

4 Removal and Replacement

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4.0 Introduction

This section details removal and replacement methods for various printer components; where multiple equipment types or options are available, use the procedure that best matches the configuration.

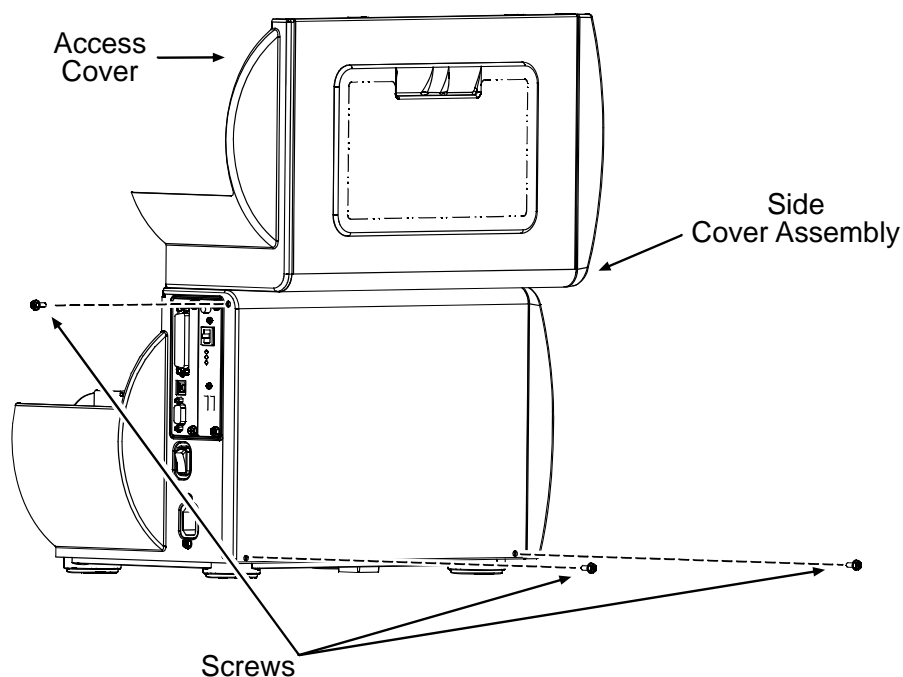


- ▶ Always disconnect AC power before performing service.
- ▶ Wear a wrist strap and follow all ESD prevention measures.
- ▶ Use extreme care and never use sharp objects on the Printhead, Platen, or Assist Roller.

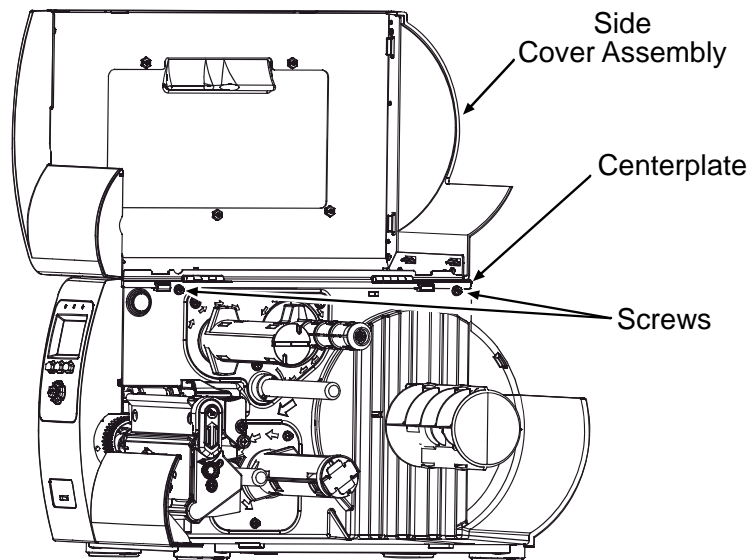
4.1 Side Cover Assembly

Removal:

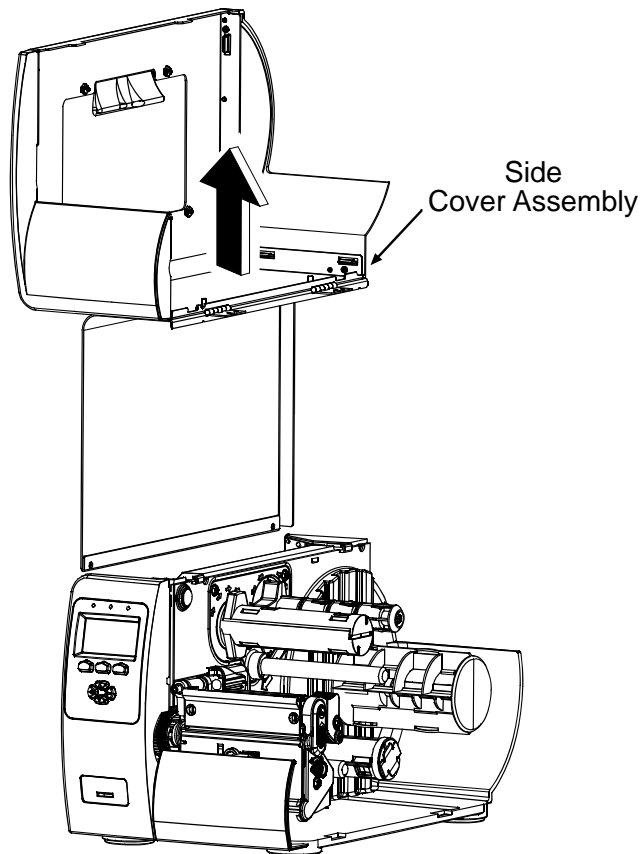
1. Turn OFF and unplug the printer.
2. Raise the Access Cover. Remove the three Screws that secure the Side Cover Assembly to the rear and the base of the printer.



3. Loosen the two Screws that secure the Side Cover Assembly to the Centerplate.



4. Lift the Side Cover Assembly off the printer.



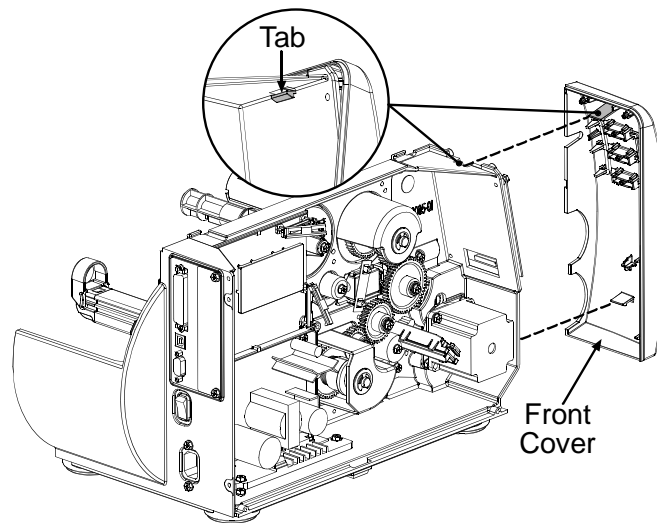
Installation:

Lower the Side Cover Assembly onto the printer. Install the three removed Screws into the rear and base of the printer, and tighten the two Screws on the Centerplate.

4.2 Front Cover

Removal:

1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly; see Section 4.1.
3. Push up on the Tab (shown) and gently pull the Front Cover forward, off the printer.



Installation:

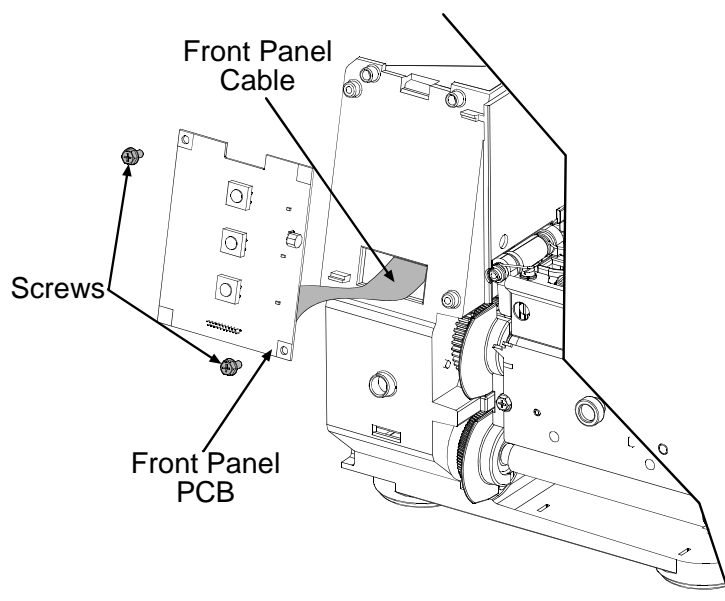
1. Align the tabs on the Front Cover to the slots in the chassis and then push until the cover snaps into place.
2. Install the Side Cover Assembly; see Section 4.1.

4.2.1 Front Panel PCB

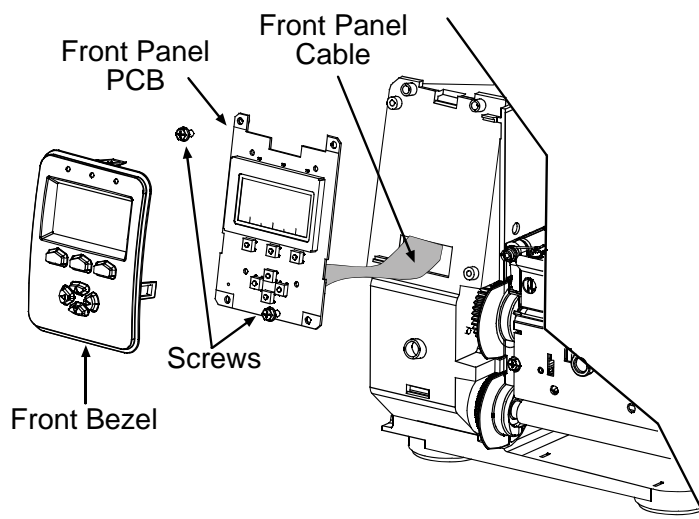
Removal:

1. Remove the Front Panel; see Section 4.2.
2. Proceed according to equipped type:

- If servicing a non-display model, remove the two Screws that secure the Front Panel PCB. Disconnect the Front Panel Cable. Remove the PCB.



