

# ES3640MFP / CX3641MFP

## Component & Disassembly Guide

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# Chapter 1

## **Component Locations and their Functions**

The following provides an overview of the major components and description of their various functions within the printer.

### **Electrical Components**

The following provides an overview of the major Printed Circuit Board components

### **Fans**

Location of Fans used to circulate air throughout the printer.

### **Solenoids and Clutches**

Location of solenoids and clutches used to actuate various gates and rollers.

### **Motor Assemblies**

Locations for all of the printer's motors.

### **Machine Assemblies**

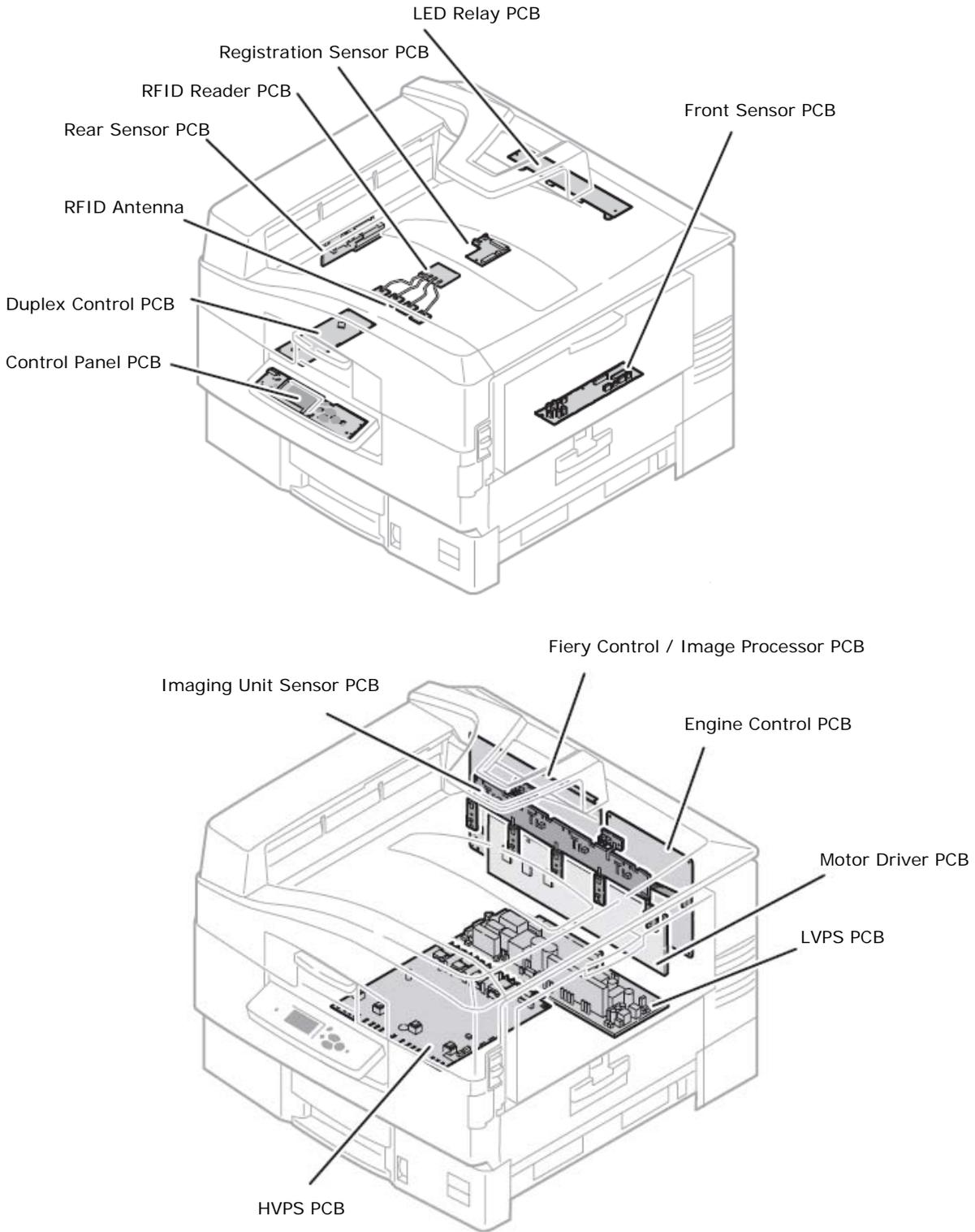
Locations for all of the printer's major assemblies.

### **Sensors in the Printer**

Identifies the location of each sensor in the printer

# 1.1 Electrical Components

The following provides an overview of the major electrical components and description of their various functions within the printer.



## **Control Panel**

The Control Panel is the primary interface to the printer's functions and includes the display, keypad, and status LED.

## **Fiery Control PCB**

The Fiery Control PCB receives host data through the USB or Ethernet port. The received data is buffered and stored, and then sent to the print engine in a rasterized format. The Fiery Control Board connects to the Engine Control Board directly.

The Fiery Control board contains:

- Memory – RAM
- Flash DIMM
- NVRAM - Control Panel and network settings.
- Configuration Chip - determines the printer configuration.
- Hard Drive

## **Engine Control Board**

The Engine Control Board synchronizes the print process by controlling the LED Heads, motors, fans, sensors, solenoids, clutches and Fuser temperatures. The Engine Control Board also controls the voltages to the Imaging Units and the print speed to compensate for changes in media and environmental conditions.

Major Functions:

- Communicates with the Fiery Control PCB
- Receives information from the sensors and/or switches.
- Generates the image based on information from the Fiery Control Board.
- Controls high-voltage sent to the Imaging Unit to perform charging development, primary and secondary transfer.
- Distributes the low-voltage DC power from the Low-Voltage Power Supply.

## **Registration Sensor Board**

Located in the Registration Sensor Assembly, the Registration Sensor Board includes the two sensors that monitor color registration.

## **LED Relay Board**

Distributes power from the LVPS to the four LED Heads.

## Imaging Unit Sensor Board

The Imaging Unit Sensor Board communicates with the Engine Control Board and supplies voltage for the two Imaging Unit Fans and Fuser Fan. The board also includes the four Low Toner Sensors that monitor toner levels in the Imaging Units, and the Imaging Unit Position sensor that detects the image drum Up / Down position.

- Low Toner Sensors [C] [M] [Y] [K] Detects level of toner in the Imaging Unit.
- Toner Cartridge in Sensors [C] [M] [Y] [K] Detects the presence of the Toner Cartridge in the holder.
- The Up / Down Position Sensor Detects the Image Drum Up / Down position.
- Imaging Unit Drum Phase Sensors Detect the position of the Imaging Unit Drums.

## Motor Driver Board

Located directly below the Imaging Unit motors, the Motor Driver Board receives +24 V from the LVPS and distributes power and control signals to these devices:

- Imaging Unit Motors
- Toner Motors
- Waste Toner Motor
- Fuser Motor
- Tray 1 Paper Size Switches

## Feeder Board

Located in the FDR Registration Unit, the Feeder Board communicates with the Motor Driver Board and provides connections for these components:

- Registration Clutch #2
- Registration Sensor #2
- Feed-Out Sensor #2
- Tray 1 No Paper Sensor
- Tray 1 Door Interlock.

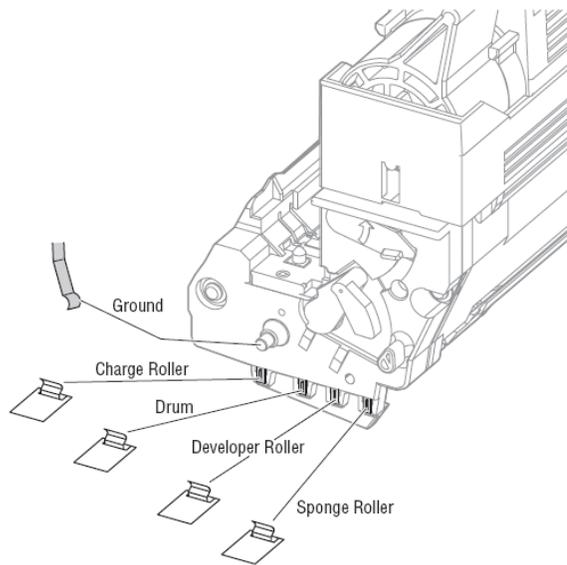
Integrated on the board are the Tray 1 Level Sensor and Tray 1 Low Paper Sensor.

## HVPS

Located under the Transfer Unit and HVPS Cover, the HVPS supplies high-voltage to the Transfer Unit and Imaging Units. The HVPS also provides connections for the Front Door Interlock that disables +24V when opened, the Waste Toner Container Full, and Detect Hall-effect sensors.

## HVPS Imaging Outputs

Output	Voltage	Purpose
CH	-0.8 to -1.4kV	Charge Roller voltage
DB	-100 to -450V/250V	Developer Roller voltage
SB	-300 to -700V	Sponge Roller voltage
BB	Drop from SB Output with Zener	Cleaning Blade voltage
TR	0 to 7kV	Transfer Roller voltage (not shown)



## LVPS

The LVPS supplies AC power from the power source to the Fuser heater. Generates and supplies stable low-voltage DC power (+5 VDC, and +24 VDC) to be used for the logic and other circuits within the printer. The LVPS includes the LVPS Board with attached Power Switch, the AC Harness, a Fan, and the box enclosure.

### LVPS Outputs

Output Voltage	Purpose
+5 V (1)	Engine Control Board power
+5 V (2)	LED Head power
+5 V (3)	Fiery Controller PCB Power
+24 V	For motor, clutch, and solenoid drive

## Front Sensor Board

Located under the Registration Roller #1, the Front Sensor Board communicates with the Motor Driver Board and connects to these components:

- Media Thickness Sensor
- Registration Clutch #1
- Temperature/Humidity Sensor
- MPT Home Position Sensor
- OHP (Transparency) Sensor
- MPT Level Sensor
- MPT No Paper Sensor

Mounted directly on the board are the Registration Sensor #1 and Transfer Unit Entrance Sensor.

## Rear Sensor Board

Located behind the Rear Sensor Board Cover on the Exit Assembly, the Rear Sensor Board communicates with the Engine Control Board and connects to these components:

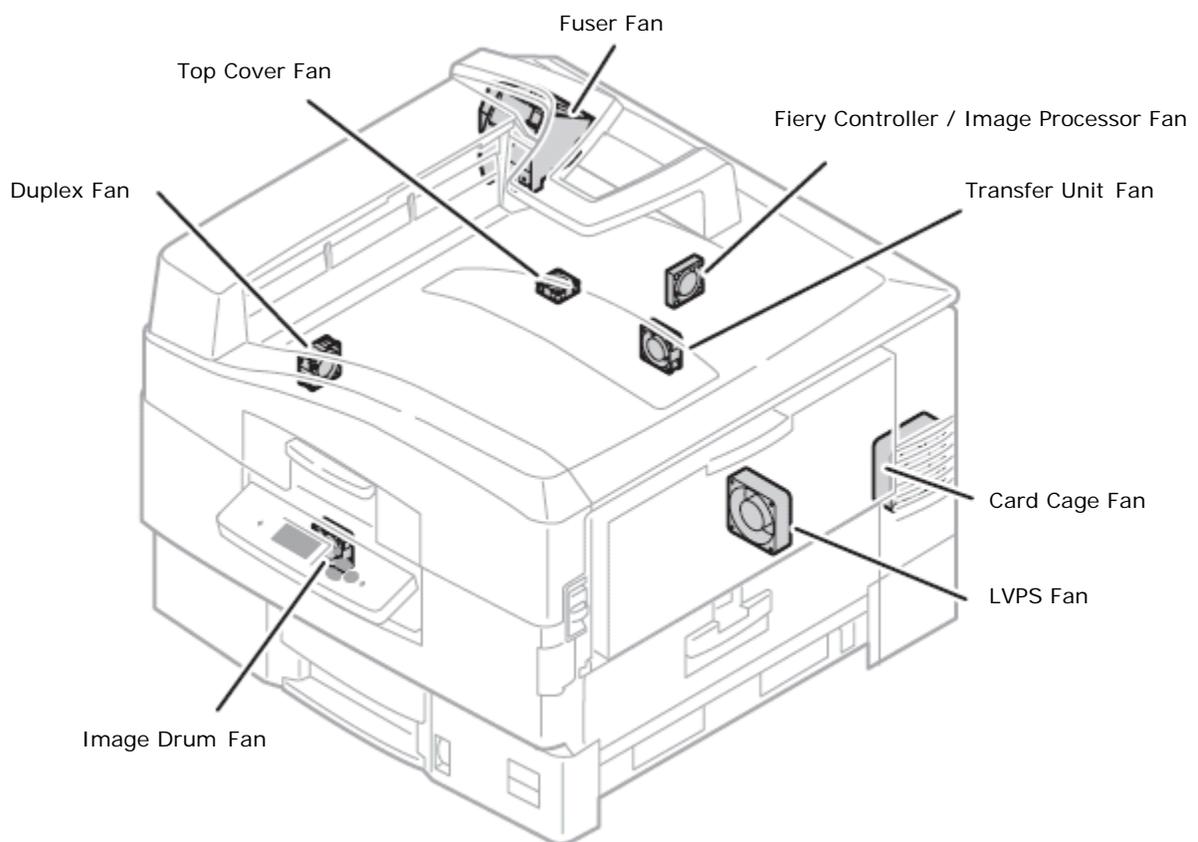
- Fuser Exit Sensor
- Stack Full Sensors for Top and Side Output Trays
- Job Offset Position Sensor
- Side Output Tray Detect Sensor
- Right Door Detect Sensor
- Exit Gate Solenoid
- Mounted directly on the board is the Offset Paper End Sensor.

## 1.2 Fans

A number of fans are used to circulate air throughout the printer.

**Caution:** when servicing a fan, note the orientation of the Fan label before removal.

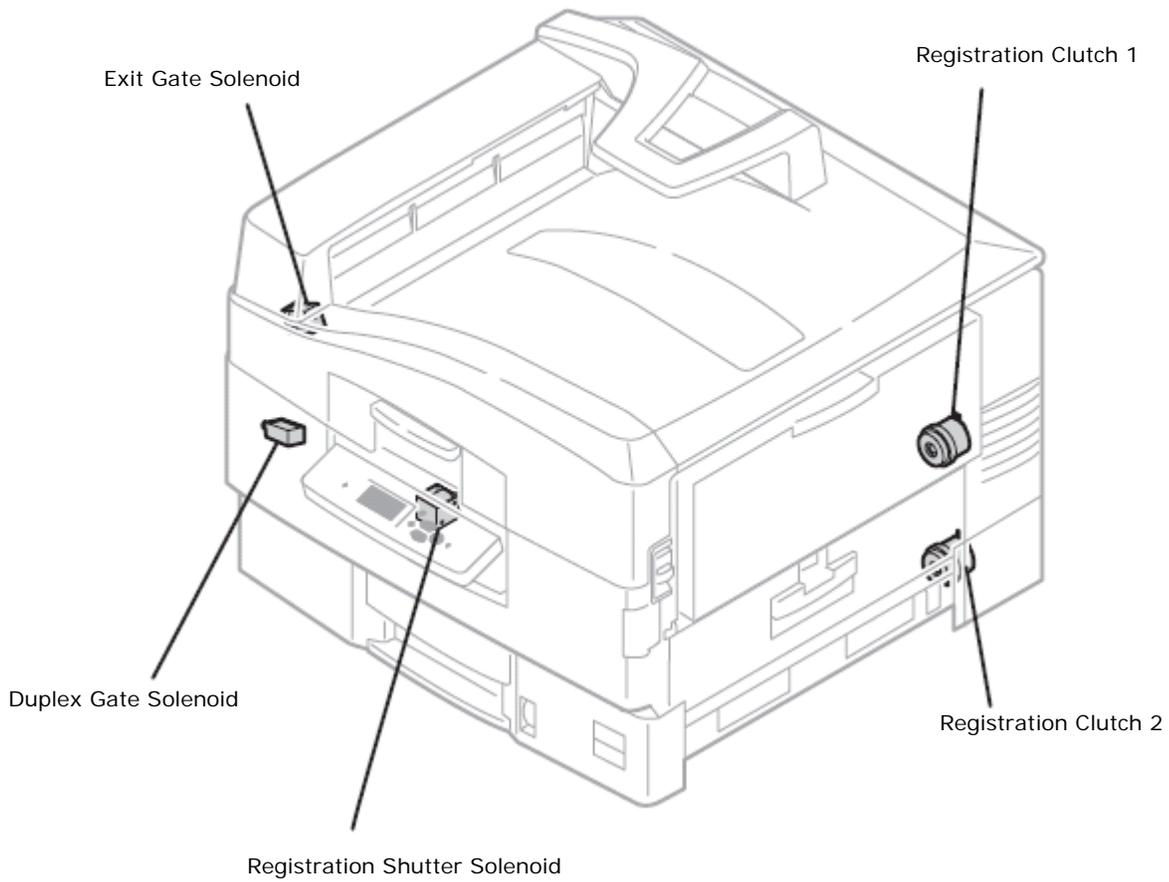
- Top Cover Fan located above the Cyan LED Head in the Top Cover
- Card Cage Fan located behind the Right Rear Cover
- Fuser Fan located at the upper left rear corner underneath the Top Cover
- Imaging Unit Fan located behind the Control Panel
- Transfer Unit Fan located below the Imaging Unit Motors
- Fiery Control PCB Fan located in the Card Cage
- LVPS Fan located in the LVPS
- Duplex Unit Fan inside the Duplex Unit



\*\*\*\*\* Use the "Motor Clutch Test" in Chapter 2 to test fan operation\*\*\*\*\*

## 1.3 Solenoids and Clutches

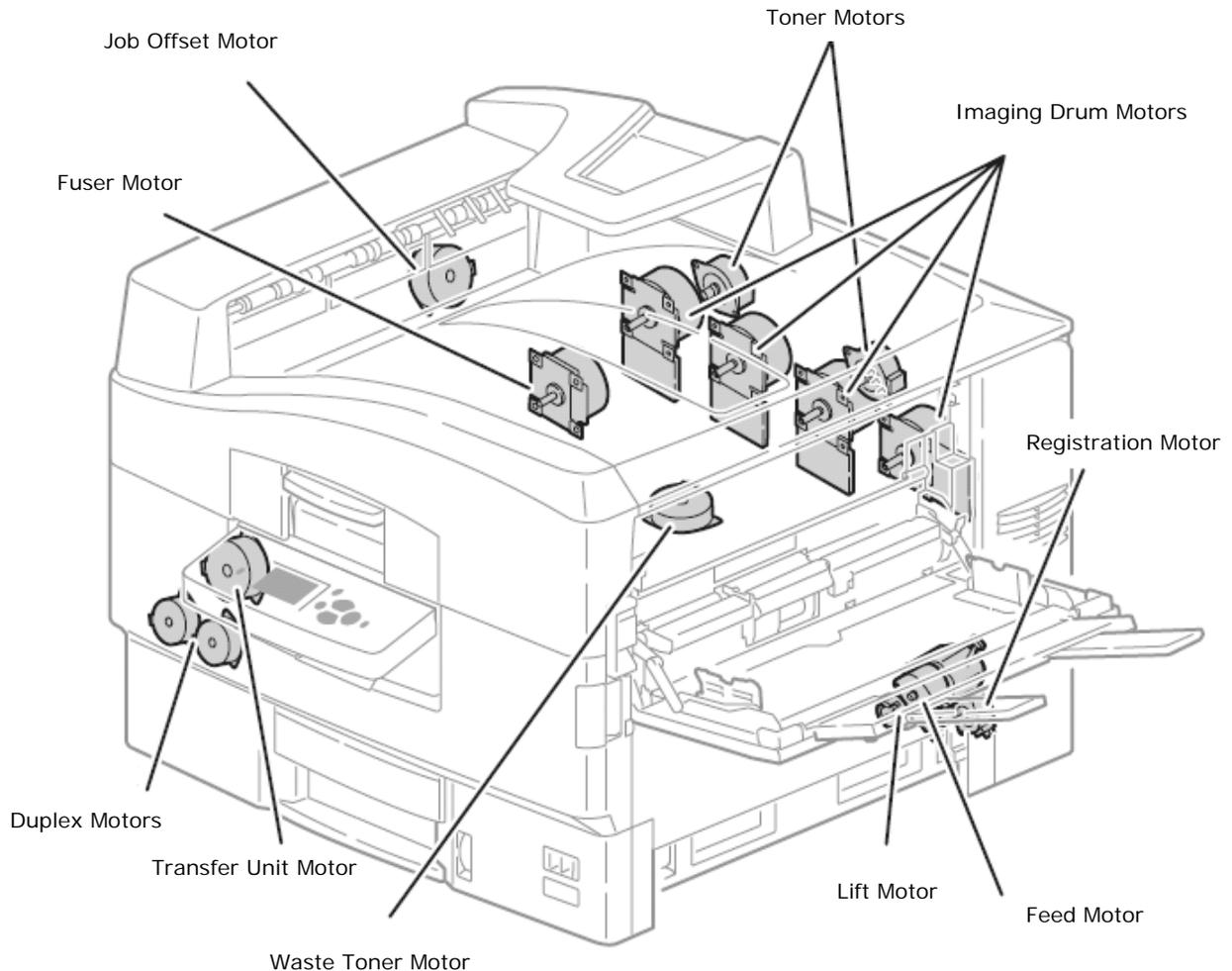
A number of solenoids and clutches are used to actuate various gates and rollers. The figure below shows the position of all the solenoids and clutches in the Print Engine.



\*\*\*\*\* Use the "Motor Clutch Test" in chapter 2 to test Solenoid - Clutch operation\*\*\*\*\*

## 1.4 Motor Assemblies

The following illustration shows the location for all the printer's motors.

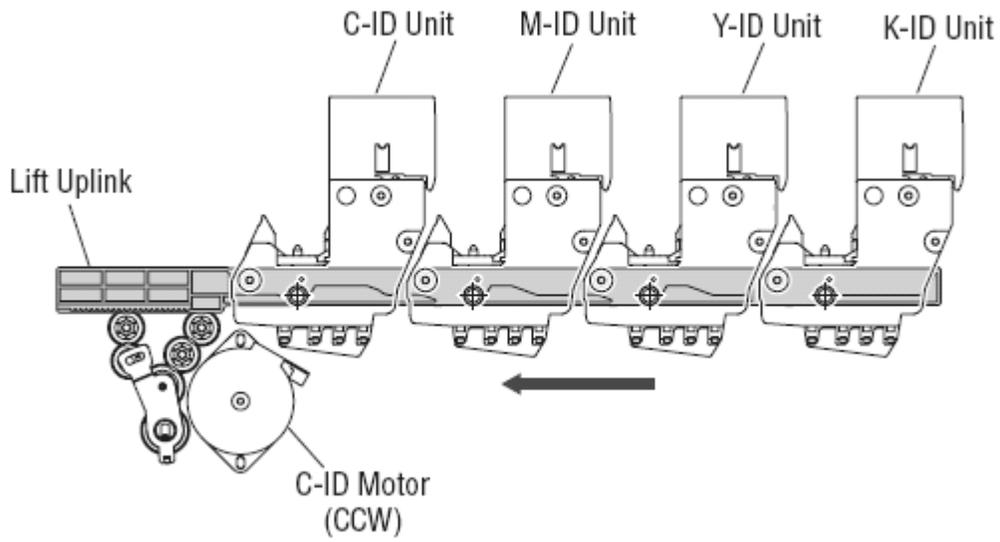


### Imaging Unit Drive Motors

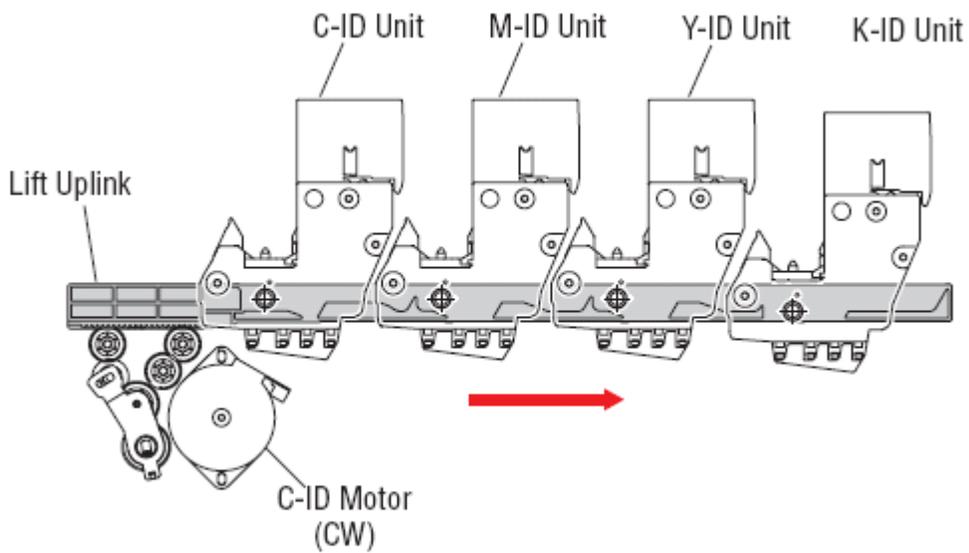
The Imaging Unit Motors drive the Imaging Unit drums, toner Agitation Bars and Agitation Gears. Imaging Unit drive varies depending on the print mode. In addition to the developing components, the Cyan Imaging Unit Motor uses an Up / Down mechanism to raise the CMY Imaging Units during monochrome printing. When the Cyan Imaging Unit Motor rotates (CCW), the Up / Down Mechanism slides to the left and, as indicated in the figure below, each Imaging Unit moves down for color printing. When the Cyan Imaging Unit Motor rotates (CW), the Up / Down Mechanism slides to the right, the CMY Imaging Units move up for black and white printing.

\* Use the "Motor Clutch Test" in the Service & Troubleshooting Guide to test Motor operation\*

## ID Unit Operations during Color Printing

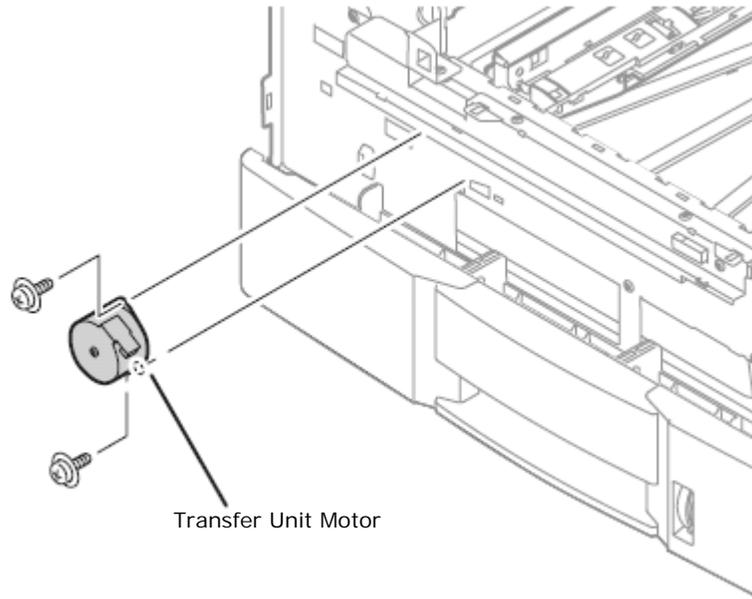


## ID Unit Operations during Monochrome Printing



## Transfer Unit Motor

The Transfer Unit motor turns clockwise driving the Transfer Unit belt. Inside the Transfer Unit are four Transfer Rollers located just under each Imaging Unit drum. When the Transfer Unit Motor and Imaging Unit Motors are activated, they carry the paper on the transfer belt to the Fuser. The voltages applied to the Transfer Rollers attract the toner image from the Imaging Unit drum to the media.

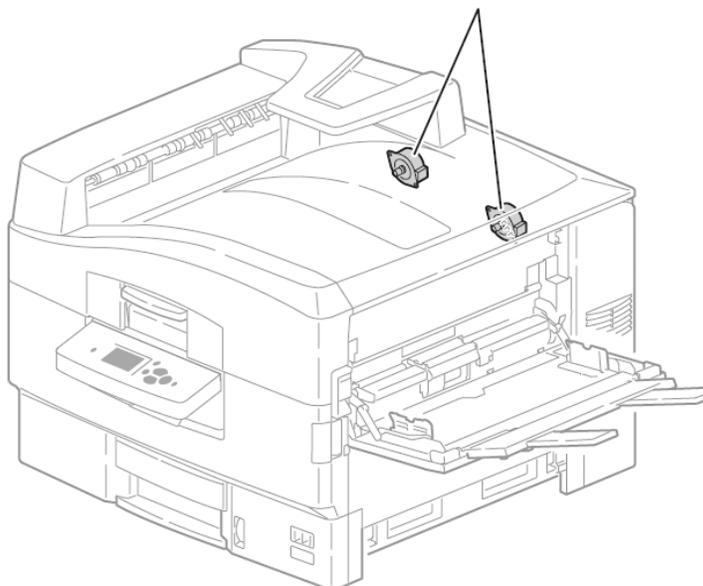


\*\*\*\*\* Use the "Motor Clutch Test" in Chapter 2 to test Motor operation\*\*\*\*\*

## Toner Motors

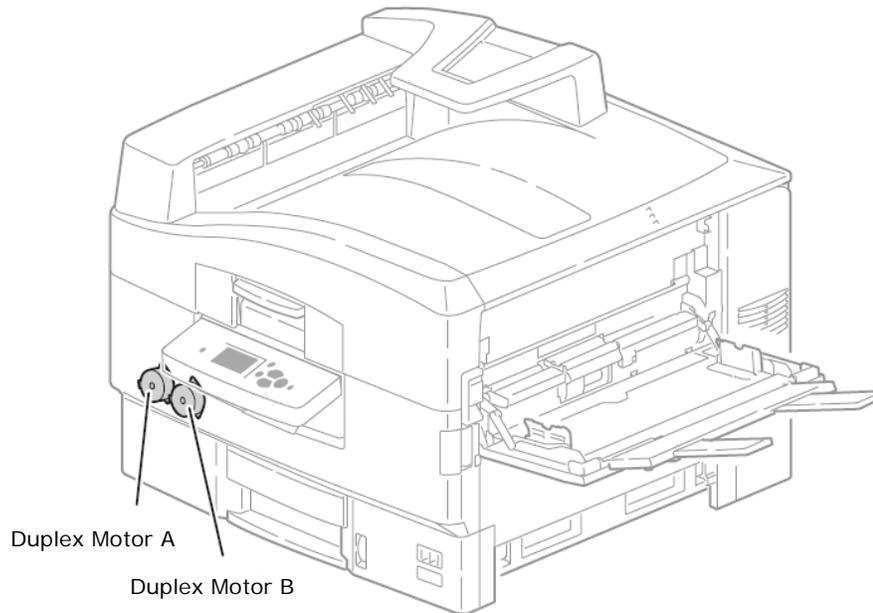
The CM and YK Toner Motors are mounted above the Imaging Unit Motors and drive the Toner Cartridge Supply Augers and Agitation Springs to deliver toner to the Imaging Units.

Toner Motors



## Duplex Drive Motors

Two motors are used to capture and transport paper in the Duplex Unit. Duplex Motor A drives the Entrance Roller CCW to capture paper, then CW to drive the media into the Transport Rollers. Motor B uses a series of belts to drive the four Transport Rollers that move media to the Registration Assembly.

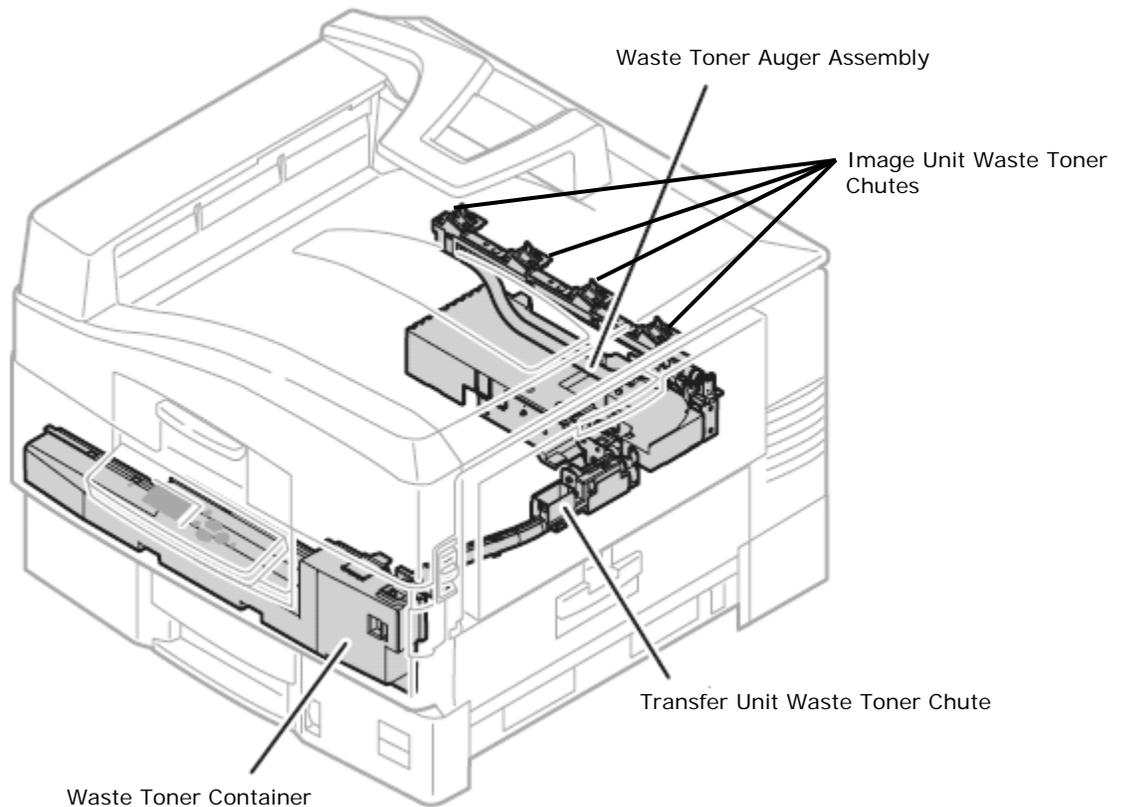


\*\*\*\*\* Use the "Motor Clutch Test" in Chapter 2 to test Motor operation\*\*\*\*\*

## 1.5 Machine Assemblies

### Waste Toner Recovery

Waste toner recovery moves the toner collected from the Imaging Unit drums and Transfer Unit belt to the Waste Toner Container located at the front of the printer. Driven by the Waste Toner Motor, separate Augers in the Waste Toner Manifold and Waste Toner Duct pull toner through a tube to the Waste Toner Container. Waste toner is moved within the Container by another Auger driven by the Waste Toner Motor.



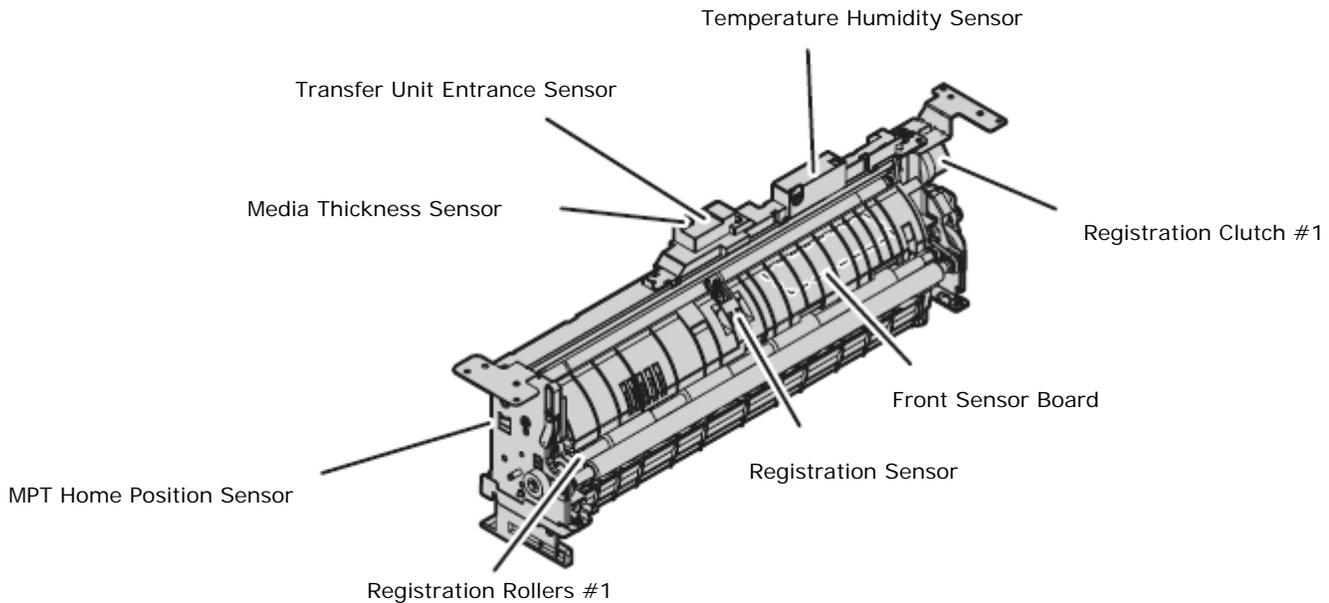
Status of the Waste Toner container is monitored by the Engine Control Board. The Engine Control Board receives count signals from the Waste Toner container Auger Rotation Sensor located behind the Right Front Cover. This Hall-Effect sensor is activated each time a small, magnetic disk, embedded in the Container auger gear, passes in front of the sensor. The auger revolutions are converted into a life count.

- Waste Toner Container detect Switch detects the presence of the Waste Toner Container.
- Waste Toner Container Full Sensor detects when the Waste Toner Container is full.
- Waste Toner Container Auger Rotation Sensor detects revolutions of the Container auger.
- Waste Toner Auger Rotation Sensor detects revolutions of the manifold auger.
- Waste Toner Motor drives augers in the Waste Toner Manifold, Waste Toner Duct, and Waste Toner Container.

\*\*\*\*\* Use the "Motor Clutch Test" in Chapter 2 to test Motor operation\*\*\*\*\*

## Registration Assembly

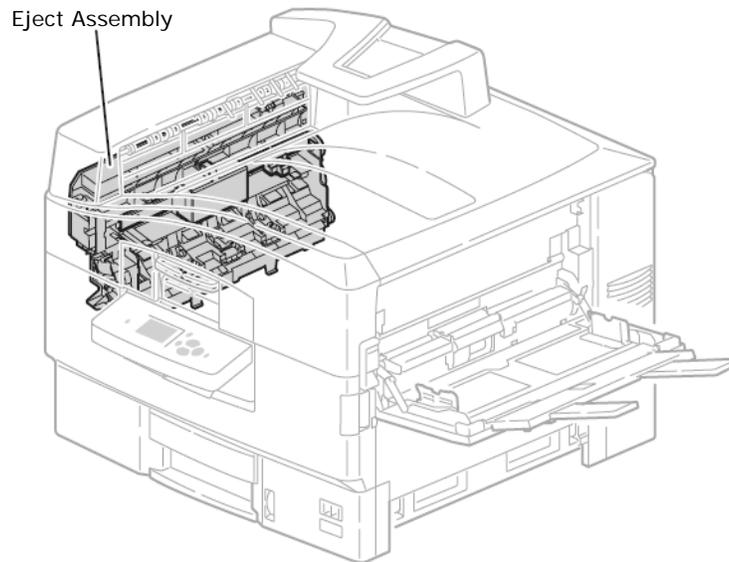
Shown in the following figure are the components associated with the Registration Assembly.



- MPT Home Position Sensor detects the position of the Feed drive.
- Registration Sensor #1
  - Detects when the media's leading edge has reached the Registration Rollers.
- Registration Rollers #1
  - Driven by the Registration Motor through the Registration Clutch, the Registration Rollers work to correct media skew and transport media to the Transfer Unit belt.
- Registration Clutch #1
  - Transfers drive from the Registration Motor to the Registration Rollers.
- Transfer Unit Entrance Sensor
  - Detects the arrival of the media at the Transfer Unit.
- Media Thickness Sensor
  - Produces a signal that varies dependent on media thickness.
- Temperature/Humidity Sensor
  - Monitors environmental conditions surrounding the printer.
- Front Sensor Board
  - Communicates the status of MPT and Registration Assembly sensors to the Motor Driver Board.

## Eject Assembly

The Eject Assembly uses rollers, solenoids, sensors, and diversion gates to handle media exiting the Fuser.



