75
604-010	PEAutoResume	Resume time out settings in seconds	0 = Disabled > 0 = time in seconds (sec) Range = 0 to 120	30
604-017	PrintModuleInfo	Debug switch settings	0 = Off 1 = On Range = 0 to 1	0
604-019	Counter-Marked-Images	Stores the count of all small / medium black printed images when traditional billing configu-ration is set	Range = 0 to 16777215	0
604-021	Total Images Dis-playable	Enable display of total images 0 = false, 1 = true	0 = Off 1 = On Range = 0 to 1	1
604-025	Not displayed	Counter - Collated Sheets	Range = 0 to 16777215	0
604-028	Not displayed	Counter - Dual Staples	Range = 0 to 16777215	0
604-031	Not displayed	Counter - Envelopes	Range = 0 to 16777215	0
604-034	Not displayed	Counter-Folded Sheets	Range = 0 to 16777215	0

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-037	Not displayed	Counter-Punched Sheets	Range = 0 to 16777215	0
604-040	Not displayed	Counter - Outboard Staples	Range = 0 to 16777215	0
604-043	Not displayed	Counter - Inboard Staples	Range = 0 to 16777215	0
604-046	Not displayed	Counter -Staples sheets	Range = 0 to 16777215	0
604-049	Not displayed	Counter - Tabs	Range = 0 to 16777215	0
604-052	Not displayed	Counter - Transparencies	Range = 0 to 16777215	0
604-055	Not displayed	Counter - Uncollated staples	Range = 0 to 16777215	0
604-058	Not displayed	Counter - Single Pitch Images	Range = 0 to 16777215	0
604-061	Not displayed	Counter - Dual Pitch Images	Range = 0 to 16777215	0
604-064	Not displayed	Counter - Stapled 2_15	Range = 0 to 16777215	0
604-067	Not displayed	Counter - Stapled 16_30	Range = 0 to 16777215	0
604-070	MSDefaultFinisherAR	Default finisher auto resume settings	0 = Disabled > 0 = time in seconds (sec) Range = 0 to 120	30
604-084	MSFaceUpEnabled	Enable face up setting	0 = Off (normal delivery) 1 = Deliver face up Range = 0 to 1	0
604-090	Not displayed	Images During Service Call	Range = 0 to 16777215	0
604-092	Not displayed	Images During Service Call	Range = 0 to 16777215	0
604-094	Not displayed	Sheet Out Of Sequence	Range = 0 to 16777215	0
604-099	Not displayed	Module Registration Error	Range = 0 to 16777215	0
604-101	Not displayed	No Completions Error	Range = 0 to 16777215	0
604-105	Not displayed	Completion While Idle	Range = 0 to 16777215	0
604-107	Not displayed	Tray Does not Exist	Range = 0 to 16777215	0

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-109	Not displayed	No Finisher Capability Found	Range = 0 to 16777215	0
604-111	Not displayed	No IOT Capability Found	Range = 0 to 16777215	0
604-112	MSDefaultTray-Train		Range 0 to 2	0
604-113	MSDefaultTray-Stack		Range 0 to 1	0
604-114	MSDefaultTrayId		Range 0 to 4	0
604-115	Propose Count No Finisher		Range 2 to 16	12
604-116	LastJobIDToRecover	Last job ID to recover	Range 0 to 65535	0
604-117	Not displayed	Last document ID to recover - doc to recover	Range 0 to 65535	0
604-118	LastImage-IDToRecover	Last image ID to recover	Range 0 to 65535	0
604-119	IOTCommFault-Count	IOT Comm Fault Count	Range 0 to 3	0
604-120	PrintPagesCompleted	Print Pages Completed	Range 0 to 65535	0
604-121	SetsCompleted	Last set Completed	Range 0 to 65535	0
604-122	LastService-IDToRecover	Last service ID to recover	Range 0 to 65535	0
604-123	QtyToRecover	Quantity to recover	Range 0 to 65535	0
604-124	Not displayed	Tag matrix	Range 0 to 0	0
604-125	MSDefaultDecurler	Default decurler level settings	0 = Low decurler 1 = Normal decurler 2 = High decurler Range 0 to 2	1
604-126	Not displayed	Serial number	Range 0 to 1	0
604-127	MSOffsetEnabledPolicy	Enable offset policy	0 = Off 1 = On Range 0 to 1	0
604-128	SerNumSet	Serial number set	Range 0 to 1	0
604-129	MSOutOfStaplesPolicy	Out of staples policy setting	0 = Hold 1 = Stapling defeated Range 0 to 1	1
604-131	Last sheet to recover	Last sheet to recover	Range 0 to 65535	0
604-132	ProdCfgNvm	ProdCfgNvm	Range 0 to 255	255
604-133	TotalQuanitity-Made	Total quantity requested for the current job	Range 0 to 65535	0

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-134	ModuleHas-BeenSetUp	Module has been set up	Range 0 to 1	0
604-135	Not displayed	Counter - Stapled31_50	Range 0 to 16777215	0
604-136	Not displayed	Counter - Stapled51_100	Range 0 to 16777215	0
604-137	Propose Count MCSS Finisher	Propose Count MCSS Finisher	Range 2 to 16	12
604-138	IOT Diag Enter TO SEC	IOT Diag Enter TO SEC	Range = 0 to 1800	30
604-139	IOT Diag Exit TO SEC	IOT Diag Exit TO SEC	Range = 0 to 1800	30
604-140	IOT Diag Test Pattern TO SEC	IOT Diag Test Pattern TO SEC	Range = 0 to 1800	0
604-141	IOT Diag Device Status TO SEC	IOT Diag Device Status TO SEC	Range = 0 to 1800	0
604-142	IOT Diag Analog Monitor TO SEC	IOT Diag Analog Monitor TO SEC	Range = 0 to 1800	0
604-143	IOT Diag In Out Manual TO SEC	IOT Diag In Out Manual TO SEC	Range = 0 to 1800	0
604-144	IOT Diag PP Tim-ing TO SEC	IOT Diag PP Timing TO SEC	Range = 0 to 1800	0
604-145	IOT Diag MSI Side Guide TO SEC	IOT Diag MSI side guide TO SEC	Range = 0 to 1800	0
604-146	IOT Diag Sys Regi TO SEC	IOT Diag Sys Regi TO SEC	Range = 0 to 1800	0
604-147	IOT Diag Reg Setup TO SEC	IOT Diag Reg Setup TO SEC	Range = 0 to 1800	0
604-148	IOT Diag Reg Check TO SEC	IOT Diag Reg Check TO SEC	Range = 0 to 1800	0
604-149	IOT Diag Reg Sens Check TO SEC	IOT Diag Reg Sens Check TO SEC	Range = 0 to 1800	0
604-150	IOT ATC Sensor Setup TO SEC	IOT ATC Sensor Setup TO SEC	Range = 0 to 1800	0
604-151	IOT Diag Belt Edge Learn TO SEC	IOT Diag Belt Edge Learn TO SEC	Range = 0 to 1800	0
604-152	IOT TRC Adjust TO SEC	IOT TRC Adjust TO SEC	Range = 0 to 1800	0
604-153	IOT Diag Tone Up Down TO SEC	IOT Diag Tone Up Down TO SEC	Range = 0 to 1800	0
604-154	IOT Diag No Paper Run TO SEC	IOT Diag No Paper Run TO SEC	Range = 0 to 1800	0

Table 3 CCS NVM ID 604-001 to 604-160

NVM ID	NVM Name	NVM Description	Settings	Default
604-155	IOT Diag ProCon On Off TO SEC	IOT Diag ProCon ON Off TO SEC	Range = 0 to 1800	0
604-156	IOT Diag Binary Cal TO SEC	IOT Diag Binary Cal TO SEC	Range = 0 to 1800	0
604-157	IOT Diag Fold Position TO SEC	IOT Diag Fold Position TO SEC	Range = 0 to 1800	0
604-158	IOT Diag CTRACS TO SEC	IOT Diag CTRACS TO SEC	Range = 0 to 1800	0
604-159	IOT Diag Comp Ctrl TO SEC	IOT Diag Comp Ctrl TO SEC	Range = 0 to 1800	0
604-160	CCMCannotCom-municateWithlo-tFC	Fault counter 03-316: CCM Cannot Communicate With Iot FC	Range = 0 to 255	0

Table 4 CCS NVM ID 604-397 to 604-983

NVM ID	NVM Name	NVM Description	Settings	Default
604-397	Not displayed	TotalIOTJamsC30	Range = 0 to 16777215	0
604-398	Not displayed	AttemptedFeedsfromBypassTrayC39	Range = 0 to 16777215	0
604-399	Not displayed	ActualFeedsfromBypassTrayC40	Range = 0 to 16777215	0
604-400	Not displayed	AttemptedPaperFeedsC32	Range = 0 to 16777215	0
604-401	Not displayed	ActualPaperFeedsC33	Range = 0 to 16777215	0
604-402	Not displayed	KnownJamsinFinishingdevicesC31	Range = 0 to 16777215	0
604-403	Not displayed	AllsheetsfedfromTray1	Range = 0 to 16777215	0
604-404	Not displayed	AllsheetsfedfromTray2	Range = 0 to 16777215	0
604-405	Not displayed	AllsheetsfedfromTray3	Range = 0 to 16777215	0
604-406	Not displayed	AllsheetsfedfromTray4	Range = 0 to 16777215	0
604-407	Not displayed	AllsheetsfedfromBypassTray	Range = 0 to 16777215	0
604-408	Not displayed	TotalSheetsside1	Range = 0 to 16777215	0
604-409	Not displayed	TotalSheetsside1and2	Range = 0 to 16777215	0

Table 4 CCS NVM ID 604-397 to 604-983

NVM ID	NVM Name	NVM Description	Settings	Default
604-410	Not displayed	TotalFeedsTray1	Range = 0 to 16777215	0
604-411	Not displayed	TotalFeedsTray2	Range = 0 to 16777215	0
604-412	Not displayed	TotalFeedsTray3	Range = 0 to 16777215	0
604-413	Not displayed	TotalFeedsTray4	Range = 0 to 16777215	0
604-414	Not displayed	TotalFeedsBypassTray	Range = 0 to 16777215	0
604-415	MSDefaultPrint-Bin	# of Bins	Range = 0 to 5	4
604-416	MSDefaultCopy-Bin	# of bins	Range = 0 to 5	4
604-417	MSDefaultFaxBin	# of bins	Range = 0 to 5	0
604-418	MSDefault-OtherBin	# of bins	Range = 0 to 5	4
604-419	MSAutoHoldEn-able	Enable auto hold	Enable Auto Hold set-tings: 0 = Off 1 = On Range = 0 to 1	1
604-420	InteruptingJobID-ToRecover	Interrupt job to recover # of jobs	Range = 0 to 65535	0
604-421	Not displayed	Interrupt document to recover # of documents-docToRecover	Range = 0 to 65535	0
604-422	InteruptImage-IDToRecover	Interrupt image to recover # of images	Range = 0 to 65535	0
604-423	InteruptPag-esCompleted	Interrupt pages completed	Range = 0 to 65535	0
604-424	Interupting-SetsCompleted	Interrupt set to recover # of sets	Range = 0 to 65535	0
604-425	InteruptingLast-ServiceID	Interrupt service to recover # of services	Range = 0 to 65535	0
604-426	QtyToRecover;	Interrupt quantity to recover	Range = 0 to 65535	0
604-427	lastSheetToRe-cover	Interrupt last sheet to recover	Range = 0 to 65535	0
604-428	MSMediaSize-ConvPolicy	Media Size Conversion Policy	Media Size Conver-sion Policy settings: 0=Off 1=On Range = 0 to 1	1

Table 4 CCS NVM ID 604-397 to 604-983

NVM ID	NVM Name	NVM Description	Settings	Default
604-429	LastFinishing-CapIDToRecover	Last capability ID that sheet were being delivered to for a normal job. Used to ensure sheets are delivered to the cor-rect tray after crash recovery	Range = 0 to 65535	0
604-430	LastIntFinishing-CapIDToRecover	Last capability ID that sheet were being delivered to for an interrupt job. Used to ensure sheets are delivered to the cor-rect tray after crash recovery	Range = 0 to 65535	0
604-431	InteruptingQuanti-tyMade	Interrupting quantity made	Range = 0 to 65535	0
604-432	MSInvertDuplex		Range = 0 to 1	0
604-433	MSMirrorInvert-Duplex		Range = 0 to 1	0
604-434	Total Color Images Display-able		Range = 0 to 1	0
604-435	Total BW and Color Images Dis-play	Total BW and Color Images Displayable	Range = 0 to 1	0
604-437	Not displayed	MarkedBWColorImages	Range = 0 to 16777215	0
604-438	Not displayed	OCT Total Sheets	Range = 0 to 16777215	0
604-439	Not displayed	LargeMarkedBlackImages	Range = 0 to 16777215	0
604-441	Not displayed	LargeMarkedImages	Range = 0 to 16777215	0
604-442	MSMediaSize-Group	Media Order Group	1 = MSGXc 2 = MSGXe 3 = MSGFx 4 = MSGFxap 5 = MSGGco 6 = MSGDmoEast 7 = MSGDmoWest Range = 0 to 7	1
604-443	MSMediaSizeCon-vPolicy85x14	Media size conversion policy 8.5 x 14 inch to larger size	0 = Off 1 = On Range 0 to 1	0
604-444	T5MisfeedJamCo-unt	Fault counter 75-101: Fault Counter:T5 Misfeed Jam	Number of faults Range = 0 to 255	0
604-979	HolePunchCon-figuration	Finisher Hole Punch Configu-ration	0 to 3	0

Table 4 CCS NVM ID 604-397 to 604-983

NVM ID	NVM Name	NVM Description	Settings	Default
604-982	Total Large Marked Images Disp	Enable Display of Large Marked Images Counter	0 = No Display 1 = Displayed Range = 0 to 1	1
604-983	Total Large Blk Marked Imgs Disp	Enable Display of Large Black Marked Images Counter	0 = No Display 1 = Displayed Range = 0 to 1	1

Table 5 CCS NVM ID 605-001 to 605-036

NVM ID	NVM Name	NVM Description	Settings	Default
605-001	NextPrintJobID	Value of next MFPrint job's id.	Range = 0 to 999	1
605-002	PrintCrashRecoveryEnable	Enable Print Job Recovery	Print Job Recovery enable Settings 0 = No Recovery 1 = Recovered Range = 0 to 1	1
605-003	MFPrintCompletedJob Log Location	This holds the crash recovery print job information on the altanta side.	Range = 0 to 12	0
605-004	Not displayed	Job log-MFPrintCompleted Job Log	Range = 0 to 0	0
605-005	Not displayed	Counter-MFPRINTMarkedImages	Range = 0 to 16777215	0
605-006	MFPRINTMarkedImagesDisplayable	Enable Option to export marked image counter information to clients	0 = No export 1 = Exported Range = 0 to 1	1
605-007	Not displayed	Counter-MFPRINTSheets	Range = 0 to 16777215	0
605-008	MFPRINTSheetsDisplayable	Enable Option to export marked image counter information to clients	0 = No export 1 = Exported Range 0 to 1	0
605-009	Not displayed	Counter-MFPRINTDuplexSheets	Range = 0 to 16777215	0
605-010	MFPRINTDuplexSheetsDisplayable	Enable Option to export Duplexed counter information to clients	0 = No export 1 = Exported Range 0 to 1	0
605-011	Not displayed	Counter-MFPRINTLargeSheets	Range = 0 to 16777215	0
605-012	MFPRINTLargeSheetsDisplayable	Enable Option to export Large Sheet counter information to clients	0 = No export 1 = Exported Range = 0 to 1	0
605-013	disturbance time	Maximum time allowed for ESS to resync before deleting orphaned print jobs	Range 0 to 240	12

Table 5 CCS NVM ID 605-001 to 605-036

NVM ID	NVM Name	NVM Description	Settings	Default
605-014	Not displayed	Counter-PrintServerFAXJobs	Range = 0 to 16777215	0
605-015	Not displayed	Counter-PrintIFAXJobs	Range = 0 to 16777215	0
605-020	MFPSuccessImgRecServerFaxDisplay	Counter	Range 0 to 1	0
605-021	MFPSuccessIFaxImagesRecDisplay	Enable Option to export Large Success Ifax images counter information to clients	0 = No export 1 = Exported Range 0 to 1	0
605-026	Not displayed	Counter-MFPRINTSuccessfullImagesReceivedFromServerFax	Range = 0 to 16777215	0
605-027	Not displayed	Counter-MFPRINTSuccessfullFaxImagesReceived	Range = 0 to 16777215	0
605-030	Print Standard Impressions	Print Output Quality Standard Lifetime Impressions Total Number of print path impressions that were selected by user at the print driver as Standard Mode	Range = 0 to 16777215	0
605-031	Print Enhanced Impressions	Print Output Quality Enhanced Lifetime Impressions Total Number of print path impressions that were selected by user at the print driver as Enhanced Mode	Range = 0 to 16777215	0
605-032	Print Standard PCL Impressions	Print Output Quality Standard PCL Lifetime Impressions. Total Number of print path impressions that were selected by user at the print driver as Standard PCL Mode	Range = 0 to 16777215	0
605-033	Print Enhanced PCL Impressions	Print Output Quality Enhanced PCL Lifetime Impressions. Total Number of print path impressions that were selected by user at the print driver as Enhanced PCL Mode	Range = 0 to 16777215	0
605-035	BlackReprintImages	Black reprint image counter	Usage counter Range = 0 to 16777215	0
605-036	BlackReprintImagesDisp	Black reprint image counter displayable	Usage counter Range = 0 to 1	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-001	Tray 1 Media Type	Tray 1 media type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = MTBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock 59 = MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-002	Tray 1 Media Color	Tray 1 media color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-003	Tray 1 Media Weight	Tray 1 Media Weight	Range = 60 to 216	75
606-004	Tray 1 Direct Select	Tray 1 Direct Select	0 = TS Direct Only 1 = TS Direct and Auto Range = 0 to 1	1
606-005	Tray 1 Priority	Tray 1 Priority	Range = 0 to 99	30
606-006	Tray 1 Width	Tray 1 Width Range and default size in mm	Range = 182 to 432	216
606-007	Tray 1 Length	Tray 1 Length Range and default size in mm	Range = 210 to 297	279
606-008	Tray 1 Percent Full	Tray 1 Percent Full	Range = 0 to 100	0
606-009	Tray 1 User Type	Tray 1 User Type	0 = TA Fixed 1 = TA AdjustableAll 2 = TA Adjustable Size Only Range = 0 to 1	1
606-010	Tray 1 Modulus	Tray 1 Modulus	Range = 0 to 100	0
606-011	Tray 1 Modulus Position	Tray 1 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-021	Tray 2 Media Type	Tray 2 media type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = MTBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock 59 = MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-022	Tray 2 Media Color	Tray 2 media color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-023	Tray 2 Media Weight	Tray 2 Media Weight	Range = 60 to 216	75
606-024	Tray 2 Direct Select	Tray 2 Direct Select	0 = TS Direct Only 1 = TS Direct And Auto Range = 0 to 1	1
606-025	Tray 2 Priority	Tray 2 Priority	Range = 0 to 99	50
606-026	Tray 2 Width	Tray 2 Width Range and default size in mm	Range = 182 to 432	216
606-027	Tray 2 Length	Tray 2 Length Range and default size in mm	Range = 140 to 297	279
606-028	Tray 2 Percent Full	Tray 2 Percent Full	Range = 0 to 100	0
606-029	Tray 2 User Type	Tray 2 User Type	0 = TA Fixed 1 = TA Adjustable All 2 = TA AdjustableSize Only Range = 0 to 1	1
606-030	Tray 2 Modulus	Tray 2 Modulus	Range = 0 to 100	0
606-031	Tray 2 Modulus Position	Tray 2 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-041	Tray 3 Media Type	Tray 3 media type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = MTBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock = 59 MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-042	Tray 3 Media Color	Tray 3 Media Color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-043	Tray 3 Media Weight	Tray 3 Media Weight	Range = 60 to 216	75
606-044	Tray 3 Direct Select	Tray 3 Direct Select	0 = TS Direct Only 1 = TS Direct And Auto Range = 0 to 1	1
606-045	Tray 3 Priority	Tray 3 Priority	Range = 1 to 99	30
606-046	Tray 3 Width	Tray 3 Width Range and default size in mm A4 = 210 8.5 x 11 = 216	Range = 210 to 216	216 for US 210 for Europe
606-047	Tray 3 Length	Tray 3 Length Range and default size in mm A4 = 297 8.5 x 11 = 279	Range = 279 to 297	279 for US 297 for Europe
606-048	Tray 3 Percent Full	Tray 3 Percent Full	Range = 0 to 100	0
606-049	Tray 3 User Type	Tray 3 User Type (fixed size) Note that the GUI uses the range to determine if other selections should be possible	0 = TA Fixed	0
606-050	Tray 3 Modulus	Tray 3 Modulus	Range = 0 to 100	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-051	Tray 3 Modulus Position	Tray 3 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-061	Tray 4 Media Type	Tray 4 Media Type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = TBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock 59 = MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-062	Tray 4 Media Color	Tray 4 Media Color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-063	Tray 4 Media Weight	Tray 4 Media Weight	Range = 60 to 216	75
606-064	Tray 4 Direct Select	Tray 4 Direct Select	0 = TS Direct Only 1 = TS Direct And Auto Range = 0 to 1	1
606-065	Tray 4 Priority	Tray 4 Priority	Range = 1 to 99	20
606-066	Tray 4 Width	Tray 4 Width Range and default size in mm	Range = 210 to 216	216
606-067	Tray 4 Length	Tray 4 Length Range and default size in mm	Range = 279 to 297	279
606-068	Tray 4 Percent Full	Tray 4 Percent Full	Range = 0 to 100	0
606-069	Tray 4 User Type	Tray 4 User Type (Bypass tray) Note that the GUI uses the range to determine if other selections should be possible	1 = TA Adjustable All Range = 1 to 1	1
606-070	Tray 4 Modulus	Tray 4 Modulus	Range = 0 to 100	0
606-071	Tray 4 Modulus Position	Tray 4 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-081	Tray 5 Media Type	Tray 5 Media Type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = MTBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock 59 = MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-082	Tray 5 Media Color	Tray 5 Media Color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-083	Tray 5 Media Weight	Tray 5 Media Weight	Range = 60 to 216	75
606-084	Tray 5 Direct Select	Tray 5 Direct Select	0 = TS Direct Only 1 = TS Direct And Auto Range = 0 to 1	1
606-085	Tray 5 Priority	Tray 5 Priority	Range = 1 to 99	99
606-086	Tray 5 Width	Tray 5 Width Range and default size in mm	Range = 98 to 432	216
606-087	Tray 5 Length	Tray 5 Length Range and default size in mm	Range = 104 to 297	279
606-088	Tray 5 Percent Full	Tray 5 Percent Full	Range = 0 to 100	0
606-089	Tray 5 User Type	Tray 5 User Type	0 = TA Fixed 1 = TA Adjustable All 2 = TA Adjustable Size Only Range = 0 to 1	1
606-090	Tray 5 Modulus	Tray 5 Modulus	Range = 0 to 100	0
606-091	Tray 5 Modulus Position	Tray 5 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-101	Tray 6 Media Type	Tray 6 Media Type	0 = MTStandard 1 = MTDrilled 3 = MTEnvelope 4 = MTTransparency 5 = MTLetterhead 6 = MTLabels 7 = MTRecycled 9 = MTOtherType 12 = MTBond 13 = MTPrePrinted 14 = MTCardStock 15 = MTCustom1 16 = MTCustom2 17 = MTCustom3 18 = MTUnspecified 19 = MTCustom4 20 = MTCustom5 21 = MTCustom6 22 = MTCustom7 23 = MTSystemDefault 37 = MTPrecutTabs 38 = MTCovers 39 = MTTabs 40 = MTPaper-BackedTransparency 41 = MTThin 42 = MTLightCardStock 43 = MTLightGlossy 44 = MTHeavyGlossy 45 = MTLightCardStockSide2 46 = MTLightGlossySide2 47 = MTHeavyGlossySide2 48 = MTCardStockSide2 49 = MTThinSide2 50 = MTHeavyLabels 51 = MTHeavyPrecutTabs 52 = MTHeavyCardStock 53 = MTHeavyCardStockSide2 54 = MTExtraHeavyGlossy 55 = MTExtraHeavyGlossySide2 56 = MTExtraHeavyLabels 57 = MTUsedStandard 58 = MTRoughStock 59 = MTPhoto 60 = MTPostcard	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-102	Tray 6 Media Color	Tray 6 Media Color	0 = MCWhite 1 = MCGreen 2 = MCBuff 3 = MCYellow 4 = MCGoldenrod 5 = MCBlue 6 = MCPink 7 = MCTransparent 8 = MCIvory 9 = MCGray 10 = MCRed 11 = MCOrange 12 = MCOtherColor 13 = MCCustom1 14 = MCCustom2 15 = MCCustom3 16 = MCUnspecified 17 = MCCustom4 18 = MCCustom5 19 = MCCustom6 20 = MCCustom7 21 = MCSystemDefault	0
606-103	Tray 6 Media Weight	Tray 6 Media Weight	Range = 60 to 216	75
606-104	Tray 6 Direct Select	Tray 6 Direct Select	0 = TS Direct Only 1 = TS Direct And Auto Range = 0 to 1	1
606-105	Tray 6 Priority	Tray 6 Priority	Range = 1 to 99	5
606-106	Tray 6 Width	Tray 6 Width Range and default size in mm	Range = 210 to 216	216
606-107	Tray 6 Length	Tray 6 Length Range and default size in mm	Range = 279 to 297	279
606-108	Tray 6 Percent Full	Tray 6 Percent Full	Range = 0 to 100	0
606-109	Tray 6 User Type	Tray 6 User Type	0 = TA Fixed 1 = TA Adjustable All 2 = TA Adjustable Size Only Range = 0 to 1	0
606-110	Tray 6 Modulus	Tray 6 Modulus	Range = 0 to 100	0
606-111	Tray 6 Modulus Position	Tray 6 Modulus Position	Range = 1 to 100	1

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-152	Print Engine Lifetime Jams	Print Engine Lifetime JamsNumber of Marking Engine Jams since activation	Range = 0 to 4294967295	0
606-153	Black Lifetime Ink Sticks Used	Black Lifetime Ink Sticks Consumed Total Number of black ink sticks consumed since Activation	Range = 0 to 4294967295	0
606-159	Cleaning Pages	Cleaning Pages Total cleaning sheets reported by marking engine since activation numCleaning Pages	Range = 0 to 16777215	0
606-167	Plain Sheets Used	Plain Sheets Used Total of normal size Plain media sheets since activation date. numNormalPlainMedia	Range = 0 to 16777215	0
606-168	Bond Sheets Used	Bond Sheets Used Total of normal size Bond media sheets since activation date numNormalBondMedia	Range = 0 to 16777215	0
606-169	LetterHead Sheets Used	LetterHead Sheets Used Total of normal size LetterHead media sheets since activation date numNormalLetterHeadMedia	Range = 0 to 16777215	0
606-170	Pre-Printed Sheets Used	Pre-Printed Sheets Used Total of normal size Pre-Printed media sheets since activation date numNormalPrePrintedMedia	Range = 0 to 16777215	0
606-171	Heavyweight Sheets Used	Heavyweight Sheets Used Total of normal size Heavyweight media sheets since activation date numNormalHWMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-172	Extra Heavyweight Sheets Used	Extra Heavyweight Sheets Used Total of normal size Extra heavyweight media sheets since activation date numNormalExtraHWMedia	Range = 0 to 16777215	0
606-173	Extra HW Reloaded Sheets Used	Extra Heavyweight Reloaded Sheets Used Total of normal size Heavyweight Reloaded media sheets since activation date numNormalExtraHWReloadedMedia	Range = 0 to 16777215	0
606-174	Extra HW Plus Sheets Used	Extra Heavyweight Plus Sheets Used Total of normal size Extra Heavyweight Plus media sheets since activation datenumNormalExtraHWPlusMedia	Range = 0 to 16777215	0
606-175	Extra HW Plus RL Sheets Used	Extra Heavyweight Plus Reloaded Sheets Used Total of normal size Extra Heavyweight Plus Reloaded media sheets since activation datenumNormalExtraHWPlusReloadedMedia	Range = 0 to 16777215	0
606-176	Gloss Coating Sheets Used	Gloss Coating Sheets UsedTotal of normal size Gloss Coating media sheets since activation datenumNormalGlossMedia	Range = 0 to 16777215	0
606-177	Gloss Coating Reloaded Sheets	Gloss Coating Reloaded Sheets UsedTotal of normal size Gloss Coating Reloaded media sheets since activation datenumNormalGlossReloadedMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-178	HW Gloss Coating Sheets Used	Heavyweight Gloss Coating Sheets UsedTotal of normal size Heavyweight Gloss Coating media sheets since activation datenumNormalHWGlossMedia	Range = 0 to 16777215	0
606-179	HW Gloss Coating Reloaded Sheets	Heavyweight Gloss Coating Reloaded Sheets UsedTotal of normal size Heavyweight Gloss Coating Reloaded media sheets since activation datenumNormalHWGlossReloadedMedia	Range = 0 to 16777215	0
606-180	Extra HW Gloss Coating Sheets	Extra Heavyweight Gloss Coating Sheets Used Total of normal size Extra Heavyweight Gloss Coating media sheets since activation datenumNormalExtraHWGlossMedia	Range = 0 to 16777215	0
606-181	Ex HW Gloss Coat Reload Sheets	Extra Heavyweight Gloss Coating Reloaded Sheets Used Total of normal size Extra Heavyweight Gloss Coating Reloaded media sheets since activation date numNormalExtraHWGlossReloadedMedia	Range = 0 to 16777215	0
606-182	Transparency Sheets Used	Transparency Sheets Used Total of normal size Transparency media sheets since activation date numNormalTransparencyMedia	Range = 0 to 16777215	0
606-183	Pre-Cut Tabs Sheets Used	Pre-Cut Tabs Sheets Used Total of normal size Pre-Cut Tabs media sheets since activation date numNormalPreCutTabMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-184	Labels Sheets Used	Labels Sheets Used Total of normal size Labels media sheets since activation date numNormalLabelMedia	Range = 0 to 16777215	0
606-185	Heavyweight Labels Sheets Used	Heavyweight Labels Sheets UsedTotal of normal size Heavyweight Labels media sheets since activation datenumNormalHWLabelMedia	Range = 0 to 16777215	0
606-186	Recycled Sheets Used	Recycled Sheets Used Total of normal size Recycled media sheets since activation datenumNormalRecycledMedia	Range = 0 to 16777215	0
606-187	Hole Punched Sheets Used	Hole Punched Sheets Used Total of normal size Hole Punched media sheets since activation date numNormalHolePunchMedia	Range = 0 to 16777215	0
606-188	Custom Paper Type Sheets Used	Custom Paper Type Sheets Used Total of normal size Custom Paper media sheets since activation date numNormalCustomMedia	Range = 0 to 16777215	0
606-189	Other Sheets Used	Other Sheets Used Total of Other media (not captured above) sheets since activation date numNormalOtherMedia	Range = 0 to 16777215	0
606-190	Plain Large Sheets Used	Plain Large Sheets Used Total of large size Plain media sheets since activation date numLargePlainMedia	Range = 0 to 16777215	0
606-191	Bond Large Sheets Used	Bond Large Sheets Used Total of large size Bond media sheets since activation date numLargeBondMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-192	LetterHead Large Sheets Used	LetterHead Large Sheets Used Total of large size Leterhead media sheets since activation date numLargeLetterHeadMedia	Range = 0 to 16777215	0
606-193	Pre-Printed Large Sheets Used	Pre-Printed Large Sheets Used Total of large size Pre-Printed media sheets since activation date numLargePrePrintedMedia	Range = 0 to 16777215	0
606-194	Heavyweight Large Sheets Used	Heavyweight Large Sheets Used Total of large size Heavyweight media sheets since activation date numLargeHWMedia	Range = 0 to 16777215	0
606-195	Extra Heavyweight Large Sheets	Extra Heavyweight Large Sheets Used Total of large size Extra Heavyweight media sheets since activation datenumLargeExtraHWMedia	Range = 0 to 16777215	0
606-196	Ex HW Reloaded Large Sheets Used	Extra Heavyweight Reloaded Large Sheets Used Total of large size Extra Heavyweight Reloaded media sheets since activation datenumLargeExtraHWReloadedMedia	Range = 0 to 16777215	0
606-197	Ex HW Plus Large Sheets Used	Extra Heavyweight Plus Large Sheets Used Total of large size Extra Heavyweight Plus media sheets since activation date numLargeExtraHWPlusMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-198	Ex HW Plus Reloaded Large Sheets	Extra Heavyweight Plus Reloaded Large Sheets Used Total of large size Extra Heavyweight Plus Reloaded media sheets since activation date numLargeExtraHWPlusReloadedMedia	Range = 0 to 16777215	0
606-199	Gloss Coating Large Sheets Used	Gloss Coating Large Sheets Used Total of large size Gloss Coating media sheets since activation date numLargeGlossMedia	Range = 0 to 16777215	0
606-200	Gloss Reloaded Large Sheets	Gloss Coating Reloaded Large Sheets Used Total of large size Gloss Coating Reloaded media sheets since activation date numLargeGlossReloadedMedia	Range = 0 to 16777215	0
606-201	HW Gloss Large Sheets Used	Heavyweight Gloss Coating Large Sheets Used Total of large size Heavyweight Gloss Coating media sheets since activation date numLargeHWGlossMedia	Range = 0 to 16777215	0
606-202	HW Gloss Reload Large Sheets	Heavyweight Gloss Coating Reloaded Large Sheets Used Total of large size Heavyweight Gloss Coating Reloaded media sheets since activation date numLargeHWGlossReloadedMedia	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-203	Ex HW Gloss Large Sheets	Extra Heavyweight Gloss Coating Large Sheets Used Total of large size Extra Heavyweight Gloss Coating media sheets since activation date numLargeExtraHWGlossMedia	Range = 0 to 16777215	0
606-204	Ex HW Gloss Reload Large Sheets	Extra Heavyweight Gloss Coating Reloaded Large Sheets Used Total of large size Extra Heavyweight Gloss Coating Reloaded media sheets since activation date numLargeExtraHWGlossReloadedMedia	Range = 0 to 16777215	0
606-205	Recycled Large Sheets Used	Recycled Large Sheets Used Total of large size Recycled media sheets since activation datenumLargeRecycledMedia	Range = 0 to 16777215	0
606-206	Hole Punched Large Sheets Used	Hole Punched Large Sheets Used Total of large size Hole punched media sheets since activation date numLargeHolePunchMedia	Range = 0 to 16777215	0
606-207	Other Paper Type Large Sheets	Other Paper Type Large Sheets Used Total of large size Other media (not captured above) sheets since activation date numLargeOtherMedia	Range = 0 to 16777215	0
606-208	Letter Sheets Used	Letter (8.5 x 11) Sheets Used Total of 8.5x11 inch sheets since activation date numLetterSheets	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-209	Tabloid Sheets Used	Tabloid (11 x 17) Sheets Used Total of 11x17 inch sheets since activation date numTabloidSheets	Range = 0 to 16777215	0
606-210	Legal Sheets Used	Legal (8.5 x 14) Sheets Used Total of 8.5 x 14 inch sheets since activation date numLegalSheets	Range = 0 to 16777215	0
606-211	Statement Sheets Used	Statement (5.5 x 8.5) Sheets Used Total of 5.5 x 8.5 inch sheets since activation date numStatementSheets	Range = 0 to 16777215	0
606-212	Executive SheetsUsed	Executive (7.25 x 10.5) Sheets Used Total of 7.25 x 10.5 inch sheets since activation date numExecutiveSheets	Range = 0 to 16777215	0
606-213	8 x 10 Sheets Used	8 x 10 inch Sheets Used Total of 8 x 10 inch sheets since activation date num8x10Sheets	Range = 0 to 16777215	0
606-214	12 x 18 Sheets Used	12 x 18 inch Sheets Used Total of 12 x 18 inch sheets since activation date num12x18Sheets	Range = 0 to 16777215	0
606-215	12 x 19 Sheets Used	12 x 19 inch Sheets Used Total of 12x19 inch sheets since activation date num12x19Sheets	Range = 0 to 16777215	0
606-216	13 x 19 Sheets Used	13 x 19 inch Sheets Used Total of 13 x 19 inch sheets since activation date num12x19Sheets	Range = 0 to 16777215	0
606-217	A4 Sheets Used	A4 Sheets Used Total of A4 sheets since activation date numA4Sheets	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-218	A3 Sheets Used	A3 Sheets Used Total of A3 sheets since activation date numA3Sheets	Range = 0 to 16777215	0
606-219	SRA3 Sheets Used	SRA3 Sheets Used Total of SRA3 sheets since activation date numSRA3Sheets	Range = 0 to 16777215	0
606-220	A5 Sheets Used	A5 Sheets Used Total of A5 sheets since activation date numA5Sheets	Range = 0 to 16777215	0
606-221	A6 Sheets Used	A6 Sheets Used Total of A6 sheets since activation date numA6Sheets	Range = 0 to 16777215	0
606-222	Postcards Used	Postcards Used Total of Postcard sheets since activation date. numPostcardSheets	Range = 0 to 16777215	0
606-223	Tabbed Media Sheets Used	Tabbed Media Sheets Used Total of Tabbed sheets since activation date numTabbedSheets	Range = 0 to 16777215	0
606-224	Envelopes Used	Envelopes Used Total of Envelope sheets since activation date numEnvelopeSheets	Range = 0 to 16777215	0
606-225	Custom Size Sheets Used	Custom Size Sheets Used Total of Custom Size sheets since activation date numCustomSheets	Range = 0 to 16777215	0
606-226	Other Size Sheets Used	Other Size Sheets Used Total of Other Size sheets since activation date numOtherSheets	Range = 0 to 16777215	0
606-227	Number of Jobs of 1 page	Number of Jobs of 1 page since activation Total Number of Jobs Consisting of 1 sheet since activation numPagesPerJob-Counters[0]	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-228	Number of Jobs of 2 - 4 pages	Number of Jobs of 2 - 4 pages since activation Total Number of Jobs Consisting of 2 - 4 sheets since activation numPagesPerJob-Counters[1]	Range = 0 to 16777215	0
606-229	Number of Jobs of 5 - 9 pages	Number of Jobs of 5 - 9 pages since activation Total Number of Jobs Consisting of 5 - 9 sheets since activation numPagesPerJob-Counters[2]	Range = 0 to 16777215	0
606-230	Number of Jobs of 10 - 19 pages	Number of Jobs of 10 - 19 pages since activation Total Number of Jobs Consisting of 10 - 19 sheets since activation numPagesPerJob-Counters[3]	Range = 0 to 16777215	0
606-231	Number of Jobs of 20 - 29 pages	Number of Jobs of 20 - 29 pages since activation Total Number of Jobs Consisting of 20 - 29 sheets since activation numPagesPerJob-Counters[4]	Range = 0 to 16777215	0
606-232	Number of Jobs of 30 - 49 pages	Number of Jobs of 30 - 49 pages since activation Total Number of Jobs Consisting of 30 - 49 sheets since activation numPagesPerJob-Counters[5]	Range = 0 to 16777215	0
606-233	Number of Jobs of 50 - 74 pages	Number of Jobs of 50 - 74 pages since activation Total Number of Jobs Consisting of 50 - 74 sheets since activation numPagesPerJob-Counters[6]	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-234	Number of Jobs of 75 - 99 pages	Number of Jobs of 75 - 99 pages since activation Total Number of Jobs Consisting of 75 - 99 sheets since activation numPagesPerJob-Counters[7]	Range = 0 to 16777215	0
606-235	Number of Jobs (100 - 249 pages)	Number of Jobs of 100 - 249 pages since activa-tion Total Number of Jobs Consisting of 100 - 249 sheets since activation numPagesPerJob-Counters[8]	Range = 0 to 16777215	0
606-236	Number of Jobs of 250+ pages	Number of Jobs of 250+ pages since activation Total Number of Jobs Consisting of 250 plus sheets since activation numPagesPerJob-Counters[9]	Range = 0 to 16777215	0
606-237	Number of Jobs of 1 set	Number of Jobs of 1 set Total Number of Jobs Consisting of 1 Set since activation numSetsPerJob-Counters[0]	Range = 0 to 16777215	0
606-238	Number of Jobs of 2 - 4 sets	Number of Jobs of 2 - 4 sets since activation Total Number of Jobs Consisting of 2 - 4 sets since activation numSetsPerJob-Counters[1]	Range = 0 to 16777215	0
606-239	Number of Jobs of 5 - 9 sets	Number of Jobs of 5 - 9 sets since activation Total Number of Jobs Consisting of 5 - 9 sets since activation numPagesPerJob-Counters[2]	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-240	Number of Jobs of 10 - 19 sets	Number of Jobs of 10 - 19 sets since activation Total Number of Jobs Consisting of 10 - 19 sets since activation numSetsPerJob-Counters[3]	Range = 0 to 16777215	0
606-241	Number of Jobs of 20 - 29 sets	Number of Jobs of 20 - 29 sets since activation Total Number of Jobs Consisting of 20 - 29 sets since activation numSetsPerJob-Counters[4]	Range = 0 to 16777215	0
606-242	Number of Jobs of 30 - 49 sets	Number of Jobs of 30 - 49 sets since activation Total Number of Jobs Consisting of 30 - 49 sets since activation numSetsPerJob-Counters[5]	Range = 0 to 16777215	0
606-243	Number of Jobs of 50 - 74 sets	Number of Jobs of 50 - 74 sets since activation Total Number of Jobs Consist-ing of 50 - 74 sets since activationnumSetsPer-JobCounters[6]	Range = 0 to 16777215	0
606-244	Number of Jobs of 75 - 99 sets	Number of Jobs of 75 - 99 sets since activation Total Number of Jobs Consisting of 75 - 99 sets since activation numSetsPerJob-Counters[7]	Range = 0 to 16777215	0
606-245	Number of Jobs of 100 - 249 sets	Number of Jobs of 100 - 249 sets since activation Total Number of Jobs Consisting of 100 - 249 sets since activation numSetsPerJob-Counters[8]	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-246	Number of Jobs of 250+ sets	Number of Jobs of 250+ sets since activation Total Number of Jobs Consisting of 250 plus sets since activation numSetsPerJob-Counters[9]	Range = 0 to 16777215	0
606-247	All sheets fed from Tray #5	All sheets fed from Tray #5 Total number of Sheets Fed from Tray 5 - Read Only Accumulated Value numTray5Sheets	Range = 0 to 16777215	0
606-248	All sheets fed from Tray #6	All sheets fed from Tray #6 Total number of Sheets Fed from Tray 6 - Read Only Accumulated Value numTray6Sheets	Range = 0 to 16777215	0
606-249	All sheets fed from Tray #7	All sheets fed from Tray #7 Total number of Sheets Fed from Tray 7 - Read Only Accumulated Value numTray7Sheets	Range = 0 to 16777215	0
606-250	All sheets fed from Tray #8	All sheets fed from Tray #8Total number of Sheets Fed from Tray 8 - Read Only Accumulated ValuenumTray8Sheets	Range = 0 to 16777215	0
606-252	Black Maintenance Impressions	Black Maintenance ImpressionsThe total number of black impressions that were made while the machine was in service mode. For Jupiter this includes amy MUD pages numBlackMaintenanceImpressions	Range = 0 to 16777215	0
606-253	Lifetime Sheets	Lifetime Sheets Total sheets successfully delivered to output destination since activationnumtotalSheets	Range = 0 to 16777215	0

Table 6 CCS NVM ID 606-001 to 606-269

NVM ID	NVM Name	NVM Description	Settings	Default
606-255	Level 1 Impressions	Level 1 Impressions This counter supports tiered billingnumTieredBillingLevel1Impressions	Range = 0 to 16777215	0
606-258	Number of Jobs of 2 pages	Number of Jobs of 2 pages since activation Total Number of Jobs Consisting of 2 sheets since activationnumPagesPerJobCounters[10]	Range = 0 to 16777215	0
606-259	Number of Jobs of 3 pages	Number of Jobs of 3 pages since activationTotal Number of Jobs Consisting of 3 sheets since activationnumPagesPerJobCounters[11]	Range = 0 to 16777215	0
606-260	Number of Jobs of 4 pages	Number of Jobs of 4 pages since activation Total Number of Jobs Consisting of 4 sheets since activationnumPagesPerJobCounters[12]	Range = 0 to 16777215	0
606-269	Service Plan	Service Plan (Contract) - ColorQube Family - 0 = XE/NA Sold, 1 = Default (has been set by SIM), 2 = Not used, 3 = Metered, 4 = XE Page Pack, 5 = DMO sold.	Range = 0 to 100	3

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-272	TB Configuration	Billing Configuration. This counter supports tier billing	0 = BC traditional 1 = BC 2 tier 2 = BC 3 tier Range = 0 to 2	2
606-392	PrePunchMediaEraseValue	Default sheet edge erase value for pre-punched, pre-cut tab stock. Please refer FS 16.020 for more details related to this feature. Also refer to IDs 2680 and 2681	Number of faults Range = 0 to 255	0
606-393	Tray 1 Jams	Tray 1 Jams - Usage Counter	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-394	Tray 2 Jams	Tray 2 Jams - Usage Counter	Range = 0 to 4294967295	0
606-395	Tray 3 Jams	Tray 3 Jams - Usage Counter	Range = 0 to 4294967295	0
606-396	Tray 4 Jams	Tray 4 Jams - Usage Counter	Range = 0 to 4294967295	0
606-397	Tray 5 Jams	Tray 5 Jams - Usage Counter	Range = 0 to 4294967295	0
606-398	Tray 6 Jams	Tray 6 Jams - Usage Counter	Range = 0 to 4294967295	0
606-399	Tray 7 Jams	Tray 7 Jams - Usage Counter	Range = 0 to 4294967295	0
606-401	IOT comm faults counter	IOT comm faults counter	Range = 0 to 4294967295	0
606-402	Finisher comm faults counter	Finisher comm faults counter	Range = 0 to 4294967295	0
606-403	Protocol comm faults counter	Protocol comm faults counter	Range = 0 to 4294967295	0
606-404	Paper trays currently installed	Paper trays currently installed	Range = 0 to 4294967295	0
606-405	Output jams	Output jams	Range = 0 to 4294967295	0
606-406	Compile jams	Compile jams	Range = 0 to 4294967295	0
606-407	Staple errors	Staple errors	Range = 0 to 4294967295	0
606-408	Booklet maker errors	Booklet maker errors	Range = 0 to 4294967295	0
606-409	Registration Jams	Registration Jams	Range = 0 to 4294967295	0
606-410	Installed Maint Kit Impressions	Maintenance Kit Installation ImpressionsTotal number of sheets that have been successfully delivered to output destination since the current kit was installed.	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-467	Actual K Pix In BW Mode Low	Actual Black Pixels Marked-Black & White Low (1K) This item conveys the Actual total number of Black pixels printed on Black and White impressions for any media size as reported by the machine. Values are given in K (1000) units.numTotActualBWModeKPixelCountLow	Range = 0 to 4294967295	0
606-482	DADHRollFeeds	DADH Feed Roll Number of feeds	Range = 0 to 4294967295	0
606-483	PPIRollFeeds	PPI Feed Roll Number of feeds	Range = 0 to 4294967295	0
606-484	3TMtray1RollFeeds	3TM Tray1 Feed Roll - Number of feeds	Range = 0 to 4294967295	0
606-485	3TMtray2RollFeeds	3TM Tray2 Feed Roll - Number of feeds	Range = 0 to 4294967295	0
606-486	3TMtray3RollFeeds	3TM Tray3 Feed Roll - Number of feeds	Range = 0 to 4294967295	0
606-487	MSIRollFeeds	MSI Feed Roll nbr of feeds	Range = 0 to 4294967295	0
606-488	InserterRollReplacements	Inserter Feed Roll - Number of replacements	Range = 0 to 4294967295	0
606-489	FuserUsage	Fuser assembly number of sheets	Range = 0 to 4294967295	0
606-492	DADHRollReplacements	DADH Feed Roll nbr of replacements	Range = 1 to 65535	1
606-493	InserterRollReplacements	Inserter Feed Roll - Number of replacements	Range = 1 to 65535	1
606-494	3TMtray1RollReplacements	3TM Tray1 Feed Roll nbr of replacements	Range = 1 to 65535	1
606-495	3TMtray2RollReplacements	3TM Tray2 Feed Roll nbr of replacements	Range = 1 to 65535	1
606-496	3TMtray3RollReplacements	3TM Tray3 Feed Roll nbr of feeds	Range = 1 to 65535	1
606-497	MSIRollReplacements	MSI Feed Roll nbr of replacements	Range = 1 to 65535	1
606-498	PFPRollReplacements	PFP Feed Roll nbr of replacements	Range = 1 to 65535	1
606-516	DADHRollLife	DADH Feed Roll Life Expectancy	Range = 0 to 4294967295	170000
606-517	Tray7FeedRollsExpLife	Tray 7 (PPI) Feed Rolls Life Expectancy	Range = 0 to 4294967295	100000

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-518	Tray1FeedRollsExpLife	Tray 1 Feed Rolls life expectancy	Range = 0 to 4294967295	750000
606-519	Tray2FeedRollsExpLife	Tray 2 Feed Rolls life expectancy	Range = 0 to 4294967295	750000
606-520	Tray3FeedRollsExpLife	Tray 3 Feed Rolls Life Expectancy	Range = 0 to 4294967295	400000
606-521	Tray5FeedRollsExpLife	Tray 5 (MSI) Feed Rolls life expectancy	Range = 0 to 4294967295	100000
606-522	Tray6FeedRollsExpLife	Tray 6 (PFP) Feed Rolls life expectancy	Range = 0 to 4294967295	1000000
606-523	FuserLife	Fuser Life Expectancy	Range = 0 to 4294967295	0
606-526	Not displayed	DADH Feed Roll Install Date	Range = 0 to 4294967295	0
606-527	Tray7FeedRollsInstDate	Tray 7 (PPI) Feed Rolls install date	Range = 0 to 4294967295	0
606-528	Tray 1 Feed Rolls install date	Tray1FeedRollsInstDate	Range = 0 to 4294967295	0
606-529	Tray 2 Feed Rolls install date	Tray2FeedRollsInstDate	Range = 0 to 4294967295	0
606-530	Tray 3 Feed Rolls install date	Tray3FeedRollsInstDate	Range = 0 to 4294967295	0
606-531	Tray 5 (MSI) Feed Rolls install date	Tray5FeedRollsInstDate	Range = 0 to 4294967295	0
606-532	Tray 6 (PFP) Feed Rolls install date	Tray6FeedRollsInstDate	Range = 0 to 4294967295	0
606-533	Not displayed	Waste Bottle Install Date	Range = 0 to 4294967295	0
606-534	Not displayed	Fuser Install Date	Range = 0 to 4294967295	0
606-537	Last Auto Maintenance Update	Last Auto Maintenance Update	Range = 0 to 4294967295	0
606-538	T1/ T2 Label Enablement	Label Enablement for T1 / T2	Range = 0 to 1	0
606-539	InhibitMarkOnTabsPolicy	Inhibit Mark On Tabs Policy	Range = 0 to 1	1
606-608	Not displayed	MSBLACKRUNLENGTH1This supports the AIF counter 1 Black Impression Run Length	Range = 0 to 4294967295	0
606-609	Not displayed	MSBLACKRUNLENGTH24This supports the AIF counter 2 to 4 Black Impression Run Length	Range = 0 to 4294967295	0
606-610	Not displayed	MSBLACKRUNLENGTH59This supports the AIF counter 5 to 9 Black Impression Run Length	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-611	Not displayed	MSBLACKRUNLENGTH1019This supports the AIF counter 10 to 19 Black Impression Run Length	Range = 0 to 4294967295	0
606-612	Not displayed	MSBLACKRUNLENGTH2029This supports the AIF counter 20 to 29 Black Impression Run Length	Range = 0 to 4294967295	0
606-613	Not displayed	MSBLACKRUNLENGTH3049This supports the AIF counter 30 to 49 Black Impression Run Length	Range = 0 to 4294967295	0
606-614	Not displayed	MSBLACKRUNLENGTH5074This supports the AIF counter 50 to 74 Black Impression Run Length	Range = 0 to 4294967295	0
606-615	Not displayed	MSBLACKRUNLENGTH7599This supports the AIF counter 75 to 99 Black Impression Run Length	Range = 0 to 4294967295	0
606-616	Not displayed	MSBLACKRUNLENGTH100249This supports the AIF counter 100 to 249 Black Impression Run Length	Range = 0 to 4294967295	0
606-617	Not displayed	MSBLACKRUNLENGTH250This supports the AIF counter 250+ Black Impression Run Length	Range = 0 to 4294967295	0
606-628	Not displayed	IOTTOTALXCRUREPLACEMENTS_K This supports the AIF counter Black Drum Cartridge in Position R1 Replacements	Range 1 to 65535	1
606-032	Not displayed	IOTCHARGECOROTRON-REPL This supports the AIF counter Charge Corotron Replacements	Range 1 to 65535	1
606-033	Not displayed	IOTTONERCARTREPLACEMENTS_K This supports the AIF counter Black Toner Replacements	Range = 0 to 4294967295	1
606-037	Not displayed	IOTFUSERUNITREPLACE-MENTS This supports the AIF counter Fuser Replacements	Range 1 to 65535	1

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-638	Not displayed	IOTWASTEBOTTLERE-PLACEMENTS This supports the AIF counter Waste Container Replacements	Range 1 to 65535	1
606-643	Not displayed	IOTFUSERUNITCY-CLECOUNT This supports the AIF counter Fuser Cycle Count	Range = 0 to 4294967295	0
606-644	Not displayed	IOTCHARGECOROTRON-COUNTER This supports the AIF counter Charge Corotron Count	Range = 0 to 4294967295	0
606-645	Not displayed	IOTXCRUREPLACEMENTS_K10 This supports the AIF counter Black Drum Cartridge Replacements with <10% usage	Range = 0 to 4294967295	0
606-646	Not displayed	IOTXCRUREPLACEMENTS_K20 This supports the AIF counter Black Drum Cartridge Replacements with <20% usage	Range = 0 to 4294967295	0
606-647	Not displayed	IOTXCRUREPLACEMENTS_K30 This supports the AIF counter Black Drum Cartridge Replacements with <30% usage	Range = 0 to 4294967295	0
606-648	Not displayed	IOTXCRUREPLACEMENTS_K40 This supports the AIF counter Black Drum Cartridge Replacements with <40% usage	Range = 0 to 4294967295	0
606-649	Not displayed	IOTXCRUREPLACEMENTS_K50 This supports the AIF counter Black Drum Cartridge Replacements with <50% usage	Range = 0 to 4294967295	0
606-650	Not displayed	IOTXCRUREPLACEMENTS_K60 This supports the AIF counter Black Drum Cartridge Replacements with <60% usage	Range = 0 to 4294967295	0
606-651	Not displayed	IOTXCRUREPLACEMENTS_K70 This supports the AIF counter Black Drum Cartridge Replacements with <70% usage	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-652	Not displayed	IOTXCRUREPLACEMENTS_K80 This supports the AIF counter Black Drum Cartridge Replacements with <80% usage	Range = 0 to 4294967295	0
606-653	Not displayed	IOTXCRUREPLACEMENTS_K90 This supports the AIF counter Black Drum Cartridge Replacements with <90% usage	Range = 0 to 4294967295	0
606-654	Not displayed	IOTXCRUREPLACEMENTS_K100 This supports the AIF counter Black Drum Cartridge Replacements with <100% usage	Range = 0 to 4294967295	0
606-655	Not displayed	IOTXCRUREPLACEMENTS_K100PLUS This supports the AIF counter Black Drum Cartridge Replacements with 100%+ usage	Range = 0 to 4294967295	0
606-667	Not displayed	IOTFUSERREPLACEMENTS_10 This supports the AIF counter Fuser Replacements with <10% usage	Range = 0 to 4294967295	0
606-668	Not displayed	IOTFUSERREPLACEMENTS_20 This supports the AIF counter Fuser Replacements with <20% usage	Range = 0 to 4294967295	0
606-669	Not displayed	IOTFUSERREPLACEMENTS_30 This supports the AIF counter Fuser Replacements with <30% usage	Range = 0 to 4294967295	0
606-670	Not displayed	IOTFUSERREPLACEMENTS_40 This supports the AIF counter Fuser Replacements with <40% usage	Range = 0 to 4294967295	0
606-671	Not displayed	IOTFUSERREPLACEMENTS_50 This supports the AIF counter Fuser Replacements with <50% usage	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-672	Not displayed	IOTFUSERREPLACEMENTS_60 This supports the AIF counter Fuser Replacements with <60% usage	Range = 0 to 4294967295	0
606-673	Not displayed	IOTFUSERREPLACEMENTS_70 This supports the AIF counter Fuser Replacements with <70% usage	Range = 0 to 4294967295	0
606-674	Not displayed	IOTFUSERREPLACEMENTS_80 This supports the AIF counter Fuser Replacements with <80% usage	Range = 0 to 4294967295	0
606-675	Not displayed	IOTFUSERREPLACEMENTS_90 This supports the AIF counter Fuser Replacements with <90% usage	Range = 0 to 4294967295	0
606-676	Not displayed	IOTFUSERREPLACEMENTS_100 This supports the AIF counter Fuser Replacements with <100% usage	Range = 0 to 4294967295	0
606-677	Not displayed	IOTFUSERREPLACEMENTS_100PLUS This supports the AIF counter Fuser Replacements with 100%+ usage	Range = 0 to 4294967295	0
606-678	Not displayed	IOTCCREPLACEMENTS_10 This supports the AIF counter Charge Corotron Replacements with <10% usage	Range = 0 to 4294967295	0
606-679	Not displayed	IOTCCREPLACEMENTS_20 This supports the AIF counter Charge Corotron Replacements with <20% usage	Range = 0 to 4294967295	0
606-680	Not displayed	IOTCCREPLACEMENTS_30 This supports the AIF counter Charge Corotron Replacements with <30% usage	Range = 0 to 4294967295	0
606-681	Not displayed	IOTCCREPLACEMENTS_40 This supports the AIF counter Charge Corotron Replacements with <40% usage	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-682	Not displayed	IOTCCREPLACEMENTS_50 This supports the AIF counter Charge Corotron Replacements with <50% usage	Range = 0 to 4294967295	0
606-683	Not displayed	IOTCCREPLACEMENTS_60 This supports the AIF counter Charge Corotron Replacements with <60% usage	Range = 0 to 4294967295	0
606-684	Not displayed	IOTCCREPLACEMENTS_70 This supports the AIF counter Charge Corotron Replacements with <70% usage	Range = 0 to 4294967295	0
606-685	Not displayed	IOTCCREPLACEMENTS_80 This supports the AIF counter Charge Corotron Replacements with <80% usage	Range = 0 to 4294967295	0
606-686	Not displayed	IOTCCREPLACEMENTS_90 This supports the AIF counter Charge Corotron Replacements with <90% usage	Range = 0 to 4294967295	0
606-687	Not displayed	IOTCCREPLACEMENTS_100 This supports the AIF counter Charge Corotron Replacements with <100% usage	Range = 0 to 4294967295	0
606-688	Not displayed	IOTCCREPLACEMENTS_10OPLUS This supports the AIF counter Charge Corotron Replacements with 100%+ usage	Range = 0 to 4294967295	0
606-689	Total Standby Time (hours) Not displayed	Total Standby Time (hours)Total number of hours the machine has been in Standby Mode since activationnumTotalStandbyTimeHours	Range = 0 to 16777215	0
606-690	0 to 6 Minutes Standby Time Not displayed	0 to 6 Minutes Standby TimeTotal number of times the machine has been in Standby Mode between 0 and 14 minutes.numTotalStandbyTimeHours	Range = 0 to 16777215	0
606-691	6 to 15 Minutes Standby Time Not displayed	>6 to 15 Minutes Standby TimeTotal number of times the machine has been in Standby Mode between 15 and 25 minutes.numTotalStandbyTimeHours	Range = 0 to 16777215	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-692	15 to 60 Minutes Standby Time Not displayed	>15 to 60 Minutes Standby TimeTotal number of times the machine has been in Standby Mode between 20 and 119 minutes.numTotalStandbyTimeHours	Range = 0 to 16777215	0
606-693	60 to 120 Minutes Standby Time Not displayed	>60 to 120 Minutes Standby TimeTotal number of times the machine has been in Standby Mode between 120 and 299 minutes.numTotalStandbyTimeHours	Range = 0 to 16777215	0
606-694	120 to 240 Minutes Standby Time Not displayed	>120 to 240 Minutes Standby TimeTotal number of times the machine has been in Standby Mode between 300 and 599 minutes.numTotalStandbyTimeHours	Range = 0 to 16777215	0
606-695	240+ Minutes Standby Time Not displayed	>240 Minutes Standby TimeTotal number of times the machine has been in Standby Mode for 600 minutes or more-numTotalStandbyTimeHours	Range = 0 to 16777215	0
606-696	Not displayed	All sheets fed from Tray #1Total number of Sheets Fed from Tray 1 - Read Only Accumulated ValuenumTray5Sheets	Range = 0 to 16777215	0
606-697	Not displayed	All sheets fed from Tray #2Total number of Sheets Fed from Tray 1 - Read Only Accumulated ValuenumTray5Sheets	Range = 0 to 16777215	0
606-698	Not displayed	All sheets fed from Tray #3Total number of Sheets Fed from Tray 1 - Read Only Accumulated ValuenumTray5Sheets	Range = 0 to 16777215	0
606-699	Not displayed	All sheets fed from Tray #4Total number of Sheets Fed from Tray 1 - Read Only Accumulated ValuenumTray5Sheets	Range = 0 to 16777215	0
606-700	Total Black impressions. Not displayed	Internal Use Only - Total Black Marked Images	Range = 0 to 4294967295	0
606-705	Avg AC Black. FP Not displayed	Internal Use Only - Total Black Run Mode AC FP	Range = 0 to 4294967295	0
606-709	Avg AC Black in Color FP Not displayed	Internal Use Only - Total Black Color Mode AC FP	Range = 0 to 4294967295	0

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-710	Average AC Black. Int.	Average Area Coverage for Black channel in black mode for life of machine. Integer value.	Range = 0 to 4294967295	0
606-714	Avg AC Black in Color Int.	Average Area Coverage for Black channel in color mode for life of machine. Integer value.	Range = 0 to 4294967295	0
606-715	Not displayed	Standby Counter Overflow Tracking Register	Range = 0 to 255	0
606-757	ATSWithFinishingEnable	Folding job with Tray selected switches to another tray when selected tray runs out of media:When the default is off a minority of users may have to reload the tray they asked for more often.When the default is on some jobs may come out on media they explicitly did not select.	Folding job with Tray selected switches to another tray when selected tray runs out of media Set via Web UI. 1 = Enabled Range = 0 to 1	0
606-787	FS23.201 Table Version	Default is the version number of the Excel table used to create the NVM	Range = 0 to 65535	1444
606-800	Not displayed	Waste Bottle State	Range = 0 to 255	0
606-802	BlackInkLoaderJammedFC	Fault Counter 93-501-00: Black Ink loader Jammed	Number of faults Range = 0 to 255	0
606-806	Default Staple Position	Default Staple position (HVF only)(Staple positioning: trades best position verses best productivity) Default set to best productivity to give best BLI test result. Customer can then select which mode best suites them.	Range = 1 to 2	2
606-815	Not displayed	TONERLIFETIMEUSAGEGRAMS_K This supports the AIF counter Product lifetime usage: black toner	Range = 0 to 4294967295	0
606-820	Not displayed	Number of Grams of toner in a Standard size cartridge	Range = 0 to 65535	137
606-821	Not displayed	Number of Grams of toner in a High Capacity cartridge	Range = 0 to 65535	266
606-823	Not displayed	Print Standard (300x500) mode colour coverage scaler	Range = 0 to 4000	1000
606-824	Not displayed	Print Fast (225x450) mode colour coverage scaler	Range = 0 to 4000	1000

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-825	Not displayed	Print Enhanced (450x567) mode colour coverage scaler	Range = 0 to 4000	1000
606-826	Not displayed	Print Hi Res mode (600x600) colour coverage scaler	Range = 0 to 4000	1000
606-827	Not displayed	Print Transparency mode (525x400) colour coverage scaler	Range = 0 to 4000	1000
606-828	Not displayed	Copy Photo mode (600x600) colour coverage scaler	Range = 0 to 4000	1000
606-829	Not displayed	Copy Default mode (450x567) colour coverage scaler	Range = 0 to 4000	1000
606-830	Not displayed	Copy Transparency mode (525x400) colour coverage scaler	Range = 0 to 4000	1000
606-832	8.5x13 Sheets Used Not displayed	8.5 x 13 Sheets used total of 8.5 x 13 sheets since activation date num85x13Sheets	Range = 0 to 16777215	0
606-833	9x11 Sheets Used Not displayed	9 x 11 Sheets used total of 9 x 11 sheets since activation date num9x11Sheets	Range = 0 to 16777215	0
606-834	B4 Sheets Used Not displayed	B4 Sheets used total of B4 sheets since activation date numB4Sheets	Range = 0 to 16777215	0
606-835	B5 Sheets Used Not displayed	B5 Sheets used total of B5 sheets since activation date numB5Sheets	Range = 0 to 16777215	0
606-836	JIS B4 Sheets Used Not displayed	JIS B4 Sheets used total of JIS B4 sheets since activation date numJISB4Sheets	Range = 0 to 16777215	0
606-837	JIS B5 Sheets Used Not displayed	JIS B5 Sheets used total of JIS B5 sheets since activation date numJISB5Sheets	Range = 0 to 16777215	0
606-846	Not displayed	Charge Corotron Install Date	Range = 0 to 4294967295	0
606-857	BlackNeutral(1)Countdown	Number of Black neutral ink sticks allowed (1)	Limits neutral usage to 5 units. Starts at the high limit (4) and counts down with each replacement. At value of 0, no more neutral replacements allowed. Range = 0 to 4	4

Table 7 CCS NVM ID 606-272 to 607-002

NVM ID	NVM Name	NVM Description	Settings	Default
606-889	Not displayed	Print toner saver mode colour coverage scaler	Range = 0 to 4000	0
606-890	Machine GUID for Nomad Server Not displayed	Entry to store the machine GUID assigned by the Nomad-Server after cinnecting	Byte array of 37 characters including a terminating Null. Range = 0 to 0	0
607-001	Not displayed	Support for Job recovery-Fax image number 1	Range = 0 to 0	0
607-002	Not displayed	Support for Job recovery-Fax image number 2	Range = 0 to 0	0

Table 8 CCS NVM ID 608-442 to 608-999

NVM ID	NVM Name	NVM Description	Settings	Default
608-442	Not displayed	Current Toner Cartridge Black Impression Count	Range = 0 to 16777215	0
608-445	Not displayed	Current Fuser Impression Count	Range = 0 to 16777215	0
608-449	Not displayed	Current Imaging Black Unit Impression Count	Range = 0 to 16777215	0
608-495	Not displayed	Current Fuser percent remaining	Range = 0 to 255	0
608-499	Not displayed	Current Drum K percent remaining	Range = 0 to 255	0
608-500	Not displayed	Current Charge Corotron remaining	Range = 0 to 255	0
608-501	Not displayed	Current Waste Container remaining	Range = 0 to 255	0
608-505	Not displayed	Current Toner K percent remaining (K1 cartridge in 2-toner systems)	Range = 0 to 255	0
608-728	DrumConservationMode	Drum Conservation Mode	Range = 0 to 1	1
608-942	Lightweight Sheets Used	Lightweight Sheets Used Total of normal size Lightweight media sheets since activation date numNormalLWMedia	Range = 0 to 16777215	0
608-943	Lightweight Large Sheets Used	Lightweight Large Sheets Used Total of large size Lightweight media sheets since activation date numLargeLWMedia	Range = 0 to 16777215	0

Table 8 CCS NVM ID 608-442 to 608-999

NVM ID	NVM Name	NVM Description	Settings	Default
608-951	Top Edge Reg Tray 1 Simplex	Tray 1 Top Edge Reg Simp	Range = ### to 7700	7510
608-952	Top Edge Reg Tray 2 Simplex	Tray 2 Top Edge Reg Simp	Range = ### to 7700	7510
608-953	Top Edge Reg Tray 3 Simplex	Tray 3 Top Edge Reg Simp	Range = ### to 7700	7522
608-954	Top Edge Reg Tray 4 Simplex	Tray 4 Top Edge Reg Simp	Range = ### to 7700	7504
608-955	Top Edge Reg Tray 5 Simplex	Tray 5 (MSI) Top Edge Reg Simp	Range = ### to 7700	7522
608-956	Top Edge Reg Tray 6 Simplex	Tray 6 (PFP) Top Edge Reg Simp	Range = ### to 7700	7510
608-957	Top Edge Reg Tray 1 Duplex	Tray 1 Top Edge Reg Dup	Range = ### to 7700	7510
608-958	Tray 2 Top Edge Reg Dup	Top Edge Reg Tray 2 Duplex	Range = ### to 7700	7521
608-959	Top Edge Reg Tray 3 Duplex	Tray 3 Top Edge Reg Dup	Range = ### to 7700	7533
608-960	Top Edge Reg Tray 4 Duplex	Tray 4 Top Edge Reg Dup	Range = ### to 7700	7510
608-961	Top Edge Reg Tray 5 Duplex	Tray 5 (MSI) Top Edge Reg Dup	Range = ### to 7700	7522
608-962	Top Edge Reg Tray 6 Duplex	Tray 6 (PFP) Top Edge Reg Dup	Range = ### to 7700	7510
608-963	IOT LE Reg Simp	IOT Lead Edge Reg Simp	Range = 0 to 1023	256
608-964	IOT LE Reg Dup	IOT Lead Edge Reg Dup	Range = 0 to 1023	256
608-966	BillingImpressionsMode	Billing Impressions Mode	Range = 0 to 65535	0
608-976	Fault Counter 11-484-00	Fault Counter 11-484-00	Range = 0 to 255	0
608-977	Fault Counter 11-486-00	Fault Counter 11-486-00	Range = 0 to 255	0
608-978	Fault Counter 11-488-00	Fault Counter 11-488-00	Range = 0 to 255	0
608-979	Fault Counter 11-490-00	Fault Counter 11-490-00	Range = 0 to 255	0
608-980	Fault Counter 11-492-00	Fault Counter 11-492-00	Range = 0 to 255	0
608-981	Not displayed	Toner CRU install date	Range = 0 to 4294967295	0
608-982	XruInstallDate	XRU CRU install date	Range = 0 to 4294967295	0

Table 8 CCS NVM ID 608-442 to 608-999

NVM ID	NVM Name	NVM Description	Settings	Default
608-994	Custom Media feature enablement	Custom display names for custom media types - feature enablement	Range = 0 to 1	0
608-995	-	Custom display names - Custom media type List		0
608-996	CMT List Initialized	Custom display names - Custom media type List initialized flag	Range = 0 to 1	0
608-999		Display Media Resource Screen for jobs held for resources	0 = Disabled, 1 = Enabled	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-001	FrontCoverOpenInRunFC	Fault Counter 01-300-00: FrontCoverOpenInRunFault	Range = 0 to 255	0
609-002	SideCoverOpenInRunFC	Fault Counter 01-305-00: SideCoverOpenInRunFault	Range = 0 to 255	0
609-003	LELateToPostFuserSnsrSimpFC	Fault Counter 10-101-00: LeadEdgeLateToPostFuserSensorSimpFault	Range = 0 to 255	0
609-004	LELateToPostFuserSnsrDup1FC	Fault Counter 10-102-00: LeadEdgeLateToPostFuserSensorDup1Fault	Range = 0 to 255	0
609-005	LELateToPostFuserSnsrDup2FC	Fault Counter 10-103-00: LeadEdgeLateToPostFuserSensorDup2Fault	Range = 0 to 255	0
609-006	TELateFmPostFuseSnsrSimpNonInvFC	Fault Counter 10-107-00: TrailEdgeLateFromPostFuserSensorSimpNonInvFault	Range = 0 to 255	0
609-007	TELateFmPostFuserSnsrSimpInvFC	Fault Counter 10-108-00: TrailEdgeLateFromPostFuserSensorSimpInvFault	Range = 0 to 255	0
609-008	TELateFmPostFuserSnsrDup1FC	Fault Counter 10-109-00: TrailEdgeLateFromPostFuserSensorDup1Fault	Range = 0 to 255	0
609-009	TELateFmPostFuserSnsrDup2FC	Fault Counter 10-110-00: TrailEdgeLateFromPostFuserSensorDup2Fault	Range = 0 to 255	0
609-010	LELateToIotExitSnsrInvFC	Fault Counter 10-120-00: LeadEdgeLateToIotExitSensorInvFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-011	LELateToIotExitSnsrNonInvFC	Fault Counter 10-121-00: LeadEdgeLateToIotExitSensorNonInvFault	Range = 0 to 255	0
609-012	TELateFmIotExitSnsrFC	Fault Counter 10-126-00: TrailEdgeLateFromIotExitSensorFault	Range = 0 to 255	0
609-013	LELateToTopExitSnsrFC	Fault Counter 10-130-00: LeadEdgeLateToTopExitSensorFault	Range = 0 to 255	0
609-014	TELateFmTopExitSnsrFC	Fault Counter 10-131-00: TrailEdgeLateFromTopExitSensorFault	Range = 0 to 255	0
609-015	LELateToInvertSnsrSimpFC	Fault Counter 10-132-00: LeadEdgeLateToInvertSensorSimpFault	Range = 0 to 255	0
609-016	LELateToInvertSnsrDup1FC	Fault Counter 10-133-00: LeadEdgeLateToInvertSensorDup1Fault	Range = 0 to 255	0
609-017	LELateToInvertSnsrDup2FC	Fault Counter 10-134-00: LeadEdgeLateToInvertSensorDup2Fault	Range = 0 to 255	0
609-018	TELateFmInvertSnsrSimpNonInvFC	Fault Counter 10-135-00: TrailEdgeLateFromInvertSensorSimpNonInvFault	Range = 0 to 255	0
609-019	TELateFmInvertSnsrSimpInvFC	Fault Counter 10-136-00: TrailEdgeLateFromInvertSensorSimpInvFault	Range = 0 to 255	0
609-020	TELateFmInvertSnsrDup1FC	Fault Counter 10-137-00: TrailEdgeLateFromInvertSensorDup1Fault	Range = 0 to 255	0
609-021	TELateFmInvertSnsrDup2FC	Fault Counter 10-138-00: TrailEdgeLateFromInvertSensorDup2Fault	Range = 0 to 255	0
609-022	FuserThermFCFC	Fault Counter 10-315-00: FuserThermFaultFault	Range = 0 to 255	0
609-023	FuserCtrlFailFC	Fault Counter 10-320-00: FuserControlFailureFault	Range = 0 to 255	0
609-024	FuserCtrlFailStandbyOverTempFC	Fault Counter 10-321-00: FuserControlFailureStandbyOverTempFault	Range = 0 to 255	0
609-025	FuserCtrlFailStandbyUnderTempFC	Fault Counter 10-322-00: FuserControlFailureStandbyUnderTempFault	Range = 0 to 255	0
609-026	FuserCtrlFailRunOverTempFC	Fault Counter 10-323-00: FuserControlFailureRunOverTempFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-027	FuserCtrlFailRunUnderTempFC	Fault Counter 10-324-00: FuserControlFailureRunUnderTempFault	Range = 0 to 255	0
609-028	FuserNotBeingCtrlledFC	Fault Counter 10-325-00: FuserNotBeingControlledFault	Range = 0 to 255	0
609-029	FuserWarmupFailFC	Fault Counter 10-330-00: FuserWarmupFailureFault	Range = 0 to 255	0
609-030	FuserAOverTemperatureFC	Fault Counter 10-340-00: FuserAOverTemperatureFault	Range = 0 to 255	0
609-031	FuserOverTempOrShortCircuitFC	Fault Counter 10-350-00: FuserOverTempOrShortCircuitFault	Range = 0 to 255	0
609-032	FuserBOverTemperatureFC	Fault Counter 10-360-00: FuserBOverTemperatureFault	Range = 0 to 255	0
609-033	FuserCOverTemperatureFC	Fault Counter 10-365-00: FuserCOverTemperatureFault	Range = 0 to 255	0
609-034	FuserPowerSaveCtrlFailFC	Fault Counter 10-370-00: FuserPowerSaveControlFailureFault	Range = 0 to 255	0
609-035	FuserTempGradientTooHighFC	Fault Counter 10-380-00: FuserTempGradientTooHighFault	Range = 0 to 255	0
609-036	FruAuthorisationFailFC	Fault Counter 10-399-00: FruAuthorisationFailureFault	Range = 0 to 255	0
609-037	SFuserCtrlFailStandbyOverTempFC	Fault Counter 10-821-00: SorFuserControlFailureStandbyOverTempFault	Range = 0 to 255	0
609-038	SFuserCtrlFailStandbyUnderTempFC	Fault Counter 10-822-00: SorFuserControlFailureStandbyUnderTempFault	Range = 0 to 255	0
609-039	PfmCommsFailFC	Fault Counter 41-350-00: PfmCommsFailureFault	Range = 0 to 255	0
609-040	PfmFeedBufferOverflowFC	Fault Counter 41-351-00: PfmFeedBufferOverflowFault	Range = 0 to 255	0
609-041	PfmI2CFrameFailFC	Fault Counter 41-354-00: PfmI2CFrameFailureFault	Range = 0 to 255	0
609-042	FinisherCommsFailFC	Fault Counter 41-359-00: HcfCommsFailureFault	Range = 0 to 255	0
609-043	FinToBmCommsFailFC	Fault Counter 41-360-00: FinisherCommsFailureFault	Range = 0 to 255	0
609-044	PfpCommsFailFC	Fault Counter 41-363-00: FinToBmCommsFailureFault	Range = 0 to 255	0
609-045	FruCommsFailFC	Fault Counter 41-366-00: PfpCommsFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-046	XruCommsFailFC	Fault Counter 41-371-00: FruCommsFailureFault	Range = 0 to 255	0
609-047	IOTCycledInWithoutPrintingFC	Fault Counter 41-372-00: XruCommsFailureFault	Range = 0 to 255	0
609-048	LaserOnWithoutPrTurningFC	Fault Counter 41-395-00: IOTCycledInWithoutPrintingFault	Range = 0 to 255	0
609-049	MainMtrNotBeingCtrlledFC	Fault Counter 41-396-00: LaserOnWithoutPrTurningFault	Range = 0 to 255	0
609-050	HcfCommsFailFC	Fault Counter 41-397-00: MainMotorNotBeingControlledFault	Range = 0 to 255	0
609-051	PrintCmdLateToPageSyncSplx3FC	Fault Counter 41-423-00: PrintCommandLateToPageSyncSimplex3Fault	Range = 0 to 255	0
609-052	Fail24VFC	Fault Counter 41-480-00: Failure24VFault	Range = 0 to 255	0
609-053	IgnorestatFC	Fault Counter 41-805-00: IgnorestatFault	Range = 0 to 255	0
609-054	OutOfTmrsFC	Fault Counter 41-852-00: OutOfTimersFault	Range = 0 to 255	0
609-055	IOTRelativeHumiditySnsrFC	Fault Counter 42-365-00: IOTRelativeHumiditySensorFault	Range = 0 to 255	0
609-056	IOTAmbientTemperatureSnsrFC	Fault Counter 42-375-00: IOTAmbientTemperatureSensorFault	Range = 0 to 255	0
609-057	HighVoltagePowerSupplyFailFC	Fault Counter 46-060-00: HighVoltagePowerSupplyFailureFault	Range = 0 to 255	0
609-058	RosMtrFailFC	Fault Counter 61-020-00: RosMotorFailureFault	Range = 0 to 255	0
609-059	RosSystemFailFC	Fault Counter 61-340-00: RosSystemFailureFault	Range = 0 to 255	0
609-060	RosLaserNotBeingCtrlledFC	Fault Counter 61-350-00: RosLaserNotBeingControlledFault	Range = 0 to 255	0
609-061	XruAuthorisationFailFC	Fault Counter 92-399-00: XruAuthorisationFailureFault	Range = 0 to 255	0
609-062	ReplenisherLevelSnsrFailFC	Fault Counter 93-310-00: ReplenisherLevelSensorFailureFault	Range = 0 to 255	0
609-063	TonerConcSnsrFailFC	Fault Counter 93-360-00: TonerConcentrationSensorFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-064	TonerConcCtrlFailLowFC	Fault Counter 93-361-00: TonerConcentrationControlFailureLowFault	Range = 0 to 255	0
609-065	TonerConcCtrlFailHighFC	Fault Counter 93-362-00: TonerConcentrationControlFailureHighFault	Range = 0 to 255	0
609-066	TonerConcIsolatedCtrlFailLowFC	Fault Counter 93-363-00: TonerConcentrationIsolatedControlFailLowFault	Range = 0 to 255	0
609-067	WasteTonerBottleMissingFC	Fault Counter 93-380-00: WasteTonerBottleMissingFault	Range = 0 to 255	0
609-068	TonerCartridgeEmptyFC	Fault Counter 93-390-00: TonerCartridgeEmptyFault	Range = 0 to 255	0
609-069	ScorotronCleaningFailedFC	Fault Counter 94-341-00: ScorotronCleaningFailedFault	Range = 0 to 255	0
609-070	ScorotronCleangWarningFC	Fault Counter 94-342-00: ScorotronCleanngWarningFault	Range = 0 to 255	0
609-071	TransferDetackCleaningFailedFC	Fault Counter 94-345-00: TransferDetackCleaningFailedFault	Range = 0 to 255	0
609-072	TransferDetackCleanngWarningFC	Fault Counter 94-346-00: TransferDetackCleanngWarningFault	Range = 0 to 255	0
609-073	PhotoreceptorEraseLampFailFC	Fault Counter 94-350-00: PhotoreceptorEraseLampFailureFault	Range = 0 to 255	0
609-074	IOTDeveloperTemperatureSnsrFC	Fault Counter 94-370-00: IOTDeveloperTemperatureSensorFault	Range = 0 to 255	0
609-075	LELateToPfmWaitPointSnsrFC	Fault Counter 81-100-00: LeadEdgeLateToPfmWaitPointSensorFault	Range = 0 to 255	0
609-076	LELateToTray1FeedSnsrFC	Fault Counter 81-101-00: LeadEdgeLateToTray1FeedSensorFault	Range = 0 to 255	0
609-077	LELateToTray2FeedSnsrFC	Fault Counter 81-102-00: LeadEdgeLateToTray2FeedSensorFault	Range = 0 to 255	0
609-078	LELateToTray3FeedSnsrFC	Fault Counter 81-103-00: LeadEdgeLateToTray3FeedSensorFault	Range = 0 to 255	0
609-079	LELateToTray4FeedSnsrFC	Fault Counter 81-104-00: LeadEdgeLateToTray4FeedSensorFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-080	LELateToTray1SnsrFmTray2FC	Fault Counter 81-106-00: LeadEdgeLateToTray1SensorFromTray2Fault	Range = 0 to 255	0
609-081	LELateToTray4SnsrFmTray3FC	Fault Counter 81-107-00: LeadEdgeLateToTray4SensorFromTray3Fault	Range = 0 to 255	0
609-082	LELateToTray2SnsrFmTray4FC	Fault Counter 81-108-00: LeadEdgeLateToTray2SensorFromTray4Fault	Range = 0 to 255	0
609-083	TELateFmTray1FeedSnsrFC	Fault Counter 81-111-00: TrailEdgeLateFromTray1FeedSensorFault	Range = 0 to 255	0
609-084	TELateFmTray2FeedSnsrFC	Fault Counter 81-112-00: TrailEdgeLateFromTray2FeedSensorFault	Range = 0 to 255	0
609-085	TELateFmTray3FeedSnsrFC	Fault Counter 81-113-00: TrailEdgeLateFromTray3FeedSensorFault	Range = 0 to 255	0
609-086	TELateFmTray4FeedSnsrFC	Fault Counter 81-114-00: TrailEdgeLateFromTray4FeedSensorFault	Range = 0 to 255	0
609-087	Tray1HoistFailFC	Fault Counter 71-100-00: Tray1HoistFailureFault	Range = 0 to 255	0
609-088	Tray1OpenWhileFeedingFC	Fault Counter 71-500-00: Tray1OpenWhileFeedingFault	Range = 0 to 255	0
609-089	Tray2HoistFailFC	Fault Counter 72-100-00: Tray2HoistFailureFault	Range = 0 to 255	0
609-090	Tray2OpenWhileFeedingFC	Fault Counter 72-500-00: Tray2OpenWhileFeedingFault	Range = 0 to 255	0
609-091	Tray3HoistFailFC	Fault Counter 73-100-00: Tray3HoistFailureFault	Range = 0 to 255	0
609-092	Tray3OpenWhileFeedingFC	Fault Counter 73-500-00: Tray3OpenWhileFeedingFault	Range = 0 to 255	0
609-093	Tray4HoistFailFC	Fault Counter 74-100-00: Tray4HoistFailureFault	Range = 0 to 255	0
609-094	Tray4OpenWhileFeedingFC	Fault Counter 74-500-00: Tray4OpenWhileFeedingFault	Range = 0 to 255	0
609-095	PfpTrayHoistFailFC	Fault Counter 75-100-00: PfpTrayHoistFailureFault	Range = 0 to 255	0
609-096	PfpTrayLowerFailFC	Fault Counter 75-101-00: PfpTrayLowerFailureFault	Range = 0 to 255	0
609-097	PfpOpenWhileFeedingFC	Fault Counter 75-500-00: PfpOpenWhileFeedingFault	Range = 0 to 255	0
609-098	PfpUndockedInRunFC	Fault Counter 75-510-00: PfpUndockedInRunFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-099	LELateToPfpWaitPointSnsrFC	Fault Counter 81-115-00: LeadEdgeLateToPfpWaitPointSensorFault	Range = 0 to 255	0
609-100	LELateToPfpFeedSnsrFC	Fault Counter 81-117-00: LeadEdgeLateToPfpFeedSensorFault	Range = 0 to 255	0
609-101	LELateToRegSnsrFmPfmFC	Fault Counter 81-150-00: LeadEdgeLateToRegistrationSensorFromPfmFault	Range = 0 to 255	0
609-102	TELateToRegSnsrAfterClutchOnFC	Fault Counter 81-151-00: TrailEdgeLateToRegSensorAfterClutchOnFault	Range = 0 to 255	0
609-103	LELateToRegSnsrFmMsiFC	Fault Counter 81-155-00: LeadEdgeLateToRegistrationSensorFromMsiFault	Range = 0 to 255	0
609-104	StrayShtFmMsiAtRegSnsrFC	Fault Counter 81-156-00: StraySheetFromMsiAtRegSensorFault	Range = 0 to 255	0
609-105	UnexpTmoutForShtTypeFC	Fault Counter 81-171-00: UnexpectedTimeoutForSheetTypeFault	Range = 0 to 255	0
609-106	PpMissingPreReleasedShtFC	Fault Counter 81-174-00: PpMissingPreReleasedSheetFault	Range = 0 to 255	0
609-107	UnableToFeedNextShtFC	Fault Counter 81-180-00: UnableToFeedNextSheetFault	Range = 0 to 255	0
609-108	LELateToDplxSnsrFC	Fault Counter 83-160-00: LeadEdgeLateToDuplexSensorFault	Range = 0 to 255	0
609-109	TELateToDplxSnsrAfterClutchOnFC	Fault Counter 83-161-00: TrailEdgeLateToDuplexSensorAfterClutchOnFault	Range = 0 to 255	0
609-110	PpUnexpTmoutForShtTypeSimpInvFC	Fault Counter 83-181-00: PpUnexpectedTimeoutForSheetTypeSimpInvFault	Range = 0 to 255	0
609-111	PpUnexpTmoutForShtTypeDplxFC	Fault Counter 83-182-00: PpUnexpectedTimeoutForSheetTypeDuplexFault	Range = 0 to 255	0
609-112	StrayShtDetectPostJamClearFC	Fault Counter 83-190-00: StraySheetDetectedPostJamClearanceFault	Range = 0 to 255	0
609-113	TopCoverOpenInRunFC	Fault Counter 01-310-00: TopCoverOpenInRunFault	Range = 0 to 255	0
609-114	FinTamp1FrontMoveFailFC	Fault Counter 11-005-00: FinTamper1FrontMoveFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-115	FinTamp1RearMoveFailFC	Fault Counter 11-006-00: FinTamper1RearMoveFailureFault	Range = 0 to 255	0
609-116	FinTamp2FrontMoveFailFC	Fault Counter 11-007-00: FinTamper2FrontMoveFailureFault	Range = 0 to 255	0
609-117	FinTamp2RearMoveFailFC	Fault Counter 11-008-00: FinTamper2RearMoveFailureFault	Range = 0 to 255	0
609-118	FinCompilerCarriageHomeFailFC	Fault Counter 11-012-00: FinCompilerCarriageHomeFailureFault	Range = 0 to 255	0
609-119	FinCompilerCarriageMoveFailFC	Fault Counter 11-014-00: FinCompilerCarriageMoveFailureFault	Range = 0 to 255	0
609-120	FinPaddleRollHomeFailFC	Fault Counter 11-024-00: FinPaddleRollHomeFailureFault	Range = 0 to 255	0
609-121	FinPaddleRollCycleFailFC	Fault Counter 11-025-00: FinPaddleRollCycleFailureFault	Range = 0 to 255	0
609-122	FinPaddleRollerNotHomeFailFC	Fault Counter 11-026-00: FinPaddleRollerNotHomeFailureFault	Range = 0 to 255	0
609-123	FinBin1MoveFailFC	Fault Counter 11-030-00: FinBin1MoveFailureFault	Range = 0 to 255	0
609-124	FinBin1OffsetMoveFailFC	Fault Counter 11-031-00: FinBin1OffsetMoveFailureFault	Range = 0 to 255	0
609-125	FinBin2MoveFailFC	Fault Counter 11-036-00: FinBin2MoveFailureFault	Range = 0 to 255	0
609-126	FinBin2OffsetMoveFailFC	Fault Counter 11-040-00: FinBin2OffsetMoveFailureFault	Range = 0 to 255	0
609-127	FinPunchHeadCycleFailFC	Fault Counter 11-043-00: FinPunchHeadCycleFailureFault	Range = 0 to 255	0
609-128	FinPunchHeadRtrnHomeFailFC	Fault Counter 11-044-00: FinPunchHeadReturnHomeFailureFault	Range = 0 to 255	0
609-129	FinPunchHeadStuckHomeFailFC	Fault Counter 11-045-00: FinPunchHeadStuckHomeFailureFault	Range = 0 to 255	0
609-130	FinPunchUnitHomeFlagFailFC	Fault Counter 11-046-00: FinPunchUnitHomeFlagFailureFault	Range = 0 to 255	0
609-131	FinPunchUnitHomeFailFC	Fault Counter 11-047-00: FinPunchUnitHomeFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-132	FinStapleHead1CycleFailFC	Fault Counter 11-050-00: FinStapleHead1CycleFailureFault	Range = 0 to 255	0
609-133	FinStapleUnit1MoveFailFC	Fault Counter 11-053-00: FinStapleUnit1MoveFailureFault	Range = 0 to 255	0
609-134	FinPPIBottomPlateHomeFailFC	Fault Counter 11-056-00: FinPPIBottomPlateHomeFailureFault	Range = 0 to 255	0
609-135	FinPPIBottomPlateLiftFailFC	Fault Counter 11-057-00: FinPPIBottomPlateLiftFailureFault	Range = 0 to 255	0
609-136	FinBBCreaseBladeMoveFailFC	Fault Counter 11-061-00: FinBBCreaseBladeMoveFailureFault	Range = 0 to 255	0
609-137	FinBBCreaseRollFailFC	Fault Counter 11-062-00: FinBBCreaseRollFailureFault	Range = 0 to 255	0
609-138	FinBBStapleHead1MoveFailFC	Fault Counter 11-063-00: FinBBStapleHead1MoveFailureFault	Range = 0 to 255	0
609-139	FinBBBackStopStartFailFC	Fault Counter 11-065-00: FinBBBackStopStartFailureFault	Range = 0 to 255	0
609-140	FinBBTamp1MoveFailFC	Fault Counter 11-066-00: FinBBTamper1MoveFailureFault	Range = 0 to 255	0
609-141	FinBBTapeFeedMoveFCFC	Fault Counter 11-072-00: FinBBTapeFeedMoveFaultFault	Range = 0 to 255	0
609-142	FinBBCoolingFanFCFC	Fault Counter 11-073-00: FinBBCoolingFanFaultFault	Range = 0 to 255	0
609-143	FinBBHeaterUnderTemperatureFC	Fault Counter 11-077-00: FinBBHeaterUnderTemperatureFault	Range = 0 to 255	0
609-144	FinBBHeaterOverTemperatureFC	Fault Counter 11-078-00: FinBBHeaterOverTemperatureFault	Range = 0 to 255	0
609-145	FinPaperPusherMtrStalledFC	Fault Counter 11-083-00: FinPaperPusherMotorStalledFault	Range = 0 to 255	0
609-146	LELateToFinEntrySnsrFC	Fault Counter 11-100-00: LeadEdgeLateToFinEntrySensorFault	Range = 0 to 255	0
609-147	FinTELateFmEntranceSnsrFC	Fault Counter 11-101-00: FinTELateFromEntranceSensorFault	Range = 0 to 255	0
609-148	LELateToFinPunchSnsrFC	Fault Counter 11-110-00: LeadEdgeLateToFinPunchSensorFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-149	LELateToFin-CompilerEntrySn-srFC	Fault Counter 11-120-00: LeadEdgeLateToFinCompil-erEntrySensorFault	Range = 0 to 255	0
609-150	TELateFmFin-CompilerEntrySn-srFC	Fault Counter 11-122-00: TrailEdgeLateFromFinCompil-erEntrySensorFault	Range = 0 to 255	0
609-151	LELateToFin-TopExitSnsrFC	Fault Counter 11-130-00: LeadEdgeLateToFinTopExit-SensorFault	Range = 0 to 255	0
609-152	TELateFmFin-TopExitSnsrFC	Fault Counter 11-132-00: TrailEdgeLateFromFinTopExit-SensorFault	Range = 0 to 255	0
609-153	LELateToFin2ndT opExitSnsrFC	Fault Counter 11-140-00: LeadEdgeLateToFin2ndTopExi tSensorFault	Range = 0 to 255	0
609-154	TELateFmFin2nd TopExitSnsrFC	Fault Counter 11-142-00: TrailEdgeLateFromFin2ndTop ExitSensorFault	Range = 0 to 255	0
609-155	LELateToFin3rdT opExitSnsrFC	Fault Counter 11-150-00: LeadEdgeLateToFin3rdTopExit SensorFault	Range = 0 to 255	0
609-156	TELateFmFin3rd TopExitSnsrFC	Fault Counter 11-152-00: TrailEdgeLateFromFin3rdTopE xitSensorFault	Range = 0 to 255	0
609-157	FinLELateTo-BufferPosSnsrFC	Fault Counter 11-157-00: Fin-LELateToBufferPositionSen-sorFault	Range = 0 to 255	0
609-158	FinLELate-ToExitHVFIn-toBMSnsrFC	Fault Counter 11-158-00: Fin-LELateToExitHVFIntoBMSen-sorFault	Range = 0 to 255	0
609-159	LELateToBBEn-trySnsrFC	Fault Counter 11-160-00: LeadEdgeLateToBBEntrySen-sorFault	Range = 0 to 255	0
609-160	FinTELateFm-BufferPosSnsrFC	Fault Counter 11-161-00: Fin-TELateFromBufferPosition-SensorFault	Range = 0 to 255	0
609-161	TELateFmBBEn-trySnsrFC	Fault Counter 11-162-00: TrailEdgeLateFromBBEntry-SensorFaul	Range = 0 to 255	0
609-162	Fin-TELateFmExitH-VFIntoBMSnsrFC	Fault Counter 11-163-00: Fin-TELateFromExitHVFIntoBM-SensorFault	Range = 0 to 255	0
609-163	FinTELateFm-BufferPathSn-srFC	Fault Counter 11-164-00: Fin-TELateFromBufferPathSen-sorFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-164	FinLELateTo-BufferPathSn-srFC	Fault Counter 11-165-00: Fin-LELateToBufferPathSensor-Fault	Range = 0 to 255	0
609-165	LELateToBBCom-pilerExitSnsrFC	Fault Counter 11-170-00: LeadEdgeLateToBBCompil-erExitSensorFault	Range = 0 to 255	0
609-166	TELateFmB-BCompilerSn-srFC	Fault Counter 11-172-00: TrailEdgeLateFromBBCompil-erSensorFault	Range = 0 to 255	0
609-167	FinOffsetUnitInit-FailFC	Fault Counter 11-173-00: FinOffsetUnitInitializationFail-ureFault	Range = 0 to 255	0
609-168	FinOffsetUnitR-trnHomeFailFC	Fault Counter 11-174-00: FinOffsetUnitReturnHomeFail-ureFault	Range = 0 to 255	0
609-169	FinOffsetUnitH-omeFailFC	Fault Counter 11-175-00: FinOffsetUnitHomeFailure-Fault	Range = 0 to 255	0
609-170	FinOffsetUnitRtr-nAwayHome-FailFC	Fault Counter 11-176-00: FinOffsetUnitReturnAway-HomeFailureFault	Range = 0 to 255	0
609-171	FinOffsetUnit-AwayHome-FailFC	Fault Counter 11-177-00: FinOffsetUnitAwayHomeFail-ureFault	Range = 0 to 255	0
609-172	LELateToBBEx-itSnsrFC	Fault Counter 11-180-00: LeadEdgeLateToBBExitSen-sorFault	Range = 0 to 255	0
609-173	TELateFmBBEx-itSnsrFC	Fault Counter 11-182-00: TrailEdgeLateFromBBExitSen-sorFault	Range = 0 to 255	0
609-174	FinBMUnexpSht-DetectFC	Fault Counter 11-183-00: FinB-MUnexpectedSheetDetected-Fault	Range = 0 to 255	0
609-175	FinBMStryShtDe-tectPostJam-ClearFC	Fault Counter 11-184-00: Fin-BMStraySheetDetectedPost-JamClearanceFault	Range = 0 to 255	0
609-176	FinLELateToT-FExitSnsrFC	Fault Counter 11-185-00: Fin-LELateToTFExitSensorFault	Range = 0 to 255	0
609-177	FinTELateFmT-FExitSnsrFC	Fault Counter 11-186-00: Fin-TELateFromTFExitSensor-Fault	Range = 0 to 255	0
609-178	FinLELateToT-FAssistSnsrFC	Fault Counter 11-187-00: Fin-LELateToTFAssistSensorFault	Range = 0 to 255	0
609-179	FinNipSplitFailFC	Fault Counter 11-188-00: FinNipSplitFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-180	FinNipHome-FailFC	Fault Counter 11-189-00: FinNipHomeFailureFault	Range = 0 to 255	0
609-181	FinLELateToPPI-TabStandbySn-srFC	Fault Counter 11-191-00: Fin-LELateToPPITabStandbySen-sorFault	Range = 0 to 255	0
609-182	FinTELateFmPPI-TabStandbySn-srFC	Fault Counter 11-193-00: Fin-TELateFromPPITabStandby-SensorFault	Range = 0 to 255	0
609-183	FinLELateToPPI-PickupSnsrFC	Fault Counter 11-194-00: Fin-LELateToPPIPickupSensor-Fault	Range = 0 to 255	0
609-184	FinTELateFmPPI-TrayPickupSn-srFC	Fault Counter 11-196-00: Fin-TELateFromPPITrayPick-upSensorFault	Range = 0 to 255	0
609-185	FinStrayShtDe-tectPostJam-ClearFC	Fault Counter 11-198-00: Fin-StraySheetDetectedPostJam-ClearanceFault	Range = 0 to 255	0
609-186	UnexpShtDe-tectFC	Fault Counter 11-199-00: UnexpectedSheetDetected-Fault	Range = 0 to 255	0
609-187	FinUnDockedIntl-ckInRunFC	Fault Counter 11-300-00: FinUnDockedInterlockInRun-Fault	Range = 0 to 255	0
609-188	FinEntryGateIntl-ckOpenInRunFC	Fault Counter 11-301-00: FinEntryGateInterlockOpenIn-RunFault	Range = 0 to 255	0
609-189	FinTopCoverIntl-ckOpenInRunFC	Fault Counter 11-302-00: Fin-TopCoverInterlockOpenInRun-Fault	Range = 0 to 255	0
609-190	FinFrontDoorIntl-ckOpenInRunFC	Fault Counter 11-303-00: Fin-FrontDoorInterlockOpenIn-RunFault	Range = 0 to 255	0
609-191	FinTopGateIntlck-OpenInRunFC	Fault Counter 11-304-00: Fin-TopGateInterlockOpenInRun-Fault	Range = 0 to 255	0
609-192	FinBotExit-GateIntlckOpen-InRunFC	Fault Counter 11-305-00: Fin-BottomExitGateInterlockOpen-InRunFault	Range = 0 to 255	0
609-193	FinPPITopCover-IntlckOpenIn-RunFC	Fault Counter 11-306-00: FinP-PITopCoverInterlockOpenIn-RunFault	Range = 0 to 255	0
609-194	FinTrifoldTopCov-erOpenInRunFC	Fault Counter 11-307-00: Fin-TrifoldTopCoverOpenInRun-Fault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-195	FinTrifoldFront-DoorOpenIn-RunFC	Fault Counter 11-308-00: Fin-TrifoldFrontDoorOpenInRun-Fault	Range = 0 to 255	0
609-196	FinInsLeftHand-DoorOpenIn-RunFC	Fault Counter 11-309-00: Fin-InserterLeftHandDoorOpenIn-RunFault	Range = 0 to 255	0
609-197	FinTamp1FrontHo-meFailFC	Fault Counter 11-310-00: FinTamper1FrontHomeFailure-Fault	Range = 0 to 255	0
609-198	FinTamp1RearHo-meFailFC	Fault Counter 11-311-00: FinTamper1RearHomeFailure-Fault	Range = 0 to 255	0
609-199	FinTamp2FrontHo-meFailFC	Fault Counter 11-312-00: FinTamper2FrontHomeFailure-Fault	Range = 0 to 255	0
609-200	FinTamp2RearHo-meFailFC	Fault Counter 11-313-00: FinTamper2RearHomeFailure-Fault	Range = 0 to 255	0
609-201	FinComplerCar-riageTravelFai-lUpFC	Fault Counter 11-315-00: Fin-CompilerCarriageOverTravel-FailureUpFault	Range = 0 to 255	0
609-202	FinComplrCar-riageTravelFail-LowFC	Fault Counter 11-316-00: FinCompilerCarriageOverTrav-elFailureLowFault	Range = 0 to 255	0
609-203	FinRearTamp-AwayHomeSnsr-FailFC	Fault Counter 11-319-00: Fin-RearTamperAwayHomeSen-sorFailureFault	Range = 0 to 255	0
609-204	FinCompilerEject-orHomeFailFC	Fault Counter 11-320-00: Fin-CompilerEjectorHomeFailure-Fault	Range = 0 to 255	0
609-205	FinCompilerEject-orCycleFailFC	Fault Counter 11-322-00: Fin-CompilerEjectorCycleFailure-Fault	Range = 0 to 255	0
609-206	FinBin1OverTrav-elFailUpperFC	Fault Counter 11-334-00: FinBin1OverTravelFailureUpp-erFault	Range = 0 to 255	0
609-207	FinBin1OverTrav-elFailLowerFC	Fault Counter 11-335-00: FinBin1OverTravelFailureLow-erFault	Range = 0 to 255	0
609-208	FinBin1HomeFail-FC	Fault Counter 11-336-00: FinBin1HomeFailureFault	Range = 0 to 255	0
609-209	FinBin1OffsetHo-meFailFC	Fault Counter 11-337-00: FinBin1OffsetHomeFailureFau-lt	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-210	FinBin2OverTravelFailUpperFC	Fault Counter 11-344-00: FinBin2OverTravelFailureUpperFault	Range = 0 to 255	0
609-211	FinBin2OverTravelFailLowerFC	Fault Counter 11-345-00: FinBin2OverTravelFailureLowerFault	Range = 0 to 255	0
609-212	FinBin2HomeFailFC	Fault Counter 11-346-00: FinBin2HomeFailureFault	Range = 0 to 255	0
609-213	FinBin2OffsetHomeFailFC	Fault Counter 11-347-00: FinBin2OffsetHomeFailureFault	Range = 0 to 255	0
609-214	FinPunchHead-HomeFailFC	Fault Counter 11-350-00: Fin-PunchHeadHomeFailureFault	Range = 0 to 255	0
609-215	FinStapleHead1HomeFailFC	Fault Counter 11-360-00: FinStapleHead1HomeFailureFault	Range = 0 to 255	0
609-216	FinStapleHead1NotPrimedFC	Fault Counter 11-364-00: FinStapleHead1NotPrimedFault	Range = 0 to 255	0
609-217	FinStapleUnit1HomeFailFC	Fault Counter 11-370-00: FinStapleUnit1HomeFailureFault	Range = 0 to 255	0
609-218	FinStaplerHome-FailFC	Fault Counter 11-371-00: Fin-StaplerHomeFailureFault	Range = 0 to 255	0
609-219	FinStaplerRtrnHomeFailFC	Fault Counter 11-372-00: Fin-StaplerReturnHomeFailure-Fault	Range = 0 to 255	0
609-220	FinStaplerMiddle-HomeFailFC	Fault Counter 11-373-00: Fin-StaplerMiddleHomeFailure-Fault	Range = 0 to 255	0
609-221	FinStaplerStuck-MiddleHome-FailFC	Fault Counter 11-374-00: Fin-StaplerStuckMiddleHomeFail-ureFault	Range = 0 to 255	0
609-222	FinStapler-JawHomeFailFC	Fault Counter 11-375-00: Fin-StaplerJawHomeFailureFault	Range = 0 to 255	0
609-223	FinStaplerJaw-StuckHome-FailFC	Fault Counter 11-376-00: Fin-StaplerJawStuckHomeFailure-Fault	Range = 0 to 255	0
609-224	FinStaplerPrim-ingFailFC	Fault Counter 11-377-00: Fin-StaplerPrimingFailureFault	Range = 0 to 255	0
609-225	FinPunchPa-prSideEdgeDe-tectFailFC	Fault Counter 11-380-00: Fin-PunchUnitPaperSideEdgeDe-tectingFailureFault	Range = 0 to 255	0
609-226	FinBBBackSto-pHomeFailFC	Fault Counter 11-383-00: Fin-BBBackStopHomeFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-227	FinBBTamp1HomeFailFC	Fault Counter 11-384-00: FinBBTamper1HomeFailureFault	Range = 0 to 255	0
609-228	FinBBFlapper-HomeFailFC	Fault Counter 11-391-00: Fin-BBFlapperHomeFailureFault	Range = 0 to 255	0
609-229	FinFront-TampTrayHome-FailFC	Fault Counter 11-392-00: Fin-FrontTamperTrayHomeFailure-Fault	Range = 0 to 255	0
609-230	FinFront-TampTrayRtrnHo-meFailFC	Fault Counter 11-393-00: Fin-FrontTamperTrayReturnHome-FailureFault	Range = 0 to 255	0
609-231	FinFront-TampTrayAway-HomeFailFC	Fault Counter 11-394-00: Fin-FrontTamperTrayAwayHome-FailureFault	Range = 0 to 255	0
609-232	FinFrontTamp-StuckAwayHome-FailFC	Fault Counter 11-395-00: Fin-FrontTamperTrayStuckAway-HomeFailureFault	Range = 0 to 255	0
609-233	Fin-RearTampTray-HomeFailFC	Fault Counter 11-396-00: Fin-RearTamperTrayHomeFailure-Fault	Range = 0 to 255	0
609-234	Fin-RearTampTrayR-trnHomeFailFC	Fault Counter 11-397-00: Fin-RearTamperTrayReturnHome-FailureFault	Range = 0 to 255	0
609-235	Fin-RearTampTray-AwayHomeFailFC	Fault Counter 11-398-00: Fin-RearTamperTrayAwayHome-FailureFault	Range = 0 to 255	0
609-236	FinRearTampRtr-nAwayHome-FailFC	Fault Counter 11-399-00: Fin-RearTamperTrayReturnAway-HomeFailureFault	Range = 0 to 255	0
609-237	FinBBStapleHead2MoveFailFC	Fault Counter 11-403-00: FinBBStapleHead2MoveFailureFault	Range = 0 to 255	0
609-238	FinBBStapleHead1HomeFailFC	Fault Counter 11-411-00: FinBBStapleHead1HomeFailureFault	Range = 0 to 255	0
609-239	FinBBStapleHead2HomeFailFC	Fault Counter 11-413-00: FinBBStapleHead2HomeFailureFault	Range = 0 to 255	0
609-240	FinBMStapler-ModuleHomeFC	Fault Counter 11-414-00: Fin-BMStaplerModuleHomeFault	Range = 0 to 255	0
609-241	FinBBCreaseRoll-GateHomeFailFC	Fault Counter 11-415-00: FinB-BCreaseRollGateHomeFail-ureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-242	FinBBCreaseBladeHomeFailFC	Fault Counter 11-416-00: FinBBCreaseBladeHomeFailureFault	Range = 0 to 255	0
609-243	FinBMFlapperHomeFailFC	Fault Counter 11-417-00: FinBMFlapperHomeFailureFault	Range = 0 to 255	0
609-244	FinBMFlapperMoveFailFC	Fault Counter 11-418-00: FinBMFlapperMoveFailureFault	Range = 0 to 255	0
609-245	FinBMTamp2HomeFailFC	Fault Counter 11-419-00: FinBMTamper2HomeFailureFault	Range = 0 to 255	0
609-246	FinBMTamp2MoveFailFC	Fault Counter 11-420-00: FinBMTamper2MoveFailureFault	Range = 0 to 255	0
609-247	FinKickerCycleFailFC	Fault Counter 11-430-00: FinKickerCycleFailureFault	Range = 0 to 255	0
609-248	FinPaperPusherRtrnHomeFailFC	Fault Counter 11-440-00: FinPaperPusherReturnHomeFailureFault	Range = 0 to 255	0
609-249	FinPaperPusherHomeFailFC	Fault Counter 11-441-00: FinPaperPusherHomeFailureFault	Range = 0 to 255	0
609-250	FinPaperPusherRtrnAwayHomeFailFC	Fault Counter 11-442-00: FinPaperPusherReturnAwayHomeFailureFault	Range = 0 to 255	0
609-251	FinPaperPusherAwayHomeFailFC	Fault Counter 11-443-00: FinPaperPusherAwayHomeFailureFault	Range = 0 to 255	0
609-252	FinEjectorModuleMtrStallFC	Fault Counter 11-450-00: FinEjectorModuleMotorStallFault	Range = 0 to 255	0
609-253	FinEjectorPlateMtrStallFailFC	Fault Counter 11-451-00: FinEjectorPlateMotorStallFailureFault	Range = 0 to 255	0
609-254	FinEjectorPlateRtrnHomeFailFC	Fault Counter 11-452-00: FinEjectorPlateReturnHomeFailureFault	Range = 0 to 255	0
609-255	FinEjectorPlateHomeFailFC	Fault Counter 11-453-00: FinEjectorPlateHomeFailureFault	Range = 0 to 255	0
609-256	FinLowerPaddleRtrnHomeFailFC	Fault Counter 11-454-00: FinLowerPaddleReturnHomeFailureFault	Range = 0 to 255	0
609-257	FinLowerPaddleHomeFailFC	Fault Counter 11-455-00: FinLowerPaddleHomeFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-258	FinEjectorModuleRtrnHomeFailFC	Fault Counter 11-456-00: FinEjectorModuleReturnHomeFailureFault	Range = 0 to 255	0
609-259	FinEjectorModuleHomeFailFC	Fault Counter 11-457-00: FinEjectorModuleHomeFailureFault	Range = 0 to 255	0
609-260	FinEjectorModuleRtrnOutFailFC	Fault Counter 11-458-00: FinEjectorModuleReturnOutFailureFault	Range = 0 to 255	0
609-261	FinEjectorModuleOutFailFC	Fault Counter 11-459-00: FinEjectorModuleOutFailureFault	Range = 0 to 255	0
609-262	FinStackerMtrStallFailFC	Fault Counter 11-460-00: FinStackerMotorStallFailureFault	Range = 0 to 255	0
609-263	FinStackerBinHomeFailFC	Fault Counter 11-461-00: FinStackerBinHomeFailureFault	Range = 0 to 255	0
609-264	FinStackerBinMoveFailFC	Fault Counter 11-462-00: FinStackerBinMoveFailureFault	Range = 0 to 255	0
609-265	FinBM24vUnavailableAtInputFC	Fault Counter 11-463-00: FinBM24vUnavailableAtInputFault	Range = 0 to 255	0
609-266	FinBM24vInternalFailFC	Fault Counter 11-464-00: FinBM24vInternalFailureFault	Range = 0 to 255	0
609-267	FinPaddleUnitRtrnUpperFailFC	Fault Counter 11-465-00: FinPaddleUnitReturnUpperFailureFault	Range = 0 to 255	0
609-268	FinPaddleUnitNotUpperFailFC	Fault Counter 11-466-00: FinPaddleUnitNotUpperFailureFault	Range = 0 to 255	0
609-269	FinPaddleUnitRtrnLowerFailFC	Fault Counter 11-467-00: FinPaddleUnitReturnLowerFailureFault	Range = 0 to 255	0
609-270	FinPaddleUnitNotLowerFailFC	Fault Counter 11-468-00: FinPaddleUnitNotLowerFailureFault	Range = 0 to 255	0
609-271	FinCurlSuppressorRtrnHomeFailFC	Fault Counter 11-469-00: FinCurlSuppressorReturnHomeFailureFault	Range = 0 to 255	0
609-272	FinCurlSuppressorHomeFailFC	Fault Counter 11-470-00: FinCurlSuppressorHomeFailureFault	Range = 0 to 255	0
609-273	FinCurlSuppressorRtrnAwayFailFC	Fault Counter 11-471-00: FinCurlSuppressorReturnAwayFailureFault	Range = 0 to 255	0
609-274	FinCurlSuppressorAwayFailFC	Fault Counter 11-472-00: FinCurlSuppressorAwayFailureFault	Range = 0 to 255	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-275	FinPressSupport-MtrRtrnInitFailFC	Fault Counter 11-473-00: FinPressingSupportMotorReturnInitFailureFault	Range = 0 to 255	0
609-276	FinPressSupport-MtrInitFailFC	Fault Counter 11-474-00: FinPressingSupportMotorInitFailureFault	Range = 0 to 255	0
609-277	FinPressSupport-MtrRtrnHomeFailFC	Fault Counter 11-475-00: FinPressingSupportMotorReturnHomeFailureFault	Range = 0 to 255	0
609-278	FinPressSupport-MtrHomeFailFC	Fault Counter 11-476-00: FinPressingSupportMotorHomeFailureFault	Range = 0 to 255	0
609-279	FinPressSupport-MtrRtrnOutFailFC	Fault Counter 11-477-00: FinPressingSupportMotorReturnOutFailureFault	Range = 0 to 255	0
609-280	FinPressSupport-MtrOutFailFC	Fault Counter 11-478-00: FinPressingSupportMotorOutFailureFault	Range = 0 to 255	0
609-281	FinShortShtFed-FmInserterFC	Fault Counter 11-479-00: FinShortSheetFedFromInserterFault	Range = 0 to 255	0
609-282	OctNotInIndex-PosFC	Fault Counter 11-701-00: OctNotInIndexPositionFault	Range = 0 to 255	0
609-316	PFP Kit Type installed in PFP	PFP Kit Type installed in PFP	0 = Standard (A4 & Letter LEF) 1 = Kit A (A3 SEF & A4 LEF) 2 = Kit A (11x17 SEF & 8.5x11 LEF) 3 = Kit B (A4, SEF) 4 = Kit B (Letter, Legal SEF)	0
609-317	Reset Fault Trigger	Number of reset faults before actually resetting the system	Range 0 to 255 0 = reset with every reset fault n = number of reset faults before system reset	3
609-318	Tray4FeedRollsLifeCount	Tray 4 Feed Rolls life counter	Range = 0 to 4294967295	0
609-319	Tray4FeedRollsExpLife	Tray 4 Feed Rolls life expectancy	Range = 0 to 4294967295	400000
609-320	Tray4FeedRollsInstDate	Tray 4 Feed Rolls install date	Range = 0 to 4294967295	0
609-321	Tray4FeedRollsRepCount	Tray 4 Feed Rolls replacement counter	Range = 1 to 65535	1