- If servicing a display-equipped model, lift the tabs and remove the Bezel. Remove the two Screws that secure the Front Panel PCB. Disconnect the Front Panel Cable. Remove the PCB.



Installation:

1. Insert the Front Panel Cable through the opening in the chassis and connect it to the Front Panel PCB.

2. Secure the Front Panel PCB to the chassis using the two Screws.
3. If servicing a display-equipped model, install the Bezel over the Front Panel PCB; otherwise, go to Step 4.
4. Install the Front Panel; see Section 4.2.
5. If servicing a non-display model, adjust the darkness; see Section 2.7.

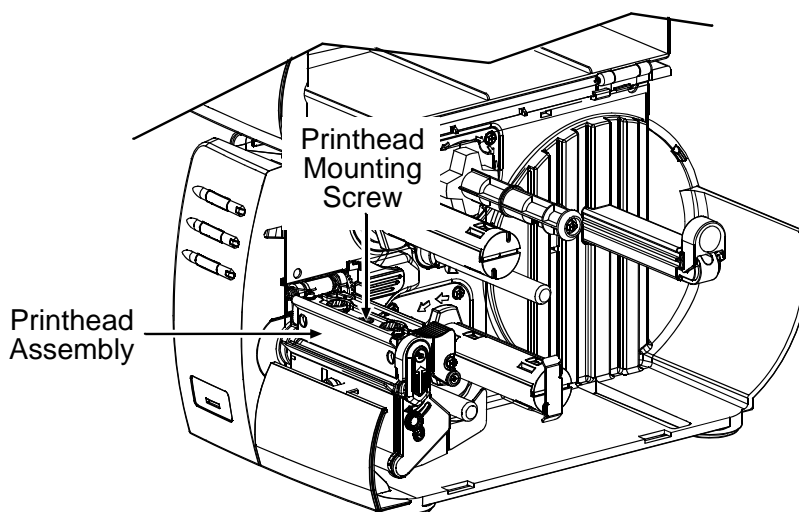
4.3 Printhead



- ▶ If over-voltage is suspected, see Section 2.10.
- ▶ Handle the printhead with extreme care and never use a sharp object on the printhead surface.

Removal:

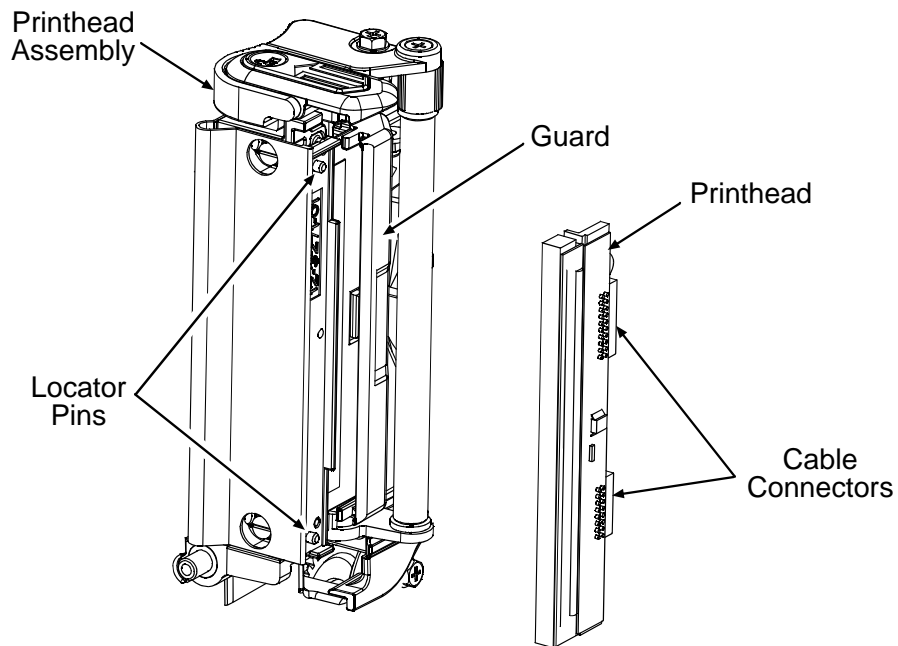
1. Turn OFF and unplug the printer. Open the cover; if ribbon is installed, remove it.
2. With the Printhead Assembly latched, loosen the Printhead Mounting Screw (it will remain in the assembly).



3. Unlatch then raise the Printhead Assembly. Carefully slide the Printhead out of the assembly (see detail, below) then disconnect the two cables and remove the Printhead.

Installation:

1. While carefully holding the Printhead, connect both cables.
2. Carefully slide the Printhead under the Guard and onto the Locator Pins in the Printhead Assembly. Secure the Printhead with the Printhead Mounting Screw (do not over-tighten).



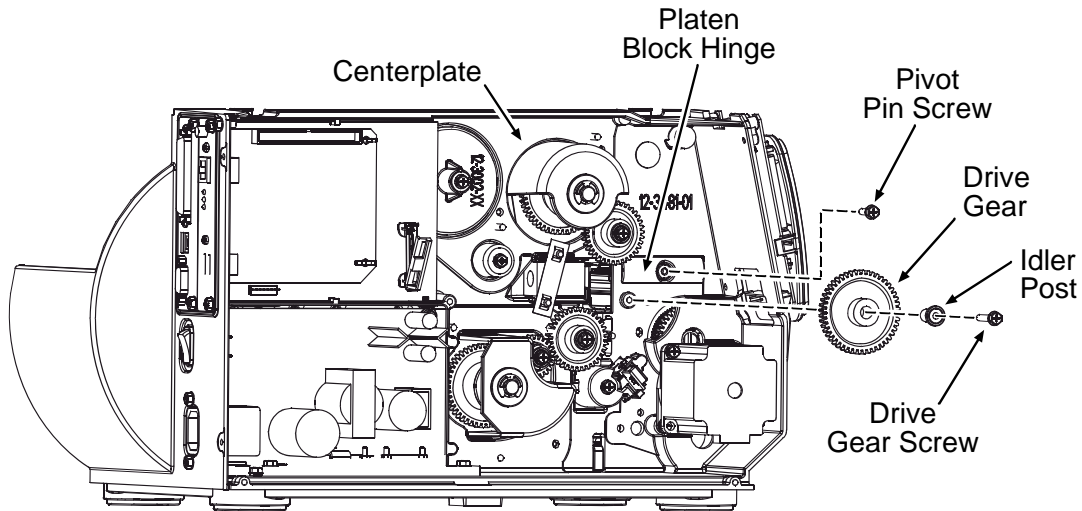
3. Clean the Printhead; see Section 2.1.1.
4. Reload ribbon (if removed) then lower and latch the Printhead Assembly.
5. Adjust the darkness; see Section 2.7.

4.3.1 Printhead Assembly

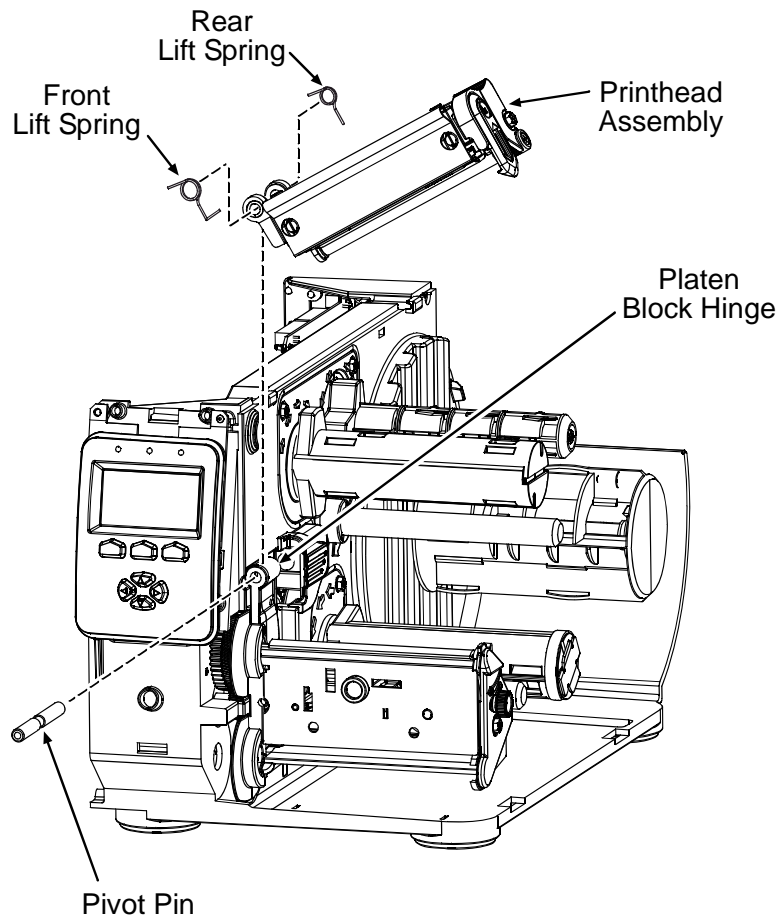
Removal:

1. Remove the Side Cover Assembly (see Section 4.1) and the Front Cover (see Section 4.2).
2. Remove the Printhead; see Section 4.3.
3. Remove the Drive Gear Screw, Idler Post, and Drive Gear from the Centerplate.