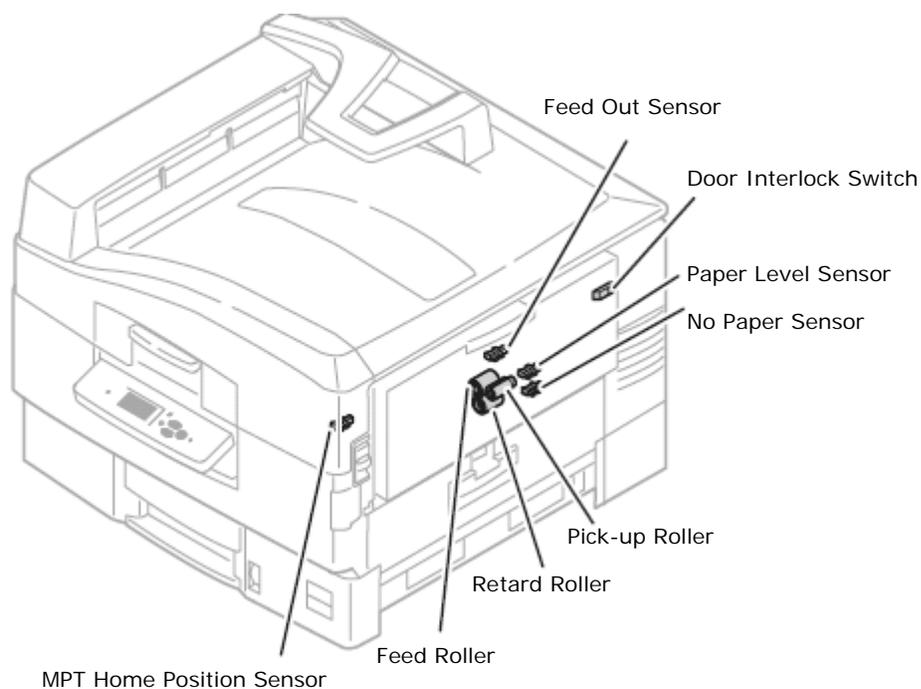
### **Eject Assembly components include:**

- Exit Gate - The Exit Gate switches the paper path. When the Exit Gate is in its resting position, paper is fed to the Top Output Tray. When it is lowered by the Exit Gate Solenoid, paper is fed to the Side Output Tray or Duplex Unit.
- Exit Gate Solenoid - Switches the paper discharge path between the Top and Side Output Trays.
- Side Output Tray Full Stack Sensors - These sensors use an actuator to detect when the Top or Side Output Tray is full.
- Fuser Exit Sensor - The Fuser Exit Sensor detects whether paper remains in the output rollers.
- Door Detect Sensor - Detects whether the Door is open or closed.
- Side Output Tray Detect Sensor - Detects whether the Side Output Tray is open or closed.
- Offset Home Position Sensor - The Offset Home Position Sensor detects the roller position.
- Job Offset Trailing Edge Sensor - Detects the trailing edge of the media as it leaves the Eject Assembly.
- Exit Rollers - Driven by the Fuser Motor, the Exit Rollers transport media from the Fuser through the Eject Assembly.
- Duplex Gate - Actuated by the Duplex Gate Solenoid in the Duplex Unit, the Duplex Gate directs media through the upper portion of the Duplex Unit and returns it to the Registration Assembly for printing on side 2.

## MPT Tray

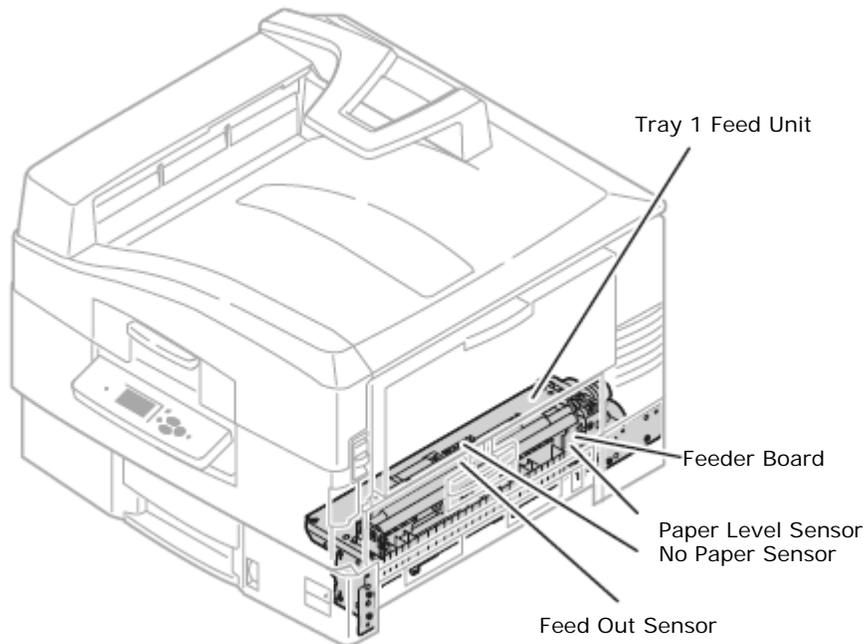
The (MPT) Tray feeds standard and custom size media into the printer. The printer's Feed Motor, shared with Tray 1, drives the (MPT) Feed Roller to feed media from the tray. (MPT) components include:

- Feed Rollers (Feed, Retard, and Pick-up) - Transport media from MPT Tray to the Registration Assembly.
- MPT Tray No Paper Sensor - Detects when media is in MPT Tray
- MPT Tray Level Sensor - Detects the presence of media at the Pick-up Roller.
- MPT Home Position Sensor - Located in the Registration Assembly, it detects the position of the Feed drive.
- Feed-Out Sensor - Detects media exiting the MPT Tray Feed Rollers
- OHP Sensor - Detects when transparency media is being fed to the Registration Assembly.



## Tray 1 - Universal Feed Tray

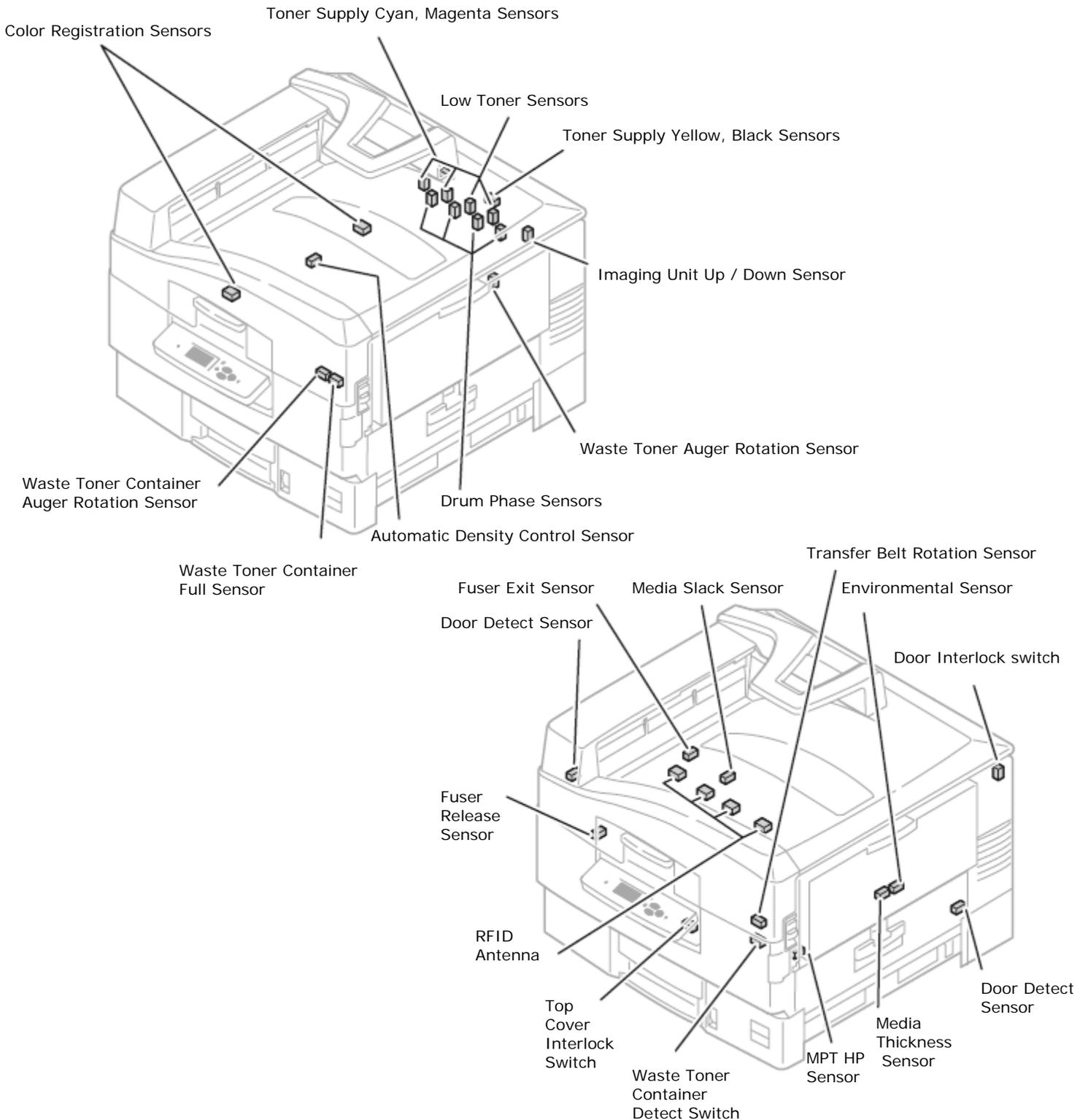
- Level Sensor - The Level Sensor uses an actuator to determine whether paper in the tray is lifted to the optimum feeding position. When the flag of the actuator leaves the sensing area, the sensor detects that the paper has been lifted.
- Feed-Out Sensor - The Feed-Out Sensor detects a paper jam in the tray by the paper position and sensor transition time.
- No Paper Sensor - The No Paper Sensor uses an actuator to determine whether the tray is empty. When the actuator lowers, the No Paper Sensor signal goes High indicating an empty tray.
- Feeder Board - The Feeder Board communicates sensor information to the Motor Driver Board.



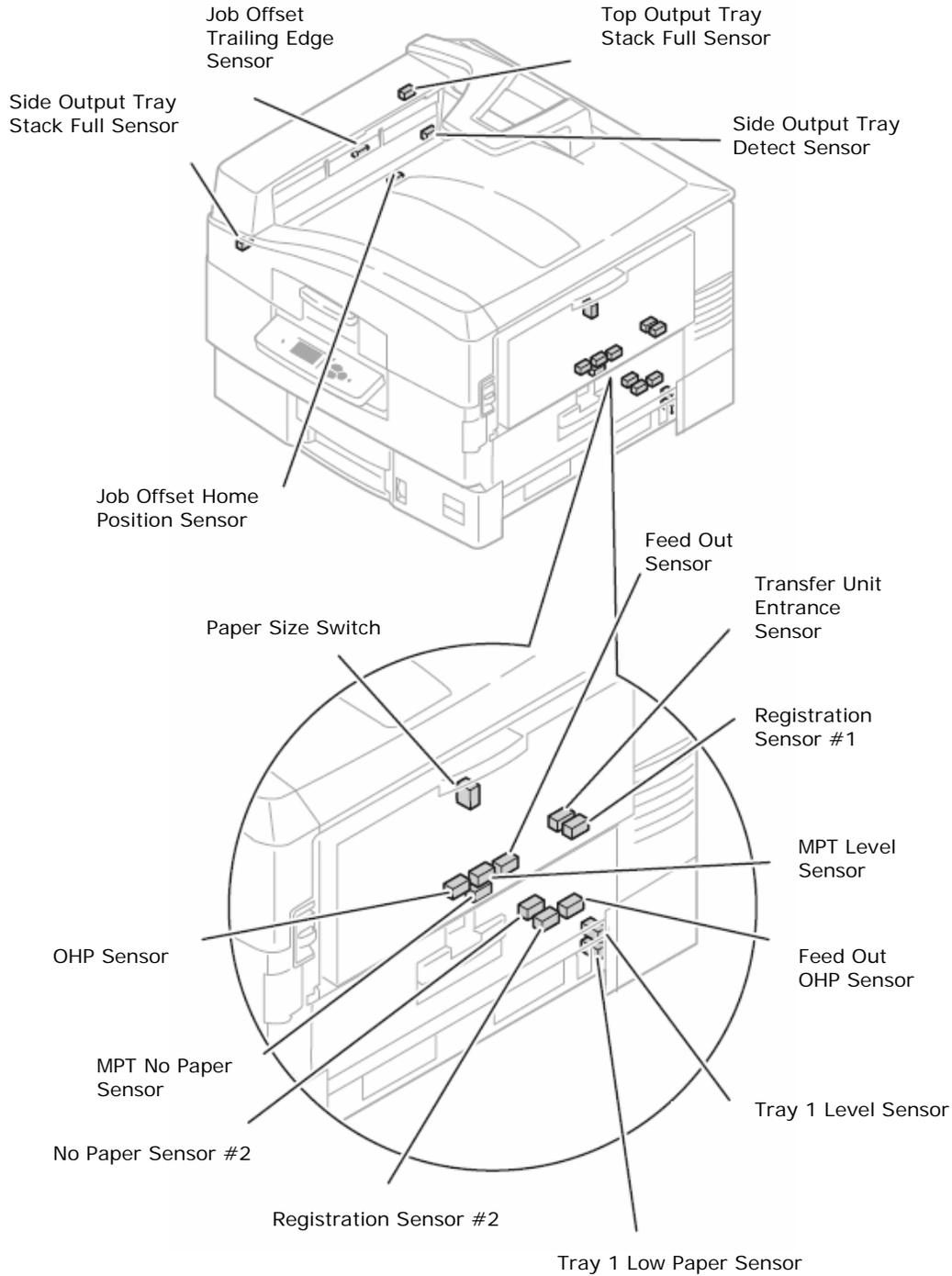
## 1.6 Sensors in the Printer

The following illustrations identify the location of each sensor.

\*\*\*\*\* Use the "Switch Scan Test" in **Chapter 2** to test Sensor operation\*\*\*\*\*



The diagram below identifies the paper feed sensors.



## Sensor Functions

The following table lists the function of each sensor.

Sensor	Function	Sensor State
Top Output Tray Stack Full Sensor	Detects the Top Output Tray stack height.	On = not full Off = full
Side Output Tray Stack Full Sensor	Detects the Side Output Tray stack height.	On = not full Off = full
Side Output Tray Detect Sensor	Detects whether the Side Output Tray is open or closed.	On = open Off = closed
Job Offset Home Position Sensor	Detects the position of the Job Offset carriage	On = not home Off = home
Job Offset Trailing Edge Sensor	Detects the trailing edge of the media for the Offset carriage.	On = media present Off = media absent
Top Cover Interlock	Detects the position of the Top Cover.	On = open Off = closed
Door Interlocks	Detect the position of the Doors.	On = open Off = closed
Waste Toner Container Detect Switch	Detects the presence of the Waste Toner Container.	On - present Off - absent
Fuser Exit Sensor	Detects media at the Fuser Exit.	On: media present Off: media absent
Fuser Temperature	Monitors the Fuser process temperature	Reference voltage
Media Slack Sensor	Detects media slack at the Fuser entrance.	On: slack Off: no slack
Media Thickness Sensor	Adjusts print parameters according to media thickness.	Reference voltage
Temperature/ Humidity Sensor	Measures environmental conditions to calculate the optimal transfer voltage.	Reference voltage
(MPT) Feed-Out Sensor #1	Detects media leaving the Feed Rollers.	On: media present Off: media absent
(MPT) No Paper Sensor	Detects the absence of media in the tray.	On: media present Off: media absent
(MPT) Level Sensor	Detects the (MPT) media supply.	On: media present Off: media absent
(MPT) Home Position Sensor	Detects the position of the (MPT) Turn Clutch for pick operations	On: not home Off: home
Transfer Belt Rotation Sensor	Used to count Transfer Unit belt revolutions	Voltage pulse
Color Registration Sensors	Monitors color registration pattern produced during automatic color registration processing.	Reference voltage
Fuser Release Sensor	Detects the presence of the Fuser.	On: absent Off: present
Waste Toner Auger Rotation	Detects Waste Toner Auger rotation	Voltage pulse
Waste Toner Container Auger Rotation	Detects Waste Toner Container Auger rotation. Provides count signal for Container life.	Voltage pulse
Waste Toner Container Full	Detects when the Waste Toner Container is full.	On: full Off: not full
Transfer Unit Entrance Sensor	Detects media leaving Registration Roller #1.	On: media present Off: media absent

Registration Sensor #1	Detects media at Registration Roller #1.	On: media present Off: media absent
Duplex Entrance Sensor	Detects media entering the Duplex Unit.	On: media present Off: media absent
Duplex Reverse Sensor	Detects the trailing edge and signals the Duplex Gate Solenoid to switch position.	On: media present Off: media absent
Duplex Front Sensor	Detects the trailing edge and exit from the Duplex Unit.	On: media present Off: media absent
Duplex Rear Sensor	Detects the leading edge following inversion.	On: media present Off: media absent
Toner Cartridge RFID's	Detects the type of Toner Cartridge installed.	Data
Low Toner Sensors	Detects full, low, and empty state of Toner Cartridges.	Sensor state transition Timing
Imaging Unit Drum Phase Sensors	Detect the position of the Imaging Unit drums.	On: absent Off: present
Up / Down Sensor	Detects the position of the Up / Down Sensor	On: up Off: down
OHP Sensor	Detects the presence of transparency media.	On: opaque Off: transparent
Paper Size Switches	Detects the size of media loaded in the universal trays.	Switch Combinations
Feeder Registration Sensor	Detects media at the universal tray's Registration Roller	On: media present Off: media absent
Feeder Level Sensor	Detects the lift position of media in the universal trays.	On: media present Off: media absent
Feeder Feed-Out Sensor	Detects media leaving the universal tray's Feed Rollers	On: media present Off: media
Feeder No Paper Sensor	Detects the absence of media in the universal trays.	On: media present Off: media absent
Feeder Low Paper Sensor	Detects a low condition of media loaded in the universal trays.	On: media present Off: media absent

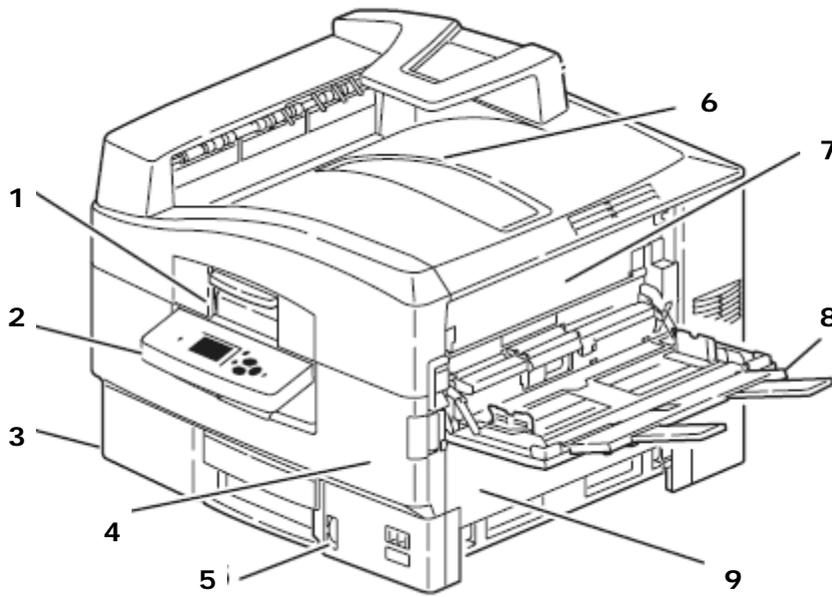
# Chapter 2

## Printer Disassembly

The following details the disassembly of the printer unit. For re-assembly follow the procedure in reverse order

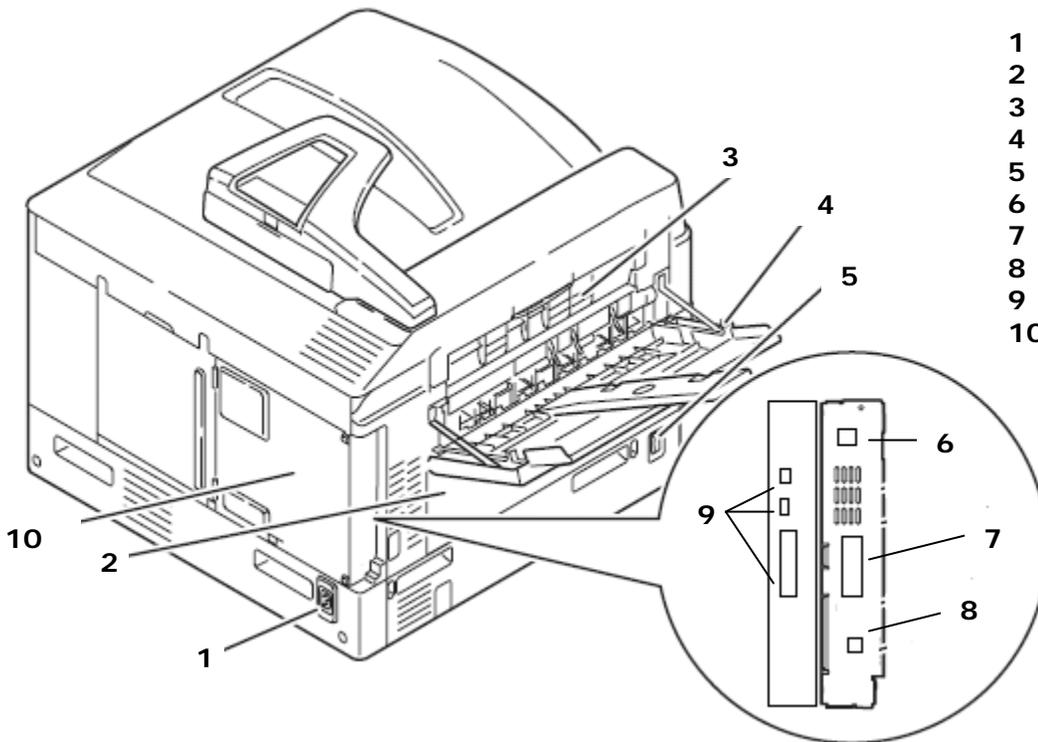
### Parts of the Printer

#### Front View



- 1 Top Cover Latch
- 2 Control Panel
- 3 Paper Tray 1
- 4 Front Door
- 5 Paper Level Indicator
- 6 Top Output Tray
- 7 Right Upper Door
- 8 MPT Tray
- 9 Right Lower Door

#### Rear View

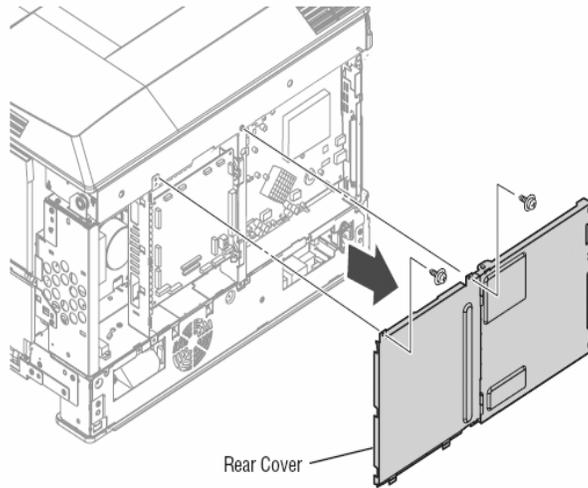


- 1 AC Power Receptacle
- 2 Lower Left Door
- 3 Upper Left Door
- 4 Side Output Tray
- 5 Main Power Switch
- 6 Ethernet Port
- 7 Parallel Port
- 8 USB Port
- 9 Scanner Interface
- 10 Rear Cover

## 2.1 Covers

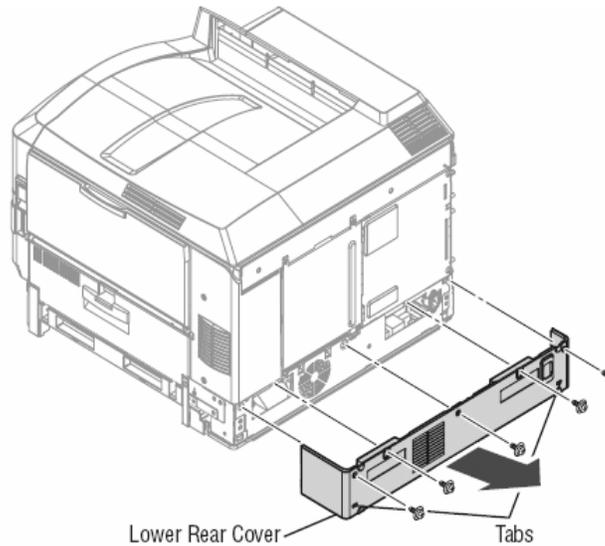
### Rear Cover

1. Loosen the 2 captive thumbscrews.
2. Remove the 2 (metal, 6 mm) screws that secure the Rear Cover to the frame.



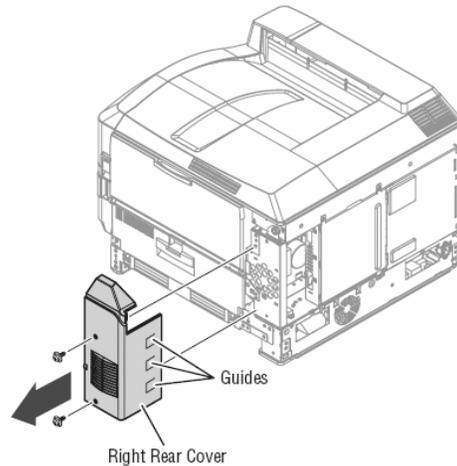
### Lower Rear Cover

1. Remove 5 (metal, 10 mm) screws from the Lower Rear Cover.
2. Using a screwdriver, release the 2 tabs located near the bottom of the Lower Rear Cover.
3. Remove the Lower Rear Cover.



## Right Rear Cover

1. Open the Top Cover.
2. Open Right Lower Door.
3. Remove 2 (metal, 6 mm) screws from the Right Rear Cover.
4. Release the 3 guides and remove the cover.

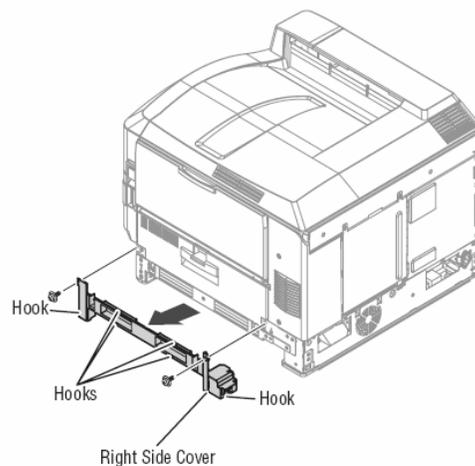


## Right Side Cover

Removal of the Right Side Cover from printers with optional Hi Cap Feeders installed requires the right hand side of the print engine to be lifted approximately three inches to clear the lower tray. Use a ream of paper, or similar object, to hold the printer above the HCF while removing the cover.

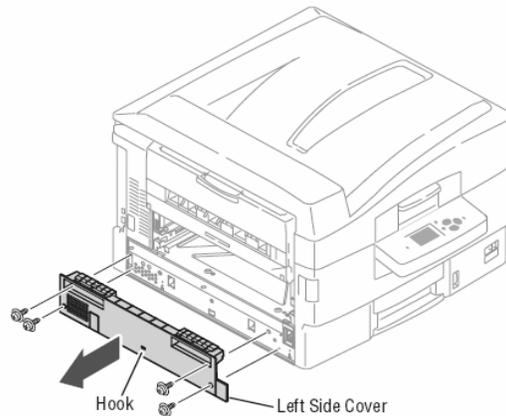
**Caution:** Use care not to over stress the plastic while prying the cover to release the hooks.

1. Remove the Lower Rear Cover.
2. Pull out Tray 1 to access 1 (metal, 10 mm) screw on the left side of the Right Side Cover.
3. Remove 1 (metal, 10 mm) screw from the right side of the Right Side Cover.
4. Using a small screwdriver release the 2 hooks at the top and bottom of each hand hold.
5. Release the hook at the right.
6. Lift printer up slightly and remove the Right Side Cover.



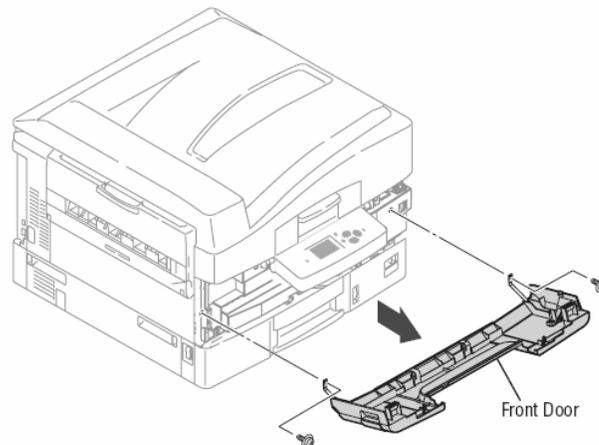
## Left Side Cover

1. Open the Top Cover.
2. Remove the Duplex Unit, if present.
3. Remove 4 (metal, 10 mm) screws securing the Left Side Cover.
4. Using a screw driver, release the center tab on the bottom of the Left Side Cover.
5. Flex the Left Side Cover slightly and pull down on the cover to release it from the printer.



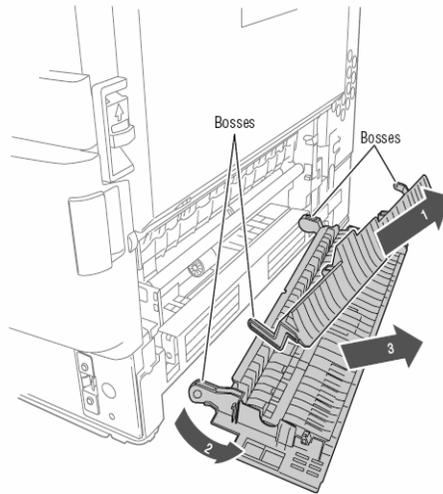
## Front Door

1. Remove 2 (metal, 6 mm) screws securing the Front Door Stopper Straps to the printer.
2. With the Front Door perpendicular to the front of the printer, slide the Front Door to the right to disengage the pivot pins and remove the Front Door.



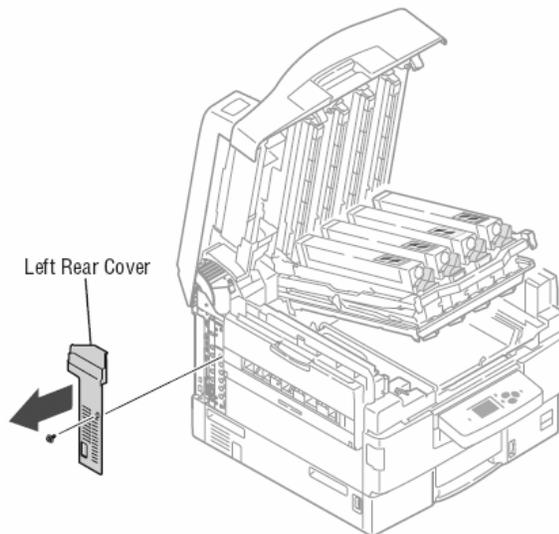
## Right Lower Door

1. Remove the Right Side Cover.
2. Open Right Lower Door.
3. Remove the Right Lower Door Chute by sliding the chute to the left and gently prying the left hinge point from the Right Lower Door pivot.
4. Slide Right Lower Door to the left to release the bosses from the holes in the frame.



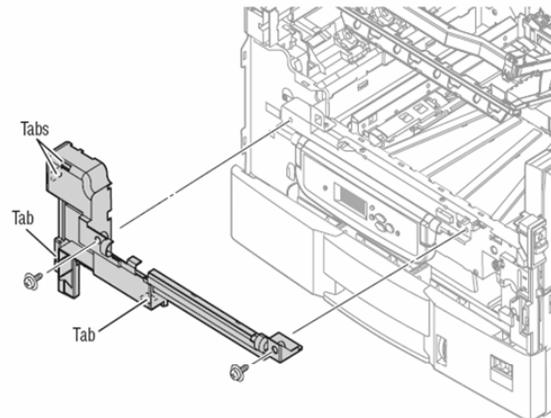
## Left Rear Cover

1. Open the Top Cover.
2. Remove 1 (metal, 6 mm) screw from the Left Rear Cover.



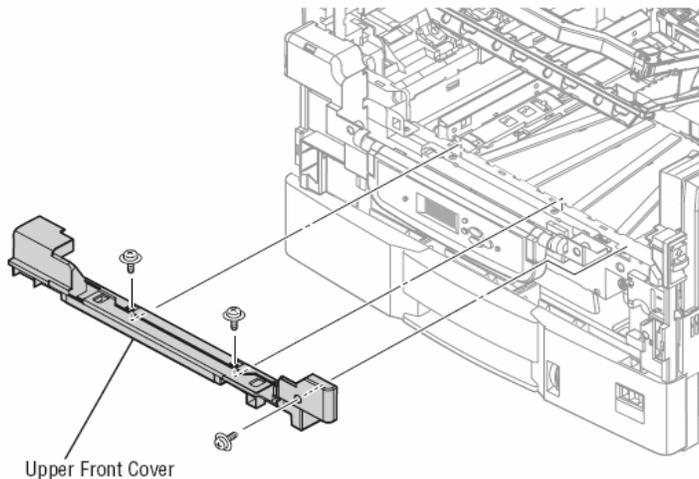
## Left Front Cover

1. Open the Top Cover and lift the Basket Assembly.
2. Open the Front Door.
3. Remove the Waste Toner Container, if present, and then insert the Waste Toner Plug as shown on the Container label.
4. Remove 1 (metal, 6 mm) screw that secures the left side Stopper Strap on the Front Door.
5. Remove 2 (metal, 10 mm) screws securing the Left Front Cover.
6. Release the 3 tabs at the left using a flat-blade screwdriver. Insert the screwdriver in the opening provided and carefully lift the cover from the frame. Press the fourth tab, located on the cover's lower edge, upwards to release it from the frame.



## Upper Front Cover

1. Open the Top Cover.
2. Raise the Basket Assembly.
3. Open the Front Door and lower the Control Panel completely.
4. Remove 2 (metal, 10 mm) screws securing the Left Front Cover.
5. Remove 3 (metal, 6 mm) screws securing the Upper Front Cover.
6. Unlock the Fuser, if installed, and remove the Upper Front Cover from the printer.

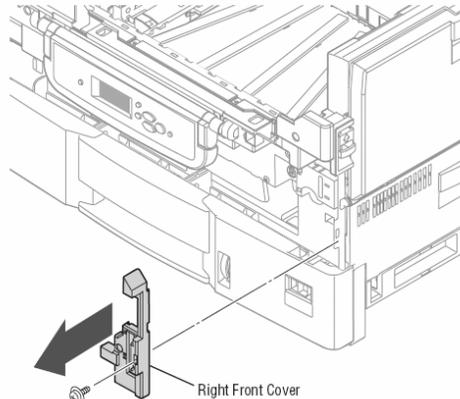


**Replacement Note:** Replace the Upper Front Cover starting at the right hand side. Work the lower edge of the cover behind the Control Panel to align the screw holes with those in the frame.

## Right Front Cover

**Caution:** The Waste Toner Container Auger Rotation Sensor is mounted in the Right Front Cover. Use care not to damage the sensor wiring during the removal process.

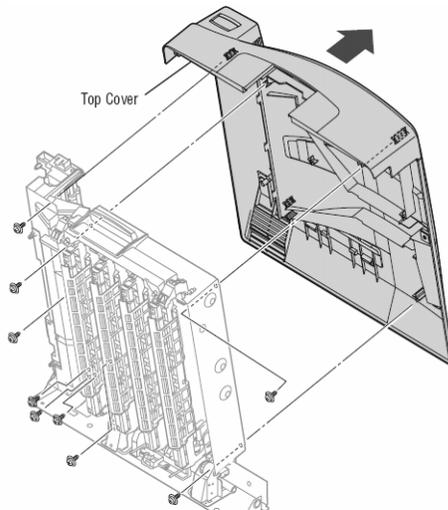
1. Open Right Upper Door.
2. Remove the Waste Toner Container if installed.
3. Remove the Front Door.
4. Remove 1 (metal, 6 mm) screw securing the Right Front Cover to the printer.
5. Release 1 tab on the right securing the Right Front Cover, and then remove it from the printer.
6. Release the sensor harness and remove the sensor from the cover.



**Replacement Note:** After installation, check that the sensor wiring is clear of the Waste Toner Container Auger drive.

## Top Cover

1. Open the Top Cover completely.
2. Remove 1 (metal, 6 mm) screw from the Fuser Fan duct and remove the duct and Fan.
3. Disconnect the Fuser Fan connector.
4. Remove 3 (black, plastic 6 mm) screws from the left side support arm.
5. Remove 6 (black, plastic 6 mm) screws securing the Top Cover.
6. Release the 3 hooks along the Exit.
7. Remove the Top Cover.

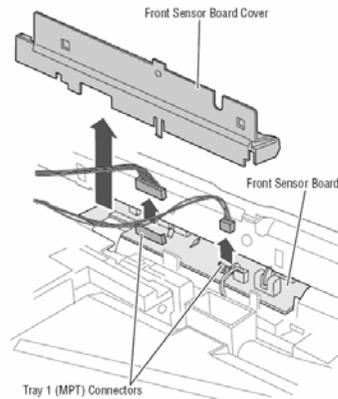


**Replacement Note:** When replacing the Top Cover, start by aligning the left side of the cover. There are 2 posts that must slide into springs on the Job Offset Assembly, then the cover will line up correctly.

## 2.2 Paper Feed

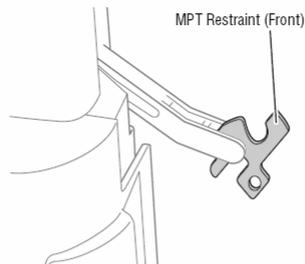
### MPT Tray

1. Open the Top Cover.
2. Remove the Front Sensor Board Cover.
3. Disconnect 2 connectors on the Front Sensor Board.

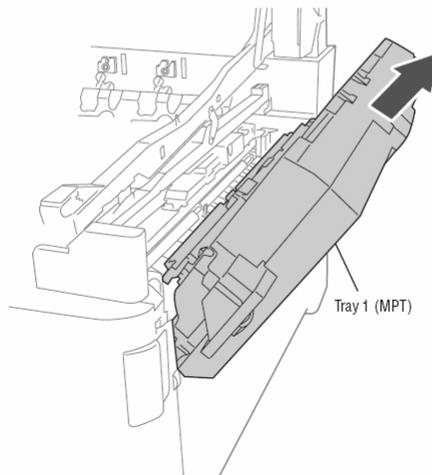


**Caution:** The hinges are not captive to the tray. In the following steps, use care not to drop the hinges

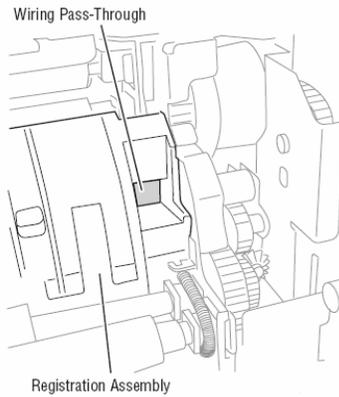
4. Open Right Upper Door
5. Remove 2 (metal, 6 mm) screws, one at each hinge, that secure either side of the MPT Tray.



6. Shift Right Upper Door towards the front of the printer and lift off the posts to remove the assembly.



**7. Release the wiring from the opening in the Registration Assembly. If the connector hangs inside the Registration Assembly, tape the connector parallel to the wiring to facilitate removal.**

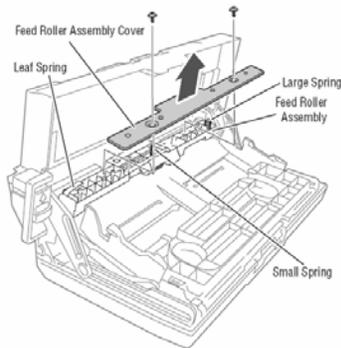


**Replacement Note:** When replacing the MPT hinges, replace the rear hinge first.

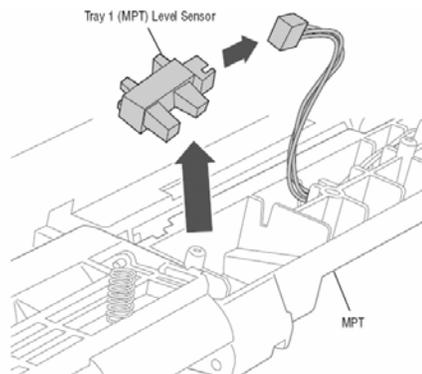
### MPT Tray Level Sensor

Two non-captive springs are installed under the Feed Roller Assembly cover. The smaller of the two springs puts tension on the Pick Roller. The larger spring sets on a boss at the rear of the assembly.