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-322	Tray1TransportRollsLifeCount	Tray 1 Transport Rolls life counter	Range = 0 to 4294967295	0
609-323	Tray1TransportRollsExpLife	Tray 1 Transport Rolls life expectancy	Range = 0 to 4294967295	600000
609-324	Tray1TransportRollsInstDate	Tray 1 Transport Rolls install date	Range = 0 to 4294967295	0
609-325	Tray1TransportRollsRepCount	Tray 1 Transport Rolls replacement counter	Range = 1 to 65535	1
609-326	Tray2TransportRollsLifeCount	Tray 2 Transport Rolls life counter	Range = 0 to 4294967295	0
609-327	Tray2TransportRollsExpLife	Tray 2 Transport Rolls life expectancy	Range = 0 to 4294967295	600000
609-328	Tray2TransportRollsInstDate	Tray 2 Transport Rolls install date	Range = 0 to 4294967295	0
609-329	Tray2TransportRollsRepCount	Tray 2 Transport Rolls replacement counter	Range = 1 to 65535	1
609-330	Tray3/4TransportRollsLifeCount	Tray 3/4 Transport Rolls life counter	Range = 0 to 4294967295	0
609-331	Tray3/4TransportRollslimit	Tray 3/4 Transport Rolls life expectancy	Range = 0 to 4294967295	600000
609-332	Tray3/4TransportRollsInstDate	Tray 3/4 Transport Rolls install date	Range = 0 to 4294967295	0
609-333	Tray3/4TransportRollsRepCount	Tray 3/4 Transport Rolls replacement counter	Range = 1 to 65535	1
609-334	SplitDriveRollsLifeCount	Split Drive Rolls life counter	Range = 0 to 4294967295	0
609-335	SplitDriveRollsExpLife	Split Drive Rolls life expectancy	Range = 0 to 4294967295	600000
609-336	SplitDriveRollsInstDate	Split Drive Rolls install date	Range = 0 to 4294967295	0
609-337	SplitDriveRollsRepCount	Split Drive Rolls replacement counter	Range = 1 to 65535	1
609-338	DuplexSensorRollsLifeCount	Duplex Sensor Rolls life counter	Range = 0 to 4294967295	0
609-339	DuplexSensorRollsExpLife	Duplex Sensor Rolls life expectancy	Range = 0 to 4294967295	600000
609-340	DuplexSensorRollsInstDate	Duplex Sensor Rolls install date	Range = 0 to 4294967295	0
609-341	DuplexSensorRollsRepCount	Duplex Sensor Rolls replacement counter	Range = 1 to 65535	1

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-342	BiasFoamLife-Count	Bias Foam life counter	Range = 0 to 4294967295	0
609-343	BiasFoamExpLife	Bias Foam life expectancy	Range = 0 to 4294967295	500000
609-344	BiasFoamInst-Date	Bias Foam install date	Range = 0 to 4294967295	0
609-345	BiasFoamRep-Count	Bias Foam replacement counter	Range = 1 to 65535	1
609-346	DeveloperDriveG-earLifeCount	Developer Drive Gear life counter	Range = 0 to 4294967295	0
609-347	DeveloperDriveG-earExpLife	Developer Drive Gear life expectancy	Range = 0 to 4294967295	600000
609-348	DeveloperDriveG-earInstDate	Developer Drive Gear install date	Range = 0 to 4294967295	0
609-349	DeveloperDriveG-earRepCount	Developer Drive Gear replace-ment counter	Range = 1 to 65535	1
609-350	PostFuserRollsLi-feCount	Post Fuser Rolls life counter	Range = 0 to 4294967295	0
609-351	PostFuser-RollsExpLife	Post Fuser Rolls life expect-ancy	Range = 0 to 4294967295	600000
609-352	PostFuserRollsIn-stDate	Post Fuser Rolls install date	Range = 0 to 4294967295	0
609-353	PostFuser-RollsRepCount	Post Fuser Rolls replacement counter	Range = 1 to 65535	1
609-354	HVFPaddleLife-Count	HVF Paddle life counter	Range = 0 to 4294967295	0
609-355	HVFPaddleEx-pLife	HVF Paddle life expectancy	Range = 0 to 4294967295	200000
609-356	HVFPaddleInst-Date	HVF Paddle install date	Range = 0 to 4294967295	0
609-357	HVFPaddleRep-Count	HVF Paddle replacement counter	Range = 1 to 65535	1
609-358	BMLELateToBM-DetectSensor	Fault Counter 11-494-00: BMLELateToBMDetectSensor	Range = 0 to 255	3
609-359	BMTELateFrom-BMDetectSensor	Fault Counter 11-496-00: BMTELateFromBMDetectSen-sor	Range = 0 to 255	3
609-360	Plain Reload Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-361	Plain Reload Large Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-362	LW Cardstock Reload Sheets Used	Total since activation date	Range = 0 to 16777215	0

Table 9 CCS NVM ID 609-001 to 609-458

NVM ID	NVM Name	NVM Description	Settings	Default
609-363	LW Cardstock Reload Sheets USed	Total since activation date	Range = 0 to 16777215	0
609-364	LW Cardstock Large Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-365	LW Cardstock LG Reload Sheets	Total since activation date	Range = 0 to 16777215	0
609-366	Cardstock Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-367	Cardstock Reload Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-368	Cardstock Large Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-369	Cardstock LG Reload Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-370	HW Cardstock Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-371	HW Cardstock Reload Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-372	HW Cardstock Large Sheets Used	Total since activation date	Range = 0 to 16777215	0
609-373	HW Cardstock LG Reload Sheets	Total since activation date	Range = 0 to 16777215	0
609-458	PrintOnAlternate-PaperEnable	Print on Alternate Paper (Just Print It) enablement.	Enablement settings: 0=Off 1=On	0

Table 10 CCS NVM ID 610-001 to 610-052

NVM ID	NVM Name	NVM Description	Settings	Default
610-001	Copy ABS Detect Window FS Start	Background detection window fast scan start, defined in tenth of percentage point of docu-ment fast scan dimension. Val-ues from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	75

Table 10 CCS NVM ID 610-001 to 610-052

NVM ID	NVM Name	NVM Description	Settings	Default
610-002	Copy ABS Detect Window FS Size	Background detection window fast scan dimension, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	850
610-003	Copy ABS Level Platen	Auto Background Suppression level for platen	Range = 0 to 4	2
610-004	Copy ABS Level DADH	Auto Background Suppression level for DADH	Range = 0 to 4	2
610-005	Copy Auto Contrast Level Platen	Auto Contrast level for platen	Range = 0 to 4	2
610-006	Copy Auto Contrast Level DADH	Auto Contrast level for DADH	Range = 0 to 4	2
610-007	Copy Auto Color Detect FS Start	Auto Color detection window fast scan start, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	64
610-008	Copy Auto Color Detect SS Start	Auto Color detection window slow scan start, defined in tenth of percentage point of document slow scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	64
610-009	Copy Auto Color Level Pixel Plat	Auto Color Detection Level for platen at pixel level. Defines a value that dictates how chromatic a pixel has to be in order to be considered color	Range = 0 to 4	2
610-010	Copy Auto Color Level Page Plat	Auto Color Detection Level for platen at page level. Defines a value that dictates how chromatic a pixel has to be in order to be considered color	Range = 0 to 4	2
610-011	Copy Auto Color Level Pixel DADH	Auto Color Detection Level for DADH at pixel level. Defines a value that dictates how many color pixels have to be on a page so that the document is considered color	Range = 0 to 4	2

Table 10 CCS NVM ID 610-001 to 610-052

NVM ID	NVM Name	NVM Description	Settings	Default
610-012	Copy Auto Color Level Page DADH	Auto Color Detection Level for DADH at page level. Defines a value that dictates how many color pixels have to be on a page so that the document is considered color	Range = 0 to 4	2
610-013	K only (only black ink for B&W)	Dictates if black & white copies are printed in K-only or composite black	Range = 0 to 1	0
610-014	Copy Photo/Text Segmentat'n Ctrl	Photo/Text Segmentation Threshold will control the Galileo segmentation. When it changes, the part of the input that will be considered text will vary as well as the part that will be considered photo.	Range = 0 to 4	2
610-015	Copy White Reference	Defines the type of paper used	Range = 0 to 127	0
610-016	Copy Im Path Type (bit depth)	Defines the binary vs. contone image path/printing	Range = 1 to 16	8
610-017	Scan ABS Detect Window FS Start	Background detection window fast scan start, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	75
610-018	Scan ABS Detect Window FS Size	Background detection window fast scan dimension, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	850
610-019	Scan ABS Level Platen	Auto Background Suppression level for platen	Range = 0 to 4	2
610-020	Scan ABS Level DADH	Auto Background Suppression level for DADH	Range = 0 to 4	2
610-021	Scan Auto Contrast Level Platen	Auto Contrast level for platen	Range = 0 to 4	2
610-022	Scan Auto Contrast Level DADH	Auto Contrast level for DADH	Range = 0 to 4	2

Table 10 CCS NVM ID 610-001 to 610-052

NVM ID	NVM Name	NVM Description	Settings	Default
610-023	Scan Auto Color Detect FS Start	Auto Color detection window fast scan start, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	16
610-024	Scan Auto Color Detect SS Start	Auto Color detection window slow scan start, defined in tenth of percentage point of document slow scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	16
610-025	Scan Auto Color Level Pixel Plat	Auto Color Detection Level for platen at pixel level. Defines a value that dictates how chromatic a pixel has to be in order to be considered color	Range = 0 to 4	2
610-026	Scan Auto Color Level Page Plat	Auto Color Detection Level for platen at page level. Defines a value that dictates how many color pixels have to be on a page so that the document is considered color	Range = 0 to 4	2
610-027	Scan Auto Color Level Pixel DADH	Auto Color Detection Level for DADH at pixel level. Defines a value that dictates how chromatic a pixel has to be in order to be considered color	Range = 0 to 4	2
610-028	Scan Auto Color Level Page DADH	Auto Color Detection Level for DADH at page level. Defines a value that dictates how many color pixels have to be on a page so that the document is considered color	Range = 0 to 4	2
610-029	Scan Photo/Text Segmentat'n Ctrl	Photo/Text Segmentation Threshold will control the Galileo segmentation. When it changes, the part of the input that will be considered text will vary as well as the part that will be considered	Range = 0 to 4	2
610-030	Scan White Reference	Defines the type of paper used (4024, 4200, Xpressions, recyclable, etc)	Range = 0 to 127	0

Table 10 CCS NVM ID 610-001 to 610-052

NVM ID	NVM Name	NVM Description	Settings	Default
610-031	Fax ABS Detect Window FS Start	Background detection window fast scan start, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	75
610-032	Fax ABS Detect Window FS Size	Background detection window fast scan dimension, defined in tenth of percentage point of document fast scan dimension. Values from 0 to 1000 (e.g. 1% is 10, 10% is 100, 100% is 1000).	Range = 0 to 1000	850
610-033	Fax ABS Level Platen	Auto Background Suppression level for platen	Range = 0 to 4	2
610-034	Fax ABS Level DADH	Auto Background Suppression level for DADH	Range = 0 to 4	2
610-035	Auto Contrast level for platen	Fax Auto Contrast Level Platen	Range = 0 to 4	2
610-036	Fax Auto Contrast Level DADH	Auto Contrast level for DADH	Range = 0 to 4	2
610-037	Fax Photo/Text Segment'n Control	Photo/Text Segmentation Threshold will control the Galileo segmentation. When it changes, the part of the input that will be considered text will vary as well as the part that will be considered	Range = 0 to 4	2
610-038	Fax White Reference	Defines the type of paper used	Range = 0 to 127	0
610-047	Print ImagePath Type (bit depth)	Defines the binary vs. contone image path/printing	Range = 1 to 16	8
610-052	Toner Saver Mode	Toner Saver Mode	0 = Standard 1 = ECO	1

Table 11 CCS NVM ID 611-001 to 612-005

NVM ID	NVM Name	NVM Description	Settings	Default
611-001	DisplayCustomTypesFirst	Custom display names - Custom media type List - Always Display Custom Types First option setting	Range = 0 to 1	0
612-001	Queue To NC Print TimeoutFC		Range = 0 to 255	0

Table 11 CCS NVM ID 611-001 to 612-005

NVM ID	NVM Name	NVM Description	Settings	Default
612-002	Queue To S2F Timeout		Range = 0 to 255	0
612-003	Queue To Fax-Send Timeout		Range = 0 to 255	0
612-004	Queue To DCCopy Timeout		Range = 0 to 255	0
612-005	Queue To S2Distr Timeout		Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-001	Market region	Defines the market region. 0 = US (North America) 1 = XCL (Canada) 2 = FX (Fuji Xerox Japan) 3 = FXAPO (Fuji Xerox Asian Pacific) 4 = ACO (Latin) 5 = RX (Europe) 6 = MRDmo East 7 = MRDmo West ***NOTE:*** *Do not use, refer to dC134.*	Range = 0 to 7 ***NOTE:*** *Do not use, refer to dC134.*	0
616-002	Power Saver Enabled	Enable Power Saver feature	0 = Disabled 1 = Enabled Range = 0 to 1	1
616-003	Product Configuration	32 = A1 class 32ppm 38 = A2 class 35/38ppm 36 = B1 class 35ppm 40 = B2 class 40ppm 45 = B3 class 45ppm 55 = B4 class 55ppm 65 = C1 class 65ppm 75 = C2 class 75ppm 85 = C3 class 85ppm 255 = Unknown speed	Range = 0 to 255	255
616-004	System Configuration	Defines System Configuration (type of system)	Range = 0 to 8	1
616-005	DST Start	Defines start day of daylight savings time	Range = 0 to 366	0
616-006	DST End	Defines end day of daylight savings time	Range = 0 to 366	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-007	Time Display Format	Defines time display format 0 = 12 hour format, 1 = 24 hour format	Range = 0 to 1	0
616-008	Power off enabled	Determines whether power saver's power off option is enabled. 0 = False, 1 = True	Range = 0 to 1	1
616-009	Power off timeout enabled	Determines whether power saver's power off option using timers is enabled. 0 = False, 1 = True	Range = 0 to 1	1
616-010	Powersaver idle-time	Defines time in 'normal' mode that system has been idle to enabled transition into power saver.	Range = 0 to 255	0
616-011	Power saver in mode time	Defines time in "mode 1" before transitioning to "mode 3" for appropriate configurations.	Range = 0 to 255	60
616-012	Power saver power off time	Defines time in "lowest" power saver mode before powering off.	Range = 0 to 255	45
616-013	Date Display Format	Defines date display format. 0 = mm/dd/yy, 1 = dd/mm/yy, 3 = yy/mm/dd	Range = 0 to 3	0
616-014	System install phase	Defines system's current installation phase.	Range = 0 to 4	2
616-015	Not displayed	SMFCustomerServiceNumber	Range = 0 to 0	0
616-016	Power up reason	Defines reason for previous power off.	Range = 0 to 6	1
616-017	Contention Algorithm	Defines the order algorithm for queues/ contention: FIFO vs. priority	Range = 0 to 1	1
616-018	Extra Time	Amount of additional time after power up before system can enter power saver.	Range = 0 to 5	5
616-019	System mode	Defines system's overall mode	Range = 0 to 12	0
616-020	Auto configuration enabled	Determines if the system runs through auto configuration, detect at power on. 0 = False, 1 = True	Range = 0 to 1	1
616-021	Line voltage	Defines system line voltage. 0=Unknown, 1 = 100V, 2 = 115V, 3 = 230V	Range = 0 to 3	2

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-022	Line frequency	Defines system line frequency. 0 = 50Hz, 1 = 60Hz	Range = 0 to 1	1
616-023	Not displayed	system serial number	Range = 0 to 0	0
616-024	Serial number enabled	Determines whether serial number has been set. 0 = False, 1 = True	Range = 0 to 1	1
616-025	Promotion time	Defines time interval for increasing job's priority based on time in system.	Range = 15 to 1440	120
616-026	Auto promotion enabled	Determines whether to increase job priority longer job is in system. 0 = False, 1 = True	Range = 0 to 1	1
616-027	Previous market region	Defines previous market region. 0=USCO, 1 = XCL, 2 = FX, 3 = FXAPO, 4 = ACO, 5 = RX	Range = 0 to 5	0
616-028	ModeChangeClientId	Defines client who did the most recent system mode change.	Range = 0 to 9994	16
616-029	Latest EOD event	Defines last day that an end of day was reached.	Range = 0 to 4294967295	0
616-030	Previous product config	Defines previous product configuration (All Products)	Range = 0 to 255	106
616-031	Previous line frequency	Defines previous line frequency. 0 = 50Hz, 1 = 60Hz	Range = 0 to 1	1
616-032	pPevious line voltage	Defines previous line voltage. 0=Unknown, 1 = 100V, 2 = 115V, 3 = 230V	Range = 0 to 3	2
616-033	NVM copyright years	List of system's copyright years.	Range = 0 to 4294967295	0
616-034	Desired install client	Defines current client of system installation.	Range = 0 to 255	0
616-035	RemoteIntrusiveDiagEnabled	Determines whether remote intrusive diagnostics is enabled. 0 = False, 1 = True	Range = 0 to 1	1
616-036	Value added reseller	Defines installation's value added reseller.	Range = 0 to 255	255
616-037	GMT Offset	Used by platforms to insure system clocks are set to correct time zones.	Range = ### to 50400	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-038	NC OnlineNvm	Determines whether ESS is On (Off) line. 0 = False, 1 = True	Range = 0 to 1	1
616-039	Job Hold Time	Max time a job can be held before it is deleted by the system	Range = 0 to 7200	4320
616-040	Job Hold Timer enabled	SA/KO setting to enable/disable hold job timer	Range = 0 to 1	1
616-041	ScanToFileinstalled count	Counter used for secure install and remove operations of the optional features	Range = 0 to 65535	0
616-042	LanFaxinstalled count	Counter used for secure install and remove operations of the optional features	Range = 0 to 65535	0
616-043	JBAinstalled count	Counter used for secure install and remove operations of the optional features	Range = 0 to 65535	0
616-044	ScanToFileenabled		Range = 0 to 1	0
616-045	LanFaxenabled	Specifies whether Lan Fax is Enabled on the machine.	Range = 0 to 1	0
616-046	JBAenabled	Specifies whether JBA is allowed to be turned Enabled on the machine.	Range = 0 to 1	0
616-047	NC TTY enabled	Used by PWS to determine if ESS terminal window is enabled	Range = 0 to 1	0
616-048	NC Config - Type		Range = 0 to 99	42
616-049	NC Config - Option		Range = 0 to 99	42
616-050	NC Config - Storage		Range = 0 to 99	42
616-051	NC Config - Software Options		Range = 0 to 99	42
616-052	Product Identifier	1000 = Unknown (Not set) 191 = 35 192 = 40 193 = 45 194 = 55 195 = 65 196 = 75 197 = 90	Range = 0 to 65535	1000
616-053	HeapLimits F:MaxImages T:MaxJobs	HeapLimits F:max images T:max jobs	Range = 0 to 1	0
616-054	InternetFaxinstalled count		Range = 0 to 65535	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-055	ScanToEmailin-stalled count		Range = 0 to 65535	0
616-056	InternetFaxen-abled		Range = 0 to 1	0
616-057	ScanToEmailena-bled		Range = 0 to 1	0
616-058	Software Upgrade Status		Range = 0 to 7	0
616-059	DeclassifySystem-OperationStatus	Declassify system - operation status	Range = 0 to 5	0
616-060	Declassify system - retry count		Range = 0 to 255	0
616-061	Declassify system - client id		Range = 0 to 255	0
616-062	DeclassifySystem-PlatformMask	Declassify system - platform mask	Range = 0 to 65535	0
616-063	Not displayed	Declassify system - platform status array-declassify system - platform status array	Range = 0 to 0	0
616-064	Not displayed	Declassify system - pattern list	Range = 0 to 0	0
616-065	Declassify system-pattern length	Declassify system - pattern list length	Range = 0 to 255	0
616-066	Declassify system # repetitions	Declassify system - number of repetitions	Range = 0 to 255	0
616-067	Declassify system - # of retries	Declassify system - number of retries	Range = 0 to 255	0
616-068	Declassify system - Timeout	Declassify system - number of retries	Range = 0 to 4294967295	0
616-069	DiskOverwritein-stalled count		Range = 0 to 65535	0
616-070	DiskOverwriteen-abled		Range = 0 to 1	0
616-071	ScanToFilehwsw available		Range = 0 to 1	1
616-072	ScanToFilein-stalled		Range = 0 to 1	1
616-073	LanFaxhwsw avail-able		Range = 0 to 1	1
616-074	LanFaxinstalled		Range = 0 to 1	1
616-075	JBAhwsw available		Range = 0 to 1	1
616-076	JBAinstalled		Range = 0 to 1	1
616-077	ScanToEmailh-wsw available		Range = 0 to 1	1

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-078	ScanToEmailin-stalled		Range = 0 to 1	1
616-079	InternetFaxhwsw available		Range = 0 to 1	1
616-080	InternetFaxin-stalled		Range = 0 to 1	1
616-081	DiskOverwriteh-wsw available		Range = 0 to 1	1
616-082	DiskOverwritein-stalled		Range = 0 to 1	1
616-083	JobOverwriteh-wsw available		Range = 0 to 1	1
616-084	JobOverwritein-stalled		Range = 0 to 1	1
616-085	JobOverwritein-stalled count		Range = 0 to 65535	0
616-086	JobOverwriteen-abled		Range = 0 to 1	1
616-087	EmbeddedFaxh-wsw available		Range = 0 to 1	1
616-088	EmbeddedFaxin-stalled		Range = 0 to 1	0
616-089	EmbeddedFaxin-stalled count		Range = 0 to 65535	0
616-090	EmbeddedFaxen-abled		Range = 0 to 1	0
616-091	Heavy Weight Fuser Enabled		Range = 0 to 1	1
616-092	Software upgrade monitor enabled	Auto upgrade enable	Range = 0 to 1	0
616-093	Not displayed	Version list	Range = 0 to 0	0
616-094	Geographic region	Geographic region	0 = Unspecified 1 = Western 2 = Eastern 3 = Not Applicable 4 = FX 5 = SDH A setting of 3 (Not Applicable) indicates the CRUs are not to be differentiated by region, but by service plan Range = 0 to 5	0
616-095	Zone1Page1Byte0	SIM data mirror	Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-096	Zone1Page1Byte1	SIM data mirror	Range = 0 to 255	0
616-097	Zone1Page1Byte2	SIM data mirror	Range = 0 to 255	0
616-098	Zone1Page1Byte3	SIM data mirror	Range = 0 to 255	0
616-099	Zone1Page1Byte4	SIM data mirror	Range = 0 to 255	0
616-100	Zone1Page1Byte5	SIM data mirror	Range = 0 to 255	0
616-101	Zone1Page1Byte6	SIM data mirror	Range = 0 to 255	0
616-102	Zone1Page2Byte0	SIM data mirror	Range = 0 to 255	0
616-103	Zone1Page2Byte1	SIM data mirror	Range = 0 to 255	0
616-104	Zone1Page2Byte2	SIM data mirror	Range = 0 to 255	0
616-105	Zone1Page2Byte3	SIM data mirror	Range = 0 to 255	0
616-106	Zone1Page2Byte4	SIM data mirror	Range = 0 to 255	0
616-107	Zone1Page2Byte5	SIM data mirror	Range = 0 to 255	0
616-108	Zone1Page2Byte6	SIM data mirror	Range = 0 to 255	0
616-109	Zone1Page3Byte0	SIM data mirror	Range = 0 to 255	0
616-110	Zone1Page3Byte1	SIM data mirror	Range = 0 to 255	0
616-111	Zone1Page3Byte2	SIM data mirror	Range = 0 to 255	0
616-112	Zone1Page3Byte3	SIM data mirror	Range = 0 to 255	0
616-113	Zone1Page3Byte4	SIM data mirror	Range = 0 to 255	0
616-114	Zone1Page3Byte5	SIM data mirror	Range = 0 to 255	0
616-115	Zone1Page3Byte6	SIM data mirror	Range = 0 to 255	0
616-116	SWUP NVM Save Switch	SWUP NVM Save Switch	Range = 0 to 255	0
616-117	delete settings	Delete settings	Range = 0 to 1	0
616-118	NC OnlineValidNvm	NCOnlineValidNvm	Range = 0 to 1	0
616-120	SearchPDFhwsw available	SearchPDFhwsw available	Range = 0 to 1	1
616-121	SearchPDFinstalled	SearchPDFinstalled	Range = 0 to 1	1
616-122	SearchPDFinstalled count	SearchPDFinstalled count	Range = 0 to 65535	0
616-123	SearchPDFenabled	SearchPDFenabled	Range = 0 to 1	0
616-124	Cpsrhwsw available	Cpsrhwsw available	Range = 0 to 1	1
616-125	Cpsrinstalled	Cpsrinstalled.	Range = 0 to 1	1
616-126	Cpsrinstalled count	Cpsrinstalled count	Range = 0 to 65535	0
616-127	Cpsrenabled	Cpsrenabled	Range = 0 to 1	0
616-128	Power on 0 to 1 Hours	Total number of times the machine has been powered on for 0 to 1 hours	Range = 0 to 16777215	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-129	Power on 2 to 3 Hours	Total number of times the machine has been powered on for 2 to 3 hours	Range = 0 to 16777215	0
616-130	Power on 4 to 9 Hours	Total number of times the machine has been powered on for 4 to 9 hours	Range = 0 to 16777215	0
616-131	Power on 10 to 23 Hours	Total number of times the machine has been powered on for 10 to 23 hours	Range = 0 to 16777215	0
616-132	Power on 24 to 167 Hours	Total number of times the machine has been powered on for 24 to 167 hours	Range = 0 to 16777215	0
616-133	Power on 168+ Hours	Total number of times the machine has been powered on for 168 or more hours	Range = 0 to 16777215	0
616-134	Hours Since Last Power On	Total number of hours the machine has been powered on since last po/po.	Range = 0 to 16777215	0
616-135	Total Time On (hours)	Total number of hours the machine has been powered on since last po/po.	Range = 0 to 16777215	0
616-143	Fast Resume status	Fast Resume status	0 = Disabled 1 = Enabled Range = 0 to 1	0
616-144	Power Management mode	Power Management mode	0 = Intelligent ready 1 = Job active 2 = Scheduled Range = 0 to 2	0
616-145	Scheduled wake time - Sunday	Power Management Scheduled wake time - Sunday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-146	Scheduled wake time - Monday	Power Management Scheduled wake time - Monday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-147	Scheduled wake time - Tuesday	Power Management Scheduled wake time - Tuesday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-148	Scheduled wake time - Wednesday	Power Management Scheduled wake time - Wednesday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-149	Scheduled wake time - Thursday	Power Management Scheduled wake time - Thursday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-150	Scheduled wake time - Friday	Power Management Scheduled wake time - Friday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-151	Scheduled wake time - Saturday	Power Management Scheduled wake time - Saturday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	9
616-152	Scheduled pwr saver time Sunday	Power Management Scheduled power saver time - Sunday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-153	Scheduled pwr saver time Monday	Power Management Scheduled power saver time - Monday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-154	Scheduled pwr saver time Tuesday	Power Management Scheduled power saver time - Tuesday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-155	Scheduled pwr saver time Wed.	Power Management Scheduled power saver time - Wednesday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-156	Scheduled pwr saver time Thurs.	Power Management Scheduled power saver time - Thursday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-157	Scheduled pwr saver time Friday	Power Management Scheduled power saver time - Friday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-158	Scheduled pwr saver time Sat.	Power Management Scheduled power saver time - Saturday	0 = 00hrs to 23 = 23hrs (hourly increments) Range = 0 to 23	17
616-159	Schedule type - Sunday	Power Management daily Schedule type - Sunday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-160	Schedule type - Monday	Power Management daily Schedule type - Monday	0 = Job activated 1 = Specified time Range = 0 to 1	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-161	Schedule type - Tuesday	Power Management daily Schedule type - Tuesday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-162	Schedule type - Wednesday	Power Management daily Schedule type - Wednesday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-163	Schedule type - Thursday	Power Management daily Schedule type - Thursday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-164	Schedule type - Friday	Power Management daily Schedule type - Friday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-165	Schedule type - Saturday	Power Management daily Schedule type - Saturday	0 = Job activated 1 = Specified time Range = 0 to 1	0
616-166	Yesterday's Activity IR1b array Not displayed	Intelligent Ready Yesterday's Activity IR1b array	Range = 0 to 0	
616-167	Yesterday's Activity IR2b array Not displayed	Intelligent Ready Yesterday's Activity IR2b array	Range = 0 to 0	0
616-168	Today's Activity IR1b array Not displayed	Intelligent Ready Today's Activity IR1b array	Range = 0 to 0	0
616-169	Today's Activity IR2b array Not displayed	Intelligent Ready Today's Activity IR2b array	Range = 0 to 0	0
616-170	IR3 week array Not displayed	Intelligent Ready IR3 week array	Range = 0 to 0	0
616-171	IR Low Power Timeout Not displayed	Intelligent Ready Low Power Timeout	Range = 1 to 120	5
616-172	IR Sleep Timeout Not displayed	Intelligent Ready Sleep Timeout	Range = 1 to 240	60
616-173	IR pre-populated usage flags Not displayed	Intelligent Ready - pre-populated array daily usage flags	Range = 0 to 0	0
616-180	Not displayed	Install Wizard deviceSettings	Range = 0 to 1	1
616-181	Not displayed	Install Wizard languageSelection	Range = 0 to 1	1
616-182	Not displayed	Install Wizard timeAndDate	Range = 0 to 1	1
616-183	Not displayed	Install Wizard NetworkConnection	Range = 0 to 1	1

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-184	Not displayed	Install Wizard pagePackPasscode	0 = Disabled 1 = Page Pack Pin Request enabled	0
616-185	Not displayed	Install Wizard miniWizardHomepage	Range = 0 to 1	1
616-186	Not displayed	Install Wizard customerSupport	Range = 0 to 1	1
616-187	Not displayed	Install Wizard networkSettings	Range = 0 to 1	1
616-188	Not displayed	Install Wizard eMailSettings	Range = 0 to 1	0
616-189	Not displayed	Install Wizard scanSettings	Range = 0 to 1	0
616-190	Not displayed	Install Wizard eFaxLine1	Range = 0 to 1	0
616-191	Not displayed	Install Wizard eFaxLine2	Range = 0 to 1	0
616-192	Not displayed	Install Wizard MediaSizes	Range = 0 to 1 1 = Normal Run mode	1
616-193	Not displayed	Install Wizard spare1	Range = 0 to 1 1 = Normal Run mode	1
616-194	Not displayed	Install Wizard spare2	Range = 0 to 1 1 = Normal Run mode	0
616-195	Not displayed	Lockout Timer	Range = 0 to 4294967295	86400
616-196	Not displayed	Password Attempts	Range = 0 to 5	0
616-197	Not displayed	Days Until Pack Pack Expiration	Range = -1 to 2147483645	-1
616-198	Not displayed	SMFSuppliesTelephoneNumber	Range = 0 to 0	0
616-199	AIF Activation Counter	AIF Activation Counter	Range = 0 to 4294967295	0
616-200	NumTimesPagePackPinlockedFC	Fault Counter 22-330: number of times page pack pin has been locked out	Range = 0 to 255	0
616-202	Current language (as set on UI)	This is a copy of the language set on the UI. Predominantly needed as the CCS becomes ready at power on before the UI and needs to process language specific routines (e.g. maintenance pages etc)	Range = 0 to 255	4
616-203	Disk Encryption - hwsw available	Disk Encryption - hwsw available	Range = 0 to 1	1
616-204	Disk Encryption - Installed	Disk Encryption - Installed	Range = 0 to 1	1

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-205	Disk Encryption Installed Count	Disk Encryption Installed Count	Range = 0 to 65535	0
616-206	Disk Encryption Enabled/Disabled	Disk Encryption Enabled/Disabled	Range = 0 to 1	1
616-208	Not displayed	Tiered Billing Password - traditional	Range = -1 to 2147483645	1791
616-209	Not displayed	Tiered Billing Password - 2 tier	Range = -1 to 2147483645	2487
616-210	Not displayed	Tiered Billing Password - 3 tier	Range = -1 to 2147483645	3258
616-212	Fast Resume popup enabled	Fast Resume popup message enabled status	0 = Fast Resume feature not previously enabled 1 = Fast Resume feature has been previously enabled	0
616-213	FullODIOTimeout	defines system manager full ODIO timeout	Range = 0 to 255	90
616-214	StandardODIOTimeout	defines system manager standard ODIO timeout	Range = 0 to 255	30
616-215	Not displayed	SAKO tools - Install wizard - Restrict tool access screen	0 = Display screen 1 = Do not display Range = 0 to 1	1
616-216	Auto-Reset Count	Automatic System Reset Count	Range = 0 to 2	0
616-217	Not displayed	PagePack Grace Prints Left	Range = 0 to 2000	1000
616-218	Not displayed	Defines whether or not the machine is in Grace Period.	Range = 0 to 1	0
616-219	Not displayed	Navigation flag for Installer Profile screen in LUI install wizard Install Wizard	Range = 0 to 1	1
616-220	Not displayed	Navigation flag for Welcome screen in LUI install wizard Install Wizard	Range = 0 to 1	1
616-221	Not displayed	Navigation flag for Completed screen in LUI install wizard Install Wizard	Range = 0 to 1	1
616-222	Not displayed	Navigation flag for PagePack Grace Period confirm screen in LUI install wizard Install Wizard	Range = 0 to 1	1
616-223	Not displayed	Used by platforms to set the timezone link to ensure system clocks are set to correct	Range = 0 to 0	0
616-224	Not displayed	Intelligent Ready History Log	Range = 0 to 0	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-225	IR1a values day array Not displayed	IR1a byte array	Range = 0 to 0	0
616-226	IR2a values day array Not displayed	IR2a byte array	Range = 0 to 0	0
616-227	IR1a last bin updated Not displayed	IR1a last updated binId	Range = 0 to 95	0
616-228	IR2a last bin updated Not displayed	IR2a last updated binId	Range = 0 to 23	0
616-229	Display Snooze Message	When the CCS instructs the machine to enter Snooze mode, it needs to remember that snooze was initiated since the machine does not report this mode. When a new unit is detected, the flag should be reset. Note setting this NVM will not induce snooze mode, it merely determines whether the Status is set for displaying the UI message.	0 = machine not in snooze mode 1 = machine in snooze mode Range = 0 to 1	0
616-230	RefurbModeNVM	Indicates that the machine has been refurbed, therefore the activation date and CRU Install dates are not be updated upon completion of Install Wizard.	0 = Not refurbed 1 = Refurbed Range = 0 to 1	0
616-231	Not displayed	Machine Unique Identifier for Serial Number Password	Range = 0 to 0	0
616-232	powersaver fast resume idletime	Defines time in "normal" mode where system has been idle to enabled transition into power saver WITH fast resume set	The idle time in minutes before the machine will enter Low power with Fast resume set Range = 1 to 225	60
616-233	powersaver fast resume in mode1	Defines time in "mode 1" before transitioning to "mode 3" WITH fast resume set.	The idle time in minutes the machine will remain in Low power before entering Sleep with Fast Resume set Range = 0 to 225	120
616-234	UI system Timeout value	UI system Timeout value	Range = 15 to 3600	60

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-235	RegDiff	Regional Differentiator value	NA_Classic = 1 NA_Enterprise = 2 XE_Classic = 3 XE_Enterprise = 4 DMO_Classic = 5 DMO_Enterprise = 6 Metered = 7 FX_Classic = 8 FX_Enterprise = 9 SR_Classic = 10 SR_Enterprise = 11 WW_Classic = 12 WW_Enterprise = 13 NA_XE_Classic = 14 NA_XE_Enterprise = 15 Factory = 63	1
616-236	Not displayed	JBA Cost Control: Enable/ Disable	0 = Disable JBA Cost Control 1 = Enable JBA Cost Control	0
616-237	POSU Enable During Install Mode	Enable POSU while system in Customer Install Mode.	0 = DO NOT allow POSU when system is in Customer Install Mode State 1 = ALLOW POSU when system is in Customer Install Mode State	0
616-238	UI System Timeout Warning Enabled	UI System Timeout Warning Enabled / Disabled	0 = Disable1 = Enable	1
616-240	Not displayed	Tiered billing password (PIN) Blk+2 tier	##	##
616-245		Install Wizard SIM Required screen	1 = Screen required	0
616-246	CheckVanillaRunResult	Check vanilla routine has been executed on machine	0 = Unknown 1 = Pass 2 = Fail Range = 0 to 255	0
616-248	Not displayed	Install Wizard Display Network Settings	1 = Should Be Run (Display the screen) 0 = Should Not Be Run (Don't display the screen)	1

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-250	NumberOfSuccessfulUpgrades	Counter recording the total number of successful upgrades of the machine	Range = 0 to 65535	0
616-251	NumberOfFailedUpgrades	Counter recording the total number of failed upgrades of the machine	Range = 0 to 65535	0
616-252	CCSFailedRetries	Counter recording the number of failed CCS power on upgrade reboots of the machine	Range = 0 to 65535	0
616-253	UpgradeHeaderPos	Counter recording the buffer position in the upgrade storage array.	Range = 0 to 65535	0
616-254	UpgradeHeaderInfo	Array of software upgrade headers showing : Date of upgrade, upgrade to/from version and first fault (if any) that occured during the upgrade	Range = 0 to 0	0
616-255	Fault Counter 95-000-00	Fault Counter 95-000-00: DCBOOTCODEERROR	Range = 0 to 255	0
616-256	Fault Counter 95-001-00	Fault Counter 95-001-00: DCSWUPCODEERROR	Range = 0 to 255	0
616-257	Fault Counter 95-002-00	Fault Counter 95-002-00: DCAPPERROR	Range = 0 to 255	0
616-258	Fault Counter 95-003-00	Fault Counter 95-003-00: DCOSERROR	Range = 0 to 255	0
616-259	Fault Counter 95-005-00	Fault Counter 95-004-00: DCCIPSERROR	Range = 0 to 255	0
616-260	Fault Counter 95-005-00	Fault Counter 95-005-00: SUIAPPERROR	Range = 0 to 255	0
616-261	Fault Counter 95-006-00	Fault Counter 95-006-00: SUIH8ERROR	Range = 0 to 255	0
616-262	Fault Counter 95-007-00	Fault Counter 95-007-00: DADHAPPERROR	Range = 0 to 255	0
616-263	Fault Counter 95-008-00	Fault Counter 95-008-00: EXTMEMERROR	Range = 0 to 255	0
616-264	Fault Counter 95-009-00	Fault Counter 95-009-00: DADHKERNELERROR	Range = 0 to 255	0
616-265	Fault Counter 95-010-00	Fault Counter 95-010-00: FAXAPPERROR	Range = 0 to 255	0
616-266	Fault Counter 95-011-00	Fault Counter 95-011-00: FAXFPGAERROR	Range = 0 to 255	0
616-267	Fault Counter 95-012-00	Fault Counter 95-012-00: FAXBOOTERROR	Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-268	Fault Counter 95-013-00	Fault Counter 95-013-00: EMBEDFAXERROR	Range = 0 to 255	0
616-269	Fault Counter 95-014-00	Fault Counter 95-014-00: IOTBOOTSTRAPERROR	Range = 0 to 255	0
616-270	Fault Counter 95-015-00	Fault Counter 95-015-00: IOTBOOTLOADERROR	Range = 0 to 255	0
616-271	Fault Counter 95-016-00	Fault Counter 95-016-00: IOTAPPERROR	Range = 0 to 255	0
616-272	Fault Counter 95-017-00	Fault Counter 95-017-00: LCSS1KAPPERROR	Range = 0 to 255	0
616-273	Fault Counter 95-018-00	Fault Counter 95-018-00: LCSS2KAPPERROR	Range = 0 to 255	0
616-274	Fault Counter 95-019-00	Fault Counter 95-019-00: LCSS2KBOOTERROR	Range = 0 to 255	0
616-275	Fault Counter 95-020-00	Fault Counter 95-020-00: LCSS3KAPPERROR	Range = 0 to 255	0
616-276	Fault Counter 95-021-00	Fault Counter 95-021-00: HCSSBOHCSSAPPERROR	Range = 0 to 255	0
616-277	Fault Counter 95-022-00	Fault Counter 95-022-00: HCSSBOAPPERROR	Range = 0 to 255	0
616-278	Fault Counter 95-023-00	Fault Counter 95-023-00: DCNCAPPERROR	Range = 0 to 255	0
616-279	Fault Counter 95-024-00	Fault Counter 95-024-00: DCNCOSERROR	Range = 0 to 255	0
616-280	Fault Counter 95-025-00	Fault Counter 95-025-00: IITAPPERROR	Range = 0 to 255	0
616-281	Fault Counter 95-026-00	Fault Counter 95-026-00: EMBEDFAXFPGAERROR	Range = 0 to 255	0
616-282	Fault Counter 95-027-00	Fault Counter 95-027-00: IITKERNELERROR	Range = 0 to 255	0
616-283	Fault Counter 95-028-00	Fault Counter 95-028-00: SCANNERERROR	Range = 0 to 255	0
616-284	Fault Counter 95-029-00	Fault Counter 95-029-00: HCFFWMODERROR	Range = 0 to 255	0
616-285	Fault Counter 95-030-00	Fault Counter 95-030-00: PFMFWMODERROR	Range = 0 to 255	0
616-286	Fault Counter 95-031-00	Fault Counter 95-031-00: PFPFWMODERROR	Range = 0 to 255	0
616-287	Fault Counter 95-032-00	Fault Counter 95-032-00: HVFAPPERROR	Range = 0 to 255	0
616-288	Fault Counter 95-033-00	Fault Counter 95-033-00: HVFBMAPPERROR	Range = 0 to 255	0
616-289	Fault Counter 95-034-00	Fault Counter 95-034-00: HVFBCERROR	Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-290	Fault Counter 95-035-00	Fault Counter 95-035-00: HVFBMBCERROR	Range = 0 to 255	0
616-291	Fault Counter 95-036-00	Fault Counter 95-036-00: PFPBLERROR	Range = 0 to 255	0
616-292	Fault Counter 95-037-00	Fault Counter 95-037-00: CFINAPPERROR	Range = 0 to 255	0
616-293	Fault Counter 95-038-00	Fault Counter 95-038-00: DFINAPPERROR	Range = 0 to 255	0
616-294	Fault Counter 95-039-00	Fault Counter 95-039-00: KMFINAPPERROR	Range = 0 to 255	0
616-295	Fault Counter 95-040-00	Fault Counter 95-040-00: AFINAPPERROR	Range = 0 to 255	0
616-296	Fault Counter 95-041-00	Fault Counter 95-041-00: SBFINAPPERROR	Range = 0 to 255	0
616-297	Fault Counter 95-042-00	Fault Counter 95-042-00: PFMTRAY3APPERROR	Range = 0 to 255	0
616-298	Fault Counter 95-043-00	Fault Counter 95-043-00: PFMTRAY4APPERROR	Range = 0 to 255	0
616-299	Fault Counter 95-044-00	Fault Counter 95-044-00: PFMTRAY5APPERROR	Range = 0 to 255	0
616-300	Fault Counter 95-045-00	Fault Counter 95-045-00: DCIOTPROXYERROR	Range = 0 to 255	0
616-301	Fault Counter 95-046-00	Fault Counter 95-046-00: DCIITPROXYERROR	Range = 0 to 255	0
616-302	Fault Counter 95-047-00	Fault Counter 95-047-00: DCACDERROR	Range = 0 to 255	0
616-303	Fault Counter 95-048-00	Fault Counter 95-048-00: DCGLUEERROR	Range = 0 to 255	0
616-304	Fault Counter 95-049-00	Fault Counter 95-049-00: DCPWSPROXYERROR	Range = 0 to 255	0
616-305	Fault Counter 95-050-00	Fault Counter 95-050-00: SSBOOTCODEERROR	Range = 0 to 255	0
616-306	Fault Counter 95-051-00	Fault Counter 95-051-00: SSAPPERROR	Range = 0 to 255	0
616-307	Fault Counter 95-052-00	Fault Counter 95-052-00: LVFBOOTERROR	Range = 0 to 255	0
616-308	Fault Counter 95-053-00	Fault Counter 95-053-00: LVFAPPERROR	Range = 0 to 255	0
616-309	Fault Counter 95-054-00	Fault Counter 95-054-00: LVFBMBOOTERROR	Range = 0 to 255	0
616-310	Fault Counter 95-055-00	Fault Counter 95-055-00: LVFBMAPPERROR	Range = 0 to 255	0
616-311	Fault Counter 95-056-00	Fault Counter 95-056-00: DCNOMADPROXYERROR	Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-312	Fault Counter 95-057-00	Fault Counter 95-057-00: DCURDERROR	Range = 0 to 255	0
616-313	Fault Counter 95-058-00	Fault Counter 95-058-00: DCSCDERROR	Range = 0 to 255	0
616-314	Fault Counter 95-059-00	Fault Counter 95-059-00: DADHQT100ERROR	Range = 0 to 255	0
616-315	Fault Counter 95-060-00	Fault Counter 95-060-00: DADH100ERROR	Range = 0 to 255	0
616-316	Fault Counter 95-061-00	Fault Counter 95-061-00: DADHQTERROR	Range = 0 to 255	0
616-317	Fault Counter 95-062-00	Fault Counter 95-062-00: IOTDUPMODERROR	Range = 0 to 255	0
616-318	Fault Counter 95-063-00	Fault Counter 95-063-00: IOTLCMODERROR	Range = 0 to 255	0
616-319	Fault Counter 95-064-00	Fault Counter 95-064-00: IITA4SCANMODERROR	Range = 0 to 255	0
616-320	Fault Counter 95-065-00	Fault Counter 95-065-00: IITCCDMODERROR	Range = 0 to 255	0
616-321	Fault Counter 95-066-00	Fault Counter 95-066-00: IITFWATESMODERROR	Range = 0 to 255	0
616-322	Fault Counter 95-067-00	Fault Counter 95-067-00: SWUPINCOMPATPRODERROR	Range = 0 to 255	0
616-323	Fault Counter 95-068-00	Fault Counter 95-068-00: SWUPINCOMPATHWERROR	Range = 0 to 255	0
616-324	Fault Counter 95-069-00	Fault Counter 95-069-00: SWUPINCOMPATFWERROR	Range = 0 to 255	0
616-325	Fault Counter 95-070-00	Fault Counter 95-070-00: SWUPDLMDOWNGRADEERROR	Range = 0 to 255	0
616-326	Fault Counter 95-071-00	Fault Counter 95-071-00: SWUPDLMSIDEGRADEERROR	Range = 0 to 255	0
616-327	Fault Counter 95-072-00	Fault Counter 95-072-00: SWUPPLATSYNCERROR	Range = 0 to 255	0
616-328	Machine Class	The chassis type and/or physical capability.	0=Unknown (Not set) 1= A, N/A 2= B, WC5845, WC5855 3= C, WC5865 to WC5890 Range = 0 to 255	0

Table 12 CCS NVM ID 616-001 to 616-340

NVM ID	NVM Name	NVM Description	Settings	Default
616-329	Sequence Number	PagePack Sequence Number	Range = 0 to 127 Incremented each time a PagePack contract is renewed	0
616-330	Not displayed	OEM system serial number	Range = 0 to 0	0
616-331	DefaultRegDiff	Default Regional Differentiator value: This is what region the machine will be set to upon expiration of PagePack plan.	Range = 1 to 63 NA_Classic = 1 NA_Enterprise = 2 XE_Classic = 3 XE_Enterprise = 4 DMO_Classic = 5 DMO_Enterprise = 6 Metered = 7 FX_Classic = 8 FX_Enterprise = 9 SR_Classic = 10 SR_Enterprise = 11 WW_Classic = 12 WW_Enterprise = 13 NA_XE_Classic = 14 NA_XE_Enterprise = 15	15
616-332	Not displayed	Plan Conversion Lockout Timer	Range = 0 to 4294967295	86400
616-333	Not displayed	Plan Conversion Password Attempts	Range = 0 to 5	0
616-335	HideCompleted-JobLogTab	Hide Completed Job Log Tab on UI	Range = 0 to 1	1
616-339	power saver grace period	For Blue Angel when the energy saver is set to 0 minutes the system will take a grace period before it falls into the energy saver mode.	Range = 15 to 60	45
616-340	ClearFaxNumber-Policy	Policy for clearing embeded fax phone numbers immediately after sending.	0 = Do NOT Clear 1 = Clear	1

Table 13 CCS NVM ID 617-001 to 617-007

NVM ID	NVM Name	NVM Description	Settings	Default
617-001	Not displayed	-Fault Log	Range = 0 to 0	0
617-002	faults displayed on TTY		Range = 0 to 1	1
617-003	display faults		Range = 0 to 1	1
617-004	Not displayed	StapleMv	Range = 0 to 0	0

Table 13 CCS NVM ID 617-001 to 617-007

NVM ID	NVM Name	NVM Description	Settings	Default
617-005	Not displayed	StapleMv	Range = 0 to 256	0
617-006	Not displayed	PunchUnitSideEdgeDetect	Range = 0 to 256	0
617-007	Not displayed	PunchUnitSideEdgeDetect	Range = 0 to 256	0

Table 14 CCS NVM ID 620-001 to 620-033

NVM ID	NVM Name	NVM Description	Settings	Default
620-001	IISS Version No Upper Level		Range = 0 to 65535	0
620-002	prescanType		Range = 0 to 1	0
620-003	photoTextSeparationLevel		Range = 0 to 4	2
620-004	photoReproLevel		Range = 0 to 2	1
620-005	bwSeparation-Level		Range = 0 to 4	2
620-006	RED chromaticValueLow		Range = 0 to 65535	0
620-007	RED chromaticValueHigh		Range = 0 to 65535	25700
620-008	RED aChromaticValueLow		Range = 0 to 65535	0
620-009	RED aChromaticValueHigh		Range = 0 to 65535	0
620-010	GRN chromaticValueLow		Range = 0 to 65535	25600
620-011	GRN chromaticValueHigh		Range = 0 to 65535	25600
620-012	GRN aChromaticValueLow		Range = 0 to 65535	0
620-013	GRN aChromaticValueHigh		Range = 0 to 65535	0
620-014	BLU chromaticValueLow		Range = 0 to 65535	25600
620-015	BLU chromaticValueHigh		Range = 0 to 65535	63
620-016	BLU aChromaticValueLow		Range = 0 to 65535	0
620-017	BLU aChromaticValueHigh		Range = 0 to 65535	0
620-018	YEL chromaticValueLow		Range = 0 to 65535	0
620-019	YEL chromaticValueHigh		Range = 0 to 65535	25600

Table 14 CCS NVM ID 620-001 to 620-033

NVM ID	NVM Name	NVM Description	Settings	Default
620-020	YEL aChromaticValueLow		Range = 0 to 65535	0
620-021	YEL aChromaticValueHigh		Range = 0 to 65535	0
620-022	MAG chromaticValueLow		Range = 0 to 65535	0
620-023	MAG chromaticValueHigh		Range = 0 to 65535	100
620-024	MAG aChromaticValueLow		Range = 0 to 65535	0
620-025	MAG aChromaticValueHigh		Range = 0 to 65535	0
620-026	CYA chromaticValueLow		Range = 0 to 65535	25600
620-027	CYA chromaticValueHigh		Range = 0 to 65535	0
620-028	CYA aChromaticValueLow		Range = 0 to 65535	0
620-029	CYA aChromaticValueHigh		Range = 0 to 65535	0
620-030	BLA chromaticValueLow		Range = 0 to 65535	100
620-031	BLA chromaticValueHigh		Range = 0 to 65535	0
620-032	BLA aChromaticValueLow		Range = 0 to 65535	0
620-033	BLA aChromaticValueHigh		Range = 0 to 65535	0

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-101	Market Information		Range = 0 to 3	0
620-102	IISS Major Version		Range = 0 to 65535	0
620-103	IISS Minor Version		Range = 0 to 65535	0
620-104	IISS Revision Version		Range = 0 to 65535	0
620-105	IISS Patch Version		Range = 0 to 65535	0
620-106	ADF Major Version		Range = 0 to 65535	0

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-107	ADF Minor Version		Range = 0 to 65535	0
620-108	ADF Revision Version		Range = 0 to 65535	0
620-109	ADF Patch Version		Range = 0 to 65535	0
620-110	IPL Version		Range = 0 to 65535	0
620-111	IIT fail bypass		Range = 0 to 1	0
620-112	Fan control mode		Range = 0 to 1	0
620-113	the number of APS sensors		Range = 0 to 1	1
620-114	Lamp Fan fal bypass		Range = 0 to 1	0
620-115	Lamp Fan Low rotation ON time		Range = 0 to 60	15
620-116	Lamp Fan Off time		Range = 0 to 60	0
620-117	FL timer set		Range = 0 to 1	0
620-118	Lamp On interval		Range = 0 to 60	30
620-119	Lamp On time		Range = 0 to 60	1
620-120	IIT failure parts diagnosis		Range = 0 to 65535	0
620-121	Platen SS Registration Adjust	Platen SS Registration Adjustment	Range = 16 to 184	100
620-122	Platen SS Magnification Adjust	Platen SS Magnification Adjustment	Range = 44 to 56	50
620-123	Platen glass type		Range = 0 to 2	2
620-124	REGI corr value-FS dir on Platen	REGI correction value in FS direction on Platen	Range = 0 to 240	120
620-125	CVT FS Off S1:S1-1 (139.7-148)	CVT FS Offset Side 1: Side1-1 (139.7 to 148)	Range = 0 to 240	120
620-126	CVT FS Off S2:S2-1 (139.7-148)	CVT FS Offset Side 2: Side2-1 (139.7 to 148)	Range = 0 to 240	120
620-127	CVT FS Off S1:S1-2 (182-194)	CVT FS Offset Side 1: Side1-2 (182 to 194)	Range = 0 to 240	120
620-128	CVT FS Off S2:S2-2 (182-194)	CVT FS Offset Side 2: Side2-2 (182 to 194)	Range = 0 to 240	120
620-129	CVT FS Off S1:S1-3 (203.2)	CVT FS Offset Side 1: Side1-3 (203.2)	Range = 0 to 240	120

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-130	CVT FS Off S2:S2-3 (203.2)	CVT FS Offset Side 2: Side2-3 (203.2)	Range = 0 to 240	120
620-131	CVT FS Off S1:S1-4 (210)	CVT FS Offset Side 1: Side1-4 (210)	Range = 0 to 240	120
620-132	CVT FS Off S2:S2-4 (210)	CVT FS Offset Side 2: Side2-4 (210)	Range = 0 to 240	120
620-133	CVT FS Off S1:S1-5 (214.9-215.9)	CVT FS Offset Side 1: Side1-5 (214.9 to 215.9)	Range = 0 to 240	120
620-134	CVT FS Off S2:S2-5 (214.9-215.9)	CVT FS Offset Side 2: Side2-5 (214.9 to 215.9)	Range = 0 to 240	120
620-135	CVT FS Off S1:S1-6 (254-257)	CVT FS Offset Side 1: Side1-6 (254 to 257)	Range = 0 to 240	120
620-136	CVT FS Off S2:S2-6 (254-257)	CVT FS Offset Side 2: Side2-6 (254 to 257)	Range = 0 to 240	120
620-137	CVT FS Off S1:S1-7 (266.7-267)	CVT FS Offset Side 1: Side1-7 (266.7 to 267)	Range = 0 to 240	120
620-138	CVT FS Off S2:S2-7 (266.7-267)	CVT FS Offset Side 2: Side2-7 (266.7 to 267)	Range = 0 to 240	120
620-139	CVT FS Off S1:S1-8 (279.4)	CVT FS Offset Side 1: Side1-8 (279.4)	Range = 0 to 240	120
620-140	CVT FS Off S2:S2-8 (279.4)	CVT FS Offset Side 2: Side2-8 (279.4)	Range = 0 to 240	120
620-141	CVT FS Off S1:S1-9 (297)	CVT FS Offset Side 1: Side1-9 (297)	Range = 0 to 240	120
620-142	CVT FS Off S2:S2-9 (297)	CVT FS Offset Side 2: Side2-9 (297)	Range = 0 to 240	120
620-143	CVT FS Off S1:S3-1 (139.7-148)	CVT FS Offset Side 1: Side3-1 (139.7 to 148)	Range = 0 to 240	120
620-144	CVT FS Off S2:S4-1 (139.7-148)	CVT FS Offset Side 2: Side4-1 (139.7 to 148)	Range = 0 to 240	120
620-145	CVT FS Off S1:S3-2 (182-194)	CVT FS Offset Side 1: Side3-2 (182 to 194)	Range = 0 to 240	120
620-146	CVT FS Off S2:S4-2 (182-194)	CVT FS Offset Side 2: Side4-2 (182 to 194)	Range = 0 to 240	120

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-147	CVT FS Off S1:S3-3 (203.2)	CVT FS Offset Side 1: Side3-3 (203.2)	Range = 0 to 240	120
620-148	CVT FS Off S2:S4-3 (203.2)	CVT FS Offset Side 2: Side4-3 (203.2)	Range = 0 to 240	120
620-149	CVT FS Off S1:S3-4 (210)	CVT FS Offset Side 1: Side3-4 (210)	Range = 0 to 240	120
620-150	CVT FS Off S2:S4-4 (210)	CVT FS Offset Side 2: Side4-4 (210)	Range = 0 to 240	120
620-151	CVT FS Off S1:S3-5 (214.9-215.9)	CVT FS Offset Side 1: Side3-5 (214.9 to 215.9)	Range = 0 to 240	120
620-152	CVT FS Off S2:S4-5 (214.9-215.9)	CVT FS Offset Side 2: Side4-5 (214.9 to 215.9)	Range = 0 to 240	120
620-153	CVT FS Off S1:S3-6 (254-257)	CVT FS Offset Side 1: Side3-6 (254 to 257)	Range = 0 to 240	120
620-154	CVT FS Off S2:S4-6 (254-257)	CVT FS Offset Side 2: Side4-6 (254 to 257)	Range = 0 to 240	120
620-155	CVT FS Off S1:S3-7 (266.7-267)	CVT FS Offset Side 1: Side3-7 (266.7 to 267)	Range = 0 to 240	120
620-156	CVT FS Off S2:S4-7 (266.7-267)	CVT FS Offset Side 2: Side4-7 (266.7 to 267)	Range = 0 to 240	120
620-157	CVT FS Off S1:S3-8 (279.4)	CVT FS Offset Side 1: Side3-8 (279.4)	Range = 0 to 240	120
620-158	CVT FS Off S2:S4-8 (279.4)	CVT FS Offset Side 2: Side4-8 (279.4)	Range = 0 to 240	120
620-159	CVT FS Off S1:S3-9 (297)	CVT FS Offset Side 1: Side3-9 (297)	Range = 0 to 240	120
620-160	CVT FS Off S2:S4-9 (297)	CVT FS Offset Side 2: Side4-9 (297)	Range = 0 to 240	120
620-161	W-Ref adjustment factor Red		Range = 70 to 255	140
620-162	W-Ref adjustment factor Green		Range = 70 to 255	140
620-163	W-Ref adjustment factor Blue		Range = 70 to 255	140
620-164	W-Ref adjustment factor BW-X		Range = 70 to 255	140
620-165	W-Ref adjustment factor BW-Y		Range = 70 to 255	140

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-166	W-Ref adj factor Red (sheet)	W-Ref adjustment factor Red (each sheet)	Range = 0 to127	63
620-167	W-Ref adj factor Green (sheet)	W-Ref adjustment factor Green (each sheet)	Range = 0 to 127	63
620-168	W-Ref adj factor Blue (sheet)	W-Ref adjustment factor Blue (each sheet)	Range = 0 to 127	63
620-169	W-Ref adj factor BW (sheet)	W-Ref adjustment factor BW (each sheet)	Range = 0 to 127	63
620-170	IIT paper code		Range = 0 to 8	0
620-171	Optical axis adjustment: front		Range = 0 to 1980	990
620-172	Optical axis adjustment: rear		Range = 0 to 1980	990
620-173	CVT FS Offset Side 1: Side1		Range = 0 to 240	120
620-174	CVT FS Offset Side 2: Side2		Range = 0 to 240	120
620-175	CVT FS Offset Side 1: Side3		Range = 0 to 240	120
620-176	CVT FS Offset Side 2: Side4		Range = 0 to 240	120
620-177	BW/Color auto recognition level		Range = 0 to 1	0
620-178	Black line adj level (for COLOR)	Black line adjustment level (for COLOR)	Range = 0 to 15	8
620-179	Black line adj level (for BW)	Black line adjustment level (for BW)	Range = 0 to 15	8
620-180	Black line adjustment test mode		Range = 0 to 7	0
620-181	BW adjustment table		Range = 0 to 7	0
620-182	HOSEI_SCAN (for detection)		Range = 0 to 6	3
620-183	HOSEI_SCAN (for image)		Range = 0 to 6	3
620-184	CCD Calib Y scan Red		Range = 0 to 1023	0
620-185	CCD Calib Y scanned: Green		Range = 0 to 1023	0
620-186	CCD Calib Y scanned: Blue		Range = 0 to 1023	0
620-187	CCD Calib M scanned: Red		Range = 0 to 1023	0

Table 15 CCS NVM ID 620-101 to 620-199

NVM ID	NVM Name	NVM Description	Settings	Default
620-188	CCD Calib M scanned: Green		Range = 0 to 1023	0
620-189	CCD Calib M scanned: Blue		Range = 0 to 1023	0
620-190	CCD Calib C scanned: Red		Range = 0 to 1023	0
620-191	CCD Calib C scanned: Green		Range = 0 to 1023	0
620-192	CCD Calib C scanned: Blue		Range = 0 to 1023	0
620-193	CCD Calib PK scanned: Red		Range = 0 to 1023	0
620-194	CCD Calib PK scanned: Green		Range = 0 to 1023	0
620-195	CCD Calib PK scanned: Blue		Range = 0 to 1023	0
620-196	Switching A6/ postcard detect	Switching A6 document / postcard detection	Range = 0 to 2	0
620-197	A4S/8.5in det. border switch 2	A4S/8.5in detection border switching 2	Range = 0 to 6	3
620-198	B5/8W10 detection switch		Range = 0 to 3	0
620-199	Switch 8.5W13/ 8.5W14 detections		Range = 0 to 3	0

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-200	Select special-doc-detect table	Select special-document-detection table	Range = 0 to 2	0
620-201	Switch docu size detect tables	Switch document size detection tables	Range = 1 to 5	2
620-202	Switch A3/11W17 detections		Range = 0 to 3	0
620-203	Switch A4/ 8.5W11 detections		Range = 0 to 3	0
620-204	Document size detection.		Range = 0 to 1	0
620-205	GCO/TFX sizes switching		Range = 0 to 1	1
620-206	B4/8-kai FS threshold setting		Range = 0 to 6	3

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-207	8-kai/11W17SEF FS threshold	8-kai/11W17SEF FS threshold setting	Range = 0 to 6	3
620-208	Switch B6/5W7 detections		Range = 0 to 2	0
620-209	Lamp check NG counts		Range = 0 to 65535	0
620-210	Data taken at lamp check NG.		Range = 0 to 1023	0
620-211	AOC flow endings with error	the number of AOC flow endings with error	Range = 0 to 255	0
620-212	BW Copy BGR-AE adjustment level		Range = 0 to 4095	0
620-213	Color copy BGR-AE adjust level	Color copy BGR-AE adjustment level	Range = 0 to 4095	0
620-214	TP_BW_Copy BGR-AE-Level Speed	BW Copy BGR-AE adjustment - speed-prioritized	Range = 0 to 4095	0
620-215	TX_CL_Copy BGR-AE-Level Speed	Color copy BGR-AE adjustment - speed-prioritized AE (Text)	Range = 0 to 4095	0
620-216	TP_BW_Contone BGR-AE-Level Speed	BW contone scan BGR-AE adjustment level for speed-prioritized AE (Text photo)	Range = 0 to 4095	0
620-217	TP_CL_Contone BGR-AE-Level Speed	Color contone scan BGR-AE adjustment level for speed-prioritized AE (Text photo)	Range = 0 to 4095	0
620-218	ABS; FS non-detected area 1	background suppression; FS non-detected area 1	Range = 0 to 65535	255
620-219	ABS; FS non-detected area 2	background suppression; FS non-detected area 2	Range = 0 to 65535	255
620-220	ABS; FS non-detected area 3	background suppression; FS non-detected area 3	Range = 0 to 65535	255
620-221	ABS; FS non-detected area 4	background suppression; FS non-detected area 4	Range = 0 to 65535	255
620-222	ABS; SS fixed position	background suppression; SS fixed position	Range = 0 to 65535	60
620-223	ABS; SS end position (for HAE)	background suppression; SS end position (for HAE)	Range = 0 to 65535	240
620-224	ABS; SS end position (for MAE)	background suppression; SS end position (for MAE)	Range = 0 to 65535	240
620-225	ABS; SS end position (for NAE)	background suppression; SS end position (for NAE)	Range = 0 to 65535	240
620-226	LIM control for BW COPY		Range = 0 to 1	1

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-227	LIM control for color COPY		Range = 0 to 1	1
620-228	BW_Copy Variation Control(1-bit)	LIM control for FAX and binary scan	Range = 0 to 1	1
620-229	LIM control for condone scan		Range = 0 to 1	1
620-230	ABS threshold (HAE)	background suppression threshold (HAE)	Range = 0 to 255	127
620-231	ABS threshold (NAE1)	background suppression threshold (NAE1)	Range = 0 to 255	33
620-232	ABS threshold (NAE2)	background suppression threshold (NAE2)	Range = 0 to 255	204
620-233	ABS threshold (NAE3)	background suppression threshold (NAE3)	Range = 0 to 65535	8
620-234	ABS threshold (NAE4)	background suppression threshold (NAE4)	Range = 0 to 65535	4
620-235	AE control of FS size detection		Range = 0 to 1	0
620-236	Not displayed	-Minimum FS detection size for AE	Range = 0 to 65535	500
620-237	AE param SS mag corr TopLimit 1	AE parameter SS magnification correction upper limit 1	Range = 0 to 4000	4000
620-238	AE param SS mag corr TopLimit 2	AE parameter SS magnification correction upper limit 2	Range = 0 to 4000	4000
620-239	AE param SS mag corr TopLimit 3	AE parameter SS magnification correction upper limit 3	Range = 0 to 4000	4000
620-240	AE param SS mag corr TopLimit 4	AE parameter SS magnification correction upper limit 4	Range = 0 to 4000	4000
620-241	TX_BW_Fax Offset Lvl AE	FAX binary scan: background suppression Offset level; text mode (normal pencil)	Range = 0 to 8191	0
620-242	TP_BW_Copy_Fax Removal Lvl AE	level for BW COPY FAX and binary scan: Text/photo mode (print photographic paper copy)	Range = 0 to 4095	0
620-243	TP_BW_Copy_Fax Offset Lvl AE	OFFSET level for BW COPY FAX and binary scan: Text/photo mode (print photographic paper copy)	Range = 0 to 4095	273

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-244	TX_BW_Copy_Fax Removal Lvl AE	level for BW COPY FAX and binary scan: text mode (normal pencil)	Range = 0 to 4095	0
620-245	TX_BW_Copy_Fax Offset Lvl AE	OFFSET level for BW COPY FAX and binary scan: text mode (normal pencil)	Range = 0 to 4095	273
620-246	TPL_BW_Copy_Fax Removal Lvl AE	level for BW COPY FAX and binary scan: text/photo mode (pale-color document)	Range = 0 to 4095	0
620-247	TPL_BW_Copy_Fax Offset Lvl AE	OFFSET level for BW COPY FAX and binary scan: text/photo mode (pale-color document)	Range = 0 to 4095	273
620-248	TRP_BW_Copy_Fax Removal Lvl AE	level for BW COPY FAX and binary scan: text mode (tracing paper)	Range = 0 to 4095	0
620-249	TRP_BW_Copy_Fax Offset Lvl AE	OFFSET level for BW COPY FAX and binary scan: text mode (tracing paper)	Range = 0 to 4095	273
620-250	TP_CL_Copy Removal Lvl AE	level for Color COPY: text/photo mode (print photographic paper copy inkjet highlighter)	Range = 0 to 4095	0
620-251	TP_CL_Copy Offset Lvl AE	OFFSET level for Color COPY: text/photo mode (print photographic paper copy inkjet highlighter)	Range = 0 to 4095	0
620-252	TX_CL_Copy Removal Lvl AE	level for Color COPY: text (normal)	Range = 0 to 4095	0
620-253	TX_CL_Copy Offset Lvl AE	OFFSET level for Color COPY: text (normal)	Range = 0 to 4095	0
620-254	TP_BW_Contone Removal Lvl AE	level for BW Contone Scan (text photo)	Range = 0 to 4095	819
620-255	TP_BW_Contone Offset Lvl AE	OFFSET level for BW Contone Scan: (text photo)	Range = 0 to 4095	0
620-256	notTP_BW_Contone Removal Lvl AE	level for BW Contone Scan (other than text photo)	Range = 0 to 4095	819
620-257	notTP_BW_Contone Offset Lvl AE	OFFSET level for BW Contone Scan: (other than text photo)	Range = 0 to 4095	0
620-258	TP_CL_Contone Removal Lvl AE	level for Color Contone Scan (text photo)	Range = 0 to 4095	0
620-259	TP_CL_Contone Offset Lvl AE	OFFSET level for Color Contone Scan: (text photo)	Range = 0 to 4095	0

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-260	notTP_CL_Contone Removal Lvl AE	level for Color Contone Scan (other than text photo)	Range = 0 to 4095	0
620-261	notTP_CL_Contone Offset Lvl AE	OFFSET level for Color Contone Scan (other than text photo)	Range = 0 to 4095	0
620-262	2F-AE LowLimit Multiplied Value	Two-face AE control parameter: lower limit of multiplier coefficient	Range = 0 to 255	0
620-263	2F-AE TopLimit Multiplied Value	Two-face AE control parameter: upper limit of multiplier coefficient	Range = 0 to 255	255
620-264	Offset for 2F AE Control	Two-face AE control parameter: comparison margin OFST	Range = 0 to 255	8
620-265	Threshold for 2F AE Control	Two-face AE control parameter: background level threshold LEVEL_N	Range = 0 to 255	16
620-266	Mode Control of 2F AE	Two-face AE control parameter: forced selection	Range = 0 to 3	0
620-267	Two color copy control		Range = 0 to 1	0
620-268	Tracing paper mode setting		Range = 0 to 1	0
620-269	Def. ColorBal adj Y: low den.	Default color balance adjustment level Y: low density	Range = 0 to 8	4
620-270	Def. ColorBal adj Y: med den.	Default color balance adjustment level Y: medium density	Range = 0 to 8	4
620-271	Def. ColorBal adj Y: hi den.	Default color balance adjustment level Y: high density	Range = 0 to 8	4
620-272	Def. ColorBal adj M: low den.	Default color balance adjustment level M: low density	Range = 0 to 8	4
620-273	Def. ColorBal adj M: med den.	Default color balance adjustment level M: medium density	Range = 0 to 8	4
620-274	Def. ColorBal adj M: hi den.	Default color balance adjustment level M: high density	Range = 0 to 8	4
620-275	Def. ColorBal adj C: low den.	Default color balance adjustment level C: low density	Range = 0 to 8	4
620-276	Def. ColorBal adj C: med den.	Default color balance adjustment level C: medium density	Range = 0 to 8	4
620-277	Def. ColorBal adj C: hi den.	Default color balance adjustment level C: high density	Range = 0 to 8	4
620-278	Def. ColorBal adj K: low den	Default color balance adjustment level K: low density	Range = 0 to 8	4
620-279	Def. ColorBal adj K: med den	Default color balance adjustment level K: medium density	Range = 0 to 8	4

