Business Solutions
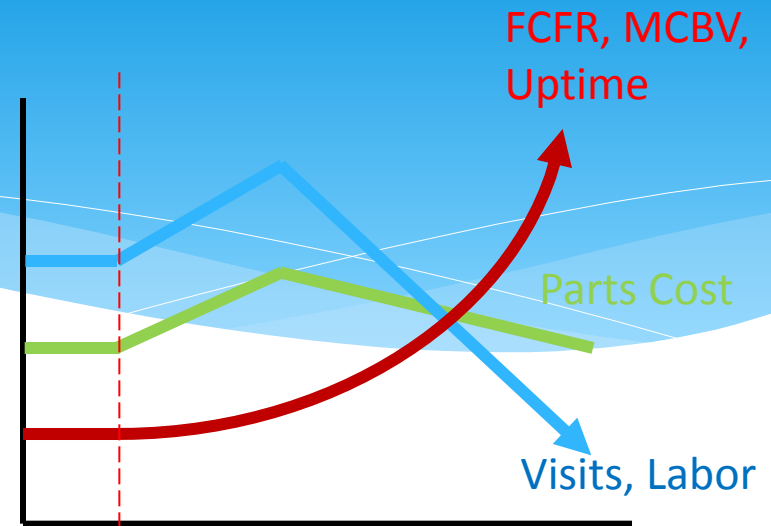**SERVICE & SUPPORT**
Expertise. Commitment. Results.

Preventative Maintenance Procedure

Last update 04/27/2018

Purpose

Increase the following items.

- **FCFR** (*First Call Fix Rate*)
- **Uptime**
- **MCBC** (*Mean Copies Between Calls*)
- **Customer Satisfaction**

FCFR, MCBV, Uptime

Parts Cost

Visits, Labor

Implementation of the Preventative Maintenance Procedure

How to use

Pre-Visit Serviced History Check	Common Process (Before)	Maintenance Process	Common Process (After)

This document was developed by Canon USA Engineering Services and Solutions to perform consistent, effective and efficient maintenance on all Canon products.

Service History Check – [Pre Visit]

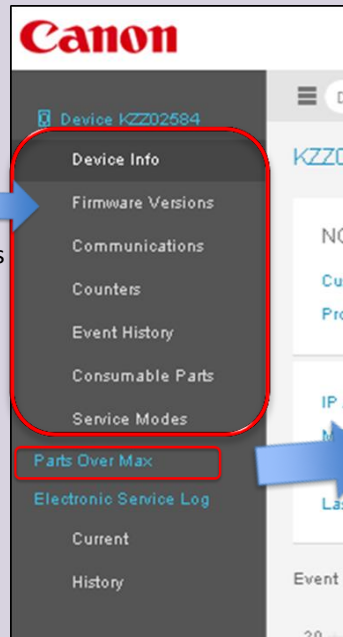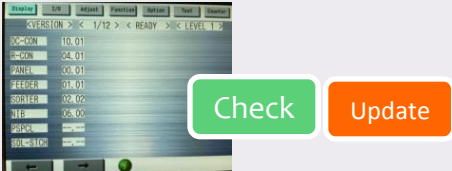| Procedure	Detail	Note	Time
Action Prior to Customer Visit: **Whenever possible, Check Snapshot for :** • Firmware Version • Event History • Part Counters • Service Mode Settings	1. Log into Snapshot : 	• Enter the machine Serial Number to check the following: 1. Firmware Version – **Prepare Firmware if necessary** 2. Communications 3. Counters – **Machine Usage** 4. Event History – **Check History for Errors, Alarms and Jams** 5. Consumable Part Counters - **Prepare Consumable and Durable Parts** 1. Understand the machine's current condition (jams and error, needed consumable parts) before visiting EM call or PM-Call. 2. Prepare all consumable parts that exceeded Target and replace them on a PM-call, replace any parts that exceeded life you have now at the EM call. 3. Take the necessary actions for the jamming and errors.	**Check** **6 min**
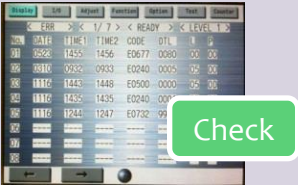
iR ADV C255iF/ C355iF Advanced Maintenance Guide

Common Process (Before)