1. Open MPT Tray
2. Remove 2 (black, plastic 6 mm) screws that secure the cover on the Feed Roller Assembly.

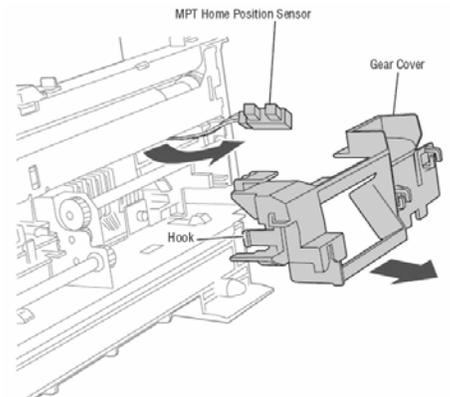


3. Release the hooks that secure the MPT Tray Level Sensor to the Feed Roller Assembly.
4. Disconnect the sensor from the harness.



## MPT Home Position Sensor

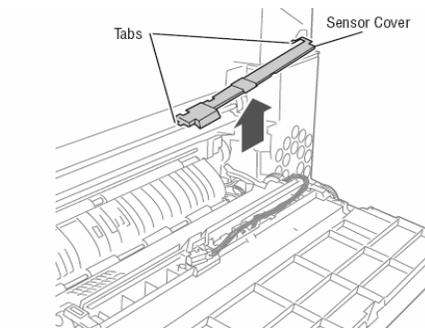
1. Remove the Registration Assembly.
2. Release 2 hooks that secure the gear cover to the back of the Registration Assembly.



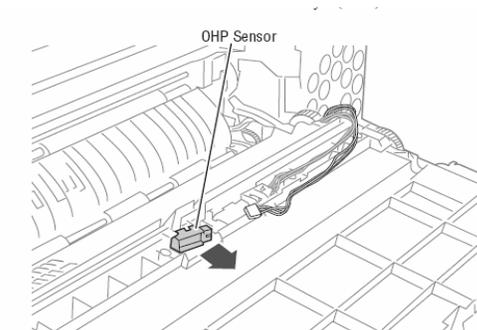
3. Release the 3 hooks that secure the sensor to the Registration Assembly, and then push the sensor through the opening to the back of the assembly.
4. Disconnect the sensor from the harness.

## MPT OHP Sensor

1. Open Right Upper Door.
2. Remove the Sensor Cover from the back of the MPT Tray.



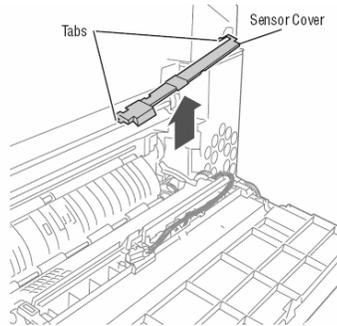
3. Disconnect the sensor from the harness.



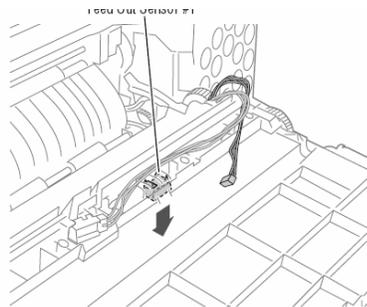
4. Release the hooks that secure the sensor to the MPT Tray.

## MPT Feed Out Sensor

1. Open Right Upper Door.
2. Remove the Sensor Cover from the back of the MPT Tray.



3. Disconnect the sensor from the harness.

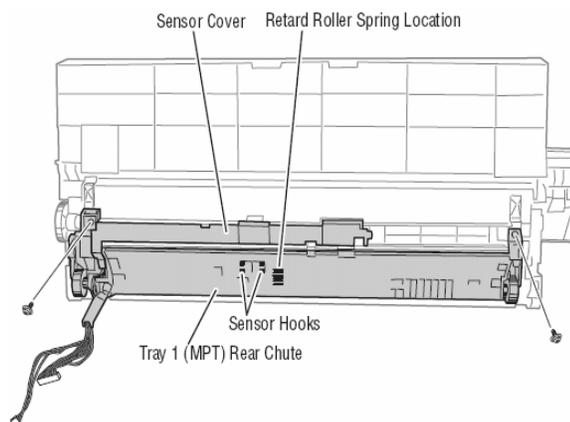


4. Release the hooks that secure the sensor to the MPT Tray.

## MPT No Paper Sensor

**Note:** A non-captive spring is installed in the Rear Chute to tension the Retard Roller.

1. Remove MPT Tray.
2. Open the tray assembly and depress the lift plate to remove 1 (black, 10 mm) screw at the center.
3. Remove 2 (black, plastic 10 mm) screws that secure the Rear Chute to the MPT Tray.

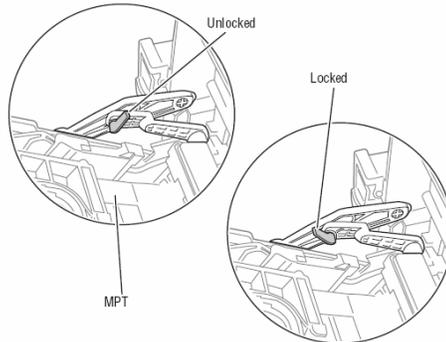


4. Separate the Rear Chute from the assembly.
5. Release the hooks that secure the sensor to the Rear Chute.
6. Disconnect the sensor connector

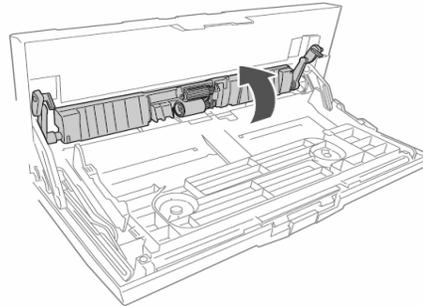
**Replacement Note** Insert the spring underneath the Retard Roller before installing the Rear Chute. Make sure the lift levers are above the Lift Plate.

## MPT Feed Rollers

1. Partially open MPT Tray.
2. Rotate the 2 levers 90 degrees to unlock the Feed Roller Assembly linkage from MPT Tray Links.



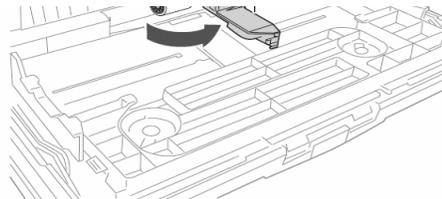
3. Raise the Feed Roller assembly to access the Pick-up and Feed Rollers.



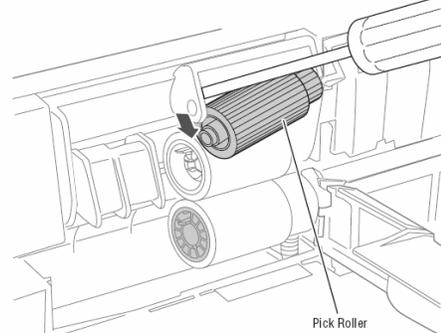
4. Open the Retard Roller Access Door.



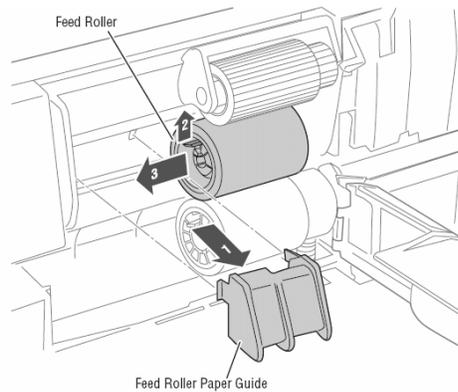
4. Open the Retard Roller Access Door.



5. Remove the Pick-up Roller by gently prying the left end away from the housing.



6. Remove the Feed Roller Paper Guide to provide space to remove the rollers.



7. Remove the Feed and Retard Rollers by releasing the hook and sliding the roller off the shaft.

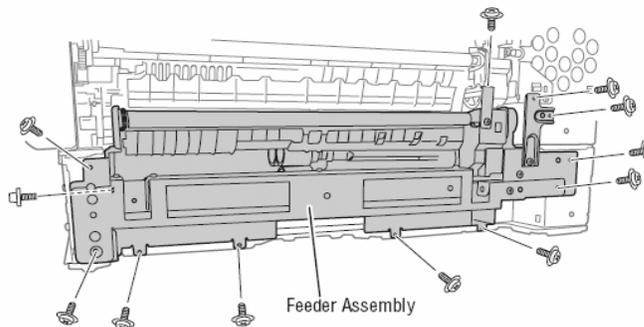
**Replacement Note:** Match each replacement roller to the one being removed. All three rollers are unique.

### Tray 1 Paper Feed Unit

#### **Note**

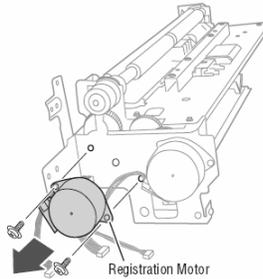
If optional Hi Cap Feeder is installed, either remove the printer from the HCF or place a ream of paper, or similar object, to hold the printer above the HCF to provide sufficient clearance to remove 4 screws and pull the Tray 1 Feeder from the frame.

1. Remove Tray 1.
2. Remove the Right Side Cover.
3. Remove the Right Rear Cover.
4. Remove the Rear Cover.
5. Remove the MPT Tray.
6. Remove Right Lower Door.
7. Remove the Card Cage Fan Duct.
8. Unplug connectors on the Motor Driver Board.
9. Remove 12 (metal, 10 and 6 mm) screws to remove the Tray 1 Feed Unit.



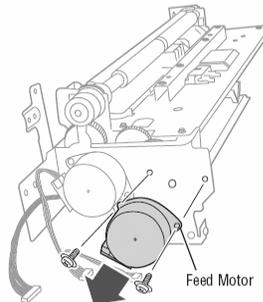
### Tray 1 Paper Registration Motor

1. Remove the Tray 1 Paper Feed Unit.
2. Release the motor harness from the clamp.
3. Disconnect the Registration Motor connector from the harness.
4. Remove 2 (metal, 6 mm) screws that secure the Registration Motor to the Feeder.



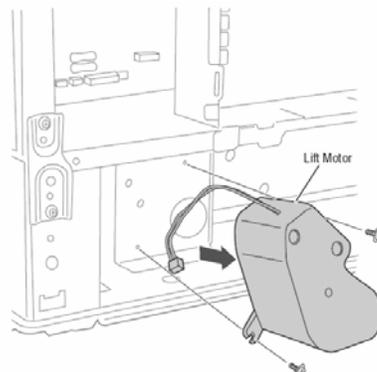
### Tray 1 Paper Feed Motor

1. Remove the Tray 1 Paper Feed Unit.
2. Release the motor harness from the clamp.
3. Disconnect the Feed Motor connector from the harness.
4. Remove 2 (metal, 6 mm) screws that secure the Feed Motor to the Feeder.



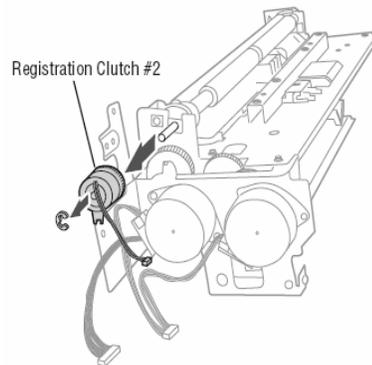
### Tray 1 Paper Lift Motor

1. Remove Tray 1.
2. Open the Top Cover.
3. Remove the Right Rear Cover.
4. Remove the Card Cage Fan Duct.
5. Remove the LVPS.
6. Disconnect the Lift Motor connector from the Motor Driver Board.
7. Remove the 2 (metal, 6 mm) screws that secure the Lift Motor to the frame.



## Tray 1 Registration Clutch

1. Remove the Tray 1 Paper Feed Unit.
2. Remove the E-clip that secures the clutch to the Registration Roller.



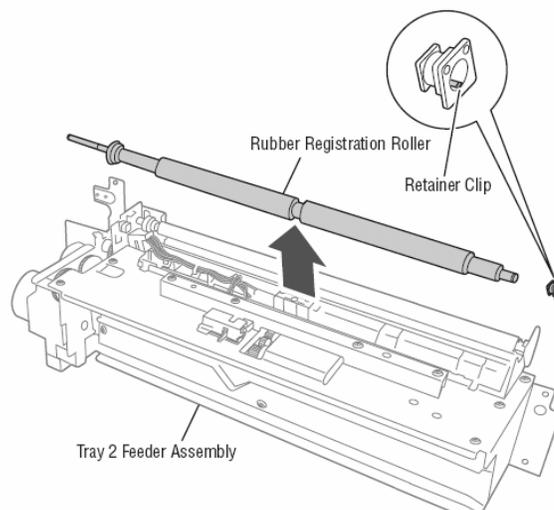
3. While holding the anti-rattle spring, remove the clutch from the roller shaft.

## Right Lower Door Detect Sensor

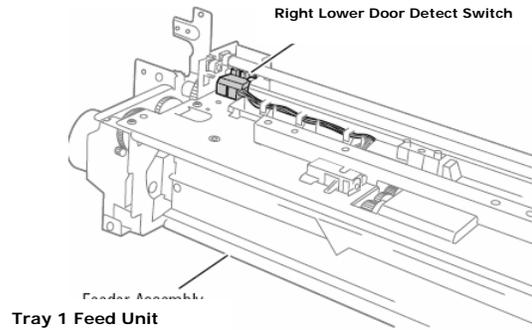
The Right Lower Door Detect Sensor is mounted on a carrier located beneath the Registration Rollers near the clutch.

**Caution:** Use care when removing the roller shaft bearings. The bearings use a small clip to lock into a notch near the end of each roller shaft. Use a small, flat-bladed screwdriver to release the clip from the shaft before attempting to remove the bearing.

1. Remove the Tray 1 Paper Feed Unit.
2. Remove the Registration Clutch.
3. Remove the 2 springs that tension the Registration Rollers.
4. Remove the bearings at each end of the rubber roller, and then remove the roller.



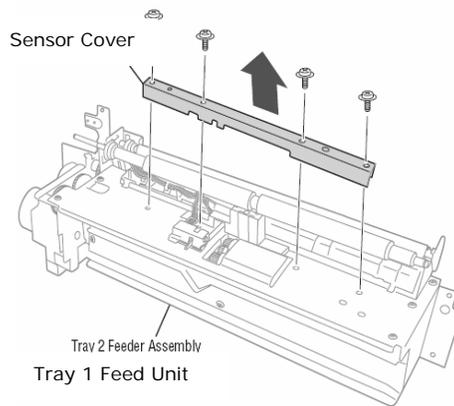
**5. Release the hook that secures the sensor holder to the feeder.**



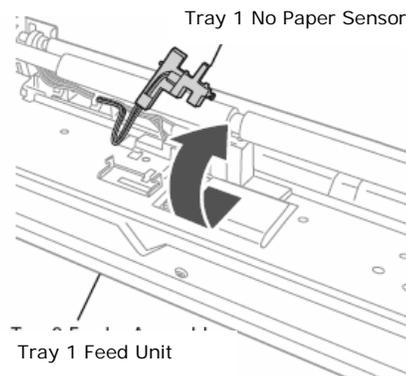
- 6. Turn the sensor holder over, and then release the hooks that secure the sensor to the carrier.**
- 7. Disconnect the sensor connector.**

### Tray 1 No Paper Sensor

- 1. Remove the Tray 1 Paper Feed Unit.**
- 2. Remove 4 (metal, 23 mm) screws that secure the cover.**



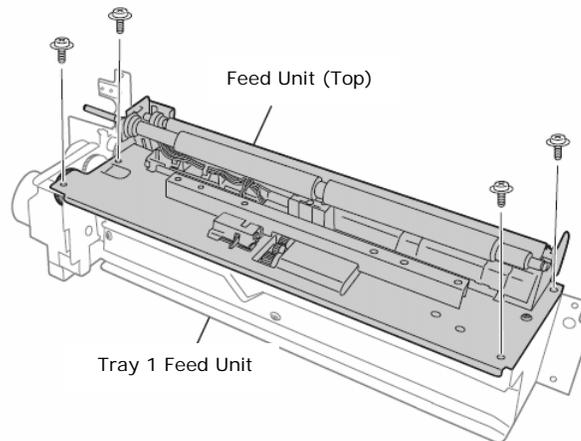
- 3. Release the hook that secures the No Paper Sensor housing to the feeder.**
- 4. Turn the housing over, and then release the hooks that secure the sensor to the housing.**



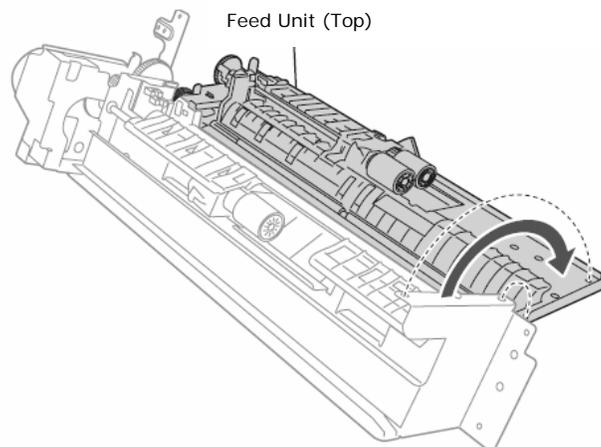
**5. Disconnect the sensor connector.**

## Tray 1 Registration Sensor / Feed Out Sensor

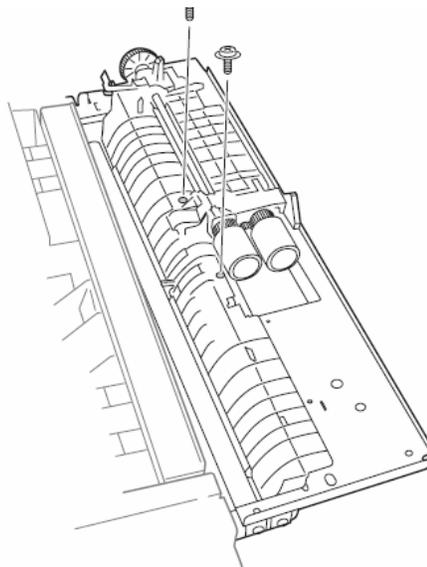
1. Remove the Tray 1 Paper Feed Unit.
2. Remove the Registration Clutch.
3. Remove the Feeder Board Cover.
4. Remove 4 (metal, 6 mm) screws that secure the feeder top.



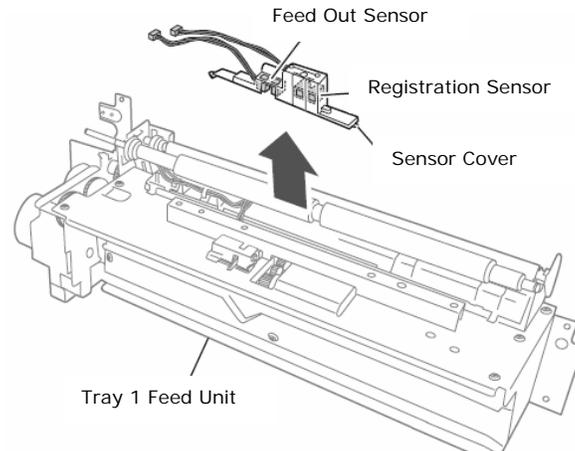
5. Separate the feeder top and then turn the top over.



6. Remove 2 (black, plastic 10 mm) screws that secure the sensor housing.



7. Turn the feeder top upright, and the release the 2 hooks that secure the sensor housing to the top of the feeder.



8. Release the hooks that secure the sensor in the housing.

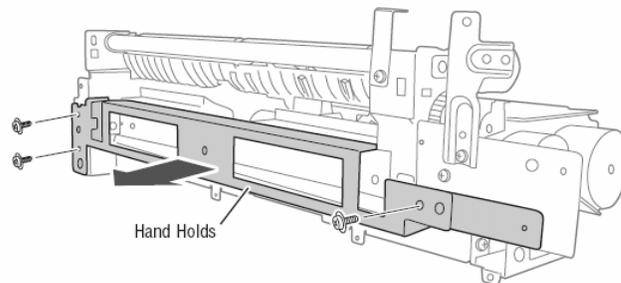
9. Disconnect the sensor connector, and then remove the sensor.

**Replacement Note:** Use care when replacing the feeder top. Make sure the Level, and Low Paper Sensor flags operate properly before tightening the screws.

### Tray 1 Feeder Board

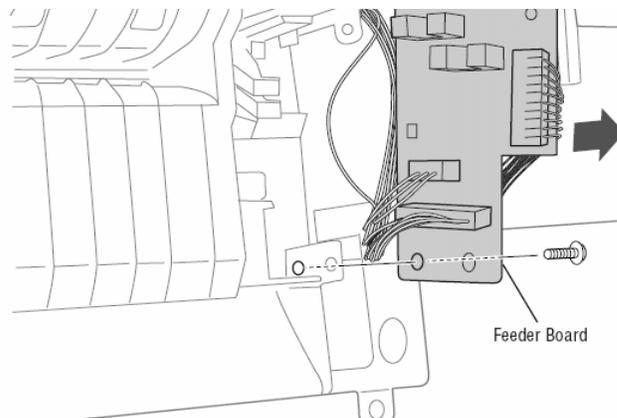
1. Remove the Tray 1 Paper Feed Unit.

2. Remove 3 (metal, 10 mm) screws that secure the hand holds to the feeder.



3. Remove 1 (metal, 6 mm) screw that secures the Feeder Board Cover.

4. Remove 1 (metal, 6 mm) screw that secures the Feeder Board to the Feeder.

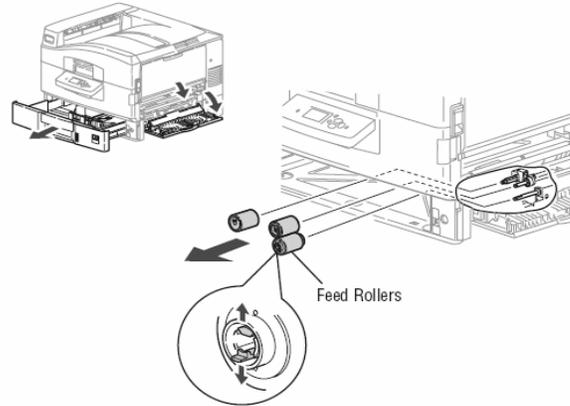


5. Disconnect the connectors, and then remove the board.

## Tray 1 Feed Rollers

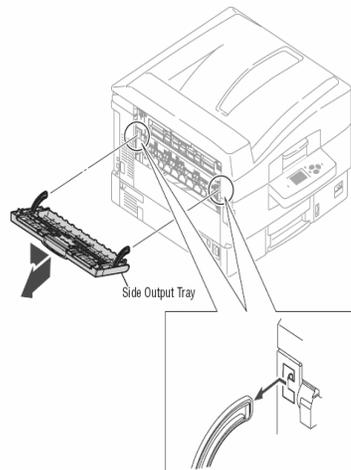
**Note:** Feed Roller (Pick-up, Feed, Retard) removal is identical for all Universal Trays. However, each roller is unique. Match each replacement roller to the roller being removed.

1. Remove Tray 1.
2. Open Right Lower Door.
3. Release the hook that secures each roller to the shaft



## Side Output Tray

1. Open the Top Cover.
2. Remove the Left Front Cover.
3. Release the Stopper Links from the printer frame.
4. Release the tray from the 2 posts by flexing the tray right to clear the left post and slide left to remove.

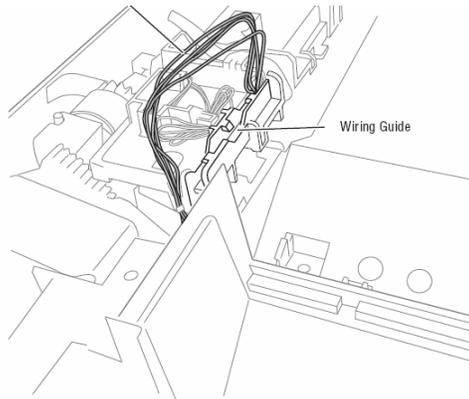


## 2.3 Internal Printer Components

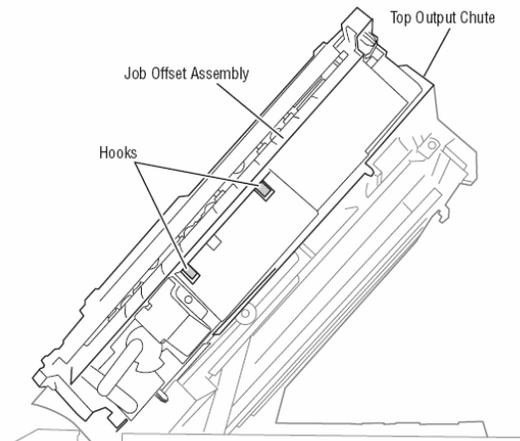
### Job Offset Assembly

**Note:** There are two springs on top of the Job Offset Assembly that are not captured. Use care not to lose these springs.

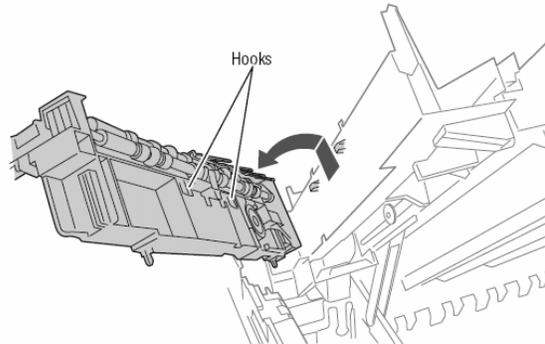
1. Remove the Top Cover.
2. Release the Job Offset Motor harness from the guides at the rear of the LED Assembly (4 red wires).



3. Release 2 hooks securing the Job Offset Assembly to the Top Output Chute.



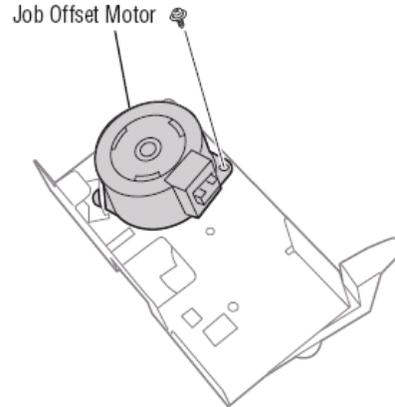
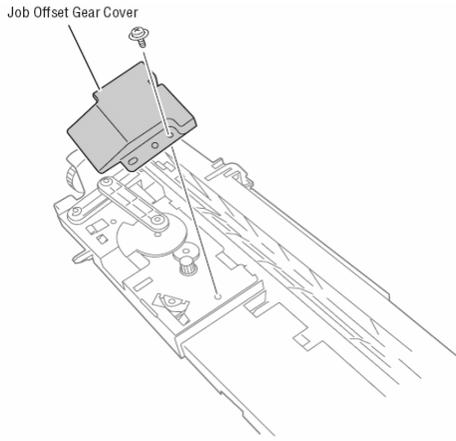
4. Lift the assembly, and then move the front to the left to reveal the Job Offset Motor and connector at the back of the assembly.



5. Disconnect the Offset Motor from the harness.
6. Remove the Job Offset Assembly.

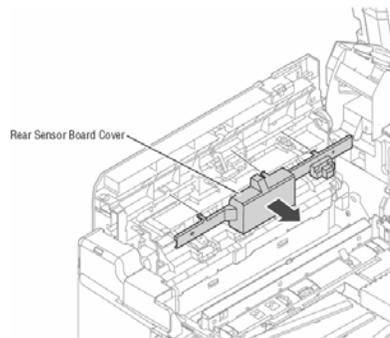
## Job Offset Motor

1. Remove the Job Offset Assembly.
2. Remove the 1 (black, plastic, 10 mm) that secures the Job Offset Gear Cover.
3. Release the 4 hooks that secure the Job Offset Motor mounting plate to the Job Offset Assembly.
4. Remove the 1 (metal, 6 mm) screw that secures the Job Offset Motor to the mounting plate to remove the motor.



## Job Offset Home Position Sensor

1. Remove the 6 hooks that secure the Rear Sensor Board Cover to the Eject Assembly.

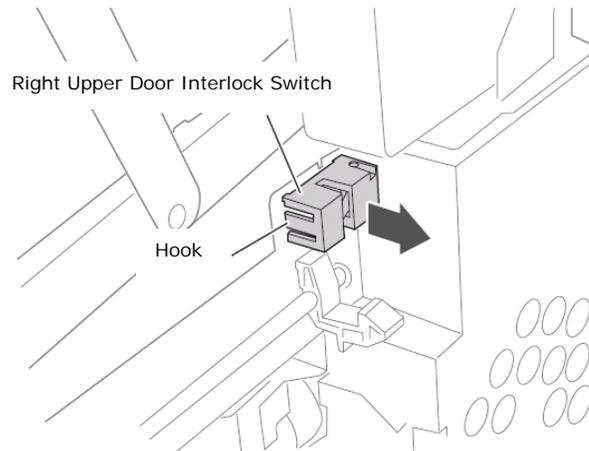


2. Release the hooks that secure the Job Offset Home Position Sensor to the Eject Assembly.
3. Release the sensor connector to remove the sensor.

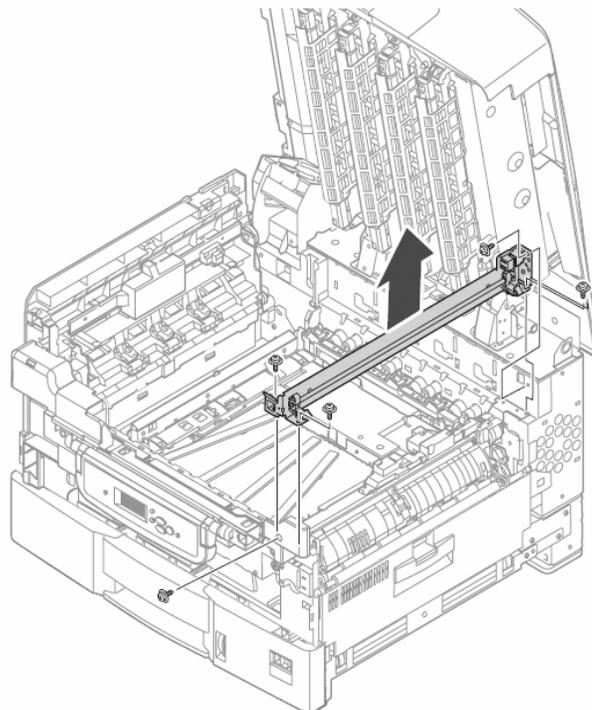


## Right Upper Door Latch Assembly

1. Open the Top Cover.
2. Open the Basket Assembly.
3. Open Upper Right Door.
4. Release the 3 hooks that secure the Right Upper Door Interlock



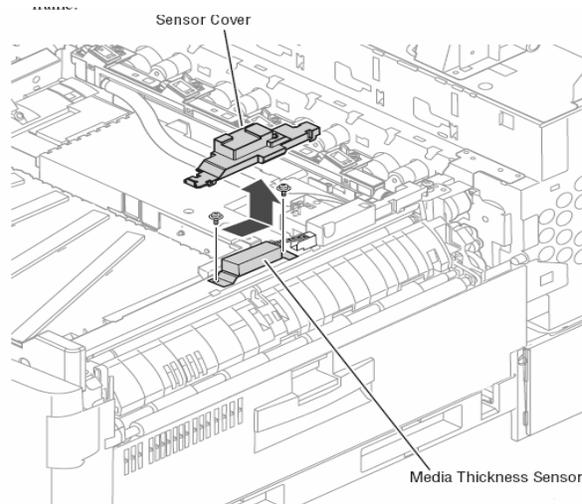
5. Remove the 5 (metal, 6 and 10 mm) screws that secure the latch to the frame.



6. Gently pull the Upper Front Cover forward to release the latch assembly from the frame.

## Media Thickness Sensor

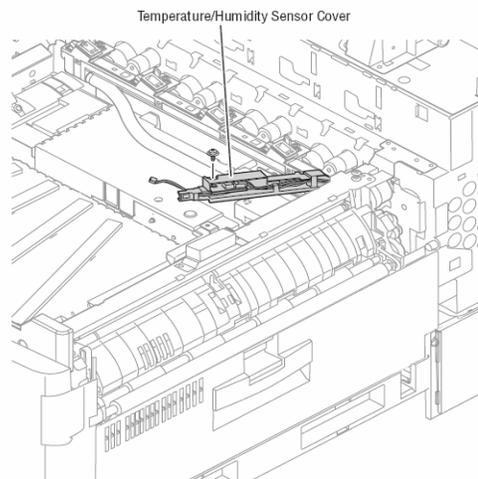
1. Open the Top Cover.
2. Open the Basket Assembly.
3. Remove the sensor cover by lifting the front tab slightly and pushing the cover to the rear.
4. Disconnect the sensor connector.
5. Remove the 2 (metal, 6 mm) screws that secure the sensor and holder to the frame.



**Replacement Note:** Make sure the sensor's gears are engaged and the holder is aligned to the bosses on the frame before tightening the screws. Also, run the Service Automatic Density Adjustment to calibrate the replacement sensor.

## Temperature/Humidity Sensor

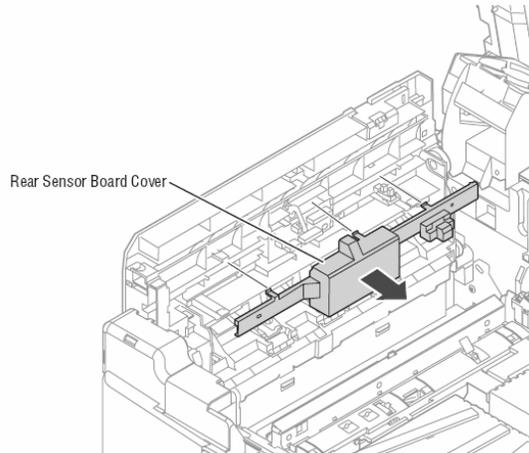
1. Open the Top Cover.
2. Open the Basket Assembly.
3. Remove the Media Thickness Sensor cover by lifting the front tab slightly and pushing the cover to the rear.
4. Disconnect the Media Thickness Sensor connector.
5. Pull the Temp/Humidity Sensor cover towards the front to release the two hooks.



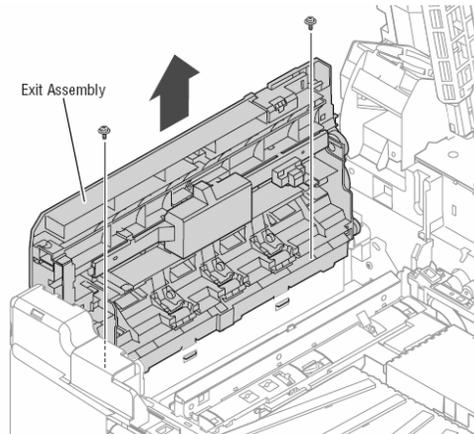
6. Remove 1 (black, plastic 10 mm) screw that secures the sensor to the cover.
7. Disconnect the Temperature/Humidity Sensor connector.

## Eject Assembly

1. Open the Top Cover.
2. Remove the Duplex Unit.
3. Remove the Fuser.
4. Remove the Side Output Tray.
5. Release the 6 hooks and 3 tabs that secure the Rear Sensor Board Cover.

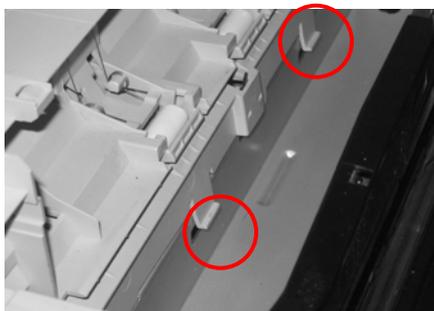


6. Disconnect connector from the Rear Sensor Board.
7. Carefully remove harness from the Eject Assembly. This requires that the connector be fed through a hole provided at the rear of the Eject Assembly.
8. Remove 2 (metal, 6 mm) screws securing the Eject Assembly to the printer.

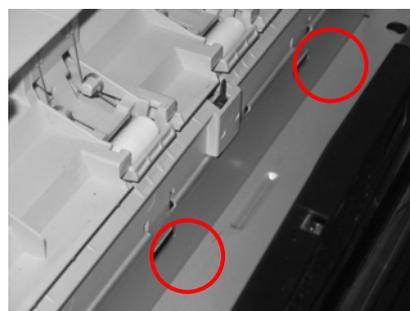


9. Release the 3 hooks at the base of the Exit Assembly and move the assembly slightly to the rear while lifting to release the boss from the frame. Access the two hooks from the Fuser well, and the third hook from the Duplex Unit cavity.

**Note: Use Caution when re-installing this unit. Be sure to properly engage the 2 hooks as illustrated**



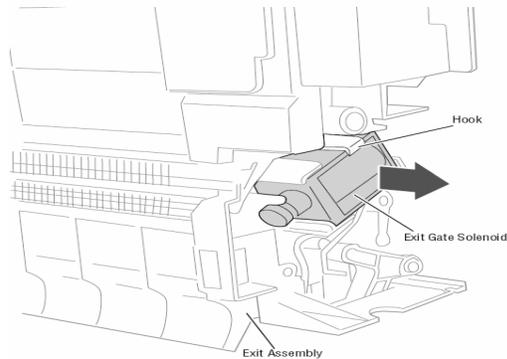
**Incorrect Installation**



**Correct Installation**

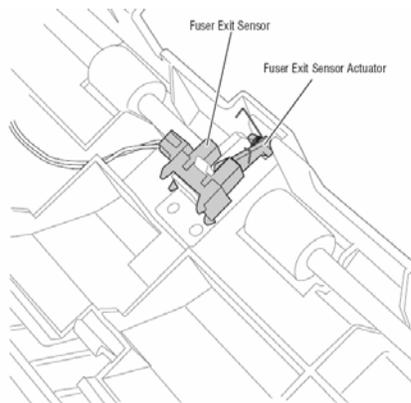
## Exit Gate Solenoid

1. Remove the Eject Assembly.
2. Disconnect the solenoid connector from the Rear Sensor Board.
3. Feed the solenoid harness out the opening at the front of the Eject Assembly.
4. Release the hook that secures the Exit Gate Solenoid to the Eject Assembly.



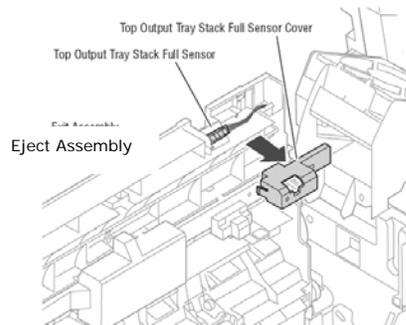
## Fuser Exit Sensor and Actuator

1. Remove the Eject Assembly.
2. Flip the Eject Assembly over and disconnect the connector from the Fuser Exit Sensor.
3. Release the 2 tabs that secure the Exit Sensor and Actuator to the Exit Assembly.



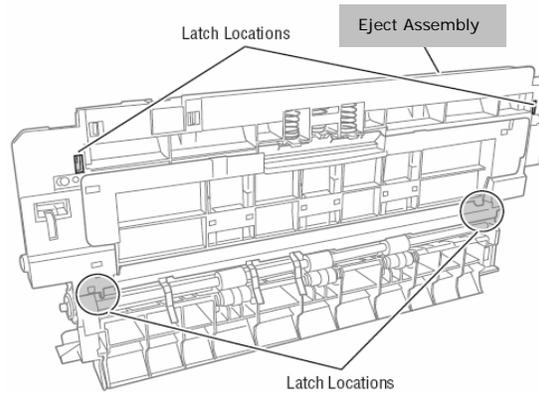
## Top Output Tray Stack Full Sensor

1. Release the 2 hooks that secure the Top Output Tray Stack Full Sensor cover to the Eject Assembly.
2. Disconnect the Top Output Tray Stack Full Sensor.
3. Release the wire that surrounds the sensor.
4. Release the hooks that secure the sensor to the Inner Chute to remove the sensor.

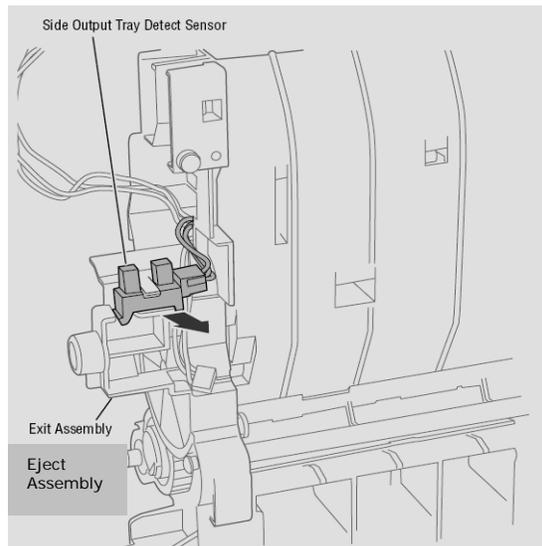


## Side Output Tray Detect Sensor

1. Remove the Eject Assembly.
2. Release the 2 hooks that secure the Top Output Tray Stack Full Sensor cover.
3. Disconnect the Top Output Tray Stack Full Sensor.
4. Release the wire that surrounds the sensor.
5. Release the 2 upper hooks of the Outer Exit Chute.
6. Separate the outer and inner chutes enough to disconnect the Side Output Tray Stack Full Sensor.
7. Release the 2 lower Outer Exit Chute tabs by gently prying the two chutes apart.



