8   Removal & Installation

Two contents lists are provided for this chapter to help you to quickly find the service part you want to replace. The first list is provided in *Service Part Order* and the second in *Disassembly Order*.

Service Part Order

Service Part Order (Continued)

Disassembly Order

Removal & Installation

Disassembly Order (Continued)

Removal & Installation

Introduction

This chapter is a step-by-step guide to the removal and installation of the key components of the printer. You may find it useful to tick off the steps as they are performed. Use the illustrations for each procedure to identify the parts referred to in the text.

The procedures appear in order of removal. So the whole machine can be stripped down by starting at the beginning of this chapter and working through the subsequent procedures.

> **NOTE:** Before using this chapter to remove and install a new component, always make sure that you have performed the relevant service test from Chapter 4. If the test passes you will not need to replace the component.

Safety Precautions

Review the instructions identified by WARNING and CAUTION symbols before you service the printer. Follow these warnings and cautions for your protection and to avoid damaging the printer.

> ⚠ **WARNING!:** Serious shock hazard leading to death or injury may result if you do not take the following precautions:
>
> • Ensure that the AC power outlet (mains) has a protective earth (ground) terminal.
> • Switch the plotter off, and disconnect it from the power source prior to performing any maintenance.
> • Prevent water or other liquids from running onto electrical components or circuits, or through openings in the module.

Electrostatic Discharge (ESD) Precautions

To prevent damage to the Printer circuits from high-voltage electrostatic discharge (ESD):

1. Do not wear clothing that is subject to static build-up.

2. Do not handle integrated circuits (ICs) in carpeted areas.

3. Do not remove an IC or a printed circuit assembly (PCA) from its conductive foam pad or conductive packaging until you are ready to install it.

4. Ground (earth) your body while disassembling and working on the Printer.

5. After removing a cover from the Printer, attach an earthing (ground) lead between the PCA common and earth ground. Touch all tools to earth ground to remove static charges before using them on the Printer.

6. After removing any PCA from the Printer, place it on a conductive foam pad or into its conductive packaging to prevent ESD damage to any ICs on the PCA.

Required Tools

The following tools are required to disassemble and repair the Printer.

• A long Torx Screwdriver with the following attachments: T8, T10, T15, T20, and T25.

• A long thin-bladed T-10 Torx Screwdriver to remove the Primer. The blade must be longer than 12 cm with a maximum diameter of 10 mm.

• A long thin-bladed T-20 Torx Screwdriver to remove the OMAS Sensor. The blade must be longer than 11 cm with a maximum diameter of 4 mm.

- A T8 Torx Screwdriver to remove the left cover. The blade must be longer then 5 cm with a maximum diameter of 9 mm.

Screw Types

| Type	Torx	Length (mm)	Head Type	Thread Type	Part Number
A	T-20	17	Pan	Taptite	0515-1743
B	T-20	10	Pan	Taptite	0515-2282
C	T-10	7.0	Pan	Machined	0515-4613
D	T-8	5.5	Pan	Taptite	0515-2850
E	T-15	-	Pan	-	C3180-20001
F	T-15	9.5	Pan	Plastite	0515-2981
G	T-15	12.7	Pan	Taptite	0624-0769
H	T-15	12.7	Pan	Taptite	0515-4706
I	T-10	8.0	Pan	Taptite	0515-2200
J	T-15	20	Pan	Plastite	0624-0771
K	T-8	9.5	Pan	Taptite	0624-0680
L	T-8	12.7	Pan	Taptite	0624-0768
M	T-20	-	Pan	-	0515-2521
N	T-20	35	Pan	Sheet Metal	C6071-20025
O	T-20	12.7	Pan	-	0624-1062
P	T-15	11.6	Pan	Machined	C2847-20018
Q	T-20	-	Pan	Taptite	0515-2916
R	T-15	-	Pan	Taptite	0515-1916
S	T-15	18.4	Pan	Machined	Q6651-20179

Window (42-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

📝 **NOTE:** Throughout this section the graphics actually show the HP Designjet 4000 Printer series but the steps of the procedure are identical for the HP Designjet Z6000 Printer series.
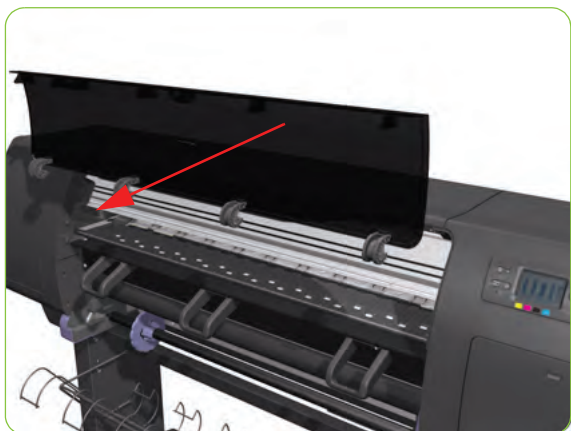
1. Open the Window.
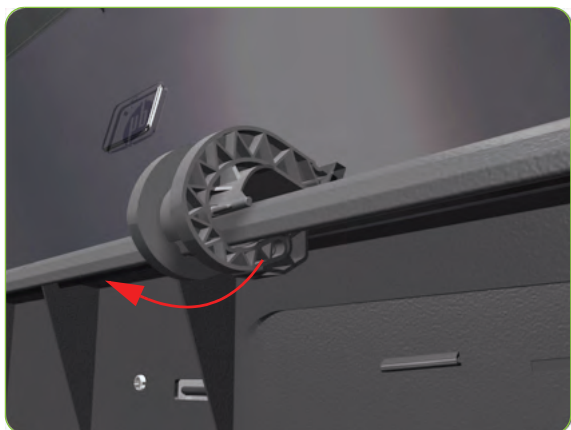
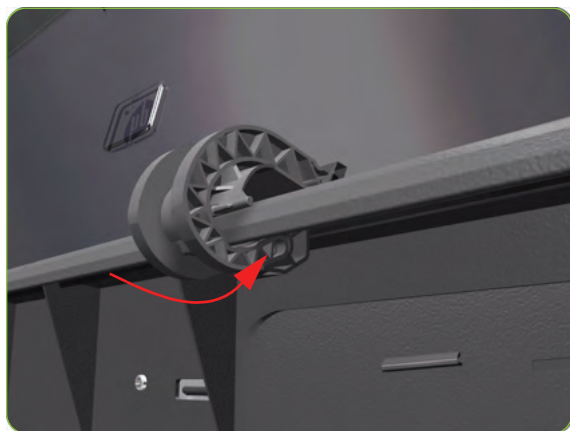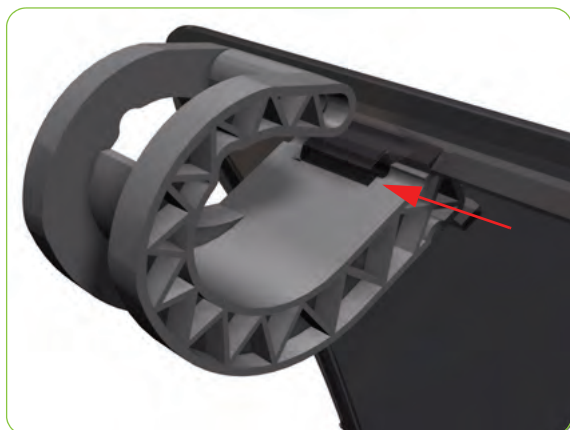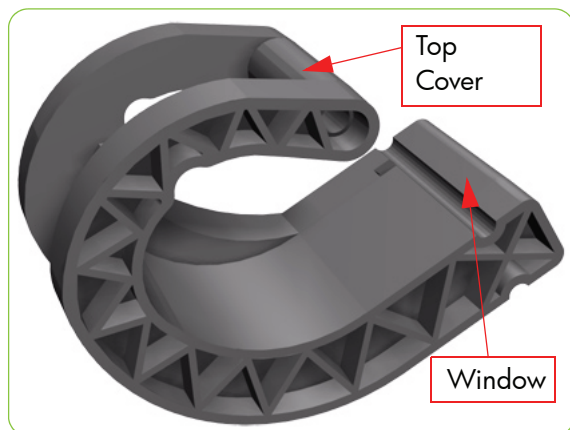2. Unclip the Window hinges from the Top Cover.

   📝 **NOTE:** Since the hinges are very hard to unclip, it is recommended that you use a screwdriver or other tool to forcefully unclip the Window hinges from the Top Cover.

3. Remove the Window from the Printer.

Installation of New Window

Top
Cover

Window

1. Identify the two ends of the Window hinge (four in total) - one end is clipped to the Window and the other to the Top Cover.

2. Slide the Window hinges on to the Window.

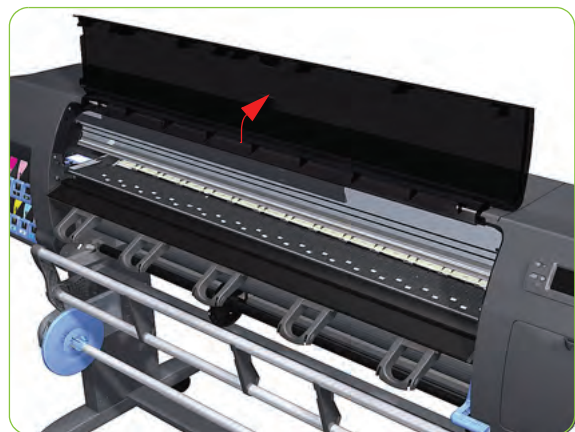3. Clip the Window Hinges to the Top Cover.

NOTE: Since the hinges are very hard to clip, you will need to forcefully clip the Window hinges to the Top Cover.

Window (60-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
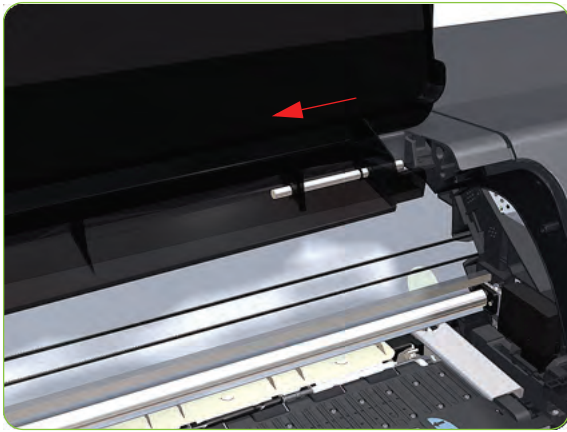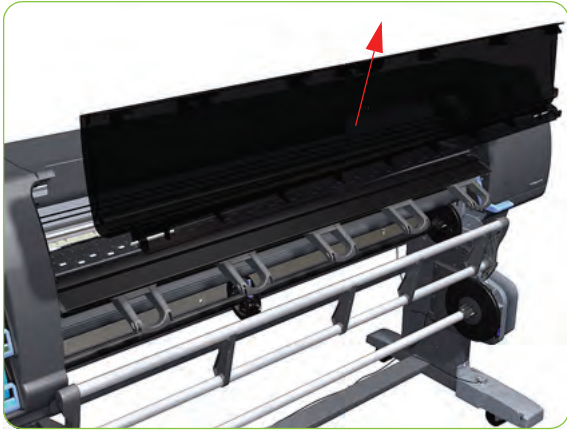

1. Open the Window.

2. Use a flat bladed screwdriver to compress and hold the spring compressed.

3. Pull the window towards you enough to release it from the left attachment.

4. Slide the Window to the left to release it from the right attachment.

5. Remove the Window from the Printer.

Right Cover

Removal

WARNING!: Switch off the printer and remove the power cable.