Procedure	Detail	Note	Time
C1 Verify Customers' Concern	Ask the customer about the condition of the machine and validate any issues they have. Ask Questions to find out if there are any following issues on the machine? 1.Copy Quality 2.Jamming 3.ERROR 4.Other issues (Copier Only) 5.No Problem	◆ **Point:** - To perform efficient maintenance, we need to ask the customer about the machine condition.	**Check** **1 min**
C2 Check the Serial Number	Ensure the serial number on the machine matches the serial number that you are dispatched to.	◆ **Point:** - If the serial number is incorrect and there is more than one machine at the account that is down please notify dispatch.	**Scan** **1 min**
C3 Perform COM-TEST	➢ COPIER > Function > INSTALL>COM-TEST COM TEST	If COM-TEST is NG, fix this issue at first. If you can't fix this issue please insure the issue is resolved prior to leaving the account.	**Check** **1 min** **COM TEST** **1 min**
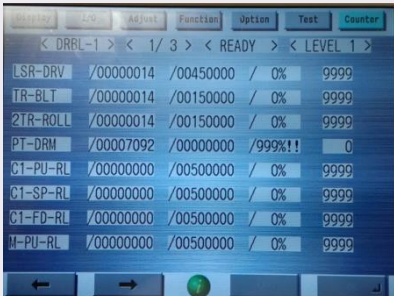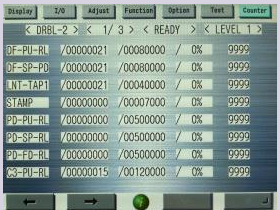
Common Process (Before)

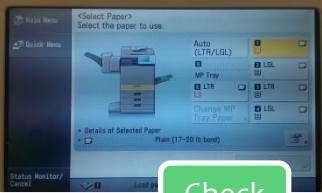| Procedure	Detail	Note	Time
C4 **Check Service Log**	1. Check Service Log	◆ **Point:** 1. Check the log to see if there is any reoccurring issues. If you see the same issues listed on the log, then the root cause hasn't been fixed. 2. Check what parts were replaced recently. These parts should not be replaced again for the same issue. 3. If the problem seems to be related to the previous call, check what the previous tech did.	**Visual Check** 1 min
C5 **Check System Software Version** **If Snapshot tool was used successfully, skip steps C5 through C8**	1. Check System Software Version ➢ COPIER>DISPLAY>VERSION **Check for latest version on e-support and recommend to update the system software to latest version** [Check] [Update]	◆ **Point:** The latest firm contains following major countermeasure. 1. As of 4/26/17 MN-CON is **19.06.01 (TP17-079)**	**Check** 1 min **COM TEST** 1 min
C6 **Check Service history** **If Snapshot tool was used successfully, skip steps C5 through C8**	1. Check ERR/JAM history ➢ **COPIER>DISPLAY>ERR** ➢ **COPIER>DISPLAY>JAM** [Check]	Address all Error and Jams.	**Visual Check** 1 min
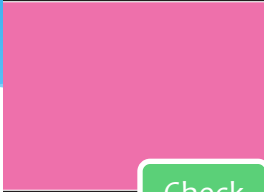
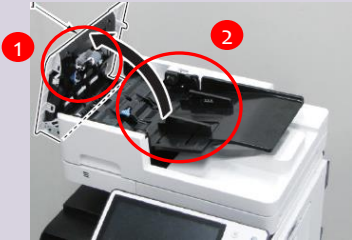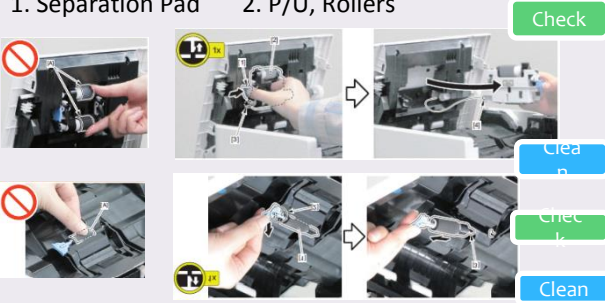# iR ADV C255iF/ C355iF Advanced Maintenance Guide

Common Process (Before)