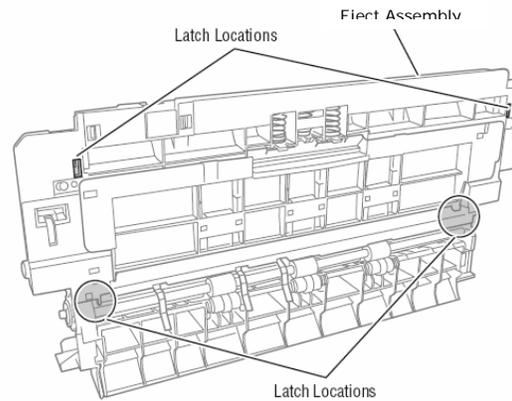
8. Release the hooks that secure the sensor to the Inner Chute.



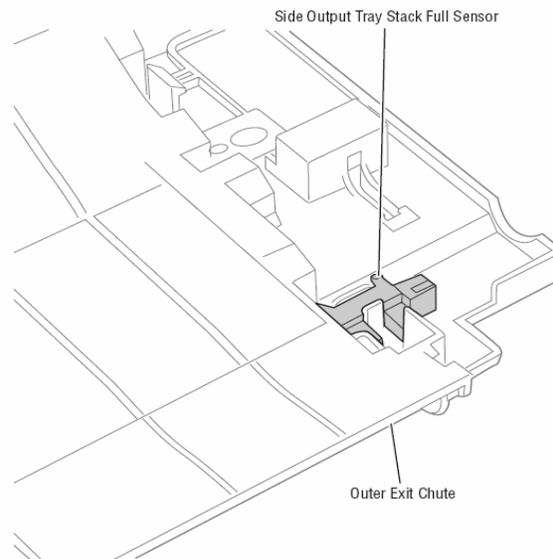
9. Disconnect the sensor connector to remove the sensor.

## Side Output Tray Stack Full Sensor

1. Remove the Eject Assembly.
2. Release the 2 hooks that secure the Top Output Tray Stack Full Sensor cover.
3. Disconnect the Top Output Tray Stack Full Sensor.
4. Release the wire that surrounds the sensor.
5. Release the 2 upper hooks of the Outer Exit Chute.
6. Separate the outer and inner chutes enough to disconnect the Side Output Tray Stack Full Sensor.
7. Release the 2 lower Outer Exit Chute tabs by gently prying the two chutes apart.

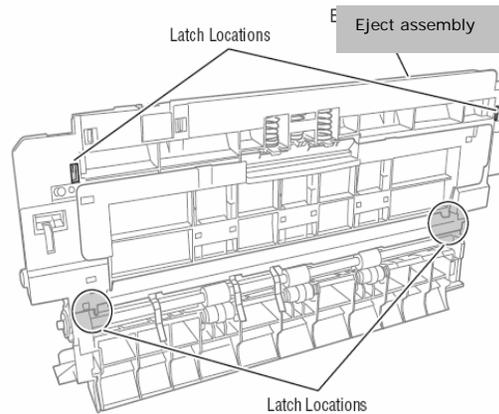


8. Release the hooks that secure the sensor to the Inner Chute to remove the sensor.

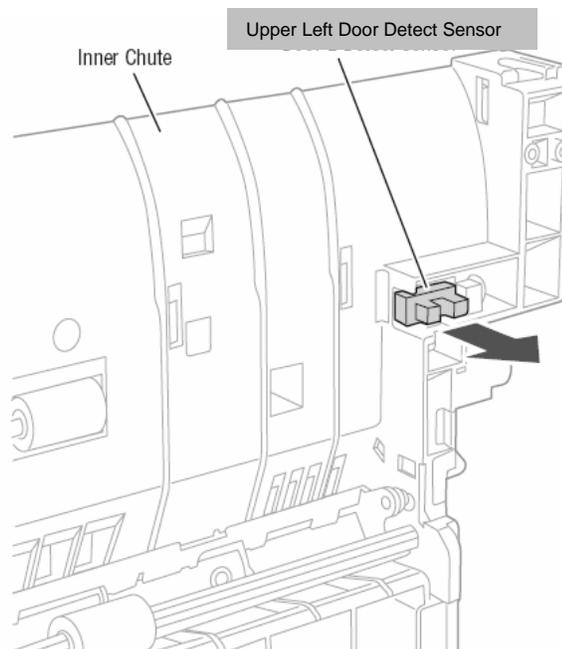


## Upper Left Door Detect Sensor

1. Remove the Eject Assembly.
2. Release the 2 hooks that secure the Top Output Tray Stack Full Sensor cover.
3. Disconnect the Top Output Tray Stack Full Sensor.
4. Release the wire that surrounds the sensor.
5. Release the 2 upper hooks of the Outer Exit Chute.
6. Separate the outer and inner chutes enough to disconnect the Side Output Tray Stack Full Sensor.
7. Release the 2 lower Outer Exit Chute tabs by gently prying the two chutes apart.

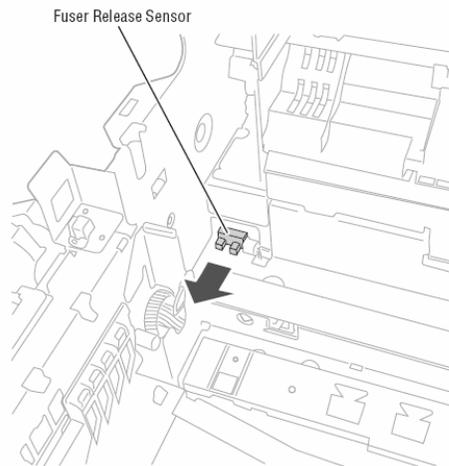


8. Release the hooks that secure the sensor to the Inner Chute.
9. Disconnect the sensor connector to remove the sensor.



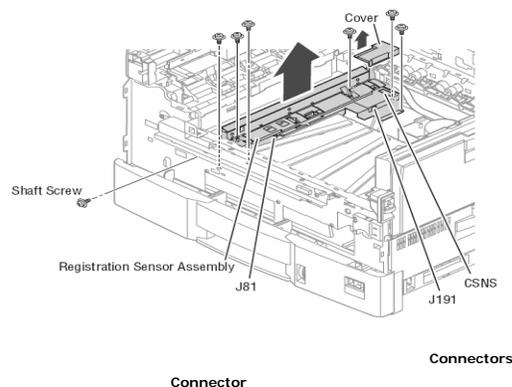
## Fuser Release Sensor

1. Remove the Duplex Unit.
2. Release the 3 hooks that secure the sensor to the frame.
3. Disconnect the Fuser Release Sensor connector.



## Registration Sensor Assembly

1. Remove the Front Door.
2. Remove the Waste Toner container, if installed.
3. Remove the Left Front Cover.
4. Remove the HVPS Cover.
5. Open the Basket Assembly.
6. Remove the Registration Sensor Board Cover.
7. Remove the sensor connectors from the Registration Sensor Board.
8. Remove 6 (metal, 6 mm) screws securing the Registration Sensor Assembly.

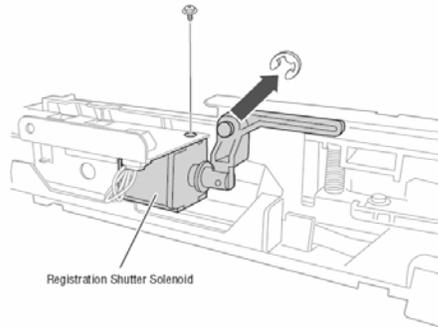


9. Remove the Transfer Unit Motor.
10. Remove 1 (metal, 6 mm) shaft screw located behind the Transfer Unit Motor.
11. Release 2 hooks that secure the Registration Sensor Board Cover.
12. Disconnect 2 wiring harnesses (3-wire Purple, 2-wire Red) and lift the assembly to clear the hook at the rear.

**Replacement Note:** Make sure the hook at the rear of the frame engages the assembly.

## Registration Shutter Solenoid

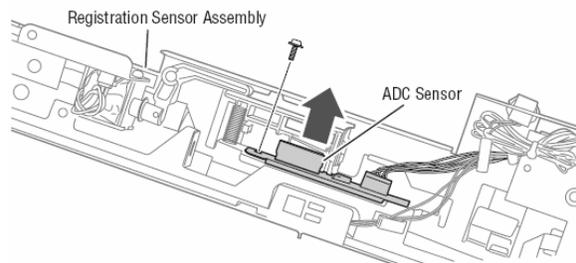
1. Remove the Registration Sensor Assembly.
2. Remove the E-clip that secures the Registration Shutter linkage to the assembly.
3. Disconnect the Registration Shutter Solenoid connector.
4. Remove 1 (metal, 6 mm) screw, with washer, securing the Registration Shutter Solenoid to the assembly.



## Automatic Density Control Sensor

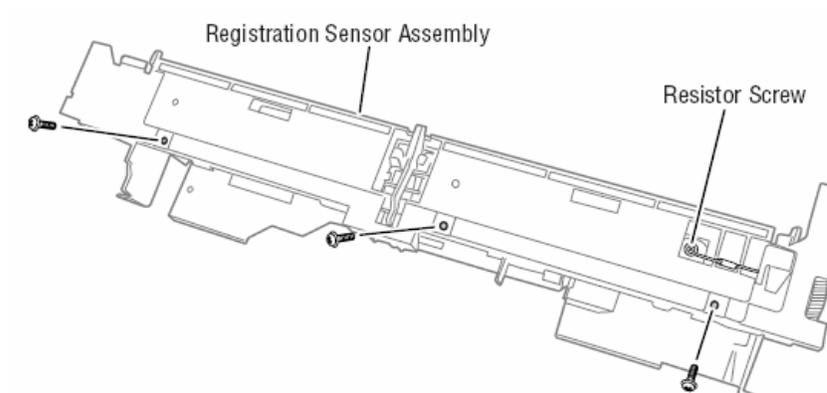
**Note:** The Registration Shutter return spring is not captive to the shutter. Note the position of the spring before disassembly.

1. Remove the Registration Sensor Assembly.
2. Turn the assembly over and release the 3 bosses that retain the Registration Shutter in the assembly.
3. Remove the 1 (metal, 6 mm) screw that secures the Automatic Density Control Sensor to the assembly.
4. Slide the sensor to the left to release the sensor from the assembly.
5. Disconnect the Automatic Density Control Sensor connector, and then remove the Automatic Density Control Sensor.

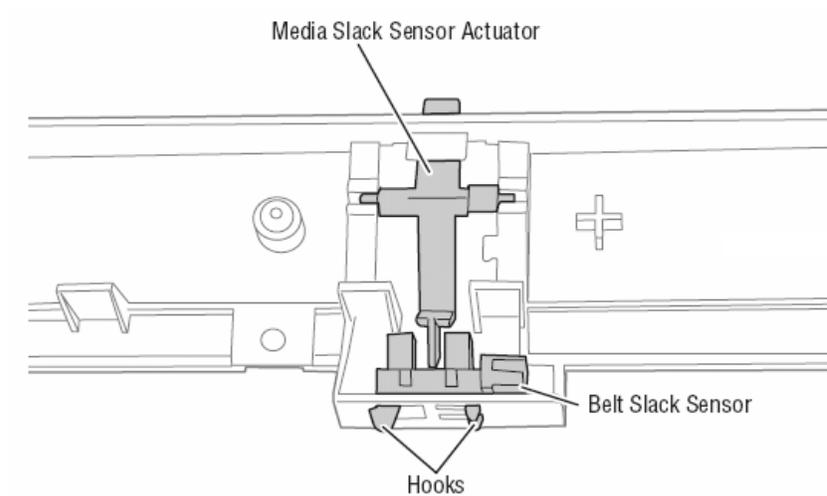


## Media Slack Sensor and Actuator

1. Remove the Registration Sensor Assembly.
2. Remove the 3 (metal, 6 mm) screws that secure the sensor and actuator to the Registration Sensor Assembly.



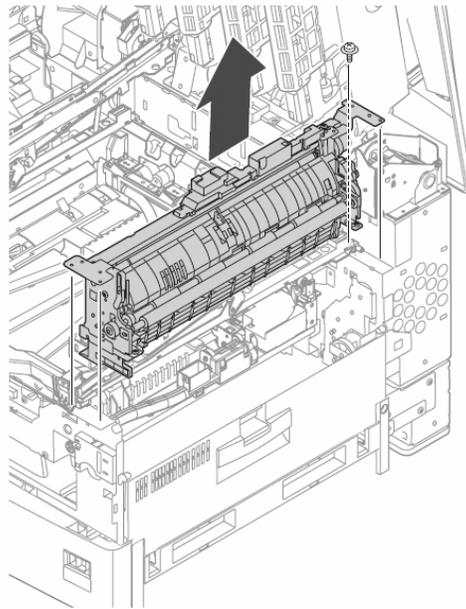
3. Remove the 1 (metal, 6 mm) screw that grounds the resistor to the assembly.
4. Disconnect the sensor connector.
5. Release the hooks to remove the Media Slack Sensor.



**Replacement Note:** Make sure the 3 upper tabs latch to the frame and that the ribbon cable is captured by the 4 lower tabs.

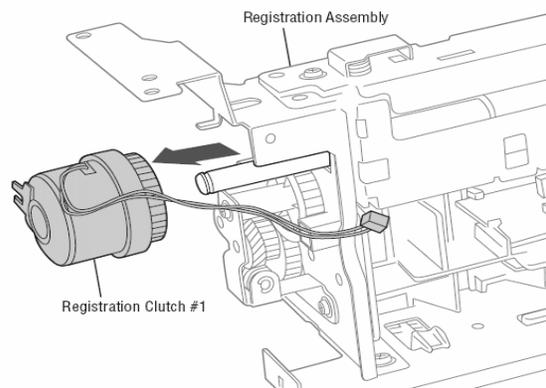
## Registration Assembly

1. Open the Top Cover.
2. Open the Front Door.
3. Open the Upper Right Door.
4. Open the Basket Assembly.
5. Remove the Duplex Unit.
6. Remove MPT Tray.
7. Remove the Upper Right Door Latch Assembly.
8. Remove 1 (metal, 10 mm) screw that secures the Registration Assembly.
9. Release the wiring from the guides in the Registration Assembly.
10. Disconnect the ribbon cable from the connector on the Front Sensor Board.
11. Press the Waste Toner Container Auger drive in to clear the frame, and then lift the Registration Assembly up to remove it.



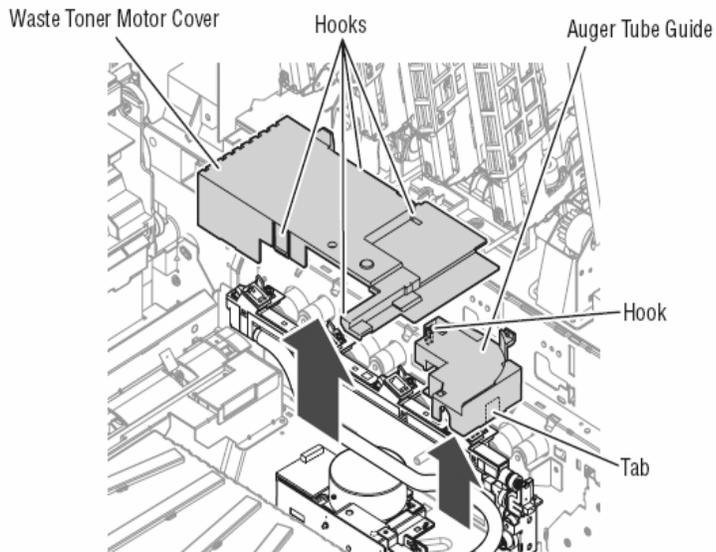
## Registration Clutch

1. Remove the Registration Assembly.
2. Disconnect the clutch connector from the Front Sensor Board.
3. Remove the clutch wiring from the opening to free it from the Registration Assembly.
4. Remove the E-clip that secures the Registration Clutch #1 to the lower Registration Roller.
5. Pull the clutch from the shaft while holding the anti-rattle spring.

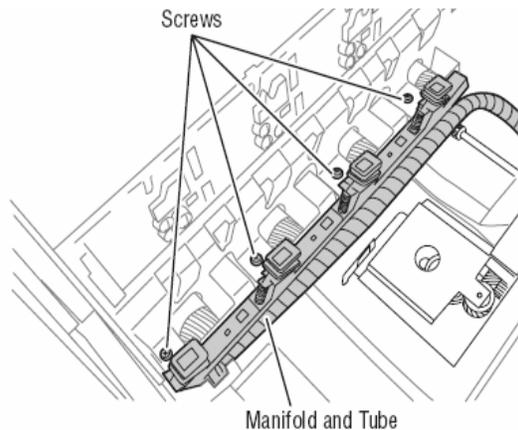


## Waste Toner Auger Assembly

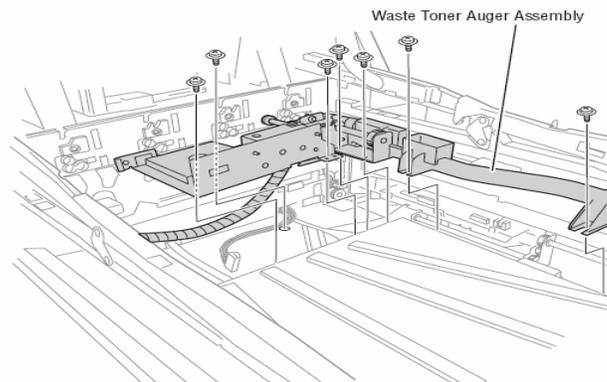
1. Remove the Waste Toner Container if installed.
2. Remove the Duplex Unit.
3. Release 4 hooks that secure the Waste Toner Motor Cover.
4. Release 1 hook



5. Remove 4 (black, plastic 6 mm) screws connecting the Waste Toner Manifold to the Basket Assembly.



6. Open the Basket Assembly to release the manifold from the basket.
7. Release the Waste Toner Motor harness from the clamp.
8. Remove 7 (metal, 6 mm) screws to remove the Waste Toner Auger Assembly.

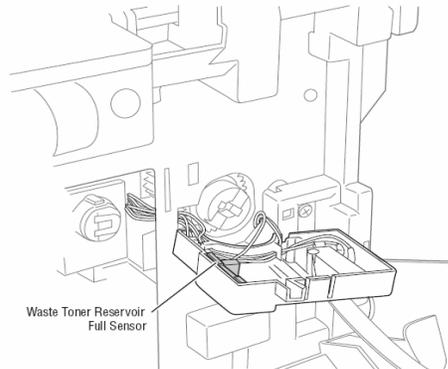


**Replacement Note:** Clear any debris from the Duplex Unit cavity before installing the Duplex Unit.

## Waste Toner Container Full Sensor

The Waste Toner Container Full Sensor is located in the sensor housing attached directly above the Waste Toner Container Auger drive.

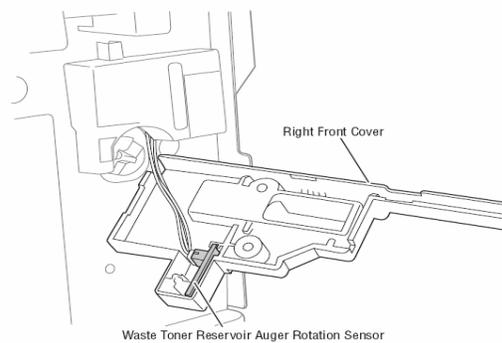
1. Open the Top Cover.
2. Remove the [HVPS Cover](#).
3. Disconnect the Connector from the HVPS
4. Open the Front Door.
5. Remove the Waste Toner Container if installed.
6. Release 1 tab at the top of the sensor housing to release the housing.
7. Disconnect the sensor from the harness.
8. Slide the sensor from the holder.



## Waste Toner Container Auger Rotation Sensor

The Waste Toner Container Auger Rotation Sensor is mounted inside the Right Front Cover.

1. Open the Right Upper Door.
2. Remove the [Front Door](#).
3. Remove the Waste Toner Container if installed.
4. Remove the [Right Front Cover](#).
5. Disconnect the connector from the sensor.
6. Remove the sensor from the Right Front Cover.

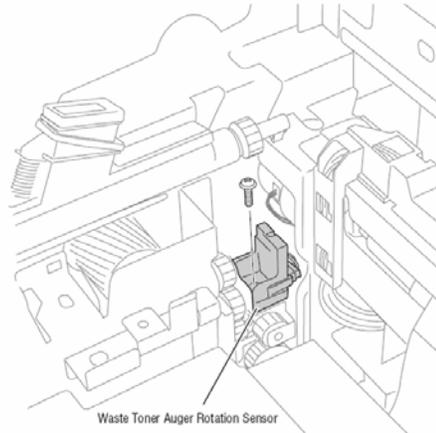


**Replacement Note:** Use care when routing the harness near the Auger Drive and through the notch provided in the cover. Check wire routing following installation of the cover.

## Waste Toner Auger Rotation Sensor

The Waste Toner Auger Rotation Sensor is located at the right end of the Waste Toner Manifold. The sensor is connected to the Motor Driver Board.

1. Open the Top Cover.
2. Open the Basket Assembly.
3. Remove 1 (metal, 6 mm) screw that secures the sensor holder.
4. Disconnect the sensor from the harness.
5. Release 1 hook that secures the sensor in the holder.

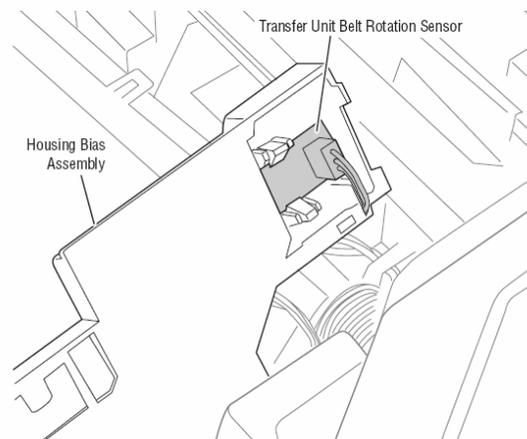


**Replacement Note:** Seat the sensor completely in the holder before securing the screw.

## Transfer Unit Belt Rotation Sensor

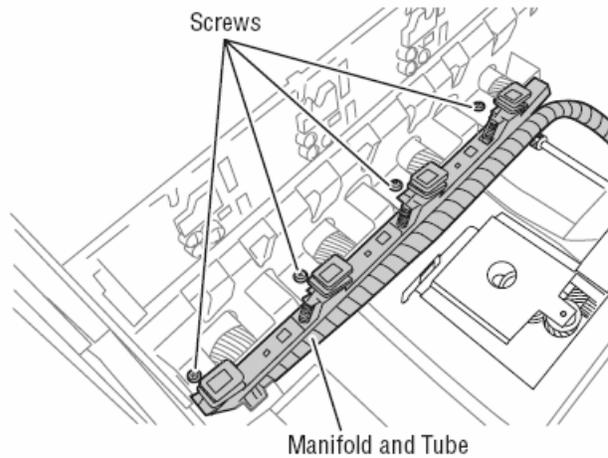
The Transfer Unit Belt Rotation Sensor is mounted inside the Housing Bias Assembly.

1. Remove the Housing Bias Assembly.
2. Release 2 hooks that secure the sensor to the assembly.
3. Disconnect the sensor from the harness.

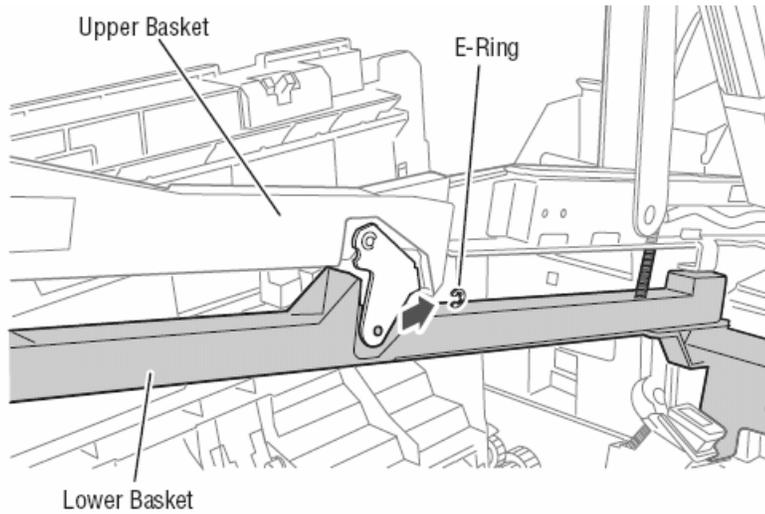


## Lower Basket Assembly

1. Remove 4 (Black, plastic 6 mm) screws that secure the Waste Toner Manifold to the Lower Basket Assembly.



2. Remove 2 E-rings that secure the hinges on either side of the Lower Basket Assembly.



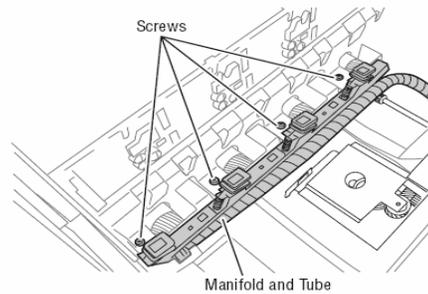
3. Release the Spring from the Upper Basket Assembly at the left, rear of the arm.
4. Remove the Hinge Pins to remove the Lower Basket Assembly.

**Replacement Note:** Align the Lower Basket rear guides into frame before installing hinge pins.

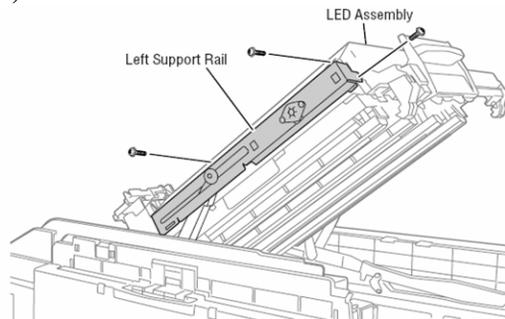
## Basket Assembly

**Note:** Take note of the Torsion Spring position before removing the Inner Shaft.

1. Remove the Top Cover.
2. Remove the Right Rear Cover.
3. Remove the Left Rear Cover.
4. Remove the Fuser Fan and Fan duct.
5. Remove the Job Offset Assembly.
6. Remove the Top Output Chute.
7. Remove 4 (Black, plastic 6 mm) screws that secure the Waste Toner manifold to the Lower Basket Assembly.

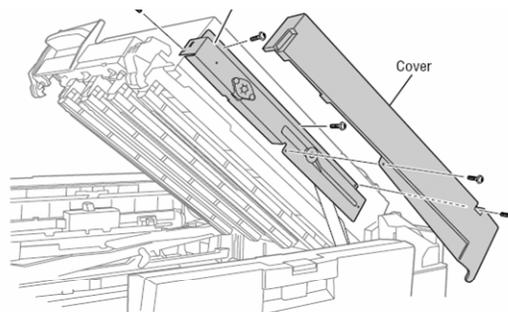


8. Remove 3 (metal, 6 mm) screws that secure the left side Basket Assembly Support Rail to the LED Assembly.

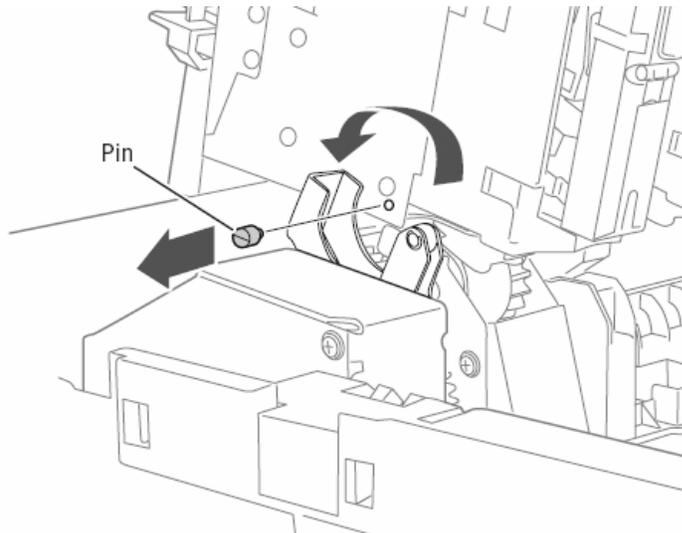


9. Remove 2 (metal, 6 mm) screws, and release two hooks that secure the cover to

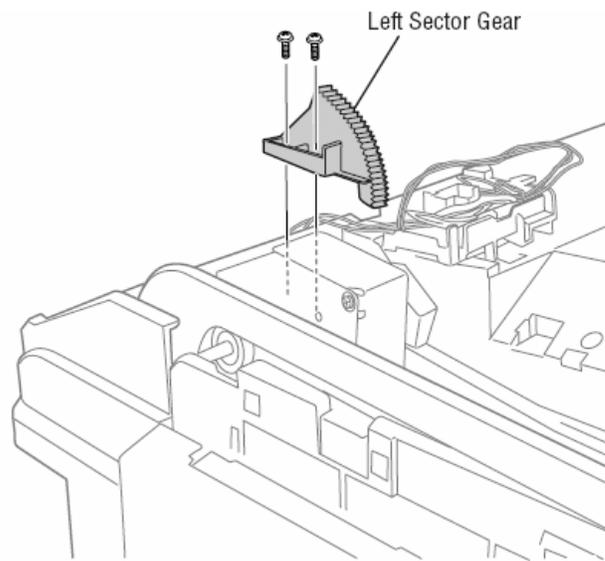
9. Remove 2 (metal, 6 mm) screws, and release two hooks that secure the cover to the right side Basket Assembly Support Rail.
10. Remove 3 (metal, 6 mm) screws that secure the left side Basket Assembly Support Rail to the LED Assembly.



11. Raise the LED Assembly completely, and then, using a small, flat-bladed screwdriver remove the 2 pins that serve as stops at the rear of the LED Assembly.



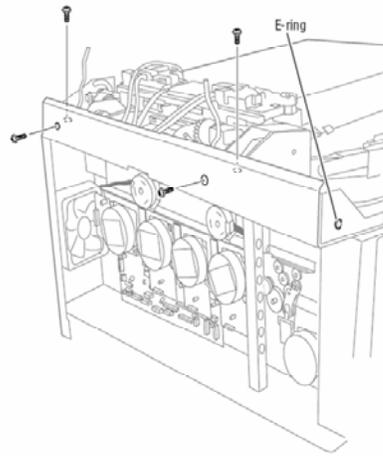
**12.** Lower the LED Assembly to remove 2 (metal, 10 mm) screws that secures each sector gear located at either side of the LED Assembly.



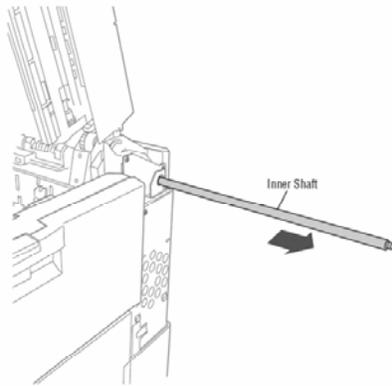
**13.** Release the Torsion Springs that supply tension to the Lower Basket Assembly. Use a second screwdriver as a stop to prevent the spring from snapping upwards and striking the LED Heads.

**14.** Remove the E-ring located on the left end of the Inner Shaft.

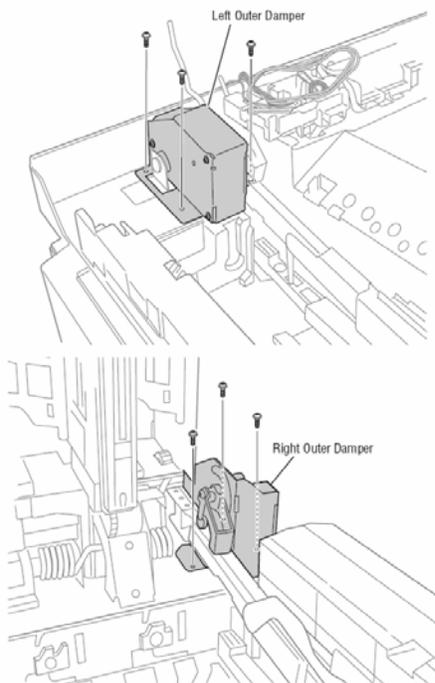
**15.** Remove 4 (metal, 10 mm) screws that lock the Inner Shaft to the Dampers. Access two of these screws through holes provided at the back near the LED Assembly hinge point.



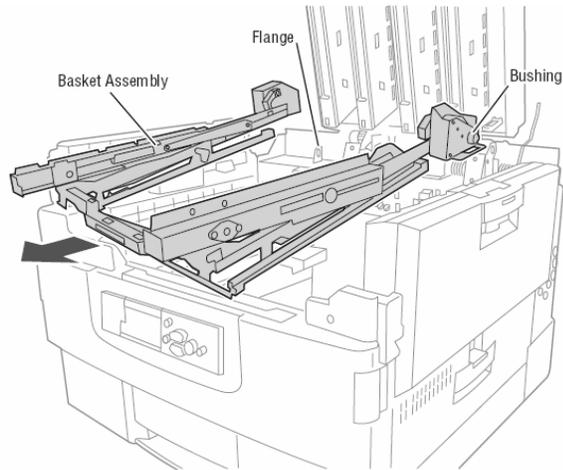
**16. Remove the Inner Shaft in the direction of the arrow (towards the MPT).**



**17. Remove 3 (metal, 10 mm) screws that secure each Outer Damper to the frame.**



**18. Release the bushings from the flange on the frame to remove the Basket Assembly.**

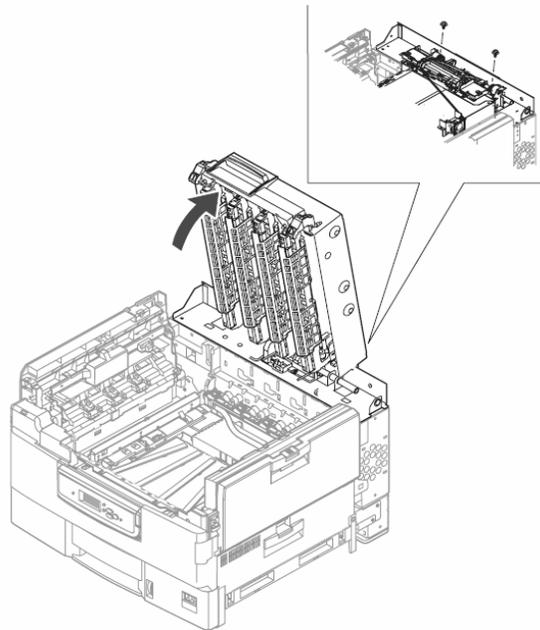


**Replacement Note:** Observe these notes as you reassemble the Basket Assembly.

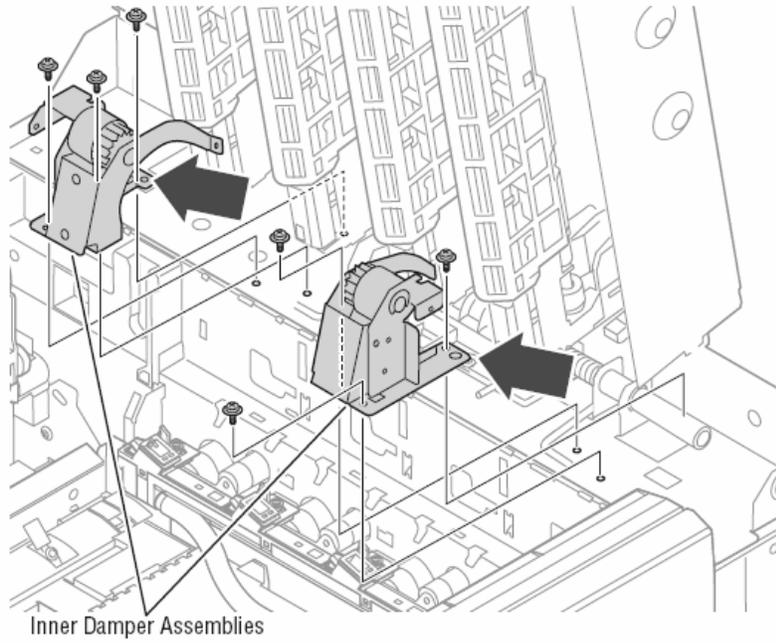
1. Replace the screws that secure the Inner Shaft to the Dampers before replacing the E-ring at the end.
2. Align the Guide Rollers at the end of each Lower Basket Assembly arm in the tracks before securing the Dampers.
3. Move the outer stops to the rear before installing the Pins.

### LED Assembly

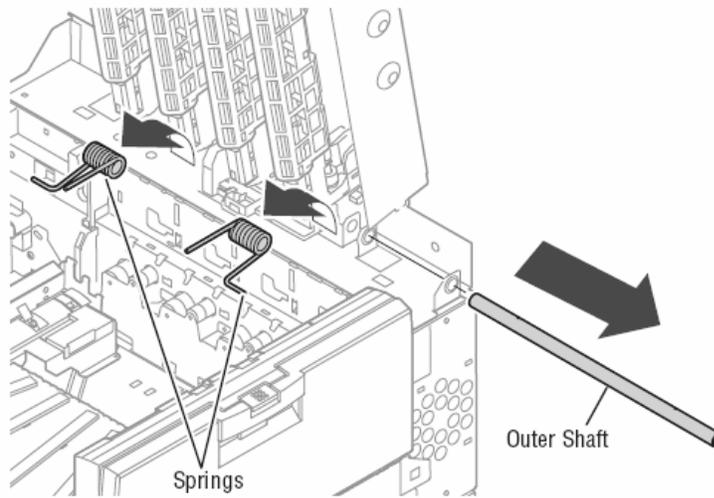
1. Remove the Basket Assembly.
2. Disconnect the 4 RFID Antennas from the RFID Reader Board, and then remove the antennas from the LED Assembly.
3. Remove the RFID Reader Board.
4. Remove the LED Relay Board.
5. Disconnect the LED Heads from the Engine Control Board.
6. Release the LED Head cables from the Card Cage clamp.
7. Remove 2 (metal, 10 mm) screws securing the 2 Sector Gears to the shaft.



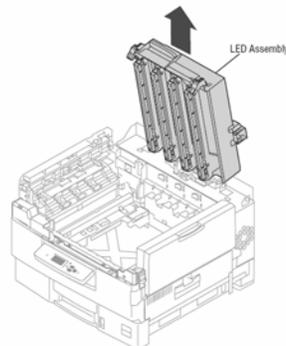
8. Remove 6 (metal, 10 mm) and 2 (metal, 6 mm) screws that secure the 2 Dampers. The 2 (metal, 6 mm) screws are located on the back of the printer.



9. Make note of the Torsion Spring position, and then remove the Outer Shaft by pushing in the direction of the arrow.



10. Remove LED Assembly.

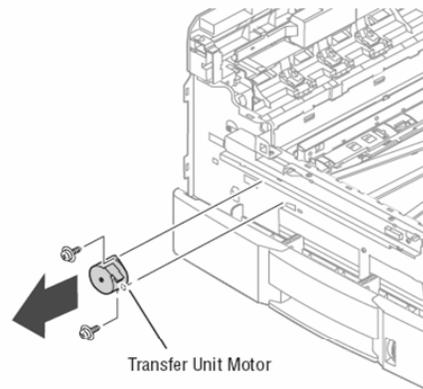


**Replacement Note:** Transfer all the LED and RFID components to the replacement assembly. Make sure the contacts under the outer shaft and springs are properly placed in their notches.

## 2.4 Printer Motors

### Transfer Unit Motor

1. Open the Top Cover.
2. Remove the [Front Door](#).
3. Remove the Waste Toner Container, if installed.
4. Remove the [Left Front Cover](#).
5. Position the Control Panel parallel to the floor.
6. Disconnect the motor connector.
7. Remove the 2 (metal, 6 mm) screws securing the motor.

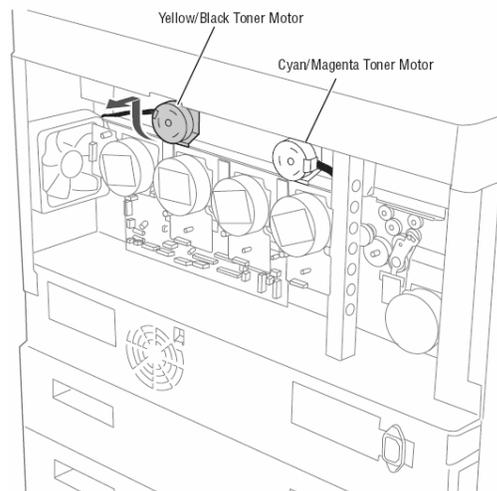


### Toner Motors

The Toner Motor supporting the YK Imaging Units is at the left. The Toner Motor supplying the CM Imaging Units is on the right. While these motors are identical, notice that they are positioned differently on the mounting plate.

**Note:** A non-captive spring is located behind each Toner Motor to provide tension against the lower tab.

1. Remove the [Card Cage](#).
2. Release the tab at the bottom of each mounting plate.
3. Lift the motor perpendicular to the printer to release the top tab from the frame.