Table 16 CCS NVM ID 620-200 to 620-299

NVM ID	NVM Name	NVM Description	Settings	Default
620-280	Def. ColorBal adj K: hi den	Default color balance adjustment level K: high density	Range = 0 to 8	4
620-281	FS mag corr (PLATEN/BELT DADF)	FS magnification correction (scanned on PLATEN/BELT DADH)	Range = 0 to 100	50
620-282	FS mag corr (CVT)	FS magnification correction (scanned on CVT)	Range = 0 to 100	50
620-283	IPS Through Bypass setting 1(A)		Range = 0 to 65535	0
620-284	IPS through (bypass) setting 2		Range = 0 to 65535	0
620-285	BW COPY: text; normal dens adj	BW COPY: text; normal density adjustment	Range = 0 to 256	128
620-286	BW COPY: text; Darker3 dens adj	BW COPY: text; Darker 3 density adjustment	Range = 0 to 256	128
620-287	Scan/FAX: text; normal dens adj	Scan/FAX: text; normal density adjustment	Range = 0 to 256	128
620-288	Scan/FAX: text; Darker3 dens adj	Scan/FAX: text; Darker 3 density adjustment	Range = 0 to 256	128
620-289	PLTN RAE SS Not Detect Area	Speed prioritized background suppression; SS non-detection area for Platen M/C	Range = 0 to 65535	0
620-290	DADF-P-Job RAE SSNotDetect Area	Speed prioritized background suppression; SS non-detection area for platen job on DADH M/C	Range = 0 to 65535	0
620-291	DADF-D-Job RAE SSNotDetect Area	Speed prioritized background suppression; SS non-detection area for DADH job on DADH M/C	Range = 0 to 65535	0
620-292	Hue angle B start		Range = 0 to 360	270
620-293	Hue angle B end		Range = 0 to 360	320
620-294	Hue angle G start		Range = 0 to 360	110
620-295	Hue angle G end		Range = 0 to 360	200
620-296	Hue angle R start		Range = 0 to 360	350
620-297	Hue angle R end		Range = 0 to 360	60
620-298	Hue angle Y start		Range = 0 to 360	60
620-299	Hue angle Y end		Range = 0 to 360	120

Table 17 CCS NVM ID 620-300 to 620-399

NVM ID	NVM Name	NVM Description	Settings	Default
620-300	Hue angle M start		Range = 0 to 360	320

Table 17 CCS NVM ID 620-300 to 620-399

NVM ID	NVM Name	NVM Description	Settings	Default
620-301	Hue angle M end		Range = 0 to 360	360
620-302	Hue angle C start		Range = 0 to 360	190
620-303	Hue angle C end		Range = 0 to 360	280
620-304	IISS-DADF communication Fail		Range = 0 to 65535	0
620-305	Not displayed	IISS-DADH communication Fail	Range = 0 to 65535	0
620-306	IISS-Controller comm Fai	IISS-Controller communication Fail	Range = 0 to 65535	0
620-307	Not displayed	IISS-Controller communication Fail	Range = 0 to 65535	0
620-308	DADF EEPROM Fail		Range = 0 to 65535	0
620-309	Not displayed	DADH EEPROM Fail	Range = 0 to 65535	0
620-310	IPS Fan Fail		Range = 0 to 65535	0
620-311	Not displayed	IPS Fan Fail	Range = 0 to 65535	0
620-312	CRG Position Fail		Range = 0 to 65535	0
620-313	Not displayed	CRG Position Fail	Range = 0 to 65535	0
620-314	IISS LOGIC Fail		Range = 0 to 65535	0
620-315	Not displayed	IISS LOGIC Fail	Range = 0 to 65535	0
620-316	Lamp Illumination Fail		Range = 0 to 65535	0
620-317	Not displayed	Lamp Illumination Fail	Range = 0 to 65535	0
620-318	CRG Over Run Fail		Range = 0 to 65535	0
620-319	Not displayed	CRG Over Run Fail	Range = 0 to 65535	0
620-320	Lamp Fan Fail		Range = 0 to 65535	0
620-321	Not displayed	Lamp Fan Fail	Range = 0 to 65535	0
620-322	CCD Fan Fail		Range = 0 to 65535	0
620-323	Not displayed	CCD Fan Fail	Range = 0 to 65535	0
620-324	AGC Fail		Range = 0 to 65535	0
620-325	Not displayed	AGC Fail	Range = 0 to 65535	0
620-326	AOC Fail		Range = 0 to 65535	0
620-327	Not displayed	AOC Fail	Range = 0 to 65535	0
620-328	IPS PWBA Fail		Range = 0 to 65535	0
620-329	Not displayed	IPS PWBA Fail	Range = 0 to 65535	0
620-330	IISS-EXT communication Fail		Range = 0 to 65535	0
620-331	Not displayed	IISS-EXT communication Fail	Range = 0 to 65535	0
620-332	Extension EEPROM Fail		Range = 0 to 65535	0
620-333	Not displayed	Extension EEPROM Fail	Range = 0 to 65535	0

Table 17 CCS NVM ID 620-300 to 620-399

NVM ID	NVM Name	NVM Description	Settings	Default
620-334	IPS-EXT Connection Fail		Range = 0 to65535	0
620-335	Not displayed	IPS-EXT Connection Fail	Range = 0 to 65535	0
620-336	IPS-YATA Connection Fail		Range = 0 to 65535	0
620-337	Not displayed	IPS-YATA Connection Fail	Range = 0 to 65535	0
620-338	EXT-YATA Connection Fail		Range = 0 to 65535	0
620-339	Not displayed	EXT-YATA Connection Fail	Range = 0 to 65535	0
620-340	YATA PWBA Fail		Range = 0 to 65535	0
620-341	Not displayed	YATA PWBA Fail	Range = 0 to 65535	0
620-342	IPS PWBA Memory Fail		Range = 0 to 65535	0
620-343	Not displayed	IPS PWBA Memory Fail	Range = 0 to 65535	0
620-344	IIT Hot Line Fail		Range = 0 to 65535	0
620-345	Not displayed	IIT Hot Line Fail	Range = 0 to 65535	0
620-346	Scan Count replace life (upper)	Scan Count replacement life (upper)	Range = 0 to 65535	91
620-347	Scan Count replace life (lower)	Scan Count replacement life (lower)	Range = 0 to 65535	36224
620-348	Lamp-On time replace life (max)	Lamp-On time Count replacement life (upper)	Range = 0 to 65535	109
620-349	Lamp-On time replace life (min)	Lamp-On time Count replacement life (lower)	Range = 0 to 65535	56576
620-350	Lamp-On Count replace life (max)	Lamp-On Count Replacement life (upper)	Range = 0 to 65535	91
620-351	Lamp-On Count replace life (min)	Lamp-On Count Replacement life (lower)	Range = 0 to 65535	36224
620-352	Fax doc Size detect DADF	Fax Document Size Detection for DADH	Range = 0 to 1	0
620-353	JAM bypass		Range = 0 to 1	0
620-354	8.5 W11 LEF threshold		Range = 1993 to 2193	2093
620-355	B5SEF / 8 W10 SEF switching		Range = 0 to 1	0
620-356	11x15 SEF/8-kai switch (AP Mkt)	11 W15 SEF / 8-kai switching in AP market	Range = 0 to 1	0
620-357	FS MAX value		Range = ### to 3070	2970
620-358	FS MIN value		Range = ### to 3070	2970
620-359	SS MAX value		Range = ### to 4418	2100
620-360	SS MIN value		Range = ### to 4418	2100

Table 17 CCS NVM ID 620-300 to 620-399

NVM ID	NVM Name	NVM Description	Settings	Default
620-361	Document Size		Range = 3 to 20	8
620-362	Specify document feed direction		Range = 0 to 1	0
620-363	DADF Doc Size Detection Table	Select DADH document size detection table custom registration	Range = 0 to 1	0
620-364	S Size Side2 Lead Regi Adjust	S-size document Side2 Lead Regi correction value	Range = 217 to 283	250
620-365	M Size Side2 Lead Regi Adjust	M-size document Side2 Lead Regi correction value	Range = 217 to 283	250
620-366	L Size Side2 Lead Regi Adjust	L-size document Side2 Lead Regi correction value	Range = 217 to 283	250
620-367	Size Mismatch Set(Simp)	Size mismatch Jam detection setting (applicable to only Simplex Mode)	Range = 1 to 2	1
620-368	Alternate Size switching 1		Range = 1 to 2	1
620-369	Alternate Size switching 2		Range = 1 to 2	1
620-370	Alternate Size switching 3		Range = 0 to 2	0
620-371	Alternate Size switching 4		Range = 0 to 2	0
620-372	Alternate Size switching 5		Range = 0 to 2	0
620-373	Alternate Size switching 6		Range = 0 to 3	0
620-374	Alternate Size switching 7		Range = 0 to 3	0
620-375	Alternate Size switching 8		Range = 0 to 4	0
620-376	Alternate Size switching 9		Range = 0 to 2	0
620-377	Alternate Size switching 10		Range = 0 to 2	0
620-378	Alternate Size switching 11		Range = 0 to 3	0
620-379	Size-Mix Mode Assumed Size	Size-Mix Mode temporary size direction	Range = 0 to 1	1
620-380	Fax job Mix Size Standard mode		Range = 0 to 1	0
620-381	DADF DPM selection		Range = 0 to 65535	80

Table 17 CCS NVM ID 620-300 to 620-399

NVM ID	NVM Name	NVM Description	Settings	Default
620-382	Magnification correction control		Range = 0 to 1	0
620-383	Color BW judgment level		Range = 0 to 4	2
620-384	textmode Photo/ Text RecogLvl	YATAGRS text mode Photo and Text Recognition level	Range = 0 to 4	2
620-385	BW copy (text photo) AE adj lvl	BW copy (text photo) AE adjustment level	Range = 0 to 4095	0
620-386	CL copy (text photo) AE adj lvl	Color copy (text photo) AE adjustment level	Range = 0 to 4095	0
620-387	BW Copy text AE adjustment level	BW Copy (text) AE adjustment level	Range = 0 to 4095	0
620-388	CL Copy (text) AE adj lvl	Color Copy (text) AE adjustment level	Range = 0 to 4095	0
620-389	BW CopyFor B AE adjust level	BW Copy for B AE adjustment level	Range = 0 to 4095	0
620-390	BW Copy G and R AE adj lvl	BW Copy for G and R AE adjustment level	Range = 0 to 4095	0
620-391	CL Copy B AE adj lvl	Color Copy for B AE adjustment level	Range = 0 to 4095	0
620-392	CL Copy G and R AE adj lvl	Color Copy for G and R AE adjustment level	Range = 0 to 4095	0
620-393	BW Copy (text) B AE adj lvl	BW Copy (text) for B AE adjustment level	Range = 0 to 4095	0
620-394	BW Copy (text) G & R AE adj lvl	BW Copy (text) for G and R AE adjustment level	Range = 0 to 4095	0
620-395	CL Copy (text) B AE adj lvl	Color Copy (text) for B AE adjustment level	Range = 0 to 4095	0
620-396	CL Copy (text) G & R AE adj lvl	Color Copy (text) for G and R AE adjustment level	Range = 0 to 4095	0
620-397	EXT. Tail Reg. adj (55.0 mm/sec)	EXT. Tail Reg. adjustment (55.0 mm/sec)	Range = 0 to 244	122
620-398	EXT. Tail Reg. adj (73.3 mm/sec)	EXT. Tail Reg. adjustment (73.3 mm/sec)	Range = 0 to 244	122
620-399	EXT. Tail Reg. adj (82.5 mm/sec)	EXT. Tail Reg. adjustment (82.5 mm/sec)	Range = 0 to 244	122

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-400	EXT. Tail Reg. adj (110.0 mm/sec)	EXT. Tail Reg. adjustment (110.0 mm/sec)	Range = 0 to 244	122
620-401	EXT. Tail Reg. adj (146.7 mm/sec)	EXT. Tail Reg. adjustment (146.7 mm/sec)	Range = 0 to 244	122

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-402	EXT. Tail Reg. adj (165.0 mm/sec)	EXT. Tail Reg. adjustment (165.0 mm/sec)	Range = 0 to 244	122
620-403	EXT. Tail Reg. adj (293.3 mm/sec)	EXT. Tail Reg. adjustment (293.3 mm/sec)	Range = 0 to 244	122
620-404	EXT. Tail Reg. adj (220 mm/sec)	EXT. Tail Reg. adjustment (220 mm/sec)	Range = 0 to 244	122
620-405	EXT. Tail Reg. adj (330 mm/sec)	EXT. Tail Reg. adjustment (330 mm/sec)	Range = 0 to 244	122
620-406	EXT. Tail Reg. adj (440 mm/sec)	EXT. Tail Reg. adjustment (440 mm/sec)	Range = 0 to 244	122
620-407	EXT. LE. adj (55.0 mm/sec)	EXT. Lead Edge. adjustment (55.0 mm/sec)	Range = 0 to 244	122
620-408	EXT. LE. adj (73.3 mm/sec)	EXT. Lead Edge. adjustment (73.3 mm/sec)	Range = 0 to 244	122
620-409	EXT. LE. adj (82.5 mm/sec)	EXT. Lead Edge. adjustment (82.5 mm/sec)	Range = 0 to 244	122
620-410	EXT. LE. adj (110.0 mm/sec)	EXT. Lead Edge. adjustment (110.0 mm/sec)	Range = 0 to 244	122
620-411	EXT. LE. adj (146.7 mm/sec)	EXT. Lead Edge. adjustment (146.7 mm/sec)	Range = 0 to 244	122
620-412	EXT. LE. adj (165.0 mm/sec)	EXT. Lead Edge. adjustment (165.0 mm/sec)	Range = 0 to 244	122
620-413	EXT. LE. adj (293.3 mm/sec)	EXT. Lead Edge. adjustment (293.3 mm/sec)	Range = 0 to 244	122
620-414	EXT. LE. adj (220 mm/sec)	EXT. Lead Edge. adjustment (220 mm/sec)	Range = 0 to 244	122
620-415	EXT. LE. adj (330 mm/sec)	EXT. Lead Edge. adjustment (330 mm/sec)	Range = 0 to 244	122
620-416	EXT. LE. adj (440 mm/sec)	EXT. Lead Edge. adjustment (440 mm/sec)	Range = 0 to 244	122
620-417	CVT FS Offset 1p Duplex Side2-1		Range = 0 to 240	120
620-418	CVT FS Offset 1p Duplex Side2-2		Range = 0 to 240	120
620-419	CVT FS Offset 1p Duplex Side2-3		Range = 0 to 240	120
620-420	CVT FS Offset 1p Duplex Side2-4		Range = 0 to 240	120
620-421	CVT FS Offset 1p Duplex Side2-5		Range = 0 to 240	120
620-422	CVT FS Offset 1p Duplex Side2-6		Range = 0 to 240	120
620-423	CVT FS Offset 1p Duplex Side2-7		Range = 0 to 240	120

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-424	CVT FS Offset 1p Duplex Side2-8		Range = 0 to 240	120
620-425	CVT FS Offset 1p Duplex Side2-9		Range = 0 to 240	120
620-426	1p Duplex Center Regi position		Range = 0 to 7196	3598
620-427	CIS black level Avg # lines	CIS black level Average number of lines	Range = 0 to 3	3
620-428	Target black level auto adjust	Target for black level auto adjust	Range = 0 to 255	16
620-429	Target white level auto adjust	Target for white level auto adjust	Range = 0 to 1023	820
620-430	Digital Offset Level		Range = 0 to 1023	512
620-431	Black Level Correction Value		Range = 0 to 255	128
620-432	White Level Correction Value		Range = 0 to 255	255
620-433	DIPS white level; Avg # lines	DIPS white level; the average number of lines	Range = 0 to 4	4
620-434	white stability adj start point	white stability adjustment start point	Range = 0 to 4095	10
620-435	white stability adj Avg area	white stability adjustment average area	Range = 0 to 255	217
620-436	white stability adj Ref value	white stability adjustment Reference value	Range = 0 to 1023	962
620-437	W-Ref density correction factor		Range = 100 to 255	158
620-438	Fine adj hilite WhiteStability	Fine adjustment factor for highlight at white stability adjustment	Range = 80 to 120	100
620-439	W-Ref den. corr factor set value	W-Ref density correction factor set value	Range = 0 to 255	255
620-440	EXT. Lead Reg. adj (460 mm/sec)	EXT. Lead Reg. adjustment (460 mm/sec)	Range = 0 to 244	122
620-441	EXT. Tail Edge. adj (460 mm/sec)	EXT. Tail Edge. adjustment (460 mm/sec)	Range = 0 to 244	122
620-442	Switching main / sub		Range = 0 to 1	1
620-443	Ship Garbage detection Thresh	Shading correction dust detection threshold at shipment	Range = 0 to 5000	500
620-444	EXT Fail bypass		Range = 0 to 1	0
620-445	Daimajin Fail bypass		Range = 0 to 1	0

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-446	Data on WhiteStability adj fail	Data obtained at white stability adjustment failure	Range = 0 to 1023	1023
620-447	Pre ASIC Through setting 1		Range = 0 to 8191	448
620-448	BW-PG density		Range = 0 to 255	128
620-449	FS non-detection area 1		Range = 0 to 65535	255
620-450	FS non-detection area 3		Range = 0 to 65535	255
620-451	SS fixed position		Range = 0 to 65535	60
620-452	LIM control for BW COPY		Range = 0 to 1	1
620-453	LIM control FAX and binary scan	LIM control for FAX and binary scan	Range = 0 to 1	1
620-454	LIM control for contone scan		Range = 0 to 1	1
620-455	AE FS size detection control		Range = 0 to 1	0
620-456	Not displayed	-Minimum FS detection size for AE	Range = 0 to 65535	500
620-457	TopLimit SS mag corr AE param1	Upper Limit of SS Magnification correction AE Parameter1	Range = 0 to 4000	4000
620-458	ship Thresh of Garbage Detect	Shading correction dust detection threshold in market	Range = 0 to 5000	2000
620-459	Adjusting all Lead Regi at once		Range = 0 to 244	122
620-460	Adjusting all Taile Edge at once		Range = 0 to 244	122
620-461	Adjusting all FS offset at once		Range = 0 to 240	120
620-462	TP_BW_Copy_Fax Removal lvl AE	level for BW COPY FAX and binary scan: (print photographic paper copy)	Range = 0 to 4095	0
620-463	TP_BW_Copy_Fax Offset lvl AE	OFFSET level for BW COPY FAX and binary scan: (print photographic paper copy)	Range = 0 to 4095	273
620-464	TX_BW_Copy_Fax Removal lvl AE	level for BW COPY FAX and binary scan: (normal pencil)	Range = 0 to 4095	0
620-465	TX_BW_Copy_Fax Offset lvl AE	OFFSET level for BW COPY FAX and binary scan: (normal pencil)	Range = 0 to 4095	273
620-466	TPL_BW_Copy_Fax Removal lvl AE	level for BW COPY FAX and binary scan: (pale-color document)	Range = 0 to 4095	0

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-467	TPL_BW_Copy_ Fax Offset lvl AE	OFFSET level for BW COPY FAX and binary scan: (pale-color document)	Range = 0 to 4095	273
620-468	TRP_BW_Copy_ Fax Removal lvl AE	level for BW COPY FAX and binary scan: (tracing paper)	Range = 0 to 4095	0
620-469	TRP_BW_Copy_ Fax Offset lvl AE	OFFSET level for BW COPY FAX and binary scan: (tracing paper)	Range = 0 to 4095	273
620-470	level BW Cont. Scan (TP)	level for BW Contone Scan (text photo)	Range = 0 to 4095	0
620-471	Off level BW Cont. Scan (TP)	OFFSET level for BW Contone Scan: (text photo)	Range = 0 to 4095	0
620-472	level BW Cont. Scan (not TP)	level for BW Contone Scan (other than text photo)	Range = 0 to 4095	0
620-473	Off level BW Cont. Scan (not TP)	OFFSET level for BW Contone Scan: (other than text photo)	Range = 0 to 4095	0
620-474	EXT Major Version		Range = 0 to 65535	0
620-475	EXT Minor Version		Range = 0 to 65535	0
620-476	EXT Revision Version		Range = 0 to 65535	0
620-477	EXT Patch Version		Range = 0 to 65535	0
620-478	Def. ColorBal adj K: low den(2)	Default color balance adjustment level K: low density	Range = 0 to 8	4
620-479	Def. ColorBal adj K: med den(2)	Default color balance adjustment level K: medium density	Range = 0 to 8	4
620-480	Def. ColorBal adj K: hi den(2)	Default color balance adjustment level K: high density	Range = 0 to 8	4
620-481	Photo and Text Recognition level		Range = 0 to 4	2
620-482	FS mag Adjust (at CVT scan)	FS Magnification Adjustment (at CVT scan)	Range = 0 to 100	50
620-483	IPS Through Bypass setting 1(B)		Range = 0 to 511	0
620-484	BW COPY; text; normal den. adj	BW COPY; text; normal density adjustment	Range = 0 to 256	128
620-485	BWCopyText-Darker 3 Density-Adjust	BW COPY; text; darker 3 density adjustment	Range = 0 to 256	128

Table 18 CCS NVM ID 620-400 to 620-496

NVM ID	NVM Name	NVM Description	Settings	Default
620-486	Scan/FAX; text normal den. adj	Scan/FAX; text normal density adjustment	Range = 0 to 256	128
620-487	Scan/FAX; text darker3 den. adj	Scan/FAX; text darker 3 density adjustment	Range = 0 to 256	128
620-488	SS non-detection band		Range = 0 to 65535	0
620-489	SS end position (noise removal)	SS end position (for noise removal)	Range = 0 to 65535	240
620-490	param SS mag corr TopLimit	Parameter SS Magnification correction Upper Limit	Range = 0 to 4000	4000
620-491	dust detect threshold in market	Shading correction dust detection threshold in market	Range = 0 to 5000	500
620-492	ShadingData blackline remove	Selection of Shading data for removing black line	Range = 0 to 1	1
620-493	White Reference ValueAtShipment	White reference value at shipment	Range = 0 to 1000	636
620-494	White-corr multiplier coeff	White-correction multiplier coefficient	Range = 0 to 1	0
620-495	Paper dust detection threshold		Range = 0 to 10000	150
620-496	VALID starting position		Range = 0 to 1000	288

Table 19 CCS NVM ID 620-500 to 620-587

NVM ID	NVM Name	NVM Description	Settings	Default
620-500	Platen Lifetime Images Not displayed	Platen Lifetime ImagesTotal number of images scanned off the platen glass in support of any service since activation	Range = 0 to 16777215	0
620-504	ADF Lifetime 1 Sided Sheets Not displayed	ADF Lifetime 1 Sided Sheets-Total number of simplex sheets run through the ADF in support of any service since activation	Range = 0 to 16777215	0
620-505	ADF Lifetime 2 Sided Sheets	ADF Lifetime 2 Sided Sheets-Total number of duplex sheets run through the ADF in support of any service since activation	Range = 0 to 16777215	0
620-509	72 x 72 Scanned Lifetime Docs Not displayed	72 x 72 Scanned Lifetime DocumentsNumber of jobs (not impressions) that were scanned where the user selected 72 x 72 resolution	Range = 0 to 16777215	0

Table 19 CCS NVM ID 620-500 to 620-587

NVM ID	NVM Name	NVM Description	Settings	Default
620-510	100 x 100 Scanned Lifetime Docs Not displayed	100 x 100 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 100 x 100 resolution	Range = 0 to 16777215	0
620-511	200 x 100 Scanned Lifetime Docs Not displayed	200 x 100 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 200 x 100 resolution	Range = 0 to 16777215	0
620-512	200 x 200 Scanned Lifetime Docs Not displayed	200 x 200 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 200 x 200 resolution	Range = 0 to 16777215	0
620-513	300 x 300 Scanned Lifetime Docs Not displayed	300 x 300 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 300 x 300 resolution	Range = 0 to 16777215	0
620-514	400 x 400 Scanned Lifetime Docs Not displayed	400 x 400 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 400 x 400 resolution	Range = 0 to 16777215	0
620-515	600 x 600 Scanned Lifetime Docs Not displayed	600 x 600 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 600 x 600 resolution	Range = 0 to 16777215	0
620-516	Black Scanned Lifetime Docs Not displayed	Black Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Black Mode is selected	Range = 0 to 16777215	0
620-517	Color Scanned Lifetime Docs Not displayed	Color Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Color Mode is selected	Range = 0 to 16777215	0

Table 19 CCS NVM ID 620-500 to 620-587

NVM ID	NVM Name	NVM Description	Settings	Default
620-518	Greyscale Scanned Lifetime Docs Not displayed	Greyscale Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Greyscale Mode is selected	Range = 0 to 16777215	0
620-519	Text Scanned Lifetime Docs Not displayed	Text Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Text Mode is selected	Range = 0 to 16777215	0
620-520	Photo Scanned Lifetime Docs Not displayed	Photo Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Photo Mode is selected	Range = 0 to 16777215	0
620-521	Mixed Scanned Lifetime Docs Not displayed	Mixed Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned while Mixed Mode is selected	Range = 0 to 16777215	0
620-522	DADH OpenDuringRunFC	05-300 Fault Counter: DADH open during run	Range = 0 to 255	0
620-523	DADHLHCovIntlockOpenDuringRunFC	05-307 Fault Counter: DADH LH cover interlock opened during run	Range = 0 to 255	0
620-524	DADH Source Doc Too Short FC	05-310 Fault Counter: DADH Source Doc Too Short For DADH	Range = 0 to 255	0
620-525	LE late to post feed sensorS5 FC	05-330 Fault Counter: LE late to post feed sensor S5 (misfeed)	Range = 0 to 255	0
620-526	TE late to post feed sensorS5 FC	05-331Fault Counter: TE late to post feed sensor S5 (multifeed)	Range = 0 to 255	0
620-527	LE late to TAR sensor S6 FC	05-335 Fault Counter: LE late to TAR sensor S6	Range = 0 to 255	0
620-528	LE late to Reg. Sensor S7 FC	05-340 Fault Counter: LE late to Reg. Sensor S7	Range = 0 to 255	0
620-529	LE late to Exit sensor S8 FC	05-345 Fault Counter: LE late to Exit sensor S8 (FWD)	Range = 0 to 255	0
620-530	TE late to Exit sensor S8 FC	05-346 Fault Counter: TE late to Exit sensor S8 (FWD)	Range = 0 to 255	0
620-531	LE late to CVT sensor S10 FWD FC	05-350 Fault Counter: LE late to CVT sensor S10 (FWD)	Range = 0 to 255	0

Table 19 CCS NVM ID 620-500 to 620-587

NVM ID	NVM Name	NVM Description	Settings	Default
620-532	LE late to CVT sensor S10 REV FC	05-352 Fault Counter: LE late to CVT sensor S10 (REV)	Range = 0 to 255	0
620-533	IIT comm faults	IIT comm faults: Used to count a collection of IIT Comms faults that may occur.(e.g. not just linked to one single fault)	Range = 0 to 4294967295	0
620-535	Tot. Scanner Jams since power on	Total number of Scanner Jams since activation.	Range = 0 to 65535	0
620-548	KernelCheck-SumErrorFC	Fault Counter 05-250-00: Kernel Checksum Error	Range = 0 to 255	0
620-549	Applica-tionCheckSumEr-rorFC	Fault Counter 05-251-00: Application checksum error	Range = 0 to 255	0
620-550	StepperControl-lerCommsEr-rorFC	Fault Counter 05-252-00: Stepper Controller Comms Error	Range = 0 to 255	0
620-551	IIT-DADHcom-msErrorFC	Fault Counter 05-253-00: IIT-DADH Comms Error	Range = 0 to 255	0
620-552	CommsSequen-ceErrorFC	Fault Counter 05-254-00: Comms Sequence Error	Range = 0 to 255	0
620-553	DADHhotlineEr-rorFC	Fault Counter 05-259-00: DADH Hotline Error	Range = 0 to 255	0
620-554	DADHnotInStand-byFC	Fault Counter 05-260-00: DADH not in standby	Range = 0 to 255	0
620-556	Num of jobs scanned at 150 x 150	150 x 150 Scanned Lifetime DocumentsNumber of jobs (not impressions) since activation that were scanned where the user selected 150 x 150 resolution	Range = 0 to 4294967295	0
620-586	Dust Detection Threshold	IIT Dust Detection Threshold	Range = 0 to 65535	0
620-587	Dust Detection Level	IIT Dust Detection Level	Range = 0 to 65535	0

Table 20 CCS NVM ID 621-001 to 641-002

NVM ID	NVM Name	NVM Description	Settings	Default
621-001	NUP Layout Pat-tern		Range = 0 to 1	0
621-002	Rotation enabled for RE	Determines whether rotation is enabled for reduction/ enlarge-ment. 0 = False, 1 = True	Range = 0 to 1	1

Table 20 CCS NVM ID 621-001 to 641-002

NVM ID	NVM Name	NVM Description	Settings	Default
621-003	Rotation enabled for APS	Determines whether rotation is enabled for APS. 0 = False, 1 = True	Range = 0 to 1	1
621-004	Signature Layout Changeable		Range = 0 to 1	0
621-005	Use New Mes-saging		Range = 0 to 1	1
621-006	Rotation Debug		Range = 0 to 1	1
621-007	Not displayed	Number of Multiple Images	Range = 0 to 16777215	0
621-008	Not displayed	Number of Rotated Images	Range = 0 to 16777215	0
621-009	Previous Market Region	Defines previous market region 0 = USCO, 1 = XCL, 2 = FX, 3 = FXAPO, 4 = ACO, 5 = RX	Range = 0 to 5	0
621-010	Lakes Legacy Scan		Range = 0 to 1	1
625-001		NextScanJobID	Range = 1 to 199	1
625-002	Platen Scanned Lifetime Images	Platen Scanned Lifetime Imag-esNumber of images that have been scanned off the platen glass that were not for Copy or Embedded Fax jobs.	Range = 0 to 16777215	0
625-003	ADF Scanned Lifetime Images	ADF Scanned Lifetime Imag-esNumber of images that have been scanned from the ADF that were not for Copy or Embedded Fax jobs.	Range = 0 to 16777215	0
633-001	spuiNeedsToInit-Nvm	spuiNeedsToInitNvm	Range = 0 to 1	1
641-001	Internal Image-PrintJobPriority	internal image print job priority	Range = 1 to 65535	1
641-002	NextTestPattern-JobID	Value of next test pattern job's id.	Range = 1 to 999	1

Table 21 CCS NVM ID 648-001 to 648-022

NVM ID	NVM Name	NVM Description	Settings	Default
648-001	rs422 Configured	Determines whether RS422 is configured. 0=False, 1=True	Range = 0 to 1	0
648-002	accessory Card Configured	Determines whether accessory card is configured. 0=False, 1=True	Range = 0 to 1	1

Table 21 CCS NVM ID 648-001 to 648-022

NVM ID	NVM Name	NVM Description	Settings	Default
648-003	foreign interface Configured	Determines whether foreign interface is configured. 0=False, 1=True	Range = 0 to 1	0
648-004	rdt Modem Configured	Determines whether RDT Modem is configured. 0=False, 1=True	Range = 0 to 1	0
648-005	RS422 (EPSV) Config Mismatch	Fault counter for RS422 configuration mismatch.	Range = 0 to 255	0
648-006	Accessory Card Config Mismatch	Fault counter for accessory card configuration mismatch.	Range = 0 to 255	0
648-007	RDT Config Mismatch Fault	Fault counter for RDT configuration mismatch.	Range = 0 to 255	0
648-008	NC Comm Lost Fault	Fault counter for ESS communication lost fault.	Range = 0 to 255	0
648-009	DC Crash Detected Fault	Fault counter for detection of DC crash on power up.	Range = 0 to 255	0
648-010	UI Comm Lost Fault	Fault counter for UI communication lost fault.	Range = 0 to 255	0
648-011	Power Loss Detected Fault	Fault counter for power loss detected fault.	Range = 0 to 255	0
648-012	DC Platform Install Phase	Defines DC platform's current install phase.	Range = 0 to 4	4
648-013	UI Comms failureFC	Fault Counter 03-346-00: UI communication failure.	Range = 0 to 255	0
648-014	NC Comm Dead Fault	Fault Counter 03-332-00: ESS communication is down fault.	Range = 0 to 255	0
648-015	DCPMF.SPMGR.PWS	Defines current state of communication to the PWS.	Range = 0 to 10	0
648-016	Machine Phone Number Setup	Defines whether machine phone number has been set up. 0=False, 1=True	Range = 0 to 1	0
648-017	DC Platform Post Upgrade Phase		Range = 0 to 1	0
648-018	DCPlatformPostUpgradeRetry Cnt	DC Platform Post Upgrade Retry Count	Range = 0 to 255	0
648-019	Power On Initiated	Power On InitiatedTotal number of times that the machine was po/po-ed	Range = 0 to 16777215	0
648-020	Not displayed	PowerOn ImpressionsNVM allocated to maintain this Log	Range = 0 to 0	0

Table 21 CCS NVM ID 648-001 to 648-022

NVM ID	NVM Name	NVM Description	Settings	Default
648-021	Controller comm faults	Controller comm faults: Used to count a collection of Controller Comms faults that may occur.(e.g. not just linked to one single fault)	Range = 0 to 4294967295	0
648-022	UI comm faults	UI comm faults: Used to count a collection of UI Comms faults that may occur.(e.g. not just linked to one single fault)	Range = 0 to 4294967295	0

Table 22 CCS NVM ID 649-001 to 649-014

NVM ID	NVM Name	NVM Description	Settings	Default
649-001	LargePaperCount	Determines whether double count is enabled 0=False, 1=True	Range = 0 to 1	0
649-002	CancelJobTimerValue	This specifies the amount of time FI will wait (seconds) before deleting a job when authentication has been removed.	Range = 0 to 900	60
649-003	PreCountDuration		Range = 0 to 200	100
649-004	CountDuration		Range = 0 to 200	100
649-005	PostCountDuration		Range = 0 to 200	100
649-006	ExitDuration		Range = 0 to 200	100
649-007	EnableOnInternalCredits		Range = 0 to 1	0
649-008	DeviceType		Range = 0 to 4	0
649-009	PremiumSelect		Range = 0 to 5	0
649-010	CopyRestricted		Range = 0 to 1	1
649-011	PrintRestricted		Range = 0 to 1	0
649-012	s2fRestricted		Range = 0 to 1	0
649-013	EFaxSendRestricted		Range = 0 to 1	0
649-014	EFaxReceiveRestricted		Range = 0 to 1	0

Table 23 CCS NVM ID 652-001 to 652-084

NVM ID	NVM Name	NVM Description	Settings	Default
652-001	User Accounts	User Accounts	Range = 0 to 65535	2001
652-002	General Accounts	General Accounts	Range = 0 to 65535	501

Table 23 CCS NVM ID 652-001 to 652-084

NVM ID	NVM Name	NVM Description	Settings	Default
652-003	Not displayed	AuditronAccounts	Range = 0 to 0	0
652-004	submitPolicy	submitPolicy	Range = 0 to 2	0
652-005	jobMgmtPolicy	jobMgmtPolicy	Range = 0 to 2	1
652-006	authPolicy	Copy Authentication Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-007	acctPolicy	Copy Accounting Policy (none, internal, external, EPSV, or JBA)	Range = 0 to 8	0
652-008	invalidAccount-Policy	invalidAccountPolicy	Range = 0 to 2	1
652-009	nullAccountPolicy	nullAccountPolicy	Range = 0 to 2	1
652-010	PrintAuthentica-tionPolicy	Print Authentication Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-011	PrintAccounting-Policy	Print Accounting Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-012	InvalidAccount-Policy	InvalidAccountPolicy	Range = 0 to 2	1
652-013	NullAccountPolicy	NullAccountPolicy	Range = 0 to 2	1
652-014	ScanToFileAu-thenticationPolicy	Scan to File Authentication Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-015	ScanToFileAc-countingPolicy	Scan to File Accounting Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-016	ScanToFileIn-validPinPolicy	ScanToFileInvalidPinPolicy	Range = 0 to 2	1
652-017	ScanTo-FileNullPinPolicy	ScanToFileNullPinPolicy	Range = 0 to 2	1
652-018	Auditron - Set Hour	Auditron - Set Hour	Range = 0 to 23	0
652-019	Auditron - Set Minute	Auditron - Set Minute	Range = 0 to 59	0
652-020	Auditron - Set Second	Auditron - Set Second	Range = 0 to 59	0
652-021	Auditron - Set Month	Auditron - Set Month	Range = 0 to 12	1
652-022	Auditron - Set Day	Auditron - Set Day	Range = 0 to 31	1
652-023	Auditron - Set Year	Auditron - Set Year	Range = 70 to 135	70

Table 23 CCS NVM ID 652-001 to 652-084

NVM ID	NVM Name	NVM Description	Settings	Default
652-024	Auditron - Wall Clock	Auditron - Wall Clock	Range = 0 to 4294967295	0
652-025	Fax Send Authen-ticity Policy	Fax Send Authentication Pol-icy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-026	Fax Send Accounting Policy	Fax Send Accounting Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-027	Fax Send Invalid Pin Policy	Fax Send Invalid Pin Policy	Range = 0 to 2	1
652-028	Fax Send Null Pin Policy	Fax Send Null Pin Policy	Range = 0 to 2	1
652-029	Fax Receive Authenticity Pol-icy	Fax Receive Authentication Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-030	Fax Receive Accounting Policy	Fax Receive Accounting Policy (none, internal, external, EPSV or JBA)	Range = 0 to 8	0
652-031	Fax Receive Invalid Pin Policy	Fax Receive Invalid Pin Policy	Range = 0 to 2	1
652-032	Fax Receive Null Pin Policy	Fax Receive Null Pin Policy	Range = 0 to 2	1
652-033	CopyAcivity	CopyAcivity	Range = 0 to 4294967295	0
652-034	Not displayed	XSAAccountArray	Range = 0 to 0	0
652-035	Not displayed	CopyActivity	Range = 0 to 0	0
652-036	Not displayed	CopyActivity	Range = 0 to 0	0
652-037	Not displayed	CopyActivity	Range = 0 to 0	0
652-038	HolePunchCount	HolePunchCount	Range = 0 to 4294967295	0
652-039	StapleCount	StapleCount	Range = 0 to 4294967295	0
652-040	CustomerName	CustomerName	Range = 0 to 4294967295	0
652-041	MonoImpression-Count	MonoImpressionCount	Range = 0 to 4294967295	0
652-042	ColourImpres-sionCount	ColourImpressionCount	Range = 0 to 1	0
652-043	CopyActivityPen	CopyActivityPen	Range = 0 to 4	0
652-044	Not displayed	CopyActivity	Range = 0 to 0	0
652-045	Not displayed	JobIdGenerator	Range = 1 to 999	1
652-046	CopyActivityJo-bIDGenerator	CopyActivityJobIDGenerator	Range = 2 to 65535	256
652-047	Not displayed	AuditronAccounts	Range = 0 to 1	0

Table 23 CCS NVM ID 652-001 to 652-084

NVM ID	NVM Name	NVM Description	Settings	Default
652-048	Not displayed	AuditronAccounts	Range = 1 to 65535	7
652-049	PermService-SOAValues	PermServiceSOAValues	Range = 0 to 255	1
652-050	PermCreateJob	PermCreateJob	Range = 0 to 255	7
652-051	PermCancelJob	PermCancelJob	Range = 0 to 255	23
652-052	PermInterruptJob	PermInterruptJob	Range = 0 to 255	3
652-053	PermPauseJob	PermPauseJob	Range = 0 to 255	3
652-054	PermQueryJob	PermQueryJob	Range = 0 to 255	7
652-055	PermResumeJob	PermResumeJob	Range = 0 to 255	3
652-056	PermSubmitJob	PermSubmitJob	Range = 0 to 255	7
652-057	PermJobLOAVal-ues	PermJobLOAValues	Range = 0 to 255	7
652-058	PermJobSOAVal-ues	PermJobSOAValues	Range = 0 to 255	3
652-059	PermCreateDoc-ument	PermCreateDocument	Range = 0 to 255	7
652-060	PermDeleteDocu-ment	PermDeleteDocument	Range = 0 to 255	18
652-061	PermDocument-LOAValues	PermDocumentLOAValues	Range = 0 to 255	7
652-062	PermDocument-SOAValues	PermDocumentSOAValues	Range = 0 to 255	3
652-063	PermProofJob	PermProofJob	Range = 0 to 255	7
652-064	PermProofDocu-ment	PermProofDocument	Range = 0 to 255	7
652-065	PermPromoteJob	PermPromoteJob	Range = 0 to 255	5
652-066	PermHoldJob	PermHoldJob		3
652-067	PermReleaseJob	PermReleaseJob	Range = 0 to 255	35
652-068	Not displayed	TripleAServicePolicies	Range = 0 to 0	0
652-069	Tiered level 1 copy accounting	Tiered level 1 copy	Range = 0 to 1	0
652-070	Tiered level 1 print	Tiered level 1 print accounting	Range = 0 to 1	0
652-071	JBA display restricted	JBA display restricted	Range = 0 to 1	1
652-072	Not displayed	JBA display restricted	Range = 0 to 0	0
652-073	Not displayed	JBA default value 1	Range = 0 to 0	0
652-074	Not displayed	JBA labels 0	Range = 0 to 0	0
652-075	Not displayed	JBA labels 1	Range = 0 to 0	0
652-076	JBA display fields 0	JBA display fields 0	Range = 0 to 1	1
652-077	JBA display fields 1	JBA display fields 1	Range = 0 to 1	1

Table 23 CCS NVM ID 652-001 to 652-084

NVM ID	NVM Name	NVM Description	Settings	Default
652-078	JBA display masks 0	JBA Display masks 0	Range = 0 to 1	0
652-079	JBA diplay masks 1	JBA Display masks 1	Range = 0 to 1	0
652-080	Copy Feature Account Policy	Copy feature account policy (none, full service XSA, colour Only)	0 = NA 1 = Full Service XSA 2 = Color Only 3 = Do Not Prompt	0
652-081	Print Feature Account Policy	Print feature account policy (none, full service XSA, colour Only)	0 = NA 1 = Full Service XSA 2 = Color Only 3 = Do Not Prompt	0
652-082	Scan Feature Account Policy	Scan to file feature account policy (none, full service XSA, colour Only)	0 = NA 1 = Full Service XSA 2 = Color Only 3 = Do Not Prompt	0
652-083	Fax Rx Feature Account Policy	Fax send feature account policy (none, full service XSA, colour Only)	0 = NA 1 = Full Service XSA 2 = Color Only 3 = Do Not Prompt	0
652-084	Fax Tx Feature Account Policy	Fax receive feature account policy (none, full service XSA, colour Only)	0 = NA 1 = Full Service XSA 2 = Color Only 3 = Do Not Prompt	0

Table 24 CCS NVM ID 656-001 to 657-001

NVM ID	NVM Name	NVM Description	Settings	Default
656-001	Image Disk READ Failure.	Fault Counter	Range = 0 to 255	0
656-002	Image Disk WRITE Failure.	Fault Counter	Range = 0 to 255	0
656-003	Image Disk BAD DATA ERROR.	Fault Counter	Range = 0 to 255	0
656-004	ImageDiskUna-bleToFormatError.	Fault Counter	Range = 0 to 255	0
656-005	Image Disk NoDiskCapacity-Error	Fault Counter	Range = 0 to 255	0
657-001		Job Log Data-Completed Job Log	Range = 0 to 0	0

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-001	TonerEmptyDspLoc	Toner empty display location	Range = 0 to 3	0
658-002	FdRollLife		Range = 0 to 200	150
658-003	PDRNNotify		Range = 0 to 16	0
658-004	SupplyInfoFlag	0 = UI, 1 = Network, 2 = Both, 3 = Neither	Range = 0 to 3	0
658-005	CruMgrDebugPrint	CRU manager debug printouts 0 = False, 1 = True	Range = 0 to 1	0
658-006	PDRNNotifyProc	0 = False, 1 = True	Range = 0 to1	0
658-007	FuserReorderMsgTrig	Reorder message displayed (days before End of Life)	Range = 1 to 25	3
658-008	XeroReorderMsgTrig	Reorder message displayed (days before End of Life)	Range = 1 to 25	3
658-009	FuserReorderDspLoc		Range = 0 to 3	0
658-010	XeroReorderDspLoc		Range = 0 to 3	0
658-011	FuserReplDspLoc		Range = 0 to 3	0
658-012	XeroReplDspLoc		Range = 0 to 3	0
658-013	ColorantReorderMsgTrig XC Market	Reorder Threshold value (days) for Ink (US market region setting)	Stores remaining threshold value to trigger low supplies warning. Range = 0 to 65535	7
658-014	DADHRollReorderMsgTrig XC Market	Reorder Threshold value for DADH Roller (if CRU) (US market region setting)	Stores remaining threshold value to trigger low supplies warning. Range = 0 to 65535	10
658-016	ColorantReorderMsgTrig XE Market	Reorder Threshold value for Ink (European market region setting)	Stores remaining threshold value to trigger low supplies warning. Range = 0 to 65535	3
658-017	DADHRollReorderMsgTrig XE Market	Reorder Threshold value for DADH Roller (if CRU) (European market region setting)	Stores remaining threshold value to trigger low supplies warning. Range = 0 to 65535	6
658-019	ImageUnitReorderMsgTrig	Reorder Threshold value for Imaging Units	Range = 0 to 65535	5
658-020	FuserReorderMsgTrigger	Reorder Threshold value for Fuser	Range = 0 to 65535	5

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-021	XferRollerReorderMsgTrig	Reorder Threshold value for Transfer Roller	Range = 0 to 65535	5
658-022	XferBeltReorderMsgTrig	Reorder Threshold value for Transfer Belt	Range = 0 to 65535	5
658-023	DayCounter	Counts the number of days in which a threshold number of impressions have occurred. After {MarkUsageCalcDuration} days, this is reset to 0.	Range = 0 to 255	0
658-024	DayUsage	Stores the number of impressions made every day being counted for up to {MarkUsageCalcDuration} days	Range = 0 to 4294967295	0
658-025	adpvThreshold	Minimum number of impressions to consider the day to be a usage day. If the machine has not made at least n impressions, don't count the day	Range = 0 to 65535	20
658-026	ImpressionSnapshot	Captured at the end of each day, to be used for comparison to total impressions to determine daily usage	Range = 0 to 4294967295	0
658-027	adpv	Average daily volume	Range = 0 to 10000	1000
658-028	PagesBlackCRU	Pages per Black Colorant	Range = 0 to 4294967295	26800
658-030	Last ADPV Calc Date	Last ADPV Calc Date	Range = 0 to 4294967295	0
658-031	ReorderMsgTrigPercent	Reorder Threshold value (Percent %) for toner	Range = 0 to 65535	5
658-032	ScanFeedDayCounter	Counts the number of days in which a threshold number of DADH feeds have occurred. After {ScanFeedUsageCalcDuration} days, this is reset to 0.	Range = 0 to 255	0
658-033	ScanFeedDayUsage	Stores the number of scan feeds made every day being counted for up to {ScanFeedUsageCalcDuration} days	Range = 0 to 4294967295	0
658-034	adsfvThreshold	Minimum number of DADH feeds to consider the day to be a usage day. If the machine has not made at least n feeds, don't count the day	Range = 0 to 65535	5

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-035	DADFFeedsSnapshot	Captured at the end of each day, to be used for comparison to total DADH feeds to determine daily usage	Range = 0 to 4294967295	0
658-036	adsfv	Average daily scan feed volume	Range = 0 to 4294967295	100
658-037	Last ADSFV Calc Date	Last ADSFV Calc DateDate captured when ADSFV is calculated	Range = 0 to 4294967295	0
658-038	ScanFeedUsageCalcDuration	This determines how often the ADSFV calculation is refreshed	Range = 1 to 255	10
658-039	MarkUsageCalcDuration	This determines how often the ADPV calculation is refreshed	Range = 1 to 255	5
658-040	ScanFeedUsageCalcFrequency	This determines how often ADSFV is calculated. This value should never exceed MarkUsageCalcDuration, but code will check for this condition	Range = 1 to 255	1
658-041	MarkUsageCalcFrequency	This determines how often ADPV is calculated. This value should never exceed ScanFeedUsageCalcDuration, but code will check for this condition	Range = 1 to 255	1
658-042	LowInkMsgTrigPercent	Low Ink threshold value (Percent %) for Ink warning.	Stores threshold value (in percent) to trigger low ink warning. Range = 0 to 255	10
658-043	day1MarkVolume	ADPV Day 1: Number of impressions made in day 1 of the adpv duration (ADPV Day Counter Index = 0)	Range = 0 to 10000	1000
658-044	day2MarkVolume	ADPV Day 2: Number of impressions made in day 2 of the adpv duration (ADPV Day Counter Index = 1)	Range = 0 to 10000	1000
658-045	day3MarkVolume	ADPV Day 3: Number of impressions made in day 3 of the adpv duration (ADPV Day Counter Index = 2)	Range = 0 to 10000	1000

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-046	day4MarkVolume	ADPV Day 4: Number of impressions made in day 4 of the adpv duration (ADPV Day Counter Index = 3)	Range = 0 to 10000	1000
658-047	day5MarkVolume	ADPV Day 5: Number of impressions made in day 5 of the adpv duration (ADPV Day Counter Index = 4)	Range = 0 to 10000	1000
658-048	day6MarkVolume	ADPV Day 6: Number of impressions made in day 6 of the adpv duration (ADPV Day Counter Index = 5)	Range = 0 to 10000	1000
658-049	day7MarkVolume	ADPV Day 7: Number of impressions made in day 7 of the adpv duration (ADPV Day Counter Index = 6)	Range = 0 to 10000	1000
658-050	day8MarkVolume	ADPV Day 8: Number of impressions made in day 8 of the adpv duration (ADPV Day Counter Index = 7)	Range = 0 to 10000	1000
658-051	day9MarkVolume	ADPV Day 9: Number of impressions made in day 9 of the adpv duration (ADPV Day Counter Index = 8)	Range = 0 to 10000	1000
658-052	day10MarkVolume	ADPV Day 10: Number of impressions made in day 10 of the adpv duration (ADPV Day Counter Index = 9)	Range = 0 to 10000	1000
658-053	day1ScanFeedVolume	ADSFV Day 1: Number of impressions made in day 1 of the adsfv duration (ADSFV Day Counter Index 0)	Range = 0 to 10000	100
658-054	day2ScanFeedVolume	ADSFV Day 2: Number of impressions made in day 2 of the adsfv duration (ADSFV Day Counter Index 1)	Range = 0 to 10000	100
658-055	day3ScanFeedVolume	ADSFV Day 3: Number of impressions made in day 3 of the adsfv duration (ADSFV Day Counter Index 2)	Range = 0 to 10000	100
658-056	day4ScanFeedVolume	ADSFV Day 4: Number of impressions made in day 4 of the adsfv duration (ADSFV Day Counter Index 3)	Range = 0 to 10000	100

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-057	day5ScanFeedVolume	ADSFV Day 5: Number of impressions made in day 5 of the adsfv duration (ADSFV Day Counter Index 4)	Range = 0 to 10000	100
658-058	day6ScanFeedVolume	ADSFV Day 6: Number of impressions made in day 6 of the adsfv duration (ADSFV Day Counter Index 5)	Range = 0 to 10000	100
658-059	day7ScanFeedVolume	ADSFV Day 7: Number of impressions made in day 7 of the adsfv duration (ADSFV Day Counter Index 6)	Range = 0 to 10000	100
658-060	day8ScanFeedVolume	ADSFV Day 8: Number of impressions made in day 8 of the adsfv duration (ADSFV Day Counter Index 7)	Range = 0 to 10000	100
658-061	day9ScanFeedVolume	ADSFV Day 9: Number of impressions made in day 9 of the adsfv duration (ADSFV Day Counter Index 8)	Range = 0 to 10000	100
658-062	day10ScanFeedVolume	ADSFV Day 10: Number of impressions made in day 10 of the adsfv duration (ADSFV Day Counter Index 9)	Range = 0 to 10000	100
658-063	Not displayed	Current K Toner Cartridge Total Area Coverage	Range = 0 to 0	0
658-077	DrumReorderMsgTrig XC Market	Reorder Threshold value (Days) for Drum Cartridges (US Market Region	Range = 0 to 65535	10
658-078	DrumReorderMsgTrig XE Market	Reorder Threshold value (Days) for Drum Cartridges (European Market Region Setting)	Range = 0 to 65535	6
658-086	FuserReorderMsgTrig XC Market	Reorder threshold value (days) for Fuser Unit (US Market Region Setting)	Range = 0 to 65535	7
658-087	FuserReorderMsgTrig XE Market	Reorder threshold value (days) for Fuser Unit (European Market Region Setting)	Range = 0 to 65535	3
658-088	XeroReorderMsgTrig XC Market	Reorder threshold value (days) for Xerographic Unit (US Market Region Setting)	Range = 0 to 65535	7
658-089	XeroReorderMsgTrig XE Market	Reorder threshold value (days) for Xerographic Unit (European Market Region Setting)	Range = 0 to 65535	3

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-090	TonerKReorderMsgSuppressed	Toner reorder latch	Range = 0 to 1	0
658-091	TonerKReorderMsgSuppressed	Toner reorder message suppression on local UI	Range = 0 to 1	0
658-092	TonerKAvDailyDispenseTime	Toner CRU Average Daily Dispense Time	Range = 0 to 4294967295	60000
658-093	TonerKFilterConstant	Toner CRU Filter Constant Defines the level of adjustment for each cycle	Range = 0 to 65535	20
658-094	TonerKDailyDispenseLowLimit	Toner CRU Daily Dispense Time Lower Limit	Range = 0 to 4294967295	0
658-095	TonerKDailyDispenseHiLimit	Toner CRU Daily Dispense Time Upper Limit	Range = 0 to 4294967295	1500000
658-096	TonerKLastCumDispenseTime	Toner CRU Previous Cumulative Dispense Time	Range = 0 to 4294967295	0
658-097	TonerKLastCumDispenseTimeDate	Toner CRU date/time of last Cumulative Dispense Time calculation (wall clock)	Range = 0 to 4294967295	0
658-098	AutoCleaningInterval	Charge Scorotron Auto Cleaning interval. Frequency in ksheets for when an Auto Scorotron cleaning request is displayed.	Range = 2 to 50	20
658-099	NumImagesDelivered	Number of images delivered	Range = 0 to 4294967295	0
658-100	FuserKReorderMsgLatched	FRU CRU reorder latch	Range = 0 to 1	0
658-101	FuserKReorderMsgSuppressed	FRU CRU reorder message suppression on local UI	Range = 0 to 1	0
658-108	FuserKAvDailyWebCount	FRU CRU Average Daily Web Count	Range = 0 to 4294967295	1000
658-109	FuserKFilterConstant	FRU CRU Web Count Filter Constant Defines the level of adjustment for each cycle	Range = 0 to 65535	20
658-110	FuserKDailyWebLowLimit	FRU CRU Web Count Daily Usage Lower Limit	Range = 0 to 4294967295	20
658-111	FuserKDailyWebHiLimit	FRU CRU Web Count Daily Usage Upper Limit	Range = 0 to 4294967295	150000
658-112	FuserKLastWebCount	FRU CRU Previous Cumulative Web Count	Range = 0 to 4294967295	0

Table 25 CCS NVM ID 658-001 to 658-153

NVM ID	NVM Name	NVM Description	Settings	Default
658-113	FuserKLastWeb-CountDate	FRU CRU date/time of saving Last Cumulative Web Count (wall clock)	Range = 0 to 4294967295	0
658-114	XruReorderMs-gLatched	XRU CRU reorder latch	Range = 0 to 1	0
658-115	XruReorderMsg-Suppressed	XRU CRU reorder message suppression on local UI	Range = 0 to 1	0
658-122	XruAvDailyCy-cleCount	XRU CRU Average Daily Cycle Count	Range = 0 to 4294967295	2000
658-123	XruCycleFilter-Constant	XRU CRU Daily Cycle Count Lower Limit	Range = 0 to 65535	20
658-124	XruDailyCy-cleLowLimit	XRU CRU Daily Cycle Count Lower Limit	Range = 0 to 4294967295	20
658-125	XruDailyCycle-HiLimit	XRU CRU Daily Cycle Count Upper Limit	Range = 0 to 4294967295	250000
658-126	XruLastCy-cleCount	XRU CRU Last Cumulative Usage Count	Range = 0 to 4294967295	0
658-127	XruLastCy-cleCountDate	XRU CRU date/time of saving Last Cumulative Cycle Count (wall clock)	Range = 0 to 4294967295	0
658-128	XruLastPrintCoun	XRU CRU Last print count - for maintaining CRUM data	Range = 0 to 16777215	0
658-129	XRLastCopy-Count	XRU CRU Last copy count - for maintaining CRUM data	Range = 0 to 16777215	0
658-130	XruLastFaxCount	XRU CRU Last fax count - for maintaining CRUM data	Range = 0 to 16777215	0
658-131	FruLastPrint-Count	FRU CRU Last print count - for maintaining CRUM data	Range = 0 to 16777215	0
658-132	FRLastCopy-Count	FRU CRU Last copy count - for maintaining CRUM data	Range = 0 to 16777215	0
658-133	FruLastFaxCount	FRU CRU Last fax count - for maintaining CRUM data	Range = 0 to 16777215	0
658-150	WasteReor-derMsgLatched	Waste Toner CRU reorder latch	Range = 0 to 1	0
658-151	WasteReorderAc-knowledged	Waste Toner CRU reorder acknowledged	Range = 0 to 1	0
658-152	TonerCRULast DispenseTime	Toner CRU Last Cumulative Dispense Time for replace-ment	Range = 0 to 4294967295	700
658-153	Toner-CRUCDTRE-plamcentThreshol d	Toner CRU Cumulative Dis-pense Time replacement threshold	Range = 0 to 4294967295	6000

Table 26 CCS NVM ID 665-001 to 665-006

NVM ID	NVM Name	NVM Description	Settings	Default
665-001	Out Of Resource Policy	Specify what JBA should do when it runs out of space.	Range = 0 to 1	0
665-002	Comm Failed Pol-icy	Specify what JBA should do if it can't communicate with the ESS.	Range = 0 to 2	0
665-003	EAS Validation Enable	Specify if JBA should Autho-rize logins and submit jobs with the ESS.	Range = 0 to 1	1
665-004	Not displayed	JBA Data-JBA Database	Range = 0 to 0	0
665-005	Not displayed	JBA User Data-Default JBA User	Range = 0 to 0	0
665-006	Not displayed	JBA Account Data-Default JBA Account	Range = 0 to 0	0

Table 27 CCS NVM ID 671-001 to 671-020

NVM ID	NVM Name	NVM Description	Settings	Default
671-001	EFaxSendJobPri-ority		Range = 0 to 4294967295	700
671-002	Not displayed	EmbeddedFaxSendDocu-mentsDefaults	Range = 0 to 0	0
671-003	Not displayed	EMBFAXSENDTransmitIm-ages	Range = 0 to 16777215	0
671-004	EMBFAX-SENDTransmitI-magesDisplay	EMBFAXSENDTransmitImag-esDisplayable	Range = 0 to 1	1
671-005	Not displayed	EMBFaxPlatenScans	Range = 0 to 16777215	0
671-006	Not displayed	EMBFaxDADHSide1Scans	Range = 0 to 16777215	0
671-007	Not displayed	EMBFaxDADHSide2Scans	Range = 0 to 16777215	0
671-008	Not displayed	EmbeddedFaxSendJobDe-faults	Range = 0 to 0	0
671-009	Not displayed	EMBFaxStoredPollingImages	Range = 0 to 16777215	0
671-010	Not displayed	EMBFaxAllSendJobs	Range = 0 to 16777215	0
671-011	SendShortJobRe-coveryWaitTime		Range = 1 to 255	5

Table 27 CCS NVM ID 671-001 to 671-020

NVM ID	NVM Name	NVM Description	Settings	Default
671-012	SendJobRecov-erySendRespTim-eout	SendJobRecoverySend-ResponseTimeout	Range = 1 to 255	120
671-013	SendJobRecov-eryWaitTime		Range = 1 to 255	120
671-014	SendJobRecover-ImageRespTime-out	SendJobRecoveryImageRe-sponseTimeout	Range = 1 to 255	120
671-015	SendJobRecov-ComplQUpdate Timeout	SendJobRecoveryComplet-edQUpdateTimeout	Range = 1 to 255	120
671-016	SendJobRecov-eryCreateJobTim-eout		Range = 1 to 255	3
671-017	SendLow-FaxMemoryWait-Time		Range = 1 to 255	20
671-018	SendJobRecov-eryRetryCounter		Range = 1 to 255	3
671-019	Platen Emb Fax Lifetime Images	Platen Embedded Fax Lifetime Images SentNumber of images that have been scanned off the platen glass that were for Embedded Fax jobs.	Range = 0 to 16777215	0
671-020	ADF Embedded Fax Lifetime Images	ADF Embedded Fax Lifetime ImagesNumber of images that have been scanned from the ADF that were for Embedded Fax jobs.	Range = 0 to 16777215	0

Table 28 CCS NVM ID 672-001 to 672-017

NVM ID	NVM Name	NVM Description	Settings	Default
672-001	EFaxReceive-JobPriority		Range = 1 to 4294967295	3
672-002	Not displayed	EFaxRecieveJobDefaults	Range = 0 to 0	0
672-003	Not displayed	EMBFAXRECEIVESheets	Range = 0 to 16777215	0
672-004	EMBFAXRE-CEIVESheetsDis-playable		Range = 0 to 1	0
672-005	Not displayed	EMBFAXRECEIVEDuplex-Sheets	Range = 0 to 16777215	0

Table 28 CCS NVM ID 672-001 to 672-017

NVM ID	NVM Name	NVM Description	Settings	Default
672-006	EFaxRecPlex-SheetsDisplay-able	EMBFAXRECEIVEDuplex-SheetsDisplayable	Range = 0 to 1	0
672-007	Not displayed	EMBFAXRECEIVE-LargeSheets	Range = 0 to 16777215	0
672-008	EMBFAXRE-CEIVE-LargeSheetsDispl ay	EMBFAXRECEIVE-LargeSheetsDisplayable	Range = 0 to 1	0
672-009	Not displayed	print crash recovery	Range = 0 to 1	1
672-010	Not displayed	EMBFaxReceiveMarkedJobs	Range = 0 to 16777215	0
672-011	Not displayed	EFaxRecieveDocumentDe-faults	Range = 0 to 0	0
672-012	Not displayed	EMBFAXRECEIVEMarkedIm-ages	Range = 0 to 16777215	0
672-013	Emb Fax Rec Marked Images Disp	EMBFAXRECEIVEMarkedIm-agesDisplayable	Range = 0 to 1	1
672-014	NextImageTime-Out		Range = 100 to 1000	300
672-015	Not displayed	EFPrintCompleted Job Log	Range = 0 to 0	0
672-016	EFPrintComplet-edJob Log Loca-tion	EFPrintCompleted Job Log Location	Range = 0 to 70	0
672-017	EF Card Distur-bance Timeout		Range = 1 to 255	12

Table 29 CCS NVM ID 673-001 to 673-023

NVM ID	NVM Name	NVM Description	Settings	Default
673-001	Postpone fax install		Range = 0 to 1	0
673-002	EmbeddedFax Basic Previous State		Range = 0 to 2	0
673-003	EmbeddedFaxEx-tendedPrevi-ousState Not displayed	EmbeddedFaxExtendedPrevi-ousState	Range = 0 to 2	0
673-004	Not displayed	-card installed id	Range = 0 to 0	0
673-005	Basic FAX Not Detected Fault		Range = 0 to 255	0

Table 29 CCS NVM ID 673-001 to 673-023

NVM ID	NVM Name	NVM Description	Settings	Default
673-006	Fax Phonebook Download Fault		Range = 0 to 255	0
673-007	Extended FAX Not Detected Fault		Range = 0 to 255	0
673-008	Fax Unexpected Reset Fault		Range = 0 to 255	0
673-009	Fax BasicCardUnrecoverable Fault	Fax BasicCardUnrecoverable Fault	Range = 0 to 255	0
673-010	Fax Sys Low Mem Unrecover Fault	Fax System Low Memory Unrecoverable Fault	Range = 0 to 255	0
673-011	Fax Not Cleared By Reset Fault		Range = 0 to 255	0
673-012	Fax Basic Card Failed Fault		Range = 0 to 255	0
673-013	Fax Extended Card Failed Fault		Range = 0 to 255	0
673-014	Fax NV Device Not Present Fault		Range = 0 to 255	0
673-015	Fax System Low Mem Recover Fault	Fax System Low Memory Recoverable Fault	Range = 0 to 255	0
673-016	Fax Out Of File Memory Fault		Range = 0 to 255	0
673-017	Fax File Integrity Fault		Range = 0 to 255	0
673-018	Fax Network Line 1 Fault		Range = 0 to 255	0
673-019	Fax Network Line 2 Fault		Range = 0 to 255	0
673-020	Fax Port 1 Fault		Range = 0 to 255	0
673-021	Fax Port 2 Fault		Range = 0 to 255	0
673-023	Fax comm faults	Fax comm faults: Used to count a collection of Fax Comms faults that may occur.(e.g. not just linked to one single fault)	Range = 0 to 4294967295	0

Table 30 CCS NVM ID 674-001 to 674-004

NVM ID	NVM Name	NVM Description	Settings	Default
674-001	LastXferImageServiceId	Efax recovery last image service ID	Range = 0 to 65535	0
674-002	LastXferImageJobId	Efax recovery last image job ID	Range = 0 to 65535	0
674-003	LastXferImageDocId	Efax recovery last image doc ID	Range = 0 to 65535	0
674-004	LastXferImageImageId	Efax recovery last image image ID	Range = 0 to 65535	0

Table 31 Finisher NVM ID 712-003 to 712-103

NVM ID	NVM Name	NVM Description	Settings	Default
712-003	BookMkrCompileOffset	Used to adjust the compile position of the booklet maker back stop to receive paper. (HVF)	0.1137mm/step (100 = mid position). Range = 0 to 200	100
712-004	BookMkrStapleOffset	Used to adjust the staple and fold position(together), relative to the Lead Edge of the sheet(s) (HVF)	0.1137mm/step (100 = mid position). Range = 0 to 200	100
712-005	BookMkrFoldOffset	Used to adjust the fold only, relative to the Lead Edge of the sheet(s). (HVF)	0.1137mm/step (100 = mid position). Range = 0 to 200	100
712-006	BookMkrTampRdyOffset	Used to adjust the booklet tamping ready position. (Sets home to ready position). (HVF)	0.265mm/step (100 = mid position). Range = 0 to 200	100
712-009	BookMkrTriFoldCFold	Used to position upper tri-fold. Moves fold relative to lead edge on C Fold. (HVF)	0.1137mm/step (40 = mid position). Range = 60 to 140	100
712-010	BookMkrTriFoldZFold	Used to position lower tri-fold. Moves fold location relative to leading edge on Z Fold. (HVF)	0.1137mm/step (40 = mid position). Range = 60 to 140	100
712-011	BookMkrTriFoldDeskew	Used to adjust the amount of deskew for the 2nd fold in a tri-fold by varying the amount of buckle length in registration for the paper entering the tri-fold. (HVF)	1.745mm/step Range = 60 to 140	100

Table 31 Finisher NVM ID 712-003 to 712-103

NVM ID	NVM Name	NVM Description	Settings	Default
712-012	BookMkrStaple-OffsetM	Used to control the staple offset position for 8.5x13 and 8.5x14 (HVF)	0.1137mm/step (100 = mid position). Range = 0 to 200	100
712-013	BookMkrStaple-OffsetL	Used to control the staple offset position for 11x17 and A3 (HVF)	0.1137mm/step (100 = mid position). Range = 0 to 200	100
712-100	BMStaplePos	Used to adjust the LVF BM staple position relative to the center of the sheet(s) (LVF)	0.1mm/step Range = 0 to 400	200
712-101	BMFoldPos	Used to adjust the LVF BM fold position relative to the center of the sheet(s) (LVF)	0.1mm/step Range = 0 to 400	200
712-102	BMLateralAnvil-PosFront	Used to adjust the LVF BM anvil position relative to the front staple cartridge	0.2666mm/step Range = 6 to 14	10
712-103	BMLateralAnvil-PosRear	Used to adjust the LVF BM anvil position relative to the rear staple cartridge	0.2666mm/step Range = 6 to 14	10

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-001	Standby Temp	Target temperature during Standby Mode	Range = 10 to 230 degrees C	45 ppm = 195 55 ppm = 195 65 ppm = 208 75 ppm = 208 90 ppm = 208
710-002	Run Temp	Target temperature during Run Mode	Range = 100 to 230 degrees C	45 ppm = 195 55 ppm = 195 65 ppm = 203 75 ppm = 203 90 ppm = 203
710-003	Low Power Temp	Target temp during Power save mode.	Range = 50 to 150 degrees C	45 ppm = 95 55 ppm = 95 65 ppm = 135 75 ppm = 135 90 ppm = 135
710-004	Fuser temp warning threshold 3	Temperature threshold level	Range = 10 to 50 degrees C	40
710-005	Fuser temp warning threshold 2	Temperature threshold level	Range = 40 to 100 degrees C	60

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-006	Fuser temp warning threshold 1	Temperature threshold level	Range = 60 to 120 degrees C	90
710-007	Fuser temp range	Temp range below standby in which start print can begin - See also ID680	Range = 10 to 30 degrees C	45 ppm = 10 55 ppm = 10 65 ppm = 28 75 ppm = 28 90 ppm = 28
710-008	FsrDelta	Temp difference between the 2 thermistors	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 45 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-009	fsrTolrunA	Temp tolerance either side of run target temp . Thermistor A	Range = 0 to 2147483647 degrees C	20
710-010	FsrTolsave	Temp tolerance either side of power save target temp	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 15 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-011	FsrStep	Temp difference between 2 consecutive readings	Range = 0 to 2147483647 degrees C	3
710-012	FsrTolrunB	Temp tolerance either side of run target temp . Thermistor B	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 40 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-013	FsrMax1	Temp at which SW calls an over-temp fault (Tmax1)	Range = 0 to 2147483647 degrees C	230
710-014	FsrMax2	Temp at which electronics shutdown the fuser (Tmax2)	Range = 0 to 2147483647 degrees C	245
710-015	101-120mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-016	121-140mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-017	141-160mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-018	161-180mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-019	181-200mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-020	201-220mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-021	221-240mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-022	241-260mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-023	261-280mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-024	281-300mm offset	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-025	80 gms Offset	Media type offset for fuser roll temperature	Range = -10 to 20	0
710-026	Transparency Offset	Media type offset for fuser roll temperature	Range = -10 to 20	45 ppm = 0 55 ppm = 0 65 ppm = -10 75 ppm = -10 90 ppm = -10
710-027	Card stock offset	Media type offset for fuser roll temperature	Range = -10 to 15	45 ppm = 0 55 ppm = 5 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-028	Envelopes Offset	Media type offset for fuser roll temperature	Range = -10 to 20	5
710-029	Labels Offset	Media type offset for fuser roll temperature	Range = -10 to 20	45 ppm = 5 55 ppm = 5 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-030	FsrTolstandby	Temp tolerance either side of standby target temp	Range = 0 to 2147483647 oC	45 ppm = 25 55 ppm = 25 65 ppm = 20 75 ppm = 20 90 ppm = 20
710-031	Fuser Web Count	Fuser Current Web Counter	Number of cycles	0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-032	Fuser Web Index	Fuser Web Index Value	Number of Cycles	45 ppm = 0 55 ppm = 16 65 ppm = 16 75 ppm = 16 90 ppm = 16
710-033	Transp_cy Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	0
710-034	CardStock Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-035	Envelopes Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-036	Labels Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-037	Tab Stock Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-038	FsrApplyPowerTime	Fuser apply power time	Range = 100 to 20000ms	200
710-039	TrangeCooling	Temperature offset above Tsave at which Control and Fault detection is enabled - See also ID204	Range = 0 to 2147483647 degrees C	10
710-040	Cold Roll Offset	Fuser cold roll offset profile	Range = 0 to 11	45 ppm = 6 55 ppm = 6 65 ppm = 8 75 ppm = 8 90 ppm = 8
710-041	Web Advance Group	Web advance group banding select	Range = 1 to 3 1 = Group 1 2 = Group 2 3 = Group 3	2
710-042	Rough Stk FRU Enable	Rough stock fuser (TOS) Enable/Disable	Range = 0 to 1 0=Disabled 1=Enabled	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-043	Type 256 FRU Enable	Type 256 Fuser Enable/ Disable	Range = 0 to 1 0=Disabled 1=Enabled	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-044	Short Cycle Out Time	IOT inactivity shutdown timer (except ROS motor)	Range = 0 to 15 seconds	0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-045	Long Cycle Out Time	Inactivity cycle out timer	Range = 0 to 180 seconds	45 ppm = 0 55 ppm = 60 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-046	FinisherSoftCyc-Time	Timeout for soft cycling of finisher	Range = 0 to 60 seconds	45 ppm = 35 55 ppm = 30 65 ppm = 30 75 ppm = 30 90 ppm = 30
710-047	AbnormalCycle-OutTime	AbnormalCycleOutTime	Range = 0 to 15 seconds	45 ppm = 0 55 ppm = 10 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-048	Standby Temp(2)	Target temperature during Standby Mode	Range = 10 to 230 degrees C	160
710-049	Run Temp(2)	Target temperature during run mode	Range = 50 to 230 degrees C	200
710-050	Low Power Temp(2)	Target temp during Power save mode. For Sorcery: The low power simmer temperature is determined by the Power Save mode set in Tools. The values are held in a look up table in SIP and passed across into IOT NVM . When an NVM initialisation occurs, the default value for LowPowerTemp(2) is overwritten by the value held in the look up table in SIP.	Range = 0 to 150 degrees C	0
710-051	Fsr3minWarningT(2)	Temperature threshold level	Range = 10 to 50 degrees C	40
710-052	Fsr2minWarningT(2)	Temperature threshold level	Range = 40 to 100 degrees C	60
710-053	Fsr1minWarningT(2)	Temperature threshold level	Range = 60 to 120 degrees C	90
710-054	FsrRange(2)	Temp range below standby in which start print can begin - See also ID680	Range = 10 to 40 degrees C	45 ppm = 0 55 ppm = 25 65 ppm = 28 75 ppm = 28 90 ppm = 28

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-055	FsrDelta(2)	Temp difference between the 2 thermistors	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 45 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-056	fsrTolrunA(2)	Temp tolerance either side of run target temp . Thermistor A	Range = 0 to 2147483647 degrees C	45 ppm = 20 55 ppm = 30 65 ppm = 20 75 ppm = 20 90 ppm = 20
710-057	FsrTolsave(2)	Temp tolerance either side of power save target temp	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 15 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-058	FsrStep(2)	Temp difference between 2 consecutive readings	Range = 0 to 2147483647 degrees C	45 ppm = 3 55 ppm = 10 65 ppm = 3 75 ppm = 3 90 ppm = 3
710-059	FsrTolrunB(2)	Temp tolerance either side of run target temp . Thermistor B	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 30 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-060	FsrMax1(2)	Temp at which SW calls an over-temp fault (Tmax1)	Range = 0 to 2147483647 degrees C	45 ppm = 240 55 ppm = 240 65 ppm = 230 75 ppm = 230 90 ppm = 230
710-061	FsrMax2(2)	Temp at which electronics shutdown the fuser (Tmax2)	Range = 0 to 2147483647 degrees C	245
710-062	101-120mm offset(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-063	121-140mm offset(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-064	141-160mm offset(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-065	161-180mm offset(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-066	181-200mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-067	201-220mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-068	221-240mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-069	241-260mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-070	261-280mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-071	281-300mm off-set(2)	Offset temperature required on thermistor B for paper width	Range = -10 to 10	0
710-072	80 gms Offset(2)	Media type offset for fuser roll temperature	Range = -10 to 20	0
710-073	Transp_cy Off-set(2)	Media type offset for fuser roll temperature	Range = -10 to 20	45 ppm = 0 55 ppm = 0 65 ppm = -10 75 ppm = -10 90 ppm = -10
710-074	Card stock off-set(2)	Media type offset for fuser roll temperature	Range = -10 to 15	45 ppm = 0 55 ppm = 5 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-075	Envelopes Off-set(2)	Media type offset for fuser roll temperature	Range = -10 to 20	5
710-076	Labels Offset(2)	Media type offset for fuser roll temperature	Range = -10 to 20	45 ppm = 5 55 ppm = 5 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-077	Fuser Web Count (2)	Fuser Current Web Counter	Cycles	0
710-078	Fuser Web Index (2)	Fuser Web Index Value	Range = 0 to 2147483647	45 ppm = 0 55 ppm = 16 65 ppm = 16 75 ppm = 16 90 ppm = 16
710-079	Transp_cy Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-080	CardStock Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 15 seconds	4
710-081	Envelopes Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-082	Labels Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-083	Tab Stock Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-084	FsrApplyPower-Time(2)	Fuser apply power time	Range = 0 to 20000ms	45 ppm = 0 55 ppm = 0 65 ppm = 200 75 ppm = 200 90 ppm = 200
710-085	TrangeCooling(2)	Temperature offset above Tsave at which Control and Fault detection is enabled - See also ID204	Range = 0 to 2147483647 degrees C	10
710-086	Cold Roll Off-set(2)	Fuser cold roll offset pro-file	Range = 0 to 11	45 ppm = 0 55 ppm = 0 65 ppm = 8 75 ppm = 8 90 ppm = 8
710-087	Web Advance Group(2)	Web Advance group banding select	Range = 1 to 3 1 = Group 1 2 = Group 2 3 = Group 3	2
710-088	Rough Stock Off-set	Media type offset for fuser roll temperature	Range = -10 to 15	5
710-089	Rough Stock Delay	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-090	Rough Stock Off-set(2)	Media type offset for fuser roll temperature	Range = -10 to 15	5
710-091	Rough Stock Delay(2)	Media type time delay for fuser roll temperature	Range = 0 to 8 seconds	4
710-092	FsrTolrunC	Temp tolerance either side of run target temp . Ther-mistor C	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 40 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-093	FsrTolrunC(2)	Temp tolerance either side of run target temp . Ther-mistor C	Range = 0 to 2147483647 degrees C	45 ppm = 0 55 ppm = 30 65 ppm = 0 75 ppm = 0 90 ppm = 0
710-094	Fuser Web Cumulative	NvmFsrCumulativeWeb-Counter		0

Table 32 IOT NVM ID 710-001 to 710-095

NVM ID	NVM Name	NVM Description	Settings	Default
710-095	Fuser Web Cumulative (2)	NvmFsrCumulativeWebCounterType2		0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
711-001	Divert Enable	Actuates solenoid to divert sheet to output	Range = 200 to 2000ms	45 ppm = 800 55 ppm = 800 65 ppm = 620 75 ppm = 620 90 ppm = 620
711-002	OCTFullFilterPg-Count	OCT 90% full filter - page count	Range = 0 to 50 pages	30
711-003	OCTFullFilter-Time	OCT 90% full filter - time	Range = 0 to 5000ms	45 ppm = 4000 55 ppm = 2500 65 ppm = 2500 75 ppm = 2500 90 ppm = 2500
711-004	FinFinishTim	Finisher Finish Time	Range = 0 to 2147483647ms	0
711-005	FinPrepTim	Finisher Prep Time	Range = 0 to 2147483647ms	0
711-006	LCSS decurler support enable	Enable support for de-curler with 1 or 2k LCSS fitted.	Range = 0 to 1 0=Disabled 1=Enabled	0
711-007	LCSS FinReady Delay	LCSS finisher ready delay	Range = 0 to 5000ms	200
711-008	HCSS FinReady Delay	HCSS finisher ready delay	Range = 0 to 5000ms	100
711-009	HVF FinReady Delay	HVF finisher ready delay	Range = 0 to 5000ms	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
741-001	Print Rate	Product Configuration Code (Speed) Number of prints per minute	Range = 0 to 9 0 = A class PPM35/38: SIP Config code 35 1 = B class PPM45: SIP Config code 45 2 = B class PPM55: SIP Config code 55 3 = C class PPM65: SIP Config code 65 4 = C class PPM75: SIP Config code 75 5 = A class PPM32: SIP Config code 32 6 = C class PPM85: SIP Config code 85 7 = Unknown Speed 8 = B class PPM35: SIP Config code 36 9 = B class PPM40: SIP Config code 40	45 ppm = 0 55 ppm = 7 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-002	Process Speed	Process Speed. Speed at which sheets move through machine	Range = 160 to 500	45 ppm = 257 55 ppm = 257 65 ppm = 362 75 ppm = 362 90 ppm = 362
741-003	Bypass equipped	MSI Paper Tray - whether fitted or not	Range = 0 to 3	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-004	Top tray equipped	Top Tray - whether fitted or not	1= Yes, 0= No	0
741-005	OCT equipped	OCT - whether fitted or not	1= Yes, 0= No	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-006	ID	Controller Identity	Unknown	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
741-007	Printer language	0	Range = 0 to 0	0
741-008	Serial ID part 1	Serial Number Primary(msb) P3, P2, P1, P0	Range = 0 to 0	808464432
741-009	Serial ID part 2	Serial Number Secondary A A3, A2, A1, A0	Range = 0 to 0	808464432
741-010	Serial ID part 3	Serial Number Secondary B(lsb) B3, B2, B1, B0	Range = 0 to 0	808464394
741-011	Serial ID valid	Serial Number Valid	Range = 0 to 0	0
741-012	SW upgrade required	SW upgrade	Range = 0 to 2	0
741-013	Finisher degraded run enable	The external finisher runs in degraded mode	Range = 0 to 1	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-014	IntManCleanEnable	Interim manual charge scorotron cleaning enablement' flag	Range = 0 to 1 0=Disabled 1=Enabled	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-015	AutoCleanEnable	Auto charge scorotron cleaning enablement' flag	Range = 0 to 1 0=Disabled 1=Enabled	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-016	InactivityLimitIOT	Machine inactivity limit held on the IOT board.	Range = 120 to 4320 Minutes	45 ppm = 0 55 ppm = 300 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-017	Machine Model	Machine configuration setting machine model	Range = 0 to 9	0
741-18	Machine Type	Machine configuration setting machine type setting	Range = 0 to 4 0= Not set (Unknown) 1=Universal 2=DC 3=MF 4=Spare	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
741-019	T and D auto clean enable	Transfer/Detack auto clean enable flag	Range = 0 to 1 0=Disabled 1=Enabled	45 ppm = 0 55 ppm = 1 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-020	T and D home relaese timeout	T/DT Home Release Period	Range = 0 to 150ms	45 ppm = 0 55 ppm = 70 65 ppm = 0 75 ppm = 0 90 ppm = 0
741-021	Machine Quay	Machine Configuration Setting Machine Key	Range = 0 to 255. Set in manufacturing	49
741-022	SlowDownCorrect	Temp value to correct slowdown Ramp down time from High to Process Speed, used in error correction algorith Mode1	Range = 0 to 1000ms	45 ppm = 17 55 ppm = 17 65 ppm = 27 75 ppm = 27 90 ppm = 27
741-023	Paperless mode enable	Paperless mode can be tailored by entering the individual code for each paper tray that is required to be in paperless mode, followed by a machine POPO	Range = 0 to 31 0 = All trays will run in normal paper mode = 00000 (0). 1 = set tray 1 = 00001 (1). 2 = set tray 2 = 00010 (2). 3 = set tray 3 = 00100 (4). 4 = set tray 4 = 01000 (8). 5 = set bypass tray = 10000 (16). 6 = set all trays = 11111 (31).	0
741-024	MainMotRunUp	Main motor run up time	Range = 0 to 4000ms	400
741-025	PRMotRunUp	Photoreceptor motor run up time	Range = 0 to 4000ms	500
741-026	FsrTolstandby(2)	Temp tolerance either side of standby target temp	Range = 0 to 2147483647oC	45 ppm = 20 55 ppm = 15 65 ppm = 15 75 ppm = 15 90 ppm = 15
741-027	PFM software	PFM S/W version number		0
741-028	HCF software	HCF S/W version number		0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
741-029	Finisher software	Finisher S/W version number		0
741-030	ROS cout enable	ROS diagnostic message enable flag	Range = 0 to 1	0
741-031	Toner cartridge cout enable	Toner cartridge diagnostic message enable flag	Range = 0 to 1	0
741-032	Toner dispense cout enable	Toner dispense diagnostic message enable flag	Range = 0 to 1	0
741-033	Waste toner cout enable	Waste toner diagnostic message enable flag	Range = 0 to 1	0
741-034	T and H cout enable	Temp and humidity diagnostic message enable flag	Range = 0 to 1	0
741-035	XRU cout enable	P/R CRUM diagnostic message enable flag	Range = 0 to 1	0
741-036	FRU cout enable	Fuser CRUM diagnostic message enable flag	Range = 0 to 1	0
741-037	Leisus client cout enable	Leisus client diagnostic message enable flag	Range = 0 to 1	0
741-038	Leisus data cout enable	Leisus data diagnostic message enable flag	Range = 0 to 1	0
741-039	DC I/F cout enable	DC Interface diagnostic message enable flag	Range = 0 to 1	0
741-040	Fuser cout enable	Fuser diagnostic message enable flag	Range = 0 to 1	0
741-041	Interlocks cout enable	Interlocks diagnostic message enable flag	Range = 0 to 1	0
741-042	NOHAD couts enable	NOHAD diagnostic message enable flag	Range = 0 to 1	0
741-043	Paper path couts enable	Paper path diagnostic message enable flag	Range = 0 to 1	0
741-044	Controller couts enable	Main controller diagnostic message enable flag	Range = 0 to 1	0
741-045	CC couts enable	Component control diagnostic message enable flag	Range = 0 to 1	0
741-046	printer UI couts enable	Printer UI diagnostic message enable flag	Range = 0 to 1	0
741-047	Finisher couts enable	Finisher diagnostic message enable flag	Range = 0 to 1	0
741-048	PFM couts enable	PFM diagnostic message enable flag	Range = 0 to 1	0
741-049	NVM couts enable	NVM diagnostic message enable flag	Range = 0 to 1	0
741-050	Scheduler couts enable	Scheduler diagnostic message enable flag	Range = 0 to 1	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
741-051	Status couts enable	IOT status diagnostic message enable flag	Range = 0 to 1	0
741-052	ChargClean-CoutEnable	Charge Cleaner Cout Enable	Range = 0 to 1	0
741-053	Service Plan mirror	Service plan - CCS NVM mirrored value. Refer to CCS 606-269	0 = Sold 1 = Non Sold 2 = Third Party 3 = XeroxManagedSupplies 4 = Page Pack 5 = DMO Sold	3
741-054	Market Region mirror	Market Region - CCS NVM mirrored value. Refer to CCS 616-001	0 = US 1 = XCL(Canada) 2 = FX (Fuji Xerox Japan) 3 = FXAPO (Fuji Xerox Asian Pacific) 4 = ACO(Latin) 5 = RX(Europe) 6 = MRDmoEast 7 = MRDmoWest	0
742-001	VTFanOnInDuplex	Enable/disable vacuun transport fan continuously on during duplex printing	Range = 0 to 1 0=Disabled 1=Enabled	0
761-001	Laser Light Level	Laser light level 600dpi 2 beam ROS. Note: When altering settings, NVM 789-001 will need to be set to enable.	Range = 1500 to 6000mErgs / cm2	45 ppm = 1912 55 ppm = 1912 65 ppm = 1815 75 ppm = 1815 90 ppm = 1815
761-002	ROS Motor Timeout	Time after which ROS motor fault will be called	Range = 100 to 20000ms	5000
761-003	Laser enabled fault timeout	Time after which laser enabled not received calls a fault	Range = 100 to 5000ms	500
761-004	ExtendedRngRosEnable	For 32 & 35/38 ppm machines only: Flag to indicate which type of ROS is fitted.	Range = 0 to 1 0 = 3 to 6 Erg/cm2 range ROS 1 = 1.5 to 6 Erg/cm2 Extended range ROS	1
761-005	ROS Laser Scaler	Used to display the ROS Laser Light Level Scaler value held in the XRU CRUM.	0	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
761-006	ROS Laser Adj Nom	Used to display the ROS Laser Light Level Adjusted nominal.	Range = 750 to 9000	45 ppm = 1912 55 ppm = 1912 65 ppm = 1815 75 ppm = 1815 90 ppm = 1815
761-007	ROS Laser Adj Enable	Used to enable ros laser light level nominal adjustment.	Range = 0 to 1 0 = Disabled 1 = Enabled	1
761-008	IQA ROS Level Offset	ROS Level offset determined by the IQA routine	Range = -1500 to 1500	0
761-009	ROS IQ Factor	NvmRosImageQualityTrcFactor		0
770-001	SimpBuckleMSIstd	Simplex buckle for MSI specific standard stock	Range = 100 to 800ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
770-002	MSIStraySheet	Jam timer for stray sheets from msi	Range = 0 to 1000ms	0
770-003	AddToMSIPitchPeriod	Addition to normal MSI Pitch Period , Not to be used when low productivity finisher attached,	Range = 0 to 1000ms	45 ppm = 0 55 ppm = 0 65 ppm = 170 75 ppm = 290 90 ppm = 400
770-004	MSIFeedToPFMFeed	Delay from MSI Feed to PFM feed, to avoid Jam	Range = 0 to 1000ms	45 ppm = 250 55 ppm = 250 65 ppm = 172 75 ppm = 172 90 ppm = 172
771-001	Tray 1 stock size	Tray 1 Stock Size	Range = 1 to 15	11
771-002	T1StockLevel	PFM - Total number of steps Tray1 has been lifted since it was last closed - SAR	Range = 0 to 950 steps	0
771-003	T1StackHeightAdjust	PFM - Number of steps Tray 1 has to be lifted above the stack up sensor for optimum feed position - SAR	Range = 0 to 40 Steps	7
771-004	LeLateT1FeedSnsr	PFM - Maximum number of steps from T1 feed motor to LE@T1 Feeed sensor - Raises LELateToT1FeedSensor Fault - SAR	Range = 0 to 500 Steps	200
771-005	T1BuckleSize	PFM - Number of steps from LE @T1 Feed Sensor to start TAR motor - SAR	Range = 0 to 200 Steps	13

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
771-006	LeLateWaitPointT1-T2	PFM - Maximum Number of steps from Tray 1 TAR Nips to LE@WaitPointSensor - SAR	Range = 0 to 1400 Steps	1000
771-007	WaitPointStepsT1-T4	PFM - Number of Steps from LE @ waitpoint sensor to stop the PFM TAR1 motor - SAR	Range = 0 to 600 Steps	45 ppm = 240 55 ppm = 240 65 ppm = 434 75 ppm = 434 90 ppm = 434
771-008	ReleaseStepsT1-T4	PFM - Number of steps the PFM TAR motor should run after the release sheet command - SAR	Range = 0 to 2000 Steps	440
771-009	PreReleaseDistanceT1	PFM - Half stepping - number of steps for pre-sheet seperation	Range = 100 to 150 steps	130
771-010	TrayMediaCombiSwitch	PFM - Tray Media size sensing switch to alternate between old and new switch combinations	Range = 0 to 1 0 = Old combination 1 = New combination	1
771-011	PFM Wait Point Adjust	Paper feed module wait point adjustment	Range = 0 to 20ms	45 ppm = 5 55 ppm = 5 65 ppm = 9 75 ppm = 9 90 ppm = 9
771-012	PFM Release Adjust	Paper feed module release adjustment (Restart)	Range = 0 to 20ms	15
771-013	PFM Release timer	PFM release sheet timer	Range = 0 to 300	45 ppm = 40 55 ppm = 40 65 ppm = 0 75 ppm = 0 90 ppm = 0
772-001	Tray 2 stock size	Tray 2 Stock Size	Range = 1 to 15	11
772-002	T2StockLevel	PFM - Total number of steps Tray2 has been lifted since it was last closed - SAR	Range = 0 to 950	0
772-003	T2StackHeightAdjust	PFM - Number of steps Tray 2 has to be lifted above the stack up sensor for optimum feed position - SAR	Range = 0 to 40 Steps	7

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
772-004	LeLateT2FeedSnsr	PFM - Maximum number of steps from T2 feed motor to LE@T2 Feeed sensor - Raises LELateToT2FeedSensor Fault - SAR	Range = 0 to 500 steps	200
772-005	T2BuckleSize	PFM - Number of steps from LE @T2 Feed Sensor to start TAR motor - SAR	Range = 0 to 200 Steps	13
772-006	LeLateT1FromT2	PFM - Maximum number of steps from Tray 2 TAR Nips to LE@T1 Feed sensor - SAR	Range = 0 to 1200 Steps	940
772-007	LeLateT2FromT3-T4	PFM - Number of steps for the LE of HCF sheet to reach the T2 feed sensor - SAR	Range = 0 to 2000 Steps	1400
773-001	Tray 3 stock size	Tray 3 stock size	Range = 1 to 15	11
773-002	Tray 3 stock level	Tray 3 stock level	Range = 0 to 255	255
773-003	T3StackHeightAdjust	HCF - Number of steps Tray 3 has to be lifted above the stack up sensor for optimum feed position	Range = 0 to 100 Steps	50
773-004	LeLateT3FeedSnsr	HCF - Maximum number of steps from T3 feed motor to LE@T3 Feed sensor - Raises LELateToT3FeedSensor Fault	Range = 0 to 700 Steps	350
773-005	T3BuckleSize	HCF - Size of De-skew buckle	Range = 0 to 15 Steps	3
773-006	T4BuckleSize	HCF - Size of De-skew buckle	Range = 0 to 15 Steps	10
773-007	LeLateT4FromT3	HCF - Maximum number of steps from Tray 3 TAR Nips to LE@T4 Feed sensor	Range = 0 to 2000 Steps	1000
773-008	T3FeSenClutchOffStps	HCF (FAR) Numer of steps from the LE at feed sensor to the clutch disable - TE at nudger A4LEF	Range = 0 to 2000 steps	260
773-009	HCF wait point 3 steps	HCF (FAR) Number of steps from TAR4 Sensor to the HCF Wait Point	Range = 0 to 2000 steps	45 ppm = 180 55 ppm = 180 65 ppm = 180 75 ppm = 180 90 ppm = 220