Procedure	Detail	Note	Time
C7 — Check the Drum counter. *If Snapshot tool was used successfully, skip steps C5 through C8*	1. Check the Drum counter. ➤ COPIER>COUNTER>LF. Y-DRM-LF 28, M-DRM-LF 28, C-DRM-LF 71, K-DRM-LF 59. Check / Replace	◆ **Point:** Replace the drums by referring to the value below to eliminate drum over life related issues. **COPIER>COUNTER>LF** ➤ Y/M/C/K-DRM-LF = 100 % or above **COPIER>COUNTER>DRBL-1 > PT-DR-Y/M/C**	Visual Check 1 min / Replace 1 min
C8 — Check the P/U roller counters. *Reset the counters if parts are replaced. *Check that physical condition of the part matches the counter* If Snapshot tool was used successfully, skip steps C5 through C8	Check the roller counters. ➤ COPIER>COUNTER>DRBL-1 ➤ COPIER>COUNTER>DRBL-2. Check / Replace / Clear Counter	◆ **Point:** Replace the rollers over 100% to eliminate parts over life related JAM. **Cassette 1, Bypass:** COPIER>COUNTER>DRBL-1 ➤ C1-PU-RL ➤ C1-FD-RL ➤ C1-SP-RL ➤ C1-PU-RL ➤ M-PU-RL ➤ M-FD-RL ➤ M-SP-PD **Cassette 2,3,4:** COPIER>COUNTER>DRBL-2 ➤ C2/C3/C4-PU-RL ➤ C2/C3/C4-FD-RL ➤ C2/C3/C4-SP-RL **ADF:** COPIER>COUNTER>DRBL-2 ➤ DF-SP-PD (50K) ➤ DF-PU-RL (50K). *There is no Periodic replacement # for these parts. Inspect and replace as needed.*	Visual Check 1 min / Replace 10 min
C9 — Check the other durable counters. *Reset the counters if parts are replaced. *Check that physical condition of the part matches the counter*	1. See the Parts counter. COPIER>COUNTER>DRBL-1/DRBL-2. Check / Replace / Clear Counter	◆ **Point:** Recommend to replace the following parts over 100%. COPIER>COUNTER>DRBL-1. ➤ **Fixing** FX-UNIT (150K) ➤ **Waste Toner Container :** WST-TNR estimate (30K) ➤ **ITB** estimate (150K) ➤ **Secondary Transfer Outer Roller** estimate (150K) ➤ **Finisher :** FIN-MPDL & FIN-SPDL	Visual Check 1 min / Replace 15 min
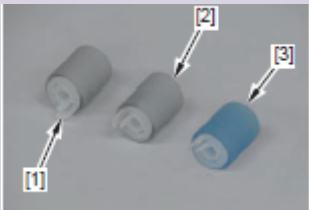
Common Process (Before)

Procedure	Detail	Note	Time
C10 Make Samples (Before Sample)	Make the following Copy/Print samples from ADF and Copy Glass. 1. PG5 2.CA7 Check Check 3. PG6 4. PG10	Any issues, resolve them as needed.	

Perform C10 and C11 at the same time to save time

Check

5 min

C11 Inspect paper Feed	Make copies from all Cassette using at least 5 originals in the ADF. <Select Paper> Select the paper to use. 1. Cassette 1 2. Cassette 2 3. Cassette 3 4. Bypass tray Check	Make copies using the following cassette. ◆**Point:** Make following jobs. 1.Double sided 2.Staple 3.Hole punch If you see the JAM, find the cause and fix that issue.	

Maintenance Process

Procedure	Detail & Action	Note	Time
M1 Clean ADF for Dust	1. Inside cover	◆ **Point:**	**Clean** **3 min**
M2 Clean ADF Rollers	Clean the rollers if they were not replaced in step No.5. 1. Separation Pad 2. P/U, Rollers Check Clean Check Clean	Clean the rollers using lint free paper with water. Sensors should be cleaned by blower brush. ➤ If the rollers are under 50% usage, cleaning may not be necessary.	**Clean** **3 min**
M3 Clean the Glass/ Optics	1. Copy Glass 2. CIS Unit Clean Clean	◆ **Point:** 1. Clean the Copy Glass with Oil cleaner (**FY9-6020-000**). 2. Check that there is no dirt or any foreign particles on the scanner system part. (CIS/CCD) 3. Check that the CIS/CCD unit moves smoothly and there is no dirt on the rail. 4. Check that there is no dew condensation found on the scanning system parts.	**Clean** **3 min**

Maintenance Process

Procedure	Detail	Note	Time
M4 Clean Rollers on Cassettes & Multi-feeder	Clean the rollers if they were not replace in step No.5. 1. Pick up Roller 2. Feed Roller 3. Separation Roller 	Clean the rollers using lint free paper with water. 1.Check that there is no foreign particles such as paper dust, etc. 2.Check that the Pick-up/Feed/Sep rollers are not worn and deformed and has no cut /dirt. 3.Check that the Feed Guide is not worn and deformed and has no cut/dirt. 4.Check all cassettes for: •Installed properly and the paper size is configured properly •**Side guides/trail edge guide plate is properly set.** •Middle plate moves smoothly and is not deformed.	**Visual Check** **Clean** **3 min**
M-5 Clean the Fixing ; Open up the side of the machine		**Take out the Fixing Assembly and clean the inlet guides** ◆ **Point:** 1. Check that the fixing film and pressure roller is not worn and deformed and has no cut/ dirt ➢ **Clean the Fixing Inlet Guide with lint-free paper moistened with alcohol** COPIER>FUNCTION>NIP-CHK **Check the nip pressure later when everything is put back together if you are experiencing fusing issues.**	**Visual Check** **Clean** **5 min**