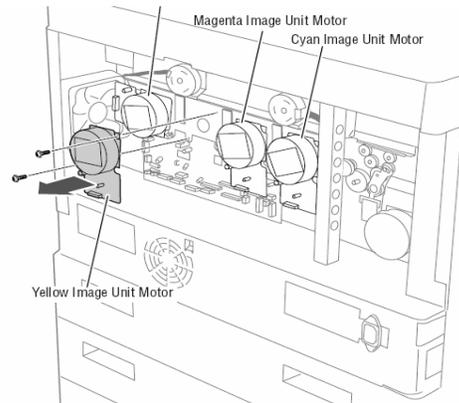
4. In the case of the CM Toner Motor, release the ribbon cable from the clamp.
5. Disconnect the Toner Motor connector from the Motor Diver Board.

## Imaging Unit Motors

The Imaging Unit Motors (CMYK) are all mounted to single mounting plate by 2 (metal, 6 mm) screws. In addition to the screws, each motor has a corresponding connection to the Motor Driver Board. Use the following procedure to remove one or all four Imaging Unit Motors.

**Note:** The Black Imaging Unit Motor is oriented differently than the other colors.

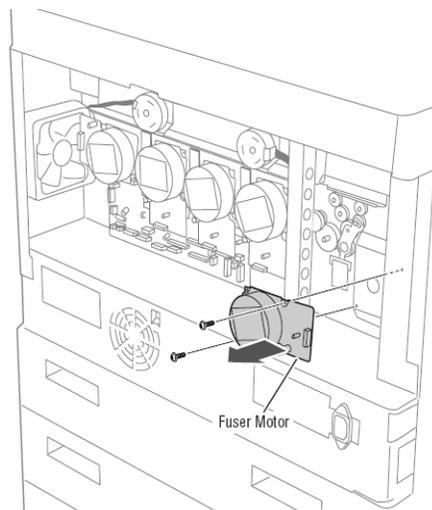
1. Remove the Card Cage.
2. Remove 2 (metal, 6 mm) screws that secure the motor.
3. Disconnect the motor's connector on the Motor Driver Board.



## Fuser Motor

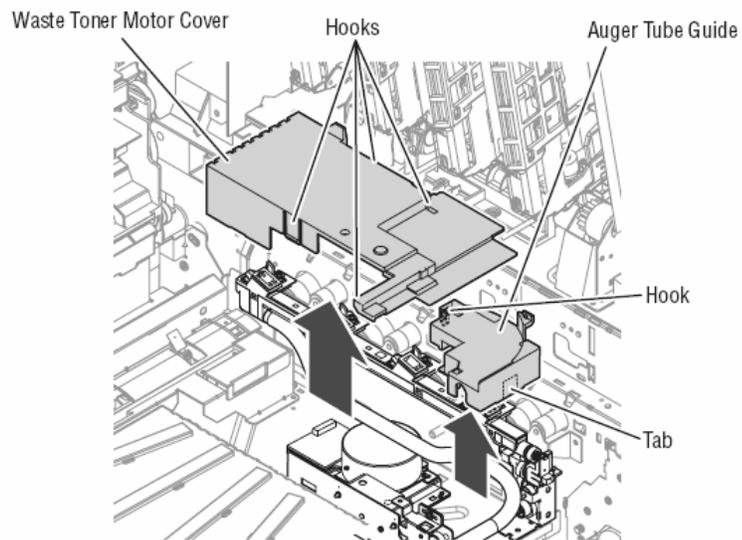
The Fuser Motor is mounted to the frame with 2 (metal, 6 mm) screws, and connects to the Motor Driver Board.

1. Remove the Card Cage.
2. Remove 2 (metal, 6 mm) screws that secure the motor.
3. Release the Fuser Motor wiring from the 3 clamps.
4. Disconnect the motor's connector on the Motor Driver Board.

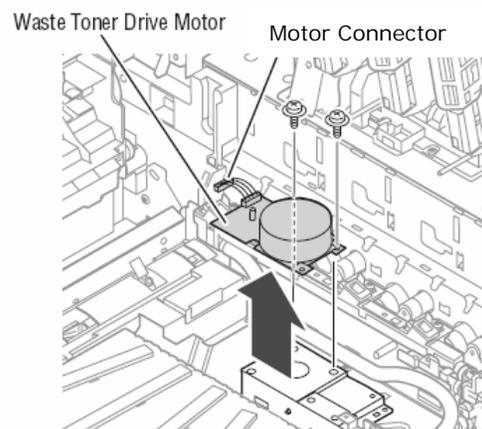


## Waste Toner Motor

1. Release the 4 hooks that secure the Waste Toner Motor Cover.



2. Disconnect the Waste Toner Motor connector from the Waste Toner Motor harness.
3. Remove 2 (metal, 6 mm) screws that secure the motor to the frame.

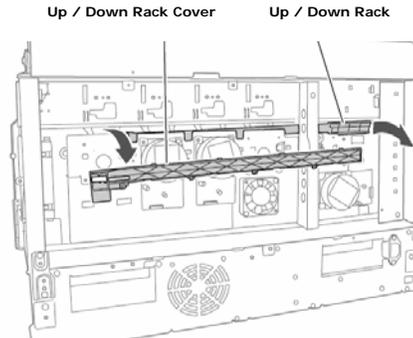


## Imaging Unit Up / Down Mechanism

The Imaging Unit Up /Down mechanism uses two Lift racks, front and back, to lift the color Imaging Units away from the Transfer Unit belt during monochrome printing.

### Rear Up / Down Rack

1. Remove the Imaging Unit Sensor Board.
2. Remove the Registration Assembly.
3. Release the hook and 4 tabs that secure the Up/Down Rack Cover to the frame, and then remove the cover.

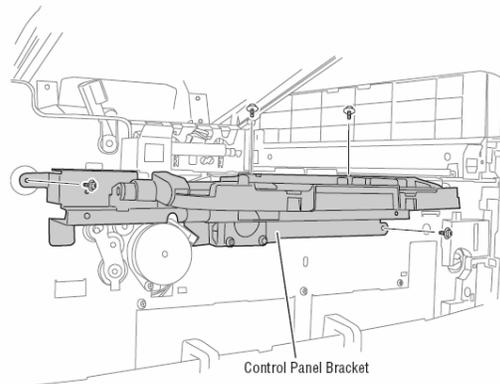


4. Move the Up/Down Rack to the right to clear the gear set, and then remove the Up/Down Rack

### Front Up/ Down Rack

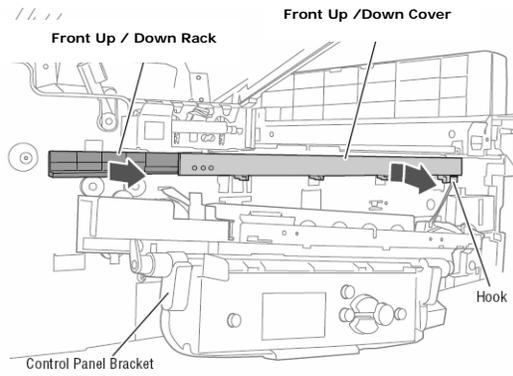
**Note:** Two copper contacts are positioned between the frame and the Control Panel bracket. Replace these contacts before securing the bracket to the frame.

1. Raise the Basket Assembly.
2. Remove the Waste Toner Container, if installed.
3. Remove the Front Door.
4. Remove the Left Front Cover.
5. Remove the Upper Front Cover.
6. Remove 4 (metal, 6 mm) screws that secure the Control Panel bracket to the frame.



7. Lower the bracket to access the Up / Down Cover.

**8. Release the hook and 4 tabs that secure the Up/Down Cover to the frame, and then remove the cover.**

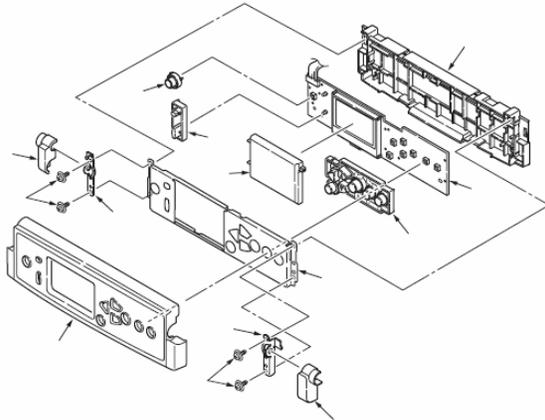


**9. Move the Up/Down Rack to the right to clear the gear set, and then remove the Up/Down Rack**

## 2.5 Electrical Components

### Control Panel

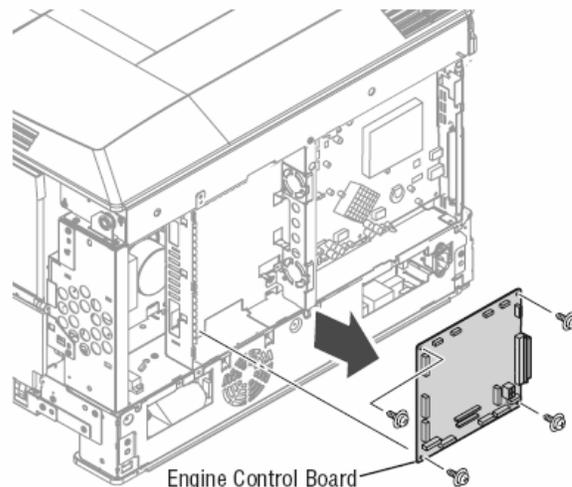
1. Release the 2 hooks closest to the printer from underneath the Control Panel.
2. Lift up on the part of the panel closest to the printer to remove the Control Panel faceplate.
3. Remove 1 (metal, 6 mm) screw that secures the ribbon cable.
4. Disconnect the ribbon cable from the Control Panel Board.
5. Remove 4 (Black, plastic, 10 mm) screws to remove the Control Panel Hinges.
6. Remove the Control Panel and Rear Cover.
7. Release the mounting bracket by sliding it slightly downwards.



**Replacement Note:** Insure the Control Panel, metal mounting bracket, front, and rear covers are assembled correctly before installing any screws.

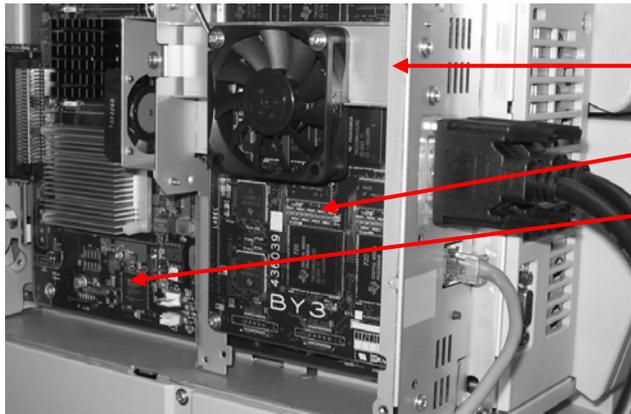
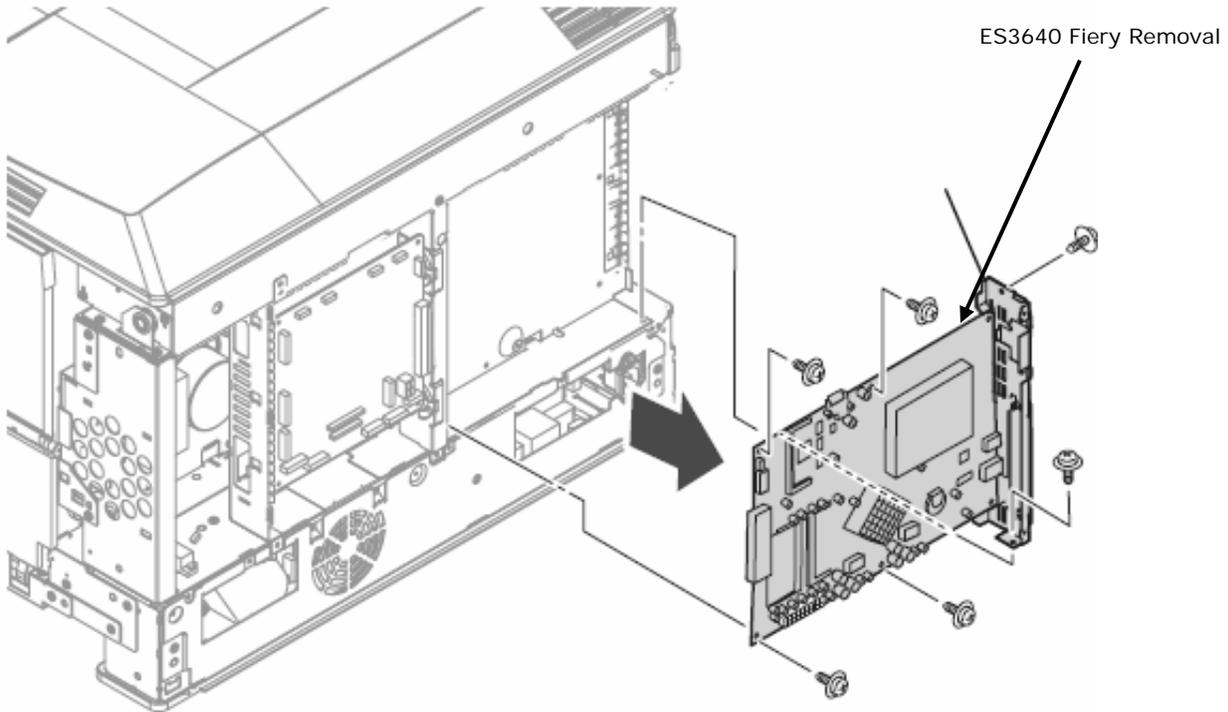
### Engine Control Board

1. Remove the Rear Cover.
2. Remove the Card Cage Fan Duct.
3. Disconnect 17 connectors from the Engine Control Board.
4. Remove 4 (metal, 6 mm) screws.
5. Shift the board to the left to release the connection to the Fiery Control Board.
6. Remove the Engine Control Board.



## Fiery Control Board

1. Remove the Rear Cover.
2. Disconnect the Fan connector.
3. Remove 6 (metal, 6 mm) screws securing the Fiery Control Board.
4. Remove the Fiery Control Board and Rear Panel.



### CX3641Fiery Removal

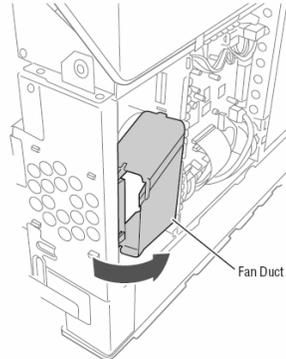
Remove the Fan Assembly

Remove the BY3 PCB

Remove the Fiery Controller

## Card Cage Fan Duct

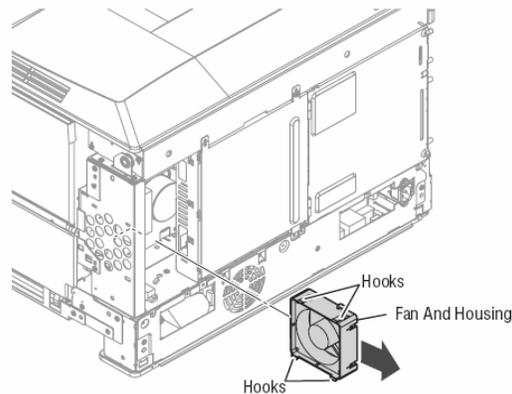
1. Open the Top Cover.
2. Open Right Lower Door.
3. Remove the Right Rear Cover.
4. Release the 2 hooks, top and bottom, that secure the Fan Duct to the Fan Housing.
5. Remove the left side of the Card Cage Fan Duct from the printer to release the 2 tabs from the Card Cage.



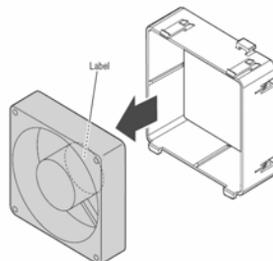
**Replacement Note:** Insert the right side of the Card Cage Fan Duct into the printer first to engage the 2 tabs. Next, snap the duct onto the card Cage Fan Housing.

## Card Cage Fan

1. Open the Top Cover.
2. Remove the Right Rear Cover.
3. Remove the Card Cage Fan Duct.
4. Release the 4 hooks that secure the Fan Housing to the frame.
5. Disconnect the fan from the Motor Driver Board fan connector.
6. Move the leading edge of the Fan Housing to the right, and then carefully remove the fan from the frame.

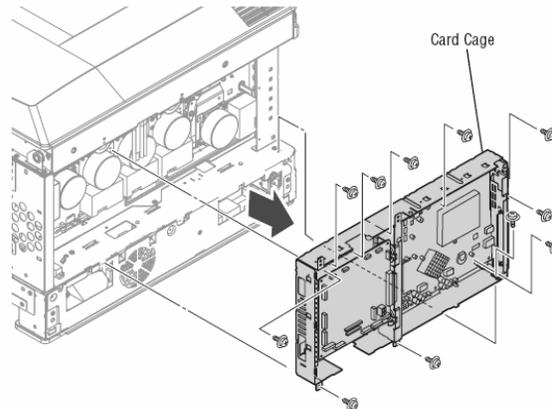


7. Remove the 3 hooks that secure the fan to the Fan Housing.
8. Disconnect the fan harness and remove the fan.



## Card Cage

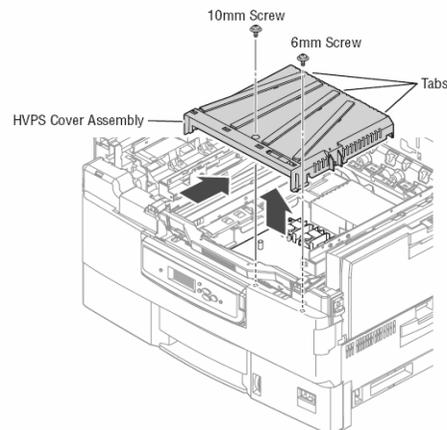
1. Remove the Rear Cover.
2. Remove the Lower Rear Cover.
3. Remove the Right Rear Cover.
4. Remove the Card Cage Fan Duct.
5. Remove the Engine Control Board.
6. Remove the Fiery Control Board.
7. Remove 11 (metal, 6 mm) screws securing the card cage to the printer.
8. Remove 1 (metal, 6mm) screw that secures the LED Head cable clamp and guide block.
9. Release the wiring harnesses from the card cage.
10. Slide the card cage out from the bottom first to protect the wiring.



## HVPS Cover

**Caution:** Use care when removing the HVPS Cover. The four ribs across the top of the cover are covers for the Transfer Roller conductors. These covers are secured by 2 hooks at their center and are easily broken by flexing the HVPS Cover during removal.

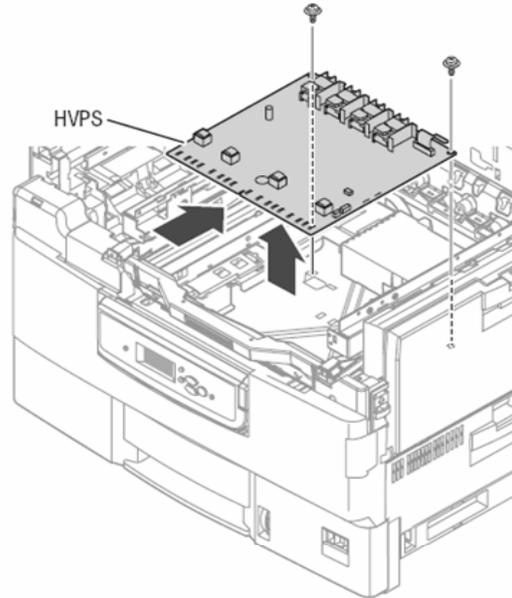
1. Open the Top Cover.
2. Remove the Transfer Unit, if installed.
3. Remove 2 (metal, 6 and 10 mm) screws securing the HVPS Cover and remove.
4. Release 3 tabs at the back of the cover, and then lift the cover while sliding it towards the rear to remove.



**Replacement Note:** Use care not to pinch wiring underneath the 6 mm screw when replacing the cover.

## High Voltage Power Supply

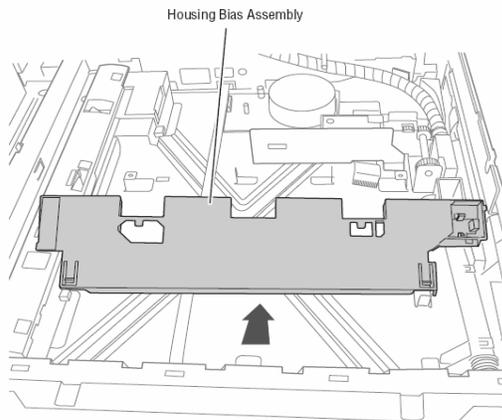
1. Remove the HVPS Cover.
2. Disconnect 4 connectors from the HVPS.
3. Remove 2 (metal, 6 mm) screws and carefully slide the board to the rear to clear the Housing Bias Assembly.



## Housing Bias Assembly

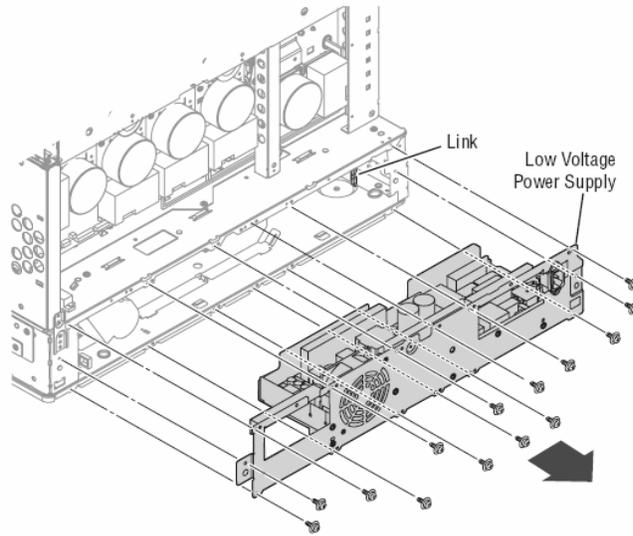
**Caution:** The Transfer Unit Belt Rotation Sensor is mounted in the Housing Bias Assembly. Use care not to damage the sensor wiring during the removal process.

1. Remove the HVPS Cover.
2. Open the Front Door.
3. Open the Basket Assembly.
4. Remove the 2 (metal, 6 mm) screws that secure the HVPS.
5. Slide the HVPS to the rear to disconnect it from the Housing Bias Assembly.
6. Release the 2 hooks that secure the Housing Bias Assembly to the frame.
7. Lift the assembly slightly to release the 2 tabs.
8. Remove the sensor by releasing the 2 hooks that secure the sensor board.
9. Remove the sensor wiring from the guides in the Housing Bias Assembly.

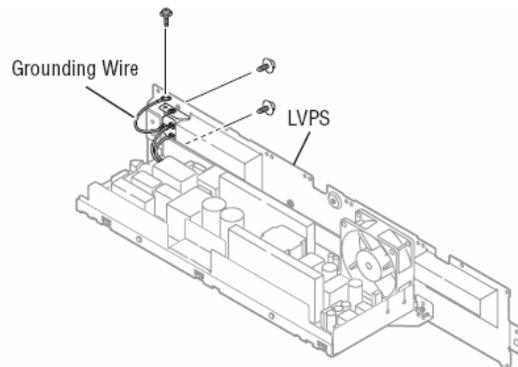


## Low Voltage Power Supply

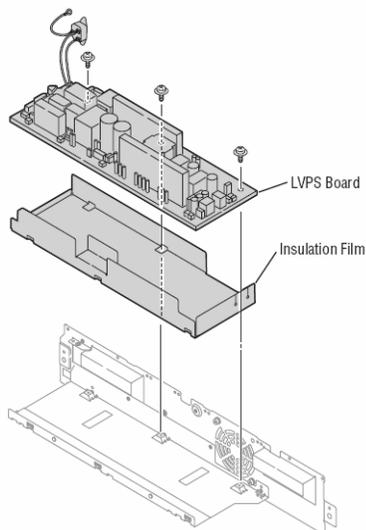
1. Remove 14 (metal, 6 mm) screws securing the power supply enclosure.
2. Lift the Power Switch Link Arm from the Power Switch on the LVPS.
3. Disconnect 4 connections to the LVPS and remove the LVPS enclosure.



4. Remove the LVPS Fan.
5. Remove the 2 (metal, 10 mm) screws that secure the AC Inlet to the LVPS enclosure.
6. Remove the 1 (metal, 6mm) screw that secures the ground wire to the LVPS enclosure.

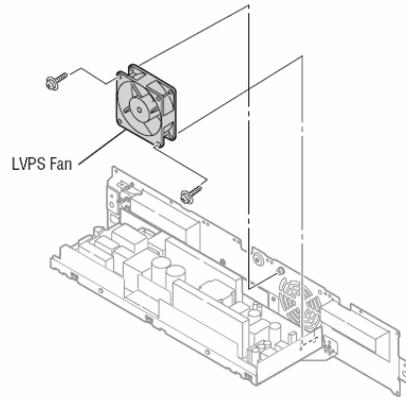


7. Remove 3 (metal, 6 mm) screws that secure the LVPS to the enclosure.



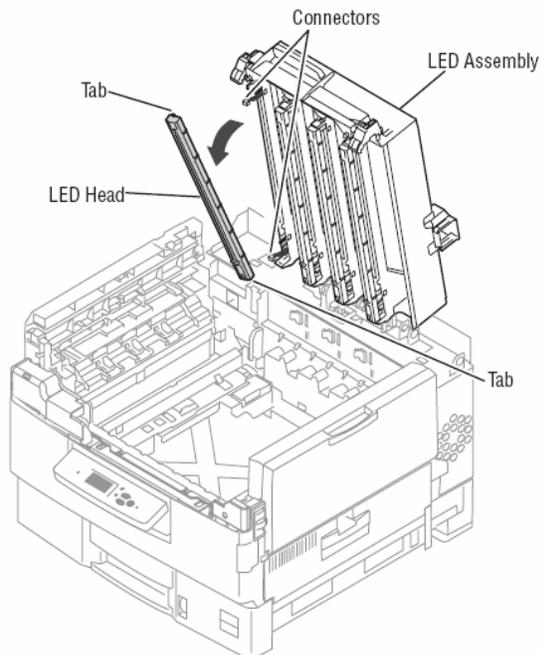
## LVPS Fan

1. Remove the LVPS enclosure.
2. Disconnect the Fan connector.
3. Release the Fan harness from the insulation film.
4. Remove 2 (metal, 30 mm) screws securing the fan to the enclosure to remove it.



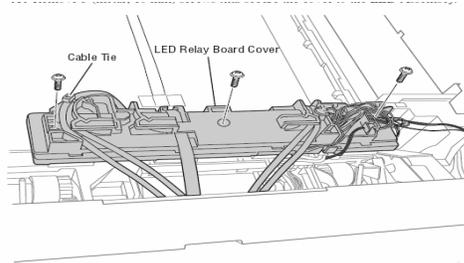
## LED Head

1. Open the Top Cover.
2. Release the front tab of the LED Head from the holder by gently pushing the LED Head towards the rear while pulling the holder forward.
3. Release the rear tab of the LED Head by pulling the LED Head towards the front of the printer.
4. Disconnect 2 connectors to remove the LED Head from the holder.



## LED Relay Board

1. Remove the Top Cover.
2. Remove the Rear Cover.
3. Disconnect the 4 LED Heads from the Engine Control Board CC, YY, MM, and KK connectors.
4. Disconnect the RFID Reader Board ribbon cable from the Engine Control Board RFID connector.
5. Remove 1 (metal, 6 mm) screw that secures the cable clamp holding the LED Head and RFID Reader Board wiring.
6. Release the Offset Motor and Transfer Unit Fan wiring from the guides in the LED Head Relay Board Cover.
7. Cut 1 cable tie, and then remove the LED Head cables from the guides in the Imaging Unit Relay Board Cover.
8. Release 2 hooks that secure to the LED Head Relay Board Cover.
9. Disconnect the POWER connector from the relay board.
10. Remove 3 (metal, 10 mm) screws that secure the cover to the LED Assembly.

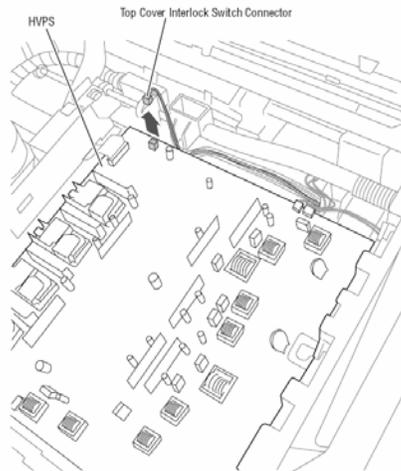


11. Release 1 hook at the front of the cover to remove the cover from the board.
12. Disconnect the KPOW, YPOW, MPOW, and CPOW connectors, and then remove the board.

## Top Cover Interlock Switch

The Top Cover's right hand latching mechanism closes the interlock when latched.

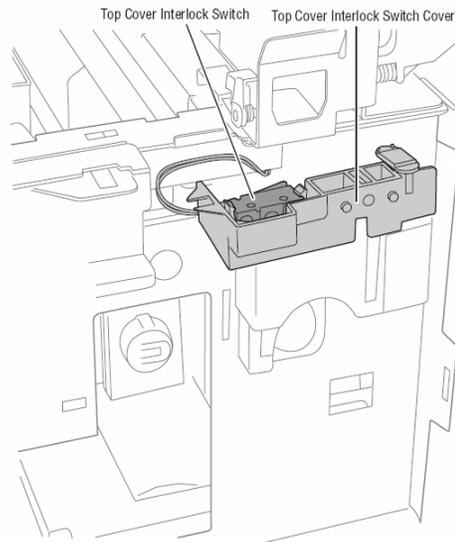
1. Open the Top Cover.
2. Open the Basket Assembly.
3. Remove the HVPS Cover.
4. Disconnect the connector from the HVPS.



5. Remove the switch wiring from the guides on the Registration Assembly.
6. Remove the Left Front Cover.
7. Remove the Upper Front Cover.
8. Remove 1 (metal, 6 mm) screw that secures the right side Control Panel hinge.
9. Remove 1 (black, 8 mm) screw that secures the switch holder.

**10. Remove 2 (metal, 6 mm) screws that secure the Control Panel mounting.**

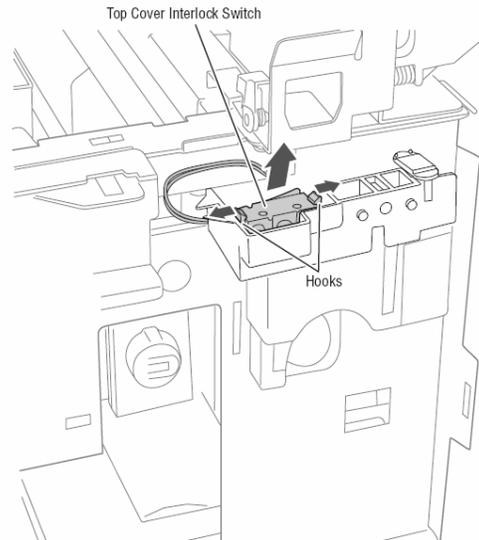
**11. Remove the switch by pulling the Control Panel mount away from the frame, and then shift the switch holder first to the right, then down.**



**12. Feed the wiring through to the front to remove the switch.**

**13. Spread the 2 hooks that secure the switch to the holder.**

**14. Release the harness and remove the switch from the cover.**

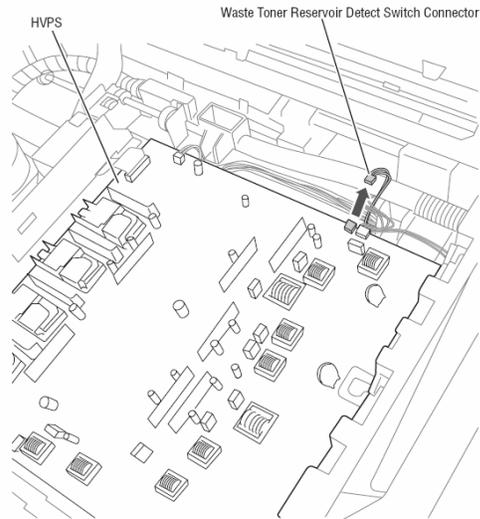


**Replacement Note:** Route the sensor wiring through the guides provided in the sensor housing. Make certain no wiring contacts the Waste Toner Reservoir auger drive.

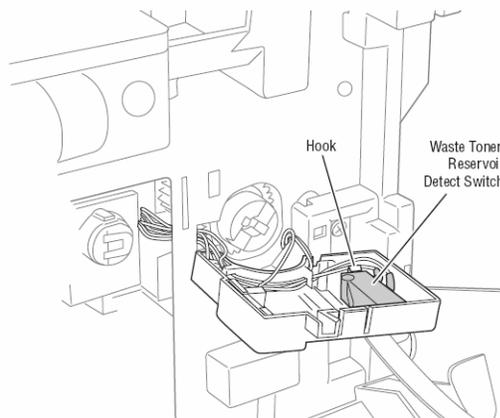
## Waste Toner Container Detect Switch

An actuator on the back of the Front Door penetrates the Waste Toner Container to activate a switch mounted in a sensor housing attached to the frame.

1. Open the Top Cover.
2. Remove the HVPS Cover.



3. Disconnect connector from the HVPS
4. Open the Front Door.
5. Remove the Waste Toner Container if installed.
6. Release 1 tab at the top of the sensor housing to release the housing from the frame.



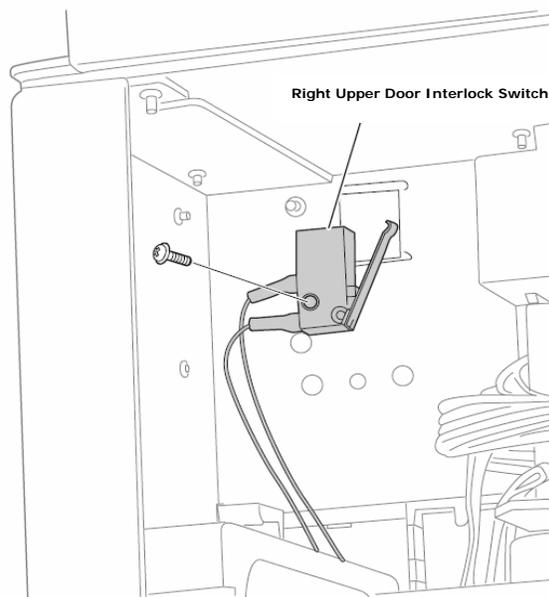
7. Spread the 2 hooks that secure the Waste Toner Container Detect Switch to the sensor housing. Use care not to damage the spring.
8. Release the harness and remove the switch from the cover.

**Replacement Note:** Route the switch wiring through the guides provided in the sensor housing. Make certain no wiring contacts the Waste Toner Reservoir Auger drive.

## Right Upper Door Interlock Switch

An actuator mounted on the Right Upper Door Latch Assembly penetrates the frame to activate a micro-switch mounted above the Card Cage Fan.

1. Remove the Card Cage Fan Duct.
2. Disconnect the connector from the Motor Driver Board.

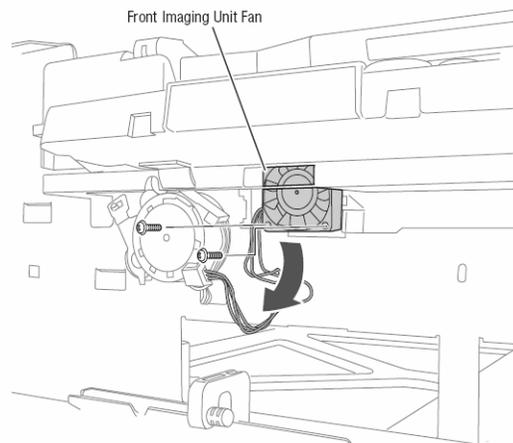


3. Remove 1 screw that secures the micro-switch to the frame.

**Replacement Note:** Verify that the actuator properly closes the switch when the Right Upper Door is closed.

## Imaging Unit Fan

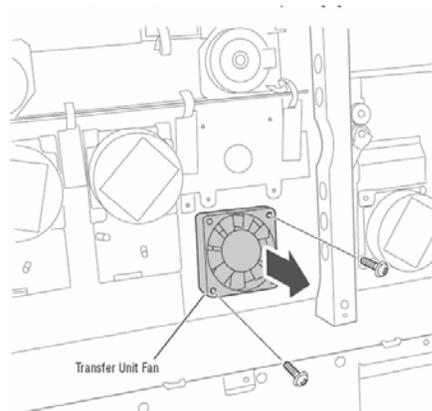
1. Open the Top Cover.
2. Open the Front Door.
3. Remove the Left Front Cover.
4. Remove the 2 (metal, 20 mm) screws that secure the fan to the frame.
5. Gently pull the fan downward to remove it from the frame.
6. Disconnect the fan from the harness.



## Transfer Unit Fan

The Transfer Unit Fan is located directly behind the Cyan Imaging Unit Motor.

1. Remove the Rear Cover.
2. Remove the Right Rear Cover.
3. Remove the Card Cage Fan Duct.
4. Remove the Card Cage.
5. Remove 2 (metal, 6 mm) screws that secure the Cyan Imaging Unit Motor.

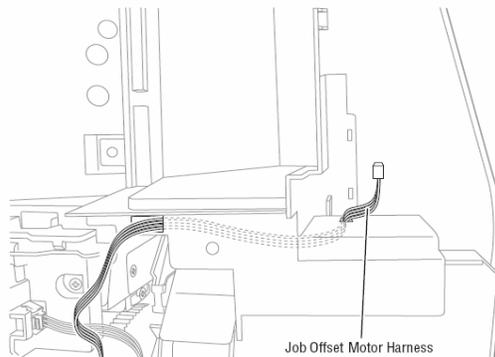


6. Remove 2 (metal, 23 mm) screws with washers that secure the Transfer Unit Fan to the frame.
7. Release the fan wiring from the clamp.
8. Disconnect the fan from the Motor Driver Board.

## Top Cover Fan

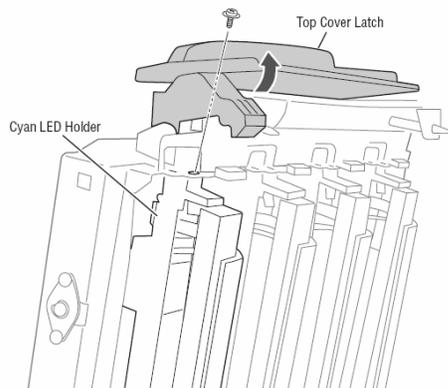
The Top Cover Fan is mounted in a duct located underneath the Cyan LED Head.

1. Remove the Job Offset Assembly.
2. Remove the Job Offset Motor harness from the Upper Fuser Fan Duct and Top Output Chute.

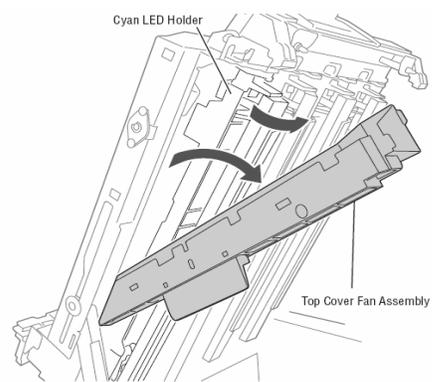


3. Release the 4 hooks that secure the Top Output Chute to remove it from the LED Assembly.
4. Release the Top Cover Fan wiring (Red, Black and White) from the guides in the LED Relay Board cover.
5. Release the 1 hook at the back, and 2 tabs at the front that secure the Top Cover Fan Duct to the LED Assembly.