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
773-010	T3WaitPtRelDelTime	HCF (FAR) Minimum Delay time from Release sheet PFM (sheet ahead) to sheet being released from HCF Wait Point	Range = 0 to 500ms	45 ppm = 150 55 ppm = 150 65 ppm = 80 75 ppm = 80 90 ppm = 80
773-011	HCF Feed motor off steps	HCF (FAR) Number of steps when there are no more feed requests from the clutch disable event that the feed motor is turned off	Range = 0 to 1000 steps	100
773-012	Sens2HiSpeedCompStps	Reserved for HCF(FAR) Feeder development	Range = 0 to 200 steps	0
773-013	HCF Feed motor velocity	HCF (FAR) Nominal feed motor velocity	Range = 200 to 1000mm/s	525
773-014	HCF Motor nominal speed	HCF (FAR) Nominal HCF Transport motor velocity	Range = 100 to 1000mm/s	525
773-015	HCF Match PFM speed	HCF (FAR) Speed that HCF Transport Motor will use to match the required PFM Process speed	Range = 100 to 1000mm/s	45 ppm = 265 55 ppm = 265 65 ppm = 373 75 ppm = 373 90 ppm = 373
773-016	HCF Match PFM high speed	HCF (FAR) Speed that HCF Transport Motor will use to match the required PFM Hi speed	Range = 100 to 1000mm/s	45 ppm = 265 55 ppm = 265 65 ppm = 685 75 ppm = 685 90 ppm = 685
773-017	HCF High speed	HCF (FAR) HCF Motor high speed to enable catch up and productivity.	Range = 200 to 1000mm/s	45 ppm = 525 55 ppm = 525 65 ppm = 700 75 ppm = 700 90 ppm = 844
773-018	HCF Tray 3 feed wait point steps	Number of steps past the Tray3 TAR Sensor to start ramping down the feed motor	Range = 0 to 1000 steps	0
773-019	Feed3AcqDelTime	Tray 3 Delay to start sheet acquire from the tray	Range = 0 to 2000ms	45 ppm = 350 55 ppm = 250 65 ppm = 100 75 ppm = 0, 90 ppm = 0
773-020	T3SheetReadyTime	Delay before sheet ready is sent tray 3	Range = 0 to 2000ms	140
773-021	T3DelayToHiSpeedStep	Number of feed steps from T3 TAR to the TAR motor going to High speed	Range = 0 to 2000 steps	260

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
773-022	LElateToFeed3Time	Max time Tray3 Clutch enable to LE at Tray 3 Feed sensor	Range = 0 to 3000ms	500
773-023	LElateToTAR3Time	Max time Tray3 Clutch enable to LE at Tray 3 TAR sensor	Range = 0 to 6000ms	1000
773-024	T3LElateToTAR4 Time	Max time from Tray 3 Feed Motor start, when the sheet is at the Horzontal wait point to the LE at the TAR 4 Sensor	Range = 0 to 6000ms	40 ppm = 550 45 ppm = 550 55 ppm = 550 65 ppm = 500 75 ppm = 500 90 ppm = 500
773-025	HCF purge enable	HCF(Far) Purge Enable - moved sheets to the left hand door for easier clearance	Range = 0 to 1 0=Disabled 1=Enabled	1
773-026	HCF feed retry attempts	HCF(FAR) Number of feed retry attempts	Range = 0 to 10 0 = Off 1 = 1 feed attempt 2 = 2 feed attempts 3 = 2 feed attempts etc	3
773-027	HCF NVM 7	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-028	HCF NVM 8	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-029	HCF NVM 14	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-030	HCF NVM 15	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-031	HCF NVM 16	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-032	HCF NVM 17	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-033	HCF NVM 18	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-034	HCF NVM 19	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-035	HCF NVM 20	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-036	HCF NVM 21	Reserved for HCF (FAR)	Range = 0 to 100000	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
773-037	HCF NVM 22	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-038	HCF NVM 23	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-039	HCF NVM 24	Reserved for HCF (FAR)	Range = 0 to 100000	0
773-040	HCF NVM 25	Reserved for HCF (FAR)	Range = 0 to 100000	0
774-001	Tray 4 Stock Size	Tray 4 Stock Size	Range = 1 to 15	11
774-002	Tray 4 stock level	Tray 4 stock level	Range = 0 to 255	255
774-003	T4StackHeightAdjust	HCF - Number of steps Tray 4 has to be lifted above the stack up sensor for optimum feed position	Range = 0 to 100 Steps	50
774-004	LeLateT4FeedSnsr	HCF - Maximum number of steps from T4 feed motor to LE@T4 Feeed sensor - Raises LELateToT4FeedSensor Fault	Range = 0 to 800 steps	400
774-005	ReleaseStepsT3-T4	HCF - Number of steps the HCF TAR 4 motor should run after the release sheet command	Range = 5 to 15 Steps	5
774-006	WaitPointStepsT3-T4	HCF - Number of Steps from T4 feed sensor to stop position	Range = 30 to 100 steps	45 ppm = 40 55 ppm = 40 65 ppm = 53 75 ppm = 53 90 ppm = 53
774-007	FeedCL4AcqDelayTime	HCF (FAR) Delay before feed clutch enabled to acquire a sheet	Range = 0 to 500ms	45 ppm = 250 55 ppm = 50 65 ppm = 100 75 ppm = 60 90 ppm = 0
773-008	HCF wait point 4 steps	Reserved for HCF(FAR) Feeder development	Range = 0 to 2000 steps	45 ppm = 140 55 ppm = 140 65 ppm = 200 75 ppm = 200 90 ppm = 230
773-009	T4ExSenClutchOffStps	Reserved for HCF(FAR) Feeder development	Range = 0 to 1000 steps	275
773-010	T4RampSteps	Reserved for HCF(FAR) Feeder development	Range = 0 to 500 steps	60

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
773-011	T4WaitPtRelDelTime	HCF (FAR) Minimum Delay time from Release sheet PFM (sheet ahead) to sheet being released from HCF Wait Point	Range = 0 to 500ms	45 ppm = 250 55 ppm = 150 65 ppm = 110 75 ppm = 110 90 ppm = 80
774-012	DelayTAR4SnsrClrStps	HCF (FAR) Step delay from TE at TAR 4 sensor to allow the sheet TE to be clear of TAR4 Nip before the TAR motor can change speeds.	Range = 0 to 500 steps	23
774-013	LElateToFeed4Time	Max time Tray4 Clutch enable to LE at Tray 4 Feed sensor	Range = 0 to 3000ms	500
774-014	LElateToTAR4Time	Max time Tray4 Clutch enable to LE at Tray4 TAR sensor	Range = 0 to 6000ms	600
774-015	Tray 4 sheet ready delay	Tray4SheetReadyDelay	Range = 0 to 5000ms	0
774-016	Tray 4 pre-acquire time	T4PreAcquireTime	Range = 0 to 5000	150
774-017	HCF NVM 31	HCFNVM31	Range = 0 to 100000	0
774-018	HCF NVM 32	HCFNVM32	Range = 0 to 100000	0
774-019	HCF NVM 33	HCFNVM33	Range = 0 to 100000	0
774-020	HCF NVM 34	HCFNVM34	Range = 0 to 100000	0
774-021	HCF NVM 35	HCFNVM35	Range = 0 to 100000	0
774-022	HCF NVM 45	HCFNVM45	Range = 0 to 100000	0
774-023	NvmFeedMotor-OnDelay	NvmFeedMotorOnDelay	Range = 0 to 100000	0
774-024	NvmFeedMotor-SlowSpeed	NvmFeedMotorSlowSpeed	Range = 0 to 100000	0
774-025	HCF NVM 52	HCFNVM52	Range = 0 to 100000	0
774-026	HCF NVM 53	HCFNVM53	Range = 0 to 100000	0
774-027	HCF NVM 54	HCFNVM54	Range = 0 to 100000	0
774-028	HCF NVM 55	HCFNVM55	Range = 0 to 100000	0

Table 33 IOT NVM ID 711-001 to 775-004

NVM ID	NVM Name	NVM Description	Settings	Default
774-029	HCF NVM 56	HCFNVM56	Range = 0 to 100000	0
774-030	HCF NVM 57	HCFNVM57	Range = 0 to 100000	0
774-031	HCF NVM 58	HCFNVM58	Range = 0 to 100000	0
774-032	HCF NVM 59	HCFNVM59	Range = 0 to 100000	0
774-033	HCF NVM 60	HCFNVM60	Range = 0 to 100000	0
775-001	ReleaseStepsT5	Distance from waitpoint to TAR motor releasing sheet	Range = 0 to 1000 steps	116
775-002	LeLateT5FeedSnsr	Steps allowed before a sheet is declared a misfeed. LE late to feed sensor.	Range = 0 to 800 steps	500
775-003	LeLateWaitPointT5	Number of tar motor steps allowed from time LE at TAR nips to handover before jam declared	Range = 0 to 2000 steps	45 ppm = 1052 55 ppm = 1052 65 ppm = 724 75 ppm = 724 90 ppm = 724
775-004	WaitPointStepsT5	Number of tar motor steps from time LE at prehan-dover to handover point	Range = 0 to 500 steps	45 ppm = 115 55 ppm = 115 65 ppm = 223 75 ppm = 223 90 ppm = 223

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-004	Pitch Tick Simp Mode 1	IOT paper path timing pitch tick setting - simplex mode 1	Range = 400 to 3500ms	45 ppm =1220 55 ppm =1090 65 ppm = 920 75 ppm = 800 90 ppm = 690
781-005	Lead Edge Threshold	NVM lead edge threshold	Range = 1 to 1ms	1
781-006	Trail Edge Threshold	NVM trail edgethreshold	Range = 0 to 4ms	45 ppm = 4 55 ppm = 4 65 ppm = 1 75 ppm = 1 90 ppm = 1

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-007	LeRegSnrTo-ClutchOn	Simplex buckle	Range = 100 to 900ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-008	TimAfterSenRampDwnM1	Nominal time after hitting sensor that speed ramps down (mode 1)	Range = 0 to 200ms	45 ppm = 20 55 ppm = 20 65 ppm = 130 75 ppm = 130 90 ppm = 130
781-009	TeDupSnrTo-ClutchOff	Time after paper reaches sensor to switch clutch off	Range = 100 to 1100ms	45 ppm = 610 55 ppm = 610 65 ppm = 600 75 ppm = 600 90 ppm = 600
781-010	LeRegSnrTo-ClutchOff	LE at reg sensor to clutch off	Range = 0 to 1000ms	45 ppm = 350 55 ppm = 350 65 ppm = 235 75 ppm = 235 90 ppm = 235
781-011	LeDupSnrTo-ClutchOff	LE at dup sensor to clutch off Mode1	Range = 0 to 1000ms	45 ppm = 240 55 ppm = 240 65 ppm = 205 75 ppm = 205 90 ppm = 205
781-012	LeDupSnrTo-ClOnNom	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
781-013	ExitSenToOfset-MotOn	Time from exit sensor to offset tray motor on	Range = 0 to 3000ms	0
781-014	PostFsrTo-TopTrayMot	Timing from post fuser to top tray motor (forward)	Range = 100 to 2000ms	45 ppm = 1060 55 ppm = 1060 65 ppm = 750 75 ppm = 750 90 ppm = 750
781-015	TopTrayMot-ToPostFsr	Timing from top tray motor to post fuser	Range = 100 to 3000ms	45 ppm = 1360 55 ppm = 1360 65 ppm = 750 75 ppm = 750 90 ppm = 750
781-016	RelShtMsiToL-eRegJam	Release sheet to reg - MSI jam window to indicate LE of sheet is late	Range = 200 to 1200ms	45 ppm = 440 55 ppm = 440 65 ppm = 350 75 ppm = 350 90 ppm = 350

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-017	PFMJamWindow	Release sheet reg - PFM jam window to indicate LE of sheet is late	Range = 100 to 800ms	45 ppm = 280 55 ppm = 280 65 ppm = 250 75 ppm = 250 90 ppm = 250
781-018	ClutchOnPostFsr-Jam	Clutch on to post fuser jam window to indicate LE of sheet is late	Range = 600 to 1850ms	45 ppm = 980 55 ppm = 980 65 ppm = 700 75 ppm = 700 90 ppm = 700
781-019	LEPostFsrExit-JamWin	LE post fuser to exit jam window to indicate LE of sheet is late	Range = 360 to 1100ms	45 ppm = 680 55 ppm = 680 65 ppm = 490 75 ppm = 490 90 ppm = 490
781-020	TEPostFsrExit-JamWin	TE post fuser to exit jam window to indicate TE of sheet is late	Range = 500 to 1700ms	45 ppm = 1060 55 ppm = 1060 65 ppm = 760 75 ppm = 760 90 ppm = 760
781-021	LEPostFsrExit-LateWin	LE post fuser to top exit jam window to indicate LE of sheet is late	Range = 1000 to 3300ms	45 ppm = 2000 55 ppm = 2000 65 ppm = 1420 75 ppm = 1420 90 ppm = 1420
781-022	LEPostFsrTE-LateWin	LE Post Fuser to TE post Fuser jam window to indicate TE of sheet is late	Range = 0 to 500ms	45 ppm = 170 55 ppm = 170 65 ppm = 130 75 ppm = 130 90 ppm = 130
781-023	LeIotExtTEIotExt-Late	LE IOT exit to TE IOT exit jam window to indicate LE/TE late	Range = 90 to 350ms	45 ppm = 170 55 ppm = 170 65 ppm = 130 75 ppm = 130 90 ppm = 130
781-024	LeTopExt-TETopExtWin	LE top exit to TE top exit jam window to indicate LE/TE late	Range = 90 to 350ms	45 ppm = 170 55 ppm = 170 65 ppm = 130 75 ppm = 130 90 ppm = 130
781-025	ResShtToLeDupLtJam3	Restart sheet to duplex jam window to indicate LE of sheet is late in mode 3	Range = 200 to 2556ms	45 ppm = 1670 55 ppm = 1670 65 ppm = 900 75 ppm = 900 90 ppm = 900

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-026	Simplex buckle transparency	Simplex buckle for transparency stock	Range = 100 to 900ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-027	Simplex buckle envelopes	Simplex buckle for envelopes	Range = 100 to 900ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-028	Simplex buckle labels	Simplex buckle for labels	Range = 100 to 900ms	45 ppm = 420 55 ppm = 420 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-029	Simplex buckle cardstock	Simplex buckle for card stock	Range = 100 to 900ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-030	PitchTickSimpMode2	IOT Paper path timing pitch tick setting - simplex mode 2	Range = 1000 to 3500ms	45 ppm = 1670 55 ppm = 1670 65 ppm = 1220 75 ppm = 1220 90 ppm = 1110
781-031	PitchTickSimpMode3	IOT Paper Path Timing Pitch Tick Setting - Simplex Mode 3	Range = 1000 to 3500ms	45 ppm = 1930 55 ppm = 1930 65 ppm = 1430 75 ppm = 1430 90 ppm = 1290
781-032	TabLength	Tab Time	Range = 0 to 1000ms	45 ppm = 50 55 ppm = 50 65 ppm = 40 75 ppm = 40 90 ppm = 40
781-033	TEFsrExitJamWinSiz2	85ppm Only - TE post fuser to exit jam window to indicate TE of sheet is late Size 2 sheets >185mm	Range = 400 to 1700ms	45 ppm = 1060 55 ppm = 1060 65 ppm = 640 75 ppm = 640 90 ppm = 640
781-034	TELateToRegClutchOn	TE late to reg after reg clutch on	Range = 0 to 1000ms	45 ppm = 250 55 ppm = 250 65 ppm = 150 75 ppm = 150 90 ppm = 150

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-035	RegClutchOnToTELate	Reg clutch on to TE late to dup sensor	Range = 0 to 1000ms	45 ppm = 190 55 ppm = 190 65 ppm = 350 75 ppm = 350 90 ppm = 350
781-036	PitchTickSimpMode5	IOT Paper path timing pitch tick setting -simplex mode 5 - transparency - pitch mode 1 simp	Range = 600 to 3500ms	45 ppm = 1800 55 ppm = 1800 65 ppm = 1300 75 ppm = 1300 90 ppm = 1280
781-037	PitchTickSimpMode6	IOT Paper path timing pitch tick setting -simplex mode 6 - envelope pitch simp only	Range = 1000 to 3500ms	45 ppm = 1700 55 ppm = 1700 65 ppm = 1210 75 ppm = 1210 90 ppm = 1210
781-038	PitchTickDupMode5	IOT Paper path timing pitch tick setting - duplex mode 5 - transparency - pitch mode 1 simp	Range = 600 to 3500ms	45 ppm = 1090 55 ppm = 1090 65 ppm = 800 75 ppm = 800 90 ppm = 690
781-039	PitchTickDupMode6	IOT Paper path timing pitch tick setting - duplex mode 6 - envelope pitch simp	Range = 1000 to 3500ms	1090
781-040	RestartDupM5Txspar	IOT transparency timing Restart sheet into duplex - Mode5 - Transparency - pitch mode 1 simp	Range = 0 to 2500ms	45 ppm = 927 55 ppm = 927 65 ppm = 985 75 ppm = 985 90 ppm = 697
781-041	RestartDupM6Envelope	IOT Envelopes timing Restart sheet into duplex - Mode6 - Envelope pitch mode1	Range = 0 to 2500ms	45 ppm = 927 55 ppm = 927 65 ppm = 985 75 ppm = 985 90 ppm = 697
781-042	TERegFsrExit	START Trail Edge Detection Reg, fuser+exit snr = paper-size-NVM from LE	Range = 0 to 1000ms	45 ppm = 40 55 ppm = 40 65 ppm = 70 75 ppm = 70 90 ppm = 70
781-043	PitchWinRelDel	Pitch window release delay	Range = 0 to 1000ms	45 ppm = 320 55 ppm = 320 65 ppm = 227 75 ppm = 227 90 ppm = 227
781-044	SplitNipControlS1	Split nip control for 1st sheet .	Range = 0 to 350mm	210

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-045	TimToDelSimp	IOT Time to deliver: simplex	Range = 0 to 5000ms	45 ppm = 1961 55 ppm = 1961 65 ppm = 1429 75 ppm = 1429 90 ppm = 1429
781-046	TimToDelInvert1	IOT Time to deliver: invert (simplex + paper length) size 1 < 185mm	Range = 0 to 5000ms	45 ppm = 2247 55 ppm = 2247 65 ppm = 1710 75 ppm = 1710 90 ppm = 1710
781-047	TimToDelSimp3	IOT Time to deliver: duplex (simplex + 3 pitches)	Range = 0 to 5000ms	45 ppm = 1961 55 ppm = 1961 65 ppm = 1429 75 ppm = 1429 90 ppm = 1432
781-048	LESenToMSIRel	Time from release to LE at Reg Sensor	Range = 0 to 2000ms	45 ppm = 364 55 ppm = 364 65 ppm = 260 75 ppm = 260 90 ppm = 260
781-049	TEPstFsrExitJam WinS2	TE post fuser to exit jam window to indicate TE of sheet is late Paper Size <185mm Not to be used on Sorcery	Range = 400 to 1700 steps	640
783-050	LeLtInvFrmLeP-stFsr	LE post fuser to LE Invert sensor to indicate LE of sheet is late	Range = 0 to 300 steps	45 ppm = 130 55 ppm = 130 65 ppm = 170 75 ppm = 170 90 ppm = 170
781-051	TriRolOpenFrmF-srSnr	Tri roll split nip open from TE at Post Fuser Sensor	Range = 0 to 200 steps	0
781-052	TriRolCloseFrm-InvOff	Tri roll split nip closed from Invert motor off forward.	Range = 0 to 200 steps	45 ppm = 0 55 ppm = 0 65 ppm = 30 75 ppm = 30 90 ppm = 30
781-053	PitchTickSimpMode7	IOT Paper path timing pitch tick setting -simplex mode 7	Range = 700 to 3500ms	45 ppm = 2180 55 ppm = 2180 65 ppm = 920 75 ppm = 800 90 ppm = 800
781-054	PitchTickDupMode7	IOT Paper path timing pitch tick setting - duplex mode 7	Range = 600 to 3500ms	45 ppm = 1090 55 ppm = 1090 65 ppm = 800 75 ppm = 800 90 ppm = 690

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-055	TeRegClutch-OffTransp	Ensures sheet clear or reg nips before turning clutch off	Range = 100 to 1200ms	45 ppm = 610 55 ppm = 610 65 ppm = 700 75 ppm = 700 90 ppm = 700
781-056	SimpBuckleR-oughStock	Simplex buckle for Rough Stock	Range = 100 to 900ms	45 ppm = 440 55 ppm = 440 65 ppm = 290 75 ppm = 290 90 ppm = 290
781-057	PitchSimpMode1 Alt	IOT Paper path timing pitch tick setting - simplex mode 1.	Range = 400 to 3500ms	45 ppm = 1220 55 ppm = 1090 65 ppm = 920 75 ppm = 800 90 ppm = 690
781-058	PitchSimpMode2 Alt	IOT Paper path timing pitch tick setting - simplex mode 2	Range = 1000 to 3500ms	45 ppm = 1670 55 ppm = 1670 65 ppm = 1190 75 ppm = 1190 90 ppm = 1190
781-059	PitchSimpMode3 Alt	IOT Paper path timing pitch tick setting - simplex mode 3	Range = 1000 to 3500ms	45 ppm = 1930 55 ppm = 1930 65 ppm = 1380 75 ppm = 1380 90 ppm = 1380
781-060	PitchSimpMode4 Alt	IOT Paper path timing pitch tick setting - simplex mode 4 - sef heavyweight invert pitch	Range = 1000 to 4000ms	45 ppm = 2500 55 ppm = 2500 65 ppm = 1640 75 ppm = 1640 90 ppm = 1640
781-061	PitchSimpMode5 Alt	IOT Paper path timing pitch tick setting - simplex mode 5 - transparency - pitch mode 1 simp	Range = 600 to 3500ms	45 ppm = 1800 55 ppm = 1800 65 ppm = 1040 75 ppm = 1040 90 ppm = 1280
781-062	PitchSimpMode6 Alt	IOT Paper path timing pitch tick setting - simplex mode 6 - envelope pitch simp only	Range = 1000 to 3500ms	45 ppm = 1700 55 ppm = 1700 65 ppm = 1210 75 ppm = 1210 90 ppm = 1210
781-063	PitchSimpMode7 Alt	IOT Paper path timing pitch tick setting - simplex mode 7	Range = 700 to 3500ms	45 ppm = 2180 55 ppm = 2180 65 ppm = 800 75 ppm = 800 90 ppm = 800

Table 34 IOT NVM ID 781-004 to 782-001

NVM ID	NVM Name	NVM Description	Settings	Default
781-064	TeRegSnrTo-CltchOfEvl	Ensures sheet clear or reg nips before turning clutch off, when Media Type is Envelopes	Range = 100 to 1500ms	45 ppm = 843 55 ppm = 843 65 ppm = 475 75 ppm = 475 90 ppm = 475
781-065	LeRegSnrTo-ClutchOffH	This NVM is for 90ppm only. NVM to be added to 8 - 177 LeRegSnrToClutchOff	Range = 0 to 50ms	45 ppm = 0 55 ppm = 0 65 ppm = 0 75 ppm = 0 90 ppm = 10
781-066	TeRegSnrTo-ClutchOffH	This NVM is for 90ppm only. NVM to be added to 8 - 154 TeRegSnrToClutchOff	Range = 0 to 200 ms	45 ppm = 0 55 ppm = 0 65 ppm = 0 75 ppm = 0 90 ppm = 112
781-067	NVMLvfPrep-TimeAdjust	This NVM is used to adjust the LVF prep time supplied by the LVF	Range = -300 to 300ms	0
782-001	LESenToPFMRel	Time from PFM release to LE at Reg sesnor	Range = 0 to 2000ms	45 ppm = 122 55 ppm = 122 65 ppm = 61 75 ppm = 61 90 ppm = 61

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-001	InvMotOnFwd	Inverter motor on forward	Range = 0 to 1000ms	45 ppm = 600 55 ppm = 600 65 ppm = 0 75 ppm = 0 90 ppm = 0
783-002	TePFsToInvMot-OffSimp	Inverter motor off stop position (simplex)	Range = 0 to 800ms	45 ppm = 360 55 ppm = 360 65 ppm = 0 75 ppm = 0 90 ppm = 0
783-003	EngNipTo-MovSheet	Engages nips to move sheet into inverter path	Range = 0 to 400ms	45 ppm = 130 55 ppm = 130 65 ppm = 10 75 ppm = 10 90 ppm = 10

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-004	InvMotOn-RevOpen	Inverter motor on reverse until open	Range = 100 to 340ms	45 ppm = 180 55 ppm = 180 65 ppm = 140 75 ppm = 140 90 ppm = 140
783-005	InvMotOnFwd85	Duplicate of 60 - use for 85ppm - From LE New Invert Sensor	Range = 200 to 2000ms	45 ppm = 600 55 ppm = 600 65 ppm = 330 75 ppm = 330 90 ppm = 330
783-006	InvMotFwdSto-pRev	Time for inverter motor to go forward, then stop, then to reverse	Range = 36 to 80ms	45 ppm = 50 55 ppm = 50 65 ppm = 66 75 ppm = 66 90 ppm = 66
783-007	LeDupSnrTo-ClhOnAct	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
783-008	SyncToRegClu-tOnDup	Duplex registration mode 1	Range = 100 to 380ms	45 ppm = 219 55 ppm = 219 65 ppm = 154 75 ppm = 154 90 ppm = 154
783-009	PitchSyncToDup-MotOn	Time to switch duplex motor on	Range = 10 to 60ms	30
783-010	LeFsrInvMo-tOnDup	Time to turn on inverter motor after LE leaves fuser (duplex)	Range = 0 to 1000ms	45 ppm = 600 55 ppm = 600 65 ppm = 0 75 ppm = 0 90 ppm = 0
783-011	TePFsrToInvMot-OffDup	Time to turn off inverter motor after TE leaves fuser (duplex)	Range = 0 to 1200ms	45 ppm = 510 55 ppm = 510 65 ppm = 0 75 ppm = 0 90 ppm = 0
783-012	LeNipClosedDup	Time between trail edge and nip closed (duplex)	Range = 0 to 400ms	45 ppm = 130 55 ppm = 130 65 ppm = 0 75 ppm = 0 90 ppm = 0
783-013	NipOpenInvMotRevM1	Time for nip to open after inverter motor starts to reverse (duplex - mode 1)	Range = 10 to 1000ms	45 ppm = 400 55 ppm = 400 65 ppm = 240 75 ppm = 240 90 ppm = 240

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-014	InvMotFwdToRevD1	IOT paper path timing Restart sheet into duplex (mode 1) Sheets >185mm size 2	Range = 0 to 2500ms	45 ppm = 927 55 ppm = 927 65 ppm = 985 75 ppm = 985 90 ppm = 697
783-015	NipOpenInvMotRevM3	Time for nip to open after inverter motor starts to reverse (duplex - mode 3)	Range = 10 to 2000ms	45 ppm = 900 55 ppm = 900 65 ppm = 640 75 ppm = 640 90 ppm = 640
783-016	InvMotFwdToRevD3	IOT paper path timing Restart sheet into duplex for mode 3	Range = 100 to 5000ms	45 ppm = 2631 55 ppm = 2631 65 ppm = 2108 75 ppm = 2108 90 ppm = 1725
783-017	RstDupJamWindowM1	Restart sheet to duplex jam window to indicate le of sheet is late in mode 1	Range = 200 to 1500ms	45 ppm = 690 55 ppm = 690 65 ppm = 500 75 ppm = 500 90 ppm = 500
783-018	InvMotFwdToRevD2	IOT Paper path timing restart sheet into duplex for mode 2	Range = 100 to 4000ms	45 ppm = 2130 55 ppm = 2130 65 ppm = 1478 75 ppm = 1478 90 ppm = 1185
783-019	NipOpenInvMotRevM2	Time for nip to open after inverter motor starts to reverse (duplex - mode 2)	Range = 10 to 1600ms	45 ppm = 900 55 ppm = 900 65 ppm = 240 75 ppm = 240 90 ppm = 240
783-020	qTeInvSnrToMotOfSmpS1	Duplicate of 61 - user for 85ppm - Inverter motor off stop position (simplex) From TE invert Sensor paper sizes < 185mm	Range = 0 to 800ms	45 ppm = 360 55 ppm = 360 65 ppm = 200 75 ppm = 200 90 ppm = 200
783-021	RstDupJamWindowM2	Restart sheet to duplex jam window to indicate LE of sheet is late in mode 2	Range = 200 to 3000ms	45 ppm = 1340 55 ppm = 1340 65 ppm = 900 75 ppm = 900 90 ppm = 900
783-022	LeInvSnrMotOn-FrwdDup	Duplicate of 74 - For 85ppm only - Time to turn on inverter motor after LE leaves fuser (duplex) From LE New Invert Sensor	Range = 300 to 1000ms	45 ppm = 600 55 ppm = 600 65 ppm = 330 75 ppm = 330 90 ppm = 330

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-023	TeInvSnrInvOfDupSiz1	Duplicate of 75 - For 85ppm only - Time to turn off inverter motor after TE leaves fuser(duplex) Description Incorrect Time to turn off invert motor off after TE leaves Invert sensor for sheets <185mm & >216mm	Range = 200 to 1200ms	45 ppm = 510 55 ppm = 510 65 ppm = 295 75 ppm = 295 90 ppm = 295
783-024	PitchTickDupMode1	IOT Paper path timing pitch tick setting - duplex mode 1	Range = 600 to 3500ms	45 ppm = 1090 55 ppm = 1090 65 ppm = 800 75 ppm = 800 90 ppm = 690
783-025	PitchTickDupMode2	IOT Paper path timing pitch tick setting - duplex mode 2	Range = 1000 to 3500ms	45 ppm = 1670 55 ppm = 1670 65 ppm = 1220 75 ppm = 1220 90 ppm = 1110
783-026	PitchTickDupMode3	IOT Paper Path Timing Pitch Tick Setting - Duplex Mode 3	Range = 1000 to 3500	45 ppm = 1930 55 ppm = 1930 65 ppm = 1430 75 ppm = 1430 90 ppm = 1290
783-027	InvMotRevDupMotM1	NvmInvMotReverseToDup-MotSpeedup	Range = 0 to 200ms	0
783-028	InvMotRevDupMotM2	NvmInvMotReverseToDup MotSpeedupMode2	Range = 0 to 2000ms	45 ppm = 820 55 ppm = 820 65 ppm = 550 75 ppm = 550 90 ppm = 550
783-029	InvMotRevDupMotM3	NvmInvMotReverseToDup MotSpeedupMode3	Range = 0 to 2000ms	45 ppm = 1230 55 ppm = 1230 65 ppm = 550 75 ppm = 550 90 ppm = 550
783-030	InvMotRevDupMotM4	NvmInvMotReverseToDup MotSpeedupMode4 - SEF Heavyweight invert only pitch mode 2	Range = 0 to 2000ms	45 ppm = 820 55 ppm = 820 65 ppm = 550 75 ppm = 550 90 ppm = 550
783-031	PitchTickSimpMode4	IOT Paper path timing pitch tick setting -simplex mode 4 - sef heavyweight invert pitch	Range = 1000 to 4000ms	45 ppm = 2500 55 ppm = 2500 65 ppm = 1880 75 ppm = 1880 90 ppm = 1640

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-032	PitchTickDupMode4	IOT Paper path timing pitch tick setting - duplex mode 4 - sef heavyweight invert only pitch	Range = 1000 to 3500ms	45 ppm = 1670 55 ppm = 1670 65 ppm = 1220 75 ppm = 1220 90 ppm = 1110
783-033	InvMotFwdToRevD4	IOT Paper path timing restart sheet into duplex for mode 4	Range = 100 to 4000ms	45 ppm = 2130 55 ppm = 2130 65 ppm = 1478 75 ppm = 1478 90 ppm = 1185
783-034	NipOpenInvMotRevM4	Time for nip to open after inverter motor starts to reverse (duplex - mode 4) - SEF Heavyweight invert only pitch	Range = 10 to 1600ms	45 ppm = 900 55 ppm = 900 65 ppm = 640 75 ppm = 640 90 ppm = 640
783-035	ResShtToLeDupLtJam4	Restart sheet to duplex jam window to indicate LE of sheet is late in mode 4 - SEF Heavyweight invert only pitch mode 2	Range = 200 to 3000ms	45 ppm = 1340 55 ppm = 1340 65 ppm = 900 75 ppm = 900 90 ppm = 900
783-036	NipOpenInvMotRevM5	Time for nip to open after inverter motor starts to reverse (duplex - mode 5) Transparencies - Transparency - pitch mode 1 simp	Range = 10 to 1000ms	45 ppm = 400 55 ppm = 400 65 ppm = 240 75 ppm = 240 90 ppm = 240
783-037	NipOpenInvMotRevM6	Time for nip to open after inverter motor starts to reverse (duplex - mode 6) Envelopes pitch simp only	Range = 10 to 1000ms	45 ppm = 400 55 ppm = 400 65 ppm = 240 75 ppm = 240 90 ppm = 240
783-038	InvMotRevDupMotM5	NvmInvMotReverseToDupMotSpeedupMode5 (Transparencies) - pitch mode 1 simp	Range = 0 to 200ms	0
783-039	InvMotRevDupMotM6	NvmInvMotReverseToDupMotSpeedupMode6 - Envelope Pitch simp	Range = 0 to 200ms	0
783-040	RstDupJamWindowM5	Restart sheet to duplex jam window to indicate LE of sheet is late - Mode5 - Transparency pitch mode 1 simp	Range = 200 to 3000ms	45 ppm = 690 55 ppm = 690 65 ppm = 500 75 ppm = 500 90 ppm = 500
783-041	RstDupJamWindowM6	Restart sheet to duplex jam window to indicate LE of sheet is late - Envelope pitch simp only	Range = 200 to 1500ms	45 ppm = 690 55 ppm = 690 65 ppm = 500 75 ppm = 500 90 ppm = 500

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-042	InvMotSlowDownM1	Inv Motor Slow Down 1 Delay from Invert motor start ramp down from high speed to restart in opposite direction	Range = 0 to 1000ms	100
783-043	InvMotSlowDownM2	Inv motor slow down 2 delay from invert motor start ramp down from high speed to restart in opposite direction	Range = 0 to 1000ms	100
783-044	InvMotSlowDownM3	Inv motor slow down 3 delay from invert motor start ramp down from high speed to restart in opposite direction	Range = 0 to 1000ms	100
783-045	InvMotSlowDownM4	Inv motor slow down 4 - sef heavyweight invert only pitch mode 2	Range = 0 to 1000ms	100
783-046	InvMotSlowDownM5	Inv motor slow down - transparency mode 5 - pitch mode 1 simp	Range = 0 to 1000ms	100
783-047	InvMotSlowDownM6	Inv Motor Slow Down Envelopes Mode 6 - Envelope pitch simp	Range = 0 to 1000ms	100
783-048	TEDuplex	START Trail Edge Detection Duplex snr = papersize-NVM From LE Dup Sensor	Range = 0 to 1000ms	45 ppm = 200 55 ppm = 200 65 ppm = 100 75 ppm = 100 90 ppm = 100
783-049	InvMotRevToStopDup1	Invert motor reverse to invert motor stop duplex 1	Range = 0 to 1000mm	45 ppm = 343 55 ppm = 343 65 ppm = 500 75 ppm = 500 90 ppm = 500
783-050	InvMotRevToStopDup2	Invert motor reverse to invert motor stop duplex 2	Range = 0 to 1000mm	45 ppm = 188 55 ppm = 188 65 ppm = 219 75 ppm = 219 90 ppm = 179
783-051	InvMotRevToStopDup3	Invert motor reverse to invert motor stop duplex 3	Range = 0 to 1000mm	45 ppm = 414 55 ppm = 414 65 ppm = 365 75 ppm = 365 90 ppm = 365

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-052	InvMotRevToStop Dup4	Invert motor reverse to invert motor stop duplex 4 - SEF Heavyweight invert pitch	Range = 10 to 2000mm	45 ppm = 188 55 ppm = 188 65 ppm = 219 75 ppm = 219 90 ppm = 179
783-053	InvMotRevToStop Dup5	Invert motor reverse to invert motor stop duplex 5 (Transparencies) - Transparency pitch mode1 simp	Range = 0 to 1000mm	45 ppm = 343 55 ppm = 343 65 ppm = 500 75 ppm = 500 90 ppm = 500
783-054	InvMotRevToStop Dup6	Invert motor reverse to invert motor stop duplex 6 (Envelopes) - Envelope pitch simp	Range = 0 to 1000mm	45 ppm = 343 55 ppm = 343 65 ppm = 500 75 ppm = 500 90 ppm = 500
783-055	TeInvSnrToInv-PathSol	Actuates solenoid to divert duplex sheet to output from TE previous sheet at Invert Sensor - ID 59	Range = 0 to 100 steps	45 ppm = 30 55 ppm = 30 65 ppm = 40 75 ppm = 40 90 ppm = 40
783-056	TeSnrToInvSolO-nExit	Actuates solenoid to divert Duplex sheet to output from TE previous sheet when Reg Clutch turns on (Only for a duplex sheet). This makes the sheet go to the exit, instead of going into the inverter.	Range = 500 to 800 steps	45 ppm = 628 55 ppm = 628 65 ppm = 620 75 ppm = 620 90 ppm = 620
783-057	TeInvSnrToInvSo-lOff	Disables invert path solenoid to divert sheet into invert path from TE at Invert Sensor	Range = 0 to 100 steps	45 ppm = 0 55 ppm = 0 65 ppm = 40 75 ppm = 40 90 ppm = 40
783-058	TeInvSnrToMotOf SmpS2	Inverter motor off stop position (simplex) From TE Invert Sensor paper sizes >185mm Size2	Range = 0 to 400 steps	45 ppm = 40 55 ppm = 40 65 ppm = 58 75 ppm = 58 90 ppm = 58
783-059	TeInvSnrToMotOf DupS2	Time to turn off inverter motor after TE leaves Invert Sensor(duplex) Paper size 185mm to 216mm Size 2	Range = 0 to 400ms	45 ppm = 97 55 ppm = 97 65 ppm = 90 75 ppm = 90 90 ppm = 90

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-060	TimToDelInvert2	IOT Time to deliver: invert (simplex + paper length) size 2 >185mm	Range = 800 to 2000 steps	45 ppm = 1678 55 ppm = 1678 65 ppm = 1553 75 ppm = 1553 90 ppm = 1553
783-061	TELateFrmIn-vSensor	Jam window for trail edge late from invert sensor - not used for a6	Range = 0 to 300 Steps	45 ppm = 117 55 ppm = 117 65 ppm = 83 75 ppm = 83 90 ppm = 83
783-062	InvMtFwdToInvMt RevM7	IOT Restart sheet into duplex (mode 7) sheets >185mm size2	Range = 0 to 2500ms	45 ppm = 927 55 ppm = 927 65 ppm = 985 75 ppm = 985 90 ppm = 697
783-063	InvMtFwdToInvMt RevS1	IOT Paper path timing restart sheet into duplex (mode 1) sheets <185mm size1	Range = 0 to 2500ms	45 ppm = 927 55 ppm = 927 65 ppm = 808 75 ppm = 808 90 ppm = 492
783-064	LeDupSnrToClutc hOnM2	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-065	LeDupSnrToClutc hOnM3	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-066	LeDupSnrToClutc hOnM4	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-067	LeDupSnrToClutc hOnM5	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
783-068	LeDupSnrToClutc hOnM6	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256

Table 35 IOT NVM ID 783-001 to 789-002

NVM ID	NVM Name	NVM Description	Settings	Default
783-069	LeDupSnrToClutchOnM7	Duplex buckle timer mode 1	Range = 0 to 700ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
783-070	LeDupSnrToCltOnNomM2	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-071	LeDupSnrToCltOnNomM3	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-072	LeDupSnrToCltOnNomM4	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 425 75 ppm = 425 90 ppm = 431
783-073	LeDupSnrToCltOnNomM5	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
783-074	LeDupSnrToCltOnNomM6	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
783-075	LeDupSnrToCltOnNomM7	LE at dup sensor to clutch on	Range = 0 to 1000ms	45 ppm = 343 55 ppm = 343 65 ppm = 244 75 ppm = 244 90 ppm = 256
789-001	SyncToRegClutOnSimp	Simplex registration	Range = 100 to 360ms	45 ppm = 219 55 ppm = 219 65 ppm = 154 75 ppm = 154 90 ppm = 154
789-002	TeRegSnrToClutchOff	Ensures sheet clear of reg nips before turning clutch off	Range = 100 to 1200ms	45 ppm = 610 55 ppm = 610 65 ppm = 288 75 ppm = 288 90 ppm = 288

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-001	XRU Total Count	Backup of CRU data: XRU Total Count		0
791-002	XRU PR Cycle Count	Backup of CRU data: XRU P/R Cycle Count		0
791-003	FRU Total Count	Backup of CRU data: FRU Total Count		0
791-004	FRU Web Usage Count	Backup of CRU data: FRU Web Usage Count		0
791-005	IQA Dev Bias Offset	Dev bias offset. used to mitigate light copies defect.	Range = 0 to 75Volts	0
791-006	Charge Scorotron	Charge scorotron (wire) Note: When altering settings, NVM ID 783-073 will need to be set to enable.	Range = 500 to 3000microA (absolute value in NVM, real value is negative)	2050
791-007	Charge Grid	Charge scorotron (grid) Note: When altering settings, NVM ID 783-070 will need to be set to enable.	Range = 150 to 700V (absolute value in NVM, real value is negative)	45 ppm = 396 55 ppm = 396 65 ppm = 408 75 ppm = 408 90 ppm = 408
791-008	Chute Bias LE	Chute bias print level	Range = -500 to 900	1
791-009	Chute Bias Mid	Chute bias inter document level	Range = -500 to 900	1
791-010	Chute Bias TE	Chute bias trail edge level	Range = -500 to 900	1
791-011	Transfer LE Side 1	Side 1 transfer corotron le	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 370 75 ppm = 370 90 ppm = 370
791-012	Transfer Mid Side 1	Side 1 transfer corotron intradocument	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 370 75 ppm = 370 90 ppm = 370
791-013	Transfer TE Side 1	Side 1 transfer corotron TE	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 370 75 ppm = 370 90 ppm = 370

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-014	Transfer LE Side 2	Side 2 transfer corotron le	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 290 75 ppm = 290 90 ppm = 290
791-015	Transfer Mid Side 2	Side 2 transfer corotron intradocument	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 290 75 ppm = 290 90 ppm = 290
791-016	Transfer TE Side 2	Side 2 transfer corotron te	Range = 150 to 1000microA	45 ppm = 295 55 ppm = 295 65 ppm = 290 75 ppm = 290 90 ppm = 290
791-017	Detack AC Side 1	Side 1 detack corotron voltage	Range = 3000 to 5000V	4200
791-018	Detack AC Side 2	Side 2 detack corotron voltage	Range = 3000 to 5000V	4200
791-019	Detack LE Side 1	Side 1 detack corotron le	Range = -200 to 20	-70
791-020	Detack Mid Side 1	Side 1 detack corotron intradocument	Range = -200 to 20	-40
791-021	Detack TE Side 1	Side 1 detack corotron te	Range = -200 to 20	-1
791-022	Detack LE Side 2	Side 2 detack corotron le	Range = -200 to 20	45 ppm = -55 55 ppm = -55 65 ppm = -70 75 ppm = -70 90 ppm = -70
791-023	Detack Mid Side 2	Side 2 detack corotron intradocument	Range = -200 to 20	45 ppm = -35 55 ppm = -35 65 ppm = -40 75 ppm = -40 90 ppm = -40
791-024	Detack TE Side 2	Side 2 detack corotron TE	Range = -200 to 20	-1
791-025	Dev Bias Print Level	Developer bias print level	Range = 100 to 500V (absolute value in NVM, real value is negative)	340
791-026	IQA Grid V Offset	Grid voltage offset determined by the iqa routine	Range = -50 to 50	0
791-027	HV control	Used to turn off corotrons & dev bias		0

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-028	Altitude adjust	Altitude adjustment	Range = 0 to 4 in metres: 0=0-749 1=750-1499 2=1500-2249 3=2250-2999 4=3000+	0
791-029	Chute Bias Inter Doc	Chute bias inter document level	Range = -500 to 900	45 ppm = 0 55 ppm = -500 65 ppm = 0 75 ppm = 0 90 ppm = 0
791-030	Detack ID Side 1	Detack corotron interdocument level side 1	Range = -200 to 20 uA = Default number - 200	0
791-031	Detack ID Side 2	Detack corotron interdocument level side 2	Range = -200 to 20 uA = Default number - 200	0
791-032	Grid Volt Offset	Used to display the Grid Voltage Offset value held in the XRU CRUM.		0
791-033	Grid Volt Adj Nom	Used to display the Grid Voltage Adjusted nominal.	Range = 150 to 700	45 ppm = 396 55 ppm = 396 65 ppm = 408 75 ppm = 408 90 ppm = 408
791-034	Grid Volt Adj Enable	Used to enable Grid Voltage nominal adjustment.	Range = 0 to 1	1
791-035	Grid Curr Scaler	Used to display the Grid Current Scaler value held in the XRU CRUM.		0
791-036	Grid Curr Adj Nom	Used to display the Grid Current Adjusted nominal.	Range = 250 to 4500	2050
791-037	Grid Curr Adj Enable	Used to enable Grid Current nominal adjustment.	Range = 0 to 1 0 = Disabled 1 = Enabled	1
791-038	Main motor on cycle in	Main motor on cycle in	Range = 0 to 1000ms	45 ppm = 540 55 ppm = 540 65 ppm = 380 75 ppm = 380 90 ppm = 380

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-039	Charge scorotron on cycle in	Charge scorotron on cycle in	Range = 0 to 1000ms	45 ppm = 300 55 ppm = 300 65 ppm = 210 75 ppm = 210 90 ppm = 210
791-040	Erase lamp on cycle in time alt	P/R Erase lamp on cycle in	Range = 0 to 1000ms	45 ppm = 300 55 ppm = 300 65 ppm = 210 75 ppm = 210 90 ppm = 210
791-041	Developer bias on cycle in	Developer bias on cycle in	Range = 0 to 1000ms	45 ppm = 160 55 ppm = 160 65 ppm = 100 75 ppm = 100 90 ppm = 100
791-042	Erase lamp on cycle in (alt)	P/r erase lamp on cycle in alternative	Range = 0 to 1000ms	0
791-043	Transfer corotron on run	Transfer corotron on run	Range = 0 to 1000ms	45 ppm = 360 55 ppm = 360 65 ppm = 220 75 ppm = 220 90 ppm = 220
791-044	detack corotron on run	Detack corotron on run	Range = 0 to 1000ms	45 ppm = 360 55 ppm = 360 65 ppm = 260 75 ppm = 260 90 ppm = 260
791-045	Chute bias on run	Chute bias on run	Range = 0 to 1000ms	45 ppm = 380 55 ppm = 380 65 ppm = 270 75 ppm = 270 90 ppm = 270
791-046	ScorotronOn-RampUp	Charge scorotron on cycle in ramp up.	Range = 0 to 1000ms	45 ppm = 200 55 ppm = 200 65 ppm = 100 75 ppm = 100 90 ppm = 100
791-047	GridVOffRamp-Dwn	Charge scorotron grid voltage off cycle out ramp down.	Range = 0 to 1000ms	45 ppm = 200 55 ppm = 200 65 ppm = 120 75 ppm = 120 90 ppm = 120
791-048	Chute bias off run	Chute bias off run	Range = 0 to 100ms	45 ppm = 40 55 ppm = 40 65 ppm = 30 75 ppm = 30 90 ppm = 30

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-049	Transfer corotron off run	Transfer corotron off run	Range = 0 to 100ms	45 ppm = 40 55 ppm = 40 65 ppm = 50 75 ppm = 50 90 ppm = 50
791-050	Detack corotron off run	Detack corotron off run	Range = 0 to 500ms	45 ppm = 110 55 ppm = 110 65 ppm = 80 75 ppm = 80 90 ppm = 80
791-051	Transfer corotron LE switch	Transfer corotron lead edge switch	Range = 0 to 500ms	45 ppm = 100 55 ppm = 100 65 ppm = 70 75 ppm = 70 90 ppm = 70
791-052	Transfer corotron TE switch	Transfer corotron trail edge switch	Range = 0 to 500ms	45 ppm = 60 55 ppm = 60 65 ppm = 40 75 ppm = 40 90 ppm = 40
791-053	Detack corotron LE switch	Detack corotron lead edge switch	Range = 0 to 500ms	45 ppm = 100 55 ppm = 100 65 ppm = 70 75 ppm = 70 90 ppm = 70
791-054	Detack corotron TE switch	Detack corotron trail edge switch	Range = 0 to 500ms	45 ppm = 90 55 ppm = 90 65 ppm = 60 75 ppm = 60 90 ppm = 60
791-055	Chute bias LE switch	Chute bias lead edge switch	Range = 0 to 500ms	45 ppm = 100 55 ppm = 100 65 ppm = 70 75 ppm = 70 90 ppm = 70
791-056	Chute bais TE switch	Chute bias trail edge switch	Range = 0 to 500ms	45 ppm = 100 55 ppm = 100 65 ppm = 70 75 ppm = 70 90 ppm = 70
791-057	T DBOFCOFS	Developer bias off cycle out - fast shutdown	Range = 0 to 1000ms	45 ppm = 310 55 ppm = 310 65 ppm = 220 75 ppm = 220 90 ppm = 220

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-058	Developer bias off cycle out	Developer bias off cycle out	Range = 0 to 500ms	45 ppm = 310 55 ppm = 310 65 ppm = 160 75 ppm = 160 90 ppm = 160
791-059	Main motor off cycle out	Main motor off cycle out	Range = 0 to 500ms	45 ppm = 270 55 ppm = 270 65 ppm = 190 75 ppm = 190 90 ppm = 190
791-060	Erase lamp off cycle out	PR Erase lamp off cycle out	Range = 0 to 1500ms	45 ppm = 770 55 ppm = 770 65 ppm = 550 75 ppm = 550 90 ppm = 550
791-061	XRU motor off cycle out	Photoreceptor motor off cycle out	Range = 0 to 1500ms	45 ppm = 790 55 ppm = 790 65 ppm = 560 75 ppm = 560 90 ppm = 560
791-062	Main motor off cycle out (alt)	Main motor off cycle out alternative	Range = 0 to 1500ms	45 ppm = 780 55 ppm = 780 65 ppm = 550 75 ppm = 550 90 ppm = 550
791-063	Dev bias off cycle out (alt)	Developer bias off cycle out alternative	Range = 0 to 1500ms	45 ppm = 790 55 ppm = 790 65 ppm = 560 75 ppm = 560 90 ppm = 560
791-064	DevBiasOnRampUp	Developer bias on cycle in ramp up.	Range = 0 to 1000ms	45 ppm = 170 55 ppm = 170 65 ppm = 160 75 ppm = 160 90 ppm = 160
791-065	DevBiasOffRampDwn	Developer bias off cycle out ramp down.	Range = 0 to 1000ms	45 ppm = 0 55 ppm = 0 65 ppm = 160 75 ppm = 160 90 ppm = 160
791-066	DevBiasOffRampDwnAlt	Developer bias off cycle out ramp down alternative.	Range = 0 to 1000ms	45 ppm = 0 55 ppm = 0 65 ppm = 100 75 ppm = 100 90 ppm = 100

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-067	DevBiasOffFSRampDwn	Developer bias off fast shutdown cycle out ramp down.	Range = 0 to 1000ms	45 ppm = 0 55 ppm = 0 65 ppm = 100 75 ppm = 100 90 ppm = 100
791-068	Xero cycle in mode	Strategy: Xero Cycle In Mode	Range = 0 to 1 Normal = 0 Alt = 1	0
791-069	Xero trasnfer corotron run mode	Strategy: Xero Trans Coro Run Mode	Range = 0 to 1 Normal = 0 Alt = 1	45 ppm = 0, 55 ppm = 1, 65 ppm = 0, 75 ppm = 0, 90 ppm = 0
791-070	Xero detack corotron run mode	Strategy: Xero detack Coro Run Mode	Range = 0 to 1 Normal = 0 Alt = 1	1
791-071	Xero chute bias run mode	Strategy: XeroChuteBiasRunMode	Range = 0 to 1 Normal = 0 Alt = 1	1
791-072	Xero cycle out mode	Strategy: XeroCycleOutMode	Range = 0 to 1 Normal = 0 Alt = 1	0
791-073	MainMotorDelayFlag	Enables or disables a delay to the main motor and Photoreceptor motor run up times by adding 1150 to both of the read NVM values for IOT NVM id's 512 & 513.	Range = 0 to 1 0=Disabled 1=Enabled	0
791-074	Dev Age Table Select	Dev age table select	Range = 0 to 1	0
791-075	PCFromFlashOrRam	For development only: alters process control factors source from either flash or NVM	Range = 0 to 1 0 = Flash 1 = NVM	0
791-076	NhVacFanOffToOnTme	Nohad vacuum fan on time (3)	Range = 0 to 100ms	43
791-077	NhVacFanOnToOffTme	Nohad vacuum fan off time (3)	Range = 0 to 100ms	29
791-078	Paper Path Fans Mode	Paper path cooling fans mode	Range = 0 to 1 0 = Disabled 1 = Enabled	45 ppm = 0 55 ppm = 0 65 ppm = 1 75 ppm = 1 90 ppm = 1

Table 36 IOT NVM ID 791-001 to 791-089

NVM ID	NVM Name	NVM Description	Settings	Default
791-079	C speed door fan enable	Enable door fans for all marking jobs. Not thermostat dependent.	Range = 0 to 1 0 = C-Speed door fans default behaviour 1 = Enable door fans for all jobs	0
791-080	Developer Temp	Actual developer temp as measured by sensor		0
791-081	Humidity %RH	Actual machine humidity as measured by sensor		0
791-082	Ambient Temp	Actual ambient temp as measured by sensor		0
791-083	Humidity Sensor Fault	Humidity Sensor Fault		0
791-084	Dev Temp Sensor Fault	Developer Temperature Sensor Fault		0
791-085	Amb Temp Sensor Fault	Ambient Temperature Sensor Fault		0
791-086	XRU Kcycle count	No. of kilo cycles the P/R has made since new		0
791-087	Developer age	Developer Material Age	Range = 0 to 2147483647 Number of prints	0
791-088	DevAgeTime-Based	Developer age - time based	Range = 0 to 2147483647 seconds	0
791-089	Ozone print count	Ozone filter prints made		0

Table 37 IOT NVM ID 793-004 to 793-045

NVM ID	NVM Name	NVM Description	Settings	Default
793-004	Toner dispense constant A	Pixel-count Toner Dispense constant	Range = 0 to 1000	45 ppm = 145 55 ppm = 145 65 ppm = 120 75 ppm = 120 90 ppm = 120
793-005	Toner dispense constant B	TC Error Toner Dispense constant	Range = 0 to 600	30
793-006	Toner dispense constant C A4LEF	Toner Background Development Constant	Range = 0 to 40ms	45 ppm = 0 55 ppm = 10 65 ppm = 0 75 ppm = 0 90 ppm = 0

Table 37 IOT NVM ID 793-004 to 793-045

NVM ID	NVM Name	NVM Description	Settings	Default
793-007	Toner dispense constant C A4SEF	Toner Background Development Constant	Range = 0 to 40ms	45 ppm = 0 55 ppm = 15 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-008	Toner dispense constant C A3SEF	Toner Background Development Constant	Range = 0 to 40ms	45 ppm = 0 55 ppm = 20 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-009	TC Setpoint	Sets Target Toner Concentration (TC) for Developer Process Controls		0
793-010	TC Sensor Control Voltage	Sets TC sensor control voltage to adjust sensitivity	Range = 400 to 1200Centivolts	45 ppm = 0 55 ppm = 800 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-011	TC block length	Control block length for TC control	Range = 1 to 100	45 ppm = 0 55 ppm = 8 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-012	TC last sensor reading	Stores TC Sensor reading taken at the last Print-mode TC reading point		0
793-013	TC last block toner dispensed	Toner dispensed over the last TC control block (20 prints)		0
793-014	Last Pixel Count	Cumulative Pixel Count over the last TC control block (20 prints)		0
793-015	TC Sensor Fault	TC sensor fault	1 = fault	0
793-016	Max dispense time	Dispense motor Max run time for toner dispense	Range = 100 to 2000ms	540
793-017	TCSetupCompleted	TC Setup completed	Range = 0 to 1 Flag	0
793-019	Average percent replenisher low	Running average % of replenisher low conditions for last 100 prints		0
793-020	Debounce level sensor	Debounce level sensor	Range = 2 to 10	45 ppm = 0 55 ppm = 6 65 ppm = 0 75 ppm = 0 90 ppm = 0

Table 37 IOT NVM ID 793-004 to 793-045

NVM ID	NVM Name	NVM Description	Settings	Default
793-021	Max continuous dispense run time	Maximum continuous run period	Range = 15 to 180ms	45 ppm = 0 55 ppm = 50 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-022	Cartridge settle time	Assists cartridge emptying	Range = 0 to 30ms	45 ppm = 0 55 ppm = 5 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-023	Min continuous dispense run time	Dispense motor - minimum dispense time.	Range = 100 to 1000ms	45 ppm = 0 55 ppm = 200 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-024	Dispense motor ramp up time	Toner dispense motor ramp up time	Range = 10 to 20000ms	30
793-025	Rep Cartridge Empty	Replenisher cartridge empty status	Range = 0 to 1	0
793-026	Cartridge total dispense time	Replenisher Cartridge	Range = 15 to 180 seconds	45 ppm = 24 55 ppm = 24 65 ppm = 70 75 ppm = 70 90 ppm = 70
793-027	Replenisher sensor fail timeout	Timeout period for replenisher level high to low	Range = 6 to 24	45 ppm = 0 55 ppm = 12 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-028	Rep Lev Snr Fault	Flag to indicate replenisher sensor failure		0
793-029	Replenisher capacity	Replenisher capacity The NVM replenisher capacity constants hold the dispensable replenisher mass (carrier + toner) (i.e.the full bottle toner mass minus the toner left in the bottle when out of toner called.	Range = 1050 to 1787 grammes (g)	45 ppm = 1353 55 ppm = 1353 65 ppm = 1750 75 ppm = 1750 90 ppm = 1750
793-030	Repl. Delivery Rate	Replenisher delivery rate	Range = 150 to 600	45 ppm = 460 55 ppm = 460 65 ppm = 500 75 ppm = 500 90 ppm = 500

Table 37 IOT NVM ID 793-004 to 793-045

NVM ID	NVM Name	NVM Description	Settings	Default
793-031	Cumulative dispense time	Total dispense time	Range = 0 to 78000000 milliseconds	0
793-032	DispMotRunOn	Toner dispense motor run on time	Range = 0 to 20000ms	320
793-033	RepDelRateAdjFactor	Replenisher delivery rate adjustment factor - the toner gas gauge calibration factor	Range = 95 to 115 Percent	45 ppm = 0 55 ppm = 100 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-034	UpperRelaxation	Toner dispense: upper relaxation capping limit when aggressive dispense mode active	Range = 100 to 600%	45 ppm = 0 55 ppm = 400 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-035	PropB Factor (E)	Toner dispense: Additional factor applied to the Proportional term when Aggressive dispense mode active	Range = 100 to 1000%	45 ppm = 0 55 ppm = 100 65 ppm = 0, 75 ppm = 0 90 ppm = 0
793-036	Full sensor offset count	No. of prints after sensor reads full, before flagging message		0
793-037	Waste Full Threshold	Waste full print count at which ‘bottle full’ status is confirmed	Range = 1 to 1000prints counter	45 ppm = 0 55 ppm = 100 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-038	Simulate waste toner full enable	Flag set to stimulate waste toner full msg		0
793-039	Full waste offset count	Counter used to monitor number of prints post waste full for shutdown		0
793-040	Waste Shutdown Limit	Maximum number of prints allowed post waste full before shutdown	Range = 0 to 10000prints counter	45 ppm = 0 55 ppm = 1000 65 ppm = 0 75 ppm = 0 90 ppm = 0
793-041	Waste toner shutdown flag	Waste toner shutdown status flag		0
793-042	Shutdown EOJ percentage	Prevents machine stop mid print job	Range = 0 to 100	45 ppm = 0 55 ppm = 50 65 ppm = 0 75 ppm = 0 90 ppm = 0

Table 37 IOT NVM ID 793-004 to 793-045

NVM ID	NVM Name	NVM Description	Settings	Default
793-043	TC Lockout Low	CSF NVM lockout for TC process control failure - Low	Range = 0 to 1 1 = lockout	0
793-044	TC LockoutHigh	CSF NVM lockout for TC process control failure - High	Range = 0 to 1 1 = lockout	0
793-045	Toner dispense time (TD)	Replenisher dispense time/ Toner dispense time (TD)	Range = 0 to 30000	45ppm = 0 55ppm = 0 65ppm = 0 75ppm = 0 90ppm = 0

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-001	DADH Centre Reg Side 1	SPDH centre registration side 1	Pixels Range = 3609 to 3965	3787
801-002	DADH LE Reg Side 1	SPDH lead edge registration side 1	Scan Lines Range = 0 to 150	0
801-003	Platen Top Edge Reg	Platen top edge registration	Pixels Range = 0 to 500	278
801-004	Platen Lead Edge Reg	Platen LE registration	Scan Lines Range = 0 to 150	0
801-005	Cal Strip Posn	Calibration strip position (0.1 mm)	0.1 mm increments Range = 0 to 2715	252
801-006	Test A Posn	Test A position	0.1 mm increments Range = 0 to 4923	1000
801-007	Test B Posn	Test B position	0.1 mm increments Range = 0 to 4923	1500
801-008	Test C Posn	Test C position	0.1 mm increments Range = 0 to 4923	2000
801-010	AGC Enable Side 1	AGC enable side 1	1 = Enable 0 = Disable Range = 0 to 1	1
801-011	DarkSetPoint Side 1	Dark set point side 1	Grey Level in whole number Range = 0 to 50	0
801-012	Scanner CVT position	Scan CVT position	0.1 mm increments Range 0 to 32	12
801-013	Scanner Doc Size Pos	Doc size position	0.1 mm increments Range = 0 to 2715	417
801-014	Scan LE Hotline	Scan LE hot line	0.1 mm increments Range = 0 to 327	307
801-015	Mono Set Point Side 1	Mono set point side 1	Grey Level in whole number Range = 170 to 255	224

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-016	Red Set Point Side 1	Red set point side 1	Grey Level in whole number Range = 170 to 255	223
801-017	Green Set Point Side 1	Green set point side 1	Grey Level in whole number Range = 170 to 255	224
801-018	Blue Set Point Side 1	Blue set point side 1	Grey Level in whole number Range = 170 to 255	230
801-020	CvtWhiteRef-Mono Side 1	CVT White Ref Mono Side 1	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512 Settings greater than 150 compensate for SPDH darker than platen.	296
801-021	CvtWhiteRefRed Side 1	CVT White Ref Red Side 1	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	304
801-022	CvtWhiteRef-Green Side 1	CVT White Ref Green Side 1	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	301
801-023	CvtWhiteRefBlue Side 1	CVT White Ref Blue Side 1	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	290
801-027	DADH / Platen Configuration	DADH / platen configuration	0 = DADH / Platen present 1 = Platen only Range = 0 to 1	0
801-046	PlatenMechMag	Platen Mech Mag	Range = 0 to 1	0
801-047	CVT Mech Mag	CVT Mech Mag side 1	Range = 0 to 1	0
801-058	Service Plan mirror	Service plan - CCS NVM mirrored value. Refer to CCS 606-269	0 = Sold 1 = Non Sold 2 = Third Party 3 = XeroxManagedSupplies 4 = Page Pack 5 = DMO Sold	3

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-059	Market Region mirror	Market Region - CCS NVM mirrored value. Refer to CCS 616-001	0 = US 1 = XCL(Canada) 2 = FX (Fuji Xerox Japan) 3 = FXAPO (Fuji Xerox Asian Pacific) 4 = ACO(Latin) 5 = RX(Europe) 6 = MRDmoEast 7 = MRDmoWest	0
801-061	Machine Speed mirror	Machine Speed - CCS NVM mirrored value. Refer to CCS 616-003	Machine Speed (Nominal ppm, not actual). Range = 0 to 255	255
801-062	Serial Number mirror 1_2	Machine Serial number - CCS NVM mirrored value. Refer to CCS 616-023	Range = 0 to 65535	12336
801-063	Serial Number mirror 3_4	Machine Serial number - CCS NVM mirrored value. Refer to CCS 616-023	Range = 0 to 65535	12336
801-064	Serial Number mirror 5_6	Machine Serial number - CCS NVM mirrored value. Refer to CCS 616-023	Range = 0 to 65535	12336
801-065	Serial Number mirror 7_8	Machine Serial number - CCS NVM mirrored value. Refer to CCS 616-023	Range = 0 to 65535	12336
801-066	Serial Number mirror 9_10	Machine Serial number - CCS NVM mirrored value. Refer to CCS 616-023	Range = 0 to 65535	12336
801-067	Platen speed Adjustment 0.1%	Platen speed Adjustment 0.1%	Range = 900 to 1100	1000
801-068	Mag Compensation Side 1	Mag Compensation 0.01% steps	Range = 0 to 200	100
801-069	Mag Compensation Side 2	Mag Compensation 0.01% steps	Range = 0 to 200	100
801-070	Overscan for DADH	Overscan for DADH in all directions	Range = 0 to 4	0
801-071	PWM % light multiplier Side 1	55 Pwm Light Multipler for increasing / decreasing the pwm % 2 decimal place	Range = 0 to 255	150

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-073	AutoInit_IIT_S1_ Version	The version of the side 1 NVM that will cause an side 1 NVM initialisation if different from the version held in the current SW set	Increment to cause an IIT NVM initialisation after SW upgrade. Range = 0 to 65535	25
801-074	Calibration Control Side 1	Bit mask that controls when calibration is performed on side 1	Range = 0 to 65535	0
801-079	AgcStartPixel Side 1	AGC Start Pixel Side 1	Indicates the start pixel number. Range = 10 to 100	10
801-080	ScannerPaperCode	Scanner Paper Code	Range = 1 to 10	5
801-081	PlatenWhiteRefRed	Platen White Ref Red	Range = 128 to 512	260
801-082	PlatenWhiteRefGreen	Platen White Ref Green	Range = 128 to 512	262
801-083	PlatenWhiteRefBlue	Platen White Ref Blue	Range = 128 to 512	260
801-084	PlatenWhiteRefMono	Platen White Ref Mono	Range = 128 to 512	262
801-093	FpgaGainSide1Register1	FPGA Gain Side 1 Register 1	Range = 70 to 170	100
801-094	FpgaGainSide1Register2	FPGA Gain Side 1 Register 2	Range = 70 to 170	100
801-095	FpgaGainSide1Register3	FPGA Gain Side 1 Register 3	Range = 70 to 170	100
801-096	FpgaGainSide1Register4	FPGA Gain Side 1 Register 4	Range = 70 to 170	100
801-097	FpgaGainSide1Register5	FPGA Gain Side 1 Register 5	Range = 70 to 170	100
801-098	FpgaGainSide1Register6	FPGA Gain Side 1 Register 6	Range = 70 to 170	100
801-099	FpgaGainSide1Register7	FPGA Gain Side 1 Register 7	Range = 70 to 170	100
801-100	FpgaGainSide1Register8	FPGA Gain Side 1 Register 8	Range = 70 to 170	100
801-101	FpgaGainSide1Register9	FPGA Gain Side 1 Register 9	Range = 70 to 170	100
801-102	FpgaGainSide1Register10	FPGA Gain Side 1 Register 10	Range = 70 to 170	100
801-103	FpgaGainSide1Register11	FPGA Gain Side 1 Register 11	Range = 70 to 170	100

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-104	FpgaGainSide1Register12	FPGA Gain Side 1 Register 12	Range = 70 to 170	100
801-105	FpgaGainSide1Register13	FPGA Gain Side 1 Register 13	Range = 70 to 170	100
801-106	FpgaGainSide1Register14	FPGA Gain Side 1 Register 14	Range = 70 to 170	100
801-107	FpgaGainSide1Register15	FPGA Gain Side 1 Register 15	Range = 70 to 170	100
801-108	FpgaGainSide1Register16	FPGA Gain Side 1 Register 16	Range = 70 to 170	100
801-109	FpgaGainSide1Register17	FPGA Gain Side 1 Register 17	Range = 70 to 170	100
801-110	FpgaGainSide1Register18	FPGA Gain Side 1 Register 18	Range = 70 to 170	100
801-111	FpgaGainSide1Register19	FPGA Gain Side 1 Register 19	Range = 70 to 170	100
801-112	FpgaGainSide1Register20	FPGA Gain Side 1 Register 20	Range = 70 to 170	100
801-113	WhiteRefTargetPlatRed	White Ref Target Plat Red	Range = 0 to 255	238
801-114	WhiteRefTargetPlatGreen	White Ref Target Plat Green	Range = 0 to 255	238
801-115	WhiteRefTargetPlatBlue	White Ref Target Plat Blue	Range = 0 to 255	238
801-116	WhiteRefTargetPlatMono	White Ref Target Plat Mono	Range = 0 to 255	238
801-117	WhiteRefTargetCvtRed Side 1	White Ref Target CVT Red Side 1	Range = 0 to 255	238
801-118	WhiteRefTargetCvtGreen Side 1	White Ref Target CVT Green Side 1	Range = 0 to 255	238
801-119	WhiteRefTargetCvtBlue Side 1	WhiteRef Target CVT Blue Side 1	Range = 0 to 255	238
801-120	WhiteRefTargetCvtMono Side 1	White Ref Target CVT Mono Side 1	Range = 0 to 255	238
801-121	Mag Adjust Control	Mag Adjust Control	Range = 0 to 6	0
801-137	LED cal correction factor Side 1	LED cal correction factor Side 1	Range = 0 to 4	3
801-138	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 0 Side 1	Range = 0 to 2047	512
801-139	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 1 Side 1	Range = 0 to 2047	0

Table 38 IIT NVM ID 801-001 to 801-215

NVM ID	NVM Name	NVM Description	Settings	Default
801-140	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 2 Side 1	Range = 0 to 2047	0
801-141	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 3 Side 1	Range = 0 to 2047	0
801-142	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 4 Side 1	Range = 0 to 2047	512
801-143	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 5 Side 1	Range = 0 to 2047	0
801-144	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 6 Side 1	Range = 0 to 2047	0
801-145	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 7 Side 1	Range = 0 to 2047	0
801-146	dc2006 BEcoefficient 0 Side 1	dc2006 BEcoefficient 8 Side 1	Range = 0 to 2047	512
801-149	No of Platen Cal Fail Retries	Number of Platen Cal Fail Retries	Range = 0 to 5	2
801-208	Detect Paper Size 2	Detect Paper Size 2	0 = A5 1 = 8.5 x 5.5 2 = Auto Media Size Group Set	2
801-211	Test Pattern Doc Count	Test Pattern Doc Count	Range = 0 to 65535	0
801-213	TotalS1Nvm	Total number of S1 and S2 NVMs for this build	Range = 0 to 65535	69
801-214	IITTableVersion	IIT NVM Table version used to generate the code	Range = 0 to 65535	1063
801-215	ScannerProductivity	Scanner Productivity	Range = 0 to 300	60

Table 39 IIT NVM ID 803-001 to 803-213

NVM ID	NVM Name	NVM Description	Settings	Default
803-001	DADH Centre Reg Side 2	SPDH centre registration side 2	Pixels Range = 3543 to 3899	3721
803-002	DADH LE Reg Side 2	SPDH lead edge registration side 2	Scan Lines Range = 0 to 150	0
803-010	AGC Enable Side 2	AGC enable side 2	1 = Enable 0 = Disable Range = 0 to 1	1
803-011	DarkSetPoint Side 2	Dark set point side 2	Grey Level in whole number Range = 0 to 50	0

Table 39 IIT NVM ID 803-001 to 803-213

NVM ID	NVM Name	NVM Description	Settings	Default
803-015	Mono Set Point Side 2	Mono set point side 2	Grey Level in whole number Range = 170 to 255	224
803-016	Red Set Point Side 2	Red set point side 2	Grey Level in whole number Range = 170 to 255	223
803-017	Green Set Point Side 2	Green set point side 2	Grey Level in whole number Range = 170 to 255	224
803-018	Blue Set Point Side 2	Blue set point side 2	Grey Level in whole number Range = 170 to 255	230
803-020	CvtWhiteRef-Mono Side 2	CVT White Ref Mono Side 2	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	294
803-021	CvtWhiteRefRed Side 2	CVT White Ref Red Side 2	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	295
803-022	CvtWhiteRef-Green Side 2	CVT White Ref Green Side 2	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	295
803-023	CvtWhiteRefBlue Side 2	CVT White Ref Blue Side 2	0 corresponds to 50% compensation, 150 corresponds to no compensation and 300 corresponds to 200% compensation. Range = 128 to 512	286
803-027	DocHandlerConfiguration	SPDH / Platen configuration	Range = 0 to 1	0
803-047	CVT Mech Mag Side 2	CVT Mech Mag Side 2	Range = 0 to 1	0
803-071	PWM % light multiplier Side 2	55 Pwm Light Multipler for increasing / decreasing the pwm % 2 decimal place	Range = 0 to 255	150

Table 39 IIT NVM ID 803-001 to 803-213

NVM ID	NVM Name	NVM Description	Settings	Default
803-073	AutoInit_IIT_S1_ Version	The version of the side 2 NVM that will cause a side 2 NVM initialisation if different from the version held in the current SW set	Increment to cause an IIT NVM initialisation after SW upgrade. Range = 0 to 65535	16
803-074	Calibration Control Side 2	Bit mask that controls when calibration is performed on side 2	Range = 0 to 65535	0
803-075	Mag Compensation 300 Side 2	Mag Compensation 0.01% steps Side 2	Side 2 Mag Compensation 0.01% (0 = -1% 200 = +1%) Range = 0 to 200	100
803-076	Mag Compensation 560 Side 2	Mag Compensation 0.01% steps Side 2	Side 2 Mag Compensation 0.01% (0 = -1% 200 = +1%) Range = 0 to 200	100
803-077	Mag Compensation 150 Side 2	Mag Compensation 0.01% steps Side 2	Side 2 Mag Compensation 0.01% (0 = -1% 200 = +1%) Range = 0 to 200	100
803-078	Mag Compensation 280 Side 2	Mag Compensation 0.01% steps Side 2	Side 2 Mag Compensation 0.01% (0 = -1% 200 = +1%) Range = 0 to 200	100
803-079	AgcStartPixel Side 2	AGC Start Pixel Side 2	Indicates the start pixel number. Range = 10 to 200	10
803-113	FpgaGainSide1Register1	FPGA Gain Side 2 Register 1	Range = 70 to 170	100
803-114	FpgaGainSide1Register2	FPGA Gain Side 2 Register 2	Range = 70 to 170	100
803-115	FpgaGainSide1Register3	FPGA Gain Side 2 Register 3	Range = 70 to 170	100
803-116	FpgaGainSide1Register4	FPGA Gain Side 2 Register 4	Range = 70 to 170	100
803-117	FpgaGainSide1Register5	FPGA Gain Side 2 Register 5	Range = 70 to 170	100
803-118	FpgaGainSide1Register6	FPGA Gain Side 2 Register 6	Range = 70 to 170	100
803-119	FpgaGainSide1Register7	FPGA Gain Side 2 Register 7	Range = 70 to 170	100
803-120	FpgaGainSide1Register8	FPGA Gain Side 2 Register 8	Range = 70 to 170	100
803-121	FpgaGainSide1Register9	FPGA Gain Side 2 Register 9	Range = 70 to 170	100
803-122	FpgaGainSide1Register10	FPGA Gain Side 2 Register 10	Range = 70 to 170	100

Table 39 IIT NVM ID 803-001 to 803-213

NVM ID	NVM Name	NVM Description	Settings	Default
803-123	FpgaGainSide1Register11	FPGA Gain Side 2 Register 11	Range = 70 to 170	100
803-124	FpgaGainSide1Register12	FPGA Gain Side 2 Register 12	Range = 70 to 170	100
803-125	FpgaGainSide1Register13	FPGA Gain Side 2 Register 13	Range = 70 to 170	100
803-126	FpgaGainSide1Register14	FPGA Gain Side 2 Register 14	Range = 70 to 170	100
803-127	FpgaGainSide1Register15	FPGA Gain Side 2 Register 15	Range = 70 to 170	100
803-128	FpgaGainSide1Register16	FPGA Gain Side 2 Register 16	Range = 70 to 170	100
803-129	FpgaGainSide1Register17	FPGA Gain Side 2 Register 17	Range = 70 to 170	100
803-130	FpgaGainSide1Register18	FPGA Gain Side 2 Register 18	Range = 70 to 170	100
803-131	FpgaGainSide1Register19	FPGA Gain Side 2 Register 19	Range = 70 to 170	100
803-132	FpgaGainSide1Register20	FPGA Gain Side 2 Register 20	Range = 70 to 170	100
803-133	WhiteRefTargetCvtRed Side 2	White Ref Target CVT Red Side 2	Range = 0 to 255	238
803-134	WhiteRefTargetCvtGreen Side 2	White Ref Target CVT Green Side 2	Range = 0 to 255	238
803-135	WhiteRefTargetCvtBlue Side 2	WhiteRef Target CVT Blue Side 2	Range = 0 to 255	238
803-136	WhiteRefTargetCvtMono Side 2	White Ref Target CVT Mono Side 2	Range = 0 to 255	238
803-137	LED cal correction factor Side 2	DC945 LED cal correction factor side 2	Range = 0 to 4	3
803-138	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 0 Side 2	Range = 0 to 2047	512
803-139	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 1 Side 2	Range = 0 to 2047	0
803-140	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 2 Side 2	Range = 0 to 2047	0
803-141	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 3 Side 2	Range = 0 to 2047	0
803-142	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 4 Side 2	Range = 0 to 2047	512
803-143	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 5 Side 2	Range = 0 to 2047	0

Table 39 IIT NVM ID 803-001 to 803-213

NVM ID	NVM Name	NVM Description	Settings	Default
803-144	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 6 Side 2	Range = 0 to 2047	0
803-145	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 7 Side 2	Range = 0 to 2047	0
803-146	dc2006 BEcoefficient 0 Side 2	dc2006 BEcoefficient 8 Side 2	Range = 0 to 2047	512
803-149	No of Platen Cal Fail Retries	Number of Platen Cal Fail Retries	Range = 0 to 5	2
803-213	TotalS2Nvm	Total number of S1 and S2 NVMs for this build	Range = 0 to 65535	35

Table 40 IIT NVM ID 805-001 to 805-032

NVM ID	NVM Name	NVM Description	Settings	Default
805-001	Page Counter	Page count error tracking	Range = 0 to 65535	0
805-002	Jam Error Count	Jam error count tracking	Range = 0 to 65535	0
805-003	Pick Error Count	Pick error count tracking	Range = 0 to 65535	0
805-004	Lead Edge Side 1 Colour 600	Lead edge registration side 1 colour 600	Range = -50 to 50	0
805-005	Lead Edge Side 1 Mono 600	Lead edge registration side 1 mono 600	Range = -50 to 50	0
805-006	Lead Edge Side 1 Colour 1200	Lead edge registration side 1 colour 1200	Range = -50 to 50	0
805-007	Lead Edge Side 1 Mono 1200	Lead edge registration side 1 mono 1200	Range = -50 to 50	0
805-008	Lead Edge Side 2 Colour 600	Lead edge registration side 2 colour 600	Range = -50 to 50	0
805-009	Lead Edge Side 2 Mono 600	Lead edge registration side 2 mono 600	Range = -50 to 50	0
805-010	Lead Edge Side 2 Colour 1200	Lead edge registration side 2 colour 1200	Range = -50 to 50	0
805-011	Lead Edge Side 2 Mono 1200	Lead edge registration side 2 mono 1200	Range = -50 to 50	0
805-012	Cal strip Speed Adjust	Calibration strip speed adjustment	Range = 54 to 6244	200
805-018	Speed Adjust Colour 600	Adjusts sheet speed over the scan head	Range = -128 to 127	0
805-019	Speed Adjust Mono 600	Adjusts sheet speed over the scan head	Range = -128 to 127	0

Table 40 IIT NVM ID 805-001 to 805-032

NVM ID	NVM Name	NVM Description	Settings	Default
805-020	Speed Adjust Colour 1200	Adjusts sheet speed over the scan head	Range = -128 to 127	0
805-021	Speed Adjust Mono 1200	Adjusts sheet speed over the scan head	Range = -128 to 127	0
805-022	Scaling Data Position	Calibration Strip Hotline Position	Range = -80 to 80	-21
805-023	Motor Speed Side 1 Colour 600	Side 1 feed motor Speed.	Range = -128 to 127	0
805-024	Motor Speed Side 1 Mono 600	Side 1 feed motor Speed.	Range = -128 to 127	0
805-025	Motor Speed Side 2 Colour 600	Side 2 feed motor Speed.	Range = -128 to 127	0
805-026	Motor Speed Side 2 Mono 600	Side 2 feed motor Speed.	Range = -128 to 127	0
805-027	Registration Loop	Size of De-skew buckle	Range = 0 to 200	60
805-028	Timing Sensor Adjustment	Sensor Light Level - Read Only	Range = 0 to 255	255
805-029	TRA Sensor	Sensor Light Level - Read Only	Range = 0 to 255	255
805-030	PreScan Sensor	Sensor Light Level - Read Only	Range = 0 to 255	255
805-031	Mid Scanner	Sensor Light Level - Read Only	Range = 0 to 255	255
805-032	Hardware Config-uration	Hardware Configuration	Range = 0 to 65535	0

dC132 Serial Number

Purpose

To restore the machine serial number.

Procedure

1. Enter Service Mode, GP 1.
2. Select the **Maintenance** tab.
3. Select **dc132 Machine Serial Number**.
4. The machine identifier code (serial number) or '##########' is displayed.
5. If the serial number does not match the label on the front, top right of the IOT frame or '##########' is displayed, the serial number is corrupt. Perform Serial Number Restore.

Serial Number Restore

1. Select **Generate New Identifier Code**. The new identifier code will appear in the window above the button.
2. Contact your next level of support to complete and submit an ACAST form.

   NOTE: An ACAST form can be found attached to ETI #1269925. The new identifier code is referred to as the machine unique identifier on the ACAST form. When your ACAST form has been processed you will be provided with a new passcode.

3. When a new passcode has been obtained re-enter dC132, then select **Enter Passcode**.
4. Enter the new passcode.
5. Select **Enter**.
6. Select **Close** to exit the routine.
7. Select **Call Closeout**, then Exit and Reboot to exit service mode.
8. Select **Exit and Reboot**.

dC134 Market Region

Purpose

To provide the option to select and set the appropriate market region for the machine.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Maintenance tab.
3. Select dc134 Market Region from the scroll list.
4. Select the 0 - US button for operation in North America or Canada.
   Select the 5 - Europe button for operation in all other market regions.
5. Select Save.
6. Select Close to exit routine.
7. Select Call Closeout to exit service mode.
8. To apply the change, select Exit and Reboot.

dC135 CRU/HFSI Status

Purpose

To view the counters for customer replacement units and high frequency service items indicating the type, name and percent remaining.

There are two types of CRU's. Some of the CRU's are equipped with CRU Manager (CRUM) chips that are used for the management of data relevant to that particular CRU. Other CRU's do not have CRUMs; the management of these consumables is dependant upon the user to confirm replacement.

ERU's – Engineer Replaceable Units. These are typically replaced by a service technician, and do not trigger user warnings as end of life is reached. Of these, some are classified as HFSI's – High Frequency Service Items, meaning that these will probably need to be replaced during the normal life expectancy of the machine.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Service Info tab.
3. Select dc135 CRU / HFSI.
4. Refer to Table 1 to observe the status of the items.
5. To reset the HFSI File:
   a. Select the HFSI item.
   b. Select Reset Counter.
   c. Select Reset to confirm.

   To edit the life of the HFSI File:
   a. Select the HFSI item.
   b. Select Edit Life.
   c. Enter the new value.
   d. Select Save to confirm.
6. Select Close to exit the routine.
7. Select Call Closeout to exit service mode.

Table 1 HFSI Details

Name	Parts list Reference	Est Life	Mgmt Type	End of Life Threshold NVM	Default End of Life Threshold	End of Life CSE adjustable
Tray 1 Feed Roll	PL 80.26 Item 4 (retard roll) PL 80.26 Item 5 (feed and nudger rolls)	500K Feeds	Counter	606-518	750K	Yes
Tray 2 Feed Roll	PL 80.26 Item 4 (retard roll) PL 80.26 Item 5 (feed and nudger rolls)	500K Feeds	Counter	606-519	750K	Yes
Tray 3 Feed Roll	PL 80.32 Item 11 (feed and nudger rolls) PL 80.32 Item 17 (retard roll)	400K Feeds	Counter	606-520	400K	Yes
Tray 4 Feed Roll	PL 80.33 Item 9 (feed and nudger rolls) PL 80.33 Item 15 (retard roll)	400K Feeds	Counter	609-319	400K	Yes
Tray 5 (Bypass Tray) Feed Roll	PL 70.30 Item 15	100K Feeds	Counter	606-051	100K	Yes
Tray 6 Feed Roll	PL 80.45 Item 10 (nudger roll) PL 80.45 Item 12 (feed roll) PL 80.47 Item 2 (retard roll)	1000K Feeds	Counter	606-522	1000K	Yes
Tray 7 Feed Roll	PL 11.179 Item 1 (part of the pickup assembly)	80K Feeds	Counter	606-517	100K	Yes
Bias Foam	PL 80.15 Item 23 (45-55 ppm) PL 80.17 Item 23 (65-90 ppm)	500K Feeds	Counter	609-343	500K	Yes
HVF Paddle	PL 11.145 Item 28	200K Feeds	Counter	609-355	200K	Yes
Document Feeder Feed Roller	PL 5.20 Item 6 (feed roll) PL 5.20 Item 7 (nudger roll) PL 5.25 Item 3 (retard roll)	170K Feeds	Counter	606-516	170K	Yes

dC136 Service Plan

Purpose

To allow the service plan to be changed from metered to sold. An authorization code is required from the Xerox service centre.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Maintenance tab.
3. Select dc136 Service Plan.
   The service plan information is displayed.
4. Enter the authorization code to change the service plan.

   NOTE: *The service plan can be changed from and to any service plan.*
5. Select Close to exit routine.
6. Select Call Closeout, then Exit and Reboot.

dC137 PagePack

Purpose

To enable or disable the PagePack function. When enabled the PagePack function, a customer typically pays a fixed amount per month, or per page, for supplies and / or service plan.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Maintenance tab.
3. Select dc137 PagePack.
   The PagePack screen is displayed.

   NOTE: *The PagePack function is enabled in all XE installations. Depending on the customer's full service maintenance agreement, the PagePack function may need to be enabled when a USSG/XCL machine is installed in an XE region.*
4. Select Disabled or Enabled.
5. Enter the PagePack passcode, a 4 digit authorization code. The authorization code can be found in the customers machine installation pack.
6. The Save button will appear. Select Cancel or Save.
7. Select Call Closeout to exit service mode.

dC140 Analog Monitor

Purpose

To provide tools to start (activate) and stop (deactivate) monitoring of specific analog components. The nominal range of the analog value and, when monitoring is active, the current value is displayed. The values are updated at least every second to allow the component state to be monitored.

Refer to Table 1 for the component list.

Procedure

1. Enter service mode, GP 1.
2. Select the Diagnostics tab.
3. Select dc140 Analog Monitor. The dc140 Analog Monitor screen is displayed.
4. Scroll the table to display the available analog components.
5. Select the required item from the table.
6. A popup menu will be displayed, select Start to confirm.
   - The table will display a status against the selected component.
   - While service mode is activated the components are not active so the value will not change.
   - To check the component, either manipulate the component manually or make a note of the value, exit Analog Monitor then go to dC330 Component Control. Run the component then return to dc140 Analog Monitor.
   - Multiple components may be selected.
   - To stop monitoring, select the required component, then select Stop.
   - Selecting Stop All will stop monitoring all components.
7. Select Close to return to the Diagnostic Routine window.
8. Select Call Closeout to exit service mode.

Table 1 Component List

ID Code	Component Name	Range	Comments
10-601	Fuser Temp Sensor A	0 - 255	Display value in degrees C. or degrees F.
10-602	Fuser Temp Sensor B	0 - 255	Display value in degrees C. or degrees F.
75-601	Tray 5 (bypass) width sensor	0 - 300	Display value in mm or inches
91-601	Humidity sensor	0 - 100	Display value in % RH
91-602	Ambient temperature sensor	0 - 255	Display value in degrees C. or degress F.
92-601	Toner concentration sensor	0 - 255	Display value in %
92-602	Developer temperature sensor	0 - 255	Display value in degrees C. or degrees F.

dC301 NVM Initialization

General

The purpose of the NVM initialization routine is to reset the values of all applicable NVM parameters to default. There are three machine domains and three types of initialization.

The three machine domains are:

- Copier NVM Initialization
- Network Controller NVM Initialization
- Fax NVM initialization

The three types of initialization are:

- **User data** That data which defines the way the customer prefers that the equipment operates (i.e. customer preference, SA/KO settings, configuration).
- **System data** That data which defines the way the equipment operates in relation to its environment (i.e. machine variables).
- **All data:** That additional data (on top of System and User data) which may be initialized without significantly impacting the machines operation. (i.e. machine variables, SA/KO settings, Fault log).

Copier NVM Initialization

Purpose

To reset specific machine variable NVM or all machine variable NVM non-volatile memory (with the exception of protected NVM for which a password is required) to their default values.

NOTE: *Initialization does not affect the billing counter and accounting.*

Procedure

1. Save the NVM to disk, refer to NVM Save and Restore, dC361.
2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dc301 NVM Initialization.
5. Select Copier.
6. Select the sub-domain. Refer to Table 1 for the functions in each sub domain.
   - Copy Controller
   - Scanner
   - Print Engine
   - Finisher
7. Select the NVM data to reset. Refer to Table 1 for the functions that are reset to default.
   - User
   - System
   - All
8. Select Initialize, when the pop-up window appears confirm the request.
   A message will be displayed to indicate successful completion.
9. Exit dc301 NVM initialization.
10. Select Call Closeout to exit service mode.
11. Reboot the machine for the changes to take effect.

NOTE: *If a Reset All has been performed then go to the Post Reset All Procedure.*

Post Reset All Procedure

If a Reset All has been selected then perform the steps that follow:

1. Open the paper trays and allow them to fully lower. Close each tray to determine the amount of paper correctly.
2. If there is a tray 6 kit installed, the media type will need to be re-entered. Enter dC131 NVM Read/Write location 609-316. Enter the appropriate value, 0 = Standard (A4 or 8.5 x 11 LEF), 1 = Kit A (A3 SEF or A4 LEF), 2 = Kit A (11x17 SEF or 8.5 x 11 LEF), 3 = Kit B (A4 SEF) and 4 = Kit B (8.5 x 11 Legal SEF).
3. Perform ADJ 60.5 IIT Registration, Magnification and Calibration.

Network Controller NVM Initialization

Purpose

To return to default the network controller NVM settings that arestored on the hard disk.

Procedure

1. Save the NVM to disk, refer to NVM Save and Restore, dC361.
2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dc301 NVM Initialization.
5. Select Network Controller.
6. Select Initialize, when the pop-up window appears confirm the request.
   A message will be displayed to indicate successful completion.
7. Refer to Table 2 for the functions that are reset.
8. Exit dc301 NVM initialization.
9. Select Call Closeout to exit service mode.
10. Reboot the machine for the changes to take effect.

Fax NVM initialization

Purpose

To return to default the fax NVM settings that are stored on the fax card. Refer to the Fax NVM Document.

NOTE: *The Edoc CD must be in the CD drive to use the Fax NVM Document link.*

Procedure

1. Save the NVM to disk, refer to NVM Save and Restore, dC361.
2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dc301 NVM Initialization.
5. Select Fax.
6. Select the NVM data to reset. Refer to Table 3 for the functions that are reset to default.
   - User
   - System
   - All
7. Select Initialize when the pop-up window appears confirm the request.

8. A message will be displayed to indicate successful completion.
9. Exit dc301 NVM Initialization.
10. Select Call Closeout to exit service mode.
11. Reboot the machine for the changes to take effect.

Table 1 Copier NVM

Sub-Domain	NVM Initialization Type	User Data NVM	System Data NVM	All Data NVM
Copy Controller	All	N	N	N
	Billing Counter	N	N	N
	System Usage Counter			Y
	Fault Counter (1)			Y
	Diagnostic Counter (1)			Y
	SA / KO Setting	Y		Y
	Fault Log			Y
	Configuration			Y
	Diagnostics			Y
	Debug			Y
	Machine Variable		Y	Y
	Machine Variable Xero		Y	Y
	Machine Variable Registration		Y	Y
	Machine Variable Paper Path		Y	Y
	Machine Variable SPDH		Y	Y
	Machine Variable Platen		Y	Y
	Auditron	Y		Y
	ESS	N	N	N
	Crash Recovery Type			Y
	Completed Job Log			Y
	Controlled Access Machine Speed, Market Region	N	N	N
	JBA Database	Y		Y
	JBA Configuration	Y		Y
	Auditron Configuration	Y		Y
	Xerox Standard Accounting	N	N	N
	HFSI Counter	N	N	N
Scanner	NVM Machine Variable		Y	Y
	SA / KO Setting	Y		Y
	Configuration			Y
Printer	NVM Machine Variable		Y	Y
	SA / KO Setting	Y		Y
	Configuration			Y
Finisher	NVM Machine Variable		Y	Y

Table 1 Copier NVM

Sub-Domain	NVM Initialization Type	User Data NVM	System Data NVM	All Data NVM
	SA / KO Setting	Y		Y
	Configuration			Y

NOTE: *The booklet maker NVM is not reset as it is custom set for each unit.*

(1) These counters are reset using the Reset Counters option provided in the Call Closeout feature.