4. Remove the Pivot Pin Screw from the Platen Block Hinge.

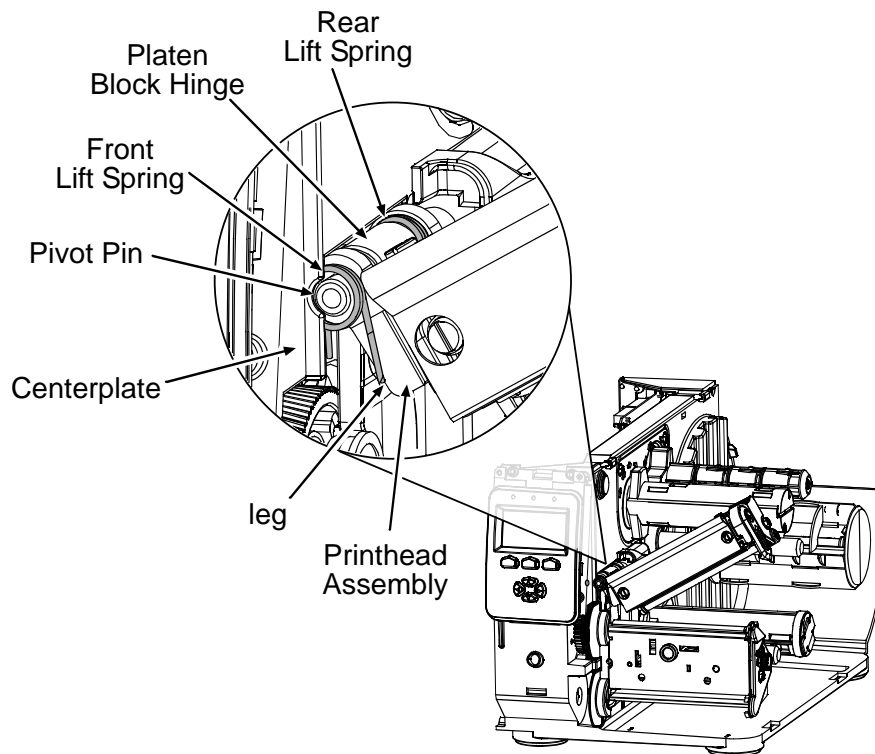


5. Extract the Pivot Pin from the Platen Block Hinge and Printhead Assembly. Then, remove the Printhead Assembly (the Front Lift Spring and the Rear Lift Spring will follow) and route the printhead cables out of the Guard; see Section 4.3.



Installation:

1. Place the Rear Lift Spring (short leg toward the Centerplate) onto the shoulder of the Platen Block Hinge then lower the Printhead Assembly until aligned with the Plate Block Hinge.
2. Place the Front Lift Spring (bent leg to captivate the Printhead Assembly) inline, against the Printhead Assembly, then insert the Pivot Pin (solid end forward). Raise the assembly and position the Front Lift Spring leg.

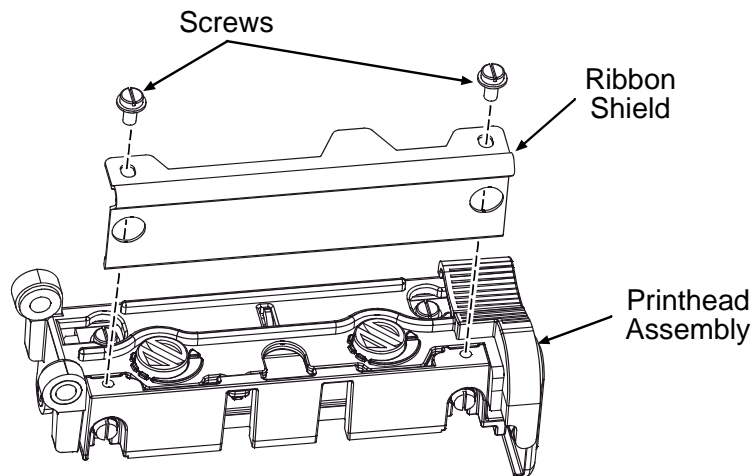


3. Install and secure the Pivot Pin Screw. Test the Printhead Assembly for proper movement and lift.
4. Attach the Drive Gear and Idler Post to the Centerplate with the Drive Gear Screw.
5. Carefully route the printhead cables through the Guard and then install the Printhead; see Section 4.3.
6. Install the Front Cover (see Section 4.2) and the Side Cover Assembly (see Section 4.1).

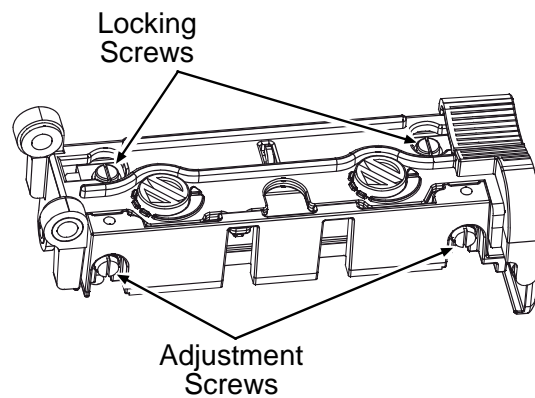
4.3.1.1 Head Pressure Cams and Springs

Removal:

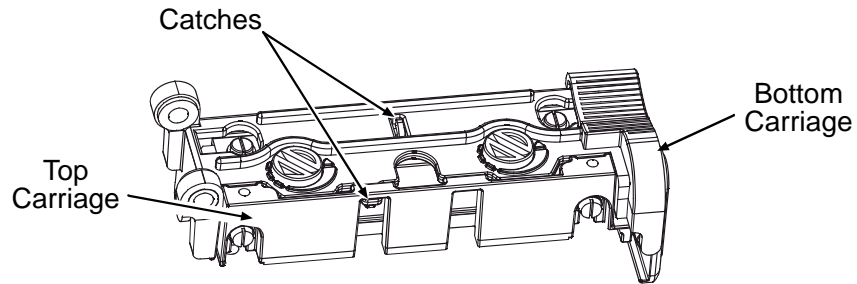
1. Remove the Printhead Assembly; see Section 4.3.1.
2. Remove the two Screws that secure the Ribbon Shield and then remove it from the Printhead Assembly.



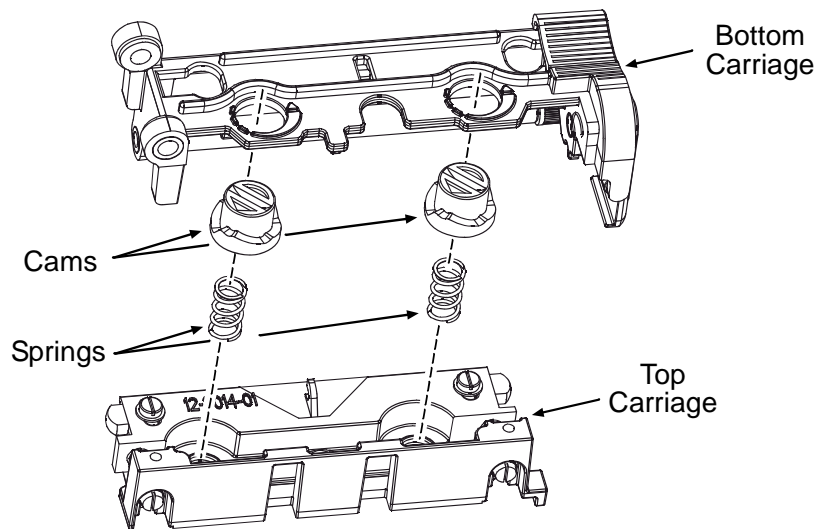
3. Loosen the Locking Screws and the Adjustment Screws.



- Slide the Bottom Carriage backward until the Catches are free and then separate the Bottom Carriage from the Top Carriage.

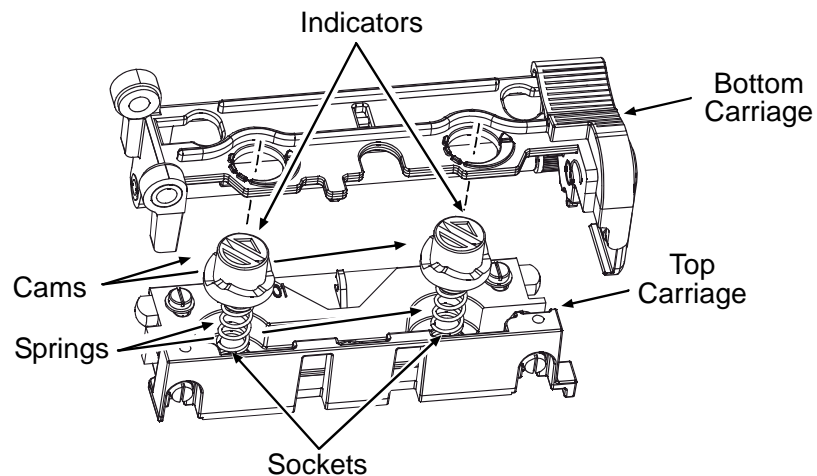


- Remove the Cams and Springs from the Top and Bottom Carriages.