**6. Rotate the Top Cover Latch upward, and then remove the 1 (black, plastic 6 mm) screw that secures the front of the Cyan LED Holder.**

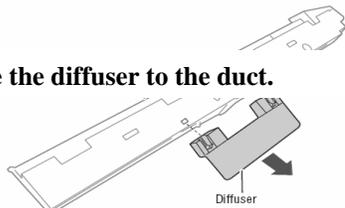


**7. Move the Cyan LED Holder to the right to allow sufficient clearance to remove the duct from the LED Assembly.**



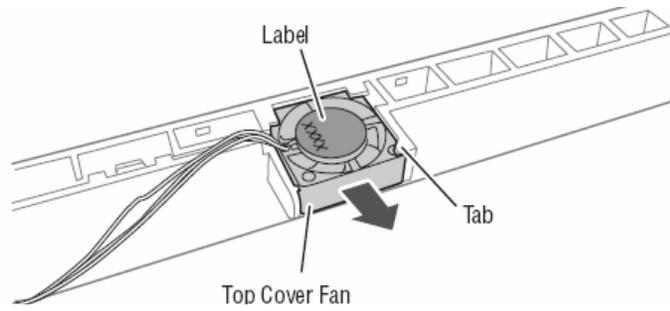
**8. Release 2 hooks that secure the diffuser to the duct.**

**8. Release 2 hooks that secure the diffuser to the duct.**



**9. Release the fan wiring from the guides in the duct.**

**10. Release 1 tab that secures the Top Cover Fan to the duct.**



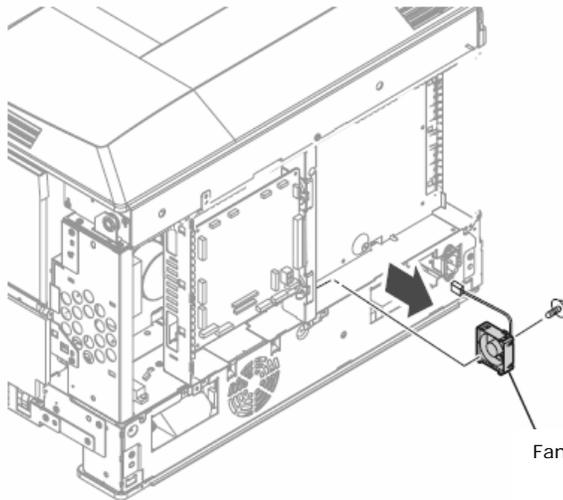
**11. Disconnect the Top Cover Fan connector (P/J482) on the LED Relay Board cover.**

**Replacement Note**

Route the fan wiring through the opening in the Cyan LED Holder and lace the wiring back into the guides provided in the duct. Also, install the fan with the label facing towards the Transfer Unit.

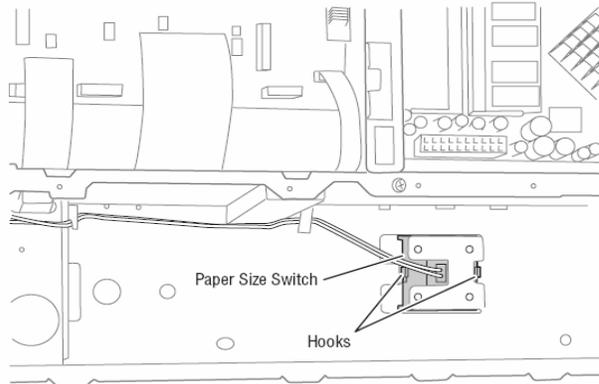
**Fiery Control Board Fan**

- 1. Open the Rear Cover.**
- 2. Remove the Fiery Control Board.**
- 3. Remove 1 (metal, 18 mm) screw that secures the Fan to the Card Cage.**

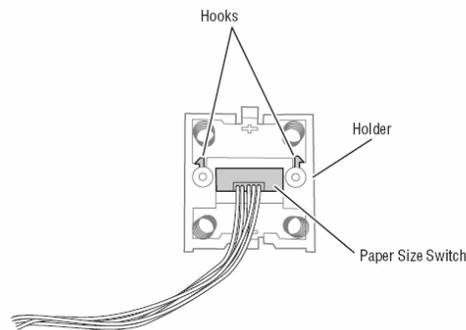


## Paper Size Switch

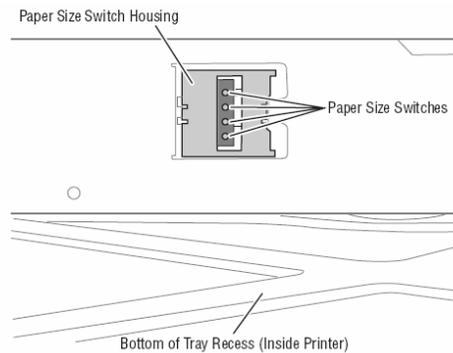
1. Remove the Tray.
2. Open the Top Cover.
3. Remove the Right Rear Cover.
4. Remove the Card Cage Fan Duct.
5. Remove the LVPS enclosure.
6. Release the 2 hooks that secure the Paper Size Switch Holder to the frame. The four springs are attached to the holder.



7. Disconnect the Paper Size Switch from the Motor Driver Board connector.
8. Release the size switch harness from the 2 cable clamps, and then carefully draw the harness into the tray cavity.
9. Remove the Paper Size Switch and holder from the front of the tray cavity.
10. Release the 2 hooks that secure the Paper Size Switch to the holder.

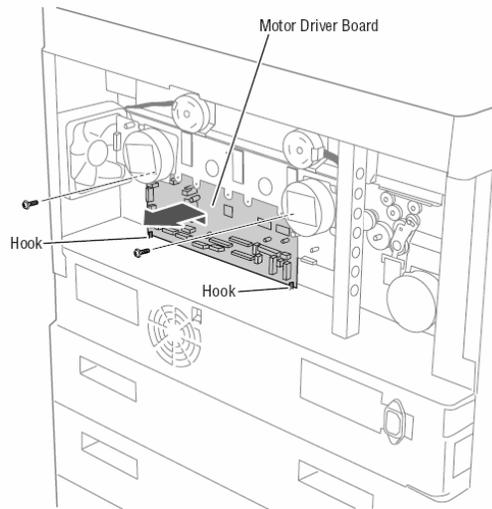


**Replacement Note:** After replacement, check that the switch is aligned as shown.



## Motor Driver Board

1. Remove the Rear Cover.
2. Remove the Right Rear Cover.
3. Remove the Card Cage Fan Duct.
4. Remove the Card Cage.
5. Remove 2 (metal, 6 mm) screws that secure the Magenta Imaging Unit Motor.
6. Remove 2 (metal, 6 mm) screws that secures the Yellow Imaging Unit Motor.
7. Remove the (Yellow) and (Magenta) connections from the Motor Driver Board.
8. Remove the remaining connections from the Motor Driver Board.



9. Remove 2 (metal, 6 mm) screws at the top of the Motor Driver Board.
10. Lift the board slightly to release it from the hooks along the lower edge.
11. Remove the Motor Driver Board.

## Imaging Unit Sensor Board

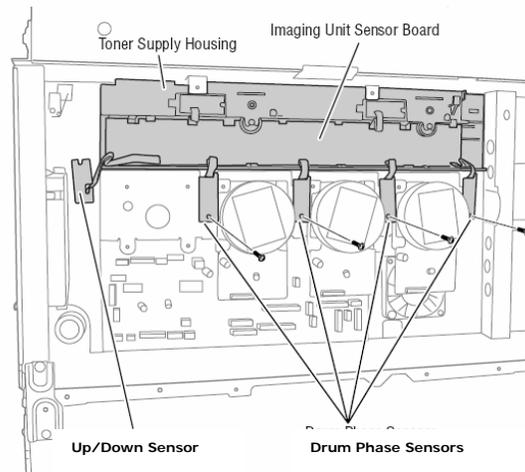
The Imaging Unit Sensor Board is held in the Toner Supply Housing. Remove the housing to facilitate replacement of the board.

### **Note**

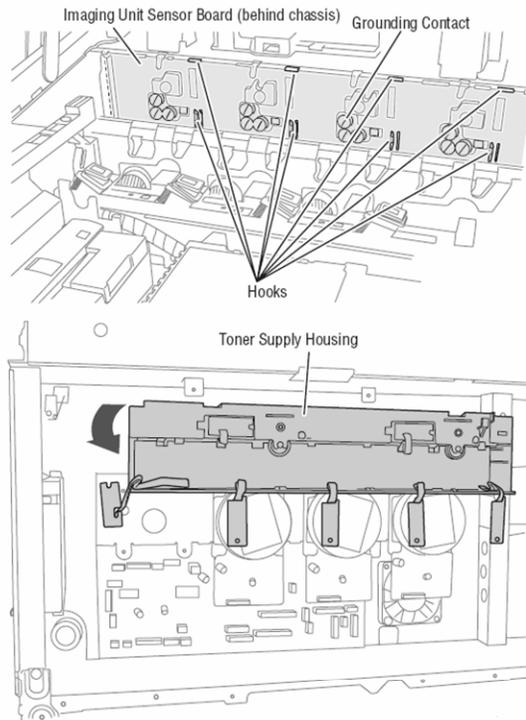
A non-captive spring is installed in the Toner Supply Housing just below the Cyan contacts. Removal of the Toner Supply Housing allows this spring to fall from its hole.

1. Remove the Rear Cover.
2. Remove the Right Rear Cover.
3. Remove the Card Cage Fan Duct.
4. Remove the Card Cage.
5. Remove the Black Imaging Unit Motor.
6. Release the 2 Toner Motors from their mounts.
7. Release the Up/Down Sensor from the holder next to the Card Cage Fan.

**8. Remove 1 (metal, 6 mm) screw on each of the 4 Imaging Unit Drum Phase Sensors and release the sensors from their retainers.**



- 9. Release the wiring from the guide just above the Cyan Imaging Motor.**
- 10. Disconnect the Fan connector from the right side of the board.**
- 11. Position the Toner Supply Cams so they are flush with the openings in the frame.**
- 12. Shift the Toner Supply Housing to the left, when viewed from the front, to release the 4 hooks located next to the grounding contacts.**
- 13. Release the 4 hooks located along the top edge of the housing, and then remove the housing.**



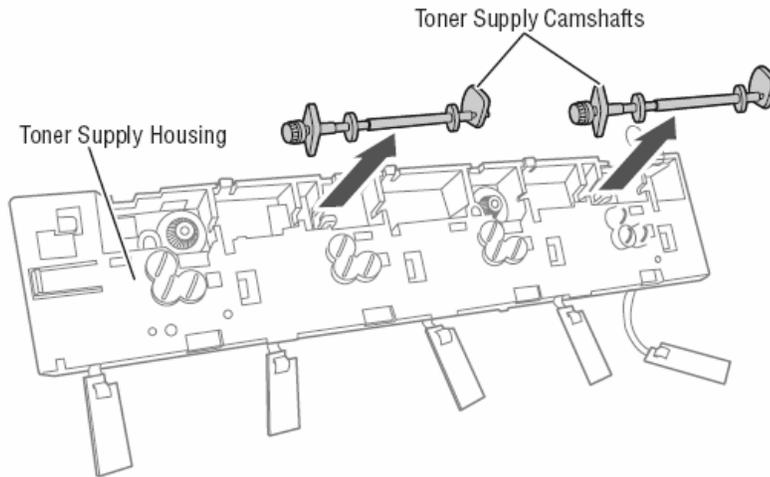
- 14. Release the 4 tabs along the bottom edge of the board.**
- 15. Lift the lower edge out, and then slide the upper edge from underneath the tabs to remove the Imaging Unit Sensor Board from the housing.**

**Replacement Note:** Three springs provide contact between the Imaging Unit Sensor Board and each Imaging Unit (12 total). These springs are captured in the housing by the board. When installing the board into the housing, make sure these contact springs are positioned correctly.

## Toner Supply Camshaft

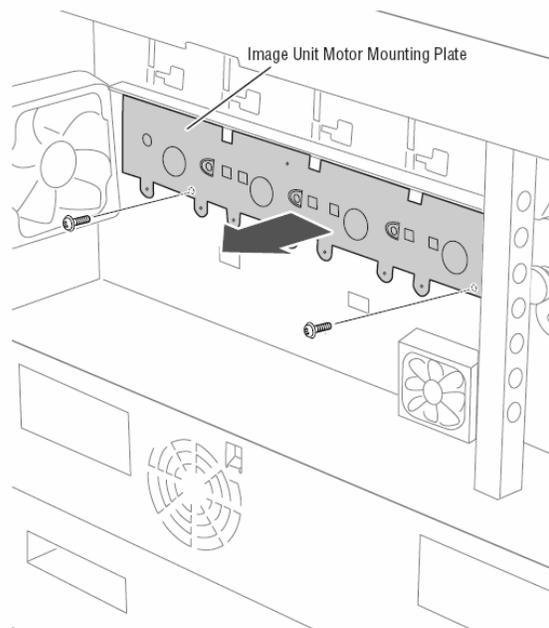
The Toner Supply Camshafts are mounted in the Toner Supply Housing.

1. Follow the [Imaging Unit Sensor Board removal procedures through Step 13](#) to remove the Toner Supply Housing from the printer.
2. Remove the camshaft by releasing it from the Toner Supply Housing.



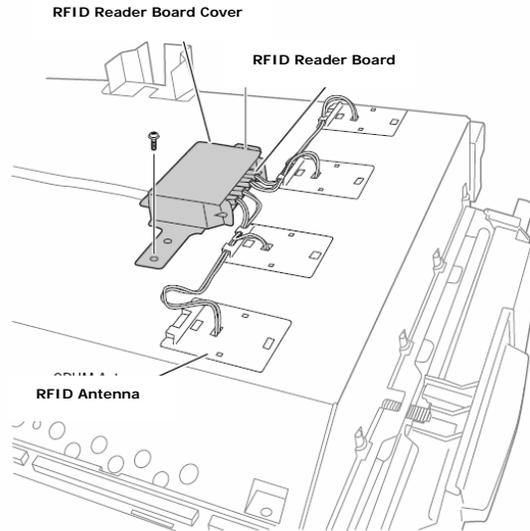
## Imaging Unit Motor Mounting Plate

1. Remove the [Motor Driver Board](#).
2. Remove the [YK and CM Toner Motors](#).
3. Remove the [Imaging Unit Sensor Board](#).
4. Remove the 4 screws that secure the 4 Imaging Unit Drive Gears.
5. Remove the 2 screws that secure the plate to the frame.



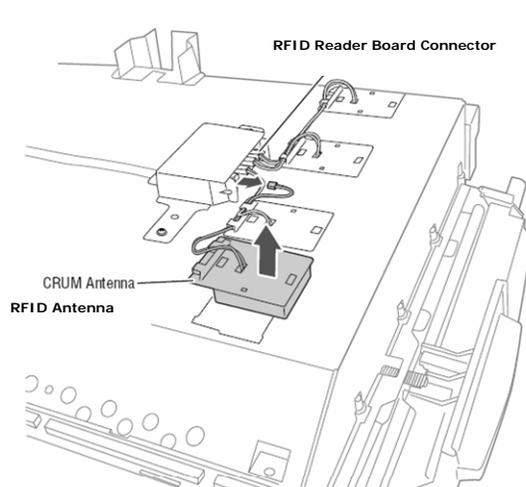
## RFID Reader Board

1. Remove the Top Cover.
2. Disconnect the ribbon cable from the RFID Reader Board.
3. Disconnect the 4 RFID Antenna connectors from the RFID Reader Board.
4. Remove the 2 (metal, 6 mm) screws that secure the RFID Reader Board Cover to the top of the LED Assembly.
5. Flip the cover over, and then remove the 2 (metal, 6 mm) screws that secure the RFID Reader Board to the cover.



## RFID Antenna

1. Remove the Top Cover.
2. Disconnect the affected RFID Antenna connector from the RFID Reader Board.
3. Release the 2 hooks that secure the antenna to the LED Assembly by reaching between the LED Heads and squeezing the antenna hooks.

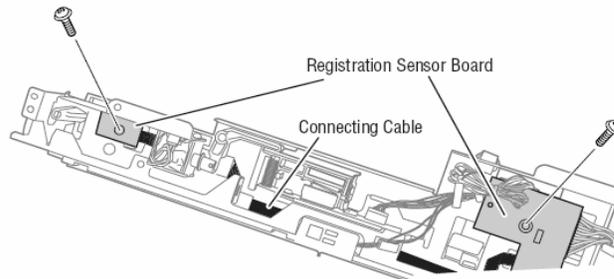


## Registration Sensor Board

The Registration Sensor Board includes the Front Color Registration Sensor attached by a ribbon cable, the Rear Color Registration Sensor integrated onto the board, the interface for the ADC Sensor, and the Transfer Unit Belt Slack Sensor. Replacement of either Color Registration Sensor requires replacement of the board.

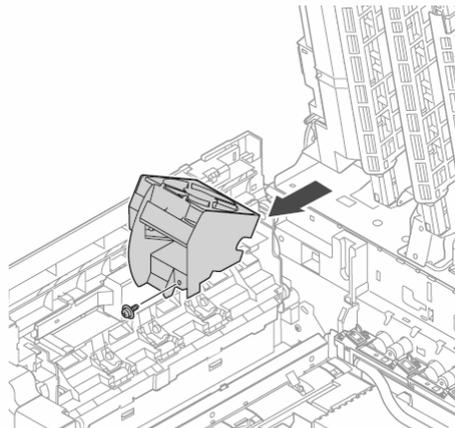
**Note:** The Color Registration Sensors are protected from the Transfer Unit belt by small, transparent covers. These covers are held in place by a hook and the presence of the sensor. Use care not to loose the sensor covers.

1. Remove the Registration Sensor Assembly.
2. Turn the assembly over and remove the 2 (metal, 6 mm) screws that secure both parts of the board.
3. Remove the Registration Shutter Solenoid.
4. Disconnect the connectors on the Registration Sensor Board.
5. Slide the ribbon cable connected to the Front Color Registration Sensor out from under the retainers and remove the board.



## Fuser Fan

1. Open the Top Cover.
2. Remove the 1 (black, 10 mm) screw that secures the Upper Fuser Fan Duct to the Top Output Chute.
3. Remove the 1 (metal, 6 mm) screw that secures the Lower Fuser Fan Duct to the frame.
4. Disconnect the connector (P/J250) at the top of the frame and remove the Fan and Duct from the printer.



5. Release the 4 hooks that secure the fan to the duct.

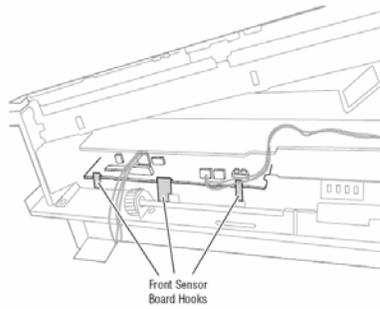
## Front Sensor Board

The Front Sensor Board is located behind the Front Sensor Board Cover inside the Registration Assembly.

**Note:** A spring is used to maintain tension against the retention hooks. This spring is not captive to either the board or Registration Assembly. Use care not to loose this spring when removing the board.

1. Remove the Registration Assembly.
2. Disconnect 3 connectors from the board.

**3. Move the Registration Sensor #1 and Transfer Unit Entrance Sensor Actuators to allow clearance, and then release the 3 hooks that secure the board to the assembly.**

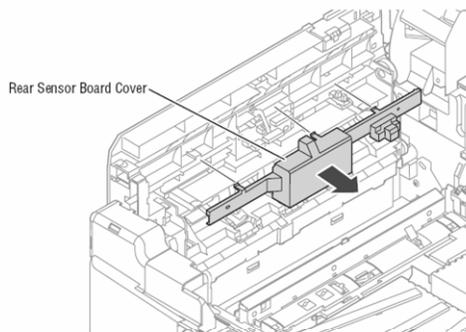


**Replacement Note:** Use a piece of non-conductive tape to retain the spring while replacing the board. Remove the tape just prior to snapping the board into the hooks. Make sure the Transfer Unit Entrance Sensor Actuator rests on the correct side of the lower Registration Roller.

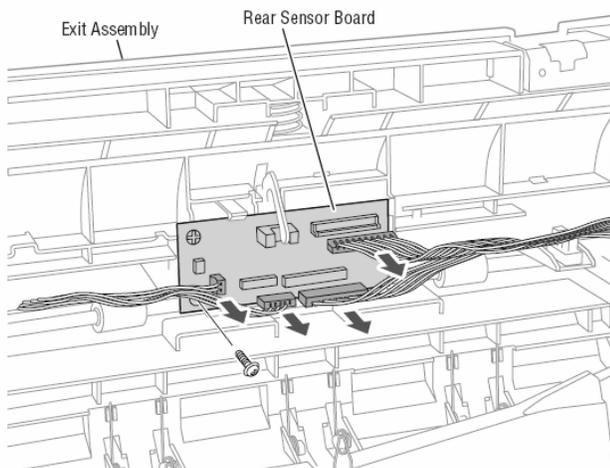
### Rear Sensor Board

The Rear Sensor Board is located underneath the Rear Sensor Board Cover on the Exit Assembly.

- 1. Open the Top Cover.**
- 2. Release the 6 hooks and 3 tabs that secure the Rear Sensor Board Cover.**



- 3. Disconnect the 4 connectors on the board.**



- 4. Remove 1 (black, plastic 6 mm) screw that secures the board to the Eject Assembly.**

# Chapter 3

## Print Engine Diagrams

### 1.1 Circuit Board Connectors

[Engine Control Board](#)

[Motor Driver Board](#)

[LVPS](#)

[Imaging Unit Sensor Board](#)

[Front Sensor Board](#)

[Rear Sensor Board](#)

[Feeder Board](#)

[LED Relay Board](#)

### 1.2 Wiring Diagram

[Print Engine General Wiring Diagram](#)

[Front Sensor Board](#)

[Feeder Board](#)

[Rear Sensor Board](#)

[Registration](#)

[Motor Driver Board](#)

[LED Heads](#)

[HVPS](#)

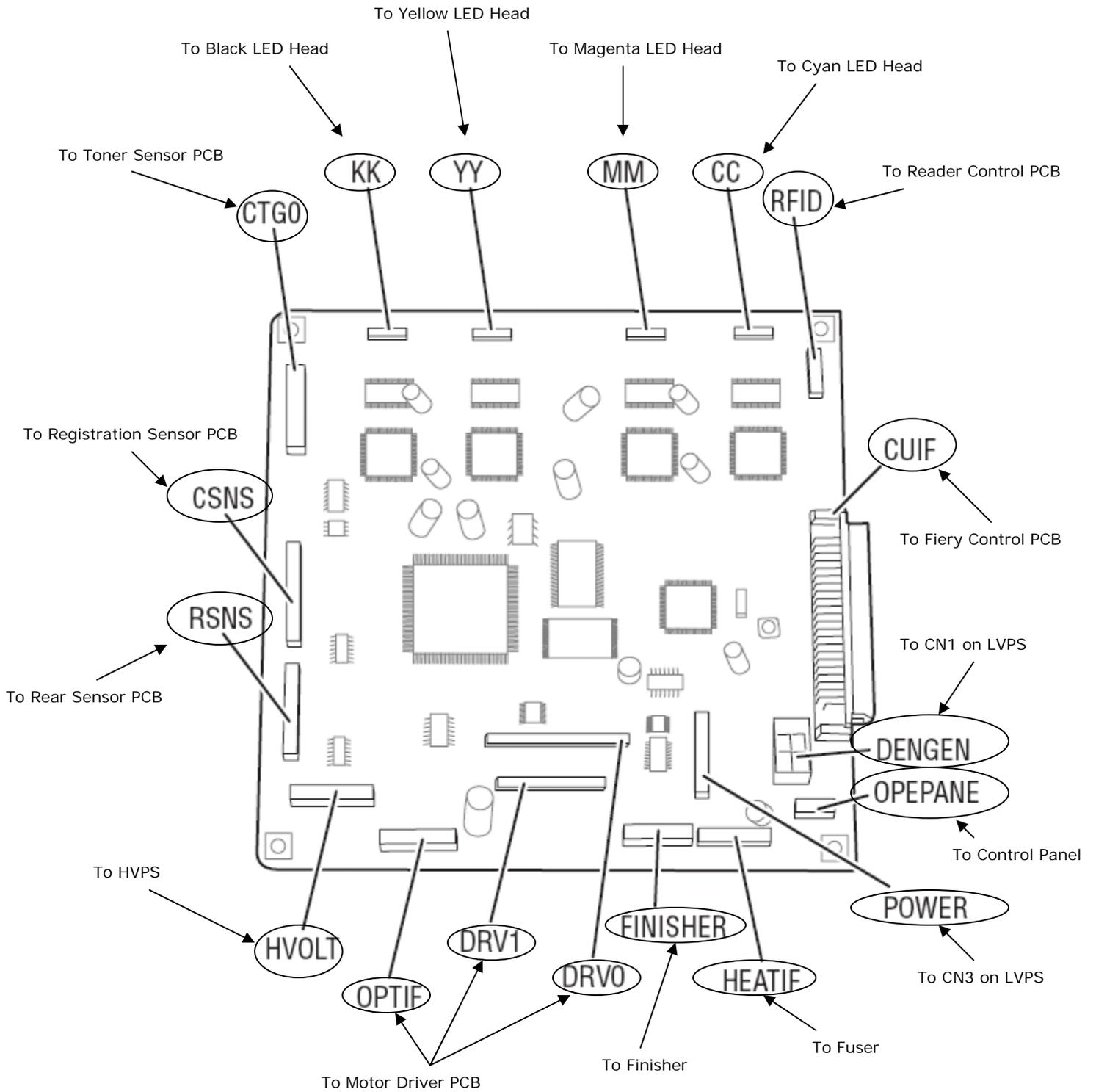
[LVPS](#)

[Fuser](#)

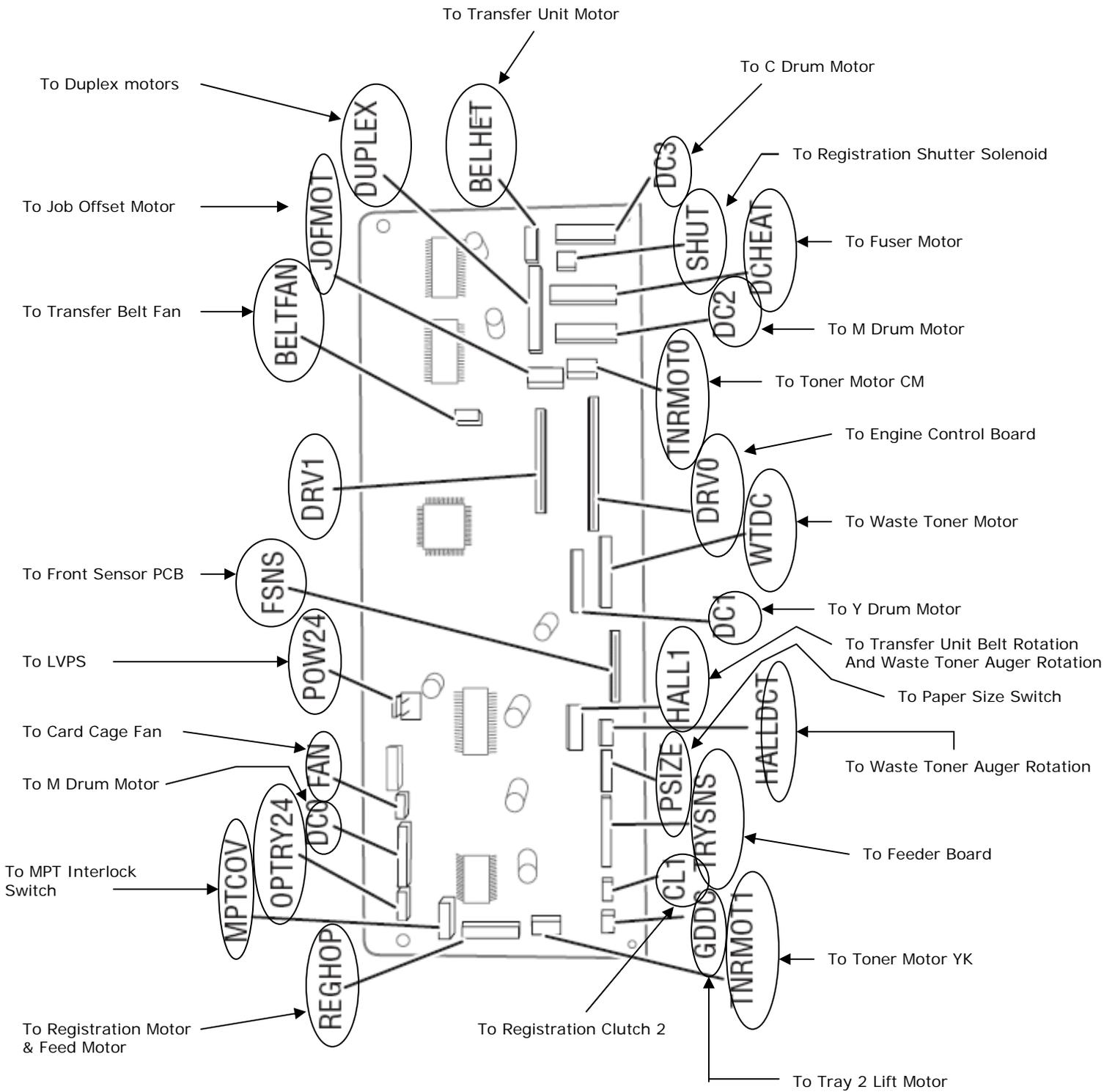
[Imaging Unit Sensor Board](#)

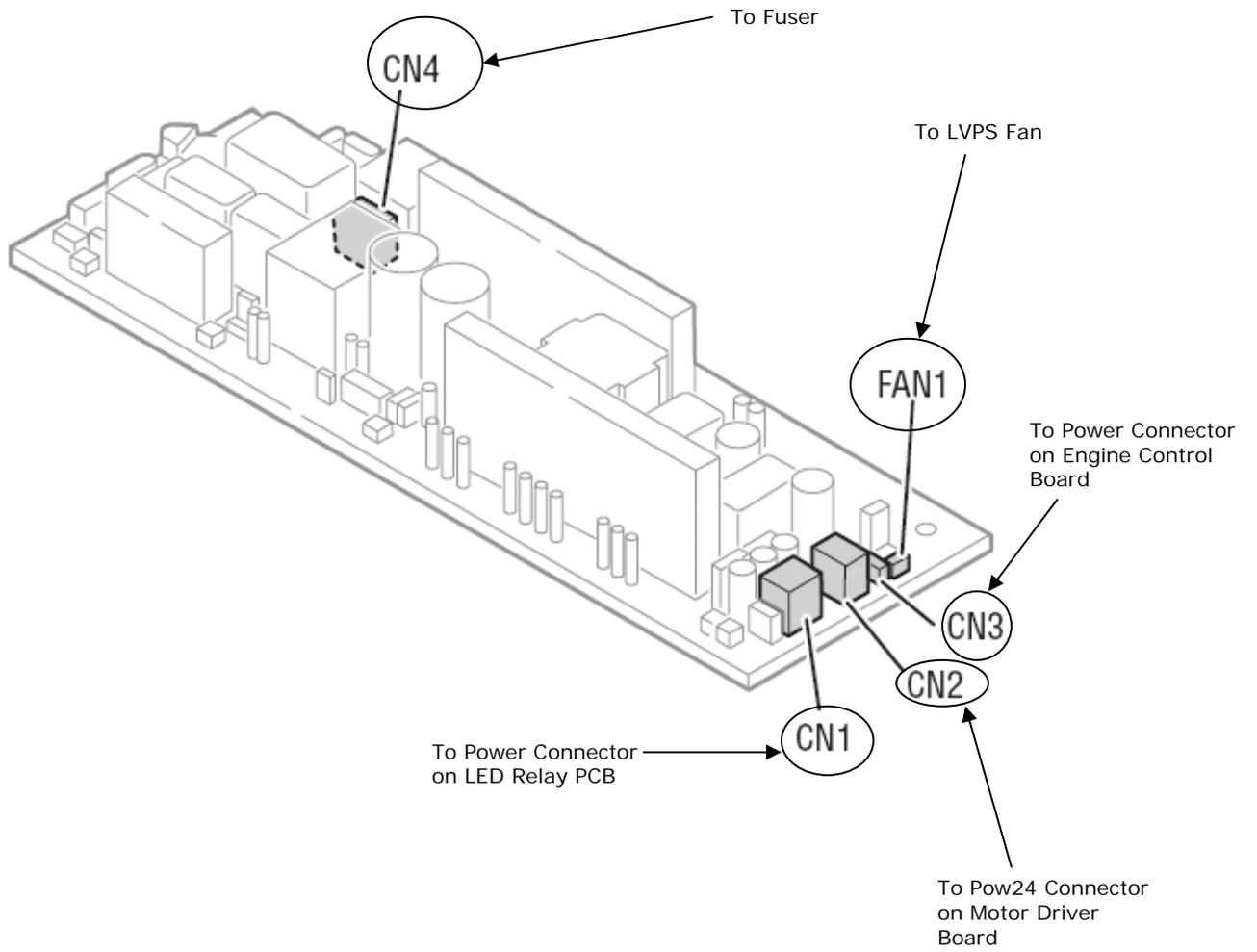
[Control Panel](#)

# Engine Control Board



# Motor Driver Board

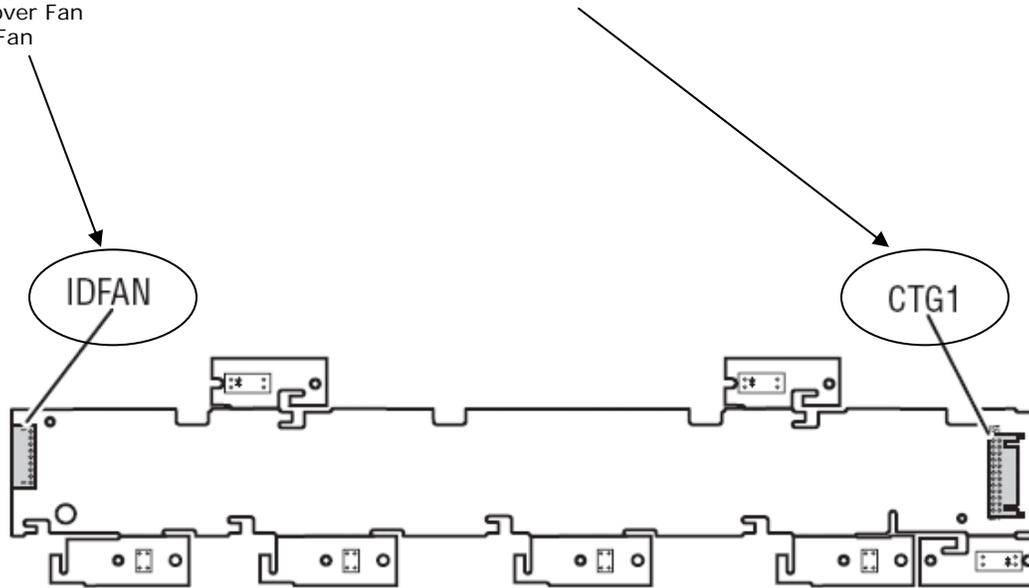




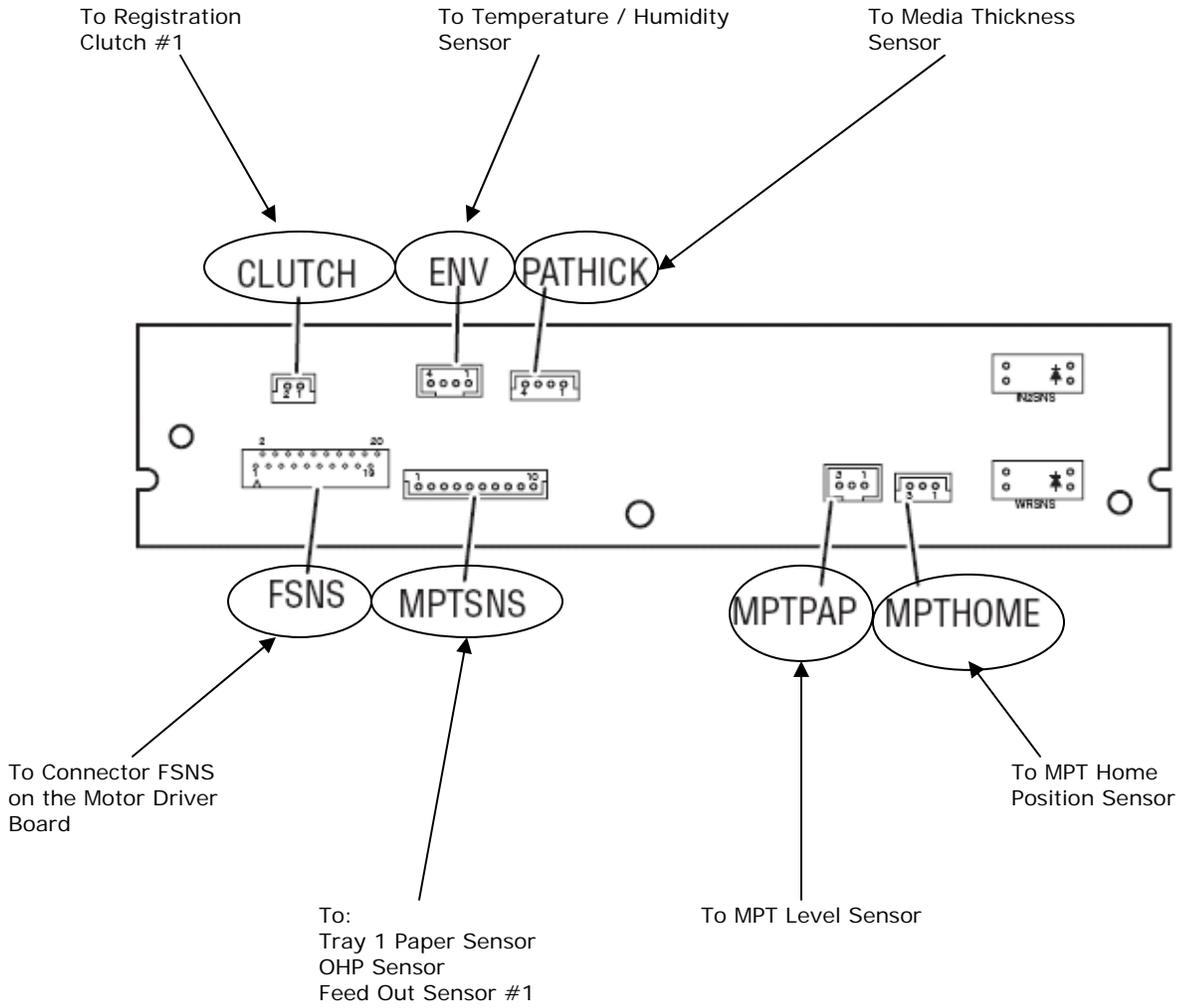
## Imaging Unit Sensor Board

To:  
Imaging Unit Fan  
Top Cover Fan  
Fuser Fan

To CTGO Connector  
on Engine Control  
Board



# Front Sensor Board

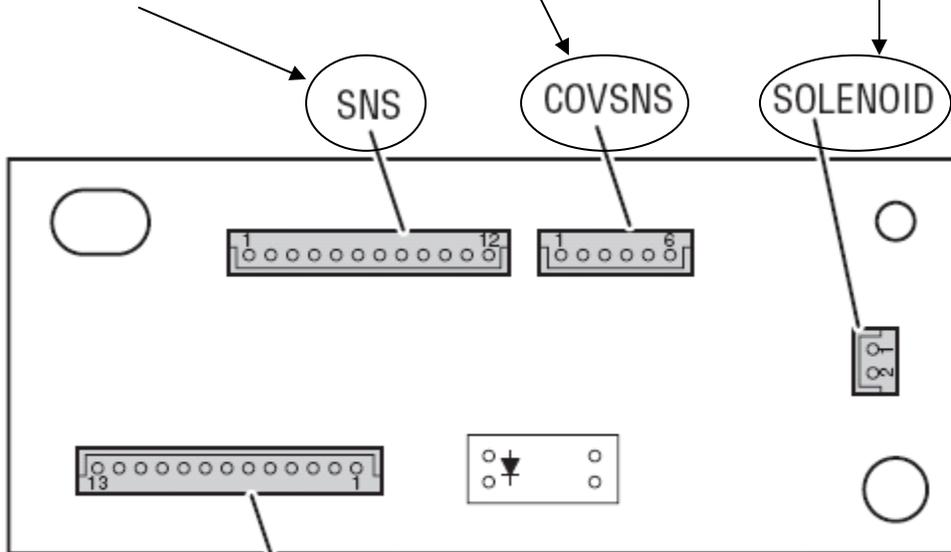


## Rear Sensor Board

To:  
Fuser Exit Sensor  
Side Output Tray Stack Full Sensor  
Top Output Tray Stack Full Sensor  
Job Offset Position Sensor