Table 2 Network Controller NVM

NVM Initialization Type	Notes
Custom Certificates	Includes netscape, trusted, racoon, OSCP and root certificates.
NVRAM Configuration	Reset to default.
Network Device Configurations	
NC Data Store	Generated at runtime.
Runtime Generated Configuration Files	
Scan Templates	Used by Workflow Scanning.
Completed Job Logs	To prevent a list of old processed jobs displaying on the UI.
NC Debug Logs	
Print Spool Files	To prevent unwanted active jobs in the queue.
JBA Accounting Files	
Stored Images	Retaining these may breach confidentiality.
Temporary Jobs From The Scan Directory	Retaining these may breach confidentiality.
Cloning Data	Retaining these may breach confidentiality.
Downloadable Email Address Books	Retaining these may breach confidentiality.
Set FTP and TELNET access to OFF	Security measure.
Weblet and EIP Applications	These are deleted.

Table 3 Fax NVM

NVM Initialization Type	User Data NVM	System Data NVM	All Data NVM
Controlled Access (2)			Y
Completed Job Log	Y		(Y)
Auditron	Y		(Y)
Configuration	Y	Y	(Y)
SA / KO Setting	Y		(Y)

(2) The Fax functionality for the NVM All Data Initialization will result in all of the NVM data being deleted, which is why the other categories are shown in brackets.

dC312 Network Echo Test

Purpose

To check network connectivity.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Diagnostics tab.
3. Select dc312 Network Echo Test.
4. Select the required protocol from TCP/IP, AppleTalk or Novel or IPX.
5. Select Start Test.

   The status region at the top of the user interface will indicate that the test is in progress.

   The status region will indicate the result of the test before returning to the previous display.
6. Select Close to exit the routine.
7. Select Call Closeout to exit Service Mode.

dC330 Component Control

Purpose

To show the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids.

Description

Output and input component codes are entered into the Component Control Table on the UI, and then checked individually or in permitted groups. The codes in the tables are grouped in function chain order, refer to GP 2 Fault Codes and History Files.

NOTE: *To check the operation of the fuser temperature, humidity, ambient temperature, bypass width, toner concentration or developer temperature sensors, refer to dC140 Analog Monitor.*

Go to the appropriate procedure:

- Input Components
- Output Components

Input Components

When the appropriate code is entered the status of the component will be shown on the UI.

NOTE: *The logic level shown on the circuit diagrams with the signal name will be the actual signal as measured with a service meter. This will not necessarily be the same as the logic state shown on the UI, especially where the output is inverted. When testing components using these control codes, look for a change in state, not for a high or low.*

The displayed status of the input component can be changed by causing the component status to change, e.g. operating a sensor with a sheet of paper.

Go to the appropriate table:

- Table 1 Input codes 001
- Table 2 Input Codes 005
- Table 3 Input Codes 010
- Table 4 Input Codes 011
- Table 5 Input Codes 012
- Table 6 Input Codes 061 to 062
- Table 7 Input Codes 071 to 076
- Table 8 Input Codes 081 to 083
- Table 9 Input Codes 091 to 093

Output Components

When the appropriate code is entered, the component will run or energize for a set time. The default time-out for most components is set at 90 seconds, but can be as short as 5 seconds. Some components require that other components are run or energized at the same time. It is possible to enter and run or energize up to six component control codes (not fax), but only in permitted groups. If illegal combination of codes are entered the components will not run or energize.

Go to the appropriate table:

- Table 10 Output Codes 005

- Table 11 Output Codes 010
- Table 12 Output Codes 011
- Table 13 Output Codes 012
- Table 14 Output Codes 020
- Table 15 Output Codes 042
- Table 16 Output Codes 062 to 066
- Table 17 Output Codes 071 to 076
- Table 18 Output Codes 081 to 083
- Table 19 Output Codes 091 to 093

Procedure

1. Enter Service Mode, GP 1.
2. Select the Diagnostics tab.
3. Select dc330 Component Control.

CAUTION

Check the component control tables for components that will damage the machine if run together.

4. Select the required codes as follows:

   If the component control code is not known:

   a. Select a chain from the drop down list.
   b. Select the required component and touch Add.

   If the required component control code is known:

   a. Touch the Chain field and enter the 3 digit chain number using the numeric key pad.
   b. Touch the Link field and enter the required link number using the numeric key pad.
   c. Touch Add.
5. Once the required component control codes are in the lower list select the required code and choose options from the menu as required.
6. Select close to exit dc330 Component Control.
7. Select Call Closeout to exit service mode.

Input Codes

Table 1 Input codes 001

Code	Displayed Name	Description	General
001-300	Front Door Interlock	Front door interlock switch (S01-300)	High = door closed, low = door open
001-305	Left Door Interlock	Left hand door interlock (S01-305)	High = door closed, low = door open

Table 2 Input codes 005

Code	Displayed Name	Description	General
005-305	DH top cover sensor	SPDH top cover interlock switch (S05-305)	High = cover closed, low = cover open
005-307	Lift home position sensor	SPDH lift home position sensor (Q05-307)	High = document present, low = no document
005-308	DH last sheet out sensor	SPDH last sheet out sensor (Q05-308)	High = document present, low = no document
005-309	DH doc present sensor	SPDH document present sensor (Q05-309)	High = document present, low = no document
005-310	DH stack height sensor	SPDH stack height sensor (Q05-310)	High = document present, low = no document
005-315	DH length sensor 1	SPDH length sensor 1 (Q05-315)	High = document present, low = no document
005-320	DH length sensor 2	SPDH length sensor 2 (Q05-320)	High = document present, low = no document
005-325	DH width sensor 1	SPDH width sensor 1 (Q05-325)	High = document present, low = no document
005-326	DH width sensor 2	SPDH width sensor 2 (Q05-326)	High = document present, low = no document
005-327	DH width sensor 3	SPDH width sensor 3 (Q05-327)	High = document present, low = no document
005-330	DH feed sensor	SPDH feed sensor (Q05-330)	High = document present, low = no document
005-335	DH takeaway sensor	SPDH takeaway sensor (Q05-335)	High = document present, low = no document
005-340	DH reg sensor	SPDH registration sensor (Q05-340)	High = document present, low = no document
005-343	DH side 2 reg sensor	SPDH side 2 registration sensor (Q05-343)	High = document present, low = no document
005-360	DH Cal home position sensor	SPDH calibration home position sensor (Q05-360). Detects when the calibration strip of the side 2 scan assembly is in the home position.	High = Calibration strip home
005-375	DH LED fan lock alarm	SPDH LED fan lock alarm	High = Alarm present

Table 2 Input codes 005

Code	Displayed Name	Description	General
005-385	DH motor fan lock alarm	SPDH motor fan lock alarm	High = Alarm present
005-951	SPDH cover open B sensor	SPDH cover open B sensor (Q05-951)	High = document present, low = no document

Table 3 Input codes 010

Code	Displayed Name	Description	General
010-100	Fuser exit switch	Fuser exit switch (S10-100), detects when paper exits the fuser	High = paper present, low = no paper
010-105	Invert sensor	Inverter sensor (Q10-105), detects when paper enters the inverter	High = paper present, low = no paper
010-120	IOT exit sensor	IOT exit sensor (Q10-120), detects when paper exits the IOT	High = paper present, low = no paper
010-315	Fuser Temp Fault Snr	Detects fault in fuser thermistor.	High = fault, low = good

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-044	Punch Unit Home Sensor	HVF punch unit home sensor (Q11-044)	High = home, low = unit not home
011-100	Entry Sensor	LCSS, HVF and LVF BM entry sensor (Q11-100)	High = paper present, low = no paper
011-110	Punch Sensor	LCSS, HVF and LVF BM punch position sensor (Q11-110)	High = paper present, low = no paper
011-112	Chad Bin Set Sensor	HVF chad bin set sensor (Q11-112) detects when the chad bin installed	High = chad bin installed
011-130	Top Exit Sensor	LCSS, HVF and LVF BM top exit sensor (Q11-130)	High = paper present, low = no paper
011-140	2nd to Top Exit Snr	LCSS, HVF and LVF BM 2nd to top exit sensor (Q11-140) detects paper exiting to the bin (bin 1)	High = paper present low = no paper
011-150	Inserter Sheet Size Detector 1	HVF inserter sheet size detector 1 (Q11-150) detects the DOF (Direction Of Feed) sheet size in inserter tray	High = sheet size detected
011-151	Inserter Sheet Size Detector 2	HVF inserter sheet size detector 2 (Q11-151) detects the DOF (Direction Of Feed) sheet size in inserter tray	High = sheet size detected

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-152	Inserter STS Sheet Size Detector	HVF inserter STS (Side To Side) sheet size detector (Q11-152) detects STS (Side To Side) sheet size in inserter tray	High = sheet size detected
011-153	Inserter Unit Empty Sensor	HVF inserter unit empty sensor (Q11-153) detects paper present inserter tray	High = paper present, low = no paper
011-154	Inserter LE Sensor	HVF inserter LE sensor (Q11-154) detects the LE of the paper	High = LE detected, low = LE not detected
011-155	Inserter TE Sensor	HVF inserter TE sensor (Q11-155) detects the TE of the paper	High = TE detected, low = TE not detected
011-156	Inserter Bottom Plate Sensor	HVF inserter bottom plate sensor (Q11-156) detects the bottom plate in home position	High = home position, low = not home
011-157	Buffer Position Sensor	HVF Buffer position sensor (Q11-157) detects paper	High = paper present, low = no paper
011-158	HVF Booklet Exit Sensor	HVF booklet exit sensor (Q11-158) detects paper exiting the finisher to enter into booklet maker	High = paper present, low = no paper
011-159	Nip Home Sensor	HVF nip home sensor (Q11-159) detects the position of the buffer movement tray in descending	High = Nip home
011-160	BM Entry Sensor	HVF BM and LVF BM entry sensor (Q11-160) detects paper entry to the booklet maker	High = paper present, low = no paper
011-164	Buffer Path Sensor	HVF buffer path sensor (Q11-164) detects paper	High = paper present, low = no paper
011-170	Nip Split Sensor	HVF nip split sensor (Q11-170) detects the position of the buffer movement tray in ascending	High = Nip split home
011-171	Paper Pusher Upper Sensor	HVF paper pusher upper sensor (Q11-171) detects if the pusher is in the upper position	High = upper position
011-172	Pressing and Support Encoder Sensor	HVF pressing and support encoder sensor (Q11-172) detects the timing for pressing and support motor	High = made, low = not detected
011-173	Paper Pusher Lower Sensor	HVF paper pusher lower sensor (Q11-173) detects if paper pusher is in lower position	High = made, low = not detected
011-174	Front Tamper Tray Away Sensor	HVF front tamper tray away sensor (Q11-174) detects the front tamper is in away position	High = made, low = not detected
011-175	Stapler Unit Mid Home Sensor	HVF stapler unit mid home sensor (Q11-175) detects if stapler unit is in mid home position	High = made, low = not detected

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-176	Offset Unit Away Sensor	HVF offset unit away sensor (Q11-176) detects if offset unit is in away position	High = made, low = not detected
011-177	Ejector Module Motor Encoder Sensor	HVF ejector module motor encoder sensor (Q11-177) detects the timing for ejector module motor	High = made, low = not detected
011-178	Ejector Plate Motor Encoder Sensor	HVF ejector plate motor encoder sensor (Q11-178) detects the timing for ejector plate motor	High = made, low = not detected
011-179	Ejector Plate Home Sensor	HVF ejector plate home sensor (Q11-179) detects if ejector plate is in home position	High = made, low = not detected
011-180	Ejector Unit Lower Paddle Home Sensor	HVF ejector unit lower paddle home sensor (Q11-180) detects if eject unit lower paddle is in home position	High = made, low = not detected
011-182	Stacker Unit Encoder Sensor	HVF stacker unit encoder sensor (Q11-182) detects the timing for stacker unit motor	High = made, low = not detected
011-183	Tri Folder Entry Sensor	HVF tri folder entry sensor (Q11-183) detects the booklet and tri folder entry. Trigger point for CL80	High = made, low = not detected
011-184	Tri Folder Assist Sensor	HVF tri folder assist sensor (Q11-184) detects trigger point for L81	High = made, low = not detected
011-185	Tri Folder Exit Sensor	HVF tri folder exit sensor (Q11-185) detects booklet and tri folder exit to tray	High = made, low = not detected
011-187	Offset Unit Index Sensor	HVF offset unit index sensor (Q11-187) detects if offset unit is in index position	High = made, low = not detected
011-190	BM Paper Present Sensor	HVF BM paper present sensor (Q11-190) detects when paper is present in the booklet maker compiling area	High = paper present, low = no paper
011-191	Pressing and Support Init Snr	HVF pressing and support initial sensor (Q11-191) detects the initial position sensor	High = made, low = not detected
011-192	Pressing and Support Home Snr	HVF pressing and support home sensor (Q11-192) detects the home position sensor	High = made, low = not detected
011-193	Pressing and Support Out Snr	HVF pressing and support out sensor (Q11-193) detects the out position sensor	High = made, low = not detected

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-194	Paddle Unit Upper Sensor	HVF paddle unit upper sensor (Q11-194) detects the paddle unit position	High = made, low = not detected
011-195	Paddle Unit Lower Sensor	HVF paddle unit lower sensor (Q11-195) detects paddle unit lower position	High = made, low = not detected
011-196	Bin 1 Rear Wall Sensor	HVF Bin1 paper stack sensor (Q11-196) operates together with Q11-322.	Low = paper stack detected, High = not detected
011-300	Docking Interlock	LCSS, HVF and LVF BM docking interlock switch (S11-300)	High = docked, low = un-docked
011-302	Top Cover Intlk	LCSS, HVF and LVF BM top cover interlock switch (S11-302), detects if top cover is open.	High = closed, low = open
011-303	Front Door Intlk	LCSS, HVF and LVF BM front door interlock switch (S11-303), detects if front door is open.	High = closed, low = open
011-306	Inserter Top Cover Intlk	HVF inserter top cover interlock sensor (Q11-306) detects if inserter tray top cover is closed	High = made, low = not detected
011-310	Tamp Front Home Snr	LCSS, HVF and LVF BM front tamper home sensor (Q11-310) Detect if front tamper is home	High = home, low = not home
011-311	Tamp Rear Home Snr	LCSS, HVF and LVF BM rear tamper home sensor (Q11-311), detects if rear tamper is home	high = home, low - not home
011-319	Tamp Rear Away Snr	LCSS, HVF and LVF BM rear tamper away home sensor (Q11-319), detects if the rear tamper is at the away home position	High = away home, low = not away home
011-320	Ejector Home Sensor	HVF ejector home sensor (Q11-320) detects the home (closed) position of the ejector housing. LCSS and LVF BM ejector home sensor (Q11-320) detects the home position of the ejector assembly	High = home, low = not home
011-322	Ejector Out Sensor	LCSS, HVF and LVF BM ejector out sensor (Q11-322) detects the out position of the ejector assembly	High = out, low= not out
011-326	Paddle Roll Home Snr	LCSS and LVF BM paddle roll position sensor, HVF BM paddle roll home sensor (Q11-326) detects the home position of the paddle roll	High = home, low = not home

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-331	Bin 1 90% Full Sensor	LCSS, HVF and LVF BM bin 1 90% full sensor (Q11-331) detects when bin 1 is 90% or more full	High = 90% or more full, low = less than 90% full
011-332	Bin 1 Upper Level Snr	LCSS, HVF and LVF BM bin 1 upper level sensor (Q11-332) detects the top of the paper stack in bin 1	High = stack sensed, low = stack not sensed
011-334	Bin 1 Upper Limit SW	LCSS, HVF and LVF BM bin 1 upper limit switch (S11-334) detects the upper limit of bin 1 movement	High = bin detected, low = bin not detected
011-335	Bin 1 Lower Limit SW	LCSS, HVF and LVF BM bin 1 upper limit switch (S11-335) detects the lower limit of bin 1 movement	High = bin detected, low = bin not detected
011-336	Bin 1 Mot Encoder Snr	LCSS and LVF BM bin 1 motor encoder sensor (Q11-336) generates motor speed pulses	High = bar in encoder wheel, low = gap in encoder wheel
011-337	Bin1 Offset Sensor	HVF bin 1 offset sensor (Q11-337) detects the offset and home position of bin 1	High = tray moving from home to offset, low = tray moving from offset to home
011-348	Chad Bin Lvl Sensor	LCSS, HVF and LVF BM chad bin full sensor (Q11-348) detects when the weight of the chad reaches a pre-set value	High = bin full, low = bin not full
011-350	Punch Head Home Snr	LCSS, HVF and LVF BM punch head home sensor (Q11-350) detects the home position of the punch head	High = punch home, low = punch not home
011-351	Punch Hd Present Snr	LCSS and LVF BM punch head present sensor (Q11-351) detects if a hole punch is installed	High = punch installed, low = punch not installed
011-360	SH 1 Home Sensor	LCSS, HVF and LVF BM staple head 1 home sensor (Q11-360) detects when the staple head is fully open (home position)	High = home, low = not home
011-361	SH 1 Paper Sensor	LCSS, HVF and LVF BM staple head 1 paper present sensor (Q11-361) detects when paper is within the jaws of the stapler	High = paper present, low = no paper
011-362	SH 1 Low Staples Snr	LCSS and LVF BM staple head 1 low staples sensor (Q11-362) detects when staple cartridge is almost empty	High = almost empty, low = plentiful staples

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-363	SH 1 Cartridge Sensor	LCSS and LVF BM staple head 1 cartridge present sensor (Q11-363) detects when a staple cartridge is installed	High = cartridge installed, low = cartridge not installed
011-364	SH 1 Priming Sensor	LCSS and LVF BM staple head 1 priming sensor (Q11-364) detects when the front two staples have been pre-formed (primed)	High = primed, low = not primed
011-365	Safety Gate Switch	HVF stapler gate safety switch (S11-365)	High = safety gate closed
011-370	SU 1 Home Sensor	LCSS and LVF BM staple unit 1 home sensor (Q11-370) detects when the staple head is at the corner staple position	High = stapler home, low = stapler not home
011-371	SU 1 Front Index Snr	LCSS and LVF BM staple unit 1 front index sensor (Q11-371) detects the index position of the stapling head	High = at stapling position, low = not at stapling position
011-383	BM Guide Home Snr	HVF and LVF BM backstop guide home sensor (Q11-383) detects when the backstop is in the home position	High = home, low = not home
011-384	BM Tamper1 Home Snr	HVF and LVF BM tamper 1 home sensor (Q11-384) detects when the BM tampers are in the home position	High = home, low = not home
011-389	BM Bin2 90% Full Snr	HVF bin 2 90% full sensor (Q11-389) detects when bin 2 is 90% or more full	High = 90% or more full, low = less than 90% full
011-391	BM Flapper Home Sensor	HVF BM and LVF BM flapper sector roll home sensor (Q11-391)	High = home
011-392	PTU Switch	HVF PTU switch (S11-392) detects if pause to unload button is pressed	High = made, low = not detected
011-393	Tri-Fold Front Dr Interlock	HVF tri fold door interlock (S11-393) detects if the tri fold door is closed	High = closed, low = door open
011-394	Tri-Fold Top Cover Interlock	HVF tri fold top cover interlock (S11-394) detects if the tri fold top cover is closed	High = closed, low = cover open
011-409	BM Exit Sensor	HVF BM exit sensor (Q11-409) detects booklets exiting the booklet maker	High = detected, low = not detected

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-411	BM SH1 Home Snr	HVF BM staple head 1 home sensor (Q11-411) detects when the staple head is fully open (home position)	High = home, low = not home
011-412	BM SH1 Staples Low	HVF BM staple head 1 staples low sensor (Q11-412) detects when staple cartridge is almost empty	High = almost empty, low = plentiful staples
011-413	BM SH2 Home Snr	HVF BM staple head 2 home sensor (Q11-413) detects when the staple head is fully open (home position)	High = home, low = not home
011-414	BM SH2 Staples Low	HVF BM staple head 2 staples low sensor (Q11-412) detects when staple cartridge is almost empty	High = almost empty, low = plentiful staples
011-415	BM Crease Gate Home	HVF BM crease roll gate home sensor (Q11-415) detects when the gate is fully raised	High = gate raised, low = gate not raised
011-416	BM Crease Blade Home	HVF BM and LVF BM crease blade home sensor (Q11-416) detects when the crease blade is fully retracted	High = home, low = not home
011-418	BM Blade Mot Encoder	HVF BM and LVF BM crease blade motor encoder sensor (Q11-418) generates motor speed pulses	High = bar in encoder wheel, low = gap in encoder wheel
011-419	BM Crease Mot Encode	HVF BM and LVF BM crease roll motor encoder sensor (Q11-419) generates motor speed pulses	High = bar in encoder wheel, low = gap in encoder wheel
011-421	BM SH Carrier Closed	HVF BM staple head carrier closed sensor (Q11-421) detects when the carrier is in the closed position	High = closed, low = not closed
011-431	Inserter Left Hand Door Interlock	HVF Insert left hand door interlock (S11-431) detects the state of the inserter door interlock	High = closed, low = open
011-438	BM Staple Unit Home Sensor	LVF BM staple unit home sensor (Q11-438)	High = home, low = not home
011-439	BM Staple Unit Away Sensor	LVF BM staple unit away sensor (Q11-439)	High = at away position, low = not at away position
011-440	BM End Stop Mid Home Sensor	LVF BM end stop mid home sensor (Q11-440)	High = at mid home position, low = not at mid home position
011-441	Stapler Jaw Home Sensor	LVF BM stapler jaw home sensor (Q11-441)	High = home, low = not home

Table 4 Input codes 011

Code	Displayed Name	Description	General
011-442	BM Staple Head 1 Prime Sensor	LVF BM staple 1 prime sensor (Q11-442)	High = ready, low = not ready
011-443	BM Staple Head 2 Prime Sensor	LVF BM staple 2 prime sensor (Q11-443)	High = ready, low = not ready
011-444	BM Staple Paper Detect Sensor	LVF BM staple paper detect sensor (Q11-444)	High = paper detected, low = paper not detected

Table 5 Input codes 012

Code	Displayed Name	Description	General
012-304	OCT Level Sensor	OCT 90% full sensor (Q12-304) detects when tray is 90% or more full.	High = 90% or more full, low = less than 90% full
012-305	OCT Index Sensor	OCT index sensor (Q12-305) detects the offset and home position of bin 1	High = tray moving from home to offset, low = tray moving from offset to home

Table 6 Input codes 061 to 062

Code	Displayed Name	Description	General
061-320	ROS Motor Ready Snr	Detects when the ROS motor is at required speed.	High = motor ready. Toggle ROS motor (61-020) on and off to check sensor.
061-340	ROS Ready	Indicates that the ROS laser has reached it's operating level and the ROS motor is up to required speed.	High = ready. Toggle ROS motor (61-020) on and off to check sensor. The ROS laser level will only be set once the ROS motor has reached the required speed.
062-019	DH Platen Down Sensor	SPDH platen down sensor (Q62-019)	High = SPDH lowered
062-020	DH 24 Volts	SPDH 24V	High = 24V present
062-034	Platen Scan Cooling Fan Input	Detects when the scanner cooling is running.	High = Fan off
062-100	Carriage Home Sensor	Carriage home sensor (Q62-100). This must be used in conjunction with 62-023 Carriage Home Sensor Test. Add both components, start the sensor test, then the carriage home sensor test. The sensor will cycle its state as the carriage moves to and from home.	High = carriage home
062-251	Doc Size Sensor 1	Document size sensor 1 (Q62-251)	High = document not sensed, low = document sensed

Table 6 Input codes 061 to 062

Code	Displayed Name	Description	General
062-253	Doc Size Sensor 2	Document size sensor 2 (Q62-253)	High = document not sensed, low = document sensed
062-301	DH Angle Sensor	Input module angle sensor (Q62-301) detects the input module at 30% angle for size sensing.	High = input module lowered, low input module raised
062-322	Platen Hotline	Platen hotline	High/Low

Table 7 Input codes 071 to 076

Code	Displayed Name	Description	General
071-300	T1 Home Switch	Tray 1 home switch (S71-300)	High = tray home, low = tray not home
071-301	T1 Size Switch 1	Size switch 1 (S71-301)	High = made
071-302	T1 Size Switch 2	Size switch 2 (S71-302)	High = made
071-303	T1 Size Switch 3	Size switch 3 (S71-303)	High = made
071-304	T1 Size Switch 4	Size switch 4 (S71-304)	High = made
071-305	T1 Size Switch 5	Size switch 5 (S71-305)	High = made
071-320	T1 Empty Sensor	Tray 1 empty sensor (Q71-320)	High = tray empty, low = paper in tray
071-330	T1 stack height sensor	Tray 1 stack height sensor (Q71-330)	High = top of stack sensed, low = top of stack not sensed
072-300	T2 Home Switch	Tray 2 home switch (S72-300)	High = tray home, low = tray not home
072-301	T2 Size Switch 1	Size switch 1 (S72-301)	High = made
072-302	T2 Size Switch 2	Size switch 2 (S72-302)	High = made
072-303	T2 Size Switch 3	Size switch 3 (S72-303)	High = made
072-304	T2 Size Switch 4	Size switch 4 (S72-304)	High = made
072-305	T2 Size Switch 5	Size switch 5 (S72-305)	High = made
072-320	T2 Empty Sensor	Tray 2 empty sensor (Q72-320)	High = tray empty, low = paper in tray
072-330	T2 stack height sensor	Tray 2 stack height sensor (Q72-330)	High = top of stack sensed, low = top of stack not sensed
073-300	T3 Home Switch	Tray 3 home switch (S73-300)	High = tray home. low = tray not home
073-320	T3 Empty Sensor	Tray 3 empty sensor (Q73-320)	High = tray empty, low = paper in tray
073-330	T3 Stack Height Sensor	Tray 3 stack height sensor (Q73-330)	High = top of stack sensed, low = top of stack not sensed

Table 7 Input codes 071 to 076

Code	Displayed Name	Description	General
073-340	T3 Level Encoder	Detects tray 3 paper level encoder status (Q73-340)	High = top of stack sensed, low = top of stack not sensed
073-400	HCF 24V Monitor	Indicates the state of 24V input monitor	High = 24V present
074-300	T4 Home Switch	Tray 4 home switch (S74-300)	High = tray home. low = tray not home
074-320	T4 Empty Sensor	Tray 4 empty sensor (Q74-320)	High = tray empty, low = paper in tray
074-330	T4 Stack Height Sensor	Tray 4 stack height sensor (Q74-330)	High = top of stack sensed, low = top of stack not sensed
074-340	T4 Level Encoder	Detects tray 4paper level encoder status (Q74-340)	High = top of stack sensed, low = top of stack not sensed
075-320	Bypass Empty Sensor	Bypass empty sensor (Q75-320)	High = tray empty, low = paper in tray
076-300	PFP Door Switch	PFP Door switch (S76-300)	High = door closed, low = door open
076-310	PFP Docking Switch	Detects that tray 6 is in the docked position (S07-372)	High = tray 6 docked
076-320	PFP Tray Empty Sensor	Detects paper in tray 6 (Q76-320)	High = paper present, Low = no paper
076-330	PFP Stack Height Sensor	Tray 6 stack height sensor (Q76-330)	High = top of stack sensed, Low = top of stack not sensed
076-335	PFP Stack Down Sensor	Tray 6 stack down sensor (Q76-335), detects when the tray is in the fully lowered position	High = tray is fully down
076-340	PFP El Motor Encoder Sensor	Encoder sensor (Q76-340), detects state of motor encoder sensor bit	High = detected, low = not detected
076-400	PFP 24V Monitor	Indicates the state of 24V input monitor	High = 24V present

Table 8 Input codes 081 to 083

Code	Displayed Name	Description	General
081-100	Wait Sensor	Wait sensor (Q81-100), detects when lead edge of paper at wait point.	High = paper present, low = no paper
081-101	T1 Feed Sensor	Detects when lead edge of paper is at tray 1 feed sensor, (Q81-101)	High = paper present, low = no paper

Table 8 Input codes 081 to 083

Code	Displayed Name	Description	General
081-102	T2 Feed Sensor	Detects when lead edge of paper is at tray 2 feed sensor, (Q81-102)	High = paper present, low= no paper
081-103	T3 Feed Sensor	Detects when lead edge of paper is at tray 3 feed sensor, (Q81-103)	High = paper present, low = no paper
081-104	T4 Feed Sensor	Detects when lead edge of paper is at tray 4 feed sensor, (Q81-104)	High = paper present, low = no paper
081-106	PFP Feed Sensor	Detects when the lead edge of the paper is at tray 6 feed sensor (Q81-105)	High = paper present, Low = no paper
081-108	HCF Exit Sensor	Detects a sheet being fed from the HCF	High = paper present, Low = no paper
081-109	Tray 3 Exit Sensor	Detects a sheet being fed through the tray 3 horizontal transport	High = paper present, Low = no paper
081-110	PFP Wait Point Sensor	Wait sensor (Q81-110), detects when lead edge of paper at wait point. (same sensor as for 81-100)	High = paper present, low = no paper
081-111	PFP Release Sheet Hotline	Displays the state of the release sheet hotline	High = hotline active, low = not active
082-150	Registration Sensor	Detects when paper is at the registration sensor (Q82-150)	High = paper present, low = no paper
083-160	Duplex Sensor	Detects when paper is at the duplex sensor (Q83-160)	High = paper present, low = no paper

Table 9 Input codes 091 to 093

Code	Displayed Name	Description	General
091-060	HVPS Fault	Detects a fault in the HVPS	High = fault, low = good
091-070	Scorotron Cleaner Home Sensor	Detects the scorotron cleaning head in the home position	High = head not home, low = head in home position
093-310	Low Toner Sensor	Low toner sensor (Q93-310)	High = toner in sump, low = toner depleted
093-350	Waste Toner Full Sensor	Waste toner full sensor(Q93-350) detects when waste toner reaches a certain level in the container.	High = container full, low = container not full
093-380	Waste Toner Door SW	Waste toner door switch (S93-380) detects if the waste bottle is missing or the door is open during run	High = bottle present/door closed, low = bottle missing/door open

Output Codes

Table 10 Output codes 005

Code	Displayed Name	Description	General
005-020	DH feed motor	Runs the SPDH feed motor (MOT05-020) clockwise	On/off. 90 seconds timeout
005-025	DH feed clutch	Energises the SPDH feed clutch (CL05-025)	On/off. 30 seconds timeout
005-030	DH read motor	Runs the SPDH read motor (MOT05-030) clockwise	On/off. 90 seconds timeout
005-370	DH LED fan motor	Runs the SPDH LED fan (MOT05-370)	On/off
005-380	DH motor fan motor	Runs the SPDH motor fan motor (MOT05-380)	On/off
005-390	DH tray elevate motor	SPDH tray elevator motor (MOT05-390)	On/off
005-400	DH Reflection sensor adjustment	SPDH Reflection sensor adjustment	On/off
005-420	Feed motor (CCW)	Runs the SPDH feed motor (MOT05-020) counter clockwise	On/off
005-425	DH take away clutch	Energises the SPDH takeaway clutch (CL05-425)	On/off
005-430	Read motor (CCW)	Runs the SPDH read motor (MOT05-030) counter clockwise	On/off

Table 11 Output codes 010

Code	Displayed Name	Description	General
010-010	Fuser web motor	Energizes the fuser web motor (MOT10-010)	On/off. 90 seconds timeout
010-030	Invert Mot Fwd Slow	Energizes the inverter motor (MOT10-030) forward at process speed.	On/off. 90 seconds timeout
010-035	Invert Mot Rev Slow	Energizes the inverter motor (MOT10-030) in reverse at process speed.	On/off. 90 seconds timeout
010-040	Invert Mot Rev Dup	Energizes the inverter motor (MOT10-030) in reverse at duplex speed.	On/off. 90 seconds timeout
010-045	Inverter Path Sol	Energizes the invert path solenoid (SOL10-045). When de-energized sheets are fed to the inverter	On/off. 5 seconds timeout
010-050	Inverter Nip Sol	Energizes the inverter nip solenoid (SOL10-050). When de-energized the nip is open	On/off. 5 seconds timeout

Table 11 Output codes 010

Code	Displayed Name	Description	General
010-055	Tri Roll Split Nip Solenoid	Energizes the tri roll split nip solenoid (SOL10-055). When de-energized the nip is open	On/off. 5 seconds timeout
010-065	Vac Transport Fan	Energizes the vacuum transport fan in the short paper path assembly	On/off. 90 seconds timeout

Table 12 Output codes 011

Code	Displayed Name	Description	General
011-000	Transport Motor 1	Runs the LCSS transport motor 1, HVF transport motor 1A and transport motor 1B and LVF BM transport motor 1 (MOT11-000)	On/off. 90 seconds timeout
011-001	Transport Motor 2	Runs the LCSS, HVF and LVF BM transport motor 2 (MOT11-001)	On/off. 90 seconds timeout
011-002	Diverter Solenoid	Energizes the LCSS, HVF, LVF BM diverter gate solenoid, HVF BM upper diverter solenoid (SOL11-002)	On/off. 5 seconds timeout
011-003	Tamp Mot Front Home	Runs the LCSS, HVF and LVF BM front tamper motor (MOT11-003) to the home position.	On/off. 5 seconds timeout
011-004	Tamp Mot Rear Home	Runs the LCSS, HVF and LVF BM rear tamper motor (MOT11-004) to the home position	On/off. 5 seconds timeout
011-005	Tamp Mot Front Move	Runs the LCSS, HVF and LVF BM front tamper motor (MOT11-003) to move inbound	On/off. 5 seconds timeout
011-006	Tamp Mot Rear Move	Runs the LCSS, HVF and LVF BM rear tamper motor (MOT11-004) to move inbound	On/off. 5 seconds timeout
011-007	Tampers to A4LEF	Moves the LCSS and LVF BM tampers to the A4LEF position.	On/off. 5 seconds timeout
011-008	Tampers to 8.5x11LEF	Move the LCSS and LVF BM tampers to the 8.5”x11” LEF position.	On/off. 5 seconds timeout
011-009	Tamper Motor Cycle	Cycles the LCSS and LVF BM tampers in and out until time-out or stop.	On/off. 90 seconds timeout
011-010	CC Eject Roll Motor	Runs the HVF compiler carriage eject roll motor (MOT11-010)	On/off. 90 seconds timeout
011-020	Ejector Motor Home	Runs the LCSS and LVF BM ejector motor (MOT11-020) to the home position	On/off. 5 seconds timeout

Table 12 Output codes 011

Code	Displayed Name	Description	General
011-021	Ejector Motor Move	Runs the LCSS and LVF BM ejector motor (MOT11-020) to the out position	On/off. 5 seconds timeout
011-023	Ejector Motor Cycle	Runs the LCSS and LVF BM ejector motor (MOT 11-020), and the HVF BM ejector motor (MOT11-023) cycle routines, until timeout or stop.	On/off. 90 seconds timeout
011-024	Paddle Roll Motor Home	Runs the LCSS and LVF BM paddle roll motor (MOT11-024) to the home position	On/off. 15 seconds timeout
011-025	Paddle Roll Motor Run	Runs the LCSS, HVF and LVF BM paddle roll motor (MOT11-025) until timeout or stop	On/off. 15 seconds timeout
011-027	Paddle Unit Motor	Runs the HVF paddle unit motor (MOT11-027) to lift / lower paddle unit	On/off. 90seconds timeout
011-030	Bin 1 Elev. Mot Home	Runs the LCSS, HVF and LVF BM bin 1 elevate motor (MOT11-030) to the home position	On/off. 15 seconds timeout
011-031	Bin 1 Elev. Mot Up	Runs the LCSS, HVF and LVF BM bin 1 elevate motor (MOT11-030) by increments up	On/off. 15 seconds timeout
011-032	Bin 1 Elev. Mot Down	Runs the LCSS, HVF and LVF BM bin 1 elevate motor (MOT11-030) by increments down	On/off. 15 seconds timeout
011-033	Bin1 Elev. Mot Cycle	Runs the LCSS, HVF and LVF BM bin 1 elevate motor (MOT11-030) to cycle bins up/down until time-out or stop.	On/off. 90 seconds timeout.
011-034	Bin 1 Offset Motor	Runs the HVF bin 1 offset motor (MOT11-034)	On/off. 15 seconds timeout
011-042	Punch Head Move Home	Runs the LCSS and LVF BM hole punch motor (MOT11-042) to the home position	On/off. 15 seconds timeout
011-043	Punch Head Run	Runs the LCSS, HVF and LVF BM hole punch motor (MOT11-043) continuously	On/off. 15 seconds timeout
011-045	Punch Unit Motor Forward	Runs the HVF punch unit motor (MOT11-045) moves punch unit forward	On/off.
011-046	Punch Unit Motor Reverse	Runs the HVF punch unit motor (MOT11-045) moves punch unit in reverse	On/off.

Table 12 Output codes 011

Code	Displayed Name	Description	General
011-050	Staple Head 1 Motor	Runs the LCSS, HVF and LVF BM staple head 1 motor (MOT11-050)	On/off. 15 seconds timeout
011-051	SH1 Motor Rev. Home	Runs the LCSS and LVF BM staple head 1 motor (MOT11-050) in reverse to the home position	On/off. 15 seconds timeout
011-053	SU1 Motor Forward	Runs the LCSS, HVF and LVF BM stapling unit traverse motor (MOT11-053) increment forward.	On/off. 15 seconds timeout
011-054	SU1 Motor Reverse	Runs the LCSS, HVF and LVF BM stapling unit traverse motor (MOT11-053) increment reverse.	On/off. 15 seconds timeout
011-055	SU1 Index Mot Cycle	Runs the LCSS, HVF and LVF BM stapling unit traverse motor (MOT11-053) cycle routine	On/off. 15 seconds timeout
011-060	BM Compiler Motor	Runs the HVF BM paper path transport motor (MOT11-060)	On/off. 90 seconds timeout
011-061	BM Blade Motor	Runs the HVF BM and LVF BM crease blade motor (MOT11-061) cycle	On/off. 90 seconds timeout
011-062	BM Crease Motor	Runs the HVF BM and LVF BM crease roll motor (MOT11-062)	On/off. 6 seconds timeout
011-063	BM Staple Head 1 Motor	Runs the HVF BM staple head 1 motor (MOT11-063)	On/off. 5 seconds timeout
011-065	BM Back Stop Motor	Runs the HVF BM backstop motor (MOT11-065) moves to receive, then staple, then crease positions	On/off. 90 seconds timeout
011-066	BM Tamper 1 Motor	Runs the HVF BM tamper 1 motor (MOT11-066)	On/off. 90 seconds timeout
011-074	BM Diverter Solenoid	Energizes the HVF BM and LVF BM lower diverter gate solenoid (SOL11-074)	On/off. 5 seconds timeout
011-076	BM Stack Hold Sol	Energizes the HVF BM stack hold solenoids (SOL11-076) part of back stop assembly	On/off. 5 seconds timeout
011-077	Inserter Electric Clutch	Energizes the HVF inserter electric clutch (CL11-077) to drive the pickup roll	On/off.
011-078	Inserter Unit Motor	Runs the HVF inserter unit motor (MOT11-078) to drive the inserter rolls	On/off.
011-079	Buffer Feed Motor	Runs the HVF Feed Buffer motor (MOT11-079) to drive the buffer rolls	On/off. 90 seconds timeout

Table 12 Output codes 011

Code	Displayed Name	Description	General
011-080	Feed Motor	Runs the HVF feed motor (MOT11-080) to drive the feed rolls	On/off. 90 seconds timeout
011-081	Nip Split Motor	Runs the HVF nip split motor (MOT11-081) to activate the buffer movement tray	On/off. 90 seconds timeout
011-082	Clamp solenoid	Energizes the HVF clamp solenoid (SOL11-082) to keep first sheet of paper in the buffer pocket at buffer mode	On/off. 90 seconds timeout
011-083	Paper Pusher Motor	Runs the HVF paper pusher motor (MOT11-083) to drive the paper pusher	On/off. 90 seconds timeout
011-084	Curl Suppressor Solenoid	Energizes the HVF curl suppressor solenoid (SOL11-084) to activate the pressing device	On/off. 90 seconds timeout
011-085	Tri-Folder Diverter Solenoid	Energizes the HVF tri folder diverter solenoid (SOL11-085) to activate the tri folder diverter gate to divert paper to tri fold path	On/off. 5 seconds timeout
011-086	Tri-Folder Assist Gate Solenoid	Energizes the HVF tri folder assist gate solenoid (SOL11-086) to activate the tri folder assist gate to assist C fold into second nip	On/off. 5 seconds timeout
011-087	Clutch Drive	Energizes the HVF clutch drive (CL11-087) to drive tri folding rolls	On/off. 5 seconds timeout
011-088	Cycle Ejector Roll Motor	Runs the HVF ejector roll motor (MOT11-088) cycle routine.	On/off. 90 seconds timeout
011-390	BM Flapper Motor	Runs the HVF BM and LVF BM flapper motor (MOT11-390)	On/off. 90 seconds timeout
011-400	BM Flapper Clutch Sol	Energizes the HVF BM flapper clutch solenoid (SOL11-400)	On/off. 5 seconds timeout
011-401	BM Crease Roll Motor	Runs the HVF crease roll gate motor (MOT11-401) cycle routine	On/off. 15 seconds timeout
011-402	BM Mt Conveyor Drive	Runs the HVF BM conveyor belt drive motor	On/off. 90 seconds timeout
011-403	BM Staple Hd 2 Motor	Runs the HVF staple head 2 motor (MOT11-403)	On/off. 5 seconds timeout
011-404	BM Crease Gate Open	Runs the HVF crease roll gate motor (MOT11-401) to the open position	On/off. 90 seconds timeout
011-435	BM Stapler Unit Move Motor Move Home	Runs the BM stapler move motor (MOT11-435) to home	On/off. 5 seconds timeout

Table 12 Output codes 011

Code	Displayed Name	Description	General
011-436	BM Stapler Unit Move Motor Move Away	Runs the BM stapler move motor (MOT11-435) away from home	On/off. 5 seconds timeout
011-437	BM saddle stitch motor	Runs the BM saddle stitch motor (MOT11-437)	On/off. 15 seconds timeout

Table 13 Output codes 012

Code	Displayed Name	Description	General
012-500	OCT Motor	Runs the OCT motor (MOT12-500)	On/off. 2 seconds timeout

Table 14 Output codes 020

Code	Displayed Name	Description	General
020-010	Sngl Tone 0Hz Ln1	Emits single tone 0Hz on line 1	On/off
020-011	Sngl Tone 400Hz Ln1	Emits single tone 400Hz on line 1	On/off
020-012	Sngl Tone 1100Hz Ln1	Emits single tone 1100Hz on line 1	On/off
020-013	Sngl Tone 1300Hz Ln1	Emits single tone 1300Hz on line 1	On/off
020-014	Sngl Tone 1650Hz Ln1	Emits single tone 1650Hz on line 1	On/off
020-015	Sngl Tone 1850Hz Ln1	Emits single tone 1850Hz on line 1	On/off
020-016	Sngl Tone 2100Hz Ln1	Emits single tone 2100Hz on line 1	On/off
020-017	ANSAM Ln1		On/off
020-018	CI Ln1		On/off
020-020	DTMF # Line1	Emits DTMF # on line 1	On/off
020-021	DTMF * Line1	Emits DTMF * on line 1	On/off
020-022	DTMF 0 Line1	Emits DTMF 0 on line 1	On/off
020-023	DTMF 1 Line1	Emits DTMF 1on line 1	On/off
020-024	DTMF 2 Line1	Emits DTMF 2 on line 1	On/off
020-025	DTMF 3 Line1	Emits DTMF 3 on line 1	On/off
020-026	DTMF 4 Line1	Emits DTMF 4 on line 1	On/off
020-027	DTMF 5 Line1	Emits DTMF 5 on line 1	On/off
020-028	DTMF 6 Line1	Emits DTMF 6 on line 1	On/off
020-029	DTMF 7 Line1	Emits DTMF 7 on line 1	On/off
020-030	DTMF 8 Line1	Emits DTMF 8 on line 1	On/off
020-031	DTMF 9 Line1	Emits DTMF 9 on line 1	On/off
020-032	DTMF A Line1	Emits DTMF A on line 1	On/off
020-033	DTMF B Line1	Emits DTMF B on line 1	On/off

Table 14 Output codes 020

Code	Displayed Name	Description	General
020-034	DTMF C Line1	Emits DTMF C on line 1	On/off
020-035	DTMF D Line1	Emits DTMF D on line 1	On/off
020-040	V.21 300 bps Line1	Emits V.21 300 bps on line 1	On/off
020-041	V.27ter 2400 bps Line1	Emits V.27ter 2400 bps on line 1	On/off
020-042	V.27ter 4800 bps Line1	Emits V.27ter 4800 bps on line 1	On/off
020-043	V.29 7200 bps Line1	Emits V.29 7200 bps on line 1	On/off
020-044	V.29 9600 bps Line1	Emits V.29 9600 bps on line 1	On/off
020-045	V.17 7200 bps Line1	Emits V.17 7200 bps on line 1	On/off
020-046	V.17 9600 bps Line1	Emits V.17 9600 bps on line 1	On/off
020-047	V.17 12000 bps Line1	Emits V.17 12000 bps on line 1	On/off
020-048	V.17 14400 bps Line1	Emits V.17 14400 bps on line 1	On/off
020-049	V.34 2400 bps Line1	Emits V.34 2400 bps on line 1	On/off
020-050	V.34 4800 bps Line1	Emits V.34 4800 bps on line 1	On/off
020-051	V.34 7200 bps Line1	Emits V.34 7200 bps on line 1	On/off
020-052	V.34 9600 bps Line1	Emits V.34 9600 bps on line 1	On/off
020-053	V.34 12000 bps Line1	Emits V.34 12000 bps on line 1	On/off
020-054	V.34 14400 bps Line1	Emits V.34 14400 bps on line 1	On/off
020-055	V.34 16800 bps Line1	Emits V.34 16800 bps on line 1	On/off
020-056	V.34 19200 bps Line1	Emits V.34 19200 bps on line 1	On/off
020-057	V.34 21600 bps Line1	Emits V.34 21600 bps on line 1	On/off
020-058	V.34 24000 bps Line1	Emits V.34 24000 bps on line 1	On/off
020-059	V.34 26400 bps Line1	Emits V.34 26400 bps on line 1	On/off
020-060	V.34 28800 bps Line1	Emits V.34 28800 bps on line 1	On/off
020-061	V.34 31200 bps Line1	Emits V.34 31200 bps on line 1	On/off
020-062	V.34 33600 bps Line1	Emits V.34 33600 bps on line 1	On/off
020-080	Sngl Tone 0Hz Ln2	Emits single tone 0Hz on line 2	On/off
020-081	Sngl Tone 400Hz Ln2	Emits single tone 400Hz on line 2	On/off

Table 14 Output codes 020

Code	Displayed Name	Description	General
020-082	Sngl Tone 1100Hz Ln2	Emits single tone 1100Hz on line 2	On/off
020-083	Sngl Tone 1300Hz Ln2	Emits single tone 1300Hz on line 2	On/off
020-084	Sngl Tone 1650Hz Ln2	Emits single tone 1650Hz on line 2	On/off
020-085	Sngl Tone 1850Hz Ln2	Emits single tone 1850Hz on line 2	On/off
020-086	Sngl Tone 2100Hz Ln2	Emits single tone 2100Hz on line 2	On/off
020-087	ANSAM Ln2	-	On/off
020-088	CI Ln2	-	On/off
020-090	DTMF # Line2	Emits DTMF # on line 2	On/off
020-091	DTMF * Line2	Emits DTMF * on line 2	On/off
020-092	DTMF 0 Line2	Emits DTMF 0 on line 2	On/off
020-093	DTMF 1 Line2	Emits DTMF 1on line 2	On/off
020-094	DTMF 2 Line2	Emits DTMF 2 on line 2	On/off
020-095	DTMF 3 Line2	Emits DTMF 3 on line 2	On/off
020-096	DTMF 4 Line2	Emits DTMF 4 on line 2	On/off
020-097	DTMF 5 Line2	Emits DTMF 5 on line 2	On/off
020-098	DTMF 6 Line2	Emits DTMF 6 on line 2	On/off
020-099	DTMF 7 Line2	Emits DTMF 7 on line 2	On/off
020-100	DTMF 8 Line2	Emits DTMF 8 on line 2	On/off
020-101	DTMF 9 Line2	Emits DTMF 9 on line 2	On/off
020-102	DTMF A Line2	Emits DTMF A on line 2	On/off
020-103	DTMF B Line2	Emits DTMF B on line 2	On/off
020-104	DTMF C Line2	Emits DTMF C on line 2	On/off
020-105	DTMF D Line2	Emits DTMF D on line 2	On/off
020-110	V.21 300 bps Line2	Emits V.21 300 bps on line 2	On/off
020-111	V.27ter 2400 bps Line2	Emits V.27ter 2400 bps on line 2	On/off
020-112	V.27ter 4800 bps Line2	Emits V.27ter 4800 bps on line 2	On/off
020-113	V.29 7200 bps Line2	Emits V.29 7200 bps on line 2	On/off
020-114	V.29 9600 bps Line2	Emits V.29 9600 bps on line 2	On/off
020-115	V.17 7200 bps Line2	Emits V.17 7200 bps on line 2	On/off
020-116	V.17 9600 bps Line2	Emits V.17 9600 bps on line 2	On/off
020-117	V.17 12000 bps Line2	Emits V.17 12000 bps on line 2	On/off
020-118	V.17 14400 bps Line2	Emits V.17 14400 bps on line 2	On/off
020-119	V.34 2400 bps Line2	Emits V.34 2400 bps on line 2	On/off

Table 14 Output codes 020

Code	Displayed Name	Description	General
020-120	V.34 4800 bps Line2	Emits V.34 4800 bps on line 2	On/off
020-121	V.34 7200 bps Line2	Emits V.34 7200 bps on line 2	On/off
020-122	V.34 9600 bps Line2	Emits V.34 9600 bps on line 2	On/off
020-123	V.34 12000 bps Line2	Emits V.34 12000 bps on line 2	On/off
020-124	V.34 14400 bps Line2	Emits V.34 14400 bps on line 2	On/off
020-125	V.34 16800 bps Line2	Emits V.34 16800 bps on line 2	On/off
020-126	V.34 19200 bps Line2	Emits V.34 19200 bps on line 2	On/off
020-127	V.34 21600 bps Line2	Emits V.34 21600 bps on line 2	On/off
020-128	V.34 24000 bps Line2	Emits V.34 24000 bps on line 2	On/off
020-129	V.34 26400 bps Line2	Emits V.34 26400 bps on line 2	On/off
200-130	V.34 28800 bps Line2	Emits V.34 28800 bps on line 2	On/off
020-131	V.34 31200 bps Line2	Emits V.34 31200 bps on line 2	On/off
020-132	V.34 33600 bps Line2	Emits V.34 33600 bps on line 2	On/off

Table 15 Output codes 042

Code	Displayed Name	Description	General
042-010	Main motor	Runs the main motor (MOT42-010) to drive the pre-registration, registration, developer, fuser and paper output modules.	On/Off. 60 seconds timeout
042-030	Ozone Fan	Runs the ozone fan.	On/off. 90 seconds timeout
042-035	P/R Cooling Fan	Runs the photoreceptor fan	Full speed/half speed. 90 seconds timeout
042-036	Duplex cooling fans enable	Runs the duplex path cooling fans	On/off. 90 seconds timeout. When enabled the fans will switch on simultaneously

Table 16 Output codes 061 to 066

Code	Displayed Name	Description	General
061-020	ROS Motor Run	Runs the ROS motor (MOT61-020) at run mode speed.	On/off. 90 seconds timeout
061-025	ROS Motor Standby	Runs the ROS motor (MOT61-020) at standby mode speed.	On/off. 90 seconds timeout

Table 16 Output codes 061 to 066

Code	Displayed Name	Description	General
062-002	Platen Exposure Lamp	Energizes the scanner exposure lamp	On/off. 90 seconds timeout
062-023	Carriage Home Sensor Test	Scanner carriage home sensor test. This must be used in conjunction with 62-100 Carriage Home Sensor. Add both components, start the sensor test, then the carriage home sensor test. The sensor will cycle its state as the carriage moves to and from home.	On/off. 90 seconds timeout
062-024	Carriage Move Doc Size Position	Drives the scanner carriage to the document size position.	On/off. 90 seconds timeout
062-025	Carriage Move CVT Position	Drives the scanner carriage to the CVT position.	On/off. 90 seconds timeout
062-026	Carriage Move Test Position A	Drives the scanner carriage to test position A.	On/off. 90 seconds timeout
062-027	Carriage Move Test Position B	Drives the scanner carriage to test position B.	On/off. 90 seconds timeout
062-028	Carriage Move Test Position C	Drives the scanner carriage to test position C.	On/off. 90 seconds timeout
062-029	Scan Cooling Fan	Runs the scanner cooling fan.	On/off. 90 seconds timeout
062-030	Carriage Move Cal Strip Position	Drives the scanner carriage to the calibration position.	On/off. 90 seconds timeout
062-031	Carriage Move Home Position	Drives the scanner carriage to the home position.	On/off. 90 seconds timeout
062-335	Scan Stepper Enabled	Scanner stepper enabled	On/off. 90 seconds timeout
066-002	DH Exposure Lamp	Energizes the SPDH exposure lamp	On/off.
066-030	DH move Cal Strip Position	Drives the SPDH calibration strip to the home position.	On/off.

Table 17 Output codes 071 to 076

Code	Displayed Name	Description	General
071-010	T1 Elevate Motor	Runs the tray 1 elevator motor (MOT71-010) up.	On/off. Linked to tray 1 home sensor. Only run with tray out. 5 seconds timeout
072-010	T2 Elevate Motor	Runs the tray 2 elevator motor (MOT72-010) up.	On/off. Linked to tray 2 home sensor. Only run with tray out. 5 seconds timeout
073-010	T3 Elevate Motor	Runs the tray 3 elevator motor (MOT73-010) up.	On/off. Linked to tray 3 home sensor. Only run with tray out. 10 seconds timeout

Table 17 Output codes 071 to 076

Code	Displayed Name	Description	General
074-010	T4 Elevate Motor	Runs the tray 4 elevate motor (MOT74-010) up.	On/off. Linked to tray 4 home sensor. Only run with tray out. 10 seconds time-out
076-010	Raise PFP Elevate Motor	Runs the tray 6 elevate motor (MOT76-010) to move the tray up.	On/off. Only runs while tray transport limits are not reached. 10 seconds time-out
076-011	Lower PFP Elevate Motor	Runs the tray 6 elevate motor (MOT76-011) to move the tray down.	On/off. Only runs while tray transport limits are not reached. 10 seconds time-out

Table 18 Output codes 081 to 083

Code	Displayed Name	Description	General
081-010	T1 Feed Motor	Runs the tray 1 feed motor (MOT 81-010).	On/off. Linked to tray 1 home sensor. Paper tray must be open when motor energized. 60 seconds timeout
081-020	T2 Feed Motor	Runs the tray 2 feed motor. (MOT81-020)	On/off. Linked to tray 2 home sensor. Paper tray must be open when motor energized. 60 seconds timeout
081-025	T1+2 Transport Motor	Runs the tray 1 and 2 transport motor (MOT81-025)	On/off. 60 seconds timeout
081-030	T3 Feed Motor	Runs the tray 3 feed motor (MOT81-030)	On/off. Linked to tray 3 home sensor. Paper tray must be open when motor energized. 90 seconds timeout
081-033	T3 Feed Clutch	Energises the tray 3 feed clutch (CL81-033)	On/off. Linked to tray 3 home sensor. Paper tray 3 must be open when the solenoid is energized
081-040	T4 Feed Motor	Runs the tray 4 feed motor (MOT81-040)	On/off. Linked to tray 4 home sensor. Paper tray must be open when motor energized. 90 seconds timeout
081-043	T4 Feed Clutch	Energises the tray 4 feed clutch (CL81-043)	On/off. Linked to tray 4 home sensor. Paper tray 4 must be open when the solenoid is energized

Table 18 Output codes 081 to 083

Code	Displayed Name	Description	General
081-045	T3+4 Transport Motor	Runs the tray 3 and 4 transport motor (MOT81-045)	On/off. 90 seconds timeout
081-050	Bypass Feed Solenoid	Energises the bypass tray feed solenoid (SOL08-050)	On/off. 5 seconds timeout
081-060	PFP Feed Motor	Runs the stepper motor to drive tray 6 nudger and feed rolls. (MOT08-117)	On/off. Paper tray must be down when motor energized. 60 seconds timeout
081-065	PFP Transport Motor	Runs the tray 6 transport motor (MOT81-065)	On/off. 60 seconds timeout
082-070	Registration Clutch	Energizes the registration clutch (CL82-070)	On/off. 5 seconds timeout
083-060	Duplex Motor Slow	Runs the duplex motor at simplex speed.	On/off. 90 seconds timeout
083-062	Duplex Motor Fast	Runs the duplex motor at duplex speed.	On/off. 90 seconds timeout

Table 19 Output codes 091 to 093

Code	Displayed Name	Description	General
091-010	P/R Motor	Runs the photoreceptor drive motor (MOT91-010)	On/off. 60 seconds timeout
091-022	P/R Erase Lamp	Energizes the photoreceptor erase lamp.	On/off. 90 seconds timeout
091-061	Charge Scorotron	Energizes the scorotron wire at nominal drive levels with drives off.	On/off. 3 seconds timeout. Linked with Charge grid 91-062. Normally stacked with HVPS fault
091-062	Charge Grid	Energizes the grid at nominal drive level with drives off.	On/off. 3 seconds timeout. Linked with charge scorotron 91-061
091-063	Transfer Corotron	Energizes the transfer corotron wire on at nominal drive level with drives off.	On/off. 3 seconds timeout. Normally stacked with HVPS fault
091-064	Detack Corotron	Energizes the detack wire on. AC voltage and DC current offset at nominal drive levels with drives off.	On/off. 3 seconds timeout. Normally stacked with HVPS fault
091-065	Chute Bias	Energizes the bias voltage on at nominal drive level.	On/off. 90 seconds timeout. Normally stacked with HVPS fault
091-066	Dev Bias	Energizes the developer bias voltage on at nominal drive level with drives off.	On/off. 3 seconds timeout. Stack with HVPS fault
091-071	Scorotron Cleaner Motor: Forward	Runs the scorotron cleaning motor (MOT91-071) in the forward direction	On/Off. 13 seconds timeout. Stack with scorotron cleaner home sensor

Table 19 Output codes 091 to 093

Code	Displayed Name	Description	General
091-072	Scorotron Cleaner Motor: Reverse	Runs the scorotron cleaning motor (MOT91-071) in the reverse direction	On/off. 13 seconds timeout. Stack with scorotron cleaner home sensor
093-040	Dispense Motor	Runs the toner dispense motor (MOT93-040)	On/off. 5 seconds timeout
093-045	Cartridge Motor	Runs the toner cartridge motor (MOT93-045)	On/off. 5 seconds timeout

dC361 NVM Save and Restore

Purpose

To restore the NVM parameters of the machine to their previous values following a service action; i.e. NVM expansion, single board controller PWB replacement, or any others that would necessitate a full NVM initialization. It can also be used to recover a machine's NVM values to a recent service call, in the event that a complete NVM failure occurred. As an additional tool, the ability to copy files between the hard drive and a USB drive is provided.

The NVM save to hard disk must be performed at the first service call and whenever the system software is changed.

This procedure will save and restore only the SBC, IIT and machine NVM.

NOTE: *After a USB flash drive is first connected to the machine a UI screen message offering scan to and print from USB options will display. This screen message can be closed or left open before entering diagnostics without effecting the NVM save/restore processes. The USB screen message will not reappear on exit from service mode.*

Procedure

NVM Save

1. If necessary, connect the USB flash drive to the USB port in the user interface housing.
2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dc361 NVM Save and Restore.
   The screen displays the NVM data.

   NOTE:
   - *The top entry displays the live NVM data for the machine.*
   - *If the data has previously been saved to the hard disk these will be displayed in a list below the live data.*
   - *If a USB device containing NVM data is connected these will be displayed below the hard disk data. To be recognized by the machine, the USB device must be connected at the time dC361 is started.*
5. Save the NVM data.
   - To save the live data to the hard disk, select the live data entry then select Save to Hard Drive.
   - To save the hard disk data to a USB device, select the hard disk entry then select Save to USB Device.
   - To save the USB data to the hard disk, select the USB entry then select Save to HDD.

     NOTE: *Data cannot be saved or restored directly to or from the USB device to the machine.*
6. Select Close to return to the service mode window.
7. Select Call Closeout to exit service mode

NVM Restore

1. If necessary, connect the USB drive to the USB port in the user interface housing.

2. Enter Service Mode, GP 1.
3. Select the Adjustments tab.
4. Select dc361 NVM Save and Restore.
   The screen displays the NVM data.
5. Restore the NVM data.
   a. Select the entry from the available NVM data on the hard drive.

      NOTE: *NVM data on a USB device should be copied to the hard drive before it can be restored.*

   b. Select Restore Machine NVM.
      The status region at the top of the screen will report that the NVM was restored successfully.
6. Select Close to return to the service mode window.
7. Select Call Closeout to exit service mode.

dC604 Registration Setup Procedure

Description

The registration setup routine allows the measurement and adjustment of image to paper registration for the Image Output Terminal.

NOTE: *ADJ 80.1 Registration Setup contains only a reference to this diagnostic procedure.*

Purpose

To measure and adjust the lead edge and top edge image to paper registration of the image output terminal by performing the following routines:

1. Image Output Terminal Registration **All Trays** side 1 - simplex lead and top edge registration adjustment.
2. Image Output Terminal Registration **All Trays** side 2 - duplex lead and top edge registration adjustment.
3. Image Output Terminal Registration **Individual trays** side 1 - simplex lead and top edge registration adjustment.
4. Image Output Terminal Registration **Individual trays** side 2 duplex lead and top edge registration adjustment.

Initial Action

- Ensure that 8.5 x 11 or A4 LEF paper is loaded in tray 1.
- Ensure that the ROS is secured and positioned correctly. Check that the ROS securing screw at the front of the machine is present and secure, refer to REP 60.15.

Procedure

NOTE: *During the registration routines, the zone areas are either shifted or cropped, and the remaining lengths of the remaining test pattern rulers are used to calculate the new registration NVM values, Figure 2. The test pattern is designed for both market regions, therefore the size of the edge deletions will depend on the paper size.*

- *For A4 LEF paper, all edges have a 10mm deletion, but the bottom edge (Zone C on Figure 1) will measure 28mm from the edge of the paper.*
- *For 8.5 x 11 LEF paper, all edges have a 10mm deletion, but the trail edge (Zone B on Figure 1) will measure 16mm from the edge of the paper.*

NOTE: *Always perform the IOT Registration Side 1 adjustments before performing any other registration adjustment, as the IOT Registration Side 1 adjustment affects the others.*

NOTE: *Always perform an All Trays registration before the registration of any Individual Trays. If the processes are run in reverse order the registration of any individual trays will be overwritten and lost.*

1. Enter service mode, GP 1.
2. Select the Adjustment tab.
3. Select dC604 Registration Setup.
4. Select Image Output Terminal Registration.
5. Select **All Trays**.

   NOTE: *Do not select individual trays unless directed by the documentation.*

6. Select Side 1.

7. Select Print Test Patterns, then follow the UI screen prompts.
8. Select Side 2.
9. Select Print Test Patterns, then follow the UI screen prompts.

   NOTE: *The output prints are duplex. Side 2 is face up in the output tray.*

10. If the correct registration can not be obtained because the registration scales are out of range or off the page. Enter dC301 NVM Initialization, select Machine Variable NVM and initialize. This will reset all of the registration values to default, return to step 3.
11. The individual trays can be adjusted to compensate for any mechanical variation between the trays, which may cause an error in the top edge registration.

    The individual tray top edge has an adjustment range of +/-10mm with increments of 0.5mm. When saved, the adjustment will update the NVM offset value for the specific tray.

    To adjust the top edge registration on individual trays perform the following:

    a. Enter service mode GP 1.
    b. Select the adjustments tab.
    c. Select dC604 Registration Setup.
    d. Select **Individual trays.**
    e. Select Print Test Patterns, then follow the UI screen prompts.
    f. Select Image Output Terminal Registration Side 2 and repeat the above procedure as necessary.
    g. Select Close to return to the service mode window.
    h. Select Call Closeout to exit service mode.
12. If registration is still out of specification, go to ADJ 70.3 and then ADJ 70.4. After checking these adjustments, repeat the procedure from step 10.
13. Check for skew. Refer to IQS 5 Skew.

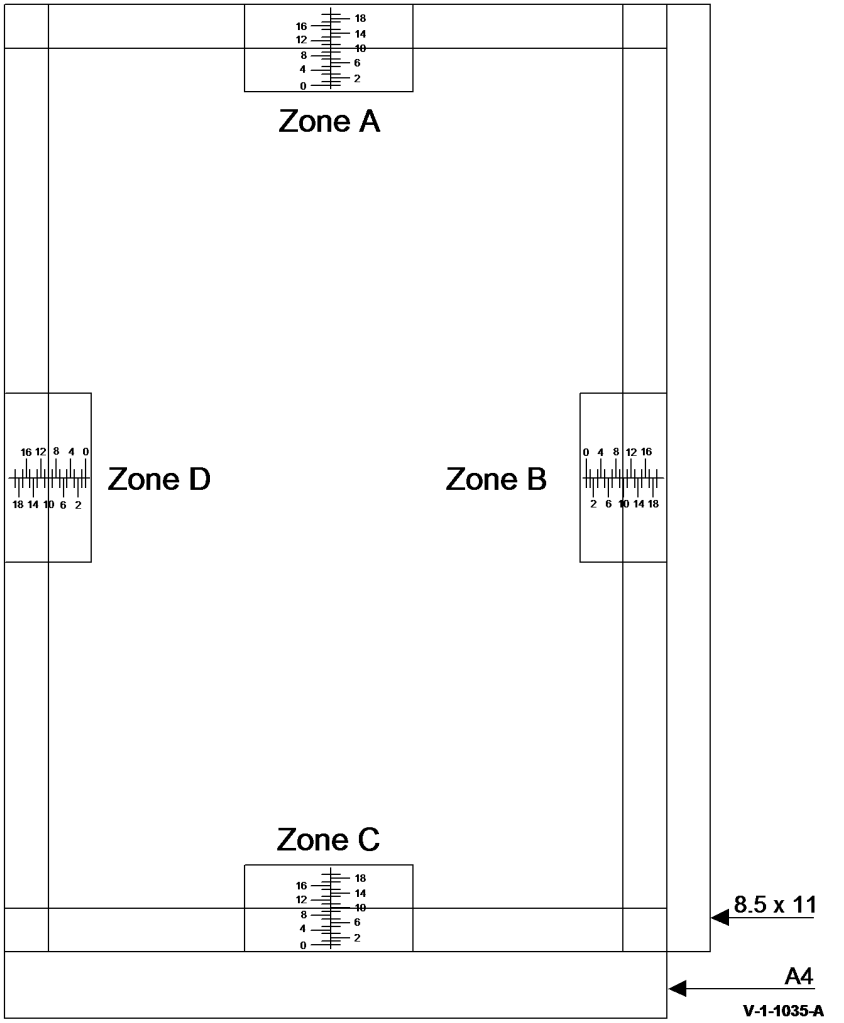


Figure 1 Registration test pattern

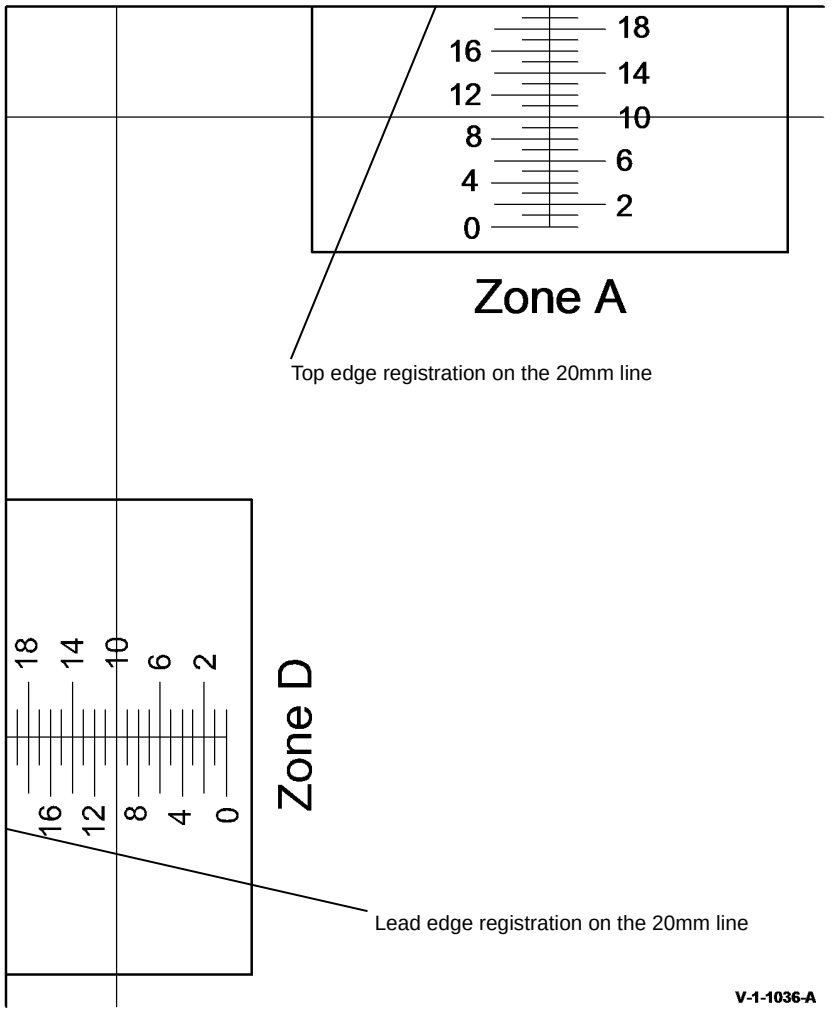


Figure 2 IOT registration

dC608 Document Feeder Registration

Purpose

This feature checks the registration of the document feeder and corrects any misalignments. The process runs automatically and does not require any user intervention other than inserting three blank sheets in the document feeder.

Initial Action

This routine must be run in conjunction and in numerical order with the dC routines listed in Table 1.

Table 1 dC routine order

IIT conjunctional dC routine sequence
1. dC604 Image Output Terminal Registration
2. dC609 Document Glass Registration
3. dC610 CCD Lamp Profile Adjustment
4. dC608 Document Feeder Registration
5. dC945 IIT Calibration

Procedure

1. Enter service mode, GP 1.
2. Select the Adjustments tab.
3. Perform all the listed dC routines proceeding this routine in Table 1.

   NOTE: *Do not continue with this routine unless dC604, dC609, and dC610 have been performed.*

4. Select dC608 Document Feeder Registration.
5. Insert 3 blank A4 or 8.5x11 inch white sheets, SEF, into the document feeder.
6. Ensure the document guides are correctly adjusted.
7. Select Start.

   The document feeder feeds the documents.

   The screen displays the registration values.
8. Select Close to exit the routine.
9. Perform all the listed dC routines following this routine in Table 1.
10. Select Call Closeout to exit service mode

    NOTE: *Ensure that dC945 is performed after this routine has been completed.*

dC609 Document Glass Registration

Purpose

This feature checks the registration of the document glass and corrects any misalignments. The process runs automatically and does not require any user intervention other than keeping the SPDH open during the operation.

Initial Action

This routine must be run in conjunction and in numerical order with the dC routines listed in Table 1.

Table 1 dC routine order

IIT conjunctional dC routine sequence
1. dC604 Image Output Terminal Registration
2. dC609 Document Glass Registration
3. dC610 CCD Lamp Profile Adjustment
4. dC608 Document Feeder Registration
5. dC945 IIT Calibration

Procedure

1. Enter Service Mode, GP 1.
2. Select the Adjustments tab.
3. Perform all the listed dC routines proceeding this routine in Table 1.

   NOTE: *Do not continue with this routine unless dC604, has been performed.*

4. Select dC609 Document Glass Registration
   The screen displays the current registration values.
5. Open the SPDH. Remove any documents from the document glass.

   NOTE: *The SPDH should remain open until this procedure is complete.*

6. Select Start to run the routine.
   The screen displays the values for before and after registration.
7. Select Close to exit the routine.
8. Perform all the listed dC routines following this routine in Table 1.
9. Select Call Closeout to exit service mode.

   NOTE: *Ensure that dC610, dC608 and dC945 are performed after this routine has been completed.*

dC610 CCD Lamp Profile Adjustment

Purpose

To adjust the side 1 (scanner) then the side 2 (SPDH) scan lamps to maintain optimum image quality.

Initial Action

This routine must be run in conjunction and in numerical order with the dC routines listed in Table 1.

Table 1 dC routine order

IIT conjunctional dC routine sequence
1. dC604 Image Output Terminal Registration
2. dC609 Document Glass Registration
3. dC610 CCD Lamp Profile Adjustment
4. dC608 Document Feeder Registration
5. dC945 IIT Calibration

Procedure

1. Enter Service Mode, GP 1.
2. Select the Adjustment tab.
3. Perform all the listed dC routines proceeding this routine in Table 1.

   NOTE: *Do not continue with this routine unless dC604 and dC609 have been performed.*

4. Select dc610 CCD Lamp Profile Adjustment.
5. Select Start to run the routine.
6. Select Close to exit the routine.
7. Perform all the listed dC routines following this routine in Table 1.
8. Select Call Closeout to exit service mode.

   NOTE: *Ensure that dC608 and dC945 are performed after this routine has been completed.*

dC612 Print Test Pattern

Purpose

To print the internal test patterns.

NOTE: *All test prints should be printed long edge feed.*

Procedure

1. Enter Service Mode, GP 1.
2. Select the Diagnostics tab.
3. Select dc612 Print Test Pattern
4. Select the test pattern required. Refer to IQ1 Image Quality Entry RAP.
   Select from the available options for the required test pattern.

   NOTE: *In most instances the recommended paper size is Letter/A4, but the test can be run from all trays, paper sizes or paper types.*
5. Select Close to exit the routine
6. Select Call Closeout to exit service mode

NOTE: *For details of test patterns, descriptions of their application, media size and other features, refer to IQ1 Image Quality Entry RAP.*

dC905 TC Sensor Calibration

Purpose

To calibrate and setup the toner concentration sensor. This routine is run at manufacture and after installing a new developer module, (45-55 ppm) PL 90.17 Item 2 or (65-90 ppm) PL 90.15 Item 2.

Description

The toner concentration sensor, located in the bottom of the developer housing, is used in the process control loop to help maintain the concentration of toner in the developer tank at the optimal level.

The toner concentration sensor needs to be calibrated by adjusting the sensor output to the required target value for a new developer toner concentration. The sensor output voltage can be adjusted to the correct level by varying the control voltage applied to the sensor.

The output of the sensor depends on the:

- Magnetic properties of the developer material (this is a fixed value).
- Applied control voltage.
- Developer temperature.
- Humidity.

Procedure

1. Enter Service Mode, GP 1.
2. Select the Adjustments tab.
3. Select dc905 TC Sensor Setup.
4. Touch the Start button to start the routine. Follow the on screen instructions. The following components will energise:
   - Photoreceptor drive motor.
   - Photoreceptor erase lamp.
   - Charge scorotron and charge grid.
   - Developer bias voltage.
   - Main drive motor (to rotate the developer).
5. If the setup fails, a ‘TC Sensor Setup Routine Failed’ message appears. Go to the 393-360-00 to 393-363-00 TC Sensor Failure RAP.

dC945 IIT Calibration

Purpose

To automatically calculate and set the white-reference correction factor for paper white and calibration strip variations. This procedure must be run whenever a side 2 scan assembly, scan carriage assembly, scanner module, scanner module component, or a complete SPDH is removed.

Initial Action

- Perform as appropriate ADJ 60.3 Scanner Cleaning Procedure and/or ADJ 60.4 Side 2 Scan Assembly Cleaning Procedure.
- This routine must be run in conjunction and in numerical order with the dC routines listed in Table 1.

Table 1 dC routine order

IIT dC routine sequence
1. dC604 Image Output Terminal Registration
2. dC609 Document Glass Registration
3. dC610 CCD Lamp Profile Adjustment
4. dC608 Document Feeder Registration
5. dC945 IIT Calibration

Procedure

1. Enter Service Mode, GP 1.
2. Select the Adjustments tab.

   NOTE: *This routine requires the use of one of the five approved paper types, set to a corresponding NVM value, Table 2. If a correct paper type is not available Do Not run the dC 945 routine, and leave the NVM setting at default, Table 3.*

3. Refer to dC131 NVM Read/Write then set the NVM value to your approved paper type, Table 2.
4. Perform all the listed dC routines proceeding this routine in Table 1.

   NOTE: *Do not continue with this routine before dC604, dC609, dC610 and dC608 have been performed.*

5. Select dC945 IIT Calibration.
6. Select Document handler.
7. Follow the on screen instructions.
8. Select Platen.
9. Follow the on screen instructions.
10. Select Close to exit the routine.
11. Select Call Closeout to exit service mode.
12. Select Exit and Reboot.

Table 2 Approved paper types

Approved paper types for dC945	Approved paper size	ScannerPaperCode NVM location 801-80 and value setting
J_ Paper 22lb, 82gsm	A3 or 11 x 17 inch	NVM location 801-80 value = 1
ColorXpressions 24lb, 90gsm	A3 or 11 x 17 inch	NVM location 801-80 value = 5
ColorTechPlus 24lb, 90gsm	A3 or 11 x 17 inch	NVM location 801-80 value = 6
Xerox 4200 20lb, 75gsm	A3 or 11 x 17 inch	NVM location 801-80 value = 7
Xerox Business 21lb, 80gsm	A3 or 11 x 17 inch	NVM location 801-80 value = 8

dC945 Failure

If dC945 fails perform the following:

1. Refer to dC131 NVM Read/Write, then set the NVM values listed in Table 3 to their default value.
2. Go to SCP 1 Initial Actions, then check the fault history of the machine. Clear any faults then perform dC945.

Table 3 NVM Values

Description	NVM location	NVM location
PlatenWhiteRefRed	801 - 81	260
PlatenWhiteRefGreen	801 - 82	262
PlatenWhiteRefBlue	801 - 83	260
PlatenWhiteRefMono	801 - 84	262
CvtWhiteRefMono	801 - 20	296
CvtWhiteRefRed	801 - 21	304
CvtWhiteRefGreen	801 - 22	301
CvtWhiteRefBlue	801 - 23	290
CvtWhiteRefMono	803 - 20	294
CvtWhiteRefRed	803 - 21	295
CvtWhiteRefGreen	803 - 22	295
CvtWhiteRefBlue	803 - 23	286

Tags

Purpose

To provide a list of all the tag numbers used together with a description of each of the machine modifications.

Description

Each modification to the system is assigned a unique tag number. This section of the service documentation contains a listing and brief description of all change tags.

Change tags listed in this section are listed by machine module. The module to which the tag relates is identified by the tag prefix letter, for example; Tag F048 applies to the Finisher - module. The module prefixes are:

- Processor Tags - 001 to 250 (no prefix).
- SPDH Tags - D001 to D050.
- Scanner Tags - S001 to S050.
- Finisher (1K LCSS) Tags - L001 to L050.
- Finisher (2K LCSS) Tags - F001 to F050.
- Finisher (HVF) Tags - V001 to V050.
- LVF BM Tags - B001 to B050.
- Tray 6 Tags - P001 to P050.
- Tray 7 Inserter Tags - I001 to I050.
- Fax Tags - X001 to X050.

Tag Information

Information that may be included with each tag item is as follows:

- Tag - gives the control number for the tag.
- Class - gives the classification codes as listed in Table 1.
- Use - indicates the multinational operating markets affected by the modification.
- Manufacturing Serial Number - gives the serial number of the factory built machines with the modification installed.
- Purpose - gives a brief description of the modification.
- Name - gives the name of the part or modification.
- Kit Number - gives the part number of the kit or part required to install the modification.
- Reference or Parts List On - indicates the parts list where the kit or modification part can be found.

Mod / Tag Plate Location

The Processor module. Open the front door. The Mod / Tag plate is located on the inside of the front door assembly.

The SPDH module. Lift up the SPDH top cover assembly. The Mod / Tag plate is located on the inside of the top cover on the outboard side.

The scanner module. Remove the scanner rear cover. The Mod / Tag plate is located on the inside of the rear cover.

The 1K LSCSS module. Un-dock the 1K LCSS. The Mod / Tag plate is located on the docking plate.

The 2K LCSS module. Un-dock the LCSS. The Mod / Tag plate is located in the base pan of the LCSS.

The HVF module. Un-dock the HVF. The Mod / Tag plate is located on the metal panel under the docking latch.

The LVF BM module. Undock the LVF BM module. The Mod/Tag plate is located on the booklet tamper assembly, PL 11.74 Item 1.

Tray 6 module. Un-dock the tray 6 module. The Mod/Tag plate is locate on the right side metal panel.

Tray 7 (inserter module). The Mod / Tag plate is located on the underside of the unit.

Fax module. The Mod / Tag plate is located on the underside of the fax module.

Classification Codes

The Class or Classification code can be explained as follows:

Table 1 Classification codes

NASG code	XE code	Description
-	1	Safety: Install this tag immediately.
M	2	Mandatory: Install this tag at the next opportunity.
R	3	Repair: Install this tag as a repair, at the failure of a component.
O	4	Optional: Install as a customer option or a field engineering decision.
S	4	Situational: Install as the situation demands.
N	5	Manufacturing: Cannot be installed in the field.
	6	Refurbishing only.

Processor Tags

TAG: 001

CLASS: 4

NAME: **Populated short paper path**

PURPOSE: Short paper path assembly with vacuum transport fan and transport roller assembly.

KIT NUMBER:

PARTS LIST ON: PL 10.25

TAG: 002

CLASS: 4

NAME: **Tray 1 and Tray 2 lip Kit**

PURPOSE: This kit is to be installed if excessive paper curl occurs in tray 1 or tray 2. The lip is installed on the front edge of the paper tray to constrain the curl on the paper. The excessive curl on the paper can cause the paper to skew and result in paper jams.

KIT NUMBER:

PARTS LIST ON: PL 70.10

TAG: 003

CLASS: 4

NAME: **SBC PWB Image disk full fix**

PURPOSE: Fix for **Please wait... The Image Disk is full** message on the UI of the machine. Refer to service bulletin T8309-10-03. See Note.

KIT NUMBER: 604K97830

PARTS LIST ON: PL 3.22 Item 3, PL 31.14 Item 6.

NOTE: *There are three different configuration for a SBC PWB W/TAG 003:*

- *SBC PWB with a SBC PWB jumper kit installed in J45.*
- *SBC PWB with a 1.5 K resistor, installed during manufacturing across pins 1 and 10 of J45. Modified SBC PWB cut-in to manufacturing July 2013.*
- *SBC PWB with a resistor R1425, installed during manufacturing*

TAG: 004

CLASS: 4

NAME: **Inverter transparency feed Kit (45-55 ppm only)**

PURPOSE: This kit is to install an alternative post fuser exit roller. Designed to eliminate transparencies from sticking and causing jams on exit from the fuser.

Related faults codes are 10-121 and 10-107.

KIT NUMBER:

PARTS LIST ON: PL 10.12 Item 24

TAG: 010

CLASS: 5

NAME: **Rosti manufactured tray 3 and 4 assembly**

PURPOSE: To designate a Rosti manufactured tray 3 and 4 assembly.

KIT NUMBER:

PARTS LIST ON: PL 70.26

TAG: 011

CLASS: 4

NAME: **Reposition of HCF exit sensor bracket**

PURPOSE: To prevent the HCF exit sensor rubbing on the tray 3 and 4 transport roll. This change is applicable to only Tag 10 Rosti build HCF modules only. Non Tag 10 modules have no issue.

KIT NUMBER:

PARTS LIST ON: PL 80.33.

TAG: 012

CLASS: 4

NAME: **Modified HCF Exit sensor bracket**

PURPOSE: A modified bracket to prevent it's interference with the tray 3 and 4 transport roll. This kit is applicable for Tag 10 and without Tag 11 machines only.

KIT NUMBER:

PARTS LIST ON: PL 80.33.

TAG: 013

CLASS: 4

NAME: **Blue Angel 2014 compliant LVPS for C speed machines.**

PURPOSE: To comply with Blue Angel requirements.

KIT NUMBER:

PARTS LIST ON: PL 1.10 Item 3.

NOTE: *If a machine is built with Tag 13 then any replacement LVPS must be Tag 13*

NOTE: *There is no service requirement to upgrade machines to Tag 13.*

TAG: 048

CLASS: 4

NAME: **Skew bypass tray spares kit**

PURPOSE: Roller spring kit to reduce skew when copying or printing from the bypass tray.

KIT NUMBER:

PARTS LIST ON: PL 70.30

TAG: 051

CLASS: 4

NAME: **Drive roll repair kit**

PURPOSE: Replacement non-perishable shafts and roll assembly. For use in specific environmental condition at hospitals and petrochemical sites.

KIT NUMBER:

PARTS LIST ON: PL 80.15, PL 80.17, PL 80.20, PL 80.22, PL 10.14, PL 10.25

TAG: 111

CLASS: 4

NAME: **HCF heater kit**

PURPOSE: To prevent paper curl in trays 3 and 4 when the machine is operated in humid conditions.

PARTS LIST ON: PL 31.13.

SPDH Tags

TAG: D-001

CLASS: 4

NAME: **Doc present sensor actuator**

PURPOSE: Design of actuator revised to cope better with curled originals.

PARTS LIST ON: PL 5.30

TAG: D-002

CLASS: 4

NAME: **Last sheet out sensor**

PURPOSE: Sensor with reduced sensitivity to overhead lighting.

PARTS LIST ON: PL 5.30 Item 2, PL 5.30 Item 18, PL 5.30 Item 20.

NOTE: *There are 3 Mod. Tag D-002 associated spares available:*

- *PL 5.30 Item 2, provides a Mod. Tag D-002 ready tray upper assembly.*
- *PL 5.30 Item 18, provides a Mod. Tag D-002 ready sensor.*
- *PL 5.30 Item 20, provides a Mod. Tag D-002 add on filter to convert a W/O tag D-002 sensor.*

TAG: D-003

CLASS: 5

NAME: **Removal of ground wire to length sensor 2**

PURPOSE: To reduce the SPDH sensitivity to ESD.

PARTS LIST ON: PL 5.30 Item 3.

NOTE: *The removed ground wire was part of the tray lower assembly. The ground wire was connected to a grounding strip adjacent to length sensor 2. Electrostatic discharge was tracking through the removed ground wire and interfering with the SPDH sensor system.*

TAG: D-004

CLASS: 4

NAME: **SPDH separation assembly Mylar guide length increased from 13mm to 15 mm**

PURPOSE: To improve the initial feed of documents from the input tray of the SPDH. Installation of the larger Mylar guide W/TAG D004 prevents document jams against the retard roll.

PARTS LIST ON: PL 5.25, PL 31.14.

NOTE: *There are 2 Mod / Tag D-004 associated spares available:*

- *PL 31.14 Item 18, provides a Mod / Tag D-004 add on extended Mylar guide to convert a W/O TAG 004 separation assembly.*
- *PL 31.14 Item 19, provides a Mod / Tag D-004 ready separation assembly.*

Scanner Tags

TAG: S-001

CLASS: 4

NAME: **New scanner PWB**

PURPOSE: New inductors on the scanner PWB to enable shielding to be removed from the SPDH power and communication cables.

PARTS LIST ON: PL 60.20

Finisher (2K LCSS) Tags

TAG: F-001

CLASS: 5

NAME: **New LCSS graphic labels**

PURPOSE: New jam clearance instructions

KIT NUMBER: None

PARTS LIST ON: None

TAG: F-002

CLASS: 5

NAME: **LCSS tamper arms and exit sensor timing**

PURPOSE: To improve stacking performance

KIT NUMBER:

PARTS LIST ON: PL 11.16

TAG: F-003

CLASS: 5

NAME: **LCSS entry guide cover change**

PURPOSE: Improve performance

KIT NUMBER:

PARTS LIST ON: PL 11.24 Item 5

TAG: F-004

CLASS: 5

NAME: **LCSS noise reduction kit**

PURPOSE: Reduction of operational noises

KIT NUMBER:

PARTS LIST ON:

TAG: F-005

CLASS: 5

NAME: **LCSS elevator motor encoder sensor.**

PURPOSE: A new sensor with an improved response time.

KIT NUMBER:

PARTS LIST ON: PL 11.10 Item 11

TAG: F-006

CLASS: 4

NAME: **LCSS hole punch field repair kit.**

PURPOSE: To implement an adjustment for the LCSS hole punch, for machines with TAG F014 installed, in order to return the LCSS to manufactured specification. All WC5890F machines with an LCSS hole punch are manufactured with TAG F006.

KIT NUMBER:

PARTS LIST ON: PL 11.6

TAG: F-007

CLASS: 5

NAME: **LCSS rear frame cutout modified.**

PURPOSE: Change to the cutout in the rear frame to accommodate all configurations of hole punches

KIT NUMBER: -

PARTS LIST ON: -

TAG: F-008

CLASS: 4

NAME: **LCSS legal 2 hole enable kit**

PURPOSE: For use on machines with TAG F007 installed. TAG F008 moves the position of the punch sensor Q11-110. All types of hole punch (2 hole, 3 hole, 4 hole, Swedish and Legal SEF) are compatible with TAG F008.

KIT NUMBER:

PARTS LIST ON: PL 11.6

TAG: F-009

CLASS: 4

NAME: **Sharp edges removed from area 5 (safety)**

PURPOSE: To make safe the customer interaction area around the hole punch.

KIT NUMBER: -

PARTS LIST ON: -

TAG: F-010

CLASS: 4

NAME: **20 ohm tamper motor**

PURPOSE: To eliminate the tamper motor from stalling.

KIT NUMBER: -

PARTS LIST ON: PL 11.16

TAG: F-011

CLASS: 4

NAME: **Re-routed harness**

PURPOSE: To improve the routing of the staple harness by using a longer harness.

KIT NUMBER: -

PARTS LIST ON: -

TAG: F-012

CLASS: 4
NAME: **8th generation covers**
PURPOSE: to update the look of the 2K LCSS to match the 5890F machines.
KIT NUMBER: -
PARTS LIST ON: PL 11.2

TAG: F-013

CLASS: 4
NAME: **LCSS bin 1 kit**
PURPOSE: Modified angle to the output tray to reduce problem with paper curl.
KIT NUMBER: -
PARTS LIST ON: PL 11.2 Item 16

TAG: F-014

CLASS: 4
NAME: **2K LCSS Hole punch field repair kit**
PURPOSE: To implement an adjustment for the LCSS hole punch in the outboard direction.
KIT NUMBER: -
PARTS LIST ON: PL 11.6

TAG: F-015

CLASS: 2
NAME: **2K LCSS Control PWB kit**
PURPOSE: To enable the erase part of the software load.
KIT NUMBER: -
PARTS LIST ON: PL 11.26 Item 1

TAG: F-016

CLASS: 3
NAME: **LCSS Paddle assembly**
PURPOSE: New paddle wheel shaft assembly featuring increased grip paddles that are now a clip in fitting.
KIT NUMBER: -
PARTS LIST ON: PL 11.8 Item 4

TAG: F-017

CLASS: 3
NAME: **Shaft Diverter Assembly Spares Kit**
PURPOSE: Cost saving replacement shaft diverter assembly with 3 KL-clip fixings
KIT NUMBER: -
PARTS LIST ON: PL 31.13 Item 6

TAG: F-018

CLASS: 5
NAME: **2K LCSS PWB**
PURPOSE: The W/TAG F-018 2K LCSS PWBs were introduce due to a component shortage with manufacturing the original 2K LCSS PWBs.
KIT NUMBER: -
PARTS LIST ON: PL 11.26 Item 1

Finisher (1K LCSS) Tags

TAG: L-001

CLASS: 3

NAME: **LCSS PWB**

PURPOSE: Introduction of a 4 layer PWB with EDS and IOT to LCSS communication fixes.

KIT NUMBER:

PARTS LIST ON: PL 11.124

TAG: L-003

CLASS: 4

NAME: **Shaft Diverter Assembly Spares Kit**

PURPOSE: Cost saving replacement shaft diverter assembly with 3 KL-clip fixings

KIT NUMBER:

PARTS LIST ON: PL 31.13 Item 6

TAG: L-013

CLASS: 4

NAME: **LCSS bin 1 kit**

PURPOSE: Modified angle to the output tray to reduce problem with paper curl.

KIT NUMBER:

PARTS LIST ON: PL 11.100

TAG: L-016

CLASS: 3

NAME: **LCSS Paddle assembly**

PURPOSE: New paddle wheel shaft assembly featuring increased grip paddles that are now a clip in fitting.

KIT NUMBER:

PARTS LIST ON: PL 11.104

Finisher (HVF) Tags

TAG: V-001

CLASS: 2

NAME: **Modification to the inserter connector**

PURPOSE: Pin 3 (ground 24V) and pin 4 (24V) on the bulk head connector on the HVF for the inserter unit are to close together and could be shorted. On the HVF PWB, PJ703 pins 2 and 3 are repositioned. On the Inserter PWB, PJ5 pins 2 and 3 are repositioned. This changes the position of the ground 24V.

KIT NUMBER:

PARTS LIST ON: -

TAG: V-002

CLASS: 5

NAME: **Lower paddle switch**

PURPOSE: Mod TAG 002 may have been struck in manufacturing, but is not a valid mod tag.