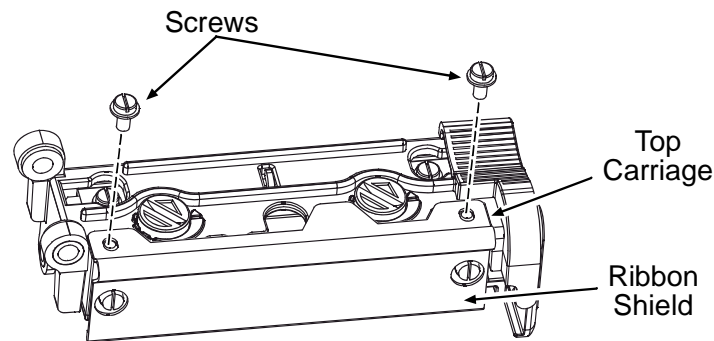


Installation:

- Place the Springs into the Sockets in the Top Carriage and then place the Cams, with the Indicators oriented for least pressure (see drawing), onto the Springs.



2. Place the Bottom Carriage into the Top Carriage, sliding it forward until the Catches engage, and then tighten the Locking Screws.
3. Snug, but do not tighten, the Adjustment Screws.
4. Install the Ribbon Shield onto the Top Carriage and secure it using the two Screws.



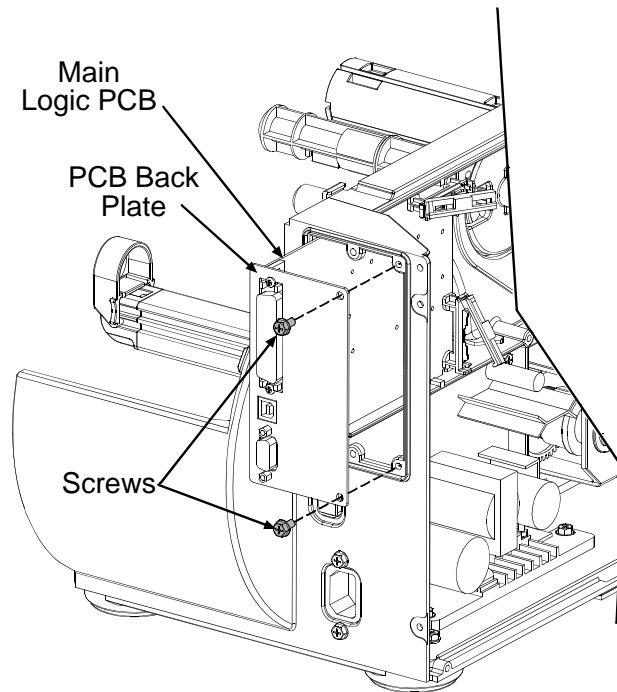
5. Install the Printhead Assembly; see Section 4.3.1.
6. Align the Printhead; see Section 2.4.
7. Adjust the Printhead Pressure; see Section 2.5.
8. If Thermal Transfer equipped, align the Ribbon Path; see Section 2.6.

4.4 Main Logic PCB

Removal:

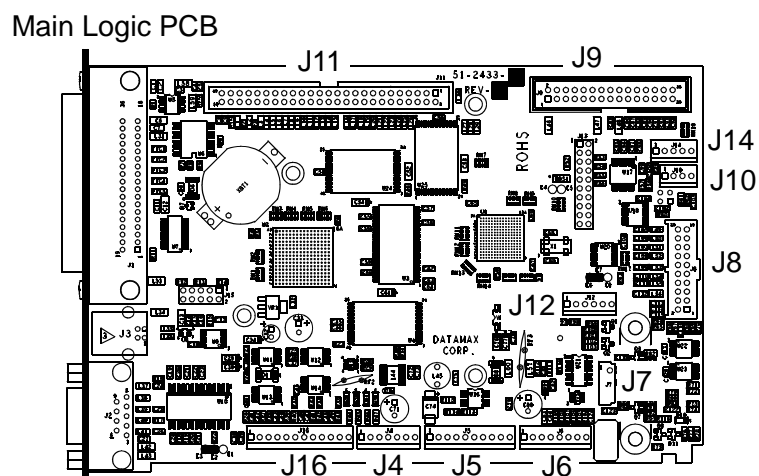
1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly; see Section 4.1.
3. Remove all cables connected to the Main Logic PCB.

4. Remove the two Screws on the PCB Back Plate of the Main Logic PCB then slide out the Main Logic PCB.



Installation:

1. Position the Main Logic PCB in the printer. Using the two Screws, secure the PCB Back Plate to the printer.
2. Connect the cables to the Main Logic PCB.

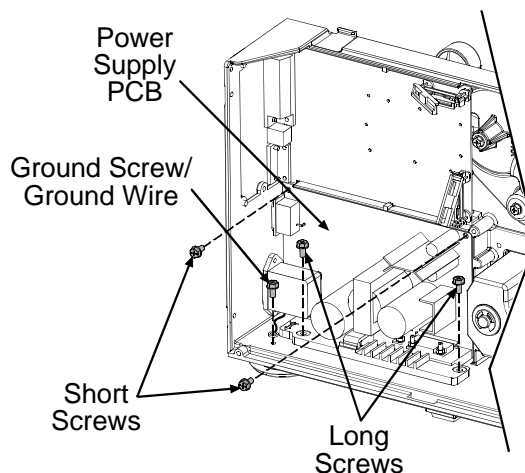
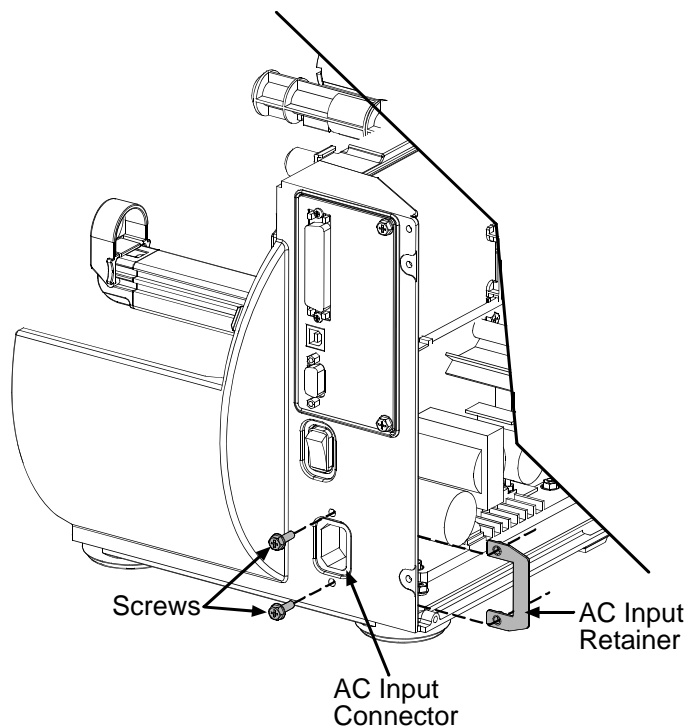


3. Install the Side Cover Assembly; see Section 4.1.
4. Calibrate the Media Sensor; see Section 2.2.

4.5 Power Supply PCB

Removal:

1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly; see Section 4.1.
3. Remove all cables connected to the Power Supply PCB.
4. Remove the two Screws that secure the AC Input Connector and Retainer to the printer.
5. Remove the Screw (and Lock Washer) that secures the Ground Wire.
6. Remove the two Short Screws that secure the Power Supply PCB and the two Long Screws that secure the Power Supply Heatsink to the printer.
7. Remove the Power Supply PCB from the printer.

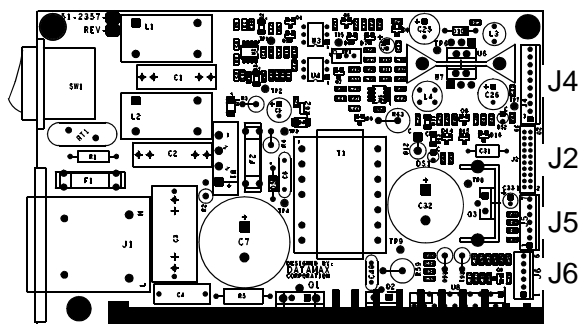


Installation:

1. Position the Power Supply PCB in the printer and secure it using the two Short Screws (PCB) and the two Long Screws (Heatsink).

2. Secure the Ground Wire using the Screw and Lock Washer to the chassis.
3. Position the AC Input Retainer onto the AC Input Connector then secure it using the two Screws.
4. Connect the cables to the Power Supply PCB.

Power Supply PCB



5. Adjust the Printhead Voltage; see Section 2.10.
6. Install the Side Cover Assembly; see Section 4.1.

4.5.1 Fuses

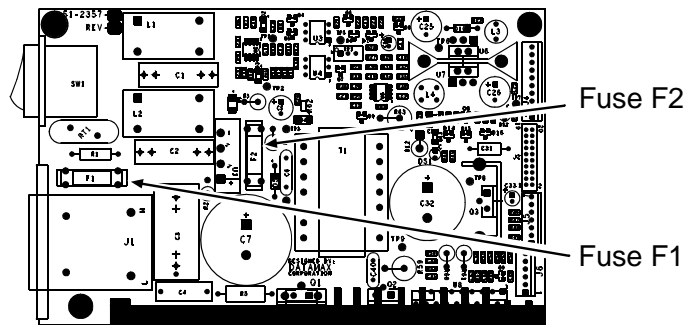
**CAUTION**

- Only use replacement fuses of the same type and rating as the originals; failure to comply could cause serious damage, including fire; and,
- Use care if replacing Fuse F1, which may blow during a failure in the primary switching circuit and indicate a more serious electrical problem.

Removal:

1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly; see Section 4.1.
3. Locate and test Fuses F1 and F2 on the Power Supply PCB.