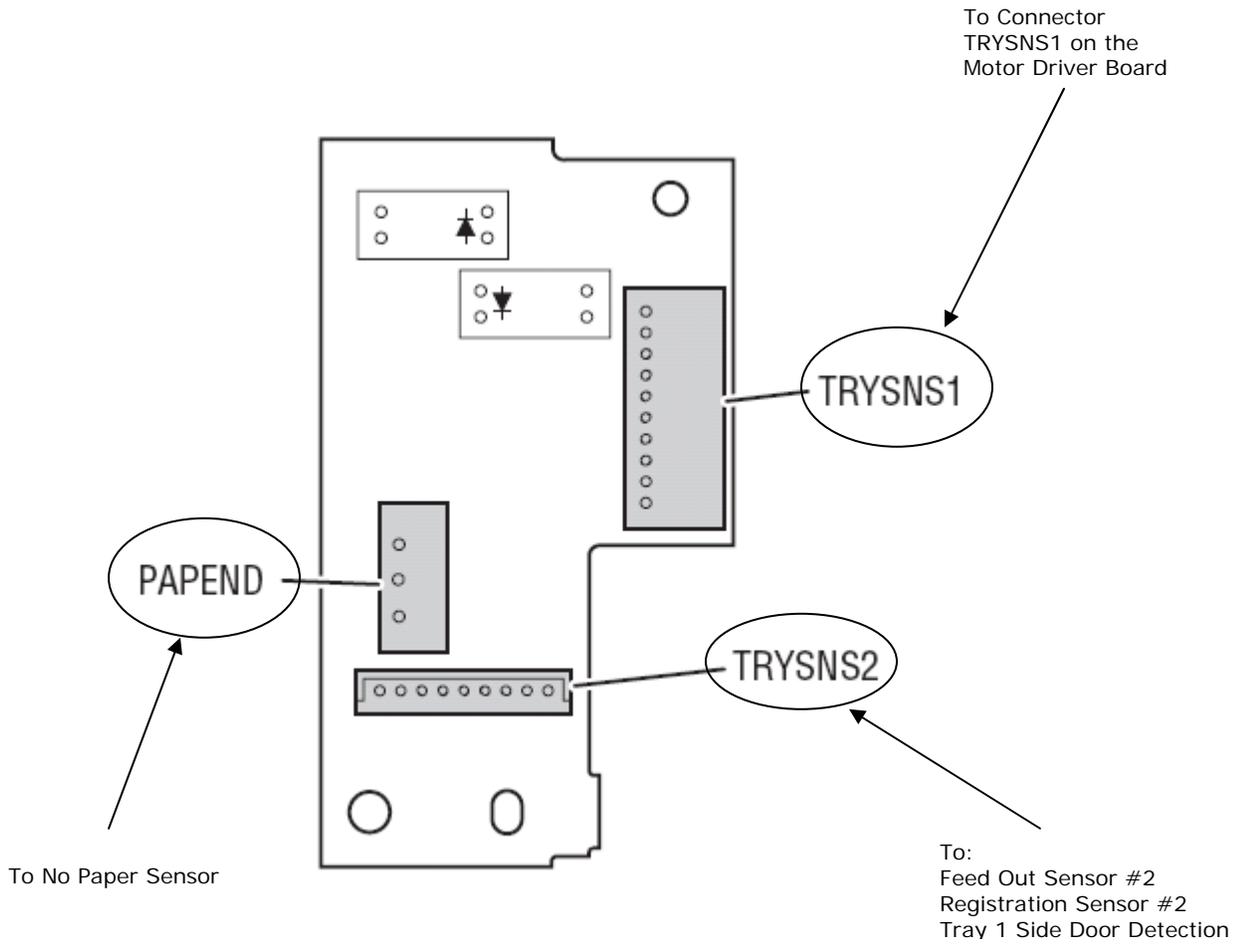
To Eject Door Close  
Sensor

To Exit Gate  
Solenoid

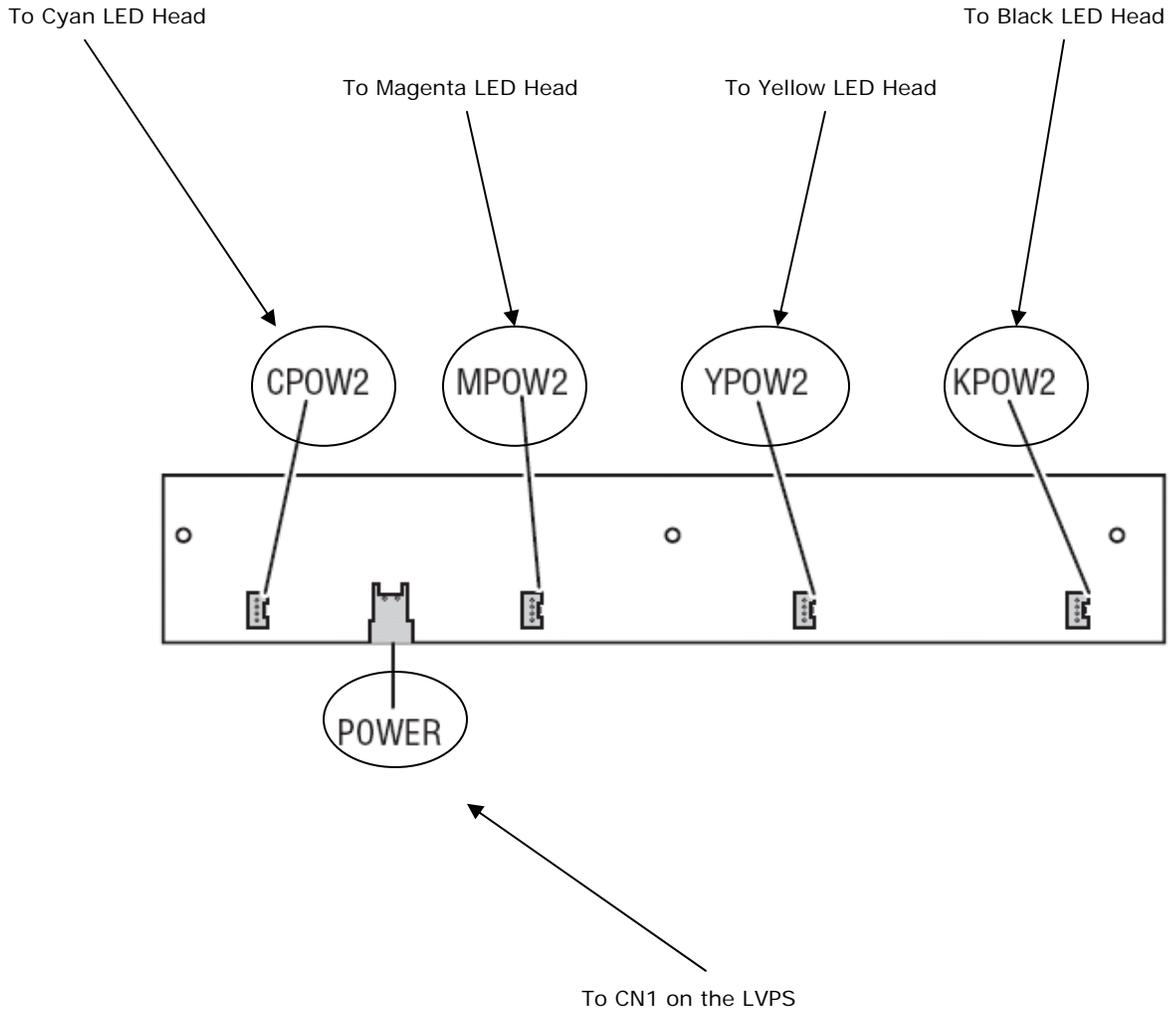


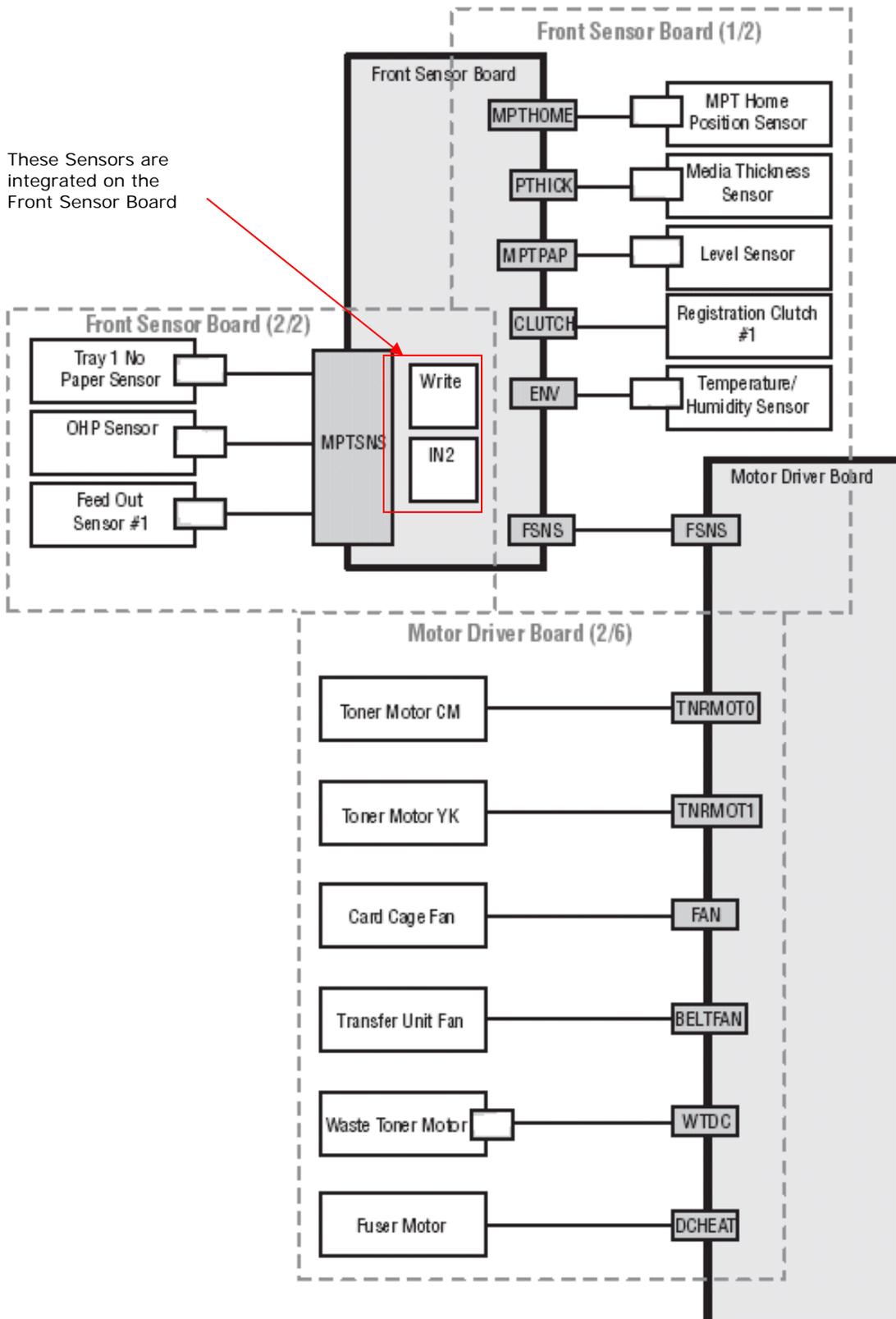
To Connector RSNS  
on the Engine  
Control Board

# Feeder Board



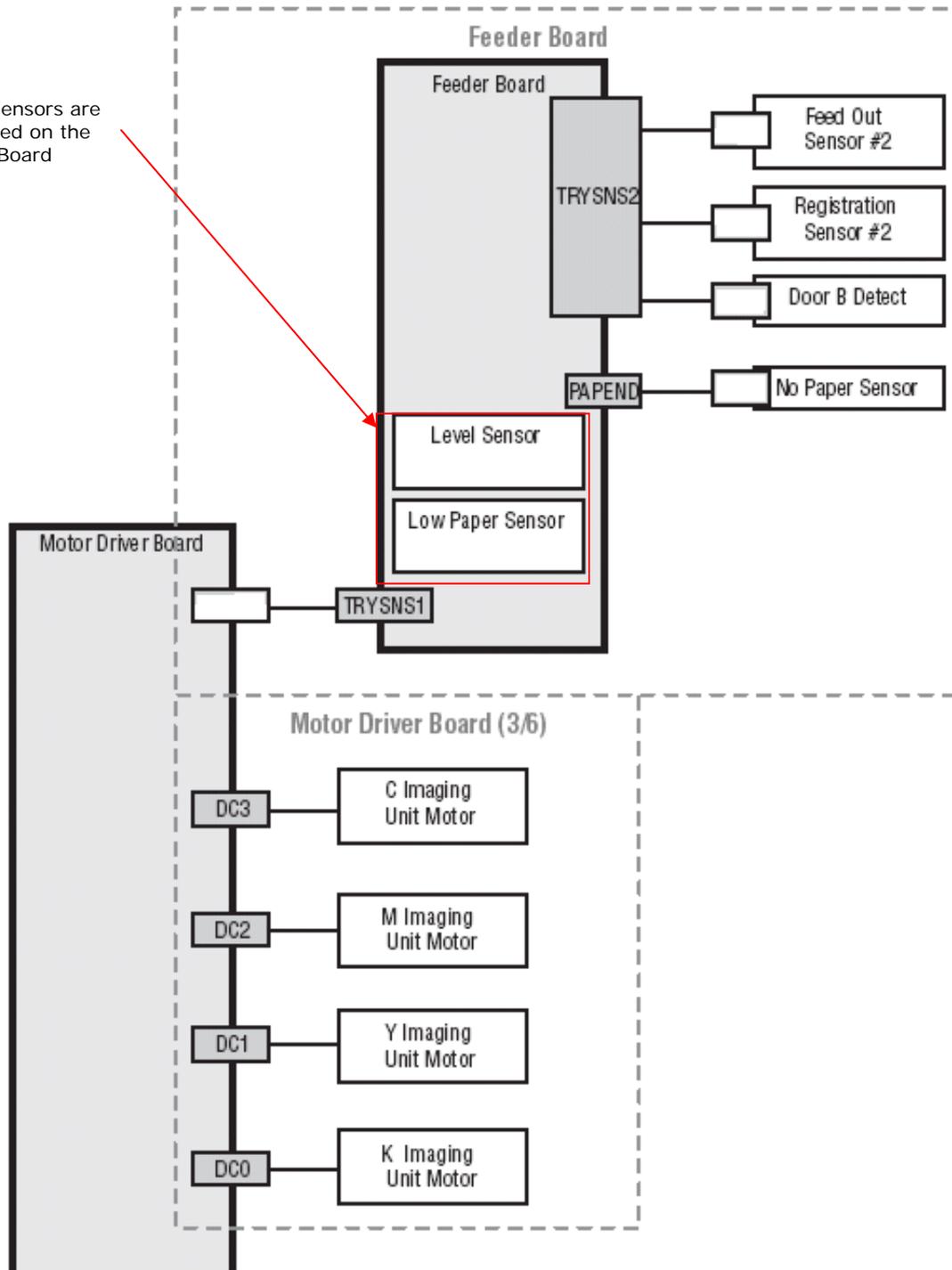
# LED Relay Board

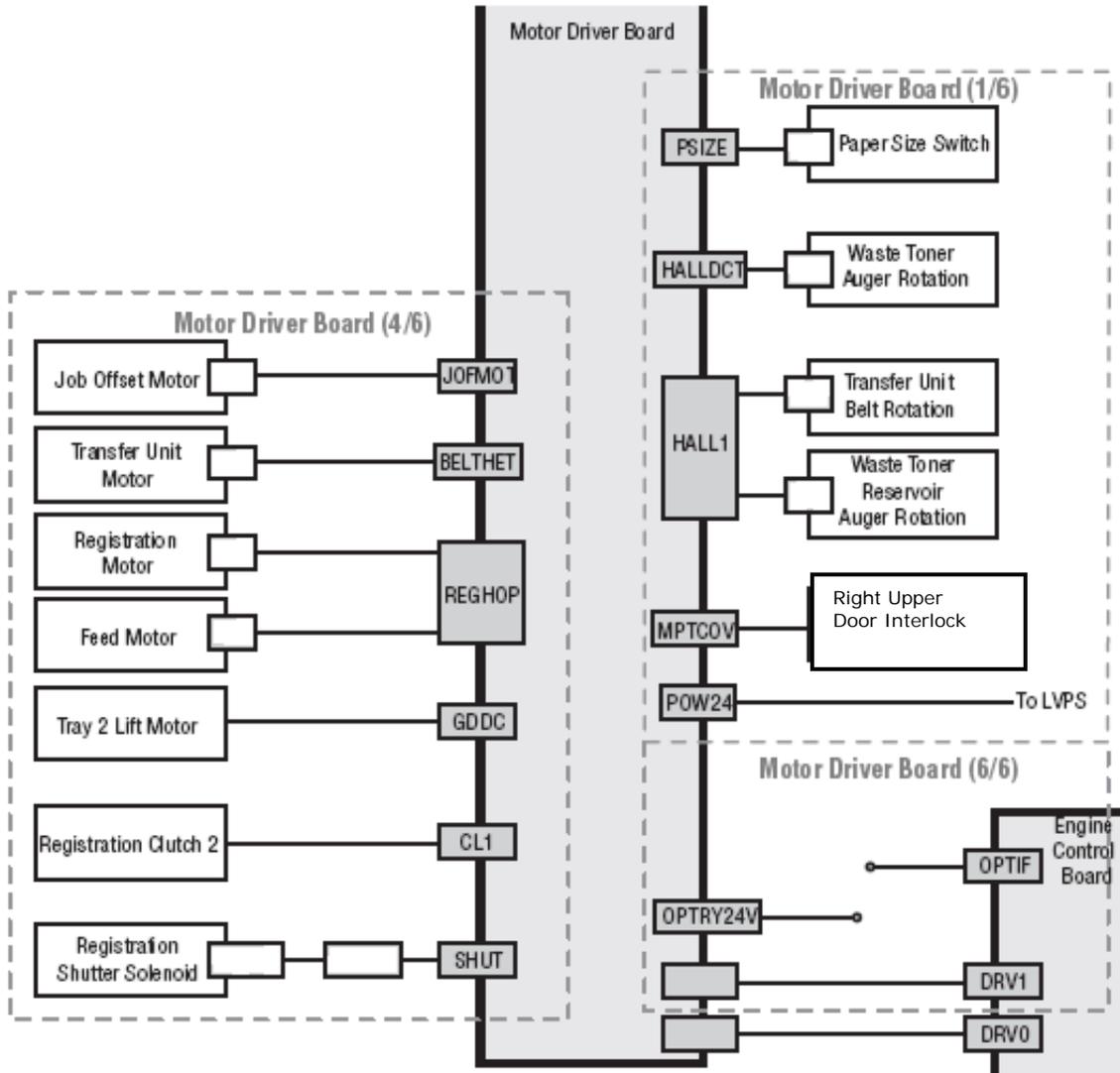


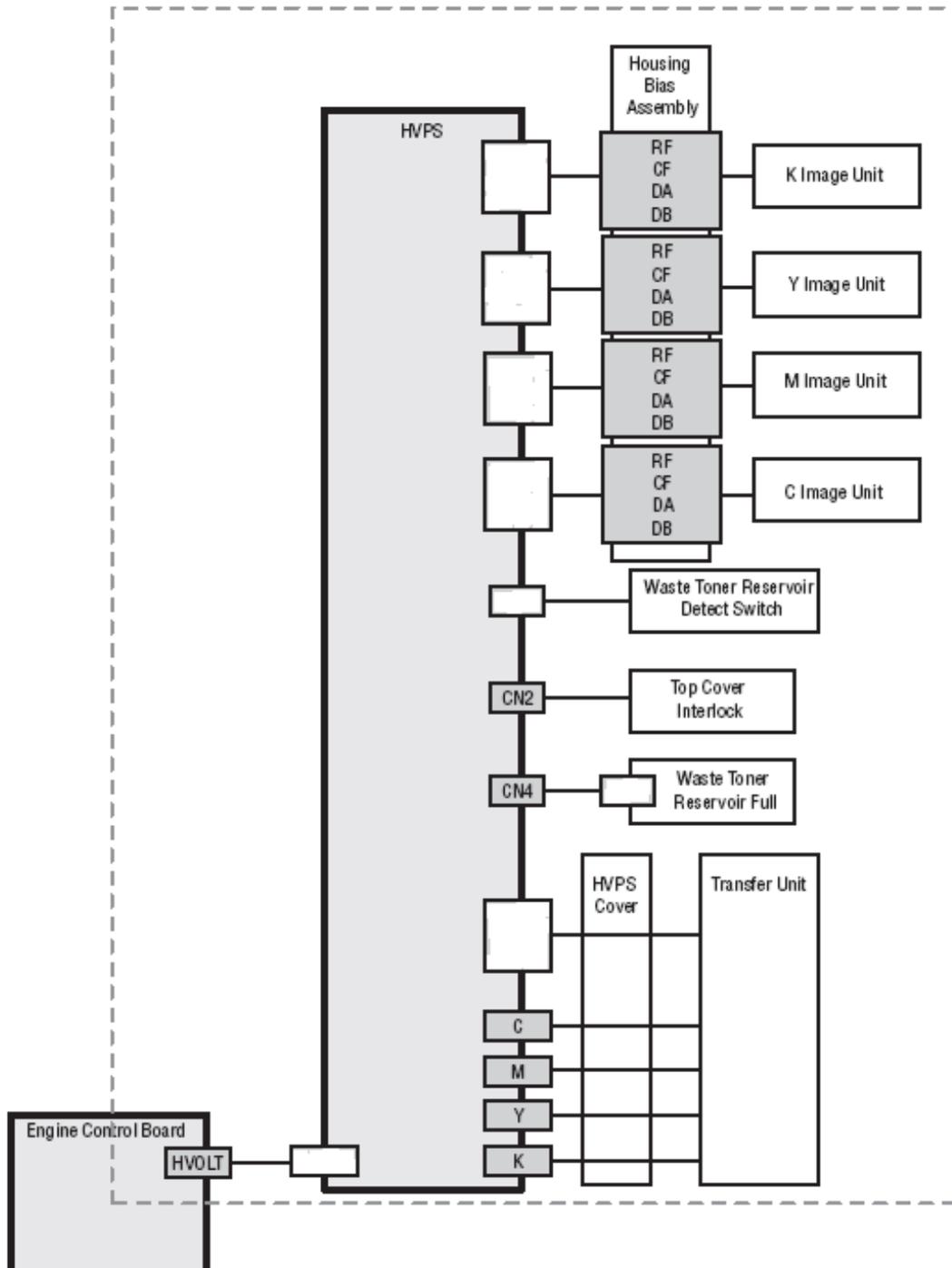


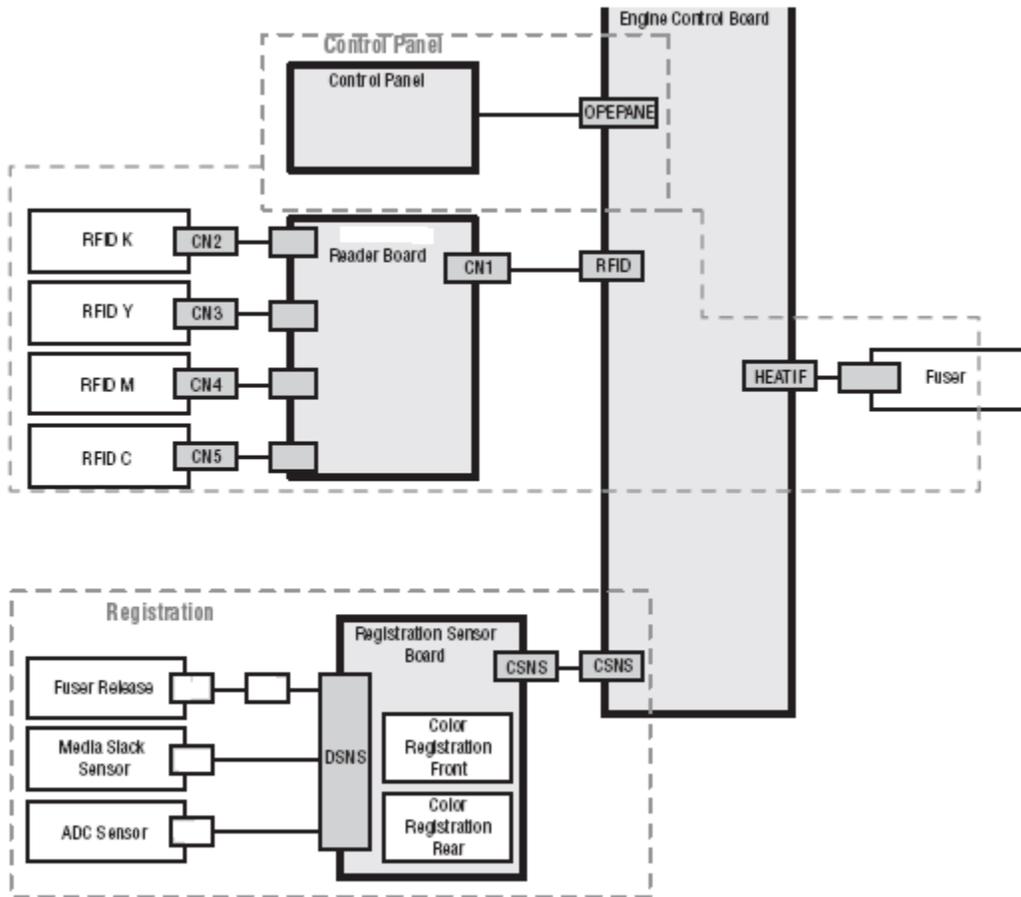
These Sensors are integrated on the Front Sensor Board

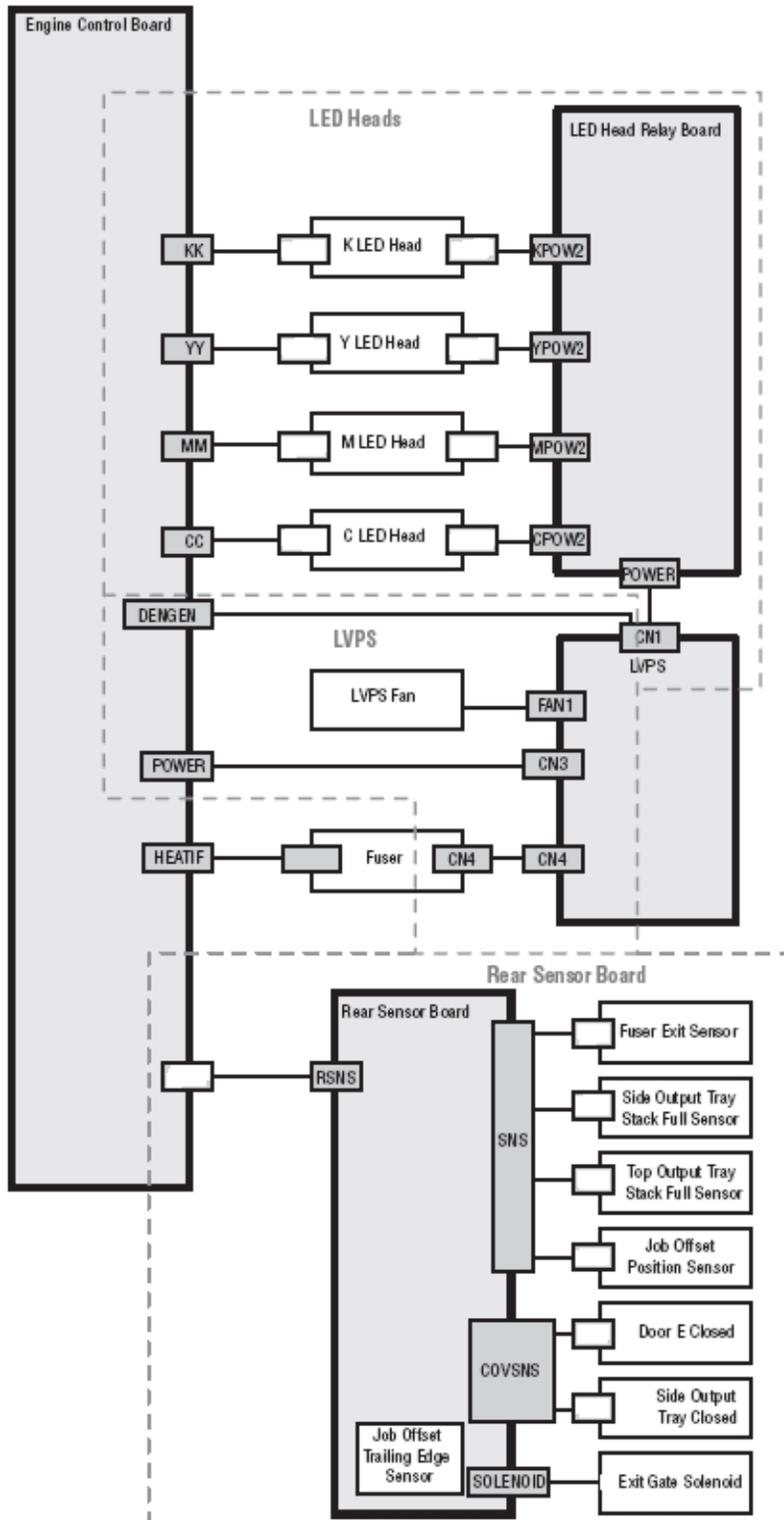
These Sensors are integrated on the Feeder Board