1. Unclip the Quick Reference Guide Holder from the rear of the Printer.

2. Using a suitable small flat-blade screwdriver, unclip the Front Panel Bezel from the Right Cover.

3. Remove the Front Panel Bezel from the Right Cover.

4. Remove two T-15 screws (**Type G**) that secure the Front Panel to the Right Cover.
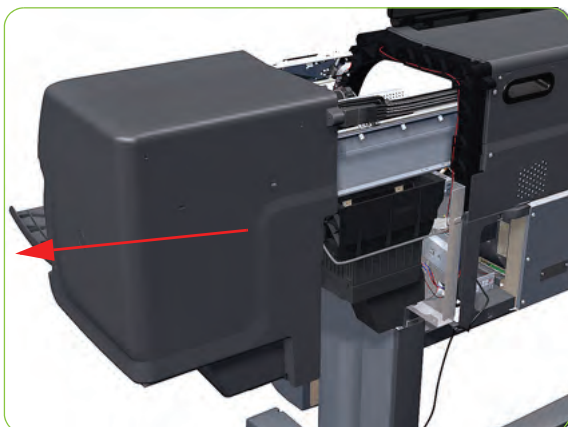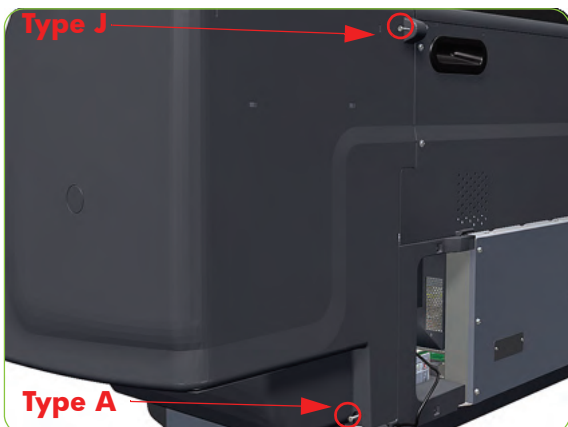
5. Open the Maintenance Cartridge Door.

6. Remove one T-15 screw (**Type J**) that secures the Right Cover.

7. Open the Window.

8. Open the Window and remove two T-15 screws (**Type J**) that secure the Right Cover.

Type J

Type A

9. Remove one T-15 screw (**Type J**) and one T-20 screw (**Type A**) that secure the Right Cover from the rear of the Printer.

10. Remove the Right Cover from the Printer.

> △ **CAUTION:** When installing the Right Cover, make sure you leave the Maintenance Cartridge Door open, otherwise you could damage the Maintenance Cartridge Door Sensor.
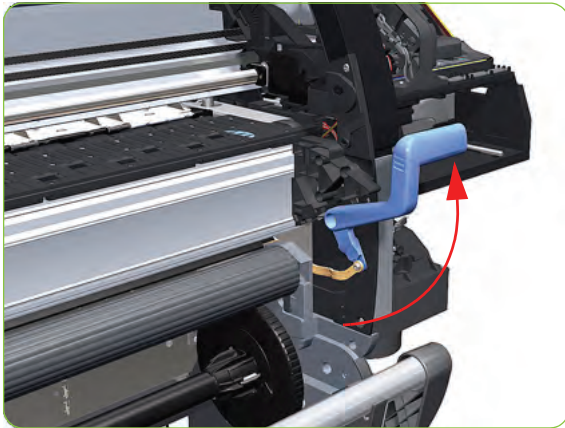
Right Trim

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
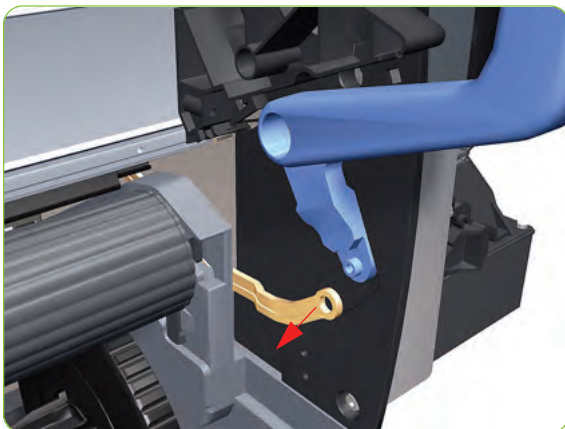
---

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Output Platen ⇒ See page 380.
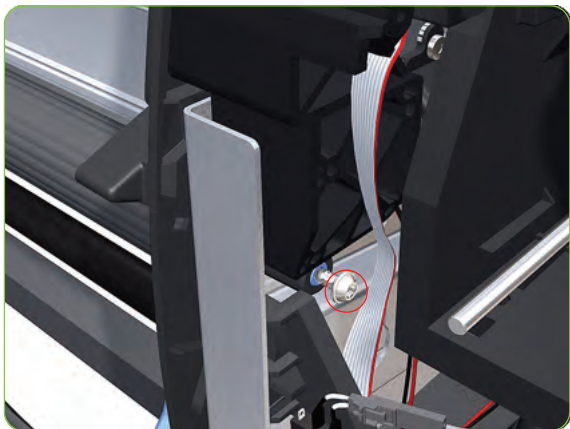3. Raise the Media Lever.

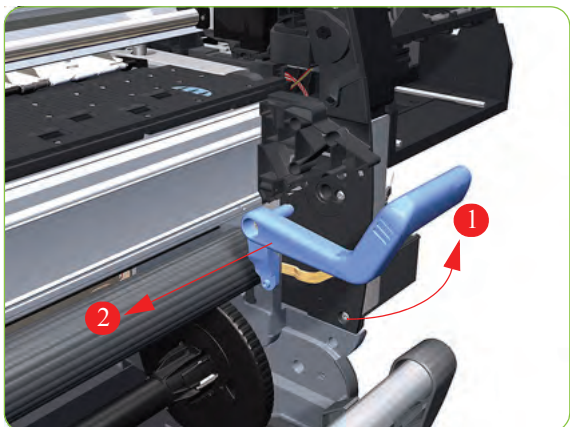4. Remove one T-15 screw (**Type F**) that secures the Media Lever to the Linkage.

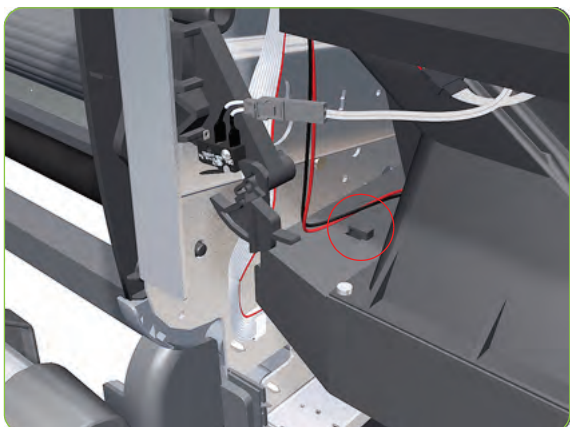5. Disconnect the Media Lever from the Linkage.

6. Remove one T-15 screw (**Type F**) that secures the Media Lever to the Right Trim.
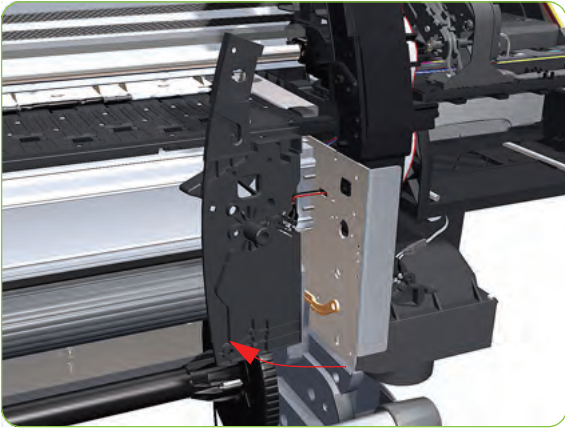
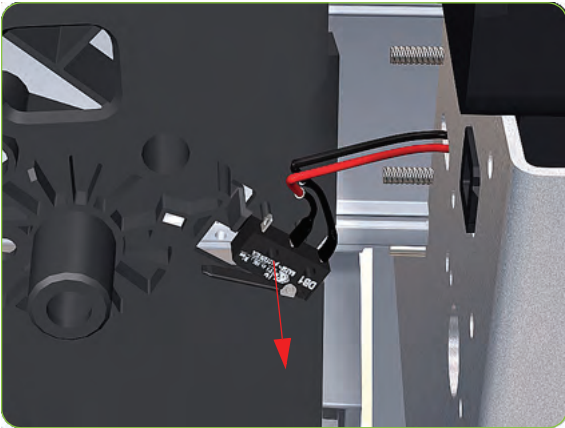7. Lift the Media Lever and remove it from the Printer.

8. Unroute the Media Lever Position Sensor cable from its clip to avoid putting strain on the Media Lever Position Sensor connections during the removal of the Right Trim.

9. Remove five T-15 (**Type F**) screws that secure the Right Trim.

10. Carefully rotate the Right Trim sufficiently to gain access to the Media Lever Position Sensor.

11. Unclip the Media Lever Position Sensor of its mounting lugs on the Right Trim.
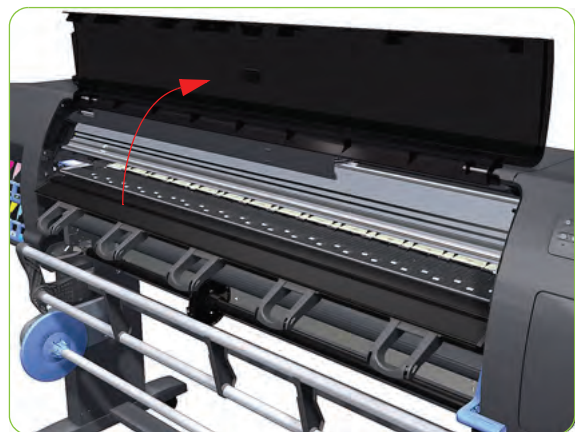

12. Remove the Right Trim from the Printer.

Left Cover

Removal

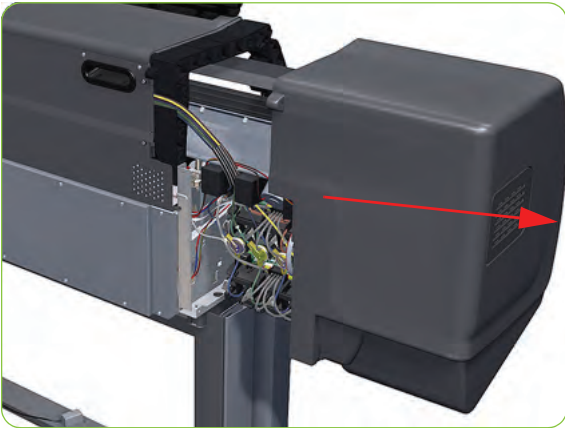**WARNING!:** Switch off the printer and remove the power cable.

1. Open the Window.

2. Remove two T-15 (**Type J**) screws that secure the Left Cover.

3. Remove one T-15 screw (**Type J**) that secures the Left Cover.

4. Remove two T-15 screws (**Type J**) secure the Left Cover.

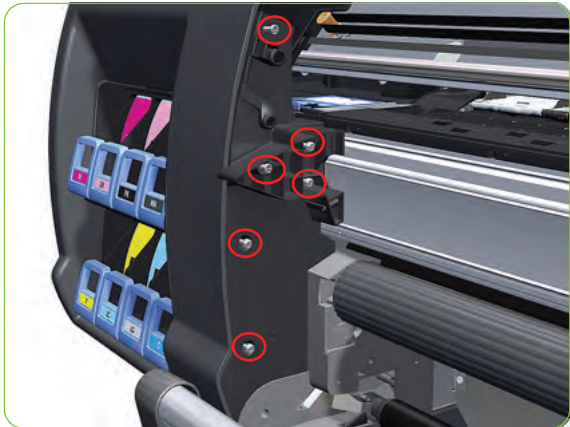5. Remove the Left Cover from the Printer.