Power Supply PCB

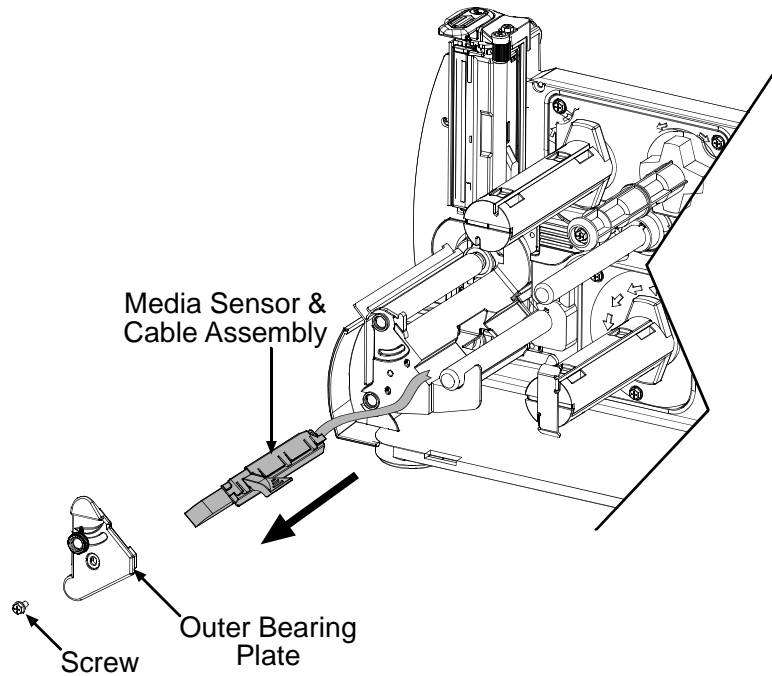
**Installation:**

1. Only replace the defective fuse(s) with the same type and rating as the factory original:
 - Fuse F1: Medium acting, 3 amps @ 250 Volts, 5 x 20 mm; and,
 - Fuse F2: Fast acting, 3 amps @ 250 Volts, 5 x 20 mm.
2. Install the Side Cover Assembly; see Section 4.1.

4.6 Media Sensor

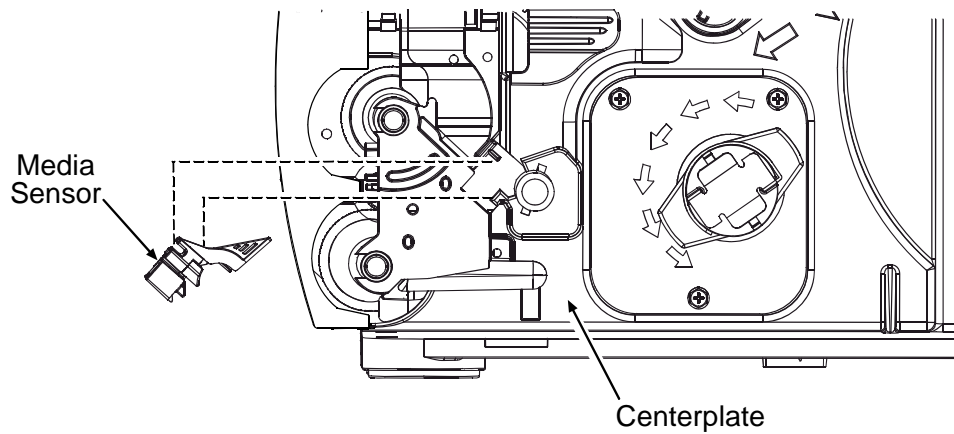
Removal:

1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly; see Section 4.1.
3. Open the J7 Strain Relief on the Main Logic PCB then remove the Media Sensor Cable.
4. Unlatch the printhead assembly then remove the Screw and the Outer Bearing Plate.
5. Slide the Media Sensor & Cable Assembly out of the printer.

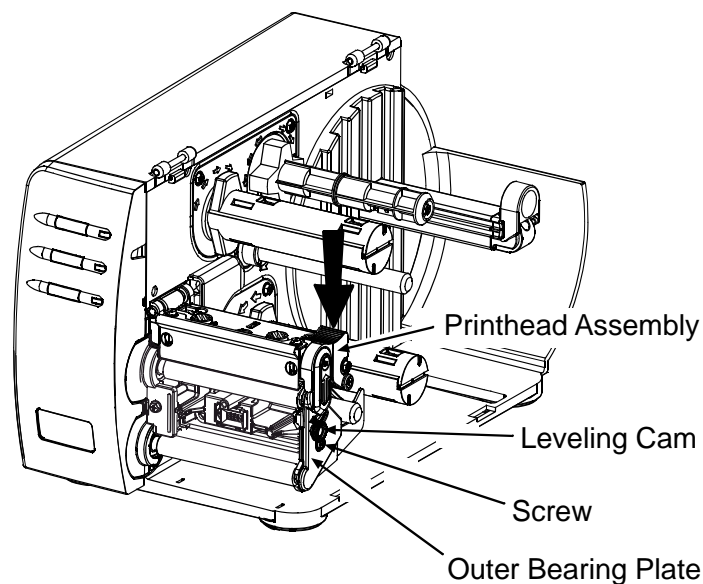


Installation:

1. Route the Cable Assembly through the Centerplate opening and then slide in Media Sensor.



2. Replace the Outer Bearing Plate and start, but do NOT tighten, the Screw.
3. Ensure that the Leveling Cam is loose and then latch the Printhead Assembly.
4. While pushing downward on the Printhead Assembly (see arrow, below), pull down on the Outer Bearing Plate and tighten the Screw.

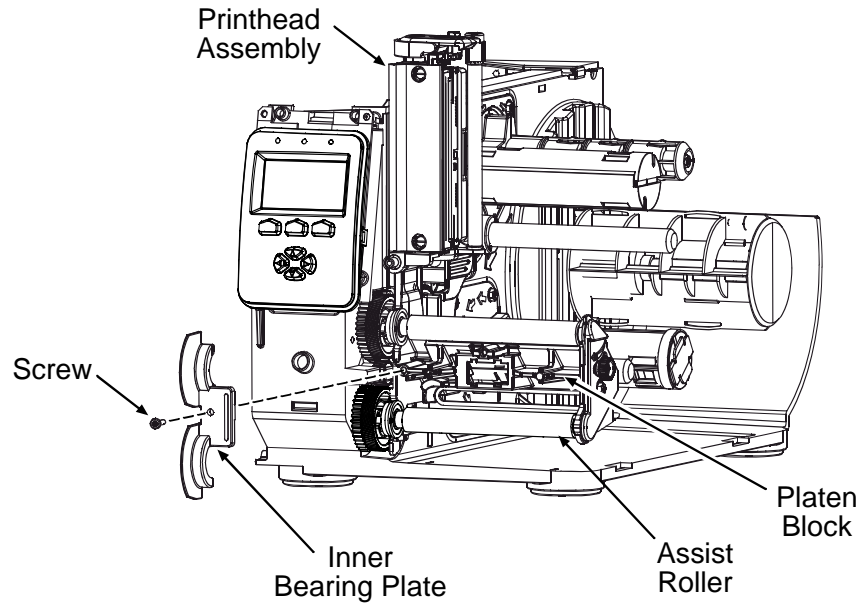


5. Connect the Media Sensor Cable to J7 on the Main Logic PCB; see Section 4.4. Press the connector lock down and then close the Strain Relief.
6. Install the Side Cover Assembly; see Section 4.1.
7. Plug in and turn ON the printer. Perform the Media Width Adjustment; see Section 2.3.

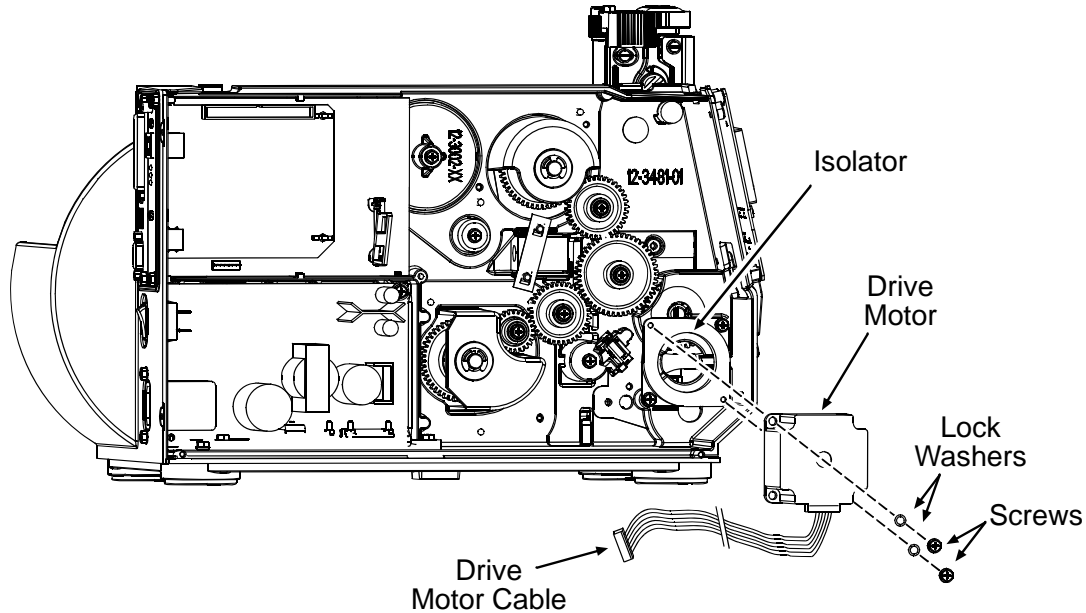
4.7 Drive Motor

Removal:

1. Turn OFF and unplug the printer.
2. Remove the Side Cover Assembly (see Section 4.1) and the Front Cover (see Section 4.2). Also, if the printer is equipped with an Assist Roller, remove the fascia and any output attachment (e.g., tearplate, arc plate, etc; see Section 4.8 for details).
3. Raise the Printhead Assembly and proceed according to equipped type: If equipped with an Assist Roller, remove the Screw that secures the Inner Bearing Plate and then remove the Inner Bearing Plate from the Platen Block; otherwise, go to Step 4.