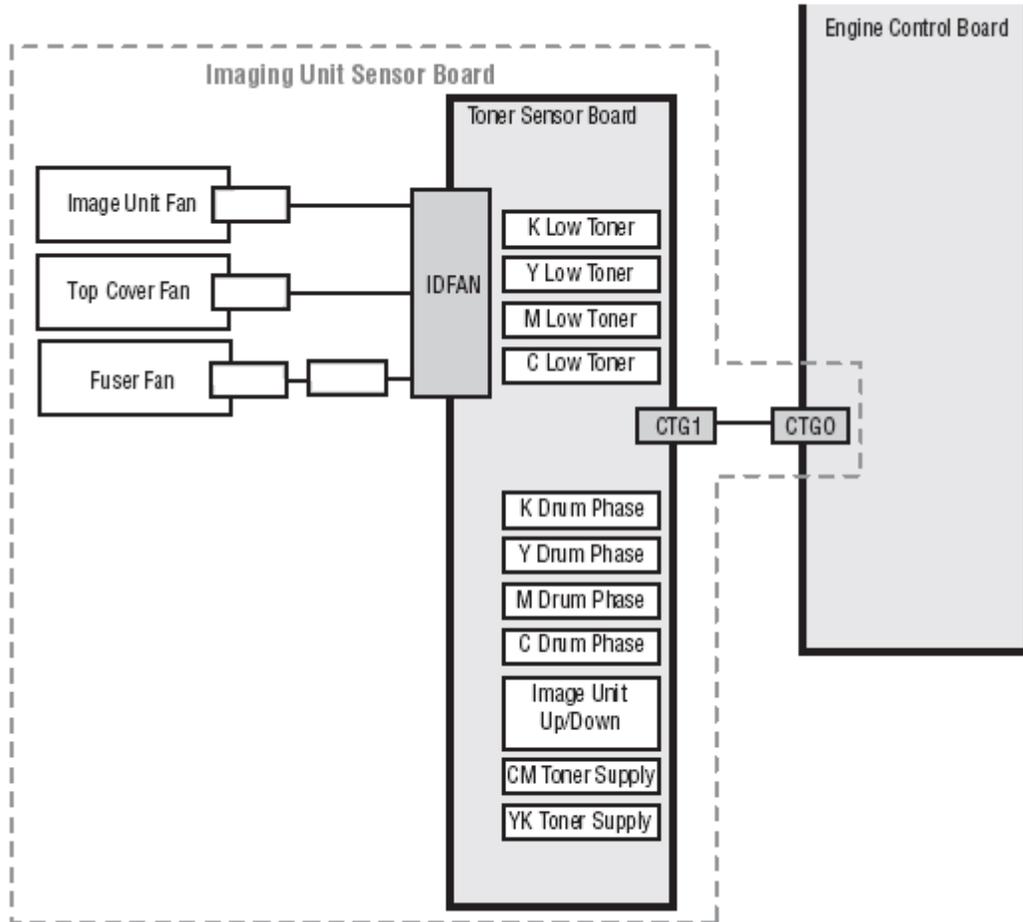


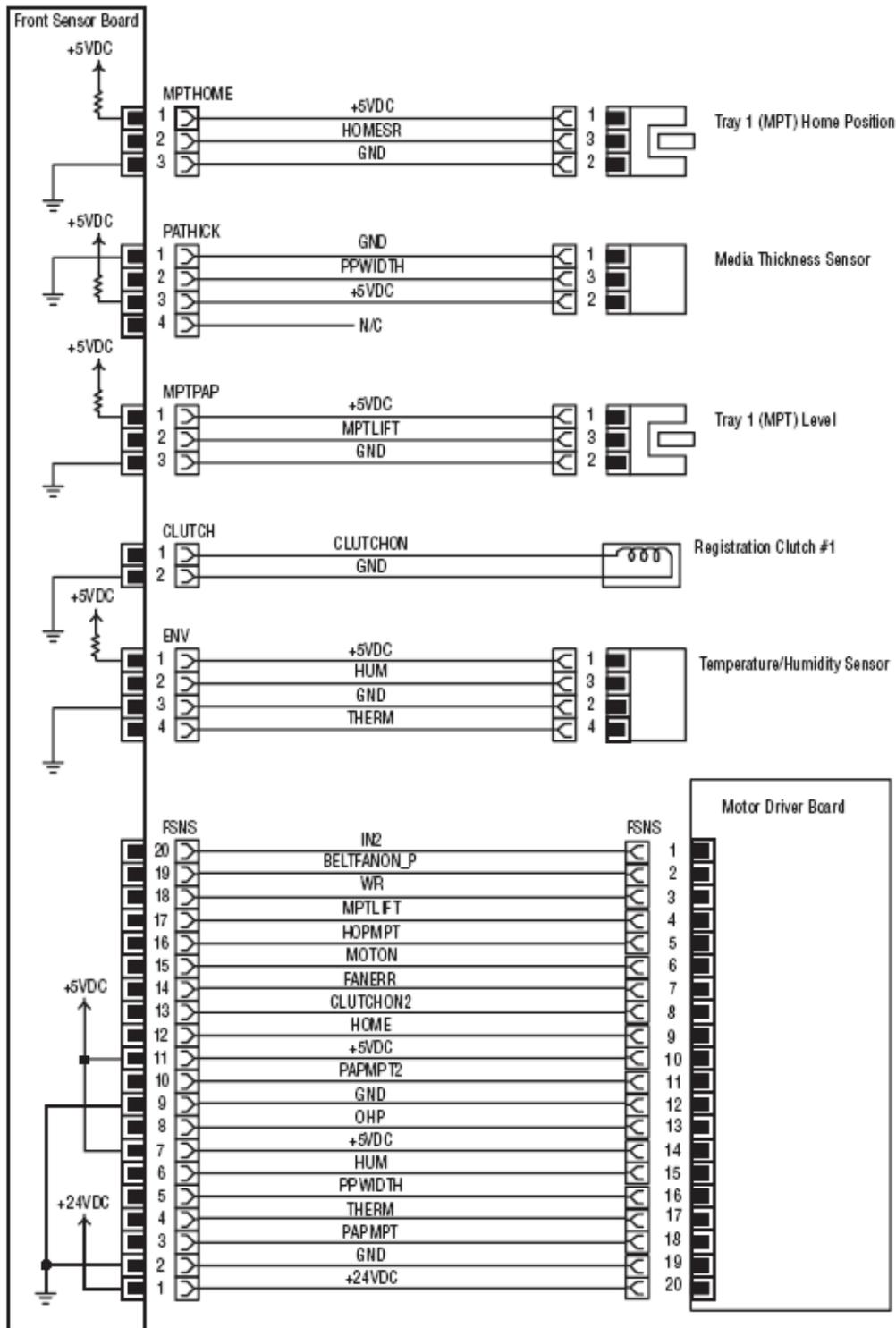


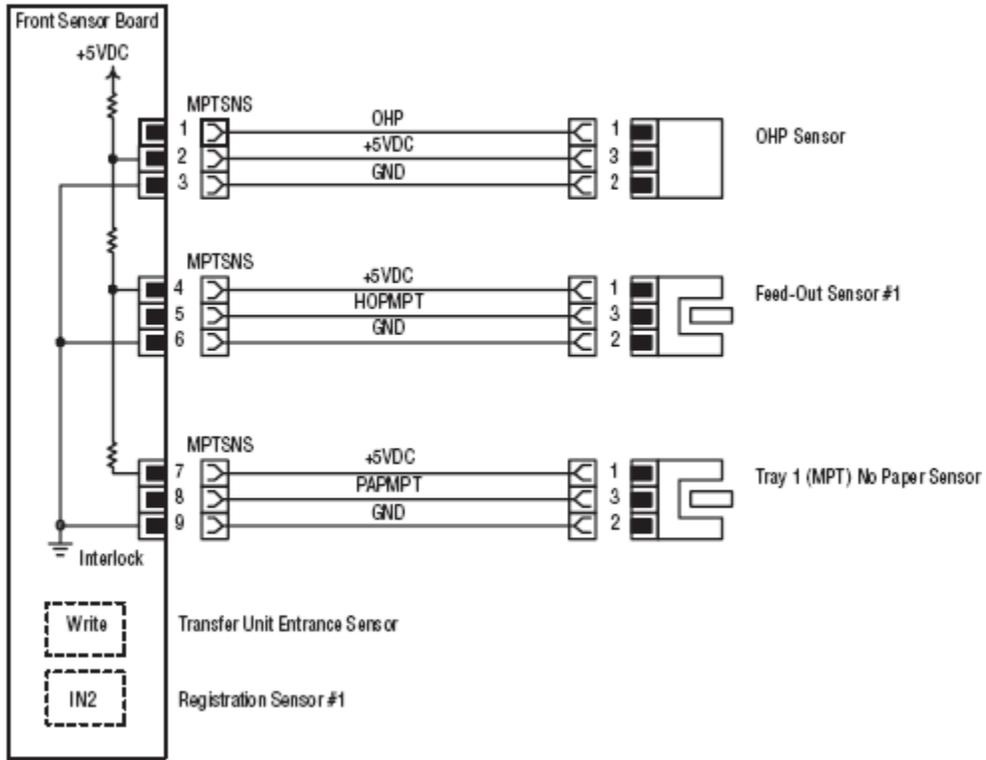




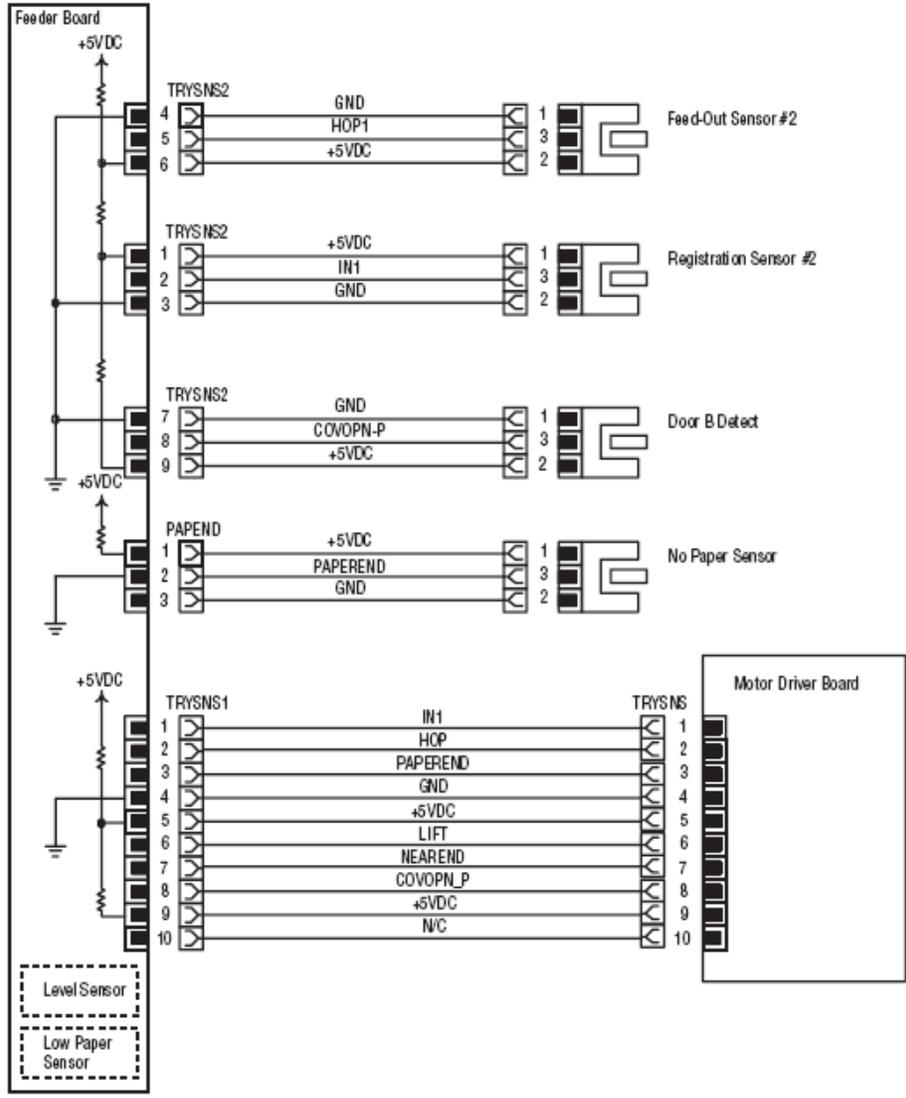




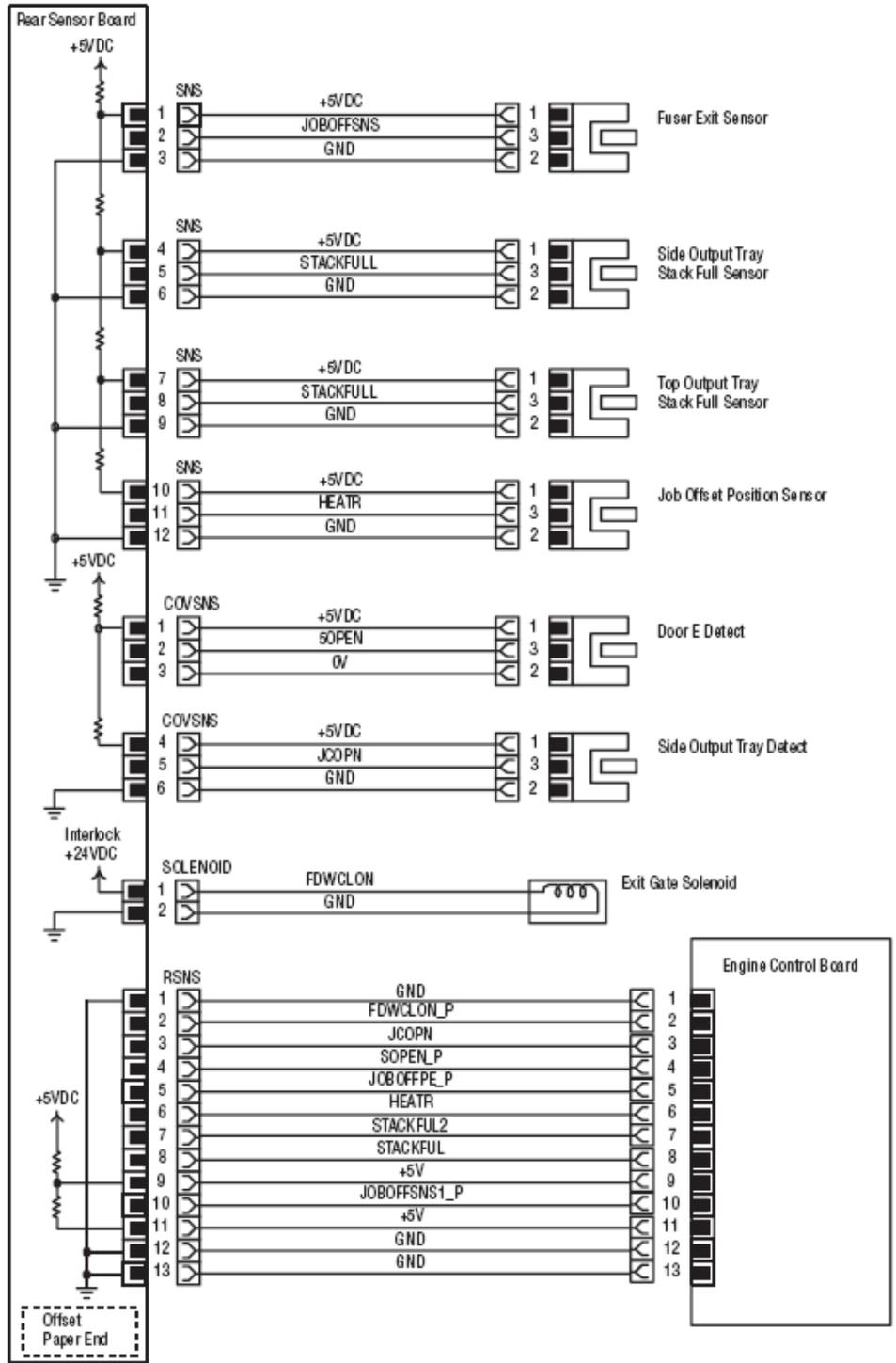




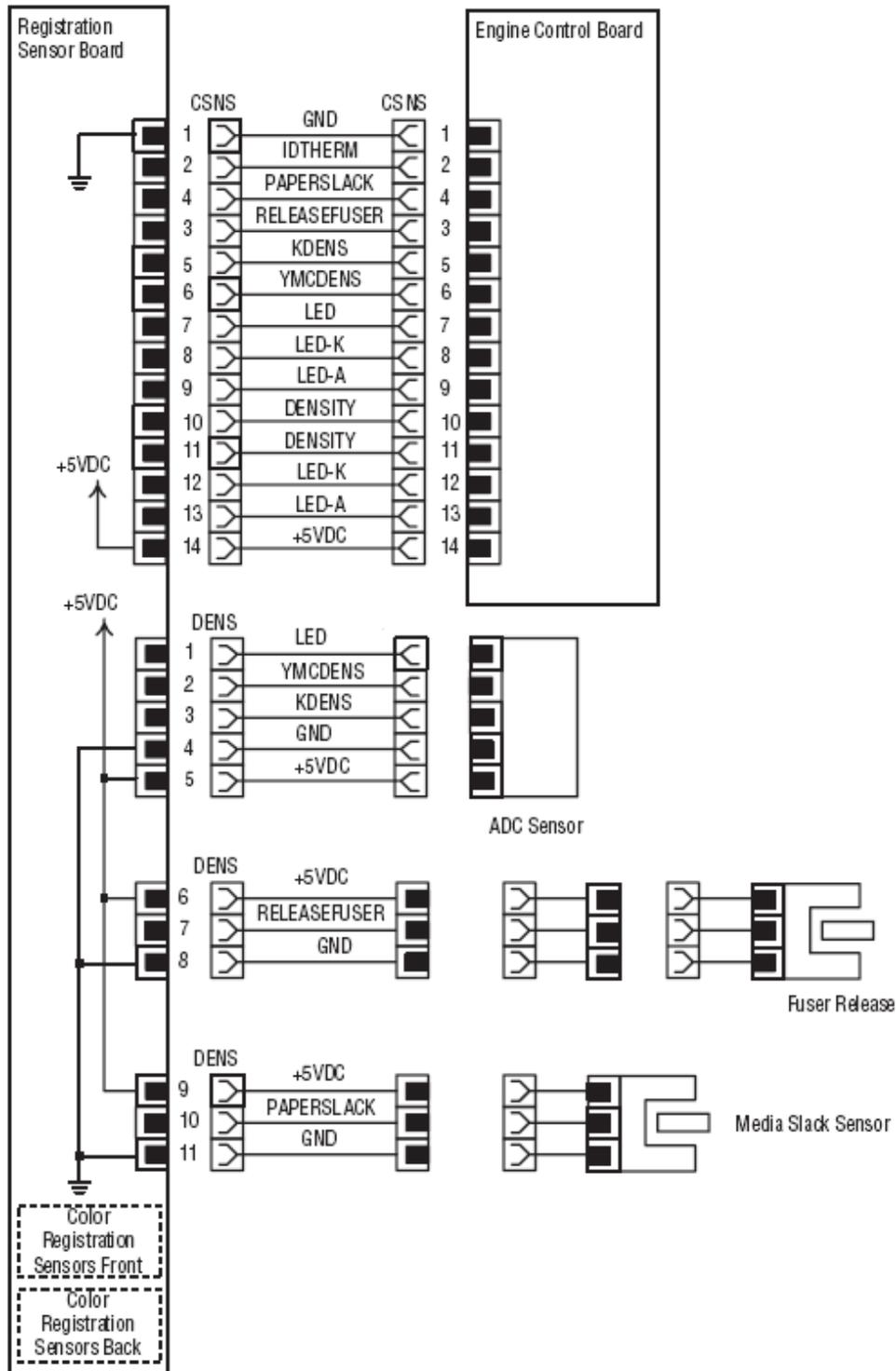
# Feeder Board



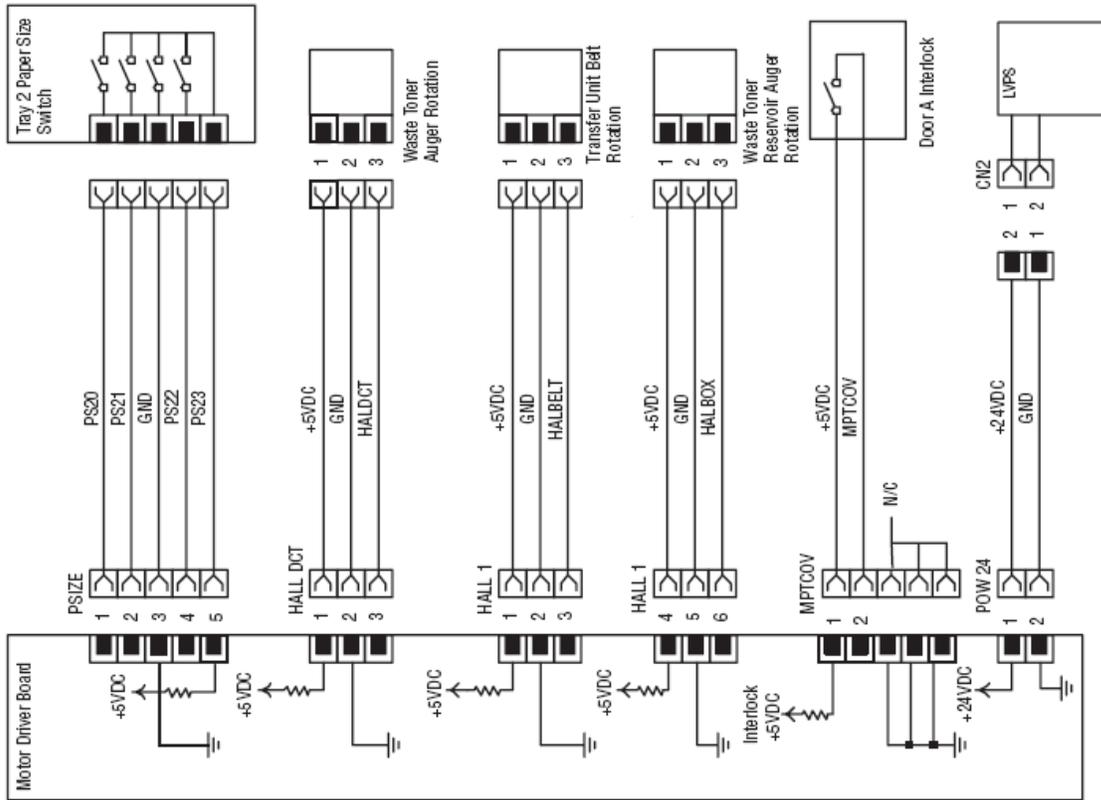
# Rear Sensor Board



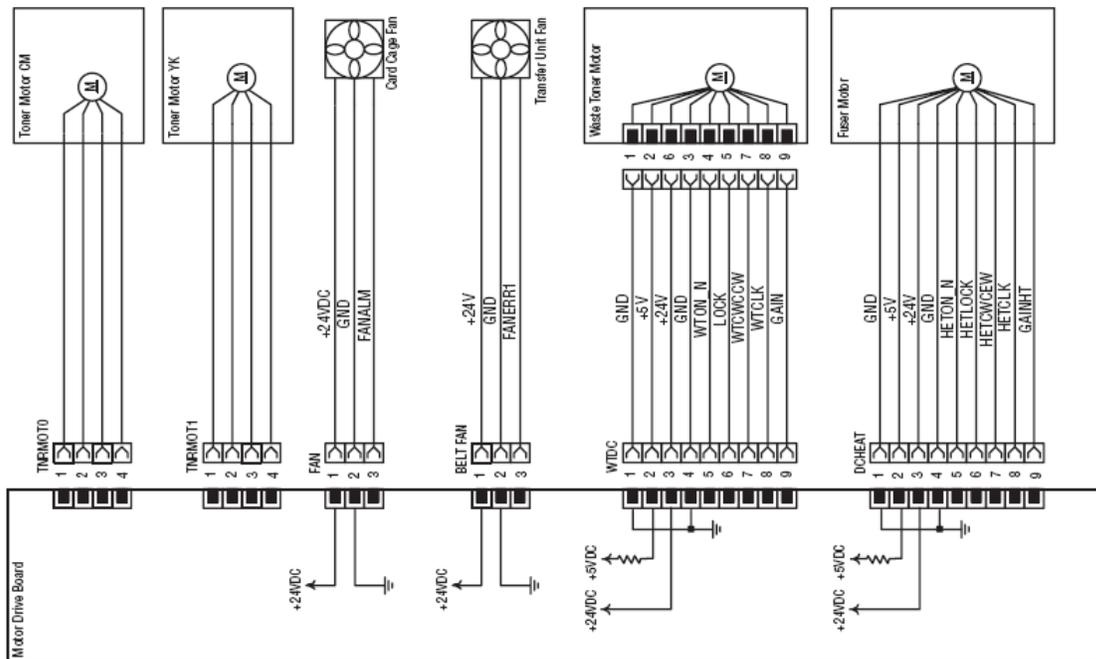
# Registration



# Motor Driver Board

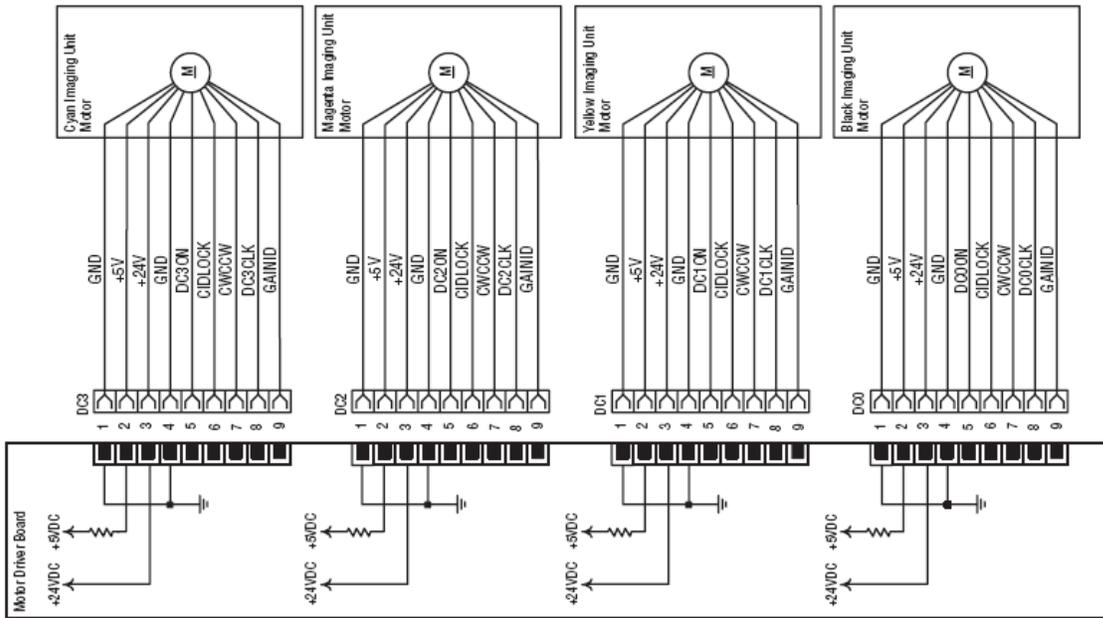


# Motor Driver Board



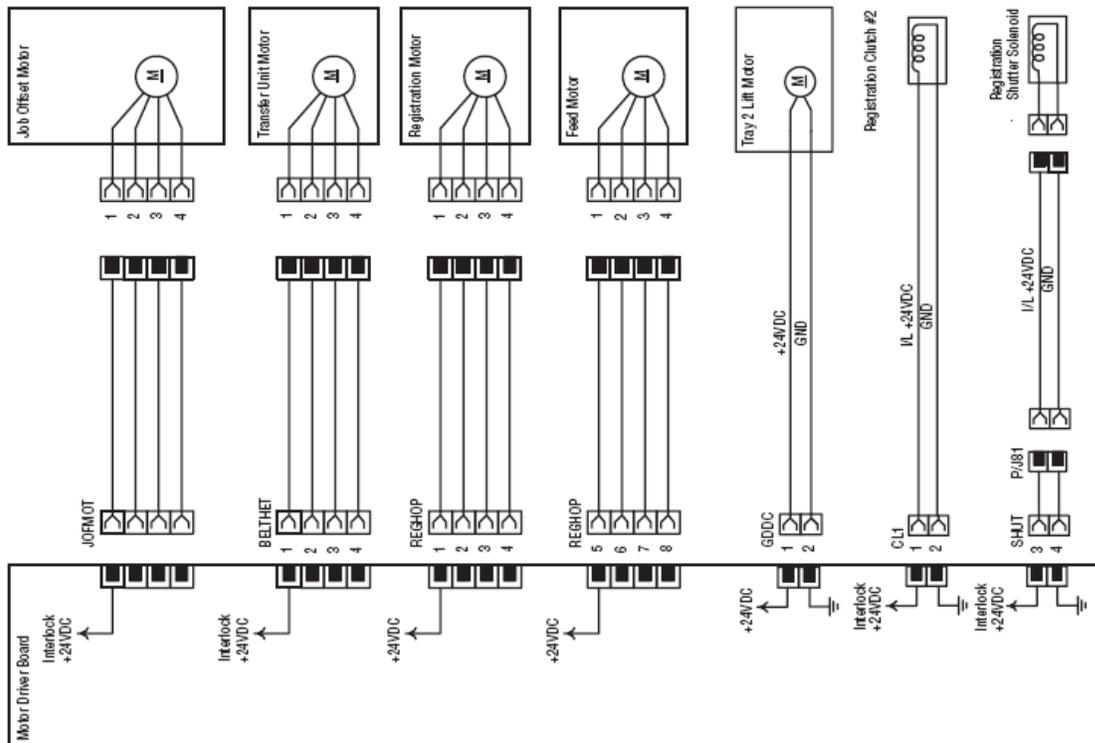
# Motor Driver Board

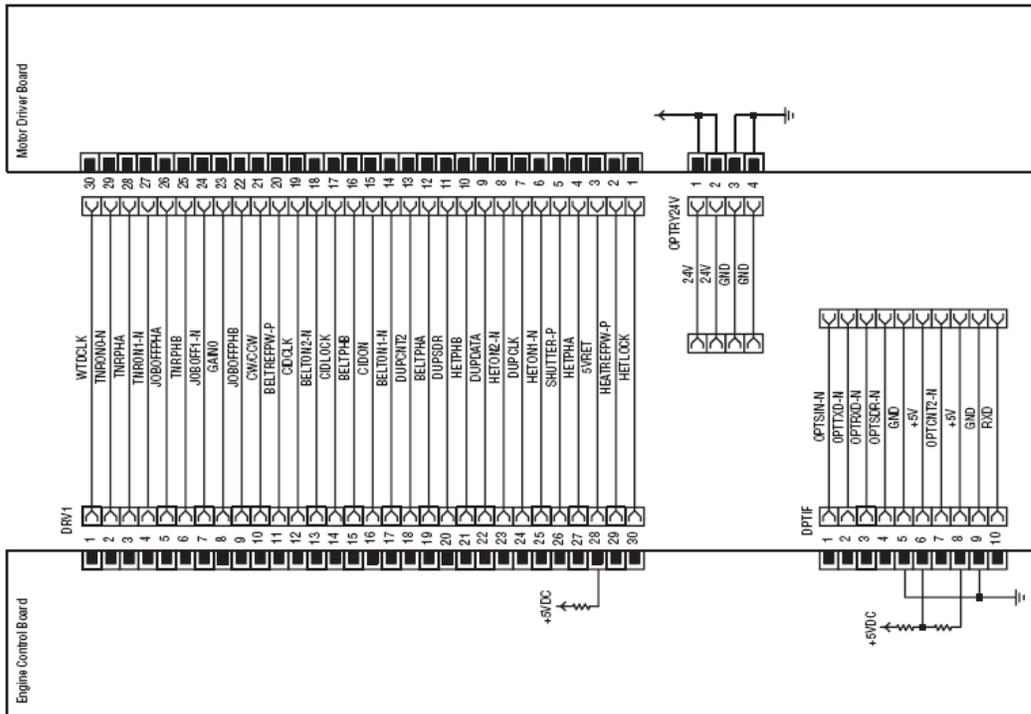
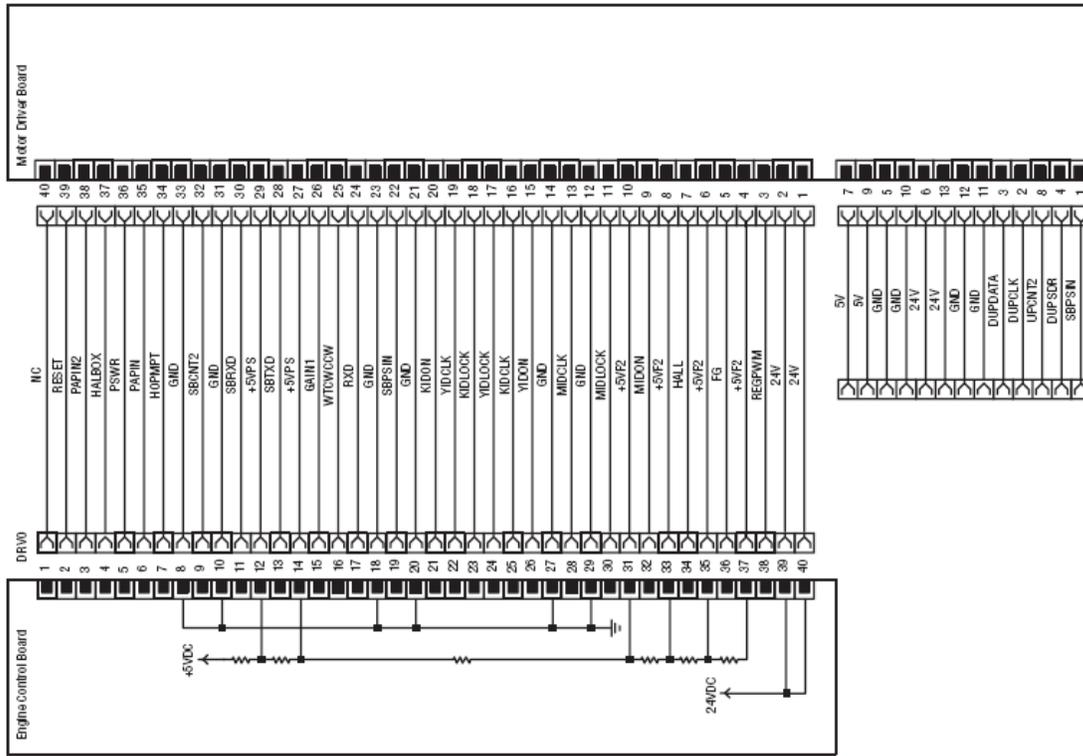
3/6



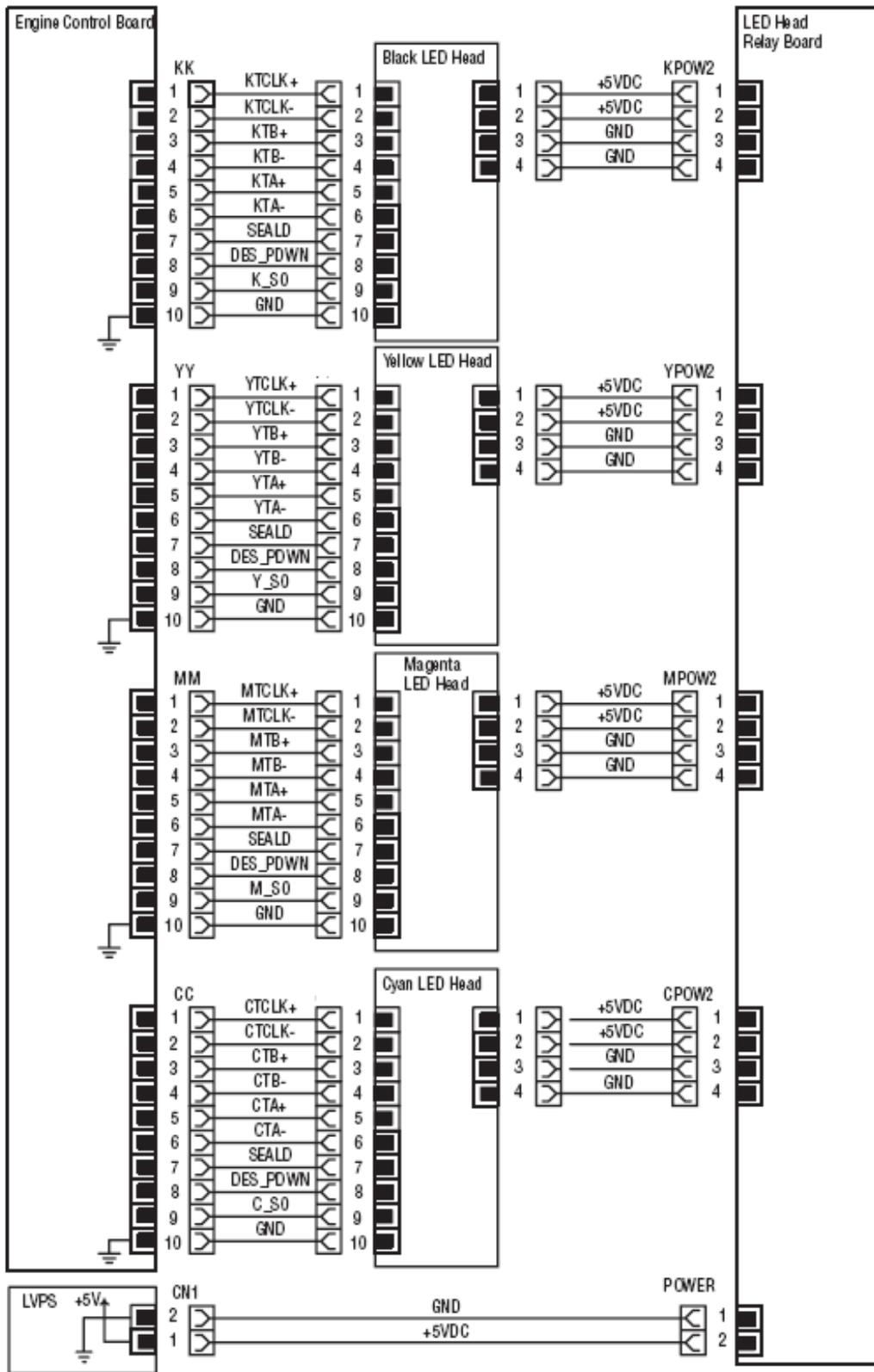
# Motor Driver Board

4/6

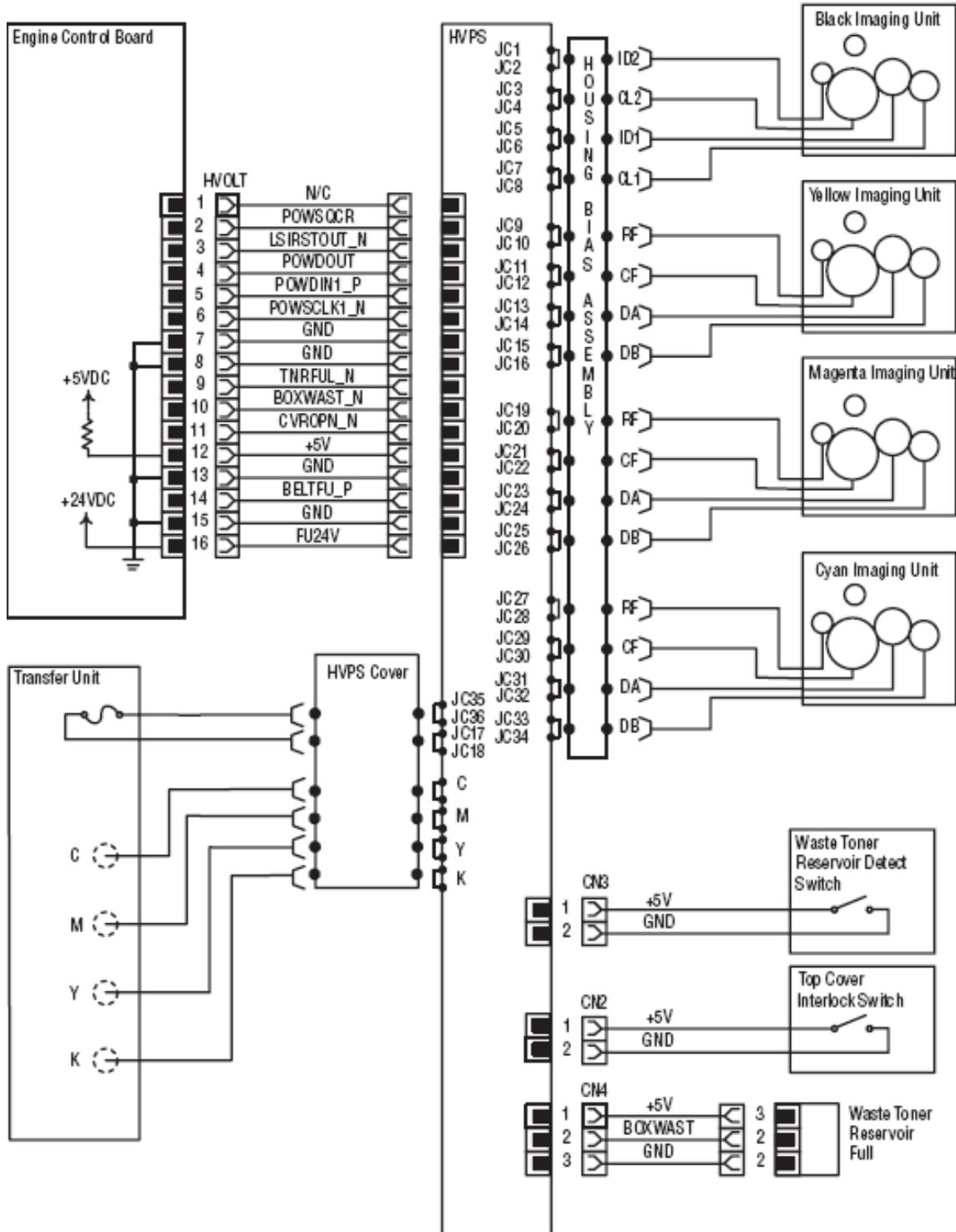




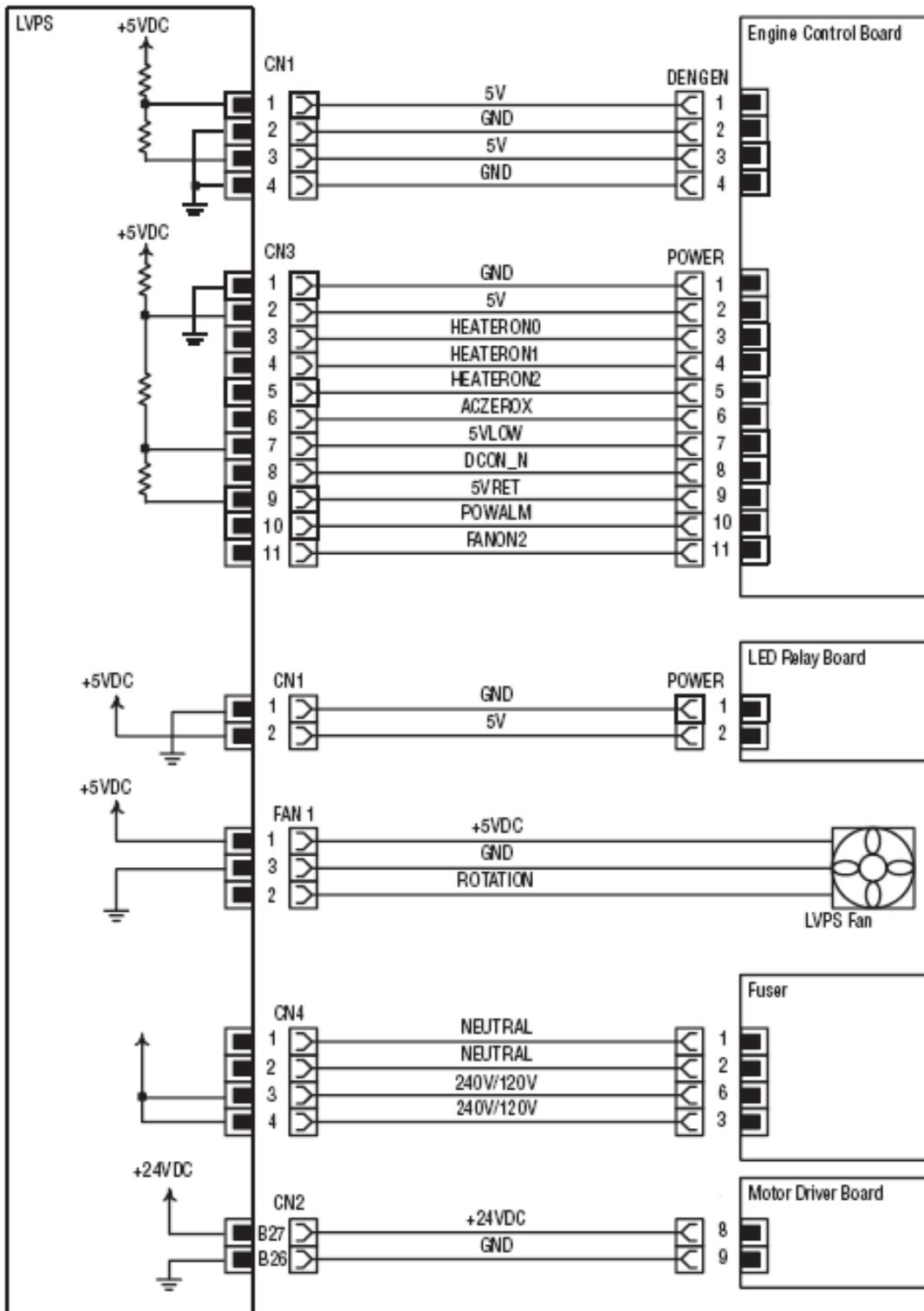
# LED Heads



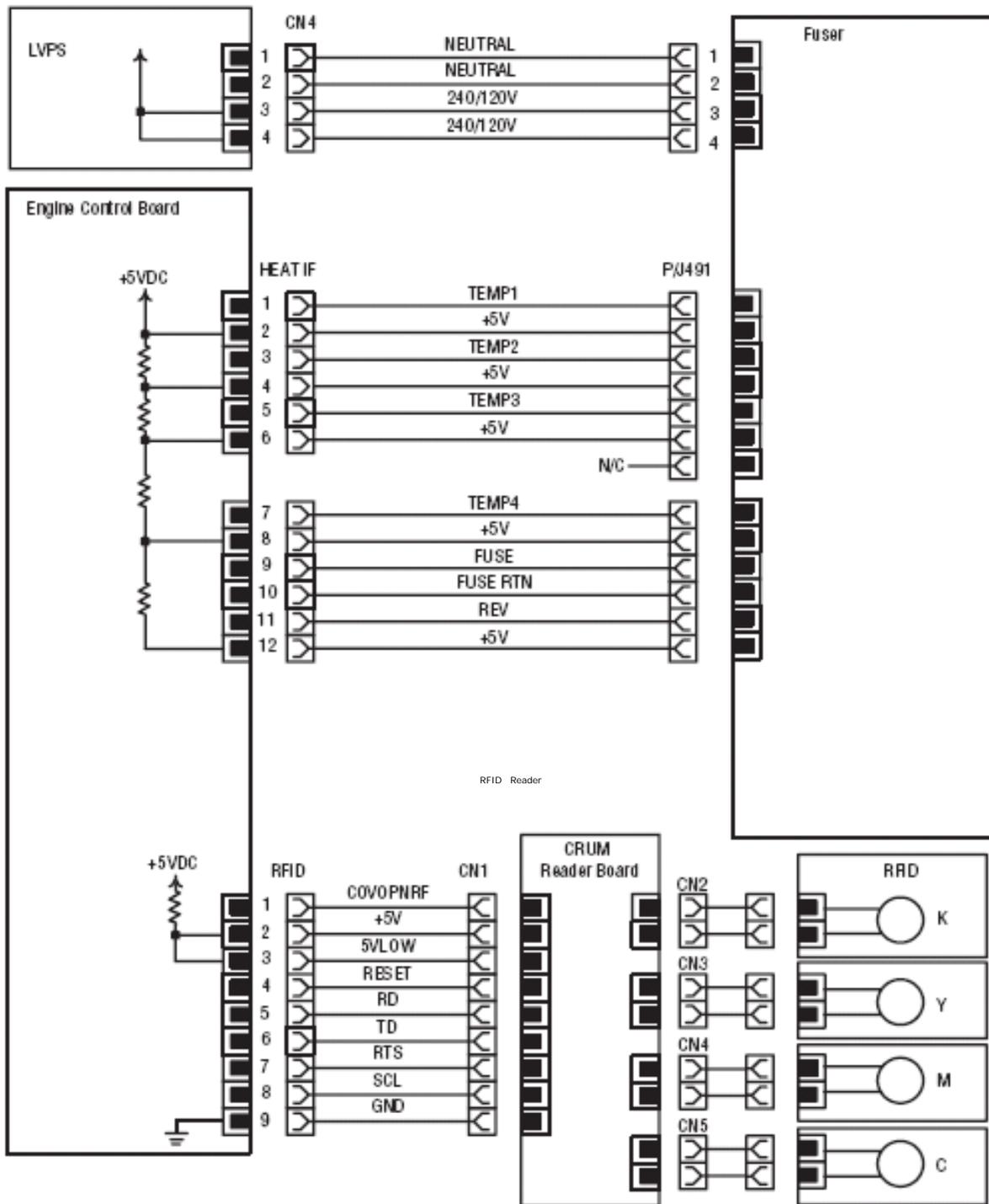
# HVPS



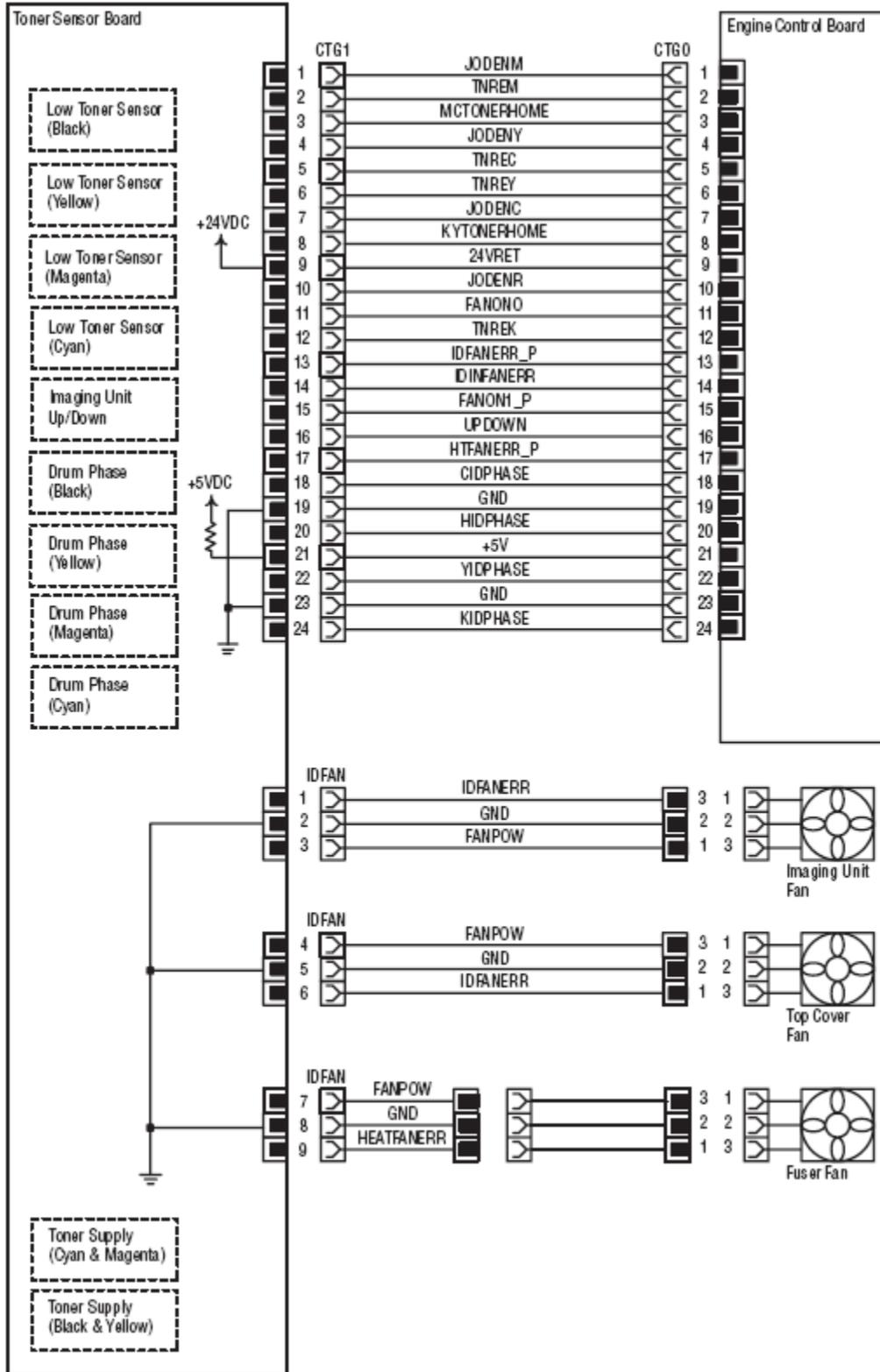
# LVPS



# Fuser



# Imaging Unit Sensor Board



# Control Panel