Left Trim

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Output Platen ⟹ See page 380.
2. Remove six T-15 screws that secure the Left Trim.

3. Carefully remove the Left Trim from the Printer.
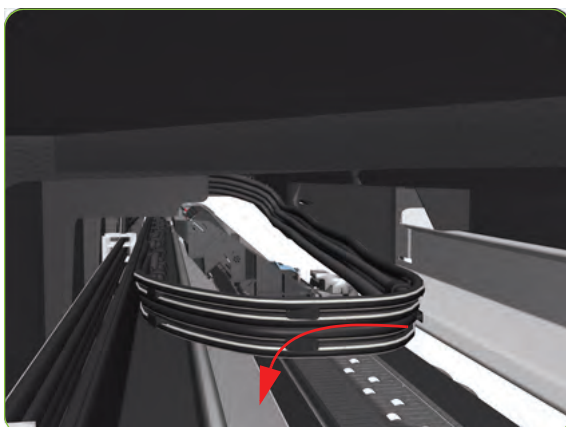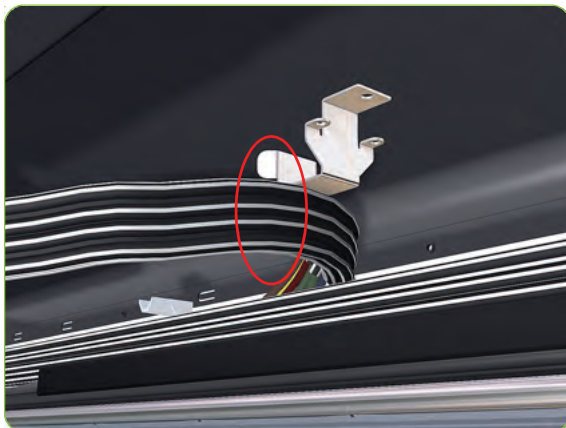
Top Cover (42-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

📝 **NOTE:** Throughout this section the graphics actually show the HP Designjet 4000 Printer series but the steps of the procedure are identical for the HP Designjet Z6000 Printer series.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Left Cover ⇒ See page 254.
3. Release the three clips securing the Ink Supply Tubes and the Trailing Cable to the Top Cover.

4. Release the Ink Supply Tubes and Trailing Cable from the clip underneath the Top Cover.

5. Remove the Ink Supply Tubes and Trailing Cable from within the Top Cover and lay them on the Print Platen.
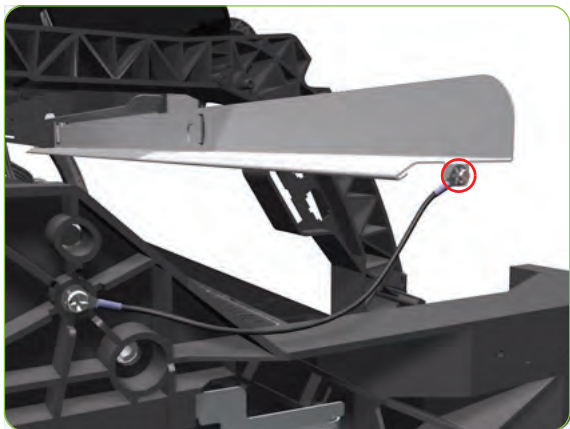
6. Remove one T-10 (**Type I**) screw that secures the ESD Strip to the Top Cover (on the left hand side of the Printer).
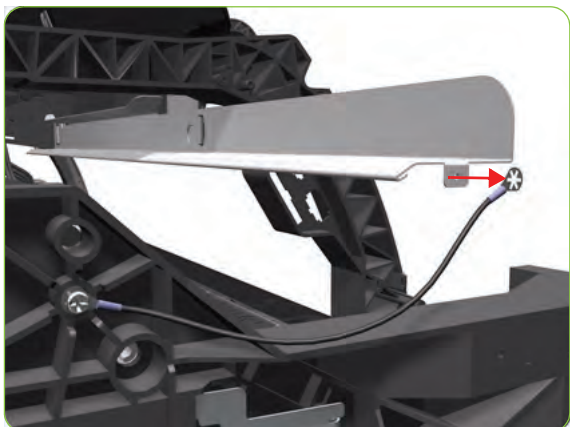
7. Disconnect the ESD Strip from the Top Cover.

8. Remove the three T-15 screws (**Type G**) that secure the Rear Door.
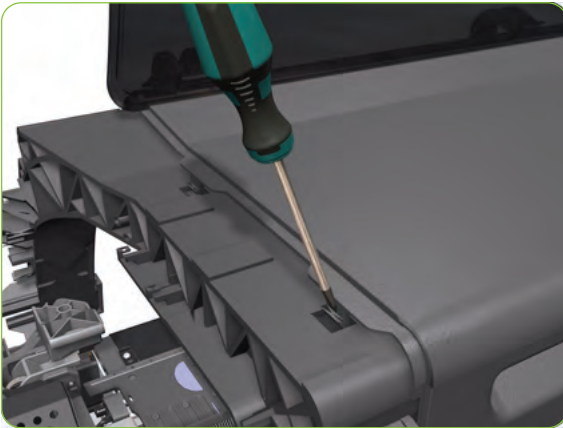
   NOTE: Each screw includes a washer (part number 3050-1267).

9. Open the Rear Door.

10. Remove four T-15 screws (**Type H**) that secure the Top Cover from the rear of the Printer.

11. Using a flat-head screwdriver, release the Top Cover from the right hand side of the Printer.
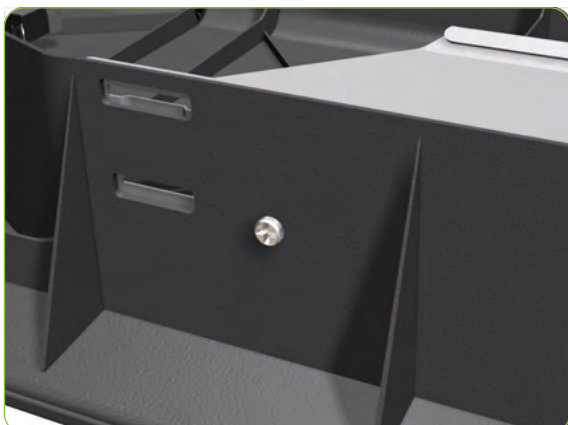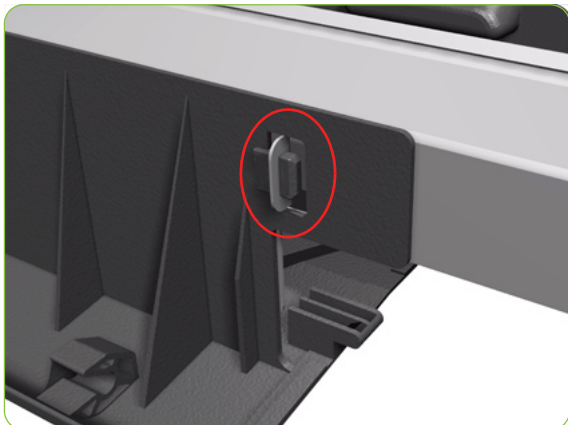

12. Release the Top Cover from the rear of the Printer.

13. Raise the right hand side of the Top Cover and pull out to the right.

> 📝 **NOTE:** If a NEW Top Cover is to be installed, take note of the following instructions before assembling the Top Cover on to the Printer:

1. Position the Metallic Support on to the Top Cover.

2. Lock the Metallic Support on to the Top Cover.

3. Install the T-20 screw that secures the Metallic Support to the Top Cover.

4. Remove the Window ($\Rightarrow$ See page 244) from the old Top Cover and install it on the new Top Cover.
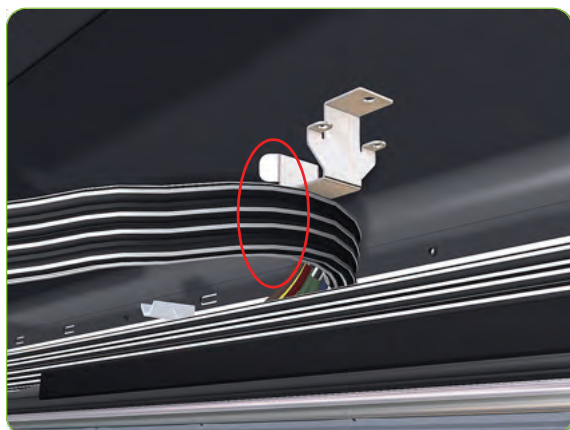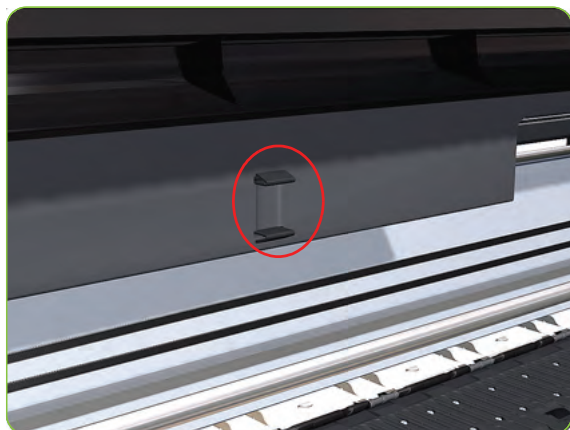
> **NOTE:** When installing the Ink Supply Tubes and Trailing Cable on to the Top Cover, take note of the of the two red marks on the Ink Supply Tubes. These two red marks should be aligned with the first slot in the Top Cover as this will help with the rest of the installation.

Top Cover (60-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Remove the Rear Door ⇒ See page 267.

4. Release the clip securing the Ink Supply Tubes and the Trailing Cable to the Top Cover.

5. Release the Ink Supply Tubes and Trailing Cable from the clip underneath the Top Cover.

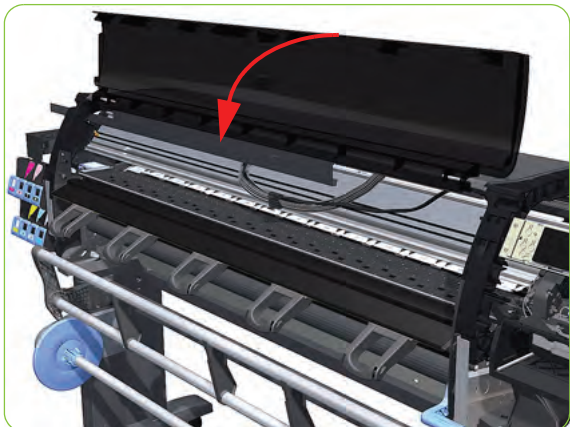6. Press the clip to release it from the Top Cover.