4. Disconnect the Drive Motor Cable from the Power Supply PCB.
5. Remove the two Screws and Lock Washers that secure the Drive Motor then carefully remove the Drive Motor.



Installation:

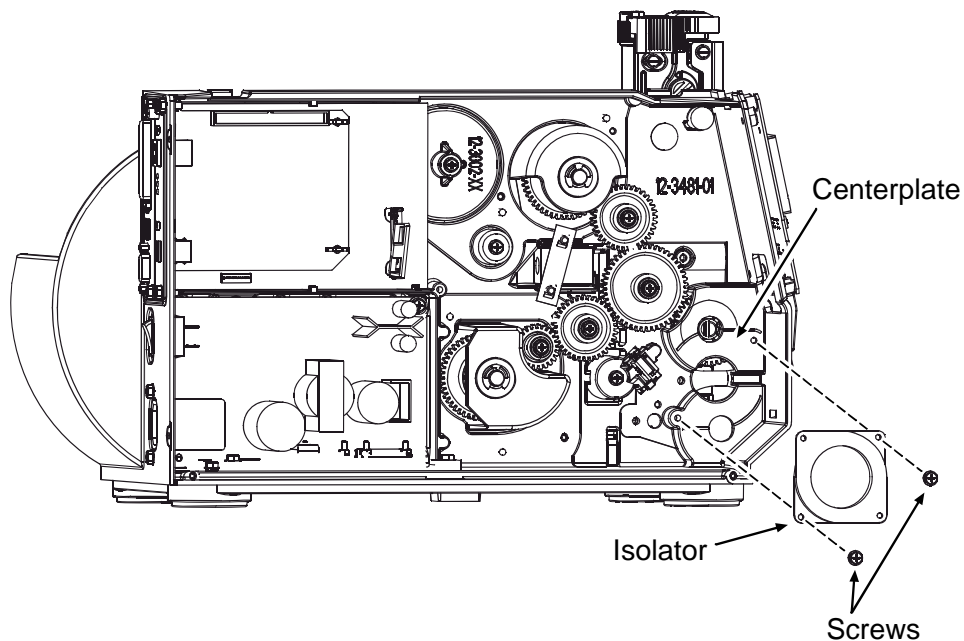
1. Carefully insert the motor's gear into the drive gear train, rotating the Drive Motor so that it rests flush against the Isolator, with gears meshed, aligned to the screw holes.

2. Secure the Drive Motor to the Isolator using the two Lock Washers and Screws.
3. Connect the Drive Motor Cable to the J6 of the Power Supply PCB; see Section 4.5.
4. Proceed according to equipped type: If equipped with an Assist Roller, replace the Inner Bearing Plate and secure it to the Platen Block using the Screw; otherwise, go to Step 6.
5. If removed, install the tearplate and fascia or other previously attached output device.
6. Install the Front Cover (see Section 4.2) and Side Cover Assembly (see Section 4.1).

4.7.1 Isolator

Removal:

1. Turn OFF and unplug the printer.
2. Remove the Drive Motor; see Section 4.7.
3. Remove the two Screws that secure the Isolator to the Centerplate then remove the Isolator.



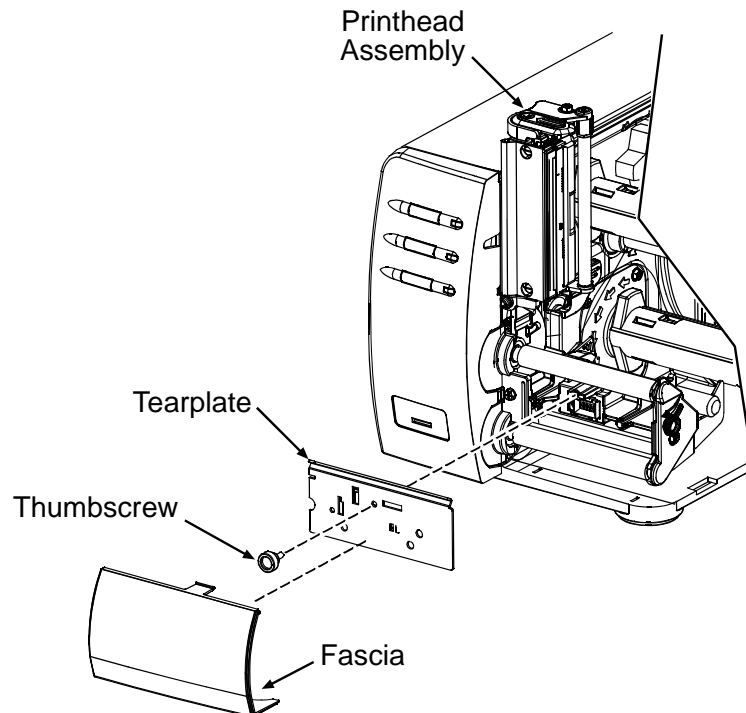
Installation:

1. Place the Isolator against the Centerplate opening as shown and secure it using the two Screws.
2. Install the Drive Motor; see Section 4.7.

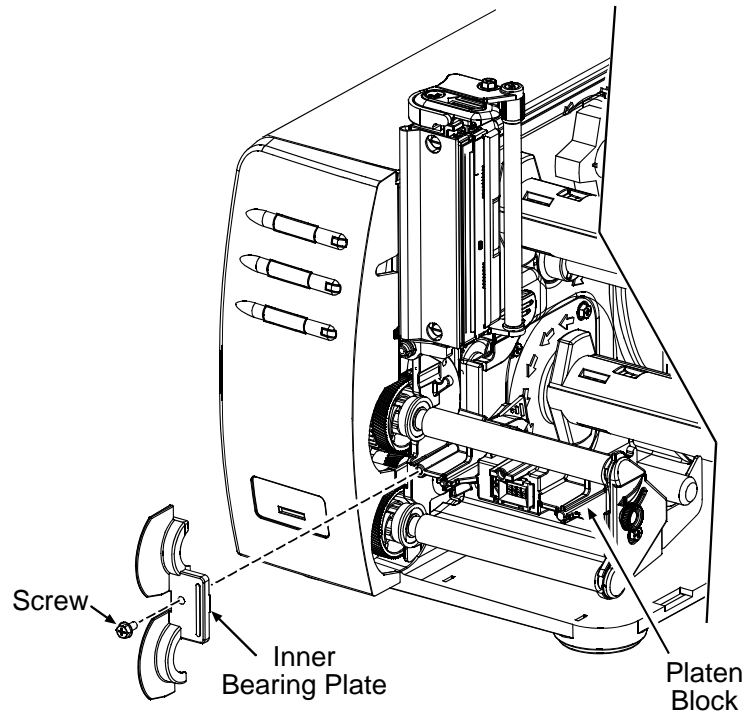
4.8 Platen and Assist Roller

Removal:

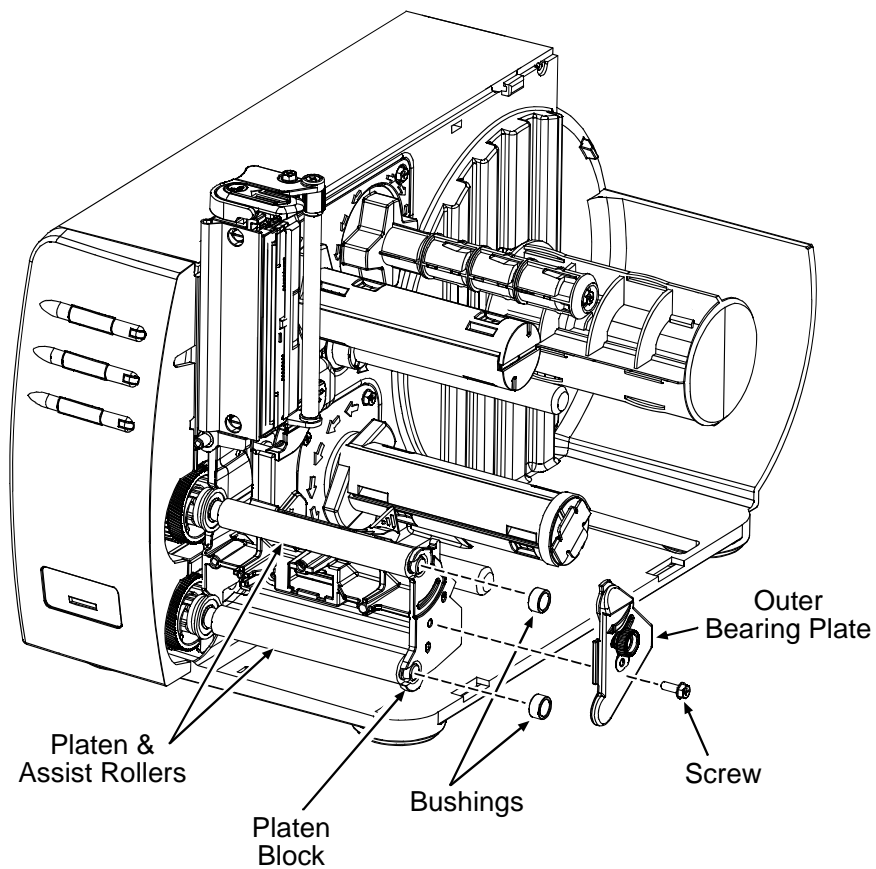
- 1 Turn OFF and unplug the printer.
2. Remove the Fascia and Tearplate (or any other attached output device) and then raise the Printhead Assembly.