Procedure	Detail	Note	Time
Maintenance Process Clean Inside of the machine. **CAUTION:** • Do not use alcohol because it causes melting and clouding of the sensor window. • Do not dry wipe the sensor window because it is charged to attract toner	M6 M7 M8 M9 M10	◆ **Point:** **Check that the Transfer Roller is not worn and deformed and has a cut/dirt.** **ITB** **Feed Guide / Rib** **Transfer Guide** **Static Eliminator** **Patch sensor** **Drum** ➢ **[M6]** Clean area around ITB assembly ➢ **[M7]** Clean Right inner cover area ➢ **[M8] Clean the ends of the Drum Unit** Clean the [A] part of the Drum Unit (Y) [1] with a blower [2] Clean the [A] part of the Drum Unit (Y) [1] with lint-free paper [3] ➢ **[M9] Clean the Registration Patch Sensor Unit "See Caution"** Clean patch sensor with a blower; If soiling cannot be removed, clean sensor with cotton swab moistened with water in a single direction. ➢ **[M10] Clean the Registration front Guide**	

Procedure	Detail	Note	Time
Clean Inside of the machine continued .	M11 M12	➢ **[M11] Clean the Registration Roller / Pre-Reg Roller** ➢ **[M12] Clean the Secondary Transfer Guide**	**Clean** **5 min**
M13 Clean Dust Proof Glass		➢ **Using the Dustproof Glass Tool located on the door, clean the dustproof glass from the hole of the Waste Toner Container.**	

Maintenance Process

Procedure	Detail	Note	Time
Maintenance Process — M14 Empty the Waste toner bottle.		**Empty waste toner container every service call.** Be sure to keep the waste toner container in a horizontal position when removing the container to prevent toner spillage onto floor.	Visual Check 1 min
Common Process (After) — C12 Perform Auto Adjust Gradation	1. Auto Adjust Gradation Settings/Registration>Adjustment/Maintenance >Adjust Image Quality> Auto Adjust Gradation Adjust	◆ Point: 1. If the customer uses heavy paper, perform an Auto Adjust Gradation with plain and heavy paper.	Adjust 3 min
Check — C13 Make Samples (After Sample)	Make the following Copy/Print samples from the ADF and Copy Glass. 1. PG5 2. CA7	3.PG6 4. PG 10	Check 5 min
Perform C13 and C14 at the same time to save time			
C14 Test paper Feed	Make copies from All Cassette using at least 5 originals each from ADF. 1. Cassette 1 2. Cassette 2 3. Cassette 3 4. Bypass tray Check	Make copies from the following cassettes. ◆Point: Make following jobs. 1.Double sided 2.Staple 3.Hole punch If you see the JAM, find the cause and fix that issue.	

Procedure	Detail	Note	Time
C15 Complete Documentation	Service Log [Fill out] P-PRINT [P-PRINT]	◆**Point:** 1. Let the customer print the test prints from their PC while completing the documentation. 2. Write down the <u>detail actions and all part names and part #</u> in the service log for the next visit. 3. If you change the service mode value or update the system software, make a P-Print and keep it with the Service Log and User data list.	**Fill Out** 🕐 **3 min** **P-Print** 🕐 **2 min**

Common Process (After)

Common Process (After)

Procedure	Detail & Action	Note	Time
C16 Perform COM-TEST	1. Check the ADS and make sure the Monitor symbol is indicated. 2. If the Monitor symbol is indicated, execute COM-TEST. If not, do not execute COM-TEST. ➢ COPIER > Function > INSTALL>COM-TEST	If COM-TEST is NG, fix this issue at first. If you can't fix this issue, call NTSC and get their assistance. COM TEST <INSTALL> < 2/ 3 > < READY > < LEVEL 1 > INISET-Y INISET-M INISET-C ATNR-OFF 0 ~(0) (0 ~ 1) E-RDS 1 ~(1) (0 ~ 1) RGW-PORT 443 ~(443) (1 ~ 65535) COM-TEST COM-LOG	Check 1 min COM TEST 1 min
C17 Communicate to the customer that you are leaving	Ask the customer if everything was addressed. Do they have the necessary supplies and ask if they are satisfied with your service.	◆ Address all customer issues with your service manager. Ensure they are resolved or addressed, whether they are administrative, service related or sales oriented.	Scan 1 min