KIT NUMBER:

PARTS LIST ON: -

TAG: V-003

CLASS: 5

NAME: **Guide hinge pin**

PURPOSE: Mod TAG 003 may have been struck in manufacturing, but is not a valid mod tag.

KIT NUMBER:

PARTS LIST ON: -

TAG: V-004

CLASS: 5

NAME: **Paper base middle bearing**

PURPOSE: Mod TAG 004 may have been struck in manufacturing, but is not a valid mod tag.

KIT NUMBER:

PARTS LIST ON: -

TAG: V-005

CLASS: 5

NAME: **Three blade lower paddle.**

PURPOSE: To improve the contact force on documents in the ejector assembly.

KIT NUMBER:

PARTS LIST ON: -

TAG: V-006

CLASS: 4

NAME: **HVF Performance improvement**

PURPOSE: Modifications to HVF sub-assemblies for improving overall performance and reliability of the finisher module, refer to ADJ 11.13-171

KIT NUMBER:

PARTS LIST ON: -

TAG: V-007

CLASS: 5

NAME: **Ejector with removable paddle assembly**

PURPOSE: Allows replacement of ejector paddle assembly without needing to replace entire ejector.

KIT NUMBER:

PARTS LIST ON: PL 11.140

TAG: V-008

CLASS: 3

NAME: **BM Diverter gate**

PURPOSE: This tag introduced a more robust design of diverter gate.

KIT NUMBER:

PARTS LIST ON: PL 11.153

TAG: V-009

CLASS: 4

NAME: **HVF Front and Rear Support Fingers**

PURPOSE: To reduce ejector support finger home position faults.

KIT NUMBER: 607K07950

PARTS LIST ON: PL 11.140

LVF BM Tags

TAG: B-000

Tray 7 Inserter Tags

TAG: I-001

CLASS: 5

NAME: **Safety hazard with the inserter connector**

PURPOSE: Pin 3 (ground 24V) and pin 4 (24V) on the bulk head connector on the HVF for the inserter unit are to close together and could be shorted. On the HVF PWB, PJ703 pins 2 and 3 are repositioned. On the Inserter PWB, PJ5 pins 2 and 3 are repositioned. This changes the position of the ground 24V.

KIT NUMBER:

PARTS LIST ON: -

Tray 6 Tags

TAG: P-001

CLASS: 5
NAME: **Central adjusting foot**
PURPOSE: To facilitate top edge registration set-up.
KIT NUMBER: -
PARTS LIST ON: -

TAG: P-002

CLASS: 3
NAME: **Feed roll retrofit kit**
PURPOSE: Spares kit
KIT NUMBER: -
PARTS LIST ON: PL 80.45

TAG: P-050

CLASS: 3
NAME: **Stack height sensor adjustment**
PURPOSE: Introduction of an adjustable stack height sensor and PFP setting tool in order to reduce missfeeds, multifeeds and prolong the life of the feed, nudger and retard rolls.
KIT NUMBER: -
PARTS LIST ON: PL 26.11, PL 80.45

TAG: P-051

CLASS: 3
NAME: **Retard shield adjustment**
PURPOSE: Introduction of an adjustable retard shield and PFP setting tool in order to reduce missfeeds, multifeeds and prolong the life of the feed, nudger and retard rolls.
KIT NUMBER: -
PARTS LIST ON: PL 26.11

Fax Tags

TAG: X-001

CLASS: 3
NAME: **R6 1 line and 2 line fax PWB**
PURPOSE: Designed to reduce the instances of 320-320-00 faults.
KIT NUMBER: -
PARTS LIST ON: PL 20.05

TAG: X-002

CLASS: 3
NAME: **CFax34 1 line and 2 line fax PWB**
PURPOSE: Introduction of a costdown fax modem offering superior reliability.
KIT NUMBER: -
PARTS LIST ON: PL 20.05

NOTE: Requires ConntectKey 2.0 machine software version 073.xxx.xxx.xxx to function.

7 Wiring Data

PJ Locations

PJ Location Tables

To locate a PJ, go to the appropriate table.

- CR1 to CR49, Table 1.
- PJ1 to PJ49, Table 2.
- PJ50 to PJ99, Table 3.
- PJ100 to PJ149, Table 4.
- PJ150 to PJ199, Table 5.
- PJ200 to PJ249, Table 6.
- PJ250 to PJ299, Table 7.
- PJ300 to PJ399, Table 8.
- PJ400 to PJ449, Table 9.
- PJ450 to PJ499, Table 10.
- PJ500 to PJ599, Table 11.

Location Figures for PWB Connectors and In-line Connectors

NOTE: *Part list references are given with each figure.*

NOTE: *The pin numbers shown on the location figures depict the location of the pins as marked on the PWB. If the pin numbers marked on a harness connector differ, the PWB pin numbers take precedence.*

- Duplex motor driver PWB, Figure 17.
- Fax Connector PWB, Figure 16.
- Foreign interface PWB, Figure 32.
- Fuser module, Figure 21.
- HCF Control PWB, Figure 3.
- HVF BM PWB, Figure 9.
- HVF BM in line connectors PJ570, pj596 and PJ597, Figure 46.
- HVF PWB, Figure 24.
- HVPS, Figure 19.
- IOT PWB, Figure 1.
- In-line connectors PJ36, PJ550, PJ556 and PJ636, Figure 27.
- In-line connectors PJ40 and PJ44, Figure 12.
- In-line connectors PJ38, PJ49 and PJ76 Figure 11.
- In-line connector PJ63, Figure 10.
- In-line connector PJ75, Figure 14.
- In-line connectors PJ82 and PJ299, Figure 28.
- In-line connector PJ93, Figure 13.
- In-line connectors PJ279 and PJ280, Figure 26.
- In-line connector PJ530, Figure 25.
- Inserter PWB, Figure 30.
- Inverter motor driver PWB, Figure 18.
- 1K LCSS PWB, Figure 38.
- 2K LCSS PWB, Figure 7.
- LVF PWB, Figure 34.
- LVF BM PWB, Figure 35.
- LVPS and Base Module, Figure 6.
- Main Drive PWB, Figure 4.
- Power and control module, Figure 5.
- Power distribution PWB, Figure 8.
- ROS, Figure 20.
- Scanner PWB, Figure 45.
- Scanner CCD PWB, Figure 43.
- Scanner LED Drive PWB, Figure 42.
- SBC PWB, Figure 31.
- SPDH PWB, Figure 36.
- Side 2 CCD PWB, Figure 39.
- SPDH LED Drive PWB, Figure 40.
- SPDH LED Lamp PWB, Figure 41.
- Tray 1 and 2 control PWB, Figure 2.
- Tray 6 control PWB, Figure 23.
- Tri-Folder Control PWB, Figure 29.
- UI Control PWB, Figure 15.
- UI Keyboard PWB, Figure 37.
- UI Status PWB, Figure 33.
- Xerographic module, Figure 22.

Table 1 CR1 to CR49

CR number	CR location figure	CR location	Wiring diagram
2	Figure 31	SBC PWB	WD 11

Table 2 PJ1 to PJ49

PJ number	PJ location figure	PJ location	Wiring diagram
1	Figure 1	IOT PWB	WD 5
1	Figure 24	HVF control PWB	WD 22
1	Figure 30	Inserter PWB	WD 32
1	Figure 3	HCF control PWB	WD 34
1	Figure 38	1K LCSS PWB	WD 15
1	Figure 16	Fax Connector PWB	WD 11
1	Figure 20	ROS	WD 1

Table 2 PJ1 to PJ49

PJ number	PJ location figure	PJ location	Wiring diagram
2	Figure 1	IOT PWB	WD 5
2	Figure 30	Inserter PWB	WD 32
2	Figure 3	HCF control PWB	WD 34
2	Figure 38	1K LCSS PWB	WD 15
2	Figure 16	Fax Connector PWB	WD 32
2	Figure 20	ROS	WD1
3	Figure 1	IOT PWB	WD 5
3	Figure 30	Inserter PWB	WD 32
3	Figure 3	HCF control PWB	WD 34
3	Figure 38	1K LCSS PWB	WD 15
4	Figure 1	IOT PWB	WD 6, WD 7
4	Figure 30	Inserter PWB	WD 32
4	Figure 3	HCF control PWB	WD 34
4	Figure 38	1K LCSS PWB	WD 15
5	Figure 1	IOT PWB	WD 6, WD 7
5	Figure 30	Inserter PWB	WD 32
5	Figure 3	HCF control PWB	WD 34
5	Figure 38	1K LCSS PWB	WD 15
6	Figure 1	IOT PWB	WD 8
6	Figure 30	Inserter PWB	WD 32
6	Figure 3	HCF control PWB	WD 34
6	Figure 38	1K LCSS PWB	WD 15
7	Figure 1	IOT PWB	WD 8
7	Figure 3	HCF Control PWB	WD 35
7	Figure 30	Inserter PWB	WD 32
7	Figure 38	1K LCSS PWB	WD 16
8	Figure 1	IOT PWB	WD 5
8	Figure 30	Inserter PWB	WD 32
8	Figure 38	1K LCSS PWB	WD 16
9	Figure 1	IOT PWB	WD 8
9	Figure 30	Inserter PWB	WD 32
9	Figure 38	1K LCSS PWB	WD 16
10	Figure 1	IOT PWB	WD 8
10	Figure 30	Inserter PWB	WD 33
10	Figure 3	HCF control PWB	WD 35
11	Figure 1	IOT PWB	WD 9
11	Figure 30	Inserter PWB	WD 33
12	Figure 1	IOT PWB	WD 10
12	Figure 30	Inserter PWB	WD 33
12	Figure 3	HCF control PWB	WD 35

Table 2 PJ1 to PJ49

PJ number	PJ location figure	PJ location	Wiring diagram
12	Figure 38	1K LCSS PWB	WD 16
13	Figure 3	HCF control PWB	WD 35
13	Figure 38	1K LCSS PWB	WD 16
13	Figure 30	Inserter PWB	WD 33
14	Figure 1	IOT PWB	WD 10
14	Figure 3	HCF control PWB	WD 35
14	Figure 38	1K LCSS PWB	WD 17
15	Figure 38	1K LCSS PWB	WD 17
16	Figure 5 / Figure 6	Power and control assembly / LVPS	WD 1
16	Figure 32	Foreign interface PWB	WD 11
16	Figure 38	1K LCSS PWB	WD 17
17	Figure 5 / Figure 6	Power and control assembly / LVPS	WD 1
17	Figure 31	SBC PWB	WD 11
17	Figure 38	1K LCSS PWB	WD 17
18	Figure 5 / Figure 6	Power and control assembly / LVPS	WD 1
18	Figure 31	SBC PWB	WD 11
19	Figure 5 / Figure 6	Power and control assembly / LVPS	WD 1
19	Figure 3	HCF control PWB	WD 35
21	Figure 5	Power and control assembly bulkhead	WD 1
22	Figure 5	Power and control assembly bulkhead	WD 1
24	Figure 5	Power and control assembly	WD 2
25	Figure 5 / Figure 6	Power and control assembly / LVPS	WD 2
26	Figure 1	IOT PWB	WD 9
26	Figure 31	SBC PWB	WD 11
27	Figure 1	IOT PWB	WD 9
30	-	IOT exit sensor	WD 6, WD 7
31	-	Wait sensor	WD 6
32	-	Duplex sensor	WD 6, WD 7
33	Figure 1	IOT PWB	WD 10
34	-	Registration sensor	WD 6
35	Figure 1	IOT PWB	WD 10
36	Figure 27	Near upper hinge in left door	WD 8
37	-	Registration clutch	WD 6, WD 7
37	Figure 31	SBC PWB	WD 11
38	-	Inverter nip solenoid	WD 6, WD 7
39	-	Inverter path solenoid	WD 6, WD 7
40	Figure 12	In-line connector on duplex transport	WD 6, WD 7
41	-	Erase lamp	WD 6, WD 7
42	-	Photoreceptor fan	WD 1

Table 2 PJ1 to PJ49

PJ number	PJ location figure	PJ location	Wiring diagram
43	-	In-line connector Vacuum transport fan Transfer / detack cleaner motor Transfer / detack home sensor	WD 7 WD 6
44	Figure 12	In-line connector on registration transport	WD 6, WD 7
44	Figure 31	SBC PWB	WD 11
45	Figure 18	Inverter motor driver PWB	WD 7
46	-	Ambient temperature / humidity sensor	WD 8
47	-	Developer temperature sensor	WD 8
48	-	Waste toner full sensor	WD 8
49	Figure 11	In-line connector Inverter entry sensor (65-90 ppm) IOT exit sensor Inverter path solenoid Inverter nip solenoid	WD 6, WD 7

Table 3 PJ50 to PJ99

PJ number	PJ location figure	PJ location	Wiring diagram
50	Figure 17	Duplex motor	WD 6, WD 7
50	Figure 18	Inverter motor driver PWB	WD 6
55	Figure 18	Inverter motor driver PWB	WD 7
55	Figure 19	HVPS	WD 10
56	-	Left door interlock	WD 8
57	-	Waste toner door switch	WD 8
61	Figure 1	IOT PWB	WD 10
63	Figure 10	In-line connector beside tray 1 and 2 control PWB	WD 46
64	Figure 1	IOT PWB	WD 10
76	Figure 11	Tri-roll nip split solenoid	WD 10
75	Figure 14	In-line connector on toner dispense module	WD 8
81	Figure 15	UI Control PWB	WD 4
91	Figure 17	Duplex motor driver PWB	WD 6, WD 7
91	Figure 18	Inverter motor driver PWB	WD 6
93	Figure 13	In-line connector on developer module	WD 8
95	-	Toner dispense motor	WD 8
96	-	Toner cartridge drive motor	WD 8
97	-	Low toner sensor	WD 8
98	-	Toner concentration sensor	WD 8

Table 4 PJ100 to PJ149

PJ number	PJ location figure	PJ location	Wiring diagram
100	Figure 21	Fuser drawer connector	WD 2, WD 10
100	Figure 32	Foreign interface PWB	WD 11
101	Figure 24	HVF Control PWB	WD 22
101	Figure 35	LVF BM PWB	WD 40
101	Figure 31	SBC PWB	WD 11
102	Figure 24	HVF Control PWB	WD 22
102	Figure 35	LVF BM PWB	WD 40
103	Figure 24	HVF Control PWB	WD 23
103	Figure 35	LVF BM PWB	WD 40
104	Figure 24	HVF Control PWB	WD 23
104	Figure 35	LVF BM PWB	WD 40
104	Figure 31	SBC PWB	WD 11
105	Figure 35	LVF BM PWB	WD 41
105	Figure 31	SBC PWB	WD 11
106	Figure 35	LVF BM PWB	WD 41
106	Figure 31	SBC PWB	WD 11
107	Figure 31	SBC PWB	WD 11
107	Figure 35	LVF BM PWB	WD 41
108	Figure 35	LVF BM PWB	WD 41
109	Figure 35	LVF BM PWB	WD 41
109	Figure 31	SBC PWB	WD 11
110	Figure 35	LVF BM PWB	WD 42
111	Figure 24	HVF Control PWB	WD 23
111	Figure 35	LVF BM PWB	WD 42
112	Figure 24	HVF Control PWB	WD 23
112	Figure 35	LVF BM PWB	WD 42
112	Figure 31	SBC PWB	WD 11
113	Figure 24	HVF Control PWB	WD 23
113	Figure 35	LVF BM PWB	WD 42
114	Figure 31	SBC PWB	WD 11
115	Figure 31	SBC PWB	WD 11
116	Figure 31	SBC PWB	WD 11
121	Figure 20	ROS	WD 5
121	Figure 24	HVF Control PWB	WD 23
122	Figure 20	ROS	WD 11
124	-	In-line to foreign interface device	WD 11
130	Figure 15	UI Control PWB	WD 4
131	Figure 8	Power Distribution PWB	WD 3
131	Figure 24	HVF Control PWB	WD 23

Table 4 PJ100 to PJ149

PJ number	PJ location figure	PJ location	Wiring diagram
132	Figure 24	HVF Control PWB	WD 23
133	Figure 24	HVF Control PWB	WD 23
133	Figure 8	Power Distribution PWB	WD 3
137	Figure 8	Power Distribution PWB	WD 3
140	Figure 8	Power Distribution PWB	WD 3
141	Figure 21	Fuser CRUM connector	WD 5
141	Figure 8	Power Distribution PWB	WD 3
142	Figure 4	Main drive PWB	WD 5
144	Figure 22	Xerographic module CRUM connector	WD 5
146	Figure 4	Main drive PWB	WD 5
147	Figure 4	Main drive PWB	WD 5
148	Figure 4	Main drive PWB	WD 5
149	Figure 4	Main drive PWB	WD 5

Table 5 PJ150 to PJ199

PJ number	PJ location figure	PJ location	Wiring diagram
151	Figure 4	Main drive PWB	WD 5
151	Figure 5	Power and control module	WD 9
153	-	Ozone fan	WD 5
154	Figure 4	Main drive PWB	WD 5

Table 6 PJ200 to JP249

PJ number	PJ location figure	PJ location	Wiring diagram
201	Figure 24	HVF Control PWB	WD 24
202	Figure 24	HVF Control PWB	WD 24
212	Figure 31	SBC PWB	WD 11
221	Figure 31	SBC PWB	WD 11

Table 7 PJ250 to PJ299

PJ number	PJ location figure	PJ location	Wiring diagram
250	Figure 31	SBC PWB	WD 11
252	Figure 31	SBC PWB	WD 11
266	Figure 31	SBC PWB	WD 11
270	Figure 2	Tray 1 and 2 control PWB	WD 46
271	Figure 2	Tray 1 and 2 control PWB	WD 46

Table 7 PJ250 to PJ299

PJ number	PJ location figure	PJ location	Wiring diagram
272	Figure 2	Tray 1 and 2 control PWB	WD 46
273	Figure 2	Tray 1 and 2 control PWB	WD 47
274	Figure 2	Tray 1 and 2 control PWB	WD 46
275	Figure 2	Tray 1 and 2 control PWB	WD 47
276	Figure 2	Tray 1 and 2 control PWB	WD 46, WD 47
279	Figure 26	Behind tray 1 on bulkhead	WD 46
280	Figure 26	Behind tray 2 on bulkhead	WD 47

Table 8 PJ300 to PJ399

PJ number	PJ location figure	PJ location	Wiring diagram
300	Figure 7	2K LCSS PWB	WD 18
300	Figure 34	LVF PWB	WD 36
301	Figure 7	2K LCSS PWB	WD 18
301	Figure 24	HVF Control PWB	WD 24
301	Figure 34	LVF PWB	WD 36
302	Figure 7	2K LCSS PWB	WD 18
302	Figure 24	HVF Control PWB	WD 25
302	Figure 34	LVF PWB	WD 36
303	Figure 7	2K LCSS PWB	WD 18
303	Figure 34	LVF PWB	WD 36
304	Figure 7	2K LCSS PWB	WD 18
304	Figure 24	HVF Control PWB	WD 25
304	Figure 34	LVF PWB	WD 36
305	Figure 7	2K LCSS PWB	WD 18
305	Figure 34	LVF PWB	WD 36
306	Figure 7	2K LCSS PWB	WD 19
306	Figure 34	LVF PWB	WD 37
307	Figure 7	2K LCSS PWB	WD 19
307	Figure 34	LVF PWB	WD 37
308	Figure 7	2K LCSS PWB	WD 19
308	Figure 34	LVF PWB	WD 37
309	Figure 7	2K LCSS PWB	WD 20
309	Figure 34	LVF PWB	WD 38
310	Figure 7	2K LCSS PWB	WD 20
310	Figure 34	LVF PWB	WD 38
311	Figure 7	2K LCSS PWB	WD 20
311	Figure 34	LVF PWB	WD 38
312	Figure 7	2K LCSS PWB	WD 20
312	Figure 34	LVF PWB	WD 38

Table 8 PJ300 to PJ399

PJ number	PJ location figure	PJ location	Wiring diagram
313	Figure 7	2K LCSS PWB	WD 21
314	Figure 7	2K LCSS PWB	WD 21
314	Figure 34	LVF PWB	WD 39
315	Figure 7	2K LCSS PWB	WD 21
315	Figure 34	LVF PWB	WD 39
316	Figure 7	2K LCSS PWB	WD 21
316	Figure 34	LVF PWB	WD 39
317	Figure 7	2K LCSS PWB	WD 21
318	Figure 7	2K LCSS PWB	WD 21
318	Figure 34	LVF PWB	WD 39

Table 9 PJ400 to PJ449

PJ number	PJ location figure	PJ location	Wiring diagram
430	Figure 45	Scanner PWB	WD 45
431	Figure 45	Scanner PWB	WD 45
433	Figure 45	Scanner PWB	WD 45
438	-	Scan carriage motor	WD 44
439	-	Scan carriage home sensor	WD 44
445	Figure 43	Scanner CCD PWB	WD 44
446	Figure 43	Scanner CCD PWB	WD 44
447	Figure 43	Scanner CCD PWB	WD 44
448	Figure 42	Scanner LED Drive PWB	WD 44
449	Figure 42	Scanner LED Drive PWB	WD 44
450	Figure 44	Scanner LED Lamp PWB	WD 44

Table 9 PJ400 to PJ449

PJ number	PJ location figure	PJ location	Wiring diagram
400	Figure 34	LVF PWB	WD 39
401	Figure 24	HVF Control PWB	WD 25
401	Figure 34	LVF PWB	WD 39
402	Figure 24	HVF Control PWB	WD 25
402	Figure 34	LVF PWB	WD 39
403	Figure 24	HVF Control PWB	WD 25
410	Figure 45	Scanner PWB	WD 44
411	Figure 45	Scanner PWB	WD 44
412	Figure 45	Scanner PWB	WD 44
413	Figure 45	Scanner PWB	WD 44
414	Figure 45	Scanner PWB	WD 44
415	Figure 45	Scanner PWB	WD 44
416	Figure 45	Scanner PWB	WD 44
417	Figure 45	Scanner PWB	WD 44
418	Figure 45	Scanner PWB	WD 44
419	Figure 45	Scanner PWB	WD 44
420	Figure 45	Scanner PWB	WD 44
421	Figure 45	Scanner PWB	WD 44
422	Figure 45	Scanner PWB	WD 45
423	Figure 45	Scanner PWB	WD 45
424	Figure 45	Scanner PWB	WD 45
425	Figure 45	Scanner PWB	WD 45
426	Figure 45	Scanner PWB	WD 45
427	Figure 45	Scanner PWB	WD 45
428	Figure 45	Scanner PWB	WD 45
429	Figure 45	Scanner PWB	WD 45

Table 10 PJ450 to PJ499

PJ number	PJ location figure	PJ location	Wiring diagram
451	Figure 39	Side 2 CCD PWB	WD 44
452	Figure 39	Side 2 CCD PWB	WD 13
453	Figure 39	Side 2 CCD PWB	WD 13
454	Figure 40	Side 2 LED Drive PWB	WD 13
455	Figure 41	Side 2 LED Lamp PWB	WD 13
458	Figure 36	SPDH PWB	WD 13
459	Figure 36	SPDH PWB	WD 12
460	Figure 36	SPDH PWB	WD 12
461	Figure 36	SPDH PWB	WD 12
462	Figure 36	SPDH PWB	WD 12
463	Figure 36	SPDH PWB	WD 12
464	Figure 36	SPDH PWB	WD 13
465	Figure 36	SPDH PWB	WD 13
466	Figure 36	SPDH PWB	WD 13
467	Figure 36	SPDH PWB	WD 13
468	Figure 36	SPDH PWB	WD 13
469	Figure 36	SPDH PWB	WD 14
470	Figure 36	SPDH PWB	WD 14
471	Figure 36	SPDH PWB	WD 14
472	Figure 36	SPDH PWB	WD 14
473	Figure 36	SPDH PWB	WD 14
474	Figure 36	SPDH PWB	WD 14
475	Figure 36	SPDH PWB	WD 14
495	-	OCT module PWB	WD 43

Table 11 PJ500 to PJ999

Connection	PJ location figure	PJ location	Wiring diagram
501	Figure 5	Power and control module	WD 48
501	Figure 24	HVF Control PWB	WD 26
502	Figure 23	Tray 6 control PWB	WD 48
502	Figure 24	HVF Control PWB	WD 26
503	Figure 23	Tray 6 control PWB	WD 48
503	Figure 24	HVF Control PWB	WD 26
504	Figure 23	Tray 6 control PWB	WD 48
505	Figure 23	Tray 6 control PWB	WD 48
506	Figure 23	Tray 6 control PWB	WD 49
507	Figure 23	Tray 6 control PWB	WD 49
508	Figure 23	Tray 6 control PWB	WD 49
509	Figure 23	Tray 6 control PWB	WD 49
510	Figure 23	Tray 6 control PWB	WD 49
511	Figure 23	Tray 6 control PWB	WD 49
512	Figure 23	Tray 6 control PWB	WD 48
514	Figure 23	Tray 6 control PWB	WD 49
530	-	In-line connector	WD 10
530	Figure 25	In-line connector above Tray 6 elevator motor	WD 48
531	-	Paper path cooling fan 1	WD 10
532	-	Paper path cooling fan 2	WD 10
537	-	Tray 1 feed sensor	WD 46
539	-	Tray 1 and 2 transport motor	WD 47
540	-	Tray 1 feed motor	WD 46
541	-	Tray 1 stack height sensor	WD 46
542	-	Tray 1 empty sensor	WD 46
545	-	Tray 2 feed motor	WD 47
546	-	Tray 2 stack height sensor	WD 47
547	-	Tray 2 empty sensor	WD 47
550	Figure 27	Near upper hinge in left door	WD 8
551	Figure 9	HVF BM PWB	WD 29
552	-	Tray 2 feed sensor	WD 47
552	Figure 9	HVF BM PWB	WD 29
553	Figure 9	HVF BM PWB	WD 29
554	-	Bypass width sensor	WD 8
554	Figure 9	HVF BM PWB	WD 29
555	-	Near upper hinge in left door	WD 8
555	Figure 9	HVF BM PWB	WD 30
556	Figure 27	Bypass feed solenoid	WD 8
556	Figure 9	HVF BM PWB	WD 30
557	Figure 9	HVF BM PWB	WD 30

Table 11 PJ500 to PJ999

Connection	PJ location figure	PJ location	Wiring diagram
558	Figure 9	HVF BM PWB	-
559	Figure 9	HVF BM PWB	WD 30
559	Figure 5	Wait sensor	WD 7
560	Figure 9	HVF BM PWB	WD 30
561	Figure 9	HVF BM PWB	WD 30
562	Figure 9	HVF BM PWB	WD 30
563	Figure 9	HVF BM PWB	WD 30
564	Figure 9	HVF BM PWB	-
570	Figure 46	HVF BM exit sensor	WD 30
587	Figure 9	HVF BM PWB	-
596	Figure 46		
597	Figure 46		
599	Figure 9	HVF BM PWB	-
601	Figure 29	Tri-folder control PWB	WD 31
601	Figure 24	HVF Control PWB	WD 26
602	Figure 29	Tri-folder control PWB	WD 31
602	Figure 24	HVF Control PWB	WD 26
603	Figure 29	Tri-folder control PWB	WD 31
604	Figure 30	Tri-folder control PWB	WD 31
605	Figure 29	Tri-folder control PWB	WD 31
636	Figure 27	Near upper hinge in left door	WD 7, WD 46, WD 47
701	Figure 24	HVF Control PWB	WD 27, WD 28
702	Figure 24	HVF Control PWB	WD 27
703	Figure 24	HVF Control PWB	WD 27
801	Figure 24	HVF Control PWB	WD 27
802	Figure 24	HVF Control PWB	WD 27
901	Figure 24	HVF Control PWB	WD 28
902	Figure 24	HVF Control PWB	WD 28
905	Figure 15	UI Control PWB	WD 4
907	Figure 15	UI Control PWB	WD 4
907	Figure 33	UI Status PWB	WD 4
908	Figure 15	UI Control PWB	WD 4
909	Figure 15	UI Control PWB	WD 4
910	Figure 37	UI Keyboard PWB	WD 4
943	Figure 15	UI Control PWB	WD 4
945	Figure 15	UI Control PWB	WD 4
998	Figure 2	Tray 1 and 2 control PWB	WD 46
998	-	Hard Disk	WD 11
999	-	Hard Disk	WD 11

IOT PWB

Location: PL 1.10 Item 2

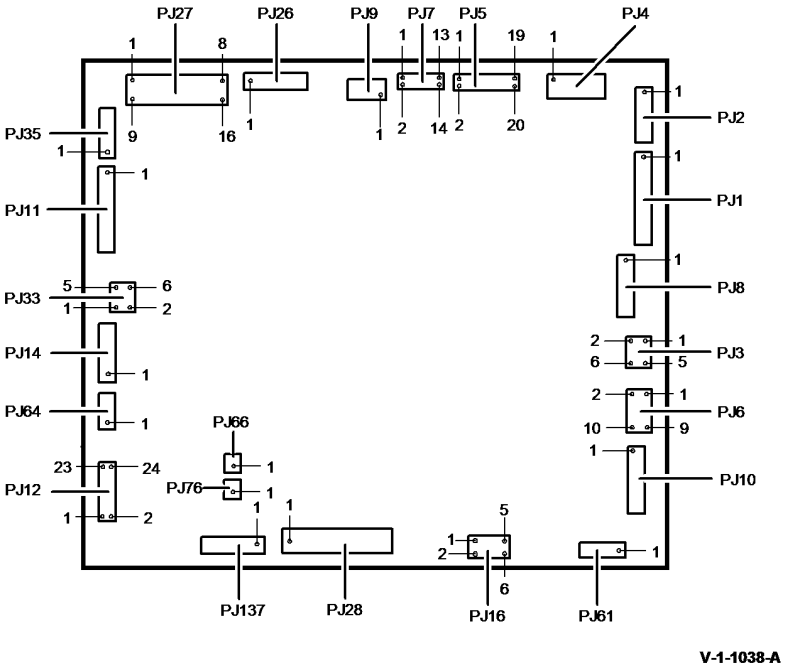


Figure 1 IOT PWB

Tray 1 and 2 Control PWB

Location: PL 70.10 Item 2

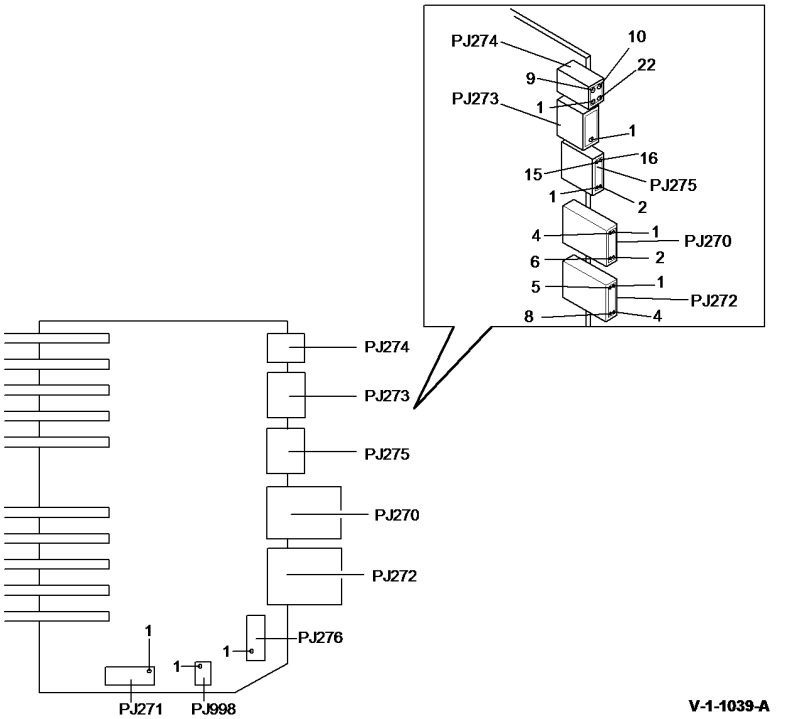


Figure 2 Tray 1 and 2 control PWB

HCF Control PWB

Location: PL 70.21 Item 2

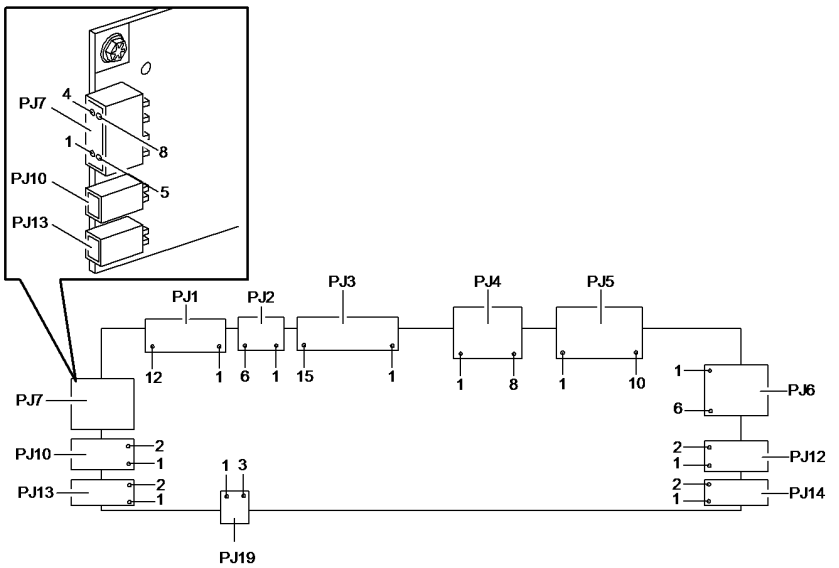


Figure 3 HCF control PWB

Main Drive Module

Location: (45-55 ppm) PL 40.15 Item 1, (65-90 ppm) PL 40.10 Item 1

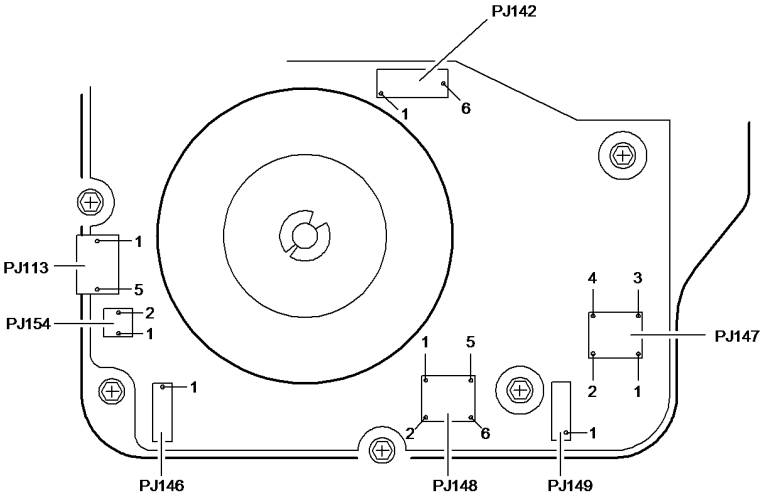


Figure 4 Main drive module

Power and Control Assembly

Location: PL 1.10 Item 1

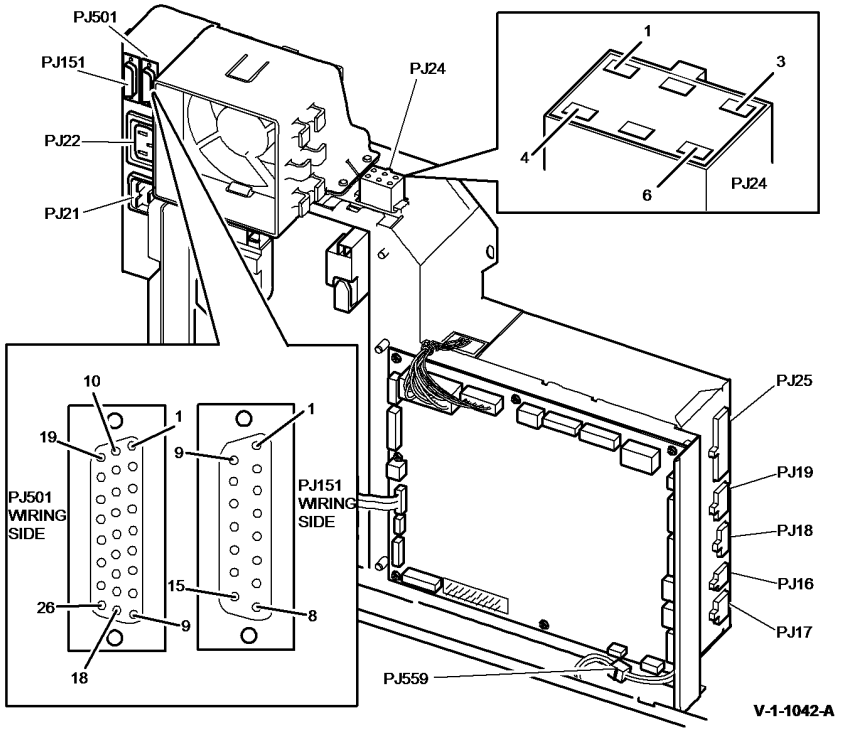


Figure 5 Power and control assembly

LVPS and Base Module

Location: PL 1.10 Item 3

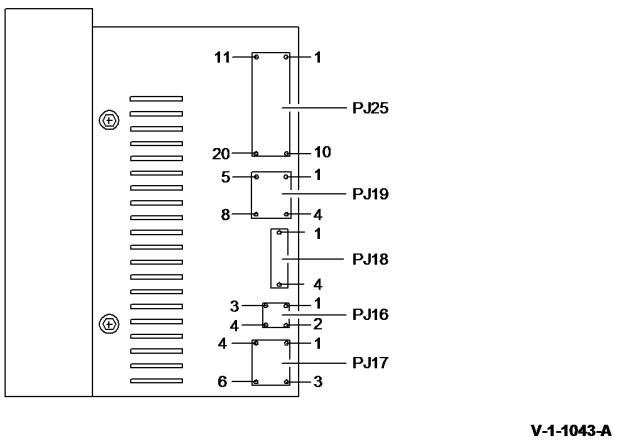


Figure 6 LVPS and base module

2K LCSS PWB

Location: PL 11.26 Item 1

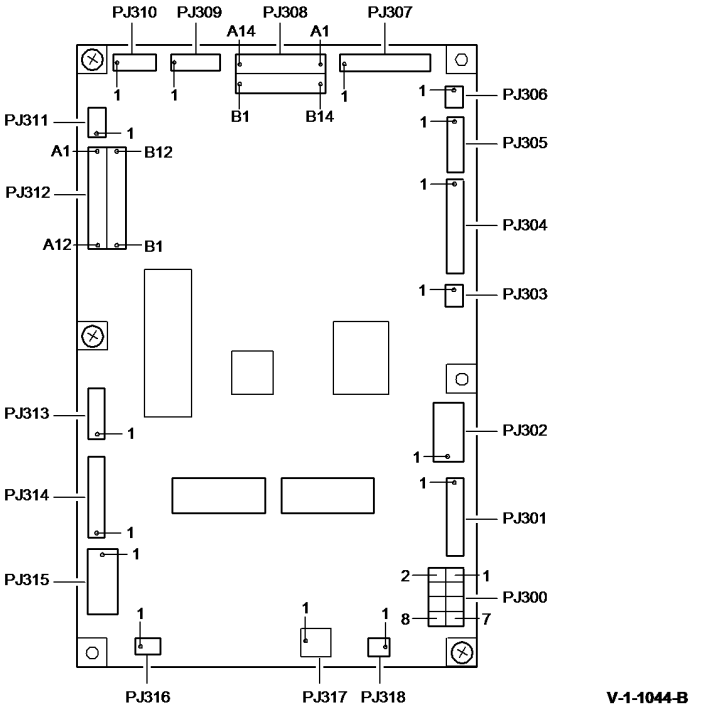


Figure 7 2K LCSS PWB

Power Distribution PWB

Location: PL 3.22 Item 1

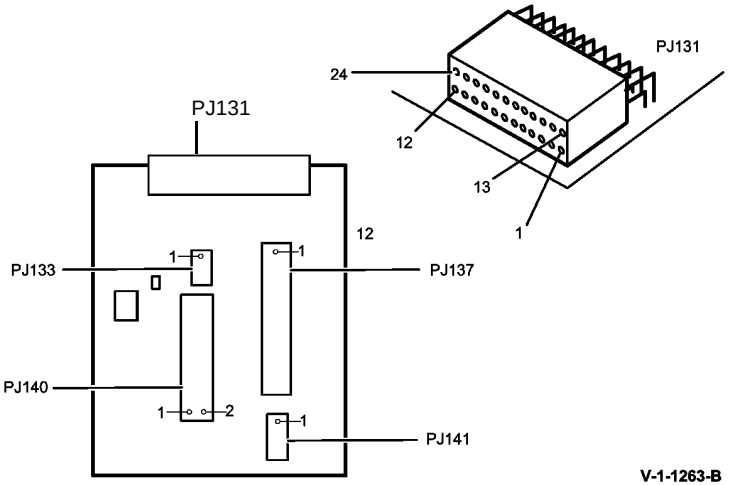
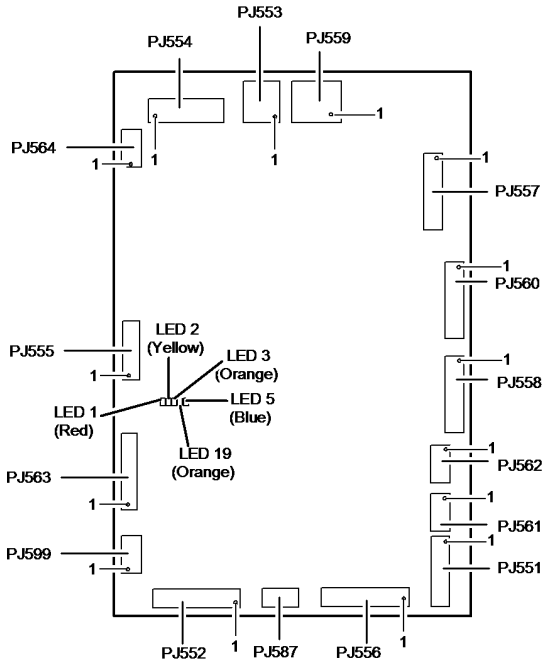


Figure 8 Power Distribution PWB

HVF BM PWB

Location: PL 11.166 Item 10

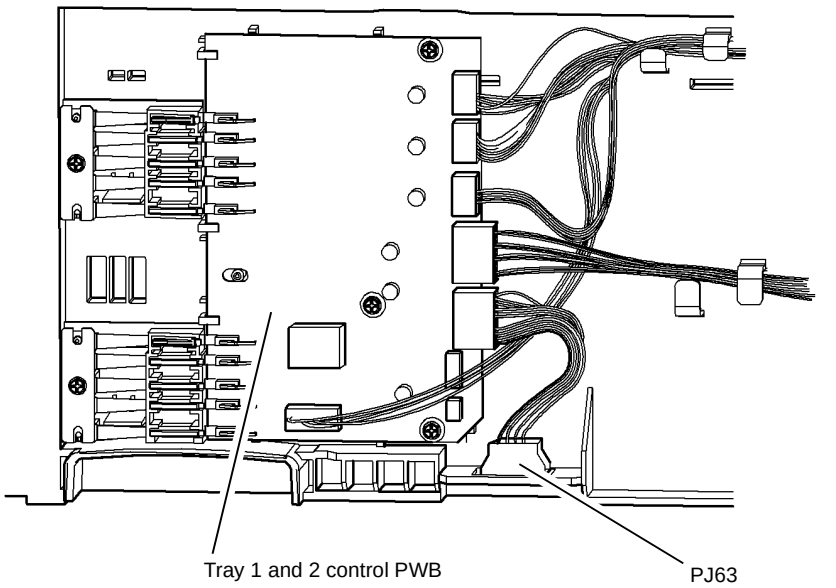


V-1-1052-A

Figure 9 HVF BM PWB

In-line Connector PJ63

Location: PL 70.10



V-1-1055-A

Figure 10 In-line Connector PJ63

In-line Connector PJ38, PJ49 and PJ76

Location: PL 10.11

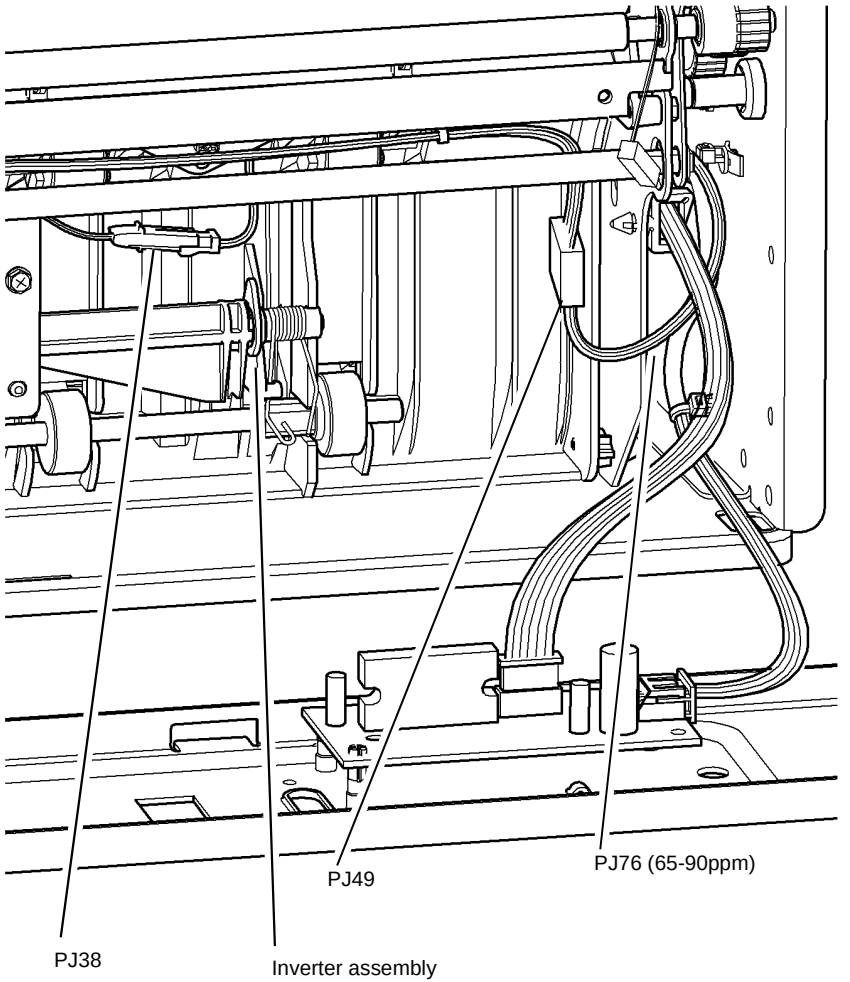


Figure 11 In-line Connector PJ38, PJ49 and PJ76

In-line Connectors PJ40 and PJ44

Location: PL 80.20

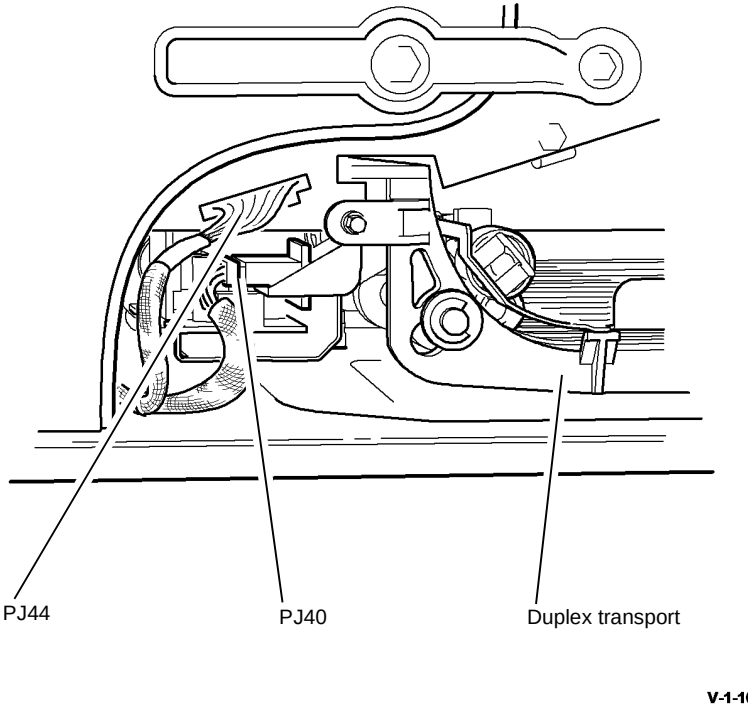


Figure 12 In-line Connector PJ40 and PJ44

In-line Connector PJ93

Location: (45-55 ppm) PL 90.17 Item 2, (65-90 ppm) PL 90.15 Item 2

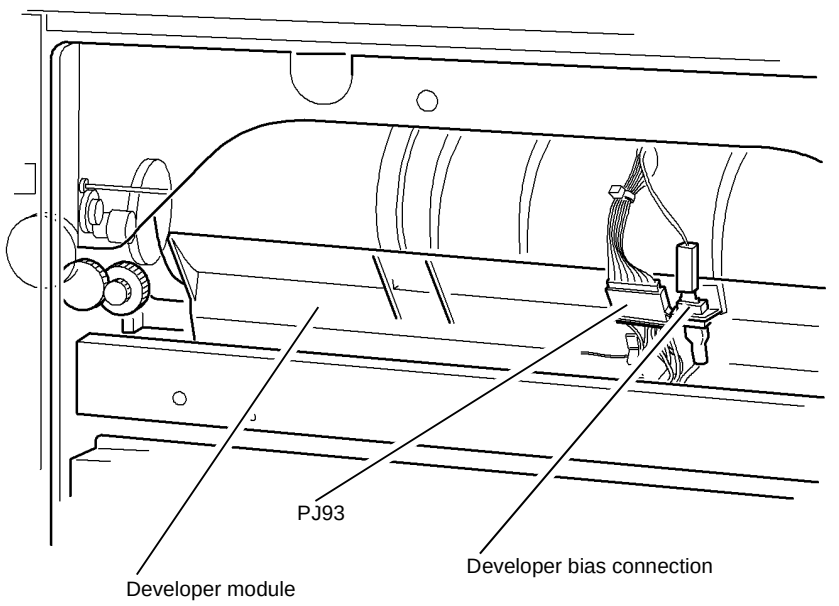


Figure 13 In-line Connector PJ93

In-line Connector PJ75

Location: (45-55 ppm) PL 90.17 Item 2, (65-90 ppm) PL 90.15 Item 2

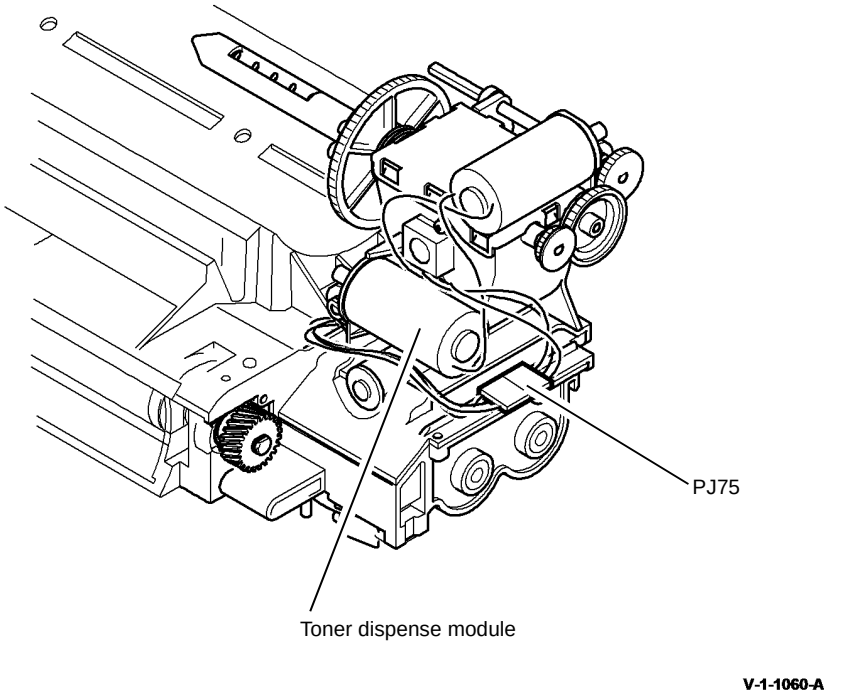


Figure 14 In-line Connector PJ75

UI Control PWB

Location: PL 2.10 Item 6

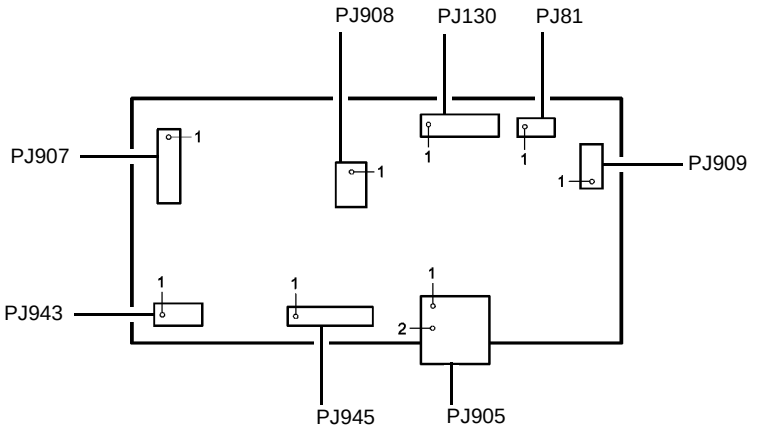


Figure 15 UI Control PWB

Fax Connector PWB

Location: PL 20.05 Item 2

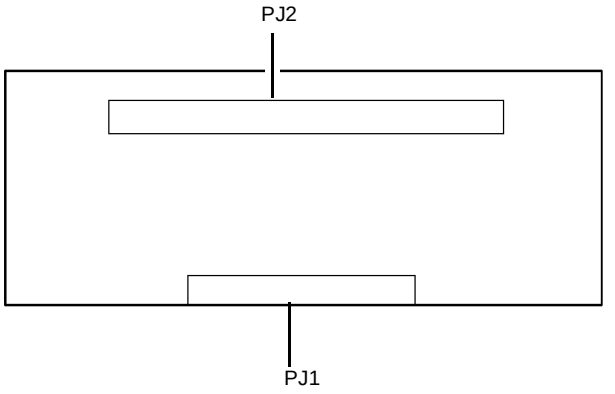
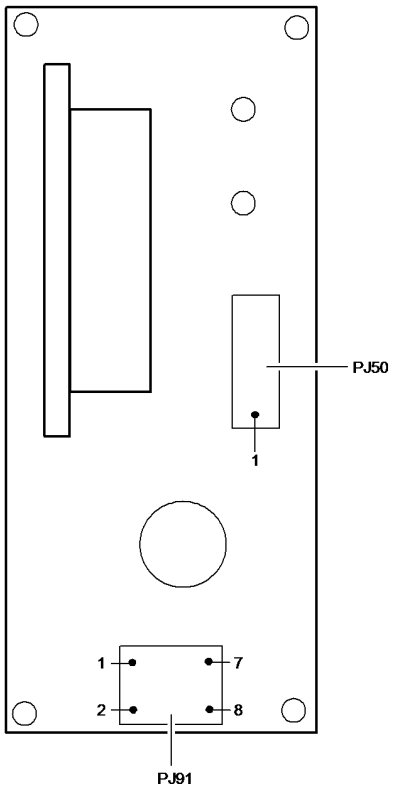


Figure 16 Fax Connector PWB

Duplex Motor Driver PWB

Location: (45-55 ppm) PL 80.22 Item 9, (65-90 ppm) PL 80.20 Item 9

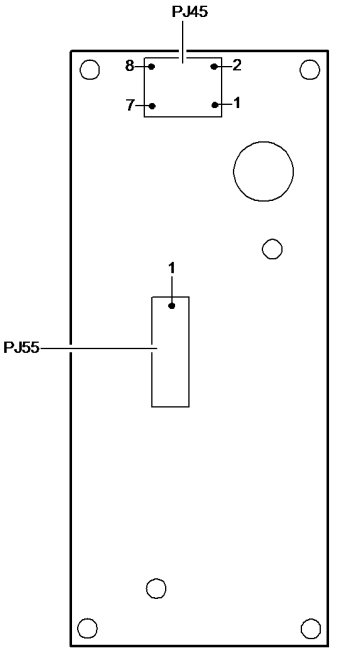


V-1-1065-A

Figure 17 Duplex Motor Driver PWB

Inverter Motor Driver PWB

Location: PL 10.11 Item 22

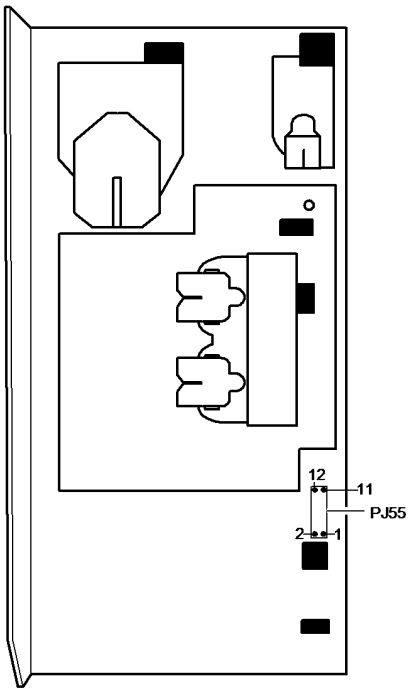


V-1-1066-A

Figure 18 Inverter Motor Driver PWB

HVPS

Location: PL 1.10 Item 5

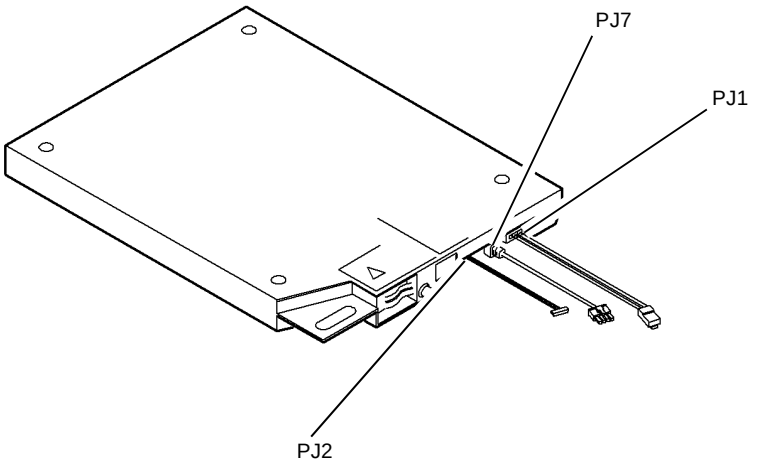


V-1-1067-A

Figure 19 HVPS

ROS

Location: PL 60.10 Item 8



V-1-1070-A

Figure 20 ROS

Fuser Module

Location: (45-55 ppm) PL 10.8 Item 1, (65-90 ppm) PL 10.10 Item 1

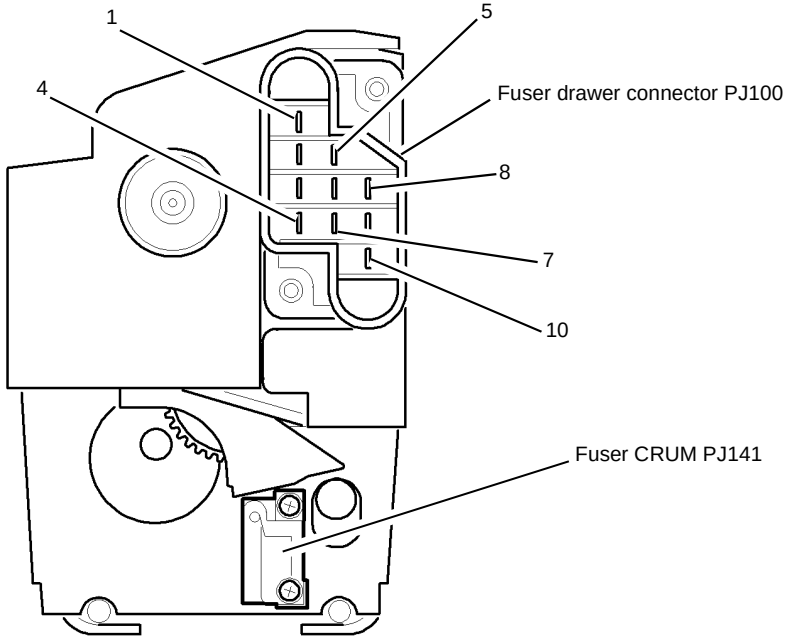


Figure 21 Fuser module

Xerographic Module

Location: PL 90.20 Item 2

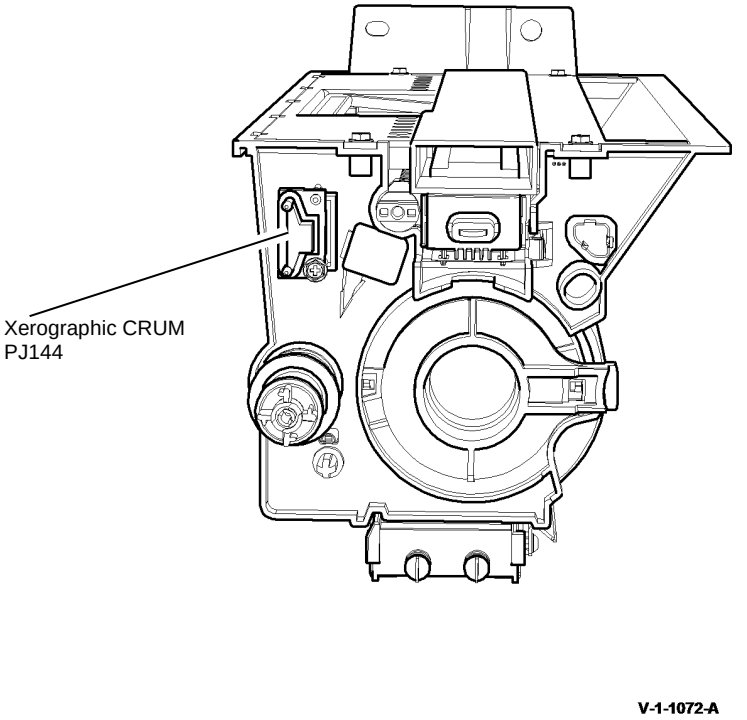


Figure 22 Xerographic Module

Tray 6 Control PWB

Location: PL 70.68 Item 8

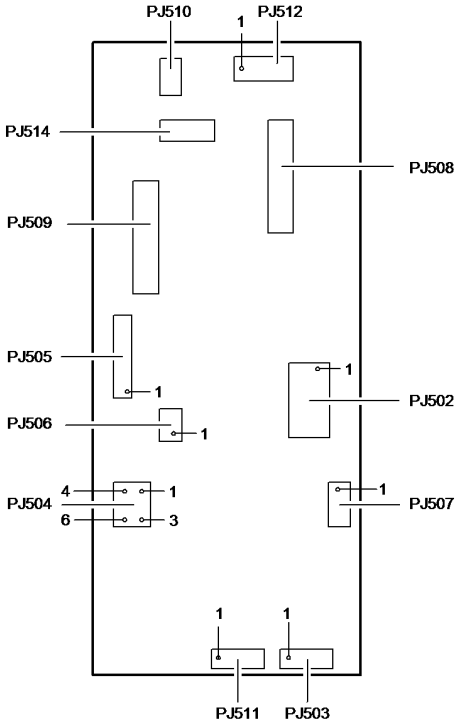


Figure 23 Tray 6 Control PWB

HVF PWB

Location PL 11.157 Item 2

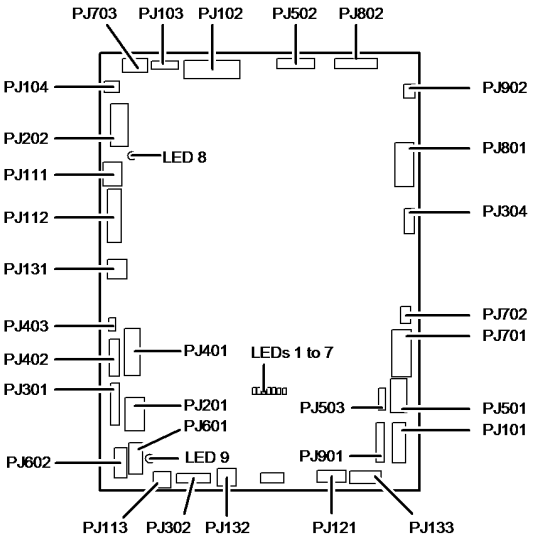


Figure 24 HVF PWB

In-line connector PJ530

Location: PL 70.68 Item 4

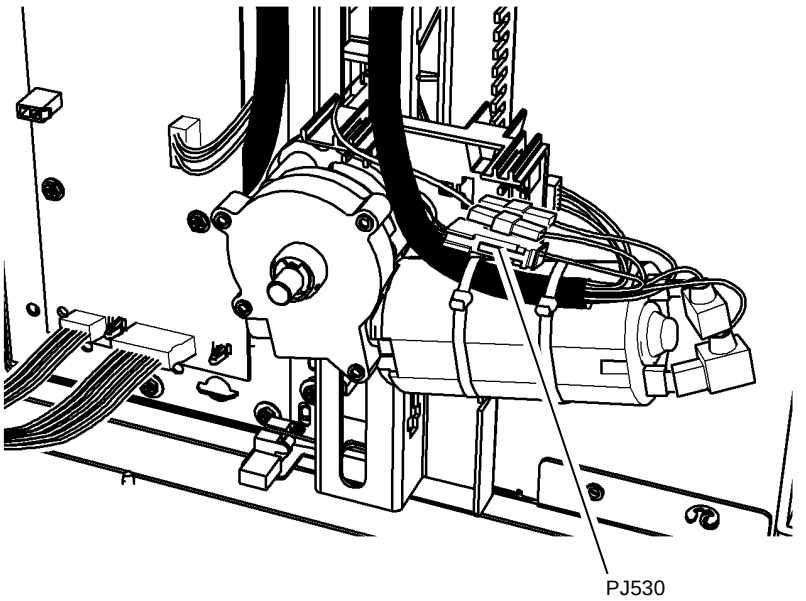


Figure 25 In-line Connector PJ530

In-line connectors PJ279 and PJ280

Location: PL 80.25 Item 9

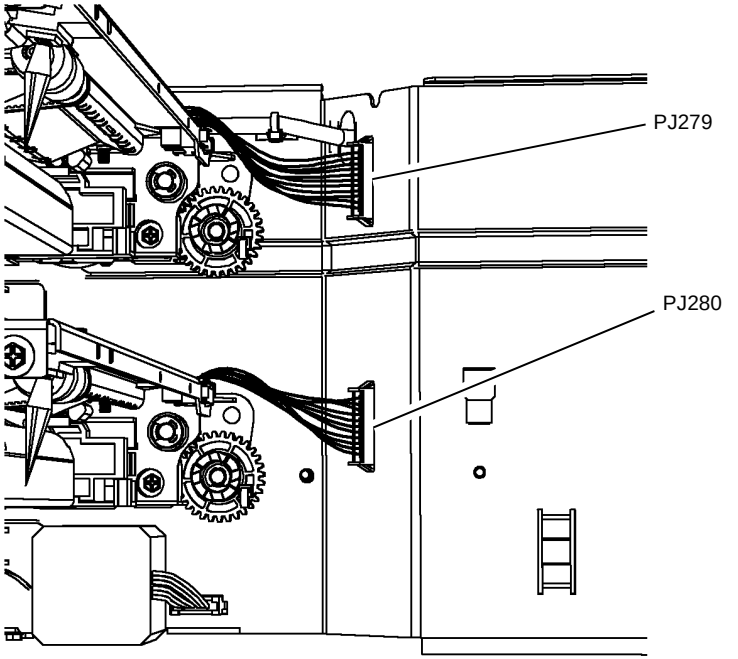


Figure 26 In-line Connector PJ279 and PJ280

In-line connectors PJ36, PJ550, PJ556 and PJ636

Location: PL 70.30

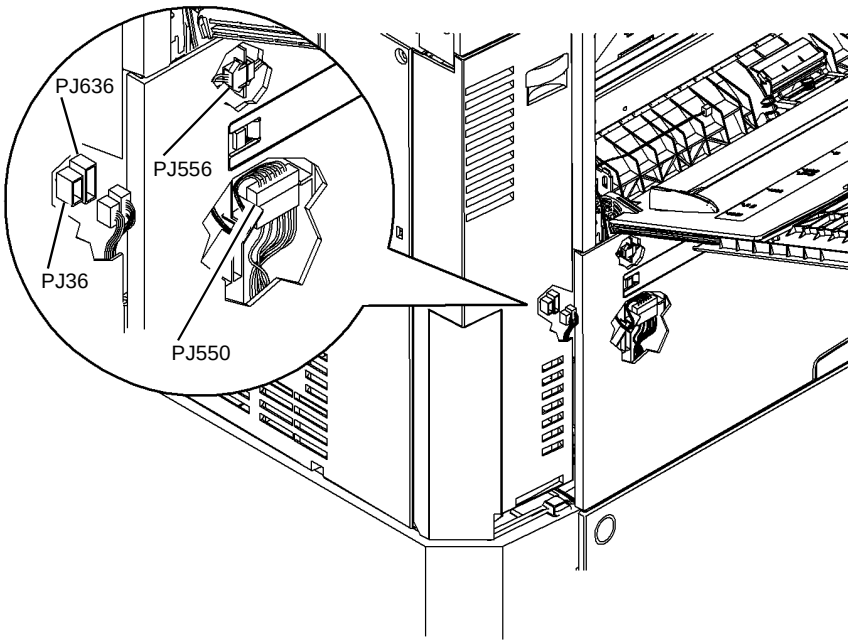


Figure 27 In-line Connector PJ36, PJ550, PJ556 and PJ636

In-line connectors PJ82 and PJ299 (W/TAG 001)

Location: PL 10.25

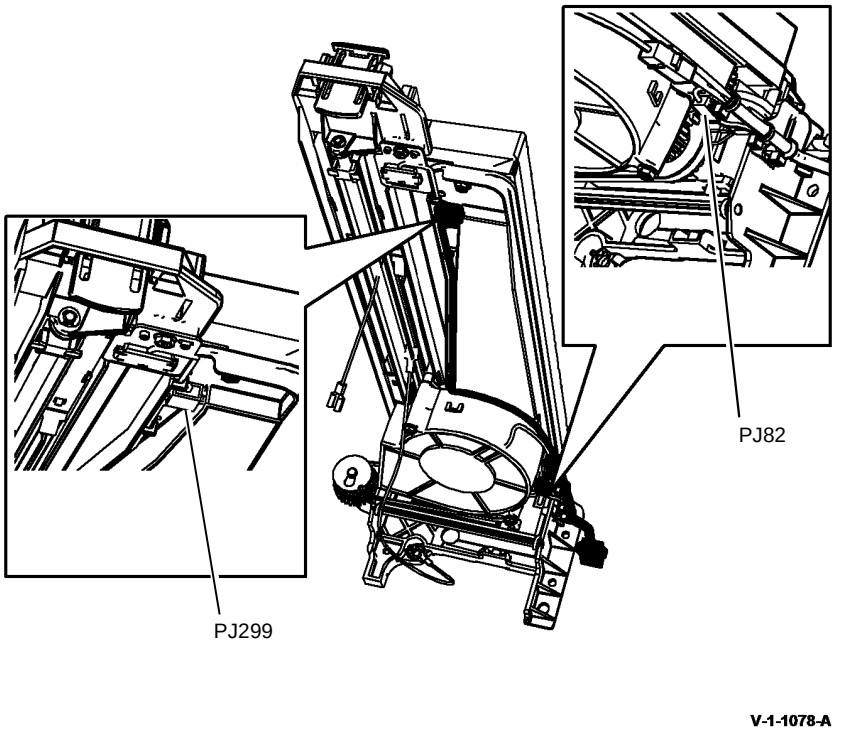


Figure 28 In-line Connector PJ82 and PJ299

Tri- Folder Control PWB

Location: PL 11.193 Item 16

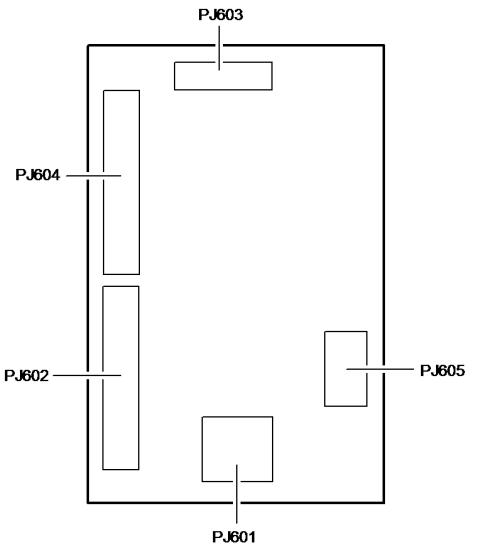


Figure 29 Tri-Folder Control PWB

Inserter PWB

Location: PL 11.179 Item 9

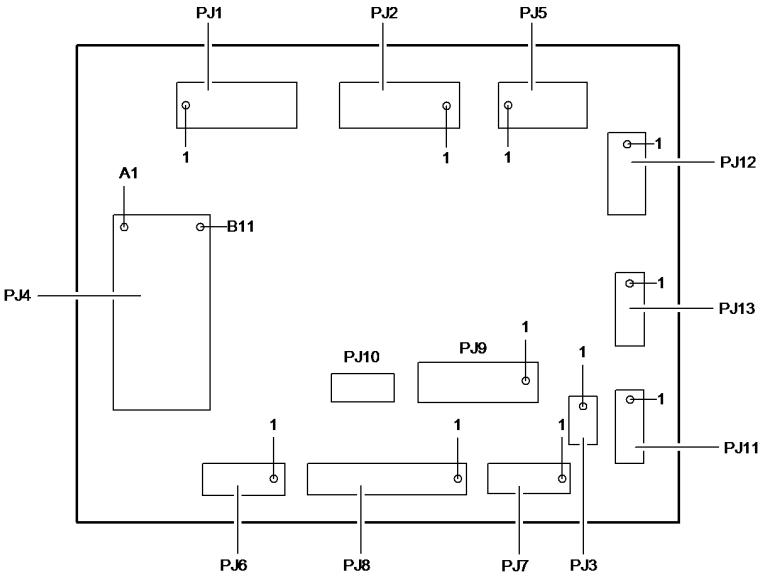


Figure 30 Inserter PWB

SBC PWB

Location: PL 3.22 Item 3

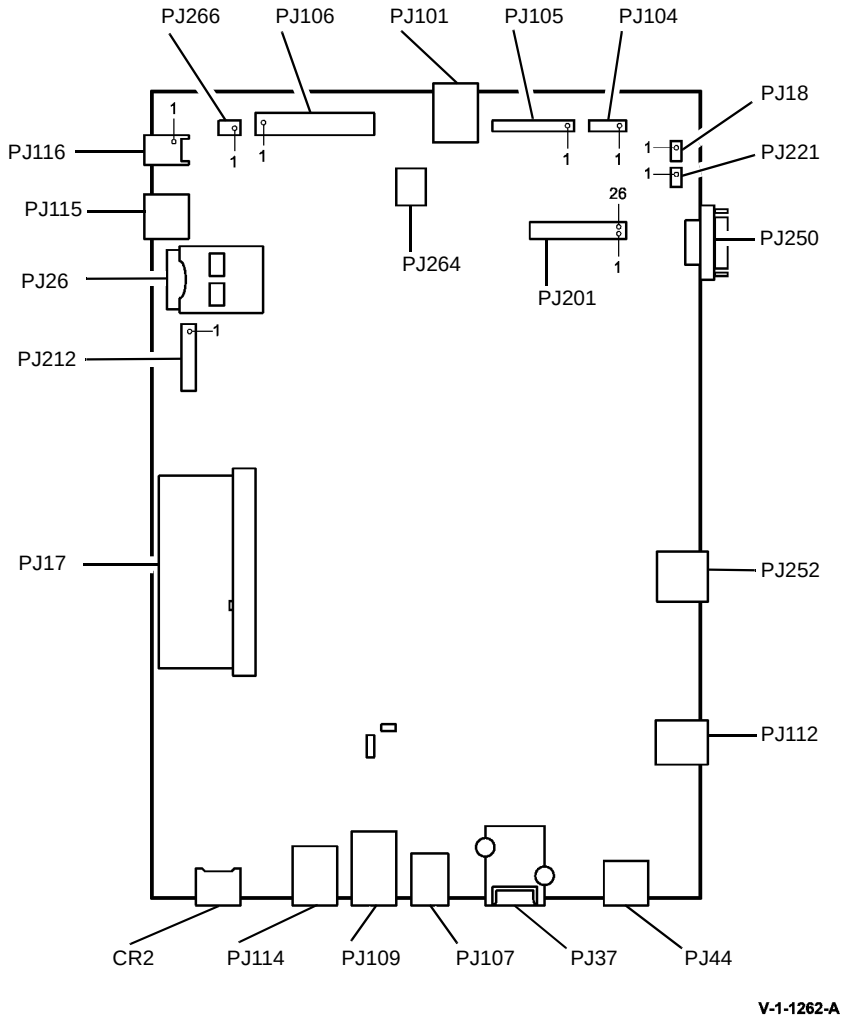


Figure 31 SBC PWB

Foreign Interface PWB

Location: PL 3.22 Item 26

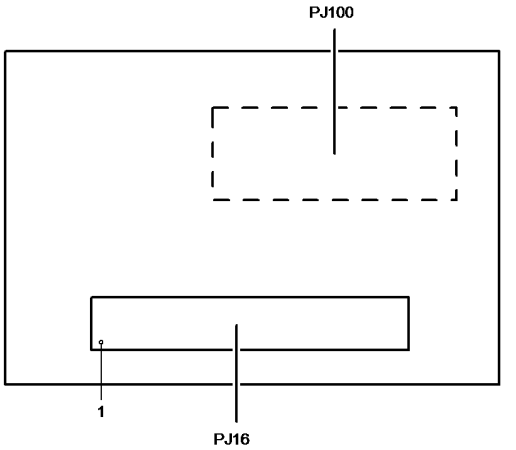


Figure 32 Foreign Interface PWB

UI Status PWB

Location: PL 2.10 Item 7

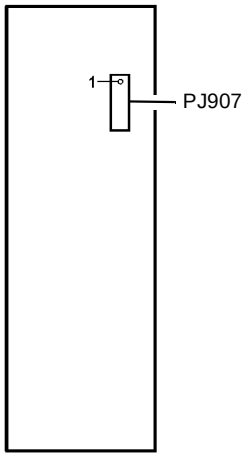


Figure 33 UI Status PWB

LVF PWB

Location: PL 11.90 Item 8

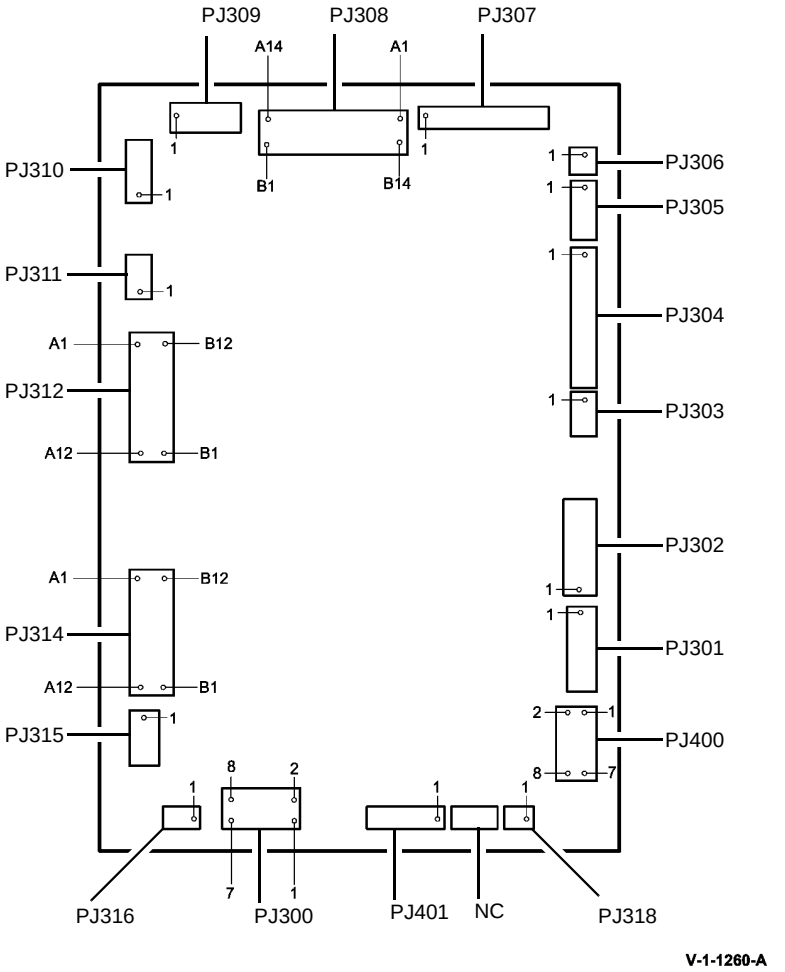


Figure 34 LVF PWB

LVF BM PWB

Location: PL 11.90 Item 1

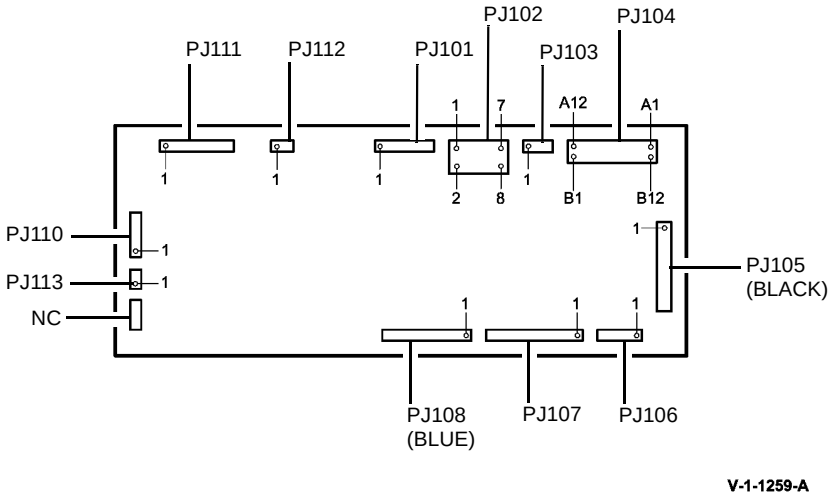


Figure 35 LVF BM PWB

SPDH PWB

Location: PL 5.10 Item 5

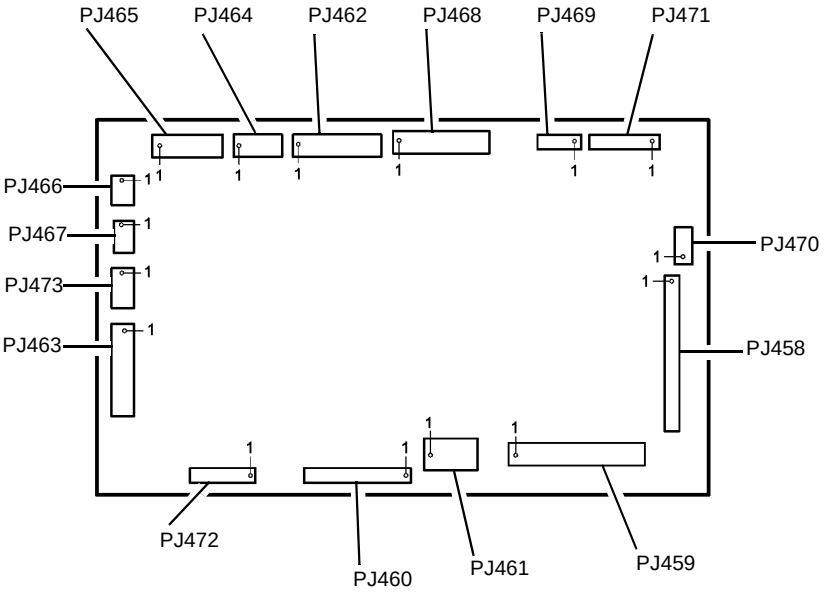


Figure 36 SPDH PWB

UI Keyboard PWB

Location: PL 2.10 Item 9

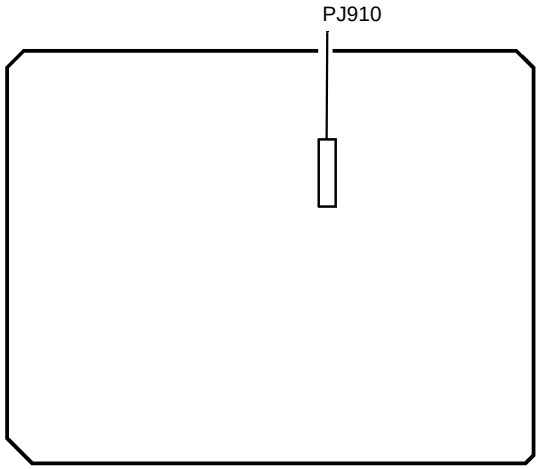


Figure 37 UI Keyboard PWB

1K LCSS PWB

Location: PL 11.124 Item 1

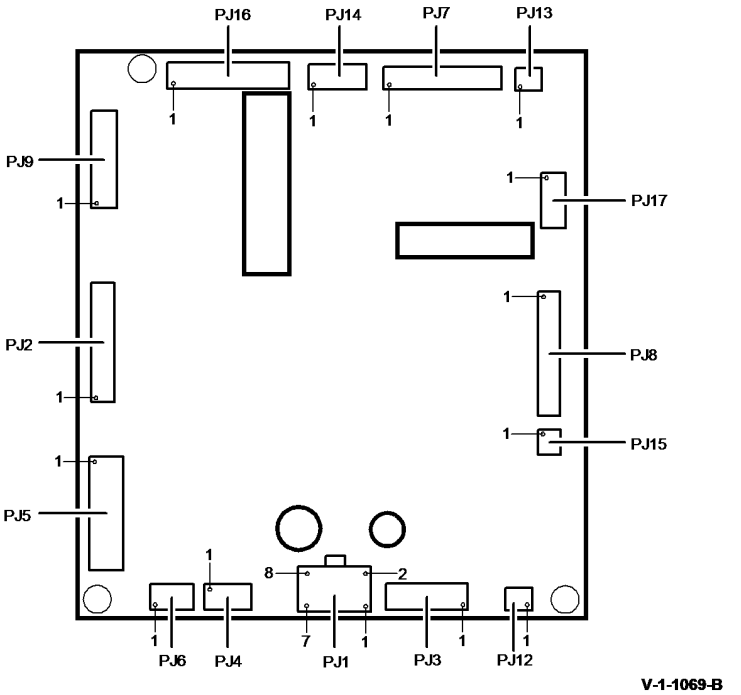


Figure 38 1K LCSS PWB

Side 2 CCD PWB

Location: PL 60.30 Item 4

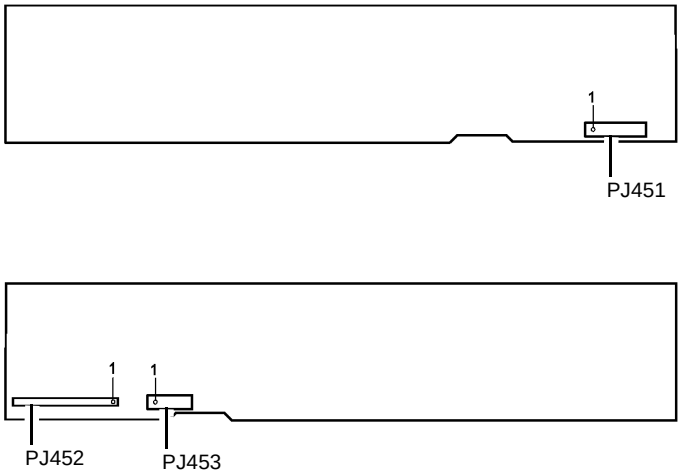


Figure 39 Side 2 CCD PWB

Side 2 LED Drive PWB

Location: PL 60.30 Item 6

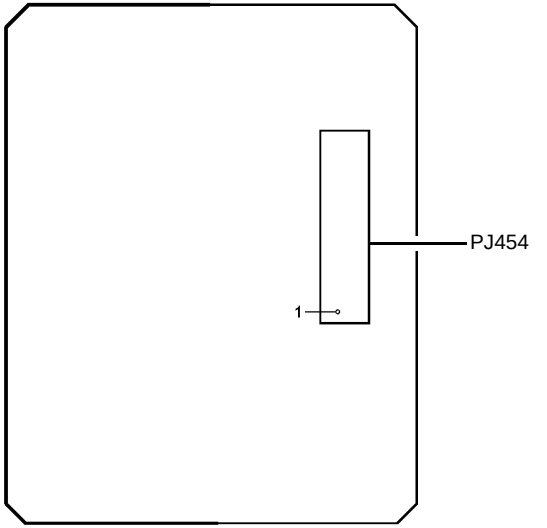
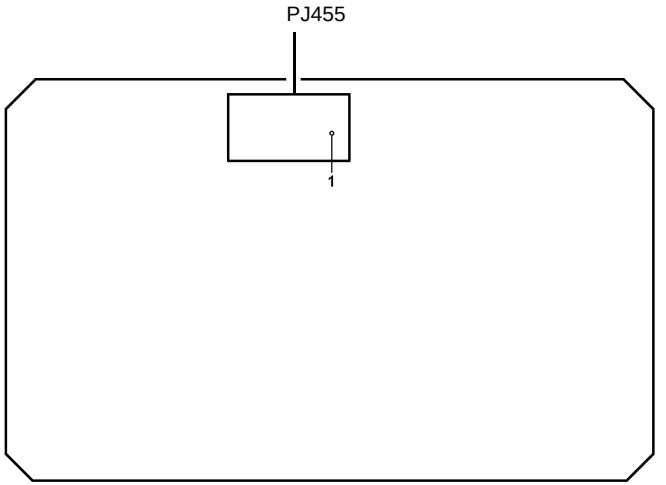


Figure 40 Side 2 LED Drive PWB

Side 2 LED Lamp PWB

Location: PL 60.30 Item 2

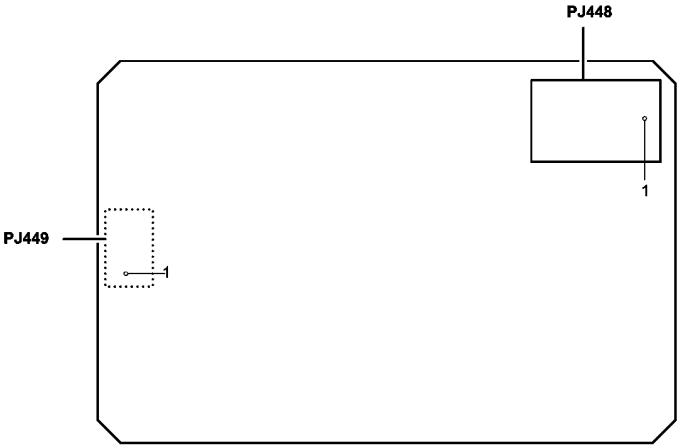


V-1-1269-A

Figure 41 Side 2 LED Lamp PWB

Scanner LED Drive PWB

Location: PL 60.25 Item 6



V-1-1270-A

Figure 42 Scanner LED Drive PWB

Scanner CCD PWB

Location: PL 60.25 Item 4

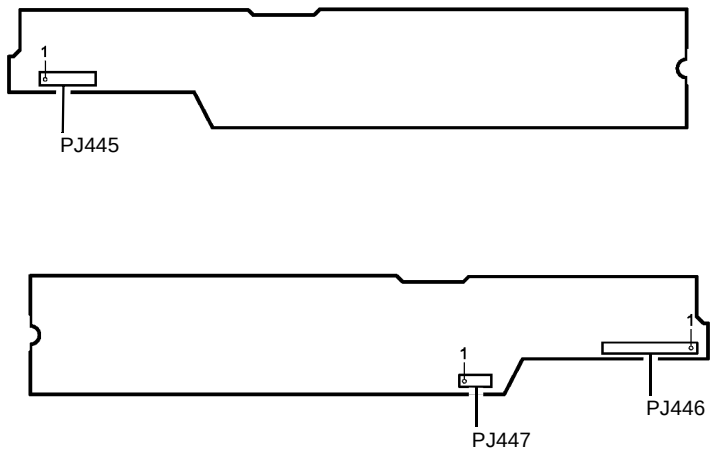


Figure 43 Scanner CCD PWB

Scanner LED Lamp PWB

Location: PL 60.25 Item 2

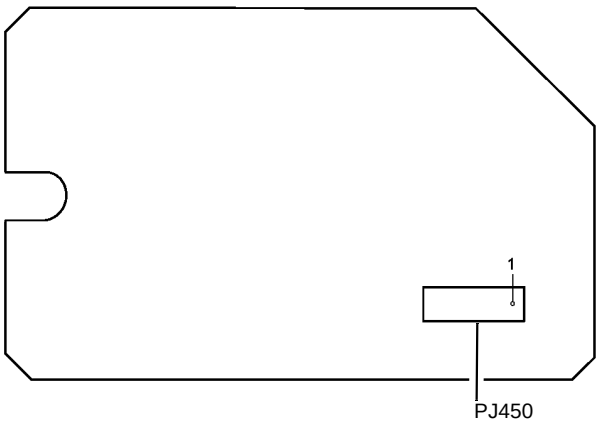


Figure 44 Scanner LED Lamp PWB

Scanner PWB

Location: PL 60.20 Item 4

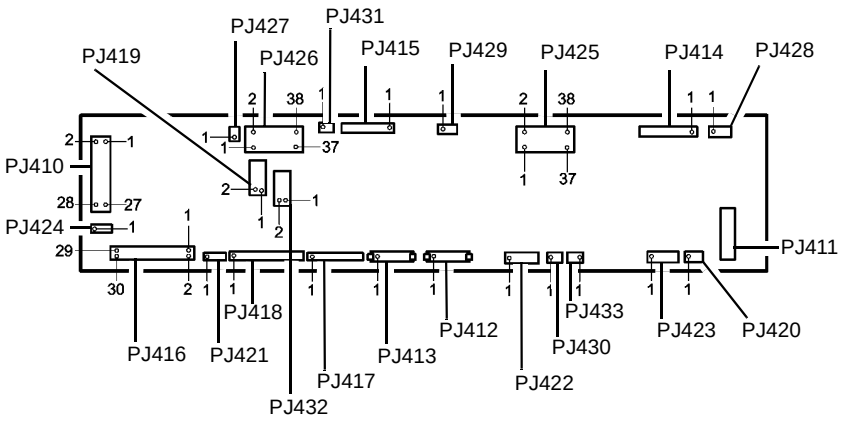


Figure 45 Scanner PWB

HVF BM In-Line Connectors

Location: PL 11.168.