3. Remove the Screw that secures the Inner Bearing Plate, and then remove the Inner Bearing Plate from the Platen Block.



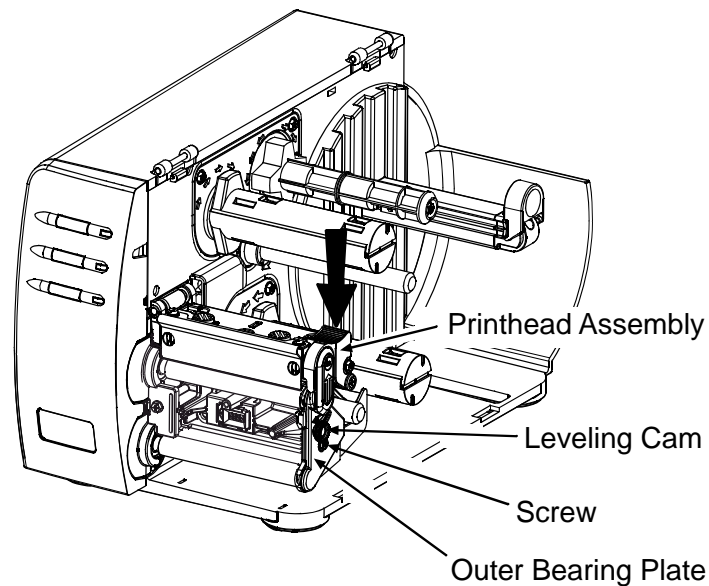
4. Remove the Screw that secures the Outer Bearing Plate then remove the Outer Bearing Plate and slide the Bushing(s) out of the Platen Block.



5. Remove the Platen and / or Assist Roller from the Platen Block.

Installation:

1. Position the Platen and / or Assist Roller into the Platen Block.
2. While holding the roller(s) in place, meshed with the drive gear, install the Inner Bearing Plate and Screw.
3. Install the Bushing(s) over the roller shaft(s) and into the Platen Block.
4. Replace the Outer Bearing Plate and start, but do NOT tighten, the Screw.
5. Ensure that the Leveling Cam is loose and then latch the Printhead Assembly.
6. While pushing downward on the Printhead Assembly (see arrow, below), pull down on the Outer Bearing Plate and tighten the Screw.

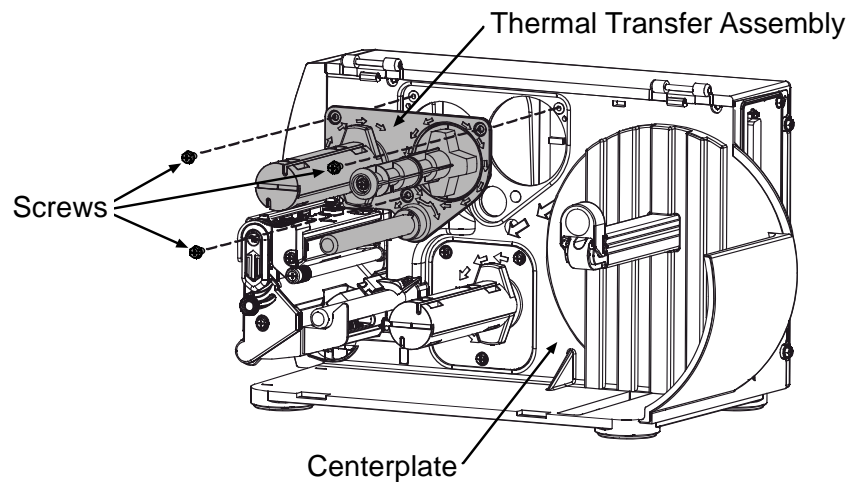


7. Install the Tearplate and Fascia or other output device.

4.9 Thermal Transfer Assembly

Removal:

1. Turn OFF and unplug the printer.
2. Remove the three Screws that secure the Thermal Transfer Assembly and then remove the Thermal Transfer Assembly from the Centerplate.



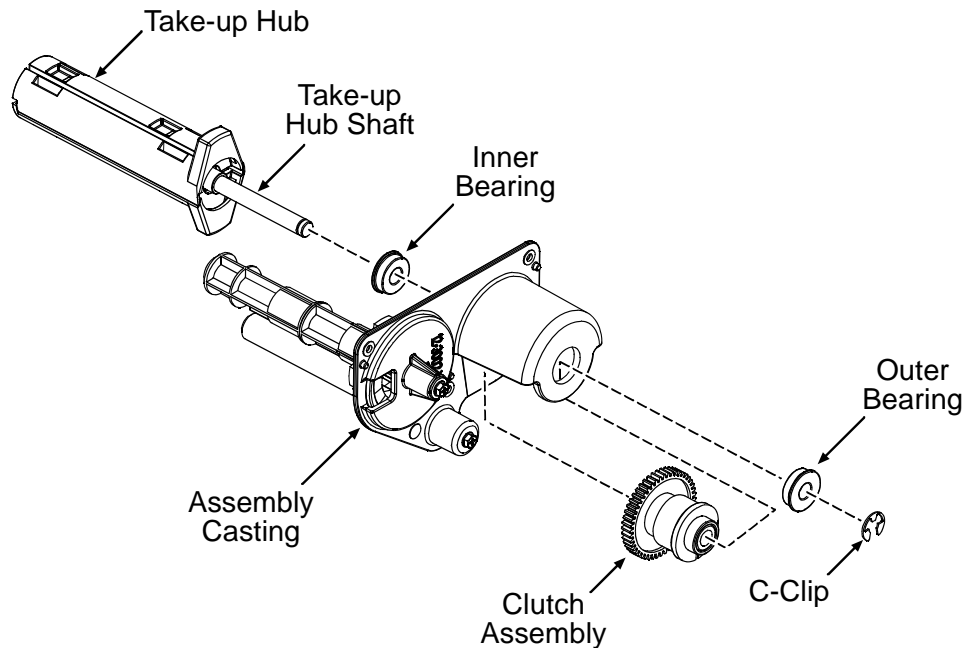
Installation:

Position the Thermal Transfer Assembly over the opening in the Centerplate and secure it using the three Screws.

4.9.1 Take-up Hub & Clutch Assembly

Removal:

1. Remove the Thermal Transfer Assembly; see Section 4.9.
2. Remove the C-Clip and Outer Bearing from the Take-Up Hub Shaft.
3. Slide the Take-up Hub and Inner Bearing out of the Assembly Casting then remove the Clutch Assembly.

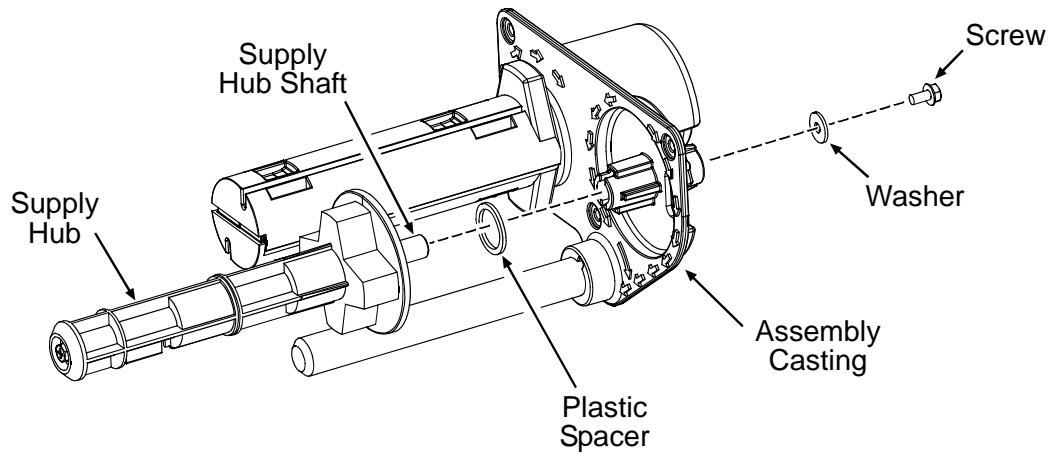
**Installation:**

1. Position the Clutch Assembly and the Inner and Outer Bearings, as shown, in the Assembly Casting.
2. Slide the Take-up Hub Shaft through the Inner Bearing, Clutch Assembly, and Outer Bearing then insert the C-Clip onto the Take-up Hub Shaft to secure the components within the Assembly Casting.
3. Install the Thermal Transfer Assembly; see Section 4.9.

4.9.2 Supply Hub**Removal:**

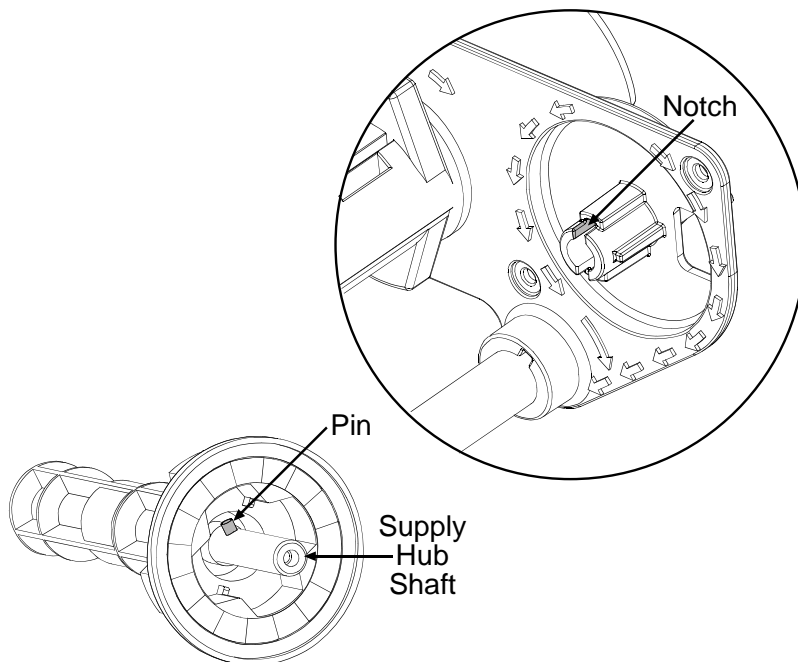
1. Remove the Thermal Transfer Assembly; see Section 4.9.
2. Remove the Screw and Washer that secures Supply Hub in the Assembly Casting.