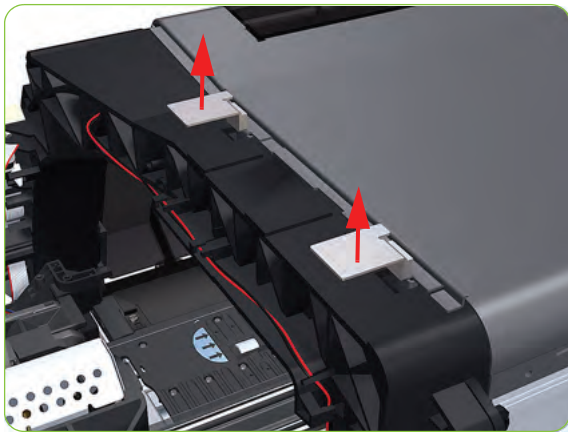7. Remove the clip from the Top Cover.
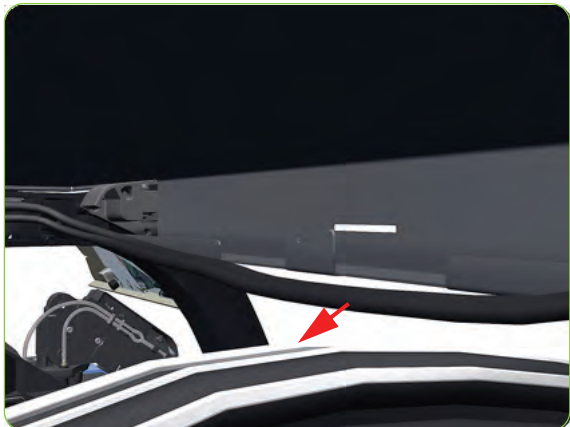
8. Unroute the Trailing Cable from the Top Cover.
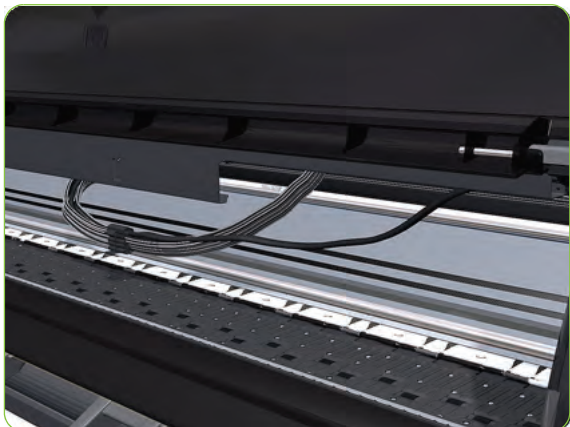
9. Position the Ink Supply Tubes so they are resting on the Platen.

10. Close the Window.
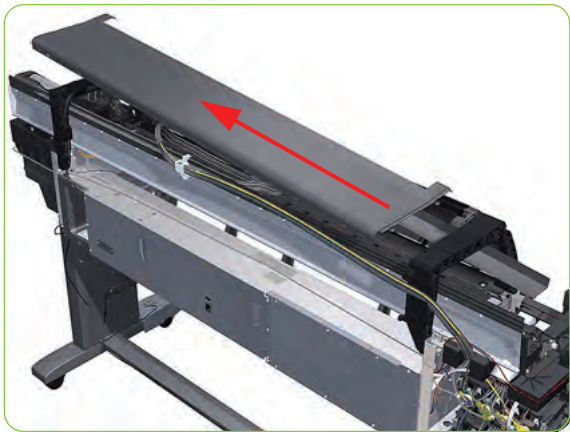
11. Remove the two locking plates.

12. Slide the Top Cover fully to the right to release the two locking clips.

13. Lift the right end of the Top Cover to release it from the right Arch.

14. Slide the Top Cover to the right to release the two locking clips.

15. Remove the Top Cover from the Printer.

Rear Door (42-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

📝 **NOTE:** Throughout this section the graphics actually show the HP Designjet 4000 Printer series but the steps of the procedure are identical for the HP Designjet Z6000 Printer series.

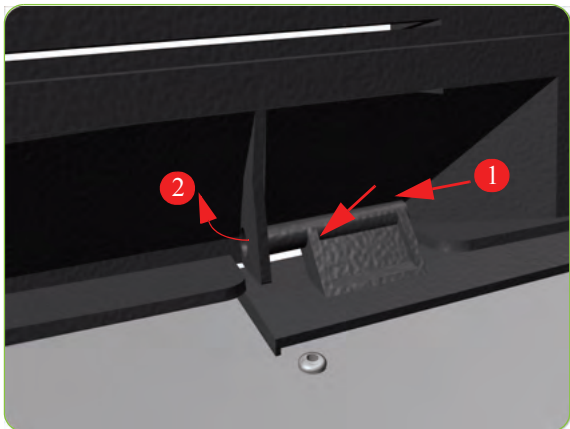1. Remove three T-15 screws (**Type G**) from the Rear Door.

   📝 **NOTE:** Each screw includes a washer (part number 3050-1267).

2. Open the Rear Door slightly (as shown).

3. To release the right hand hinge of the Rear Door, move the Rear Door to the right (1) and towards you (2).

4. To release the left hand hinge of the Rear Door, move the Rear Door to the right (1) and then bend the hinge slightly (2).

5. Remove the Rear Door from the Printer.

Rear Door (60-inch)

Removal

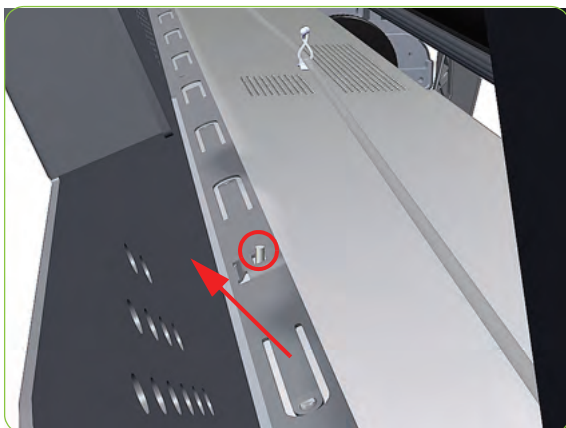⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Left Cover ⇒ See page 254.
2. Remove seven T-15 screws (**Type G**) and the four T-15 screws (**Type X**) from the Rear Door.

   📝 **NOTE:** Each Type X screw includes a washer (part number 3050-1267).

3. Open the Rear Door slightly (as shown, approximately 30 degrees).

4. Lift the left side of the rear door sufficiently to release it from the location stud.

5. Remove the Rear Door from the Printer.

Right Connector Cover

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
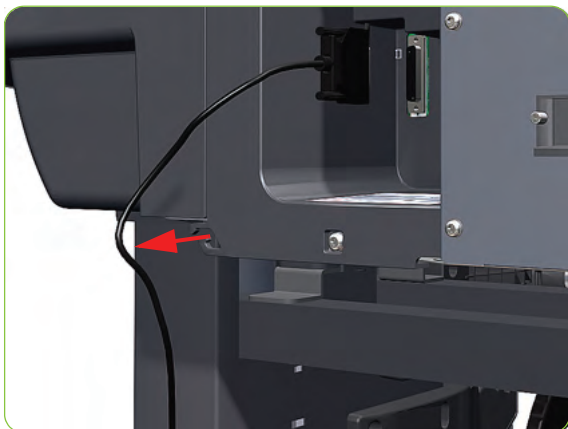
1. For the 42-inch model, remove the Rear Door ⇒ See page 265

2. For the 60-inch model, and optionally the 42-inch model, disconnect the TUR connector.

3. For the 60-inch model, and optionally the 42-inch model, unroute the TUR cable from the Right Connector Cover.

4. Remove two T-20 screws (**Type B**) from the Right Connector Cover.

5. Rotate the Right Connector Cover a few degrees counter-clockwise so it can be removed completely.
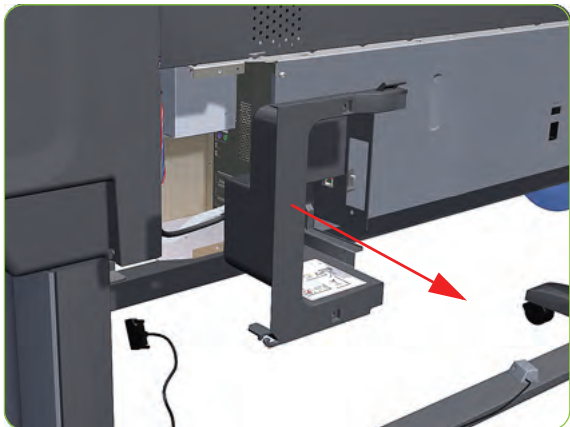
6. Remove the Right Connector Cover from the Printer.

Left Connector Cover (42-inch)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

📝 **NOTE:** Throughout this section the graphics actually show the HP Designjet 4000 Printer series but the steps of the procedure are identical for the HP Designjet Z6000 Printer series.

1. Remove the Rear Door ⇒ See page 265.
2. Remove two T-20 screws (**Type B**) from the Left Connector Cover.

3. Remove the Left Connector Cover from the Printer.

Electronics Module Extension (60-inch only)

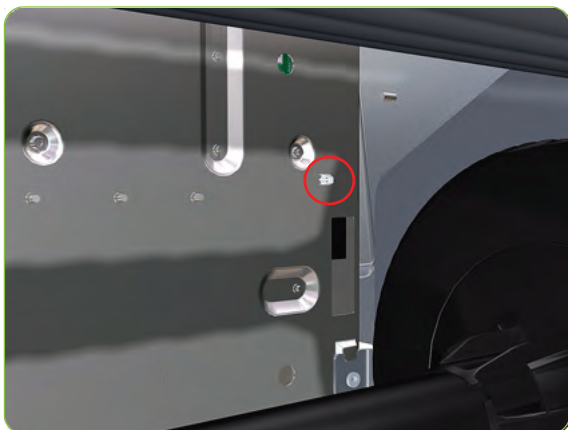## Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
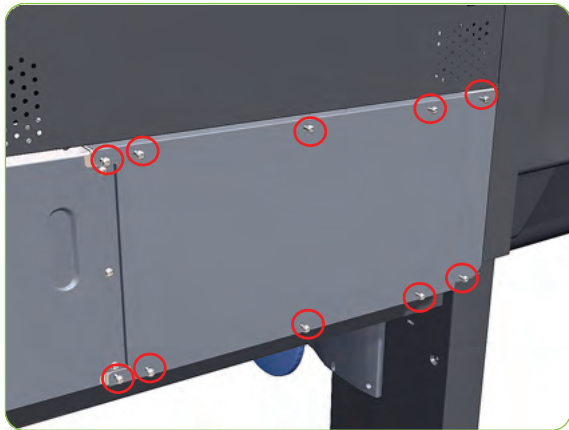
1. Remove ten T-20 screws (**Type B**) from the Electronics Module Extension.
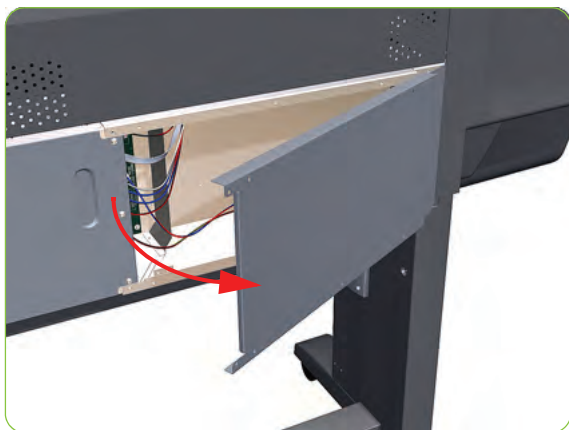
2. Rotate the Electronics Module Extension approximately 90 degrees counter-clockwise.
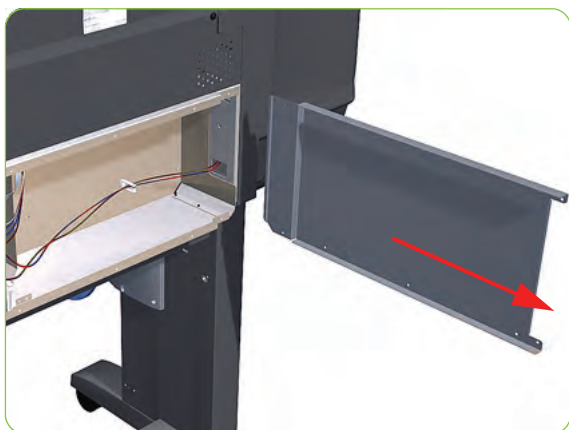
3. Remove the Electronics Module Extension from the Printer.