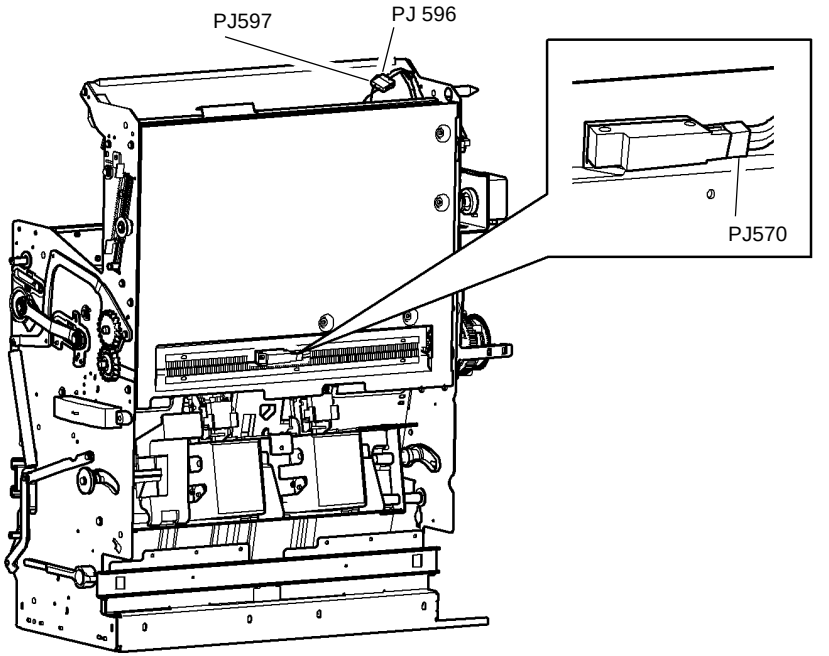


Figure 46 HVF BM in-line connectors

Wiring Diagrams

Purpose

Wiring diagrams are an aid to trace wiring faults. Wiring Diagrams are used to complement the circuit diagram in the relevant RAP.

Introduction

The main PWB connections are in the following wiring diagrams:

1K LCSS PWB, WD 15, WD 16, WD 17.

2K LCSS PWB, WD 18, WD 19, WD 20, WD 21.

BM PWB, WD 29, WD 30.

HCF PWB, WD 34, WD 35.

HVF Control PWB, WD 22, WD 23, WD 24, WD 25, WD 26,WD 27, WD 28.

Inserter PWB, WD 32, WD 33.

IOT PWB, SBC PWB, ROS, and main drive module, WD 5.

IOT PWB and paper path module (45-55 ppm), WD 6.

IOT PWB and paper path module (65-90 ppm), WD 7.

IOT PWB and tray 1 and 2 control PWB, WD 8.

IOT PWB, LVPS and base module, WD 9.

IOT PWB, HVPS, WD 10.

LVF PWB, WD 36, WD 37, WD 38, WD 39.

LVF BM PWB, WD 40, WD 41, WD 42.

LVPS and base module, WD 2.

OCT module PWB, WD 43.

Power and control assembly, WD 1.

Power distribution PWB, WD 3.

SBC PWB, WD 11.

Scanner PWB, WD 44, WD 45.

SPDH PWB, Side 2 CCD PWB, Scanner PWB, WD 12.

SPDH PWB, Side 2 CCD PWB, SPDH LED Lamp PWB, WD 13.

SPDH PWB, WD 14.

Tray 1 and tray 2 control PWB, WD 46, WD 47.

Tray 6 PWB, WD 48, WD 49.

Tri-Folder control PWB, WD 31.

UI control PWB, WD 4.

The diagrams have the following features:

- The connections on the PWBs are in PJ numerical sequence where possible.
- The complete component to PWB wiring is shown. All interconnecting connectors are shown, in part or in whole. Connectors shown in part have reference to other wiring diagrams as necessary.
- Where necessary, components have references to show additional connections to them.
- Straight through tracks on the PWBs are shown.
- The pin numbers shown depict the location of the pins as marked on the PWB. If the pin numbers marked on the harness connector differ, the PWB numbers take precedence.

How to use Wiring Diagrams

NOTE: *All Adjustments, Repairs and Part List references are shown in the relevant RAP.*

Wiring Diagrams are used in conjunction with the circuit diagrams and their supporting RAPs. The steps that follow should be used:

1. From the circuit diagram in the RAP, note the name of the PWB.
2. Note the component and its harness connection on the PWB.
3. Go to the relevant Wiring Diagram.
4. Locate the connector on the PWB.
5. Assess the dependency of other components in the same harness connected to the PWB.
6. Isolate and repair the wiring fault.

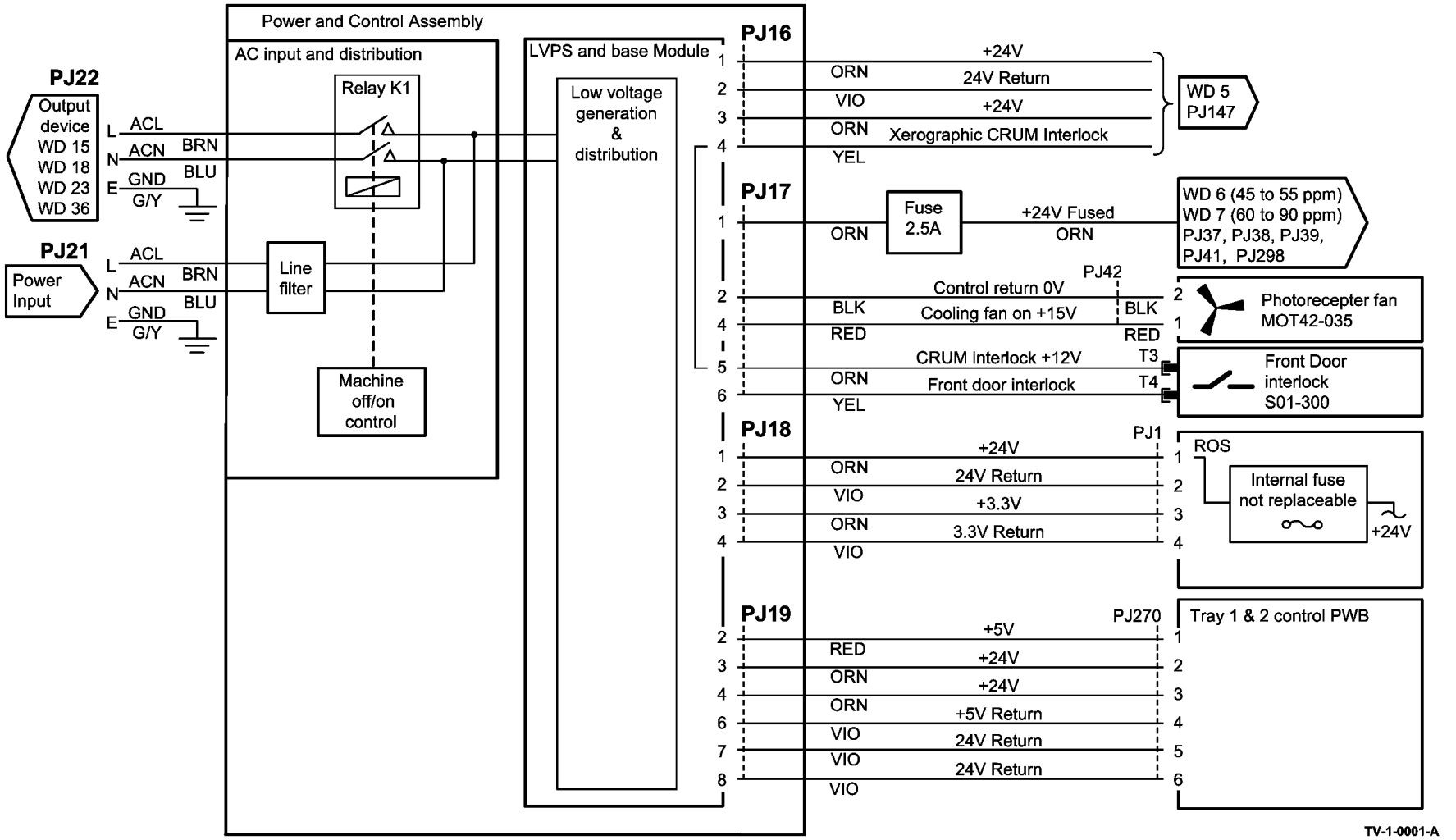
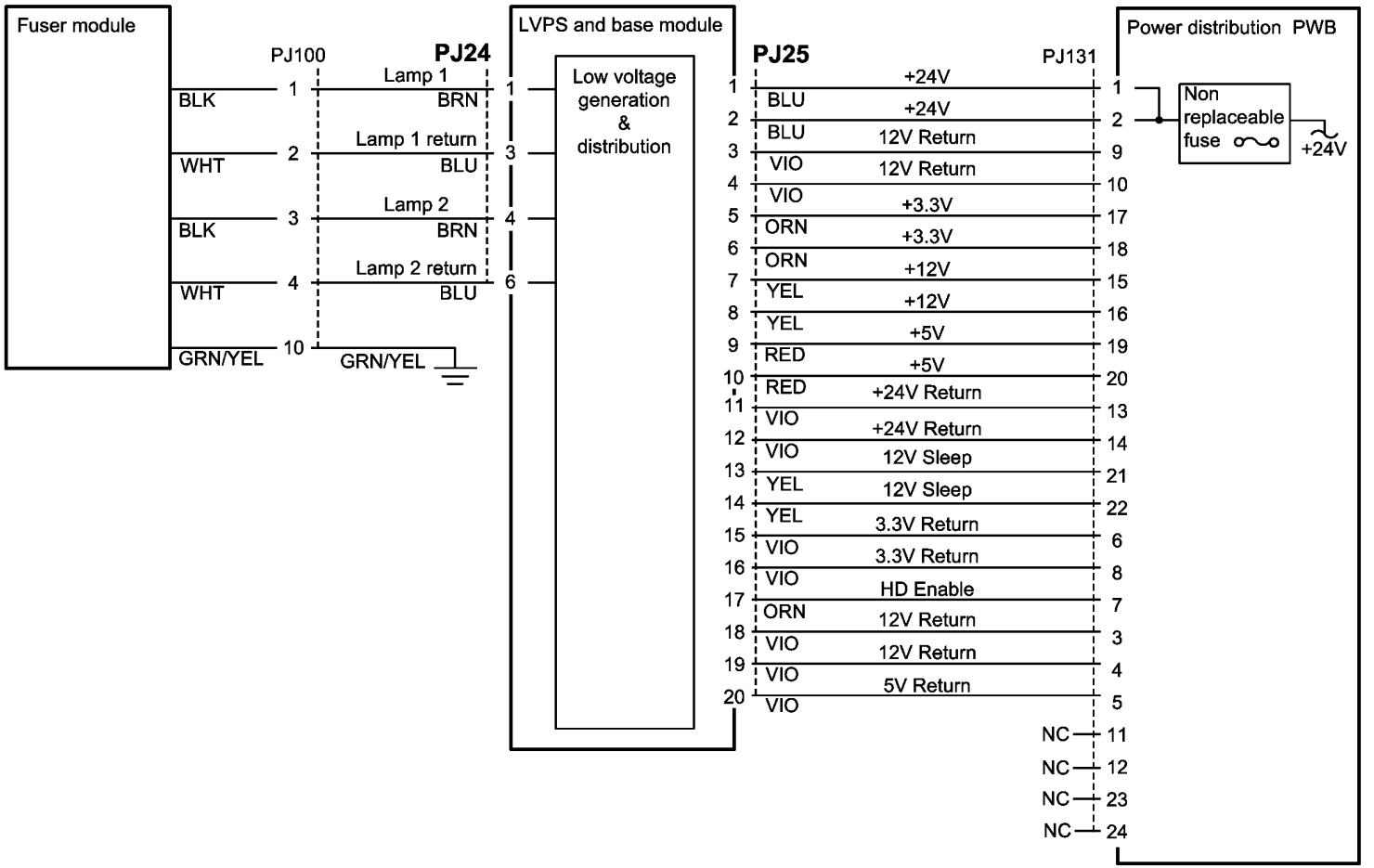


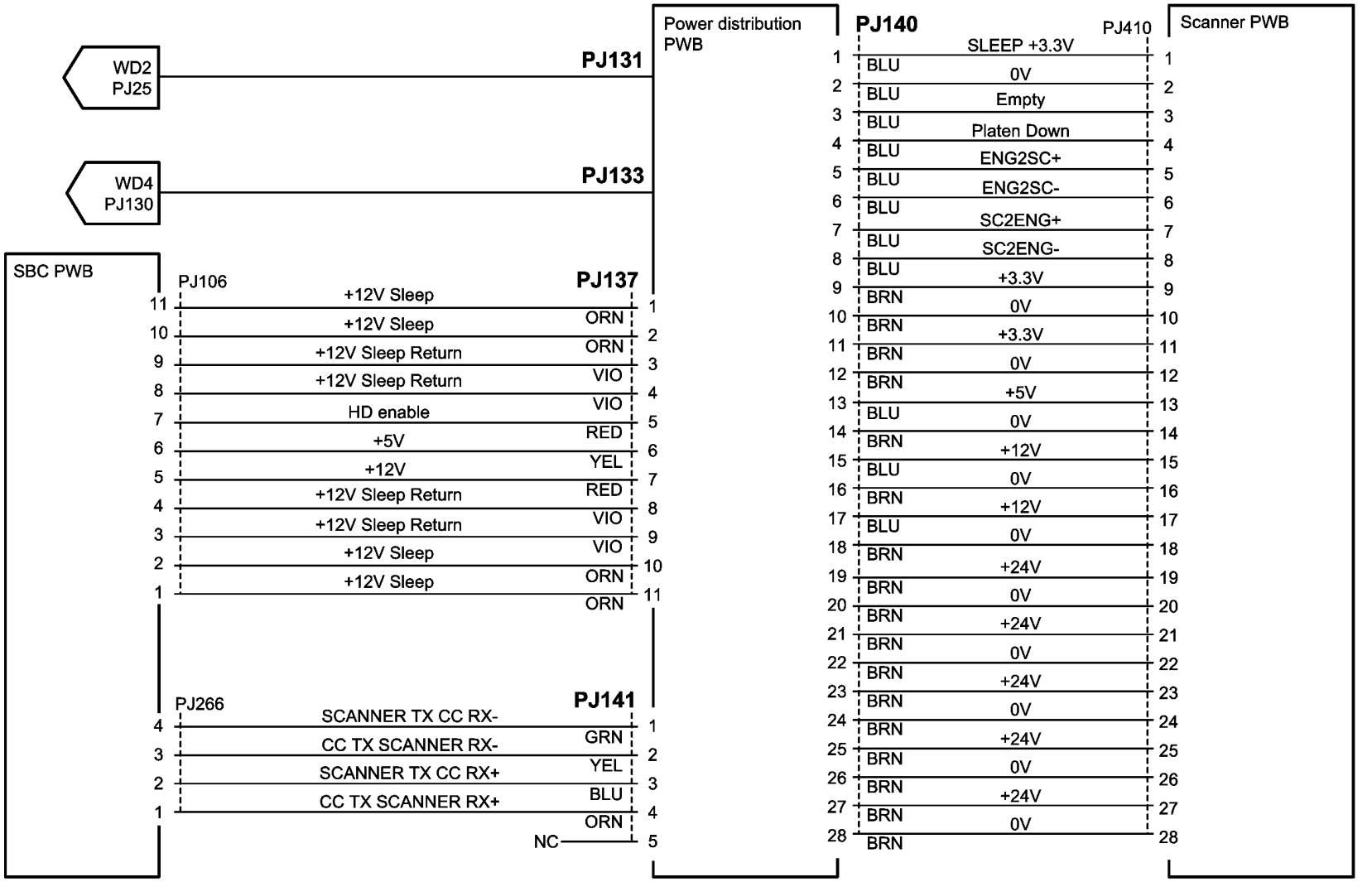
Figure 1 Wiring Diagram 1

Wiring Diagram 2



TV-1-0036-A

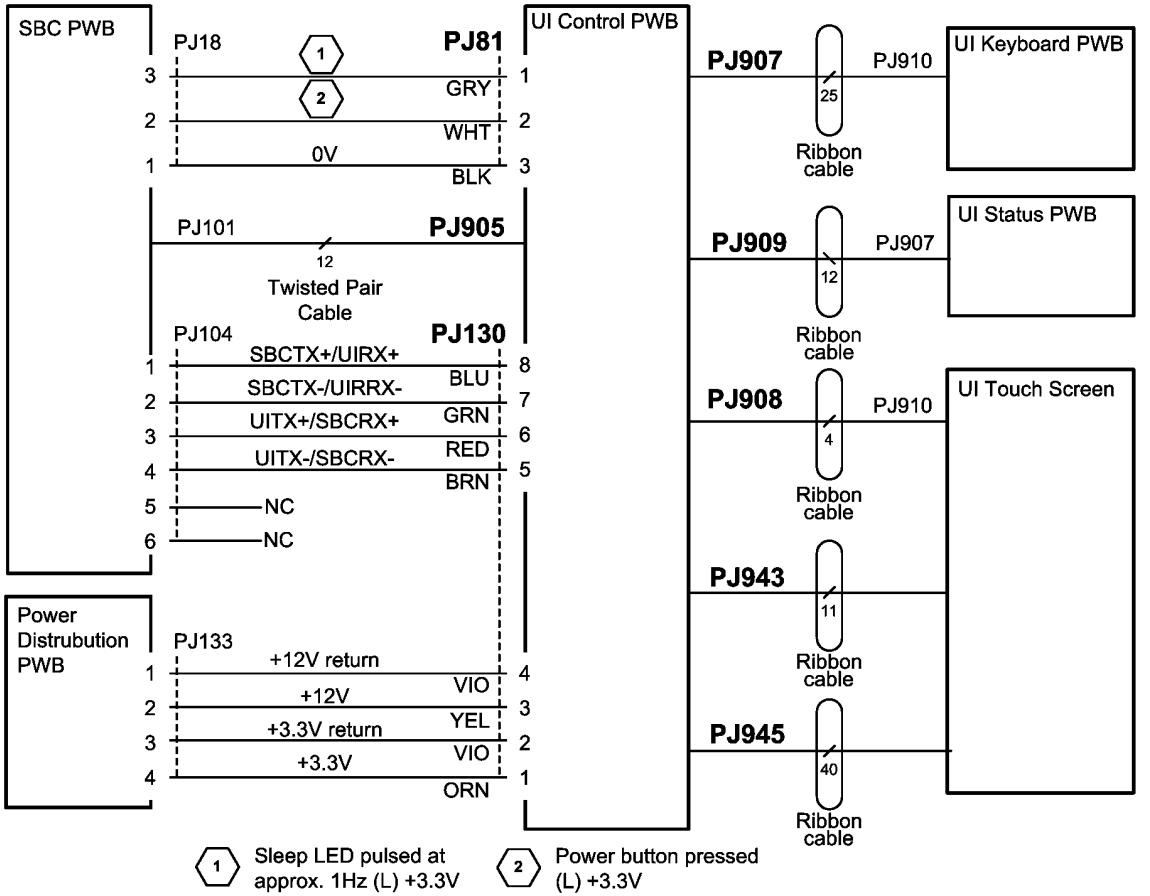
Figure 2 Wiring Diagram 2



TV-1-0038-B

Figure 3 Wiring Diagram 3

Wiring Diagram 4



TV-1-0280-A

Figure 4 Wiring Diagram 4

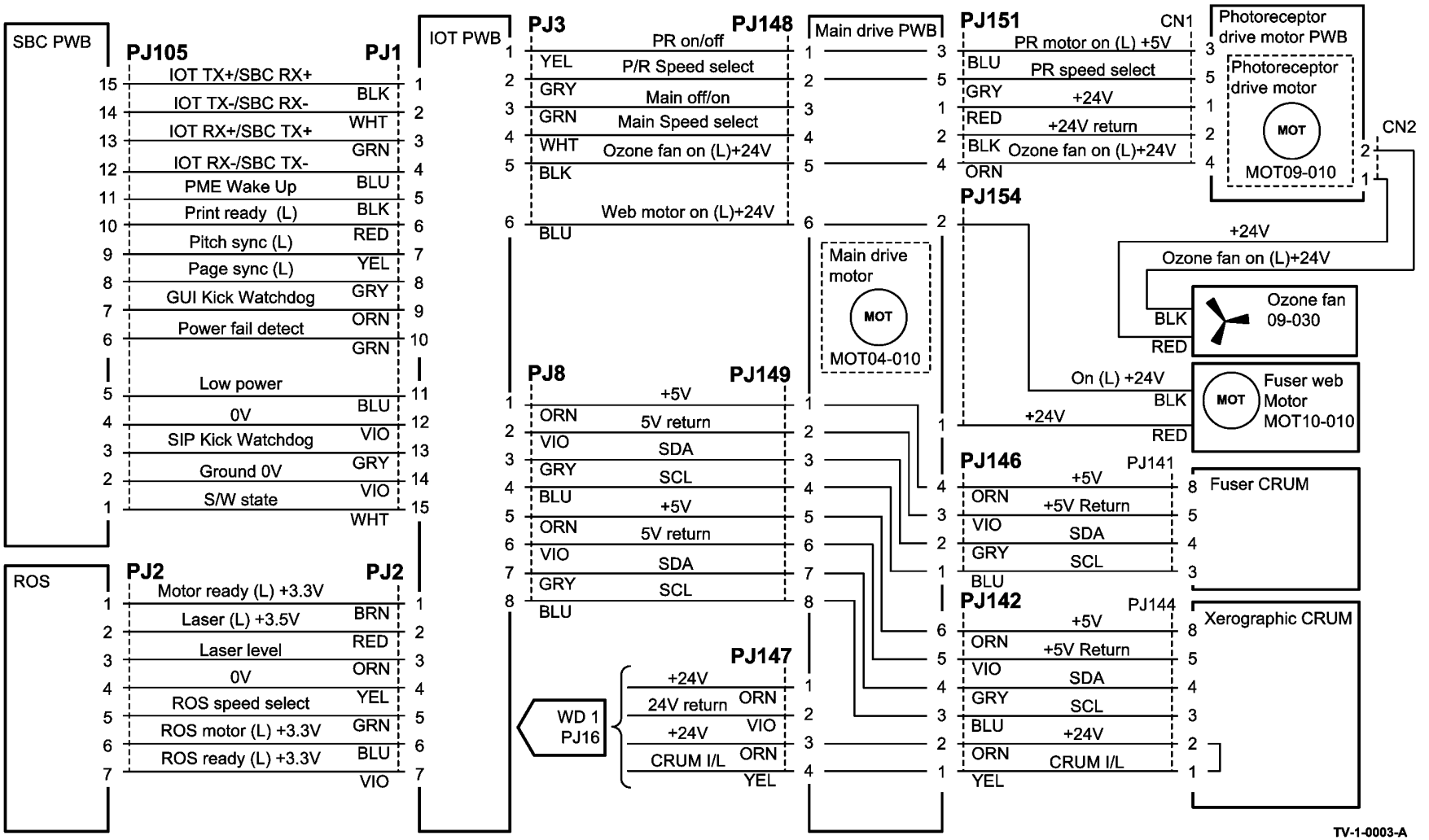


Figure 5 Wiring Diagram 5

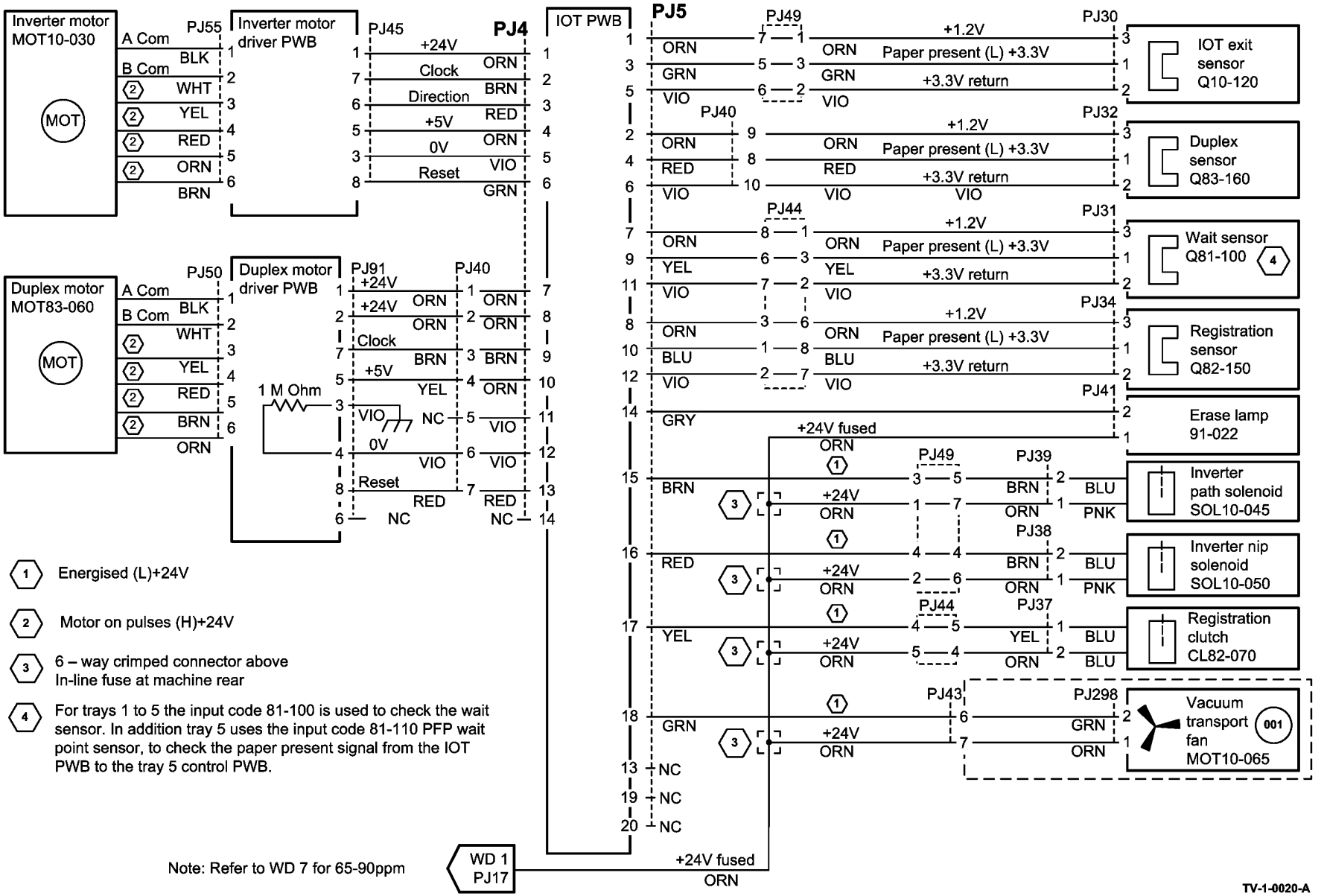
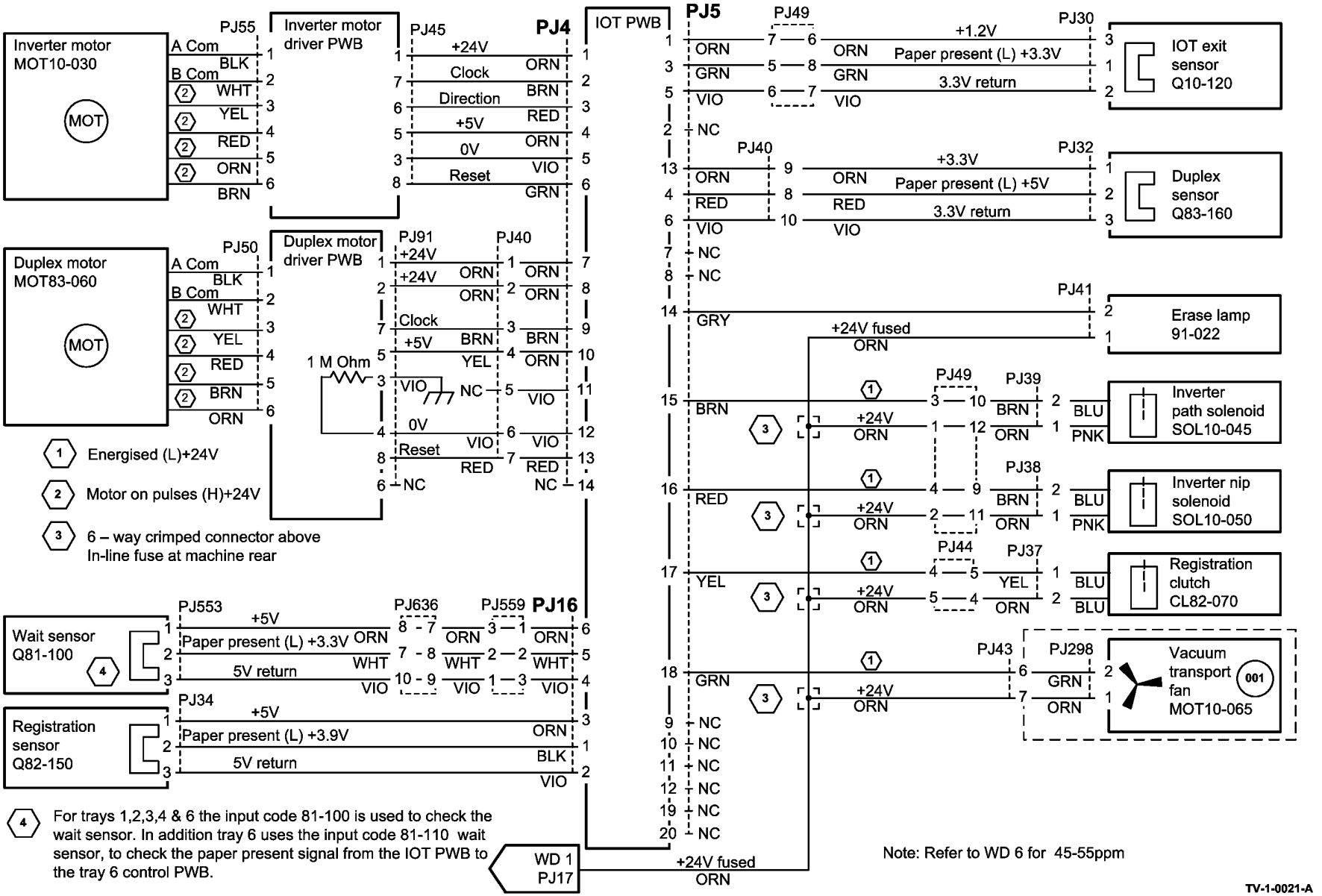


Figure 6 Wiring Diagram 6



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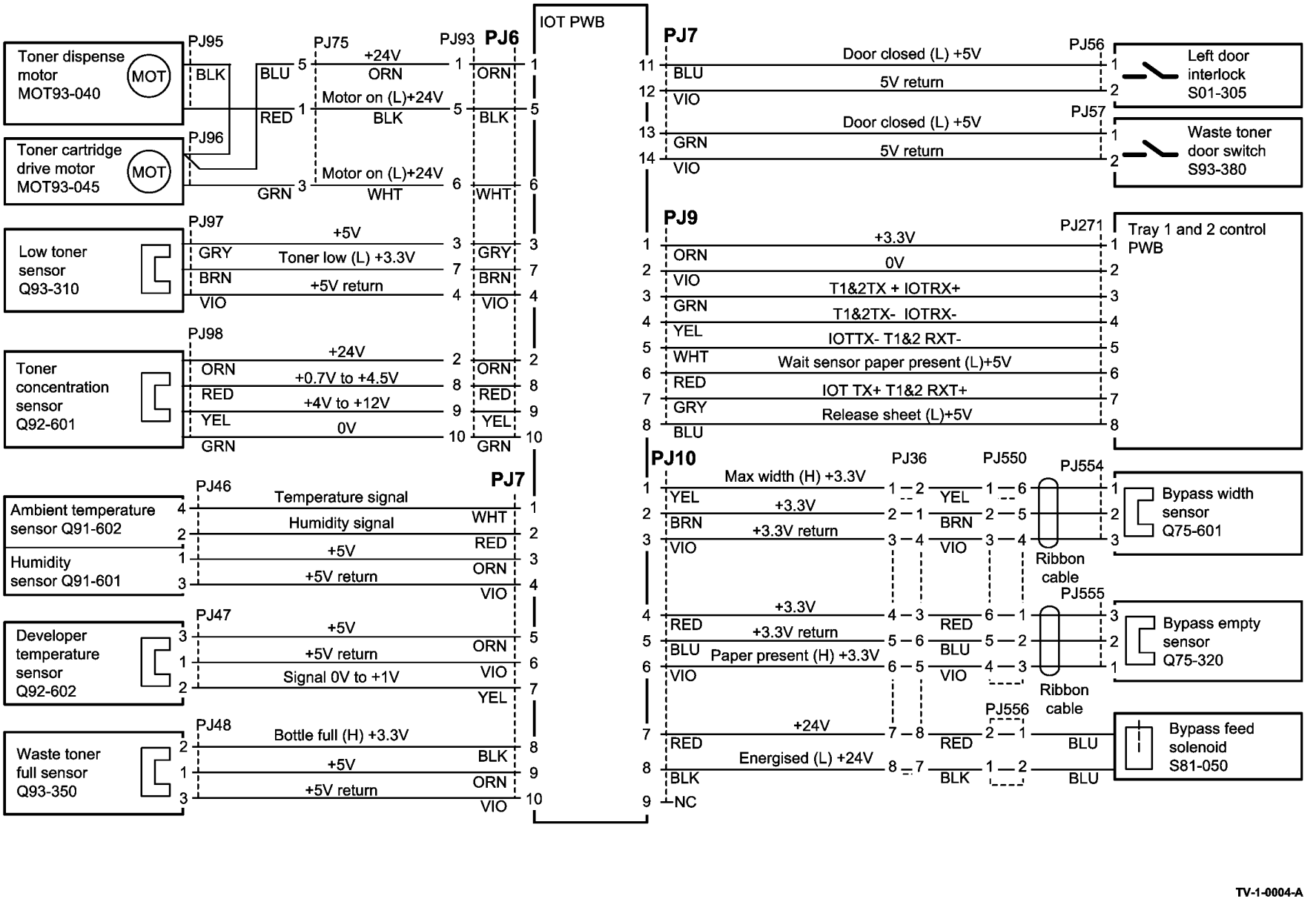

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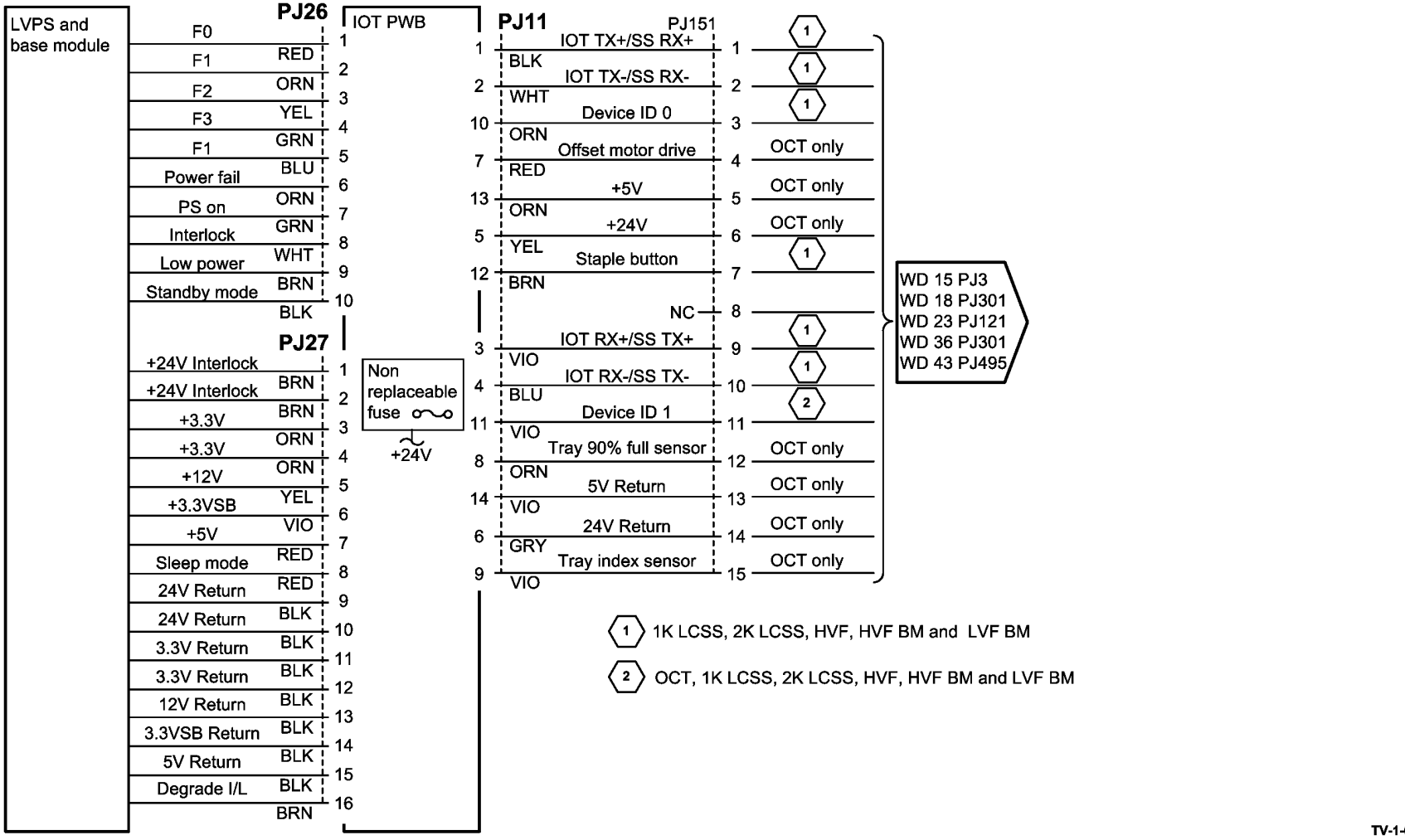

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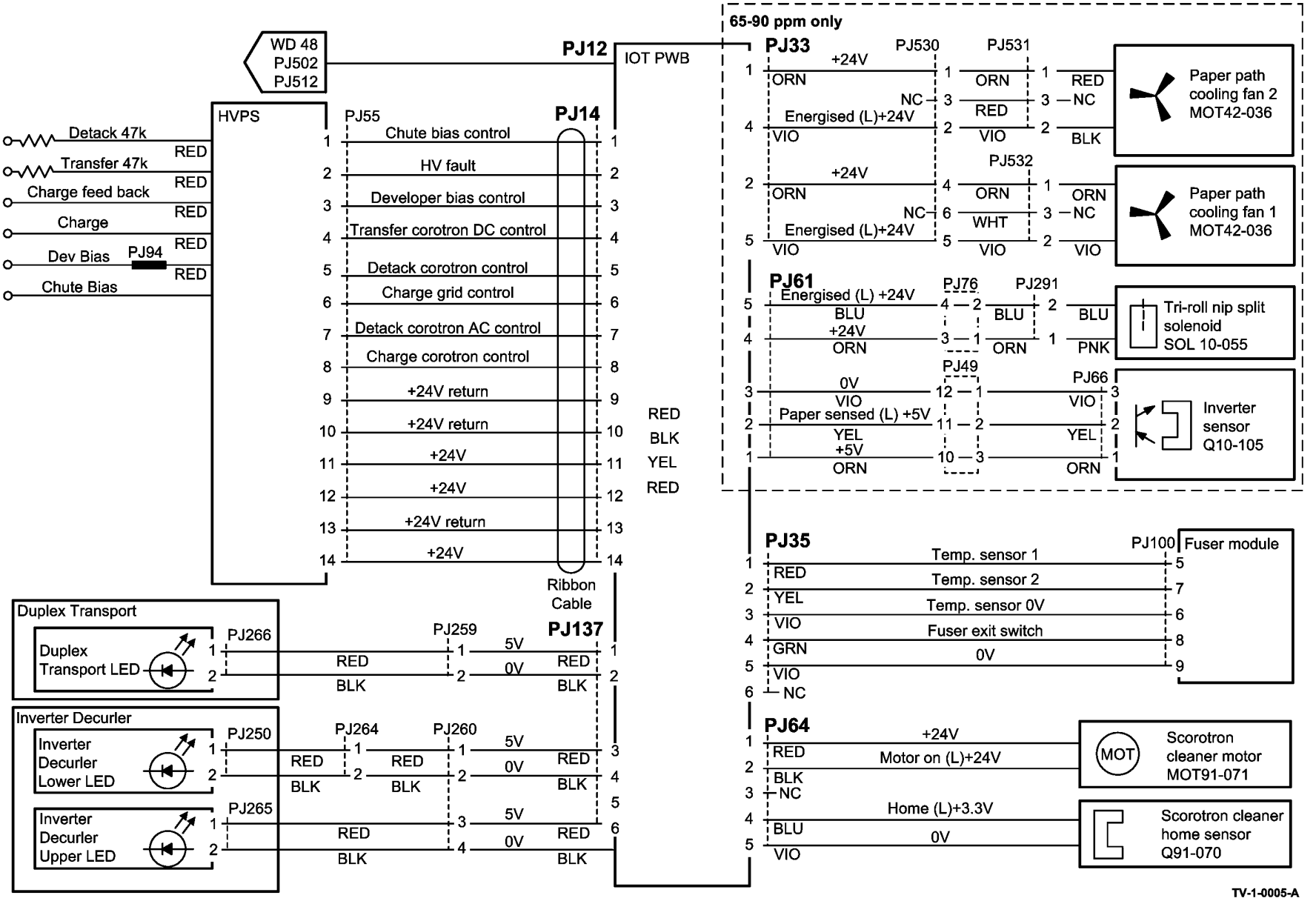

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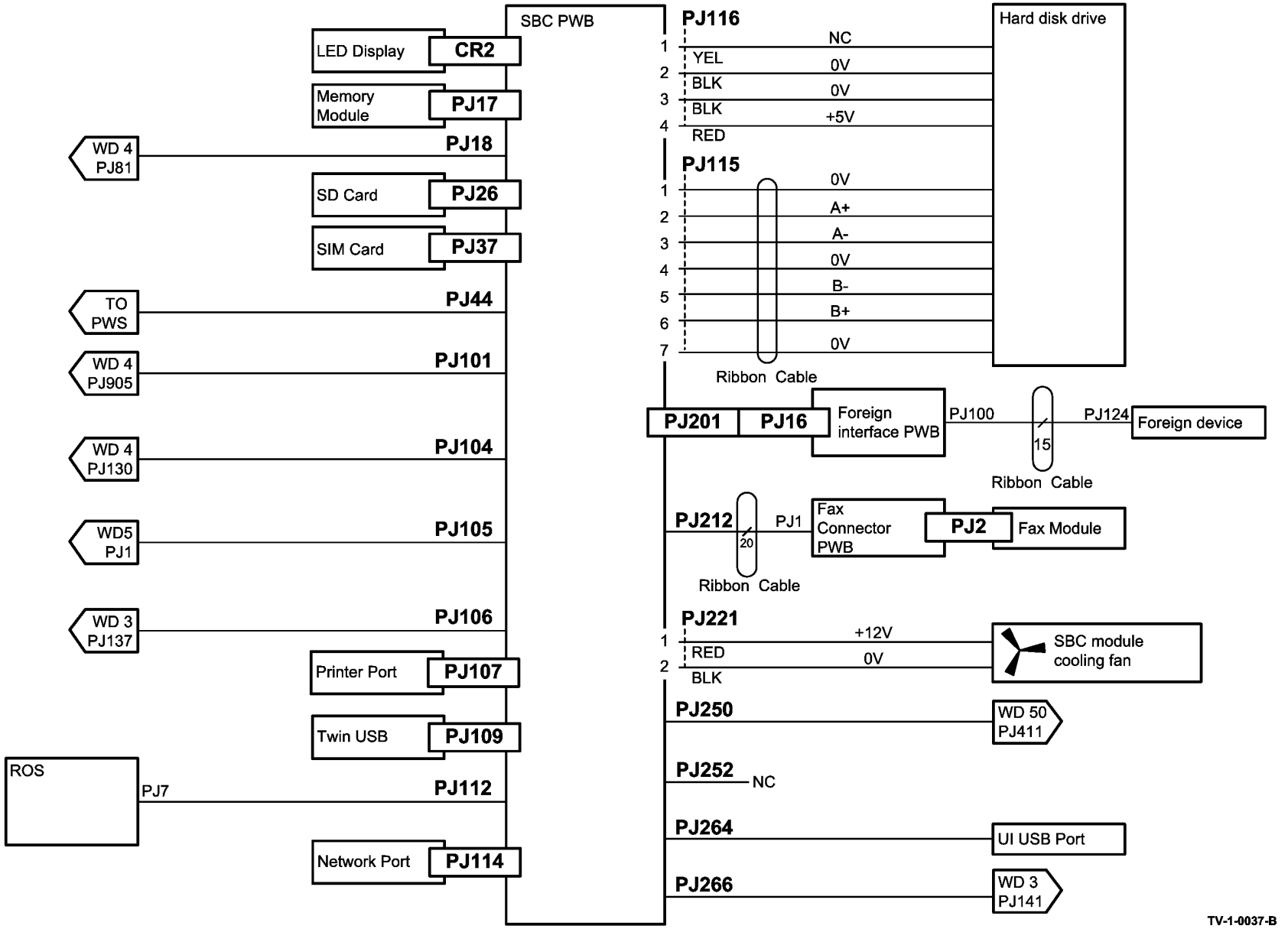
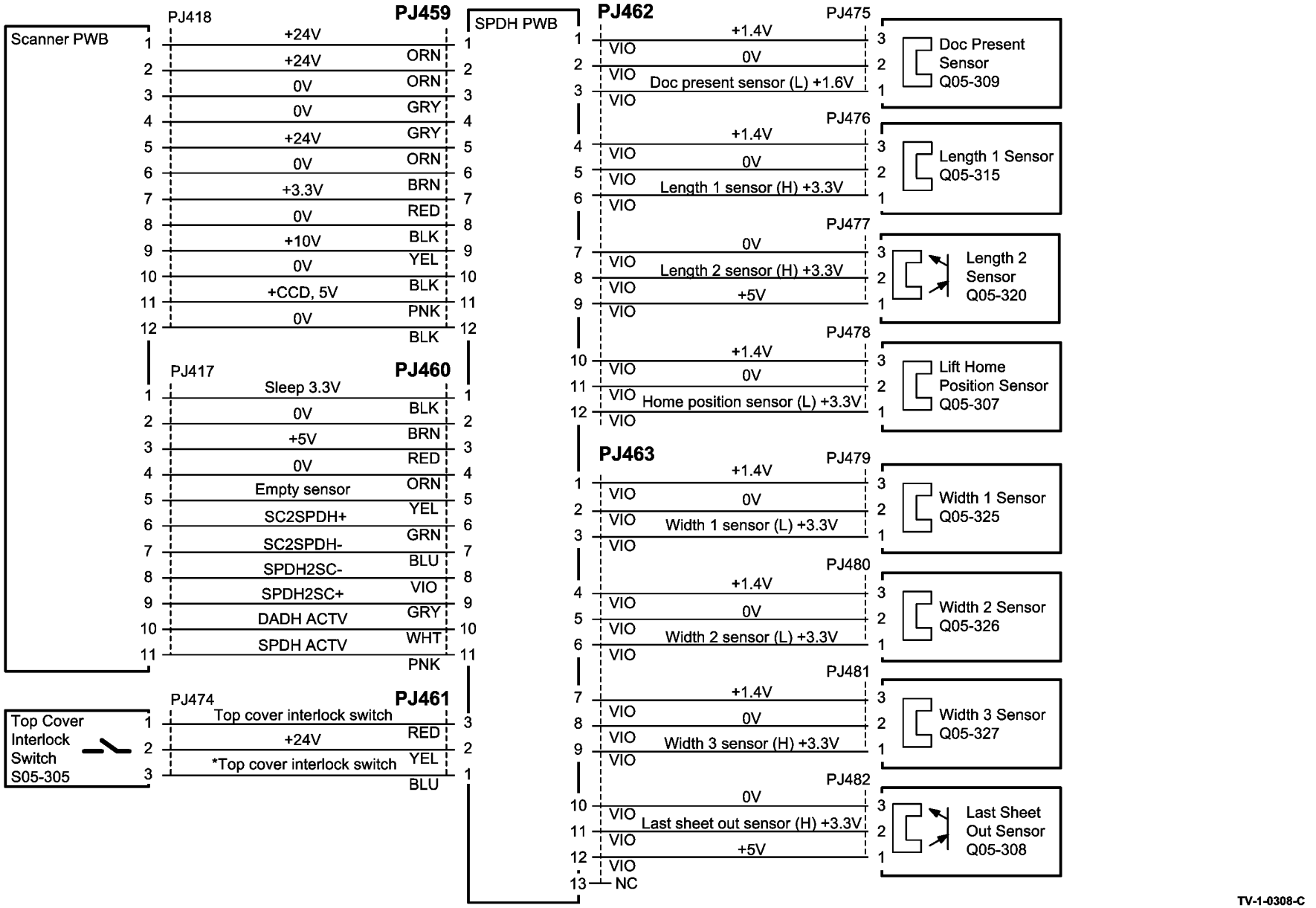


Figure 11 Wiring Diagram 11

Wiring Diagram 12



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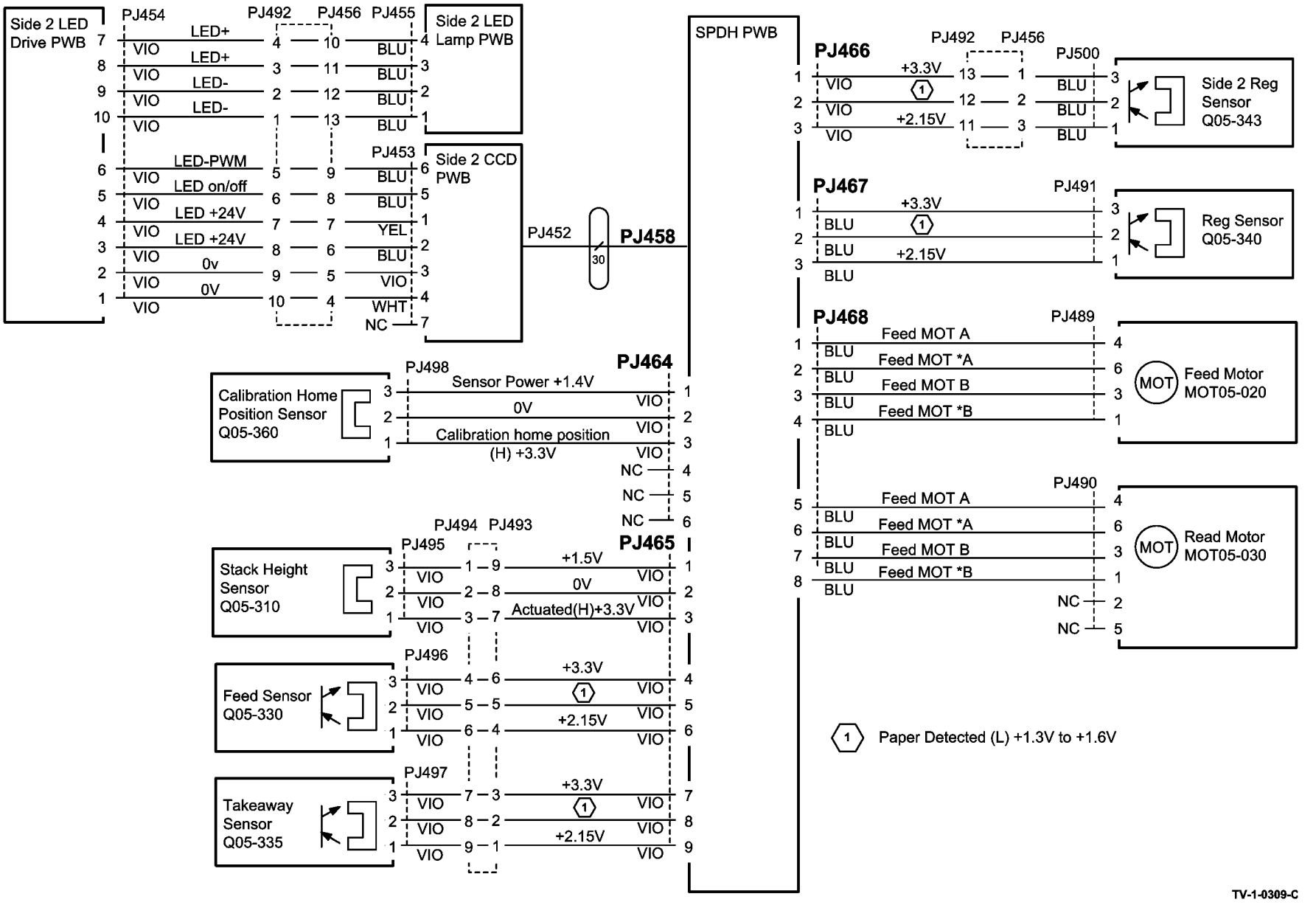
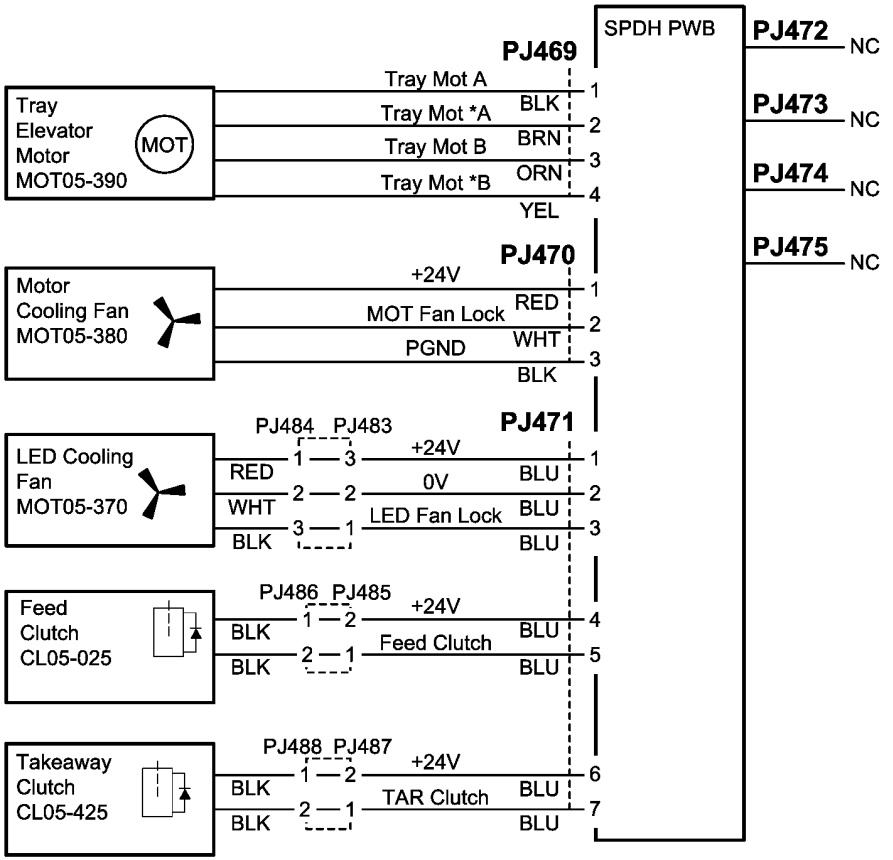


Figure 13 Wiring Diagram 13

Wiring Diagram 14



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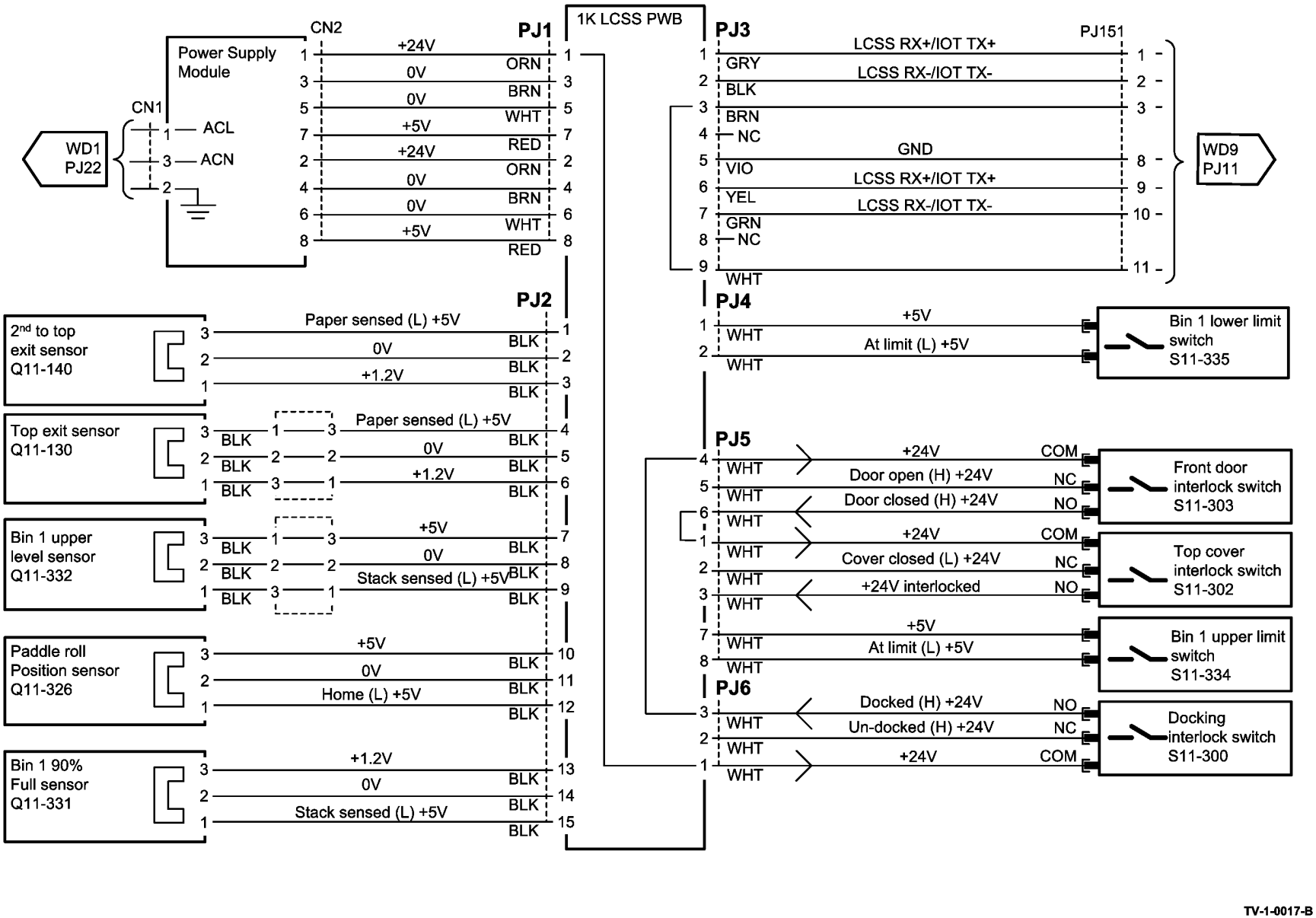

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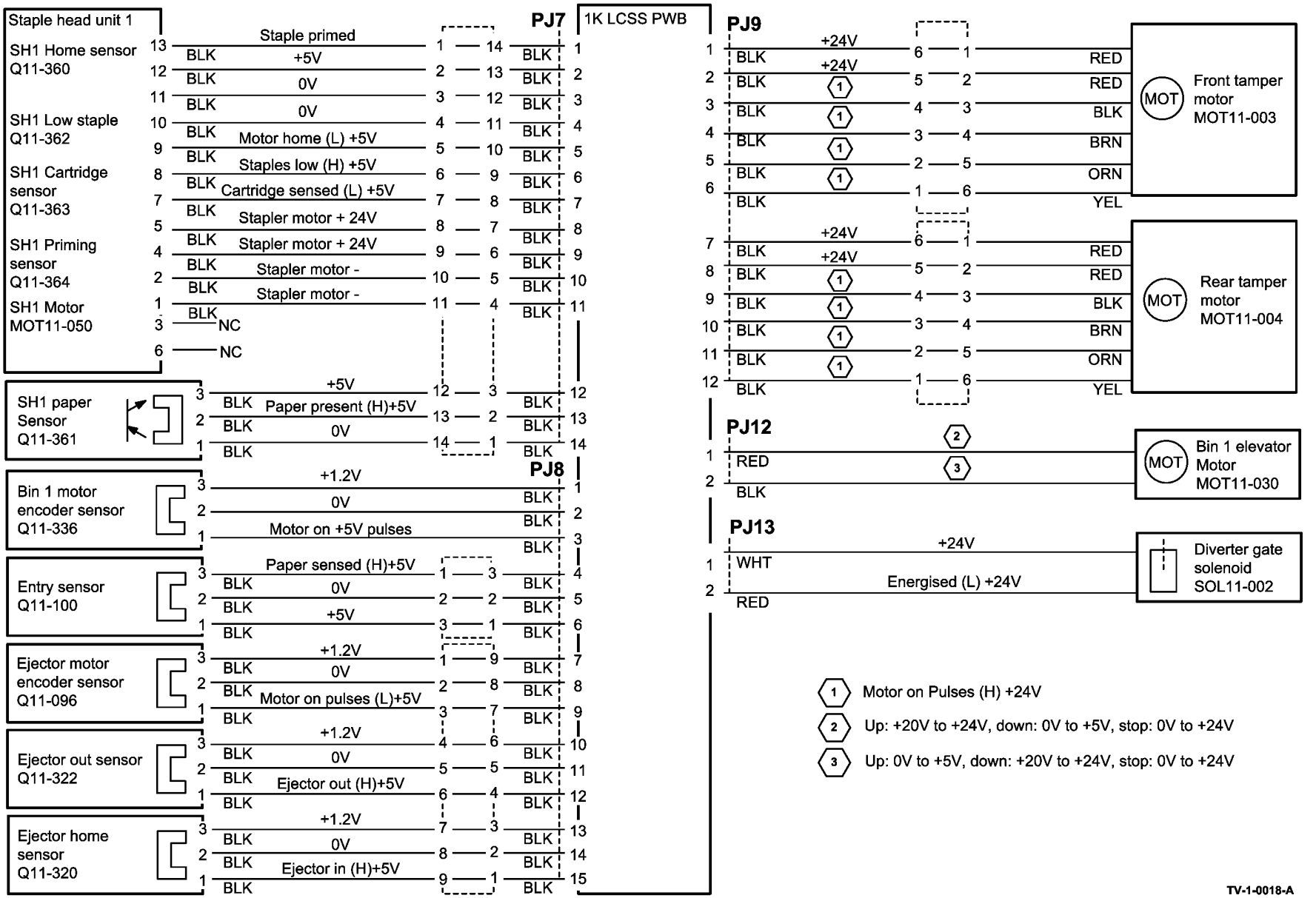

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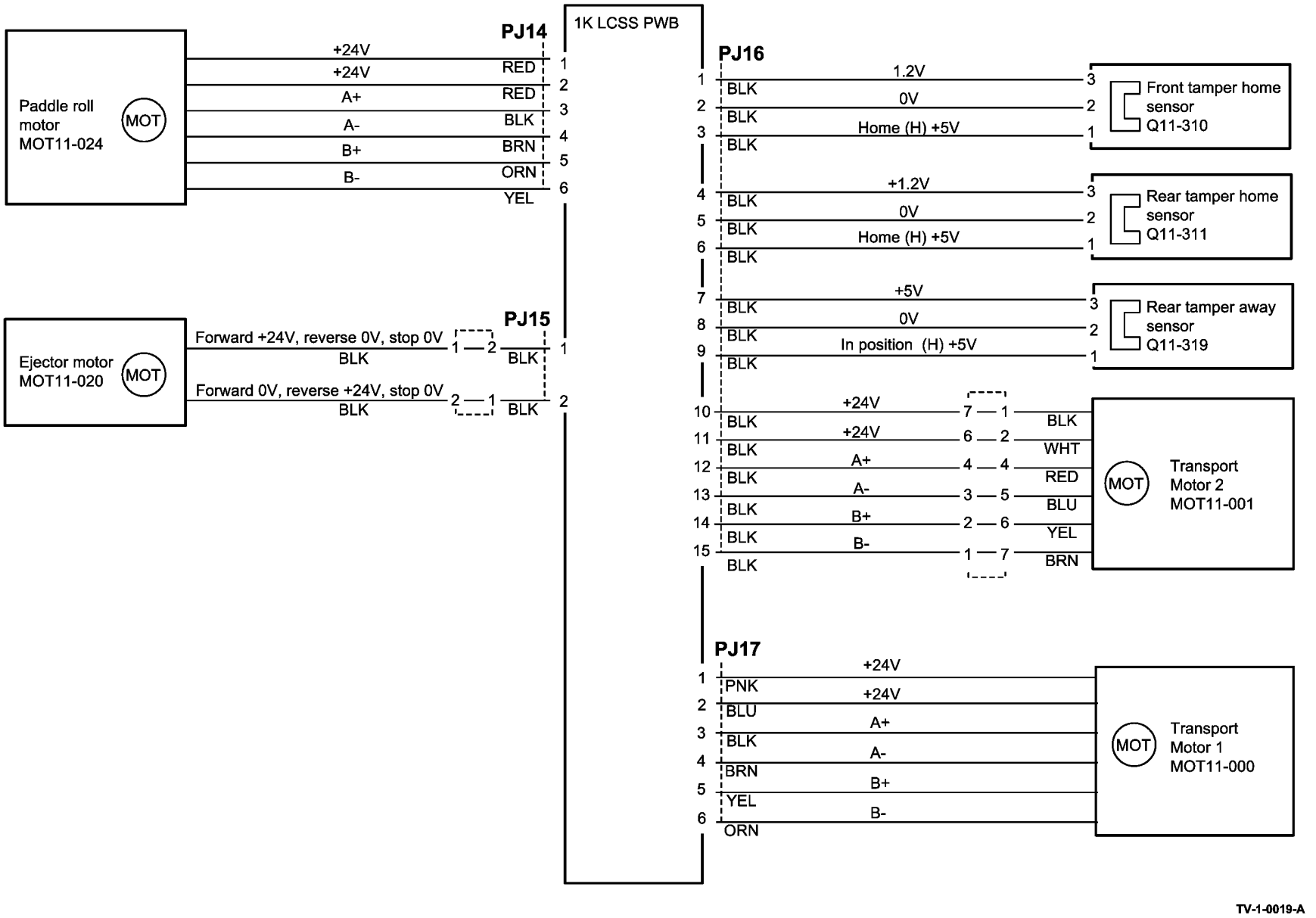

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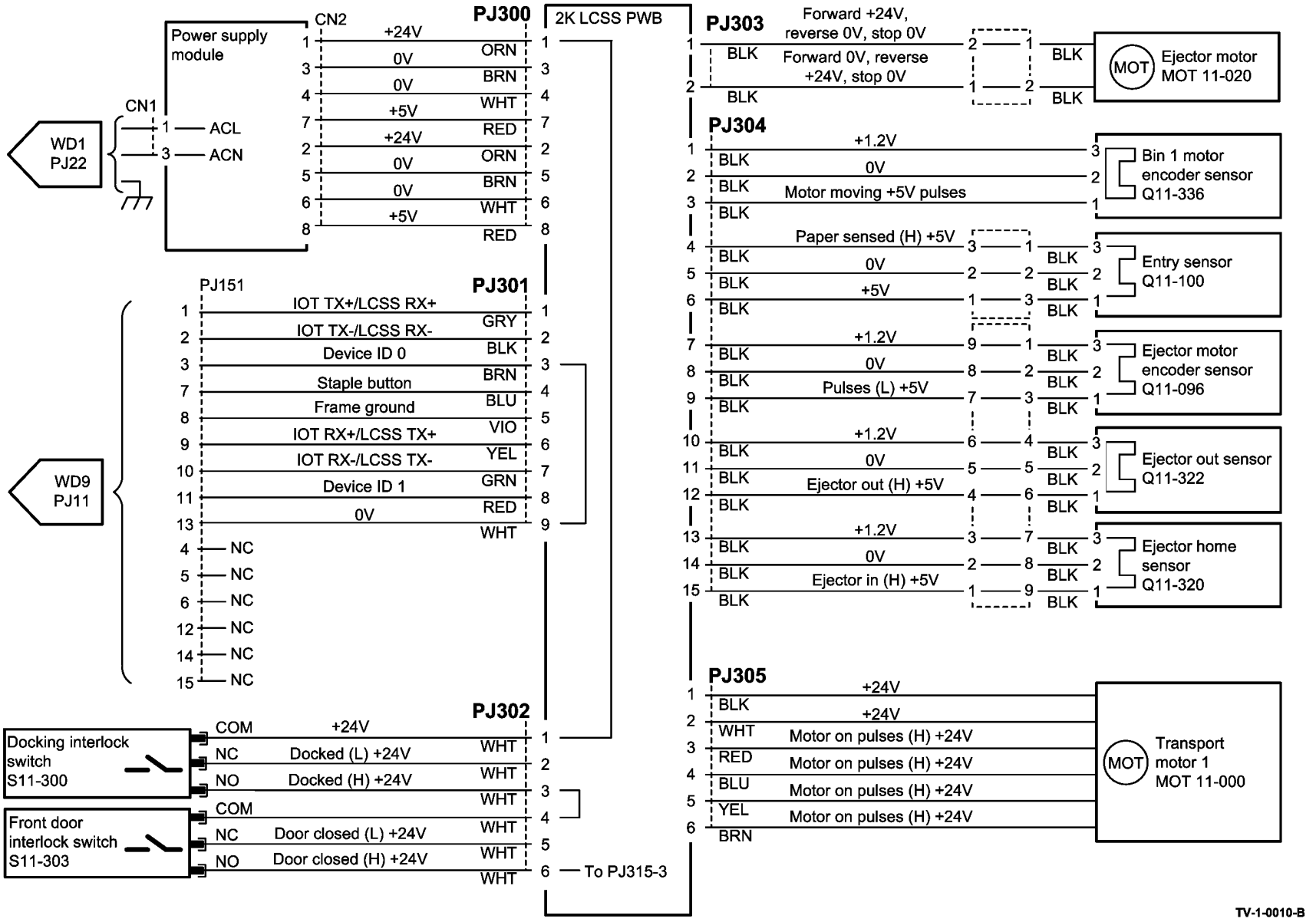
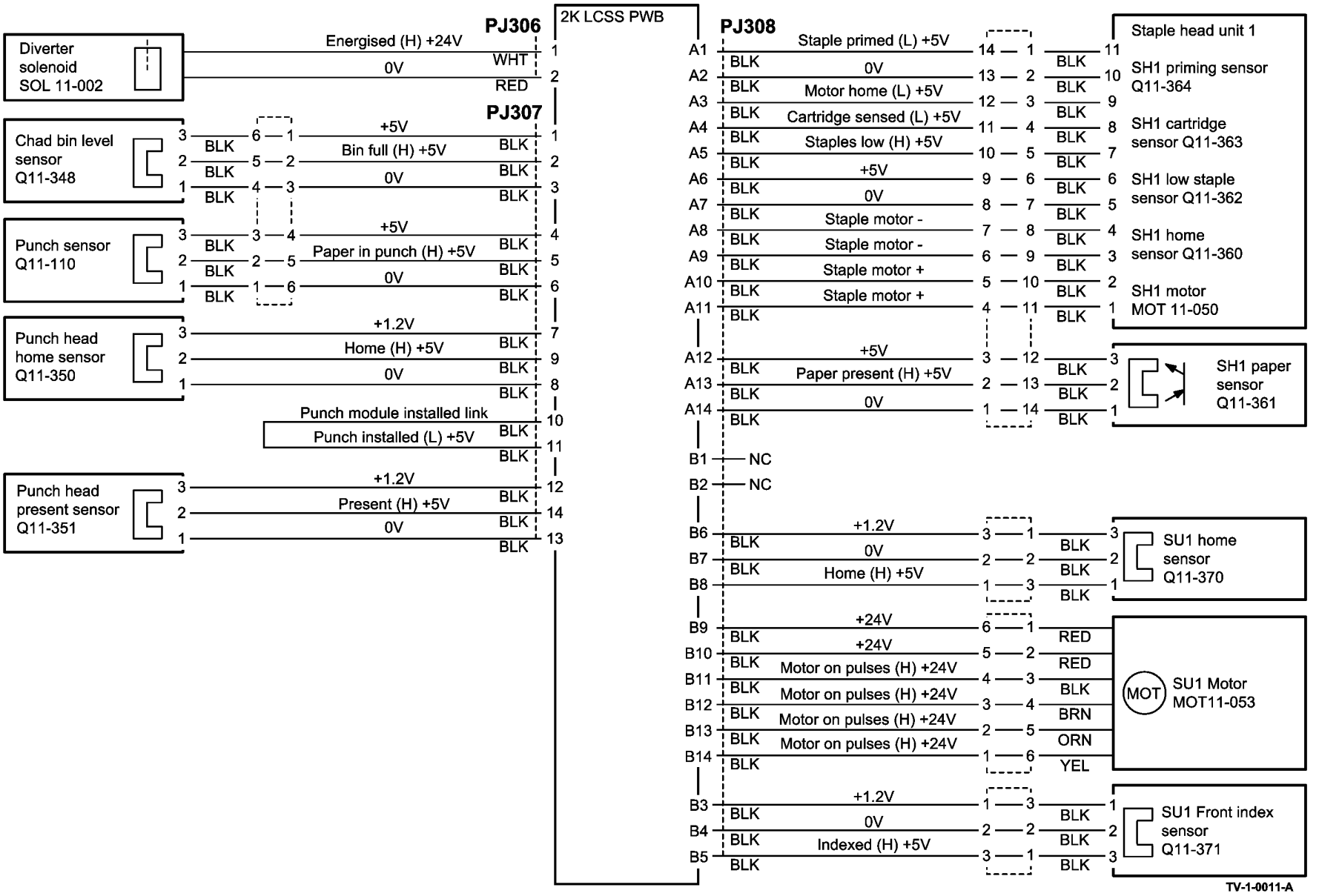


Figure 18 Wiring Diagram 18



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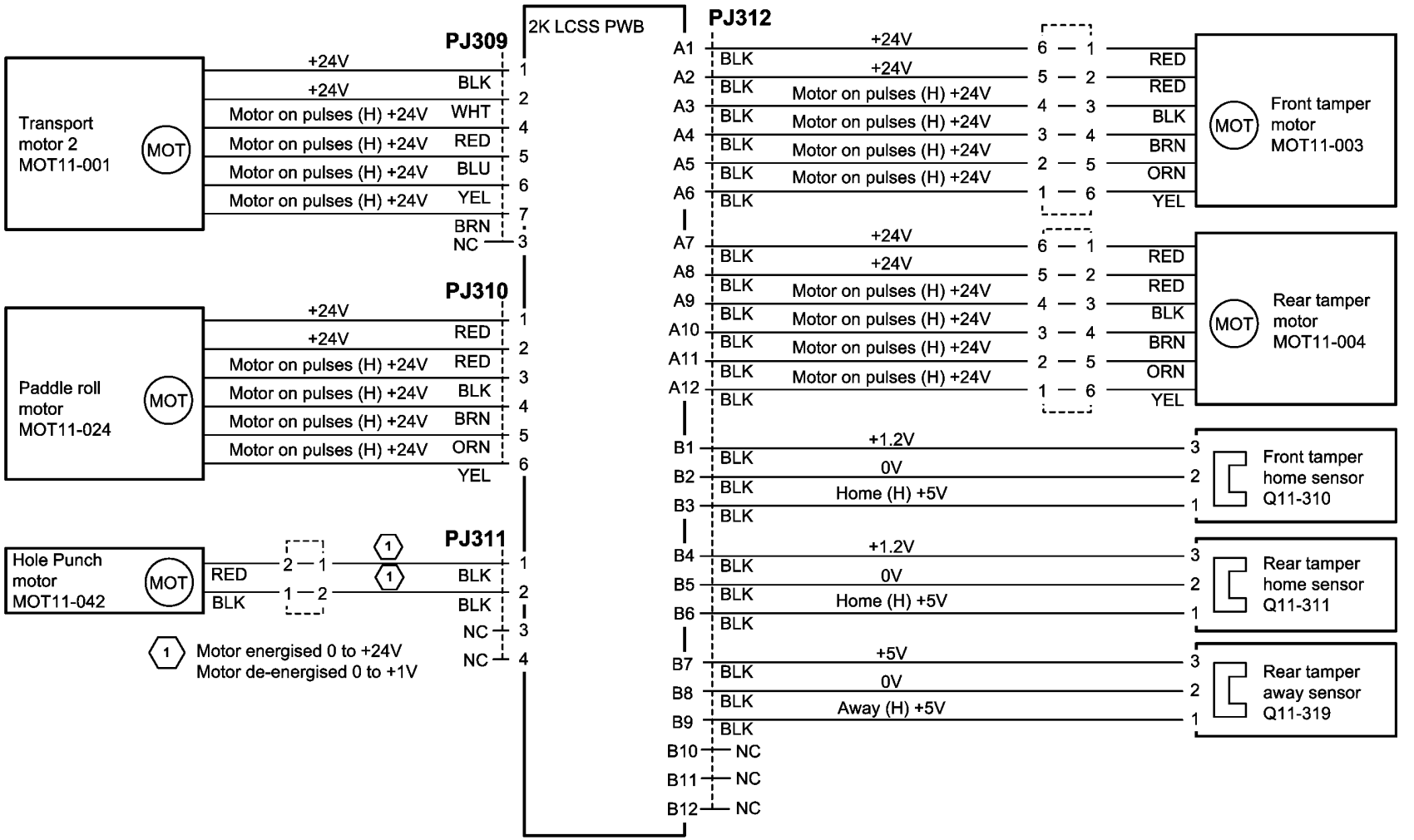

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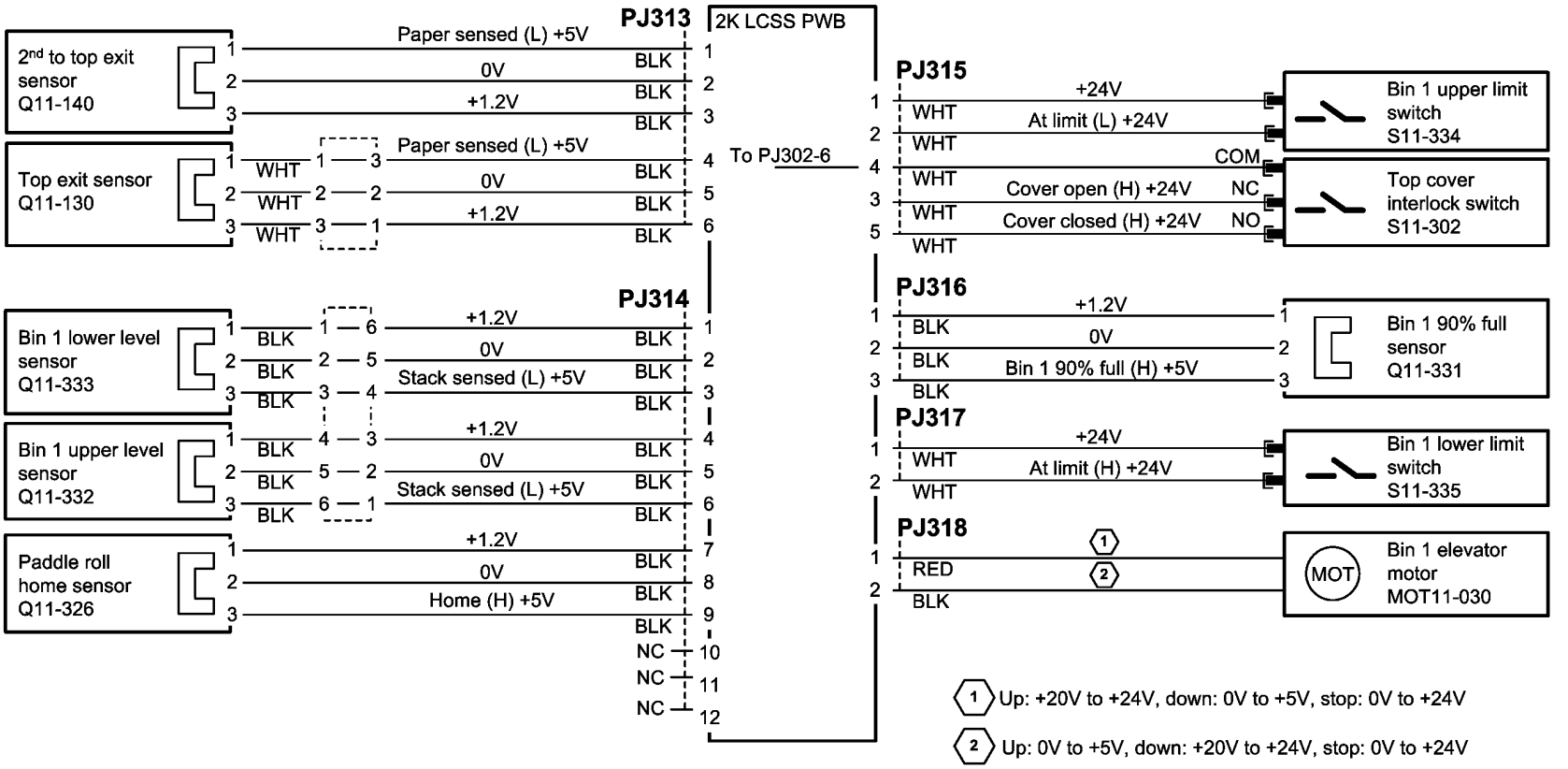

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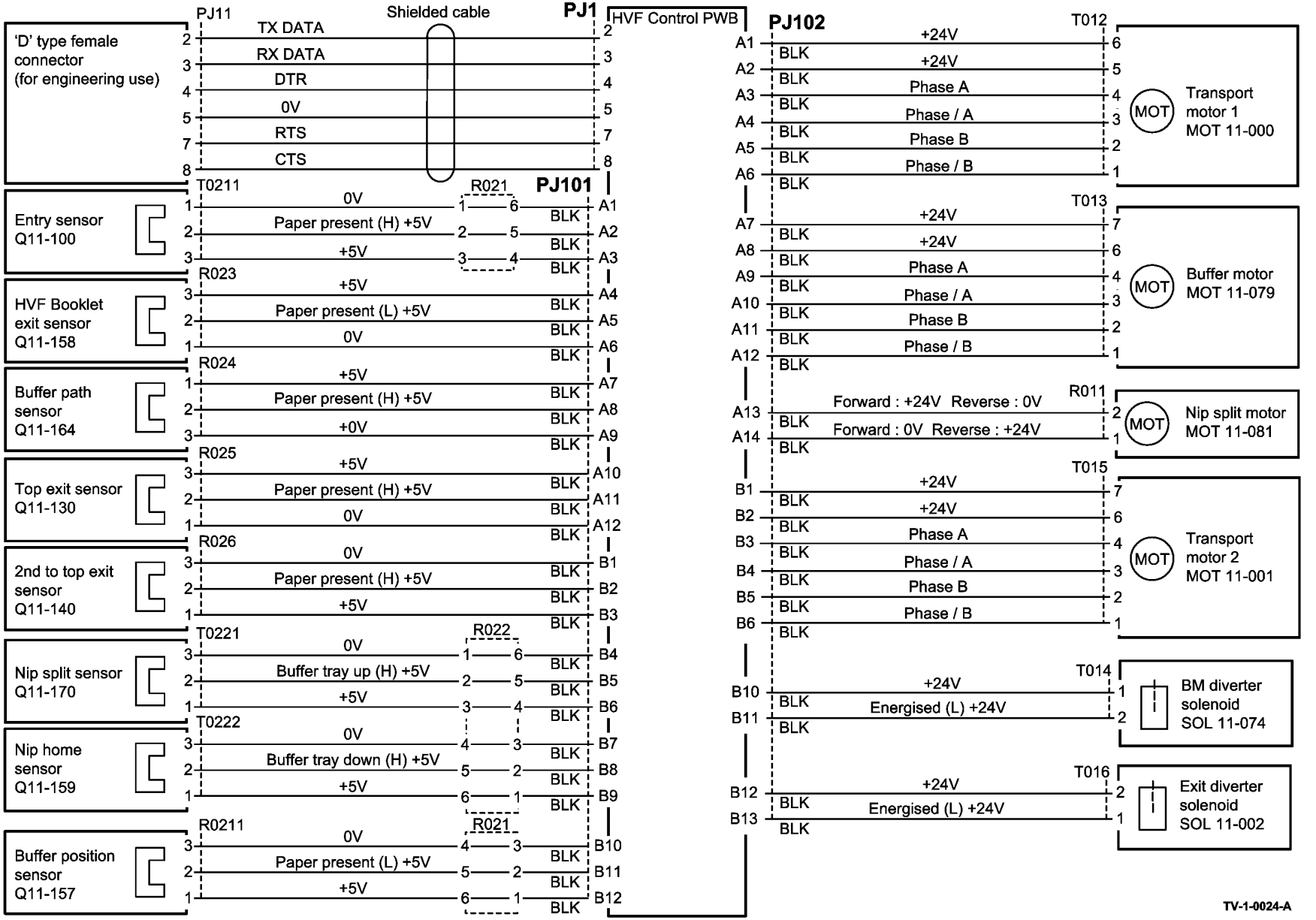

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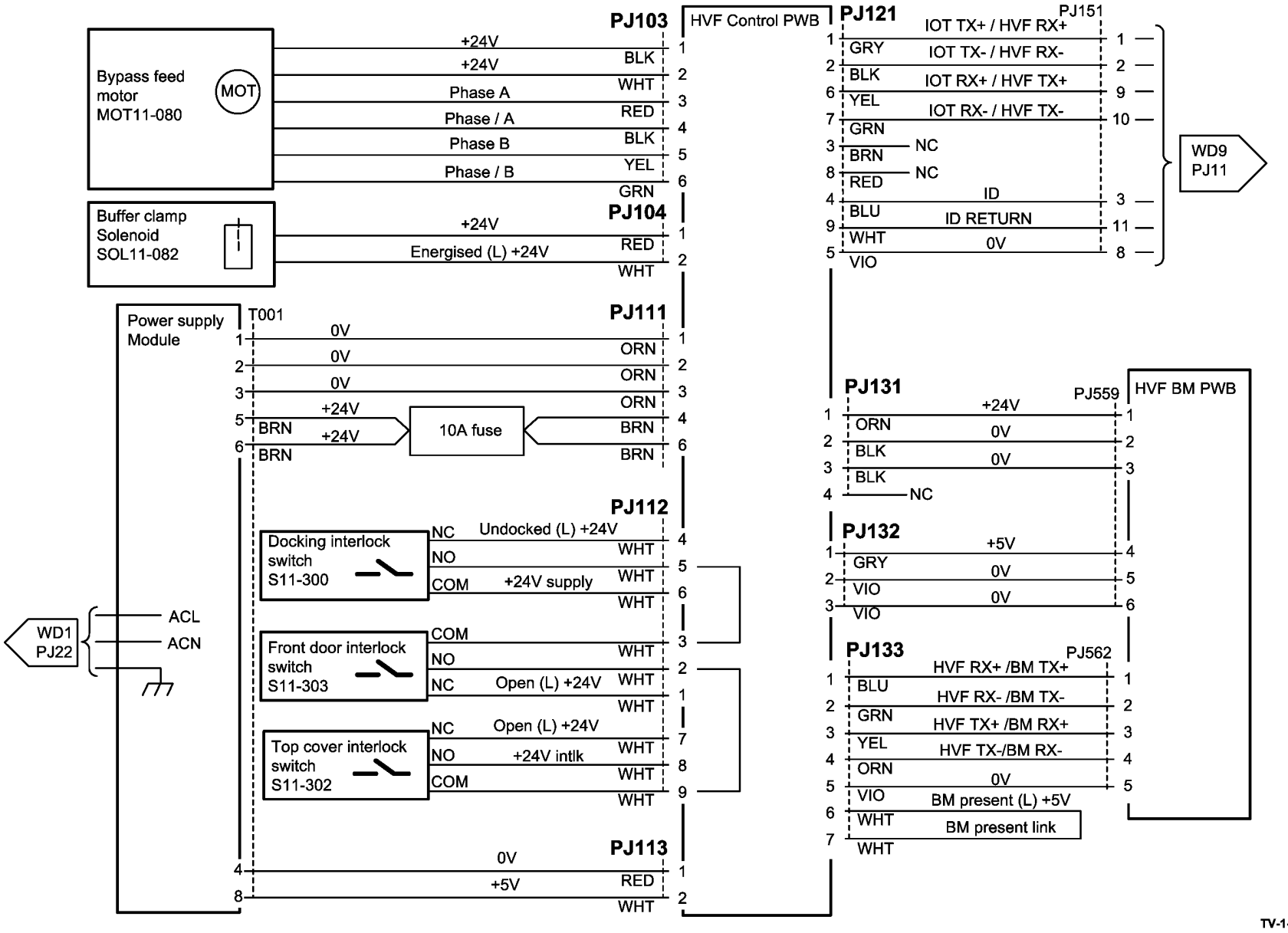

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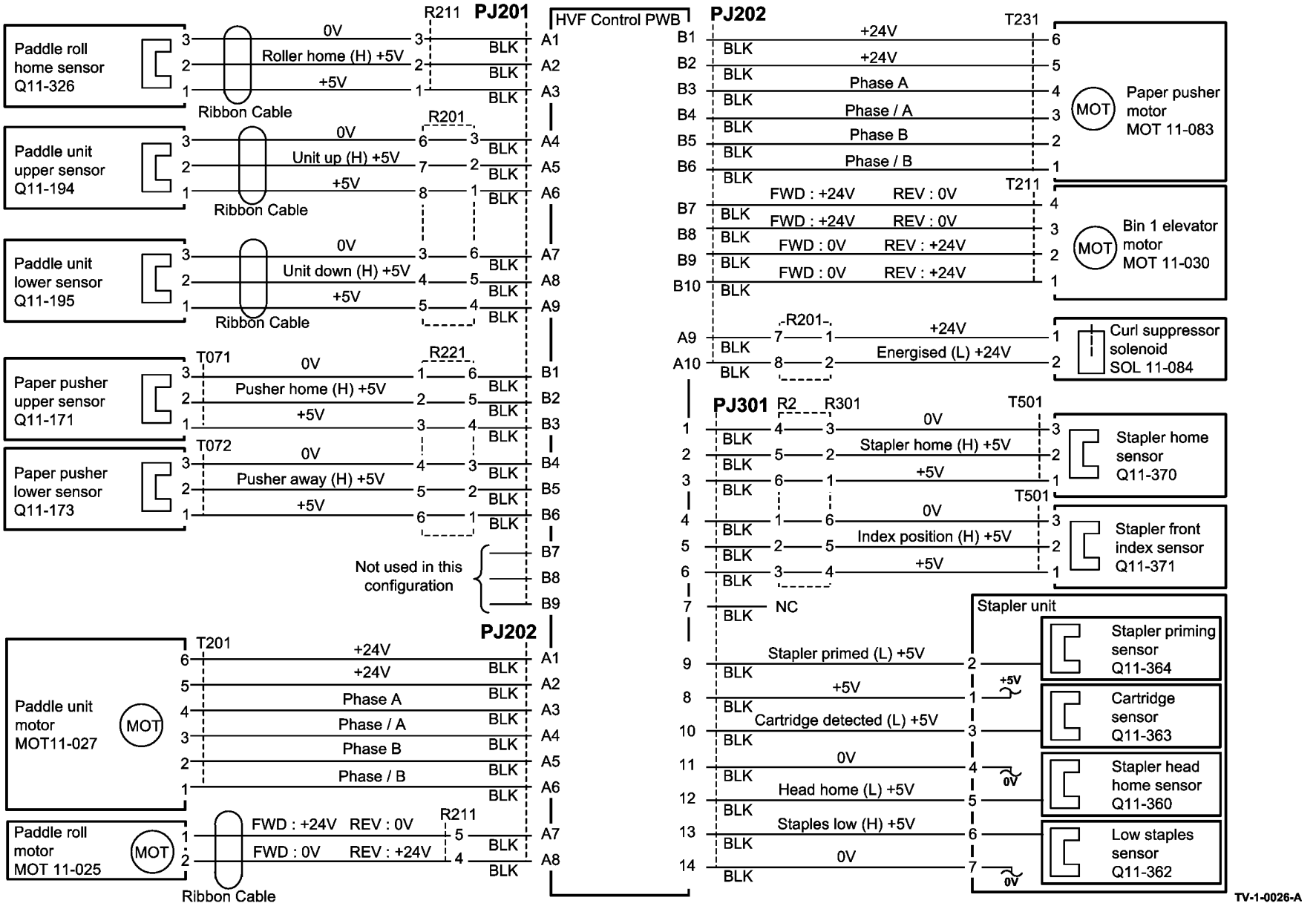