3. Slide the Supply Hub and Plastic Spacer out of the Assembly Casting.



Installation:

1. Slide the Supply Hub Shaft through the Plastic Spacer and partially into the Assembly Casting.
2. After ensuring that the Pin on the Supply Hub Shaft engages the Notch in the Assembly Casting, slide the Supply Hub Shaft completely through then install the Washer and secure the components to the Assembly Casting with the Screw.

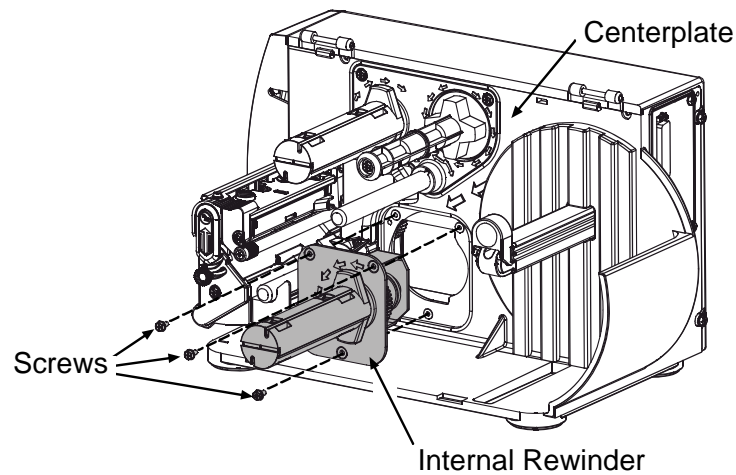


3. Install the Thermal Transfer Assembly; see Section 4.9.

4.10 Internal Rewinder

Removal:

1. Turn OFF and unplug the printer.
2. Remove the three Screws that secure the Internal Rewinder and then remove the Internal Rewinder from the Centerplate.



Installation:

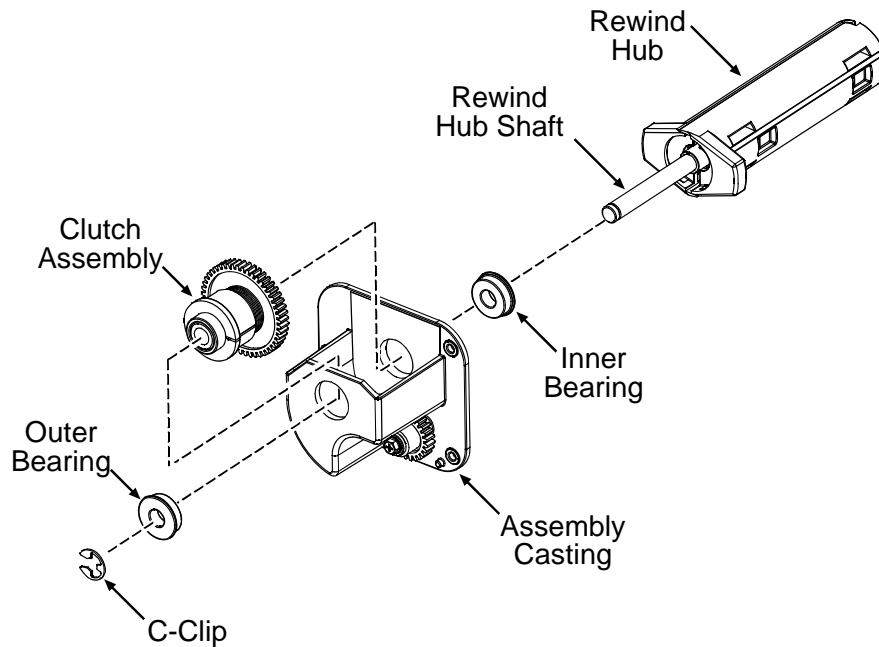
Position the Internal Rewinder over the opening in the Centerplate and secure it using the three Screws.

4.10.1 Rewind Hub & Clutch Assembly

Removal:

1. Remove the Internal Rewinder; see Section 4.10.
2. Remove the C-Clip and Outer Bearing from the Rewind Hub Shaft.

3. Slide out the Rewind Hub and Inner Bearing, and then remove the Clutch Assembly from the Assembly Casting.

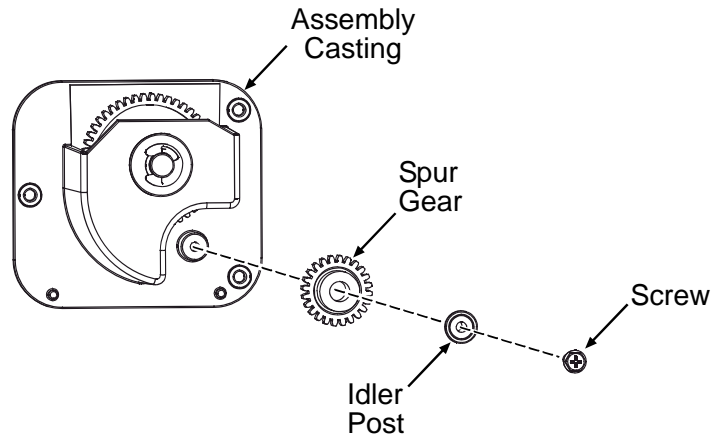
**Installation:**

1. Position the Clutch Assembly in the Assembly Casting.
2. Install the Inner Bearing then slide the Rewind Hub Shaft through the Clutch Assembly and Assembly Casting.
3. Install the Outer Bearing and secure the components with the C-Clip.
4. Install the Internal Rewinder; see Section 4.10.

4.10.2 Spur Gear

Removal:

1. Remove the Internal Rewinder; see Section 4.10.
2. Remove the Screw, Idler Post, and the Spur Gear from the Assembly Casting.

**Installation:**

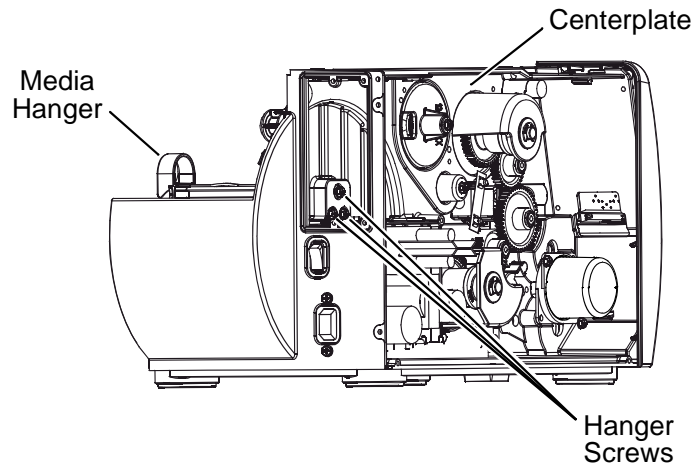
1. Place the Idler Post into the Spur Gear, and then secure the components in the Assembly Casting with the Screw.
2. Install the Internal Rewinder; see Section 4.10.

4.11 Media Supply Assembly

4.11.1 Media Hanger

Removal:

1. Remove the Main Logic PCB; see Section 4.4.
2. Remove the three Hanger Screws that secure the Media Hanger to the Centerplate and then remove the Media Hanger.



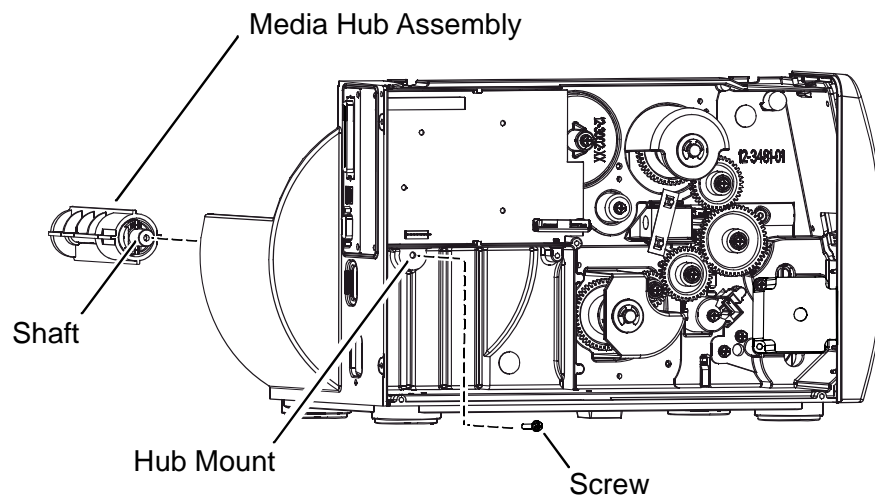
Installation:

1. Position the Media Hanger against the Centerplate and then secure it in place using the three Screws.
2. Install the Main Logic PCB; see Section 4.4.

4.11.2 Media Hub

Removal:

1. Remove the Power Supply PCB; see Section 4.5.
2. Remove the Screw that secures the Media Hub Assembly to the Hub Mount and then remove the assembly.



Installation:

1. Position the Media Hub Assembly into the Hub Mount and then secure it in place using the Screw.
2. Install the Power Supply PCB; see Section 4.5.