Window Position Sensor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Window:
   - For the 42-inch ⇒ See page 244.
   - For the 60-inch ⇒ See page 246.
2. Remove the Top Cover:
   - For the 42-inch ⇒ See page 257.
   - For the 60-inch ⇒ See page 261.
3. Remove the Right Cover ⇒ See page 248.
4. Remove the Right Connector Cover ⇒ See page 269.
5. Disconnect the Window Position Sensor cable from the Interconnect PCA.

6. Unroute the Window Position Sensor cables from the from cable clamp.

7. Unroute the Window Position Sensor cables from the Right Arc.

8. Remove three T-15 screws (**Type J**) that secure the Window Position Sensor Holder to the Right Arc.

9. Remove the Window Position Sensor Holder from the printer.
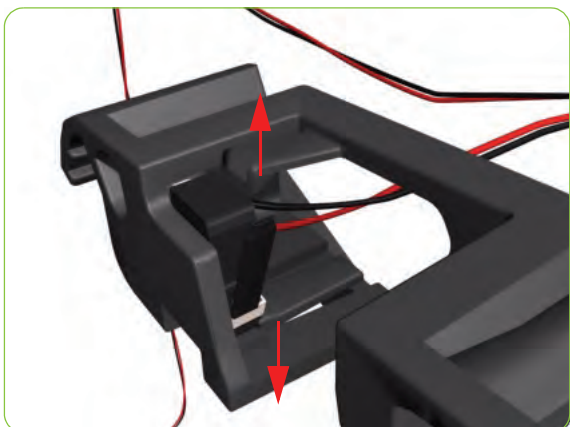
10. Release the two clips of the Window Position Sensor Holder.
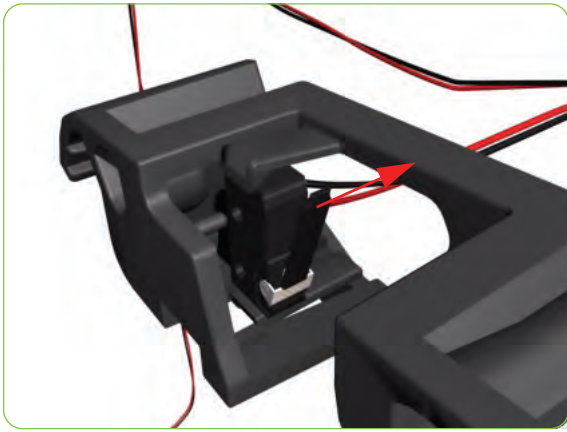
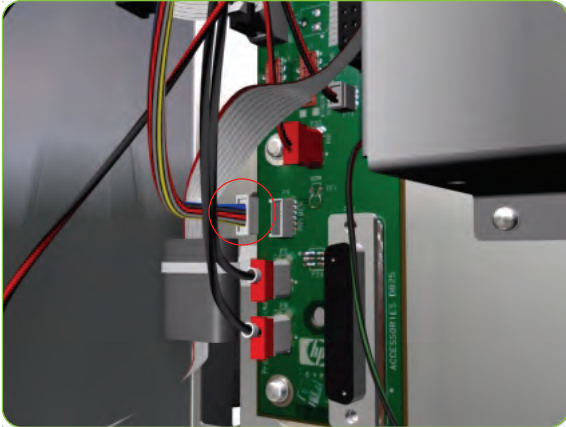11. Remove the Window Position Sensor from the Holder.
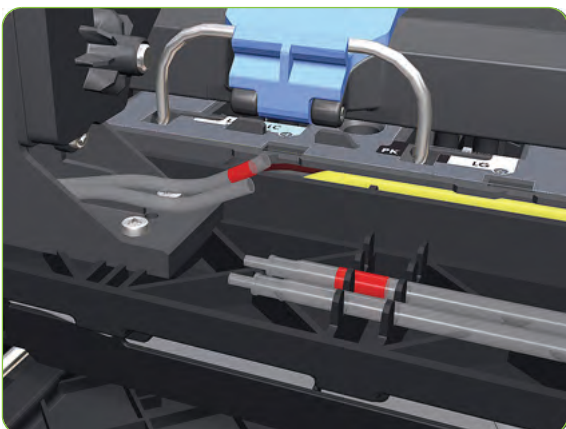
Front Panel

Removal

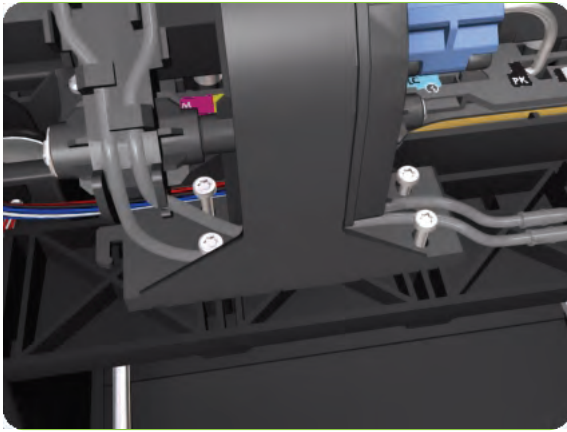⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Disconnect the Front Panel Cable from the Interconnect PCA.

4. Disconnect the Ferrite clip (located on the rear of the Electronics Module) from the front of the Printer.

5. Move the Front Panel Cable (including the ferrite) out of the Electronics Module.
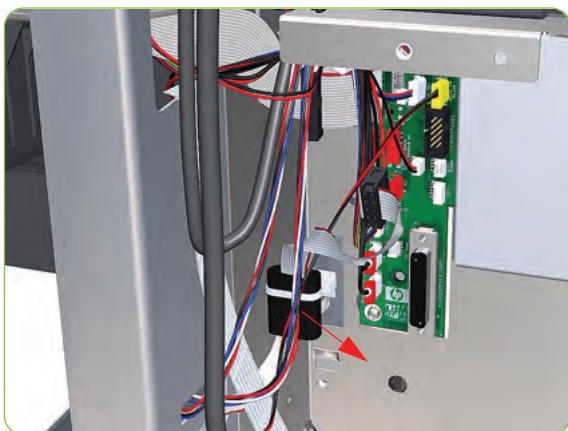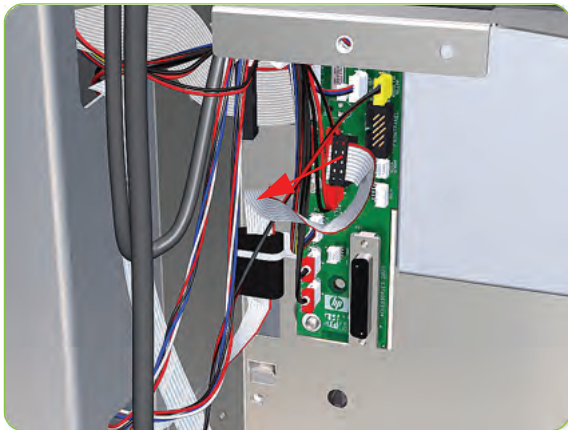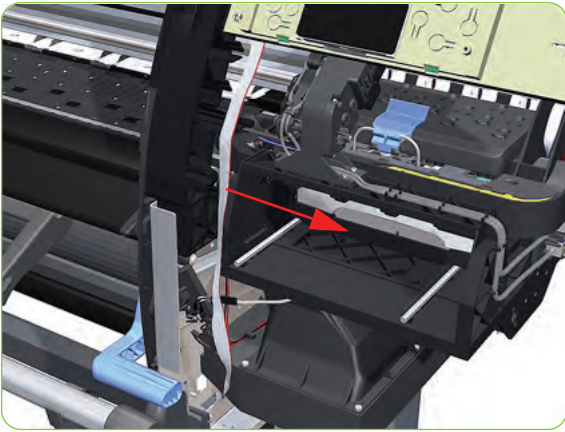
6. Release the Front Panel Cable from the Right Arc.
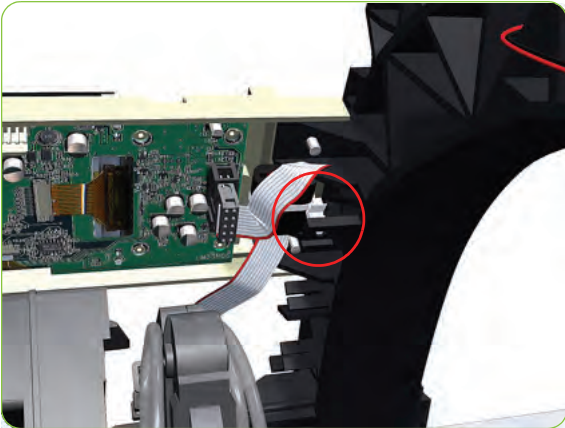
7. Disconnect the Ferrite clip from the Right Arc
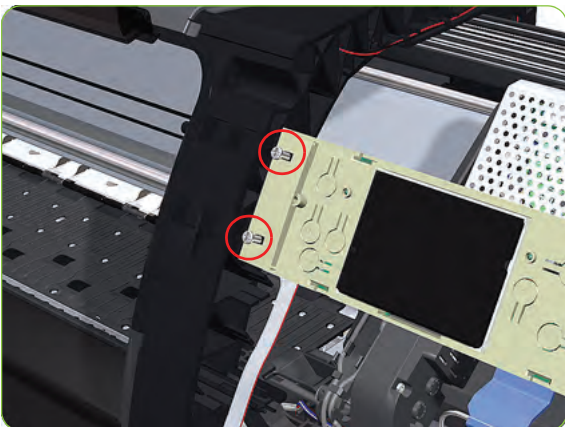
8. Remove two T-15 screws (**Type G**) that secure the Front Panel to the Printer.
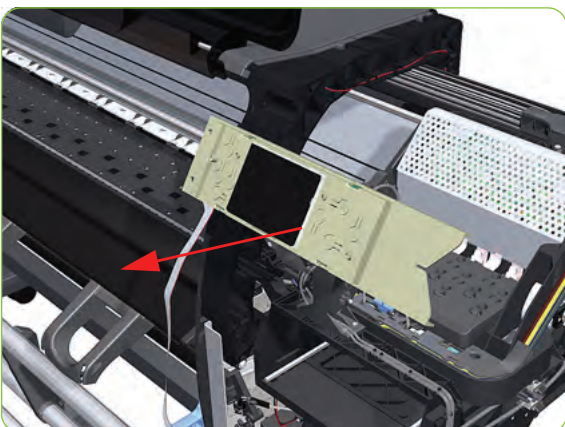
9. Remove the Front Panel from the Printer.
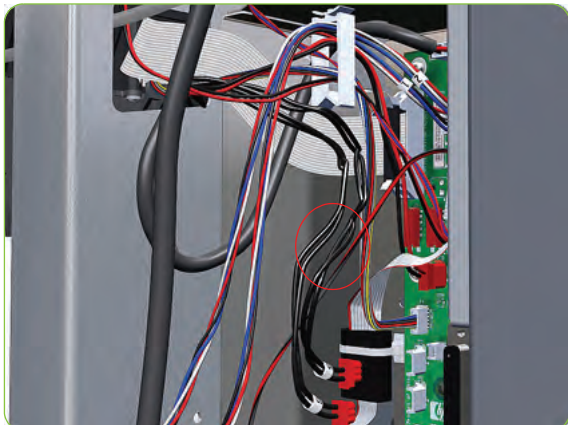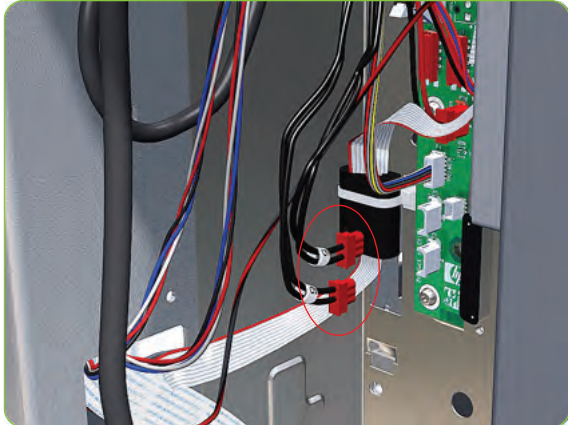
Primer Assembly

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Remove the Front Panel ⇒ See page 276.
4. Disconnect Primer Assembly cable from the from Interconnect PCA.

5. Unroute the Primer Assembly cable from the from cable clamp.

6. Disconnect the two Primer Assembly tubes.

7. Remove four T-10 screws that secure the Primer Assembly to the Service Station.

NOTE: Use a short screw driver, less than 10 cm in length.
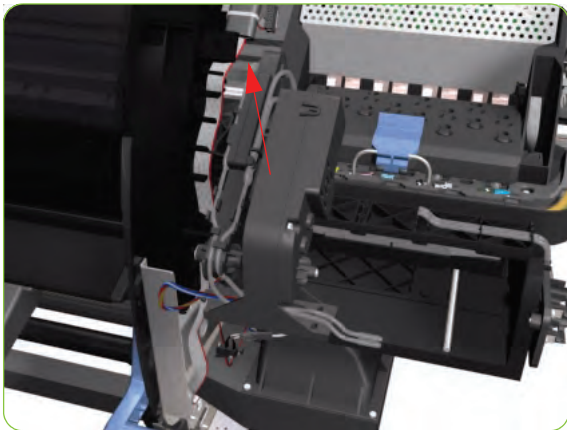
8. Remove the Primer Assembly from the Service Station.

NOTE: When installing the Primer Assembly, use the identification marks on the Primer Assembly Tubes to ensure they are correctly connected.

Primer Valves

Removal

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Remove the Front Panel ⇒ See page 276.
4. Disconnect both Primer Valves from the from Interconnect PCA.

📝 **NOTE:** The upper connection is identified as number 5 and the lower connection as number 6. These identification numbers correspond to the actual Primer Valves identification.

5. Unroute the Primer Valves cables from the from cable clamp.

6. Completely unroute the Primer Valves cables from the Service Station.
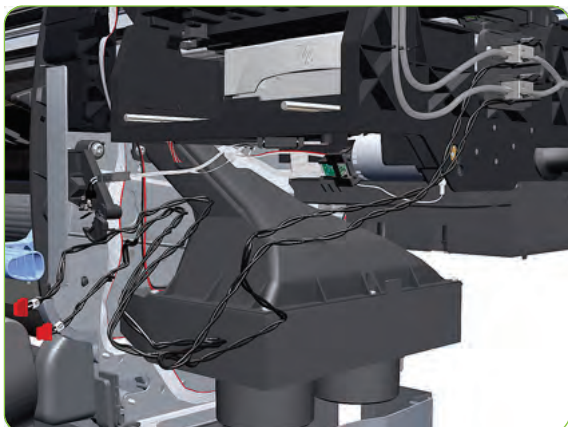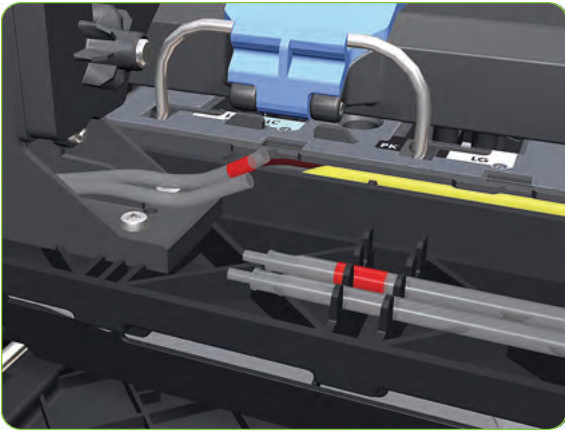
7. Disconnect the two Primer Assembly Tubes.
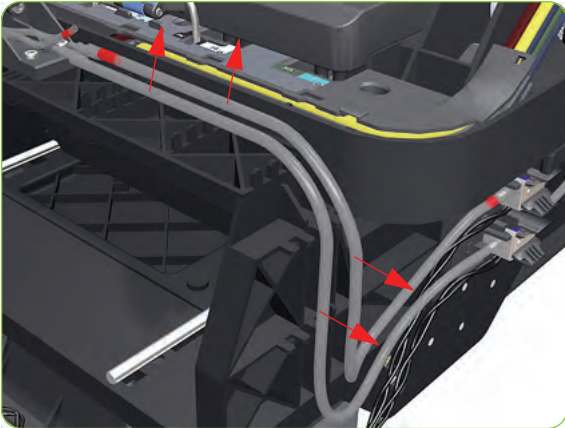
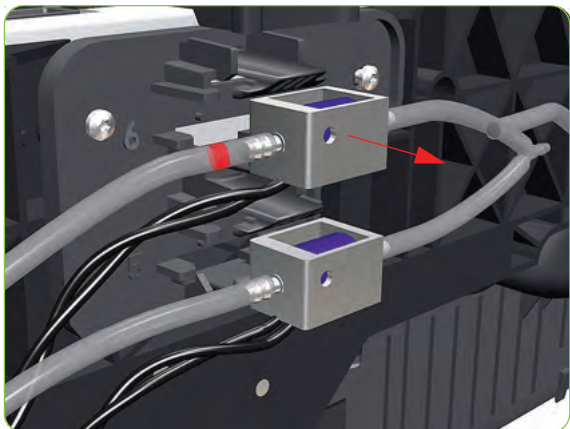8. Unclip the Primer Valve Tubes from the Service Station.
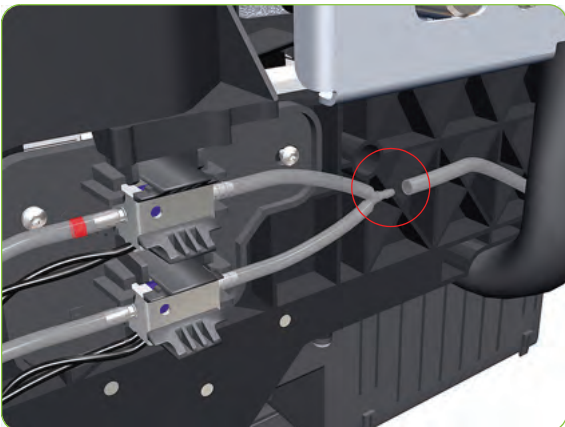
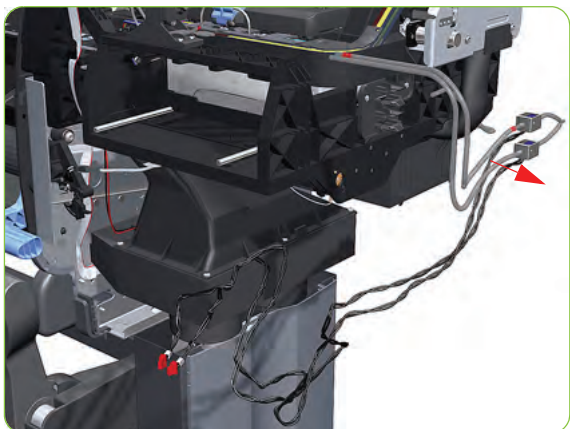9. Disconnect the Primer Valve Tubes at the Y-Piece.
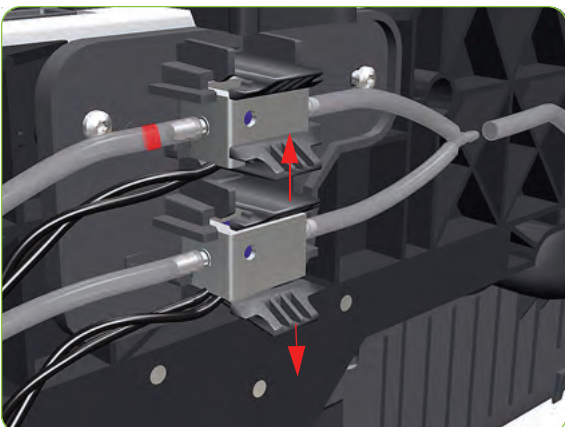
10. Unclip the lower Primer Valve.
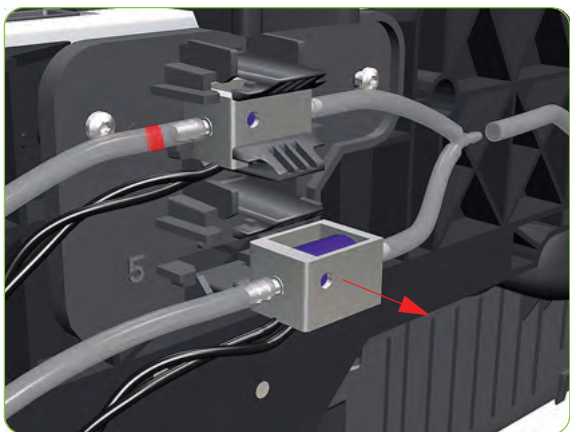
11. Remove the lower Primer Valve (identified as 5).

12. Unclip and remove the upper Primer Valve (identified as 6 and with an identification mark on the tube).

13. Remove the Primer Valves from the Printer.

📝 **NOTE:** When installing the Primer Valves, use the identification marks on the Primer Assembly Tubes and the identification numbers to ensure they are correctly connected.
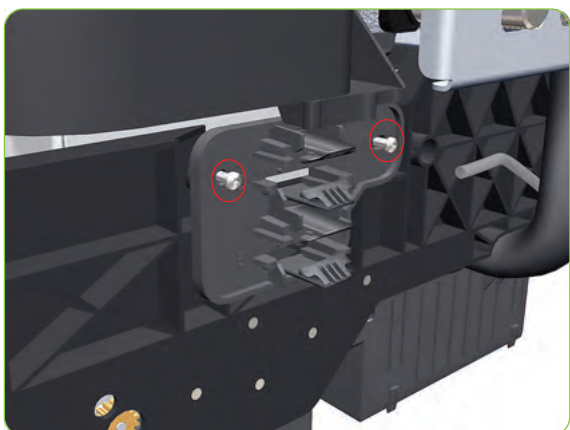
14. Remove two T-15 screws that secure the Primer Valves Mounting Plate from the printer.
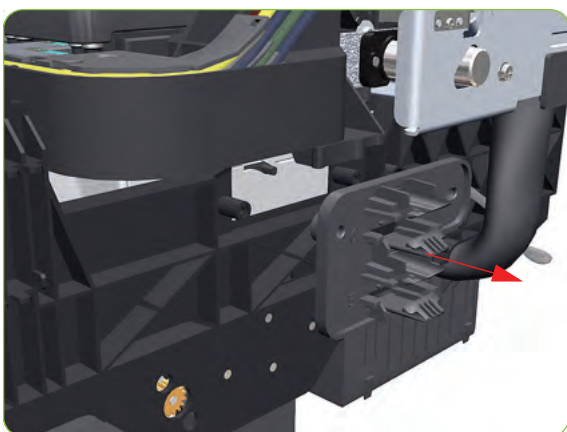
**15.** Remove Primer Valves Mounting Plate from the printer.
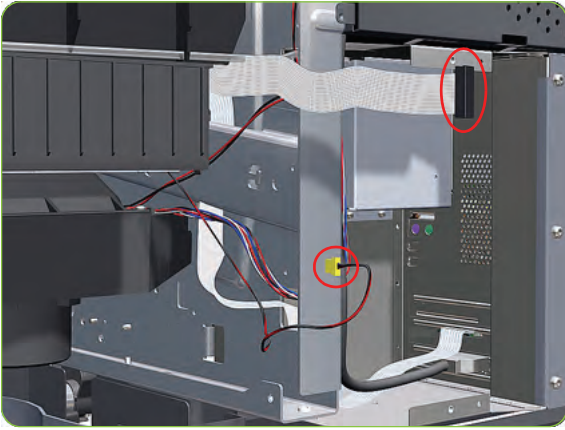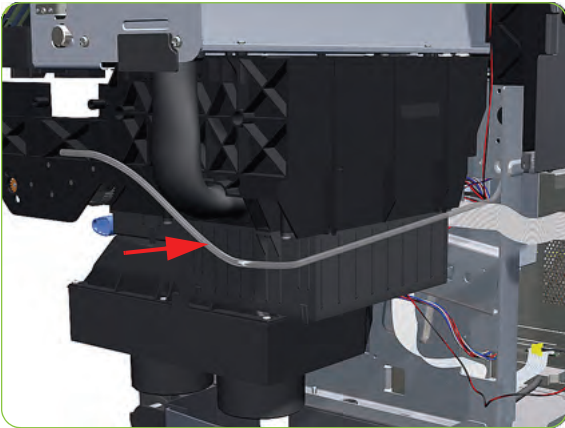
Service Station

Removal

1. Remove the Right Cover ⇒ See page 248.
2. Primer Assembly ⇒ See page 278.
3. Primer Valves ⇒ See page 280.
4. Remove the Drop Detector ⇒ See page 293.
5. Remove the Right Connector Cover ⇒ See page 265.
6. Remove the Maintenance Cartridge ⇒ See the User's Guide.
7. Disconnect the cable from the Maintenance Cartridge Door Switch.
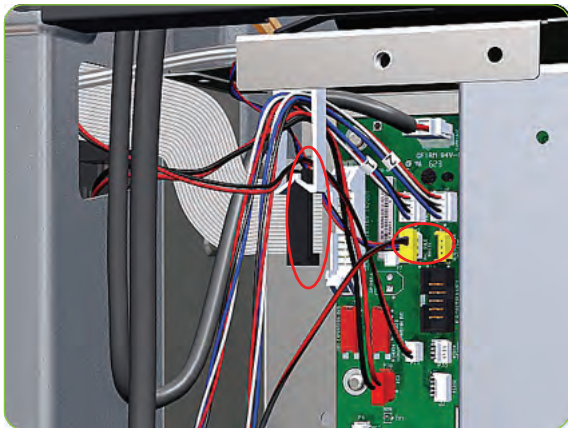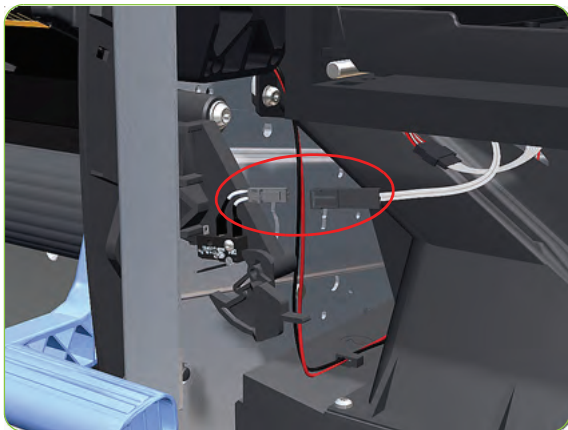
8. Disconnect the Service Station and Aerosol Fan Cables from the Interconnect PCA.

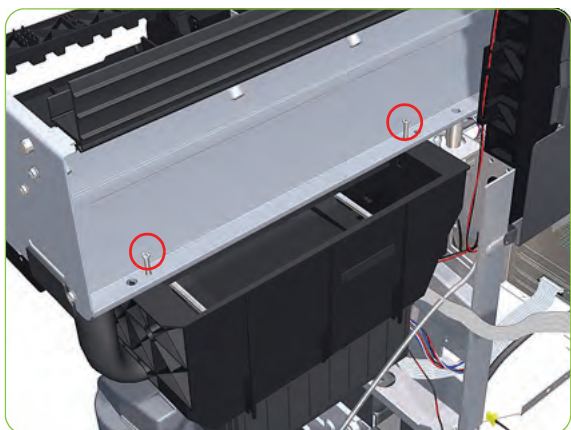9. Unroute the Service Station and Aerosol Fan Cables.

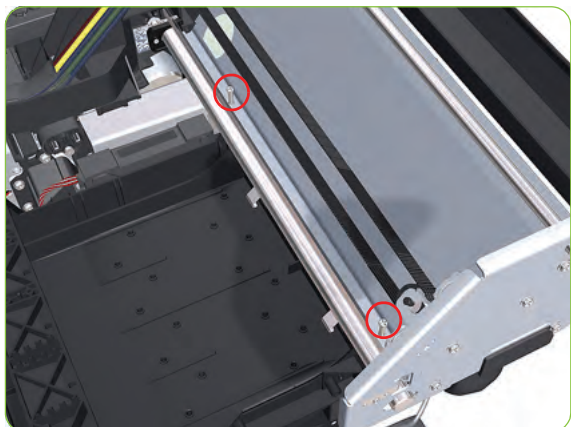10. Unroute the Primer Assembly Valves tube from the Service Station.

11. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.

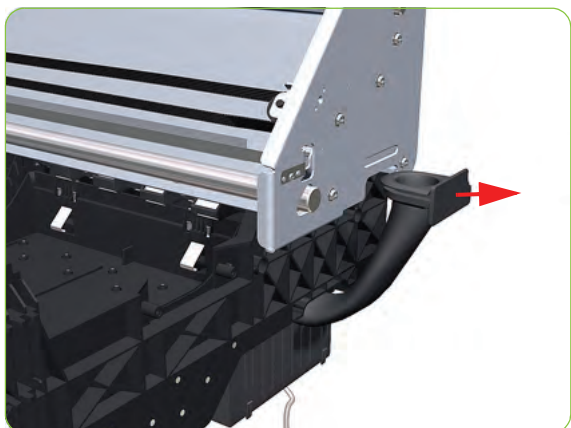12. Move the Carriage Assembly out of the Service Station.

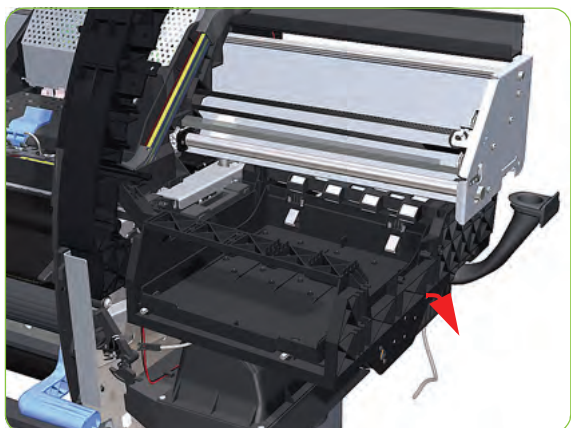13. Remove two T-15 screws (**Type J**) that secure the rear of the Service Station to the Chassis.

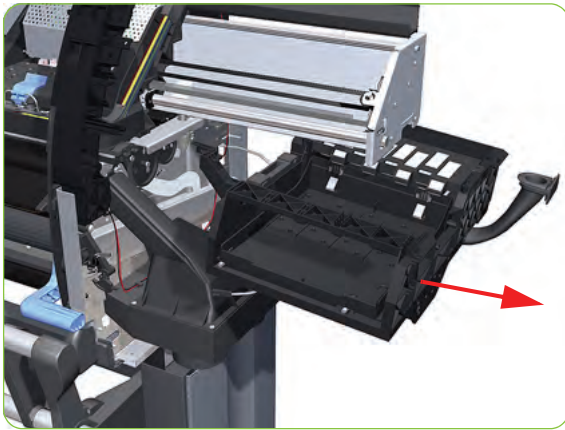14. Remove four T-15 screws (**Type J**) that secure the Service Station to the Chassis.

   ⚠ **CAUTION:** When removing the screws, please be very careful NOT to damage the Encoder Strip.

15. Disconnect the Aerosol Fan Tube from the Chassis.

16. Lower the right side of the Service Station.

17. Remove the Service Station from the Printer.

> 📝 **NOTE:** After installing the NEW Service Station, make sure you perform the following Service Utility:
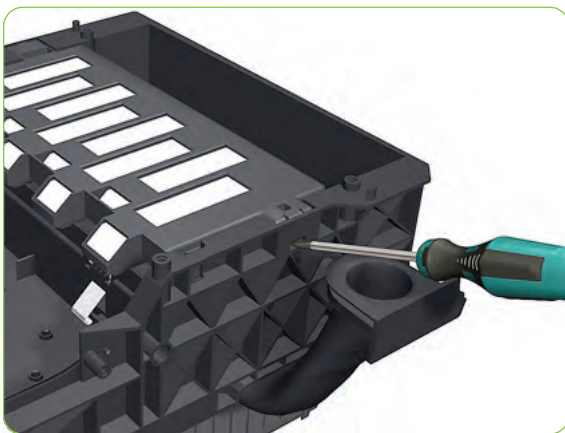
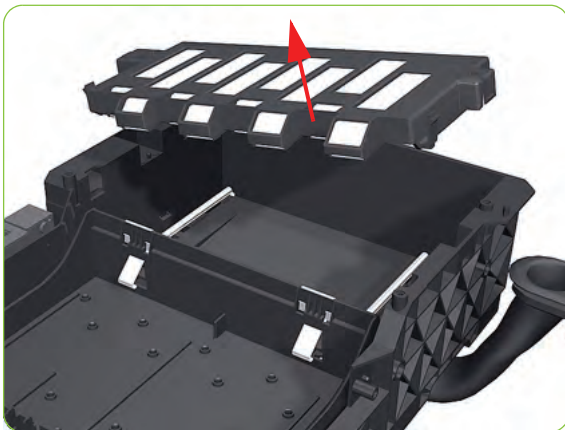- Reset Counter PHC spittoon ⇒ Chapter 4.

> 📝 **NOTE:** After installing the NEW Service Station, make sure you perform the following Service Calibration:

- Service Station Calibration ⇒ Chapter 5.

Removal of the Service Station Scraper

1. Release the clip securing the Scraper to the Service Station.


2. Remove the Scraper from the Service Station.
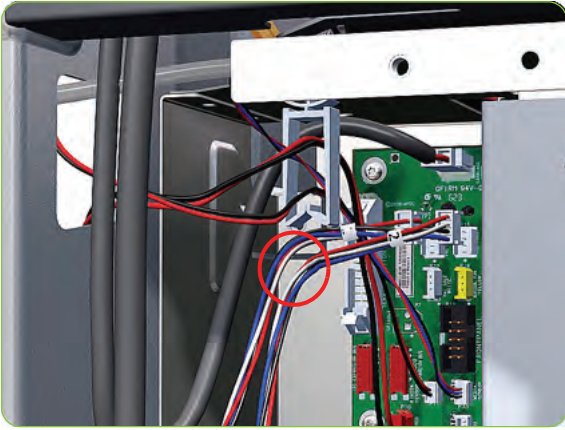
Vacuum Fan

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Remove the Primer Assembly ⇒ See page 278.
4. Remove the Primer Valves ⇒ See page 280.
5. Remove the Maintenance Cartridge ⇒ See the User's Guide.
6. Remove the Service Station ⇒ See page 284.
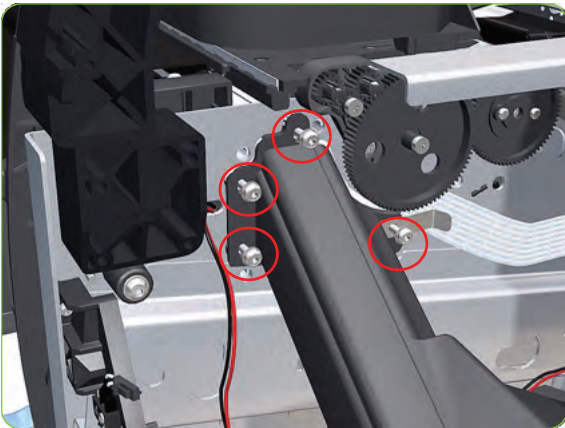7. Release the Pinchwheel Lever Sensor Cable from the Vacuum Fan.
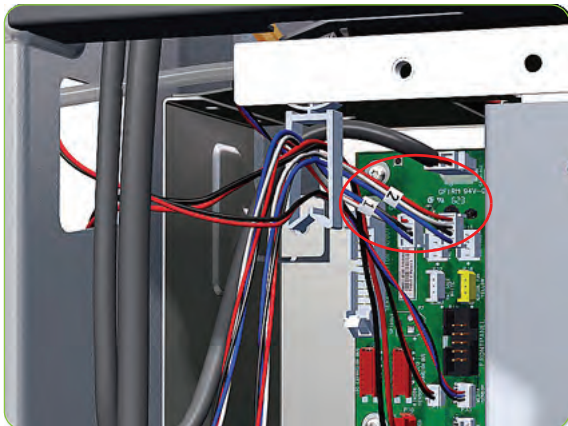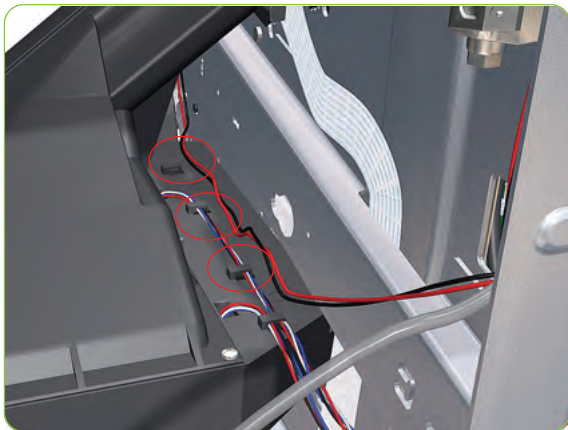
8. Disconnect both Vacuum Fan cables (identified 1 and 2) from the Interconnect PCA.
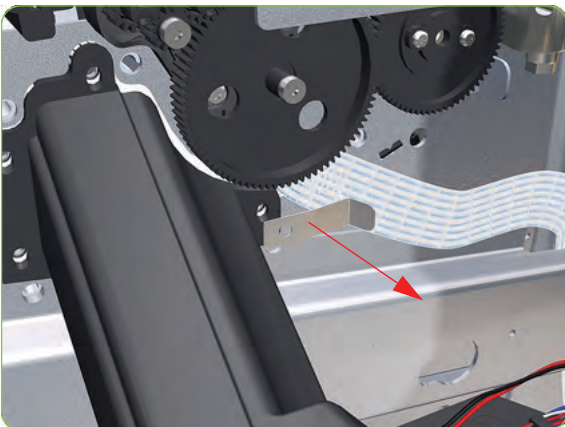
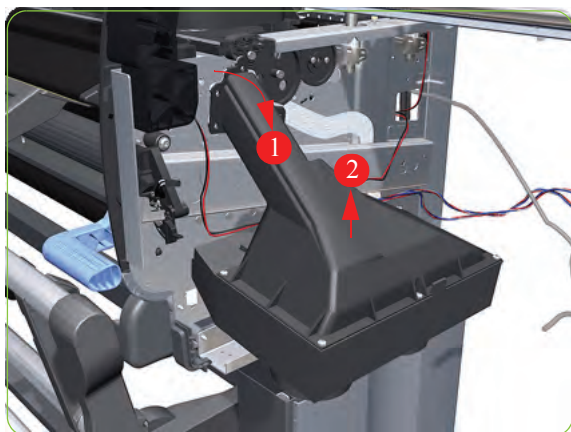9. Unclip the cables from the cable clamp.
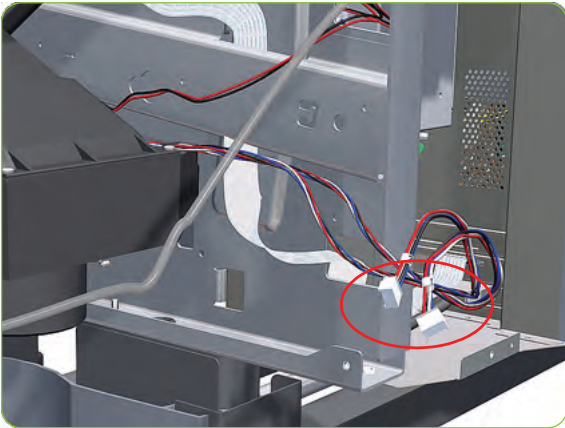
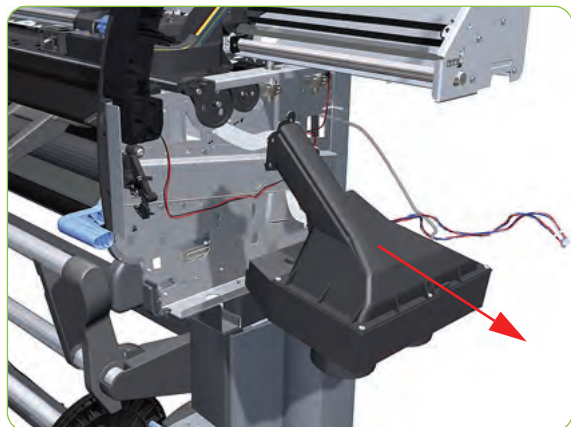10. Unroute both Vacuum Fan cables from the Interconnect PCA.

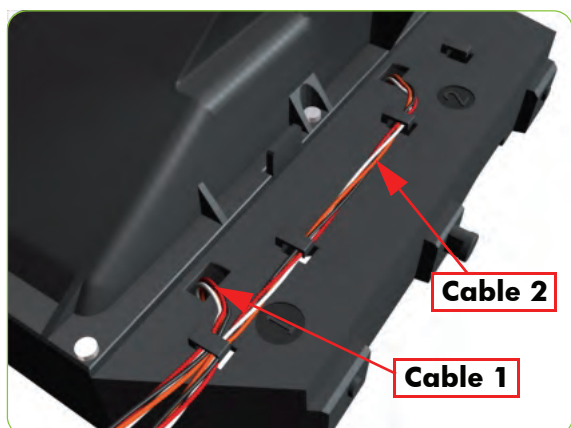11. Remove four T-20 screws (**Type B**) that secure the Vacuum Fan to the Printer.

12. Remove the OMAS cable clamp from the printer.

13. Lower then lift the Vacuum Fan out of its attachment.

14. Remove the Vacuum Fan from the Printer.

Cable 2

Cable 1

NOTE: When connecting the Vacuum Fan cables to the Interconnect PCA, make sure you connect the cable with the label marked Vacuum Fan 1 to connector 1 and the cable with the label marked Vacuum Fan 2 to connector 2. You can verify if both cables are labelled correctly by the actual markings on the Vacuum Fan.

NOTE: Make sure that the OMAS ribbon cable is free of slack when you install the cable clamp.

NOTE: After installing the NEW Vacuum Fan, make sure you perform the following Service Calibration:
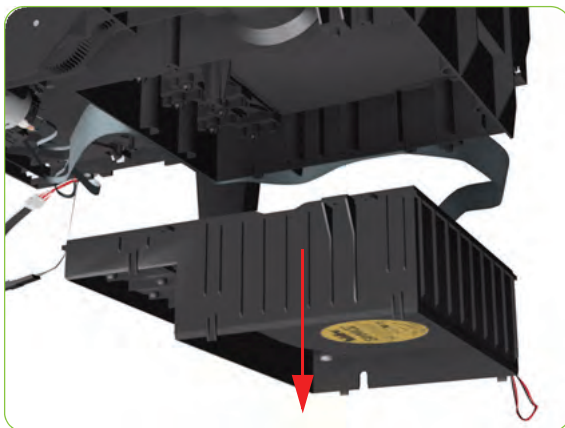
- Paper Advance Calibration ⇒ Chapter 5.

Aerosol Fan and Filter
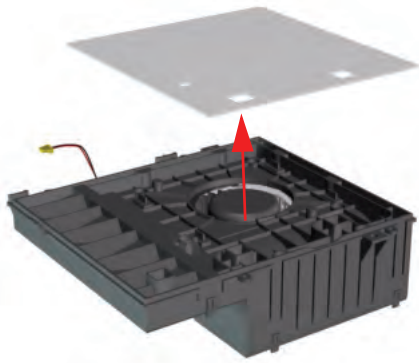
Removal

> ⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Rear Door:
   - For the 42-inch model ⇒ See page 265.
   - For the 60-inch model ⇒ See page 267.

3. Remove the Right Connector Cover ⇒ See page 265.

4. Remove the Service Station ⇒ See page 284

5. Remove four T-15 screws (**Type G**) that secure the Aerosol Fan to the Service Station.

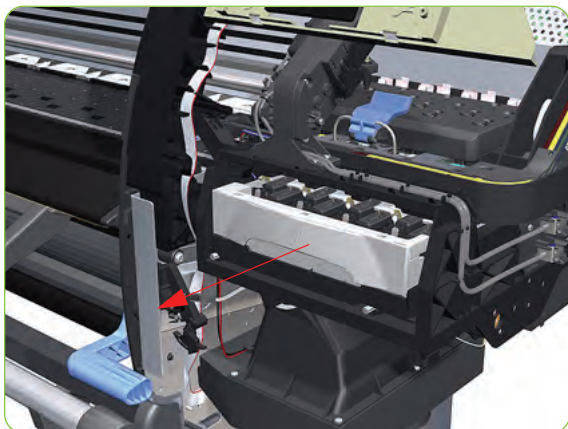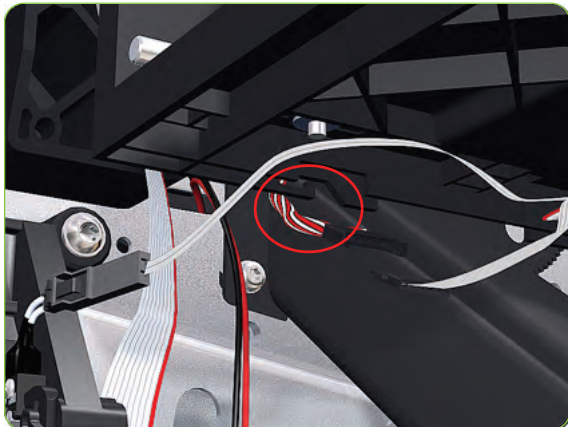