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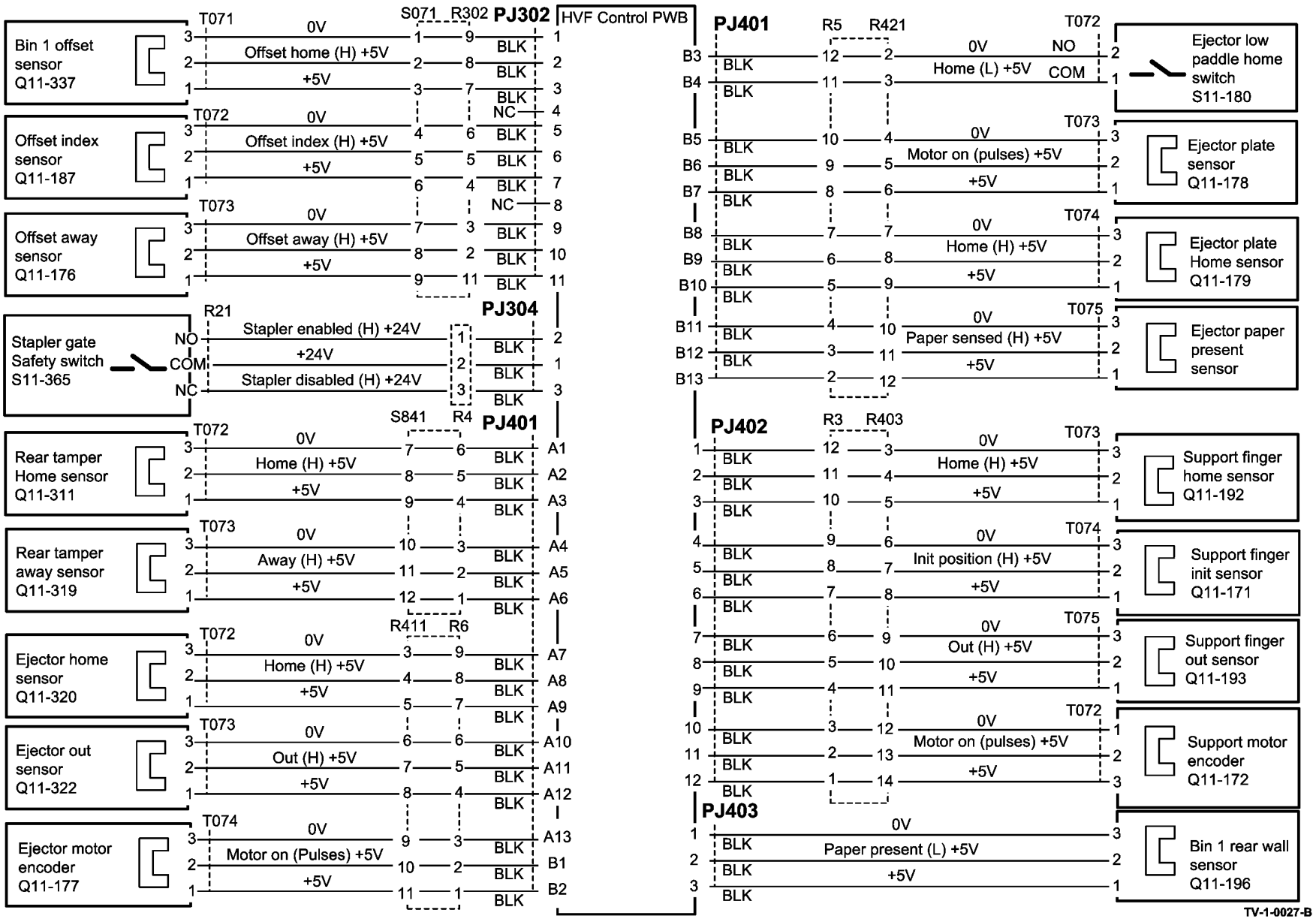

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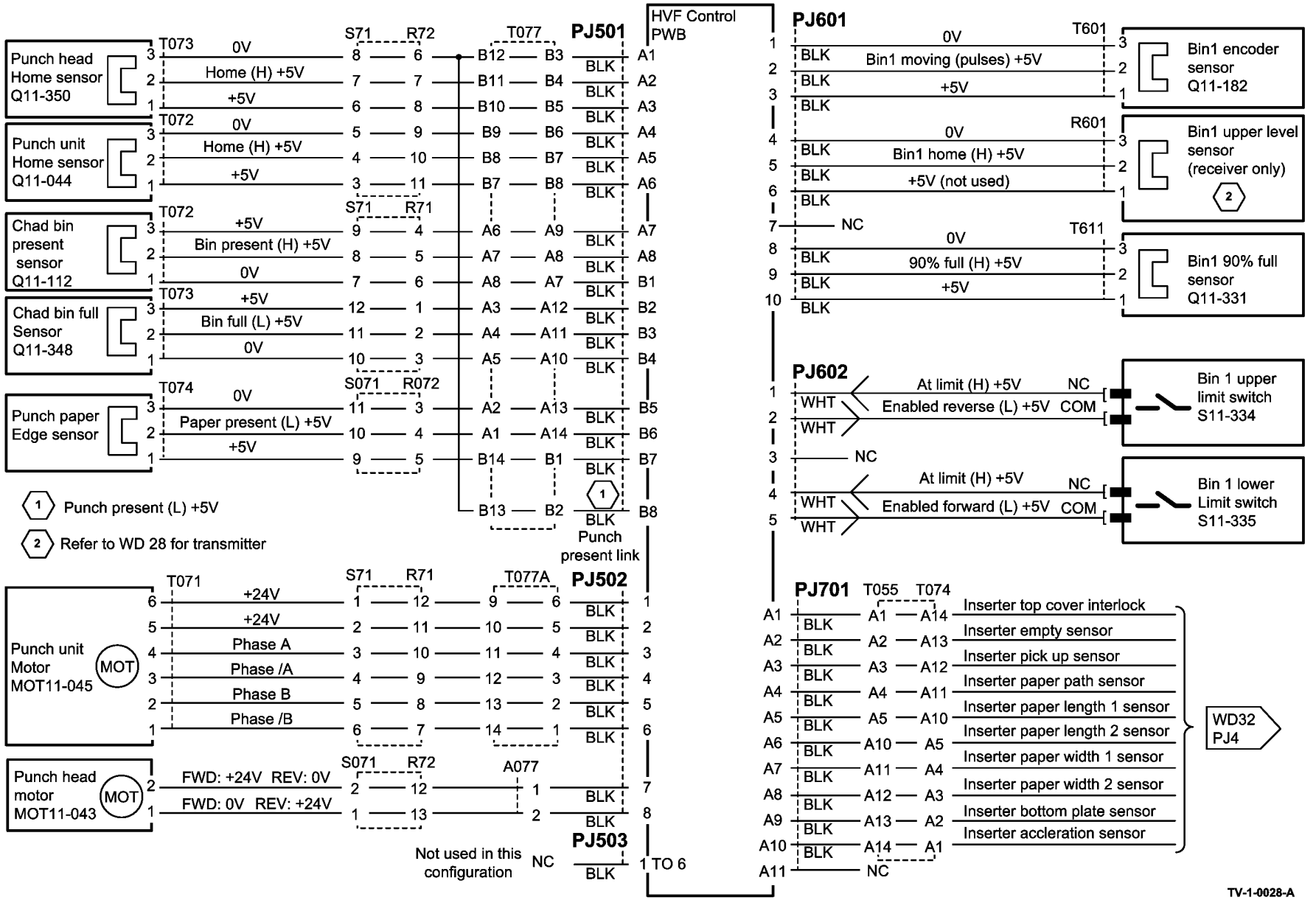

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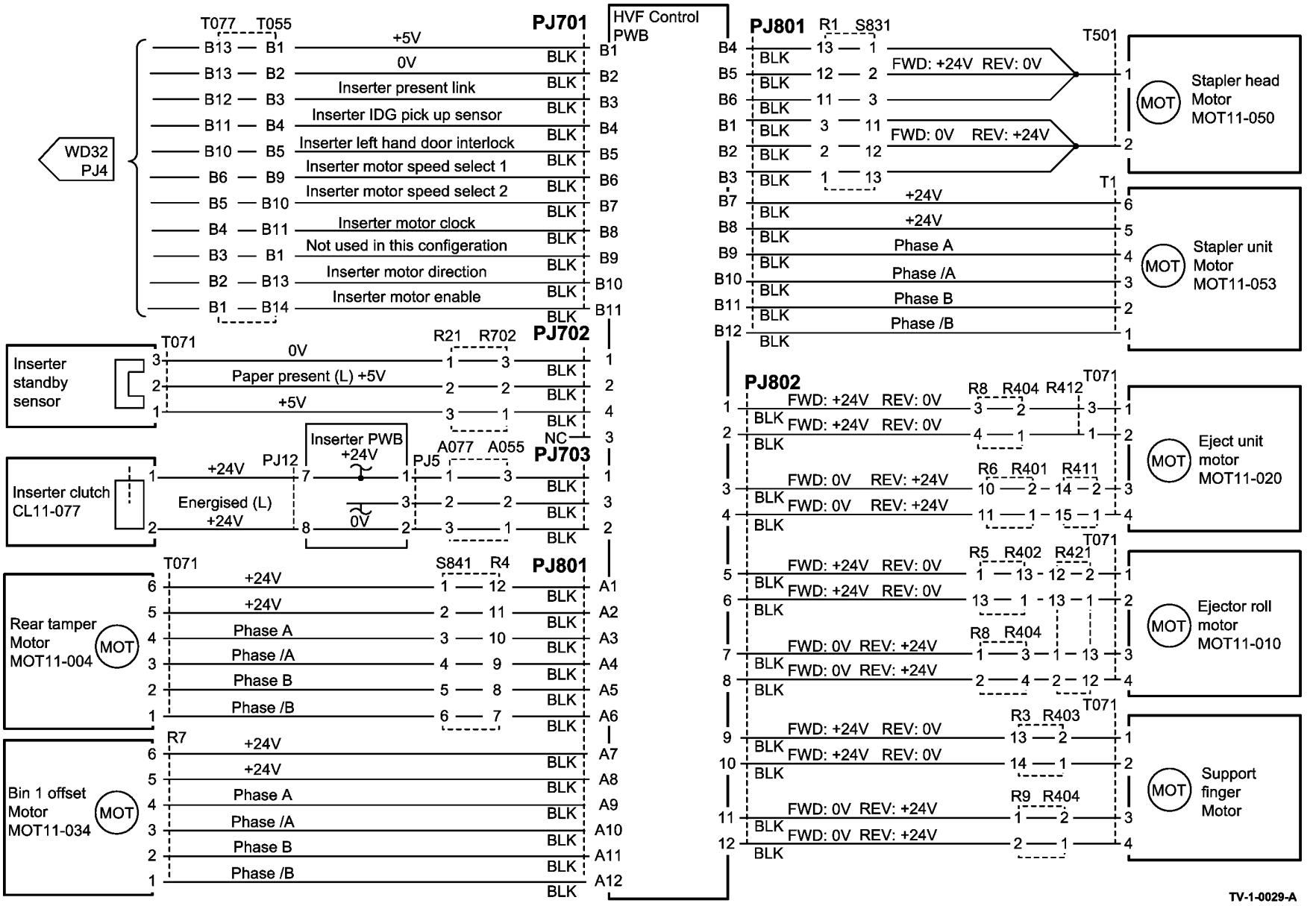

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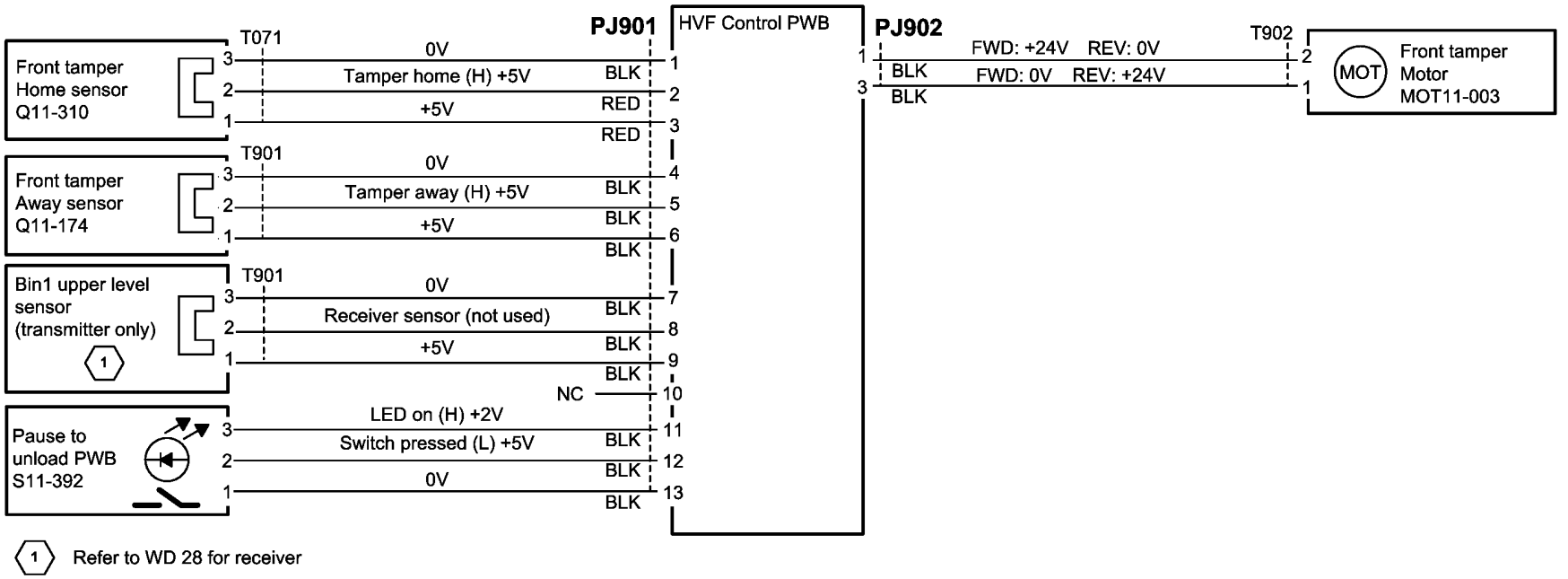

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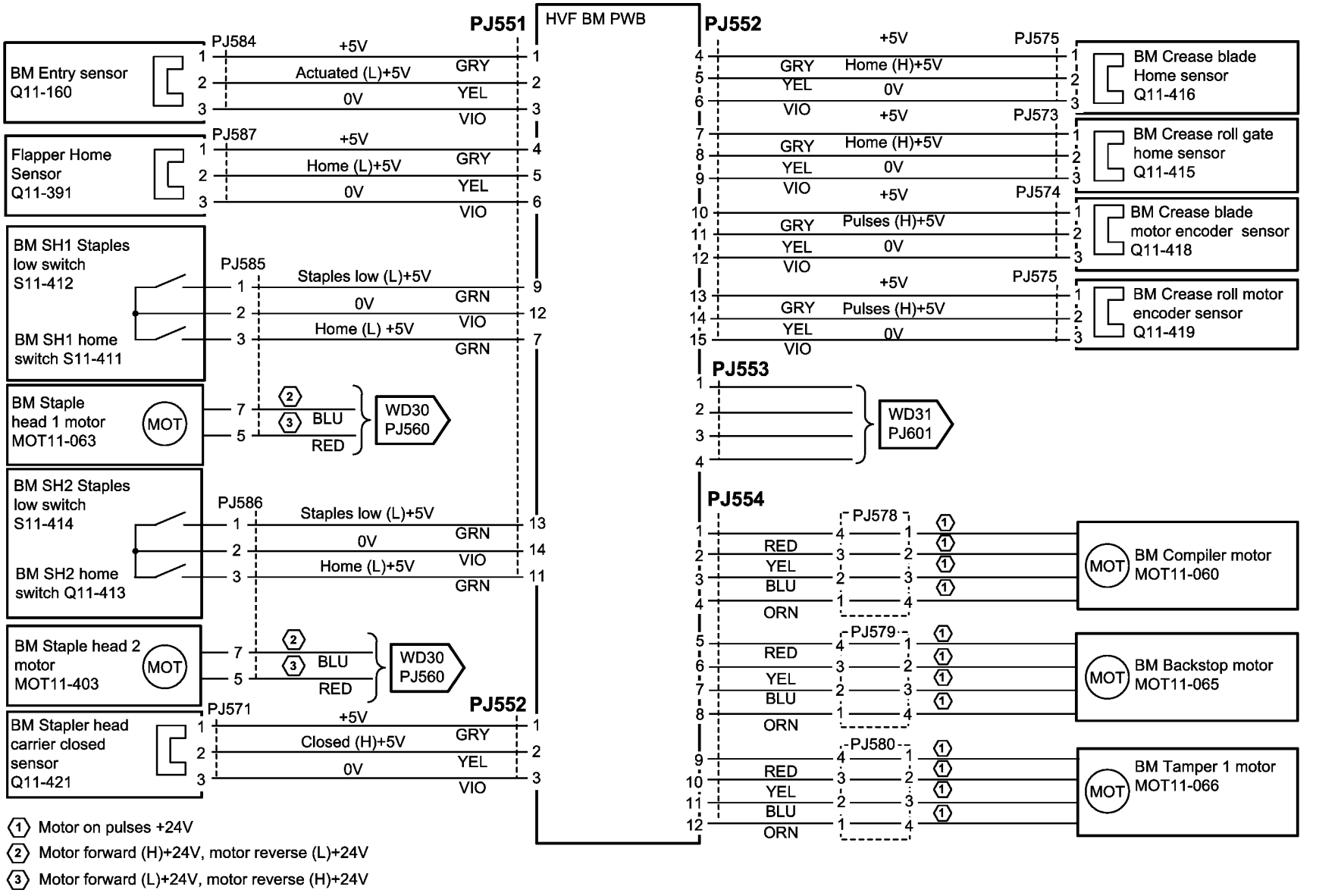

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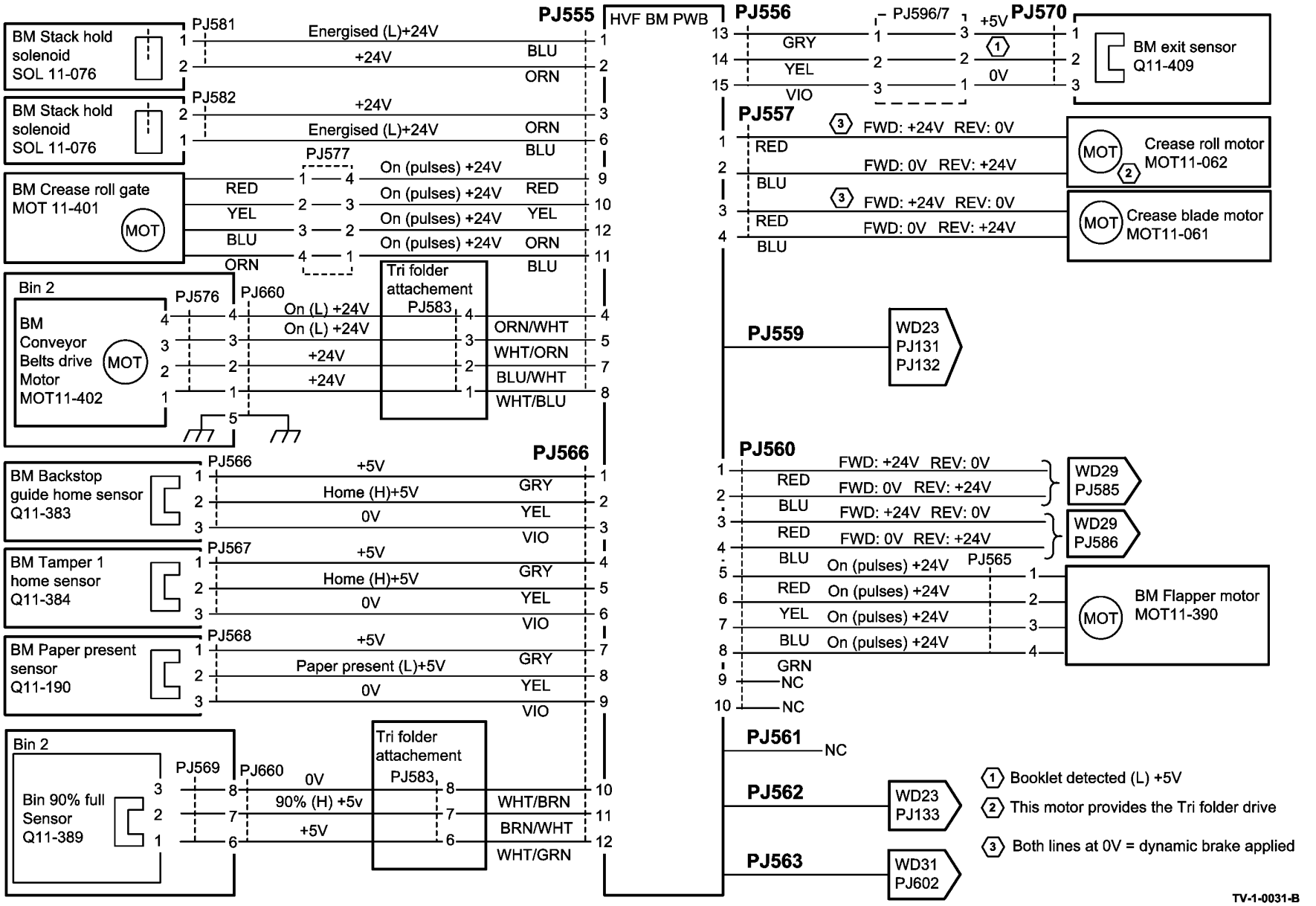

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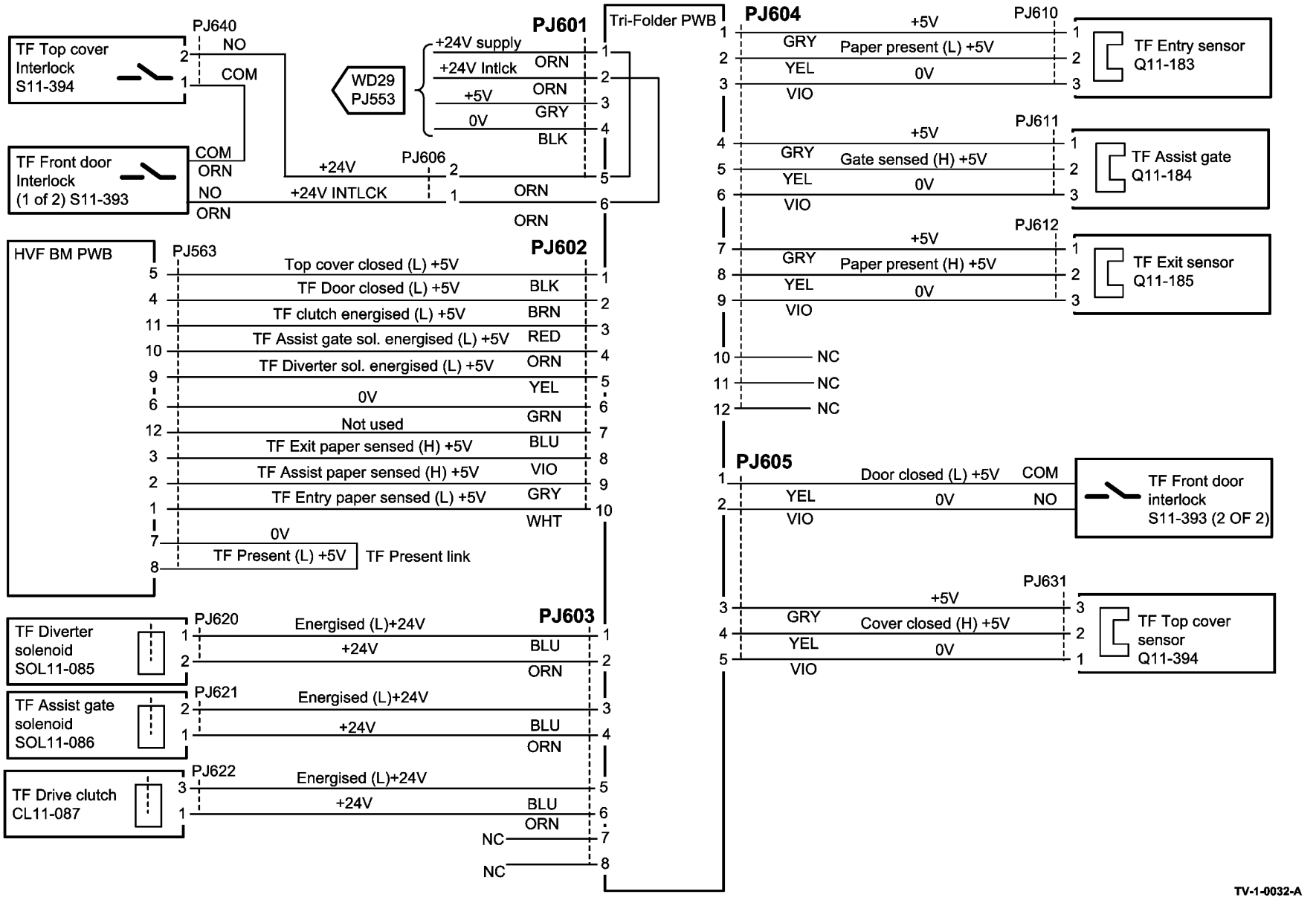

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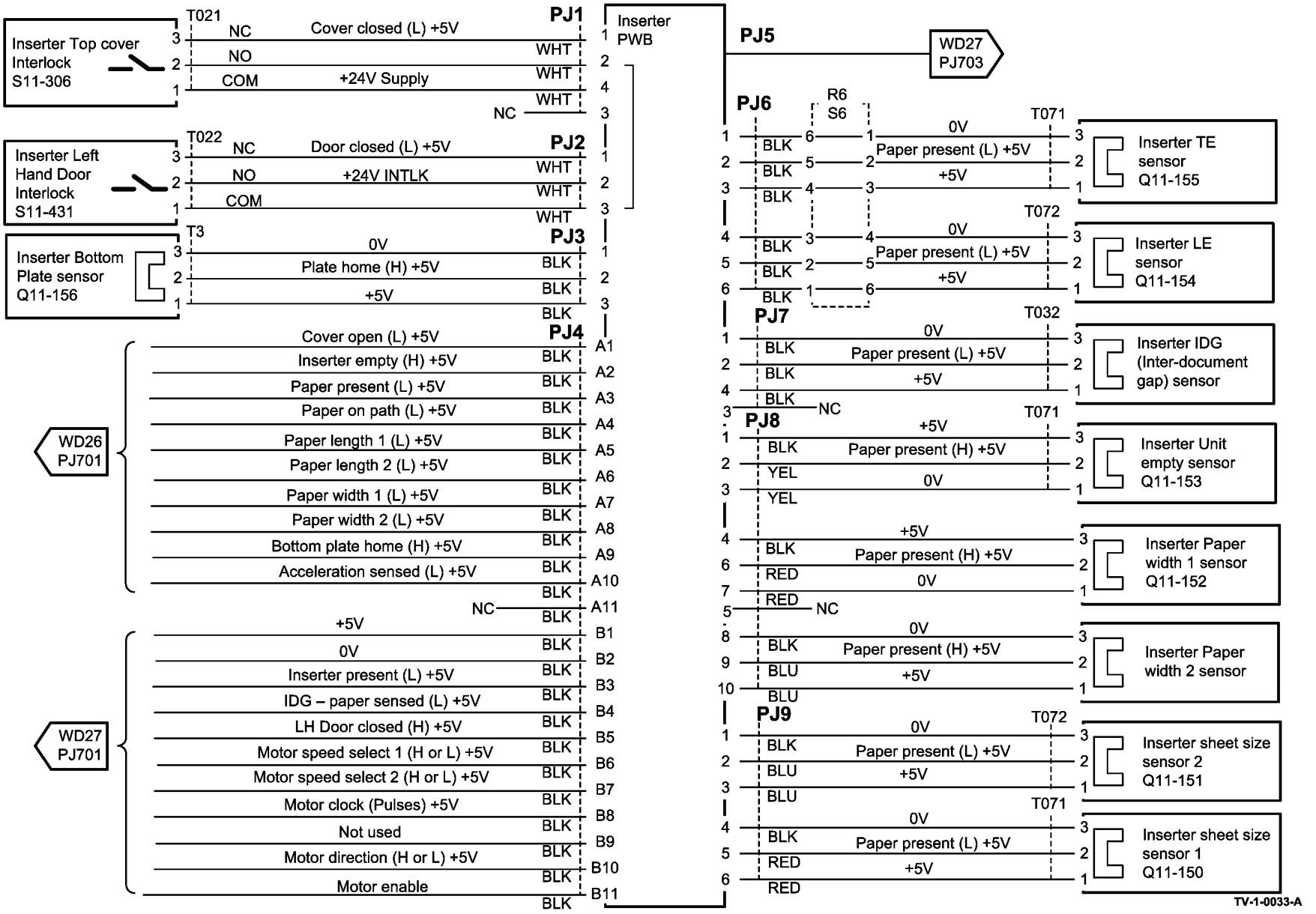

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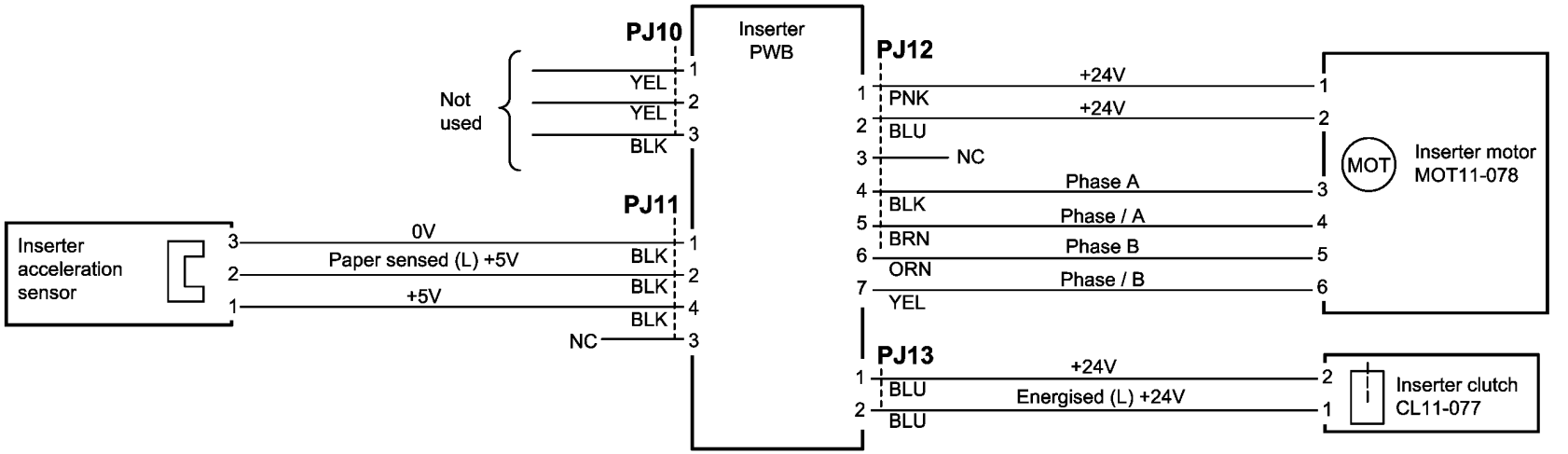

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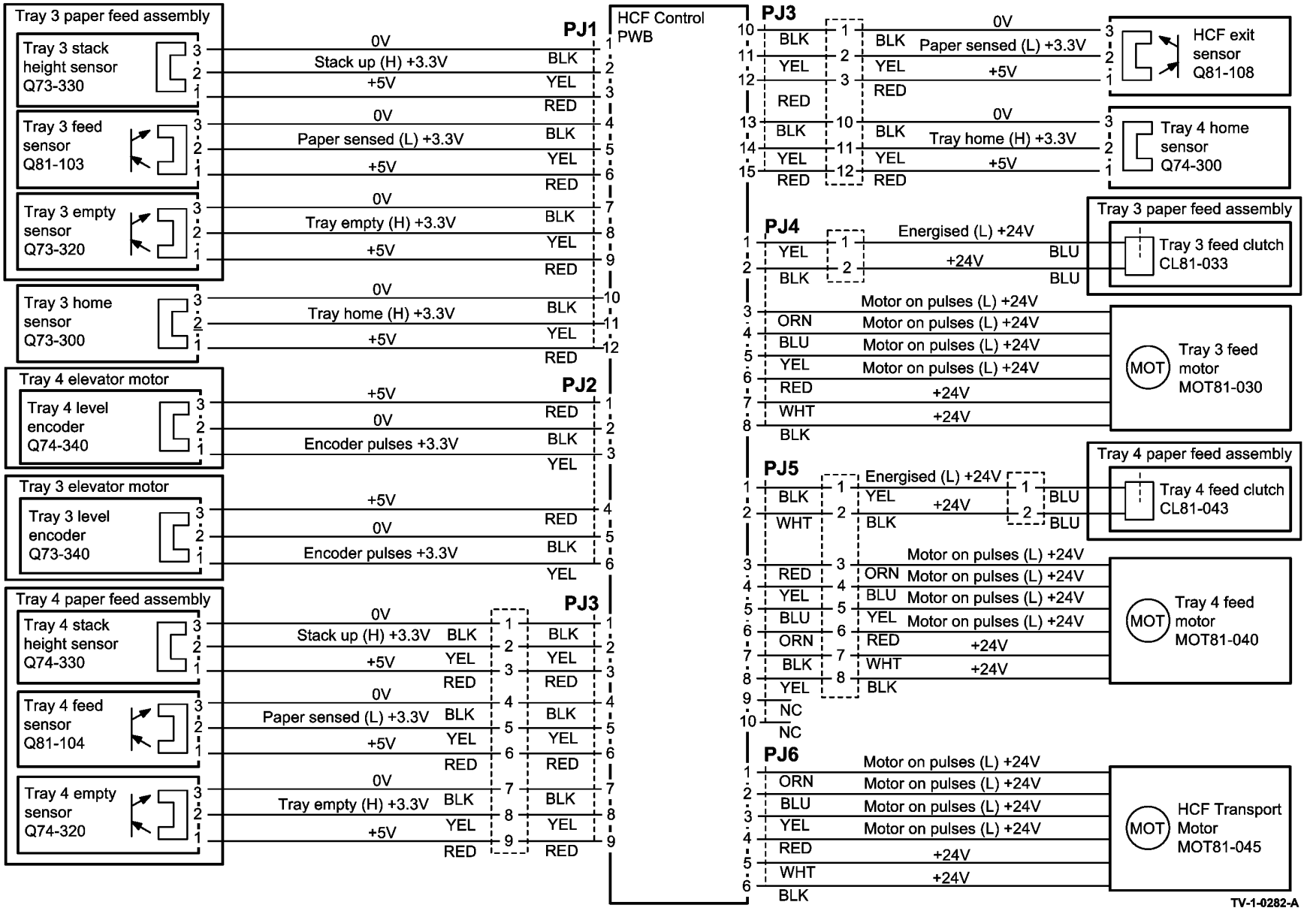

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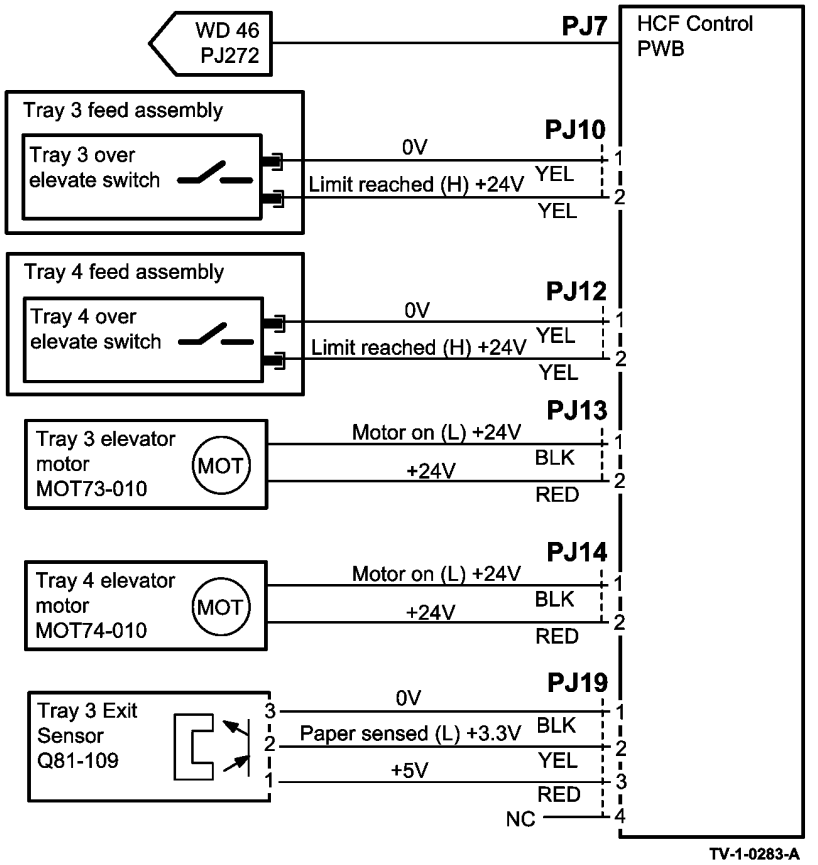

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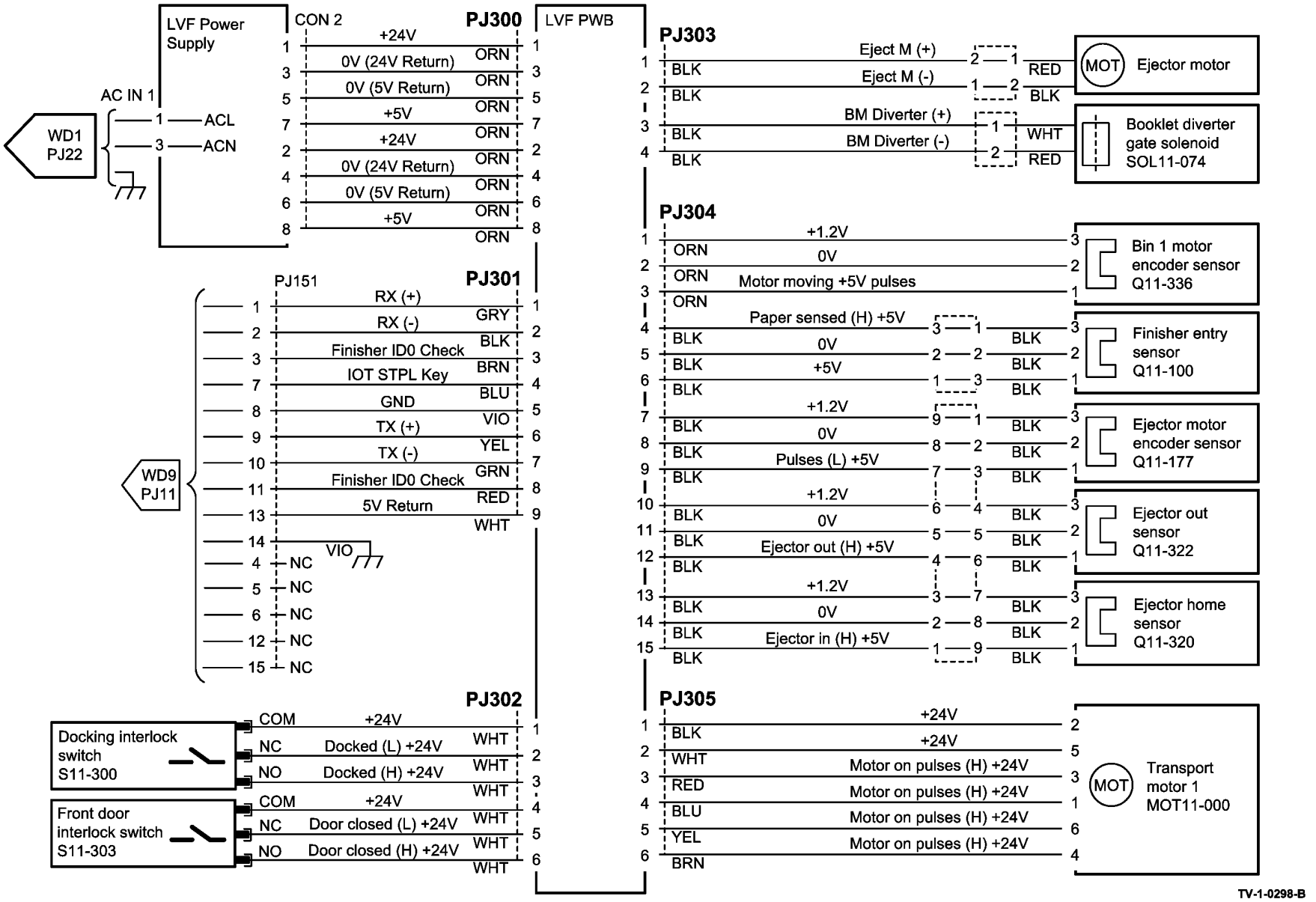

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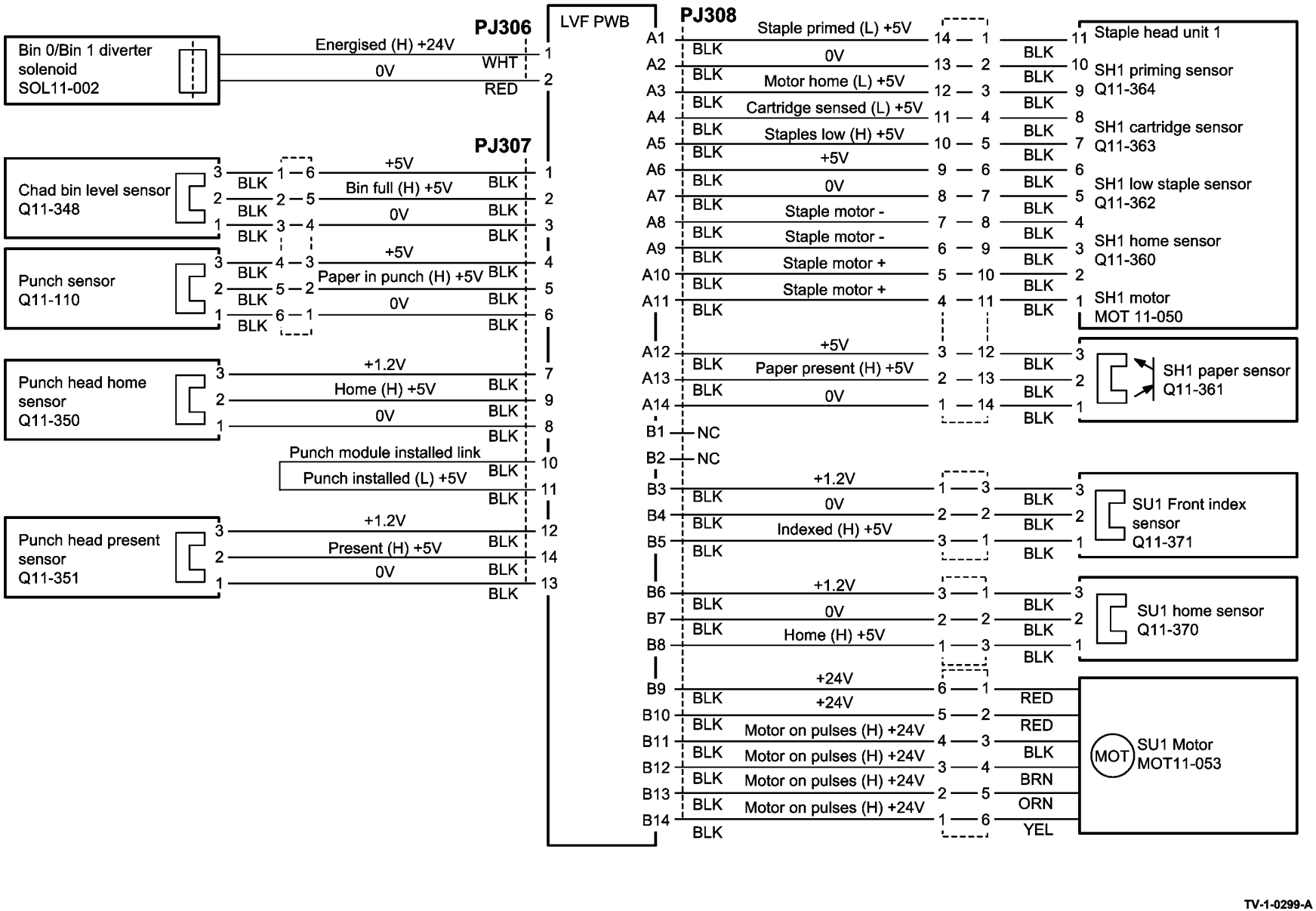

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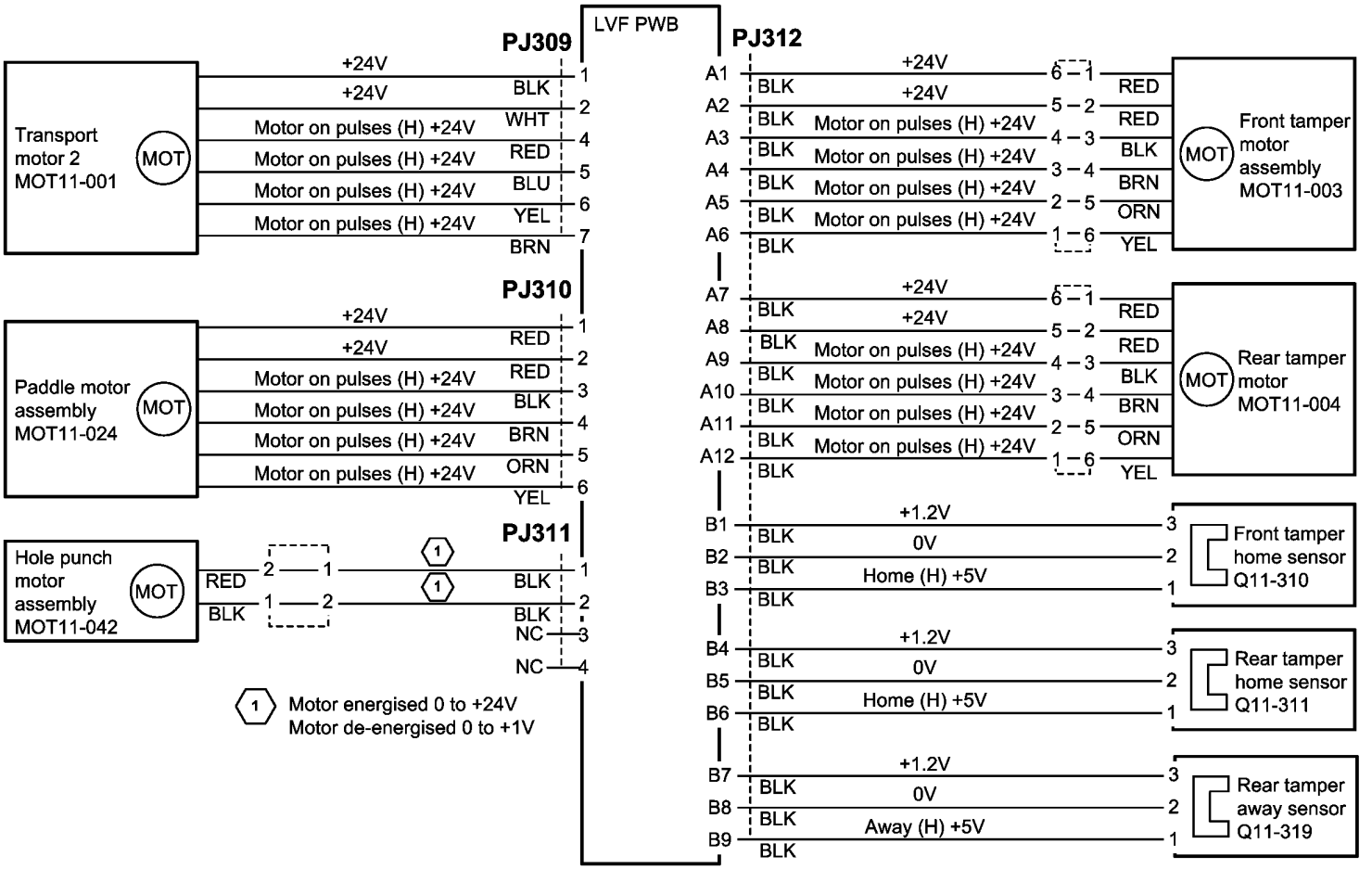

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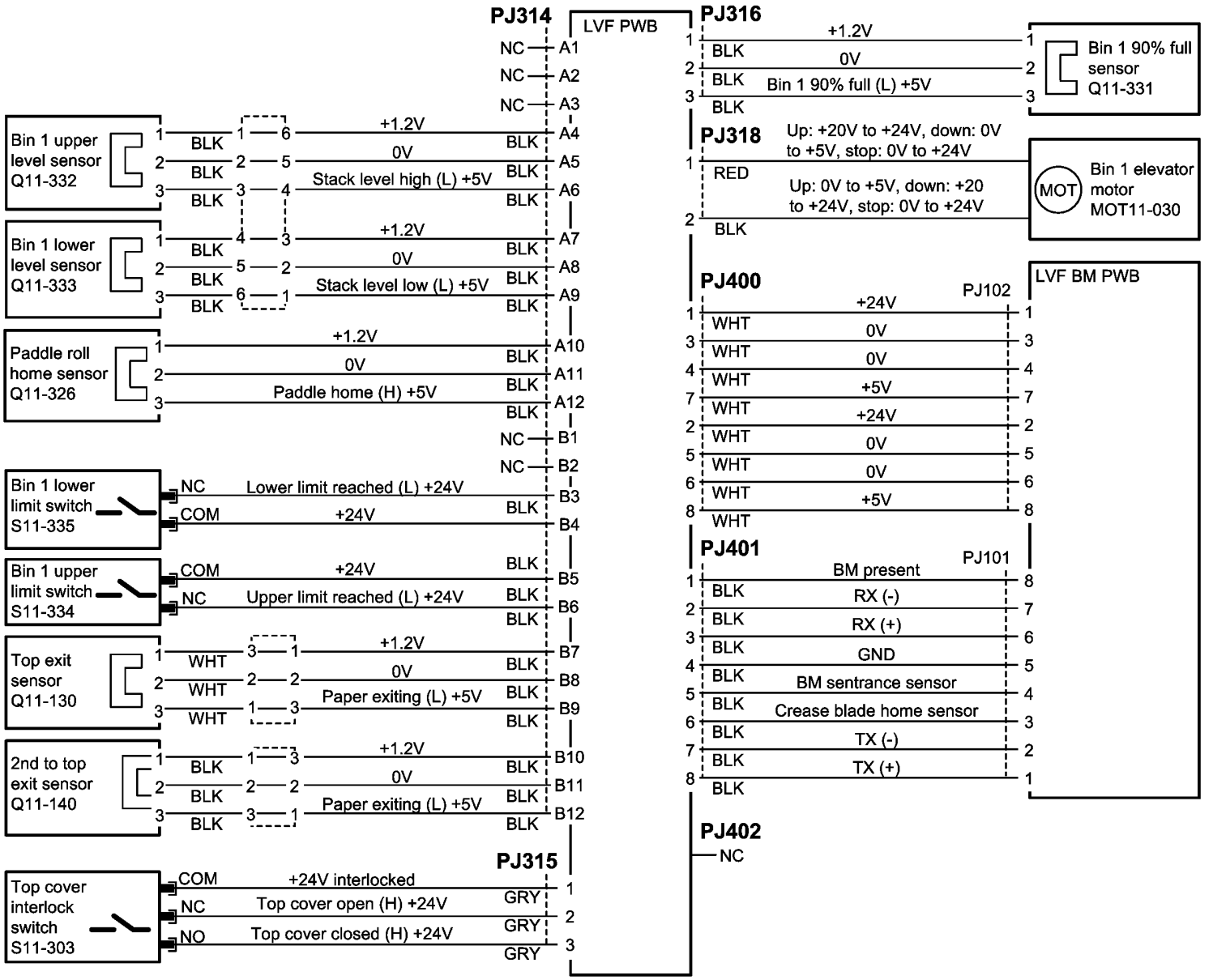
Figure 38 Wiring Diagram 38



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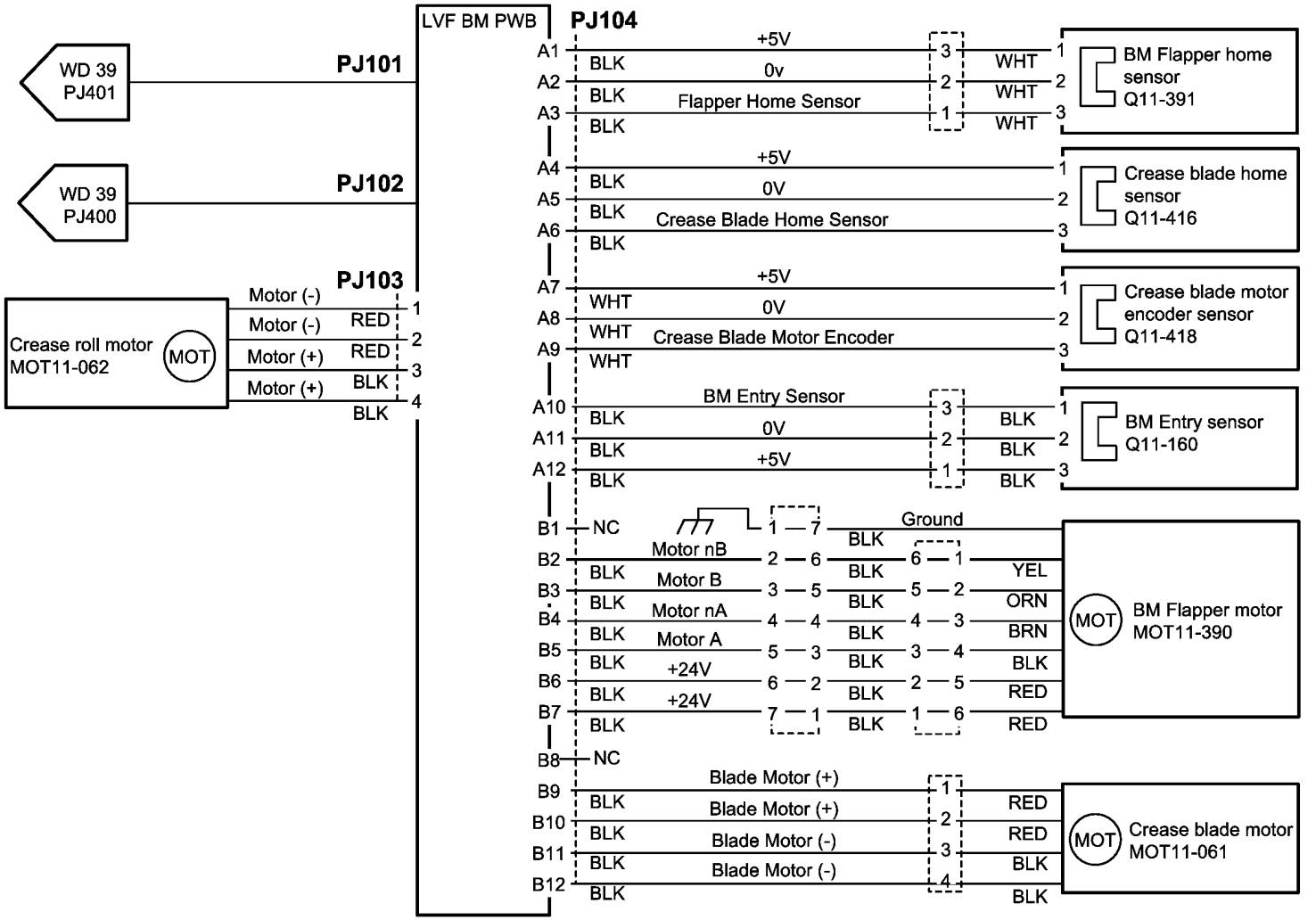

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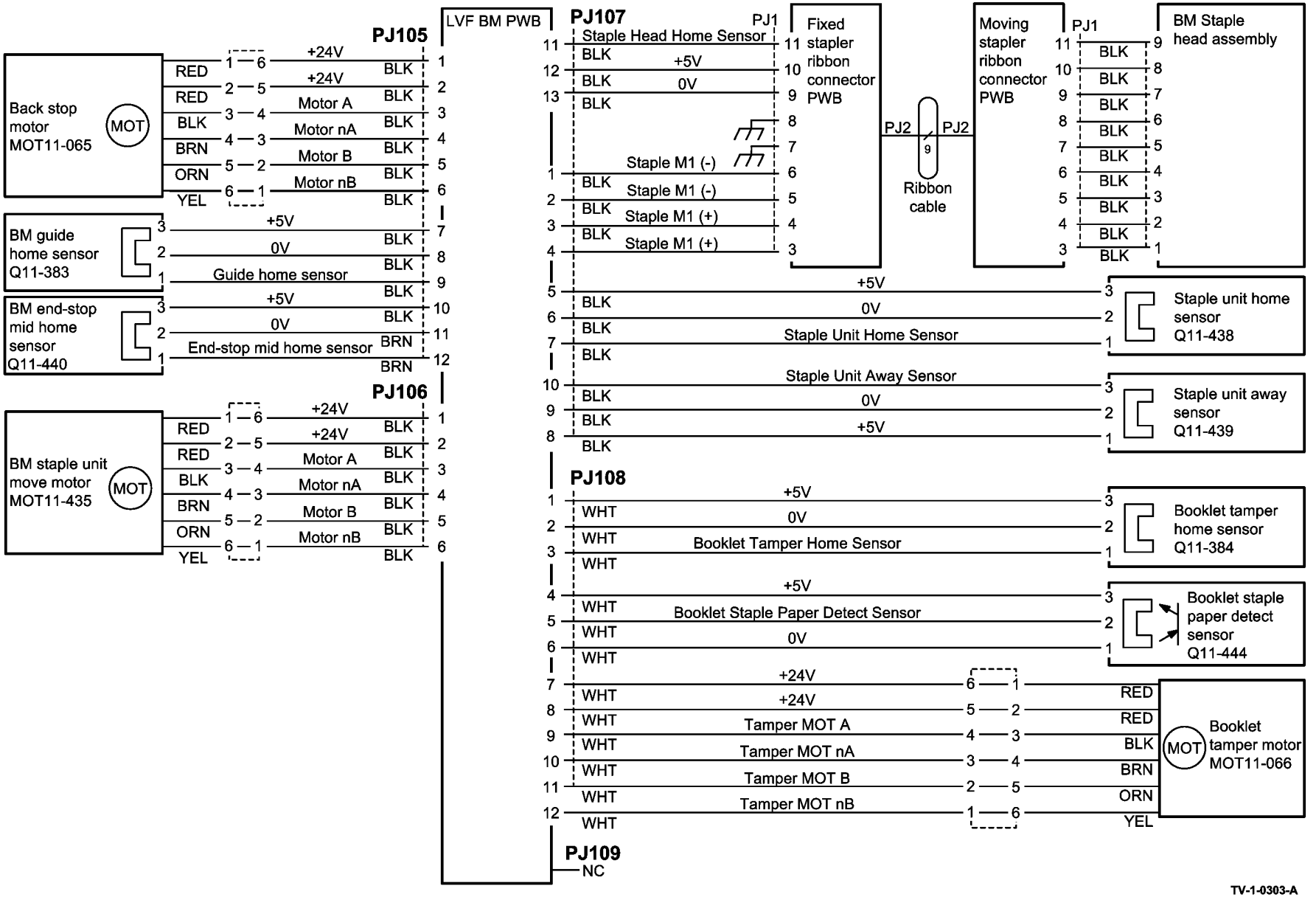
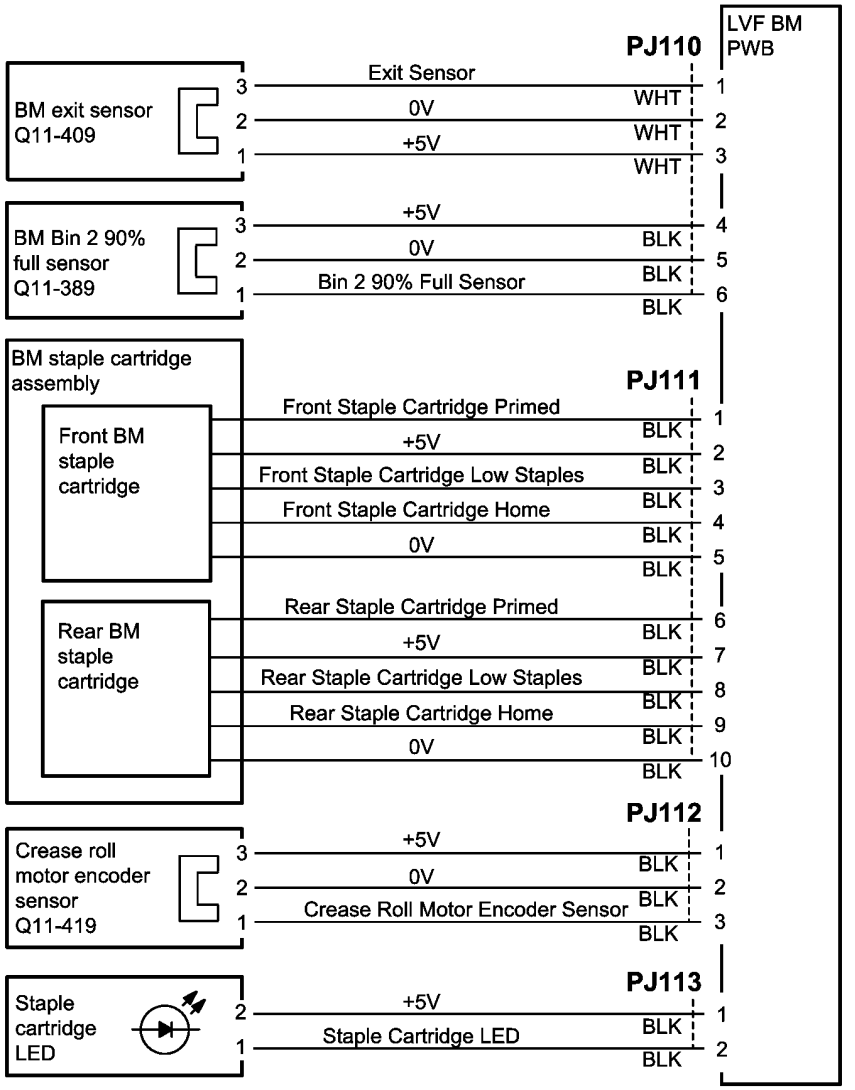


Figure 41 Wiring Diagram 41

Wiring Diagram 42



TV-1-0304-A

Figure 42 Wiring Diagram 42

Wiring Diagram 43

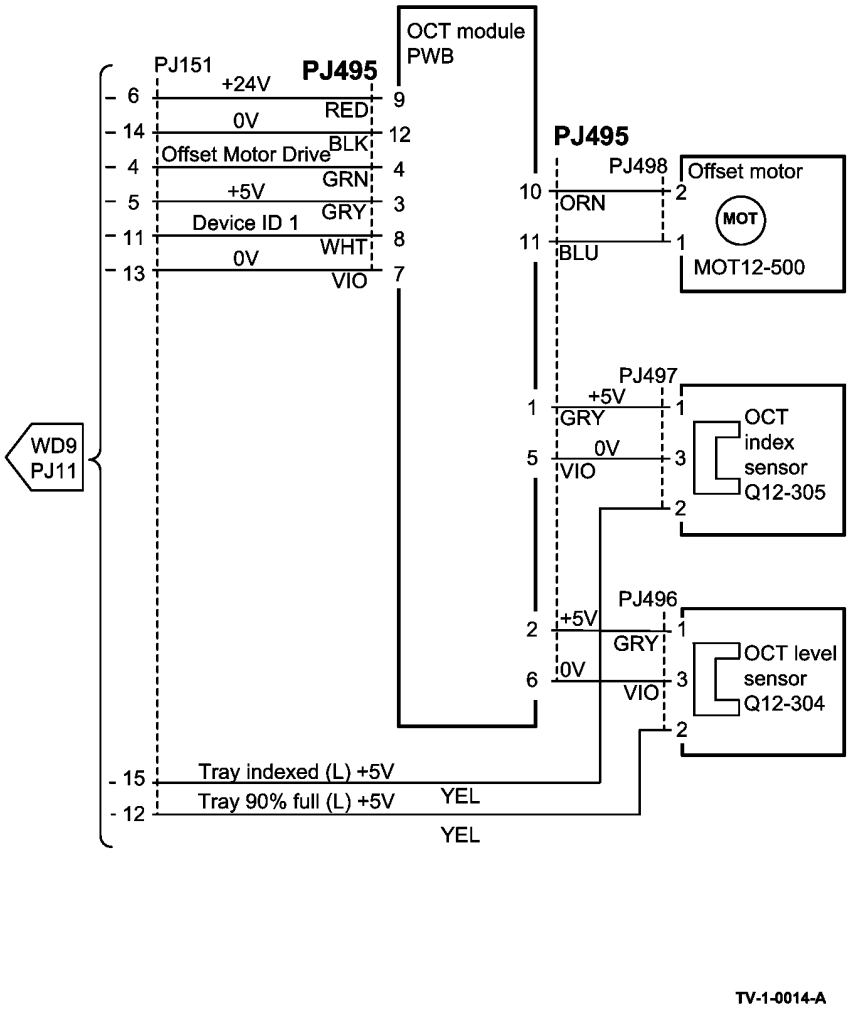


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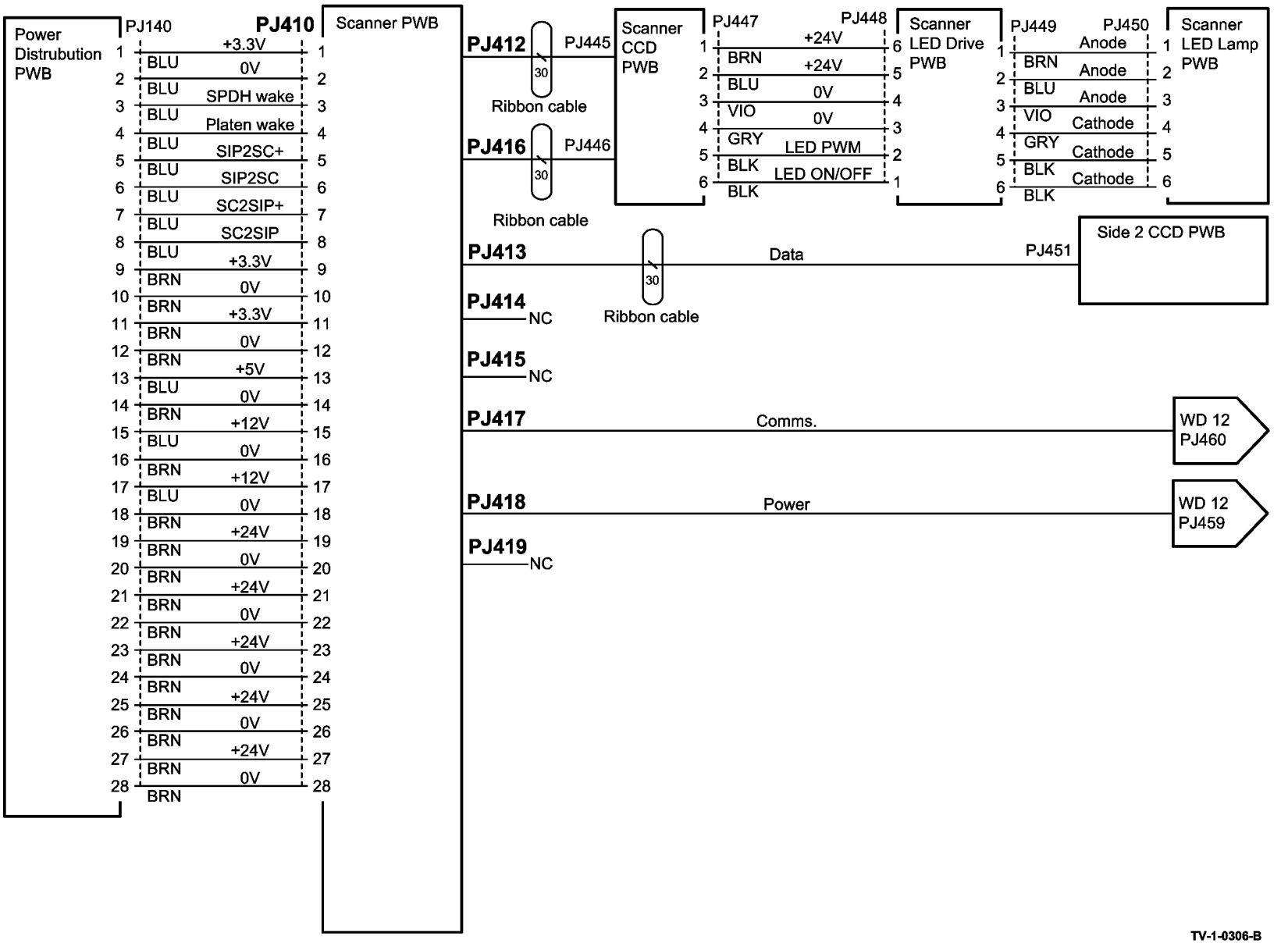
Figure 43 Wiring diagram 43



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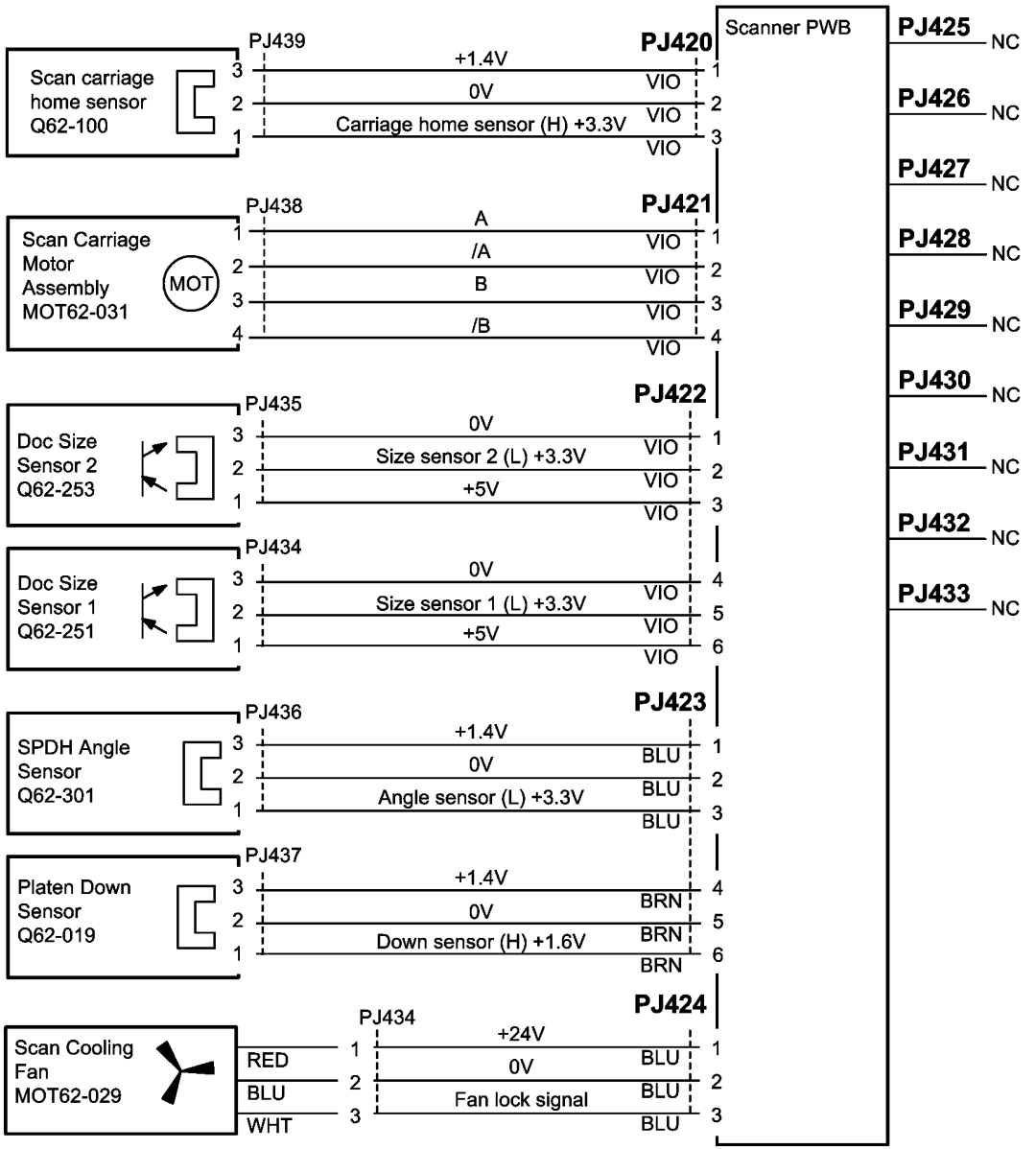

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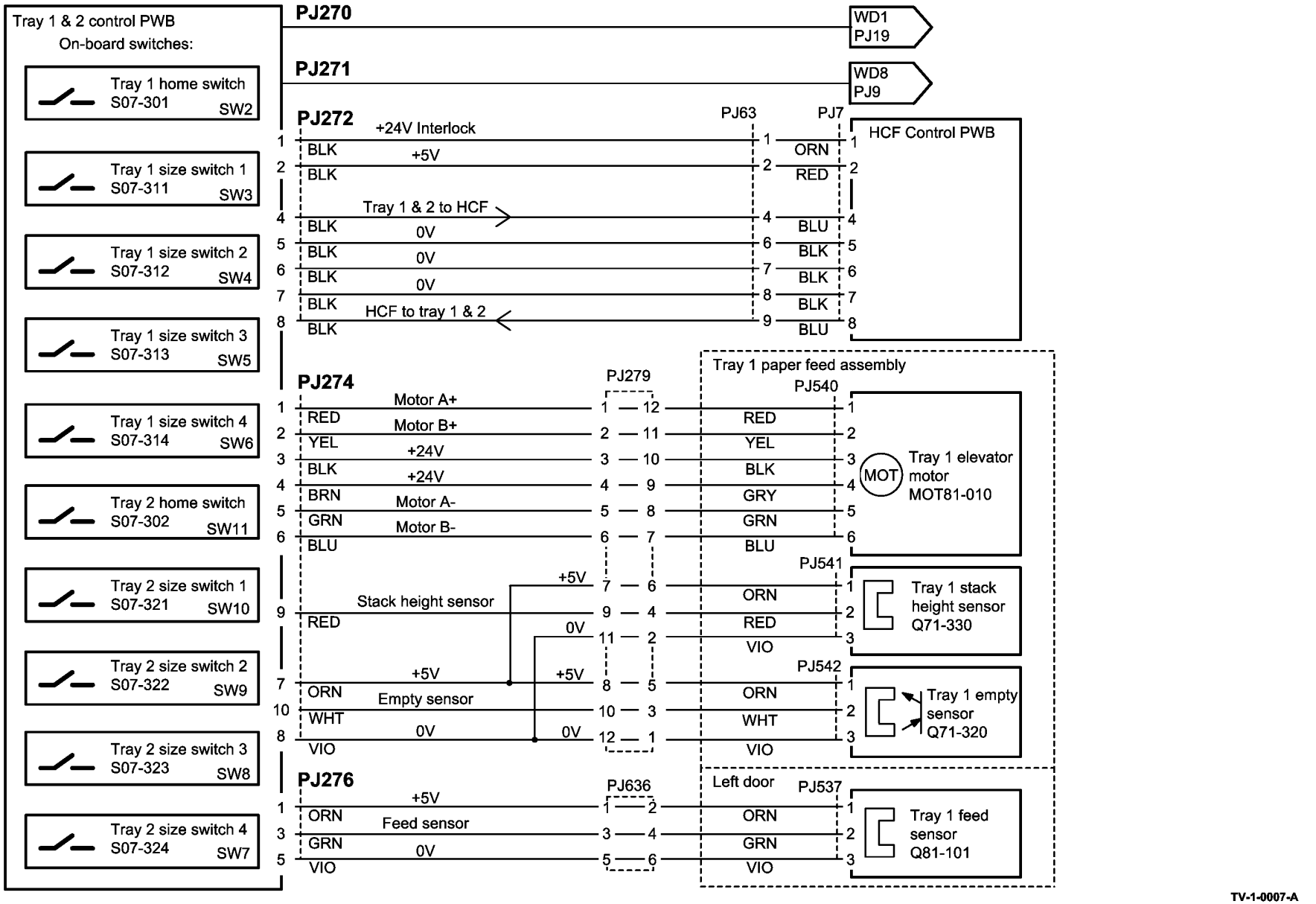

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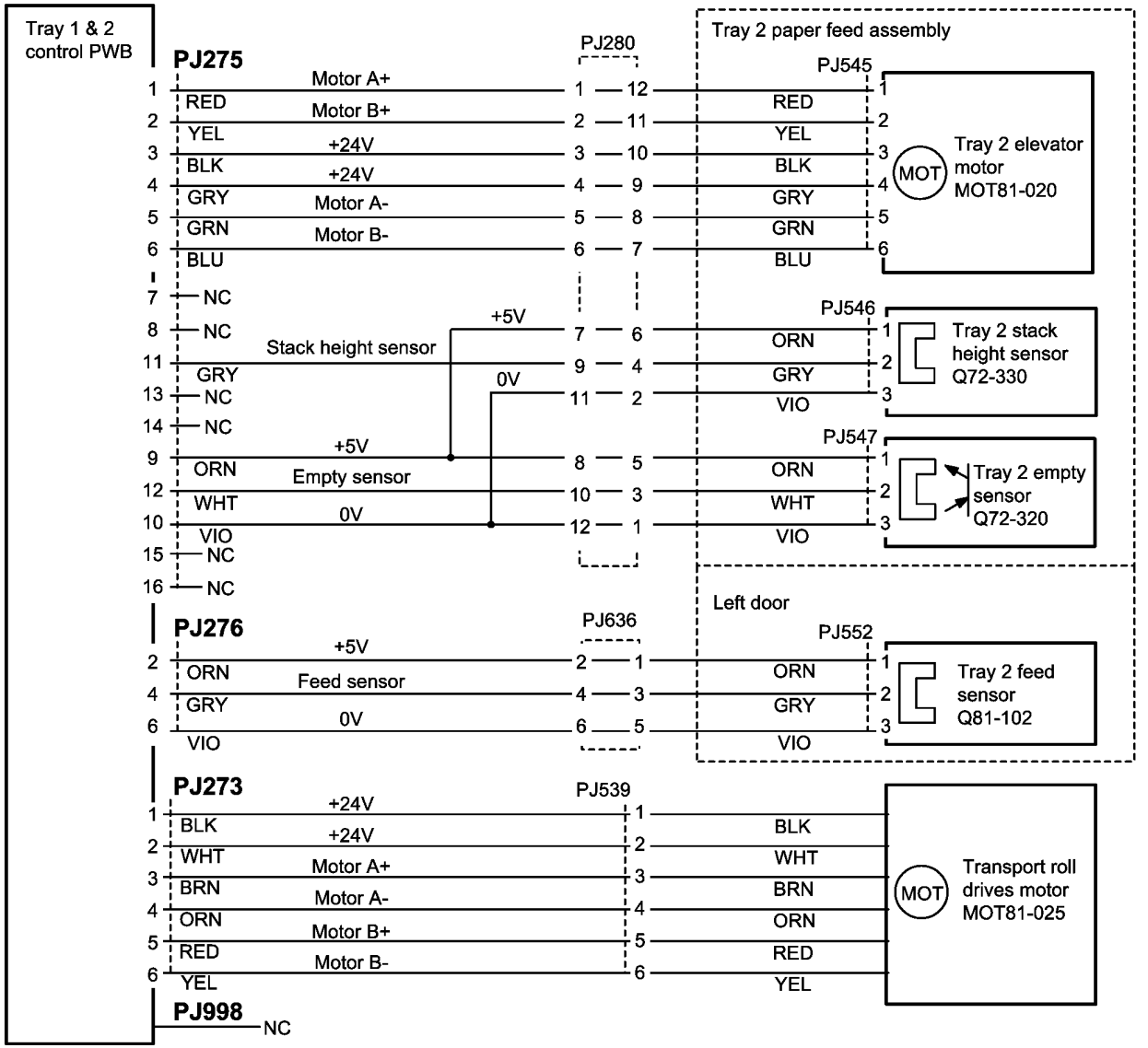

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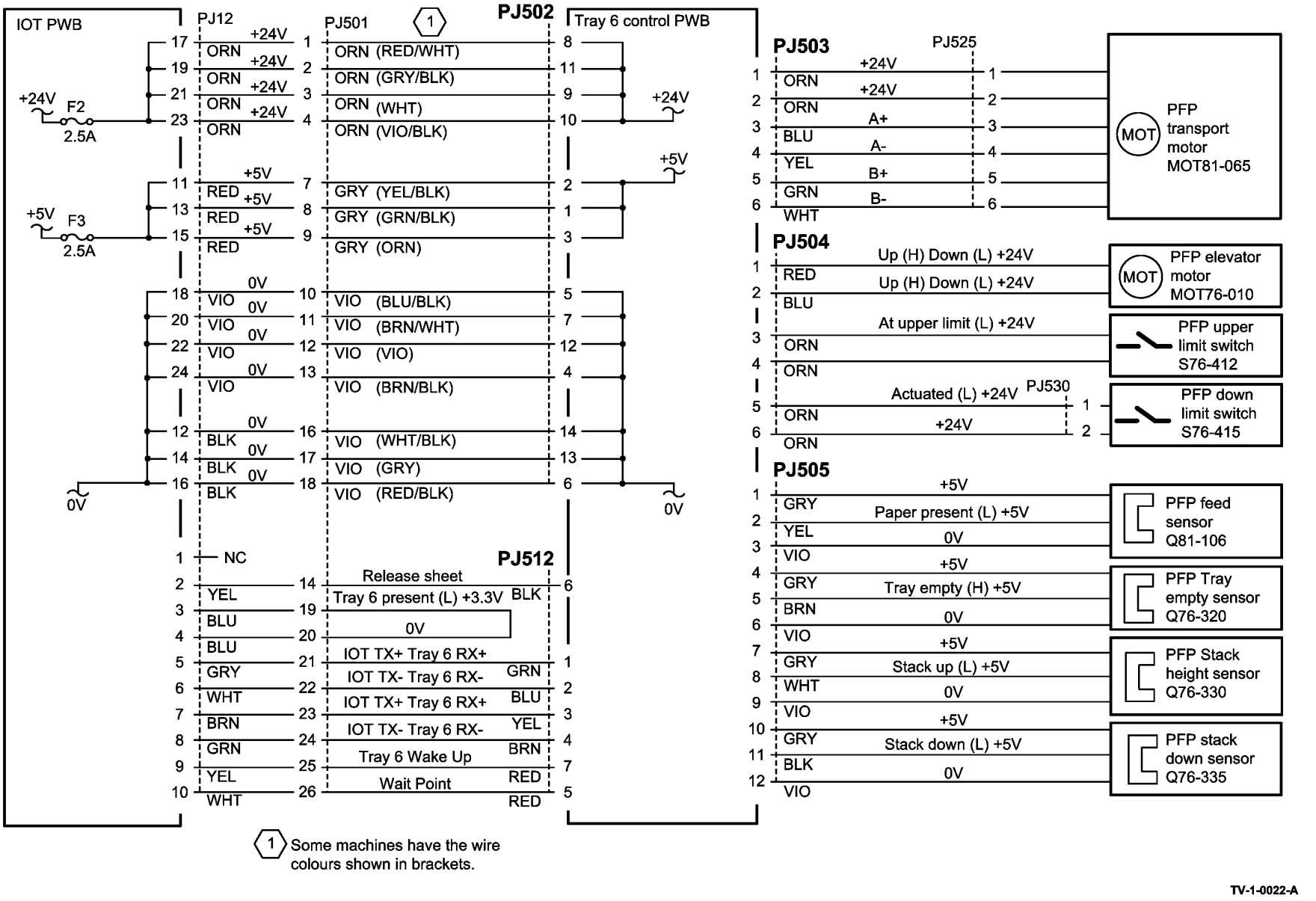

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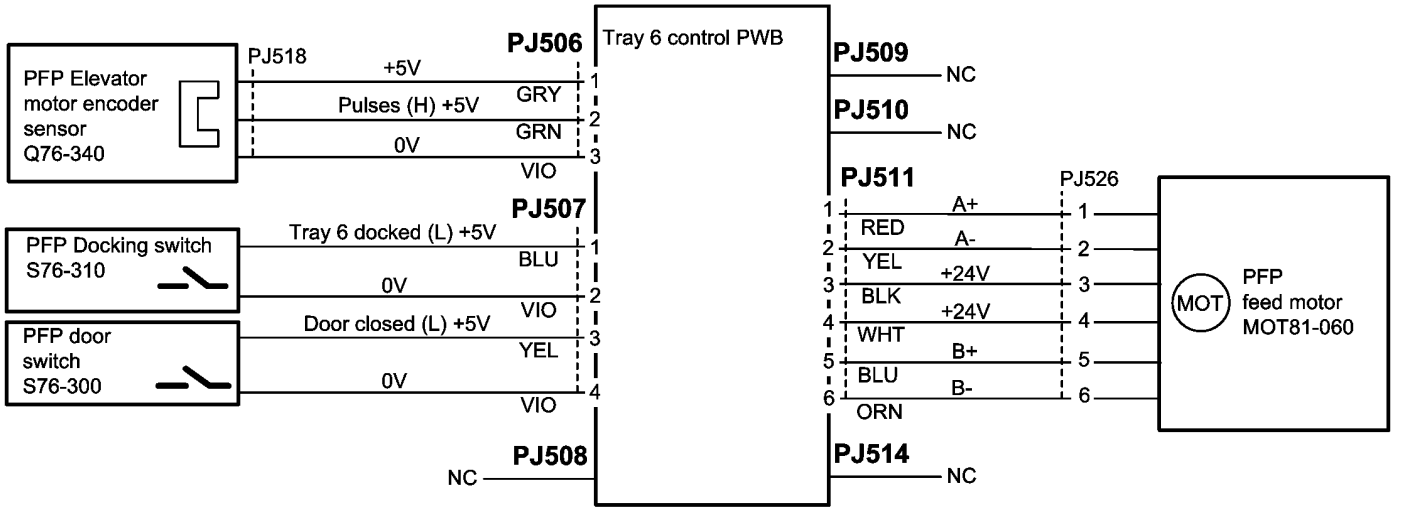

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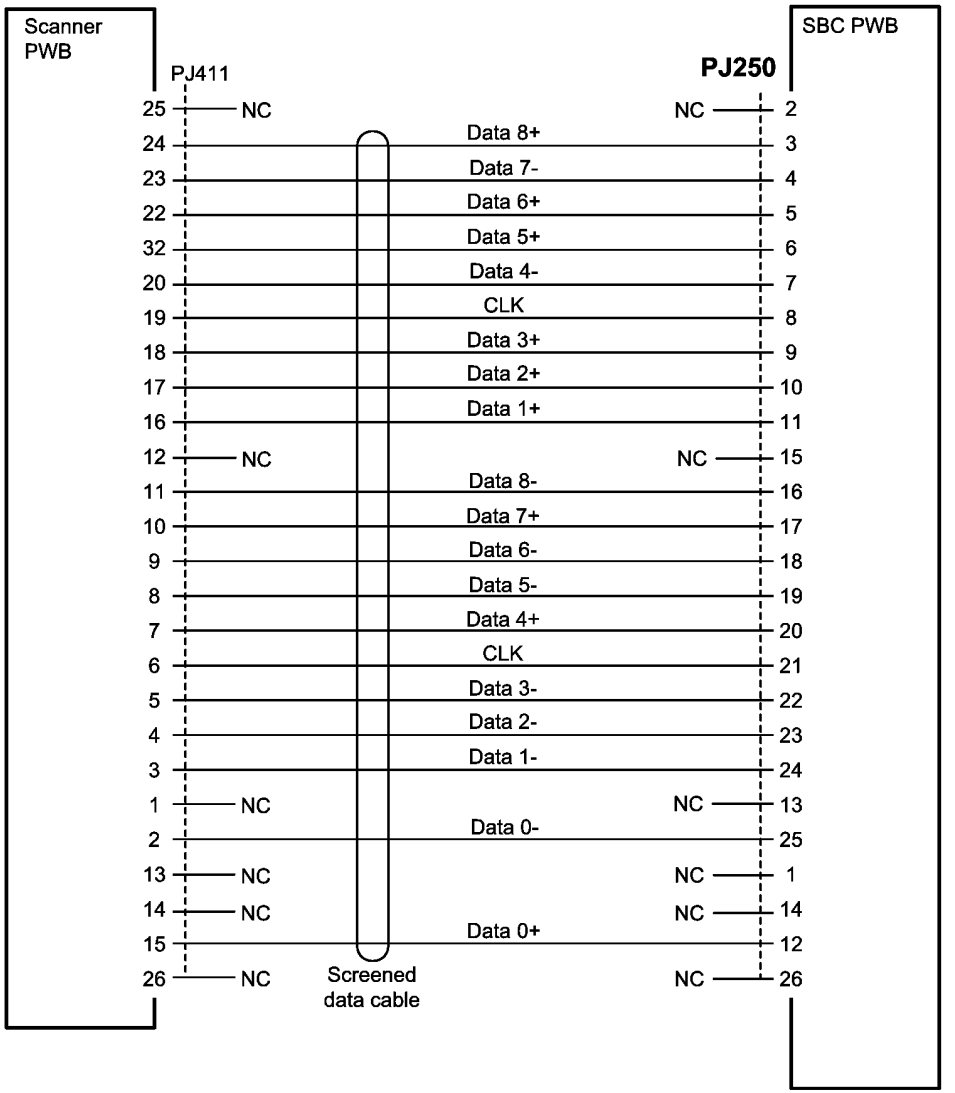

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Figure 50 Wiring Diagram 50

8 Accessories

ACC 1 Foreign Device Checkout

Procedure

- Go to the 303E Foreign Device PWB Fault RAP.

CONFIDENTIAL (when filled in)

EHS 700 - Health & Safety Incident Report Form
for Incidents Involving a Xerox Product

For incidents in Canada: PIPEDA consent given ☐ YES ☐ NO	**EH&S Office Use ONLY** EH&S Incident Reference Number:
PIPEDA is the Canadian "Personal Information Protection and Electronic Documents Act."	
For incidents in the EU: Safe Harbour Complaint ☐ YES ☐ NO	

*Date Of Incident (mm / dd / yyyy):

Product Description

*Model No. or Product Name:

Product Serial Number:	**Serial Number(s) of Accessory (ies):**
Installation Date:	**Total Copy Meter**:
Date of last service maintenance:	

List damaged and affected part(s) of the machine by description and part number:

*Description	Part Number

*Location of product and affected part(s):

Customer Identification

*Customer Name:	*Name of Customer Contact Person:	
*Address:	E-mail:	*Telephone:
		Fax:

Customer Service Engineer Identification

*Name (required for Xerox serviced equipment):	Employee:	E-mail:
Location:	*Phone (required for Xerox serviced equipment):	

Individual Providing Notification

*Name:	*Title:	*Telephone Number:
*Organization:		E-Mail:
Mailing Address:		*Date Report Submitted:

* Required information is preceeded by asterisk, **title shown in red**, with a tan wash background

Details of Incident

***Description Of Incident:** **(Check all that apply)**

☐ Smoke

Describe quantity and duration of smoke:

☐ Fire with open flames seen

☐ Electric shock to operator or service representative

☐ Physical injury/illness to operator or service representative

Describe:

☐ Other, describe:

MANDATORY DESCRIPTION (above): Provide a detailed description of all valid factors that may have contributed to the incident. Hardware involved in the incident should be preserved and retained for further investigation should investigation be deemed necessary by EH&S.

LIST INCIDENT DESCRIPTIONS AND SUPPORT DIAGRAMS/DATA INCLUDED OR ATTACHED:

***Any damage to customer property?** No ☐ Yes ☐ Describe:

***Did external emergency response provider(s) such as a fire department, ambulance, etc. respond?**

No ☐ Yes ☐ Identify: (i.e., source, names of individuals)

Apparent cause of incident (identify part that is suspected to be responsible for the incident)

***Preliminary actions taken to mitigate incident:**

Instructions: E-mail or fax both pages of this completed form to EH&S:

e-mail: usa.product.incident@xerox.com or fax 585-422-8217 [Intelnet 8*222-8217]

* Required information is preceeded by asterisk, **title shown in red** with a tan wash background

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PRODUCT AND PUBLICATION TITLE:	PUBLICATION REVISION DATE:	SOFTWARE REVISION LEVEL:

PAGE NUMBER:	COMMENT Please submit a marked-up photocopy of the relevant pages

CUSTOMER SATISFACTION QUESTION SET

QUESTION	NOT APPLICABLE	VERY SATISFIED	SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	DISSATISFIED	VERY DISSATISFIED
DO YOU FIND THE MANUAL IS TECHNICALLY ACCU-RATE?						
DO YOU FIND THE FORMAT OF THE MANUAL EASY TO USE?						
WHAT IS YOUR OVERALL SATISFACTION LEVEL WITH THE MANUAL						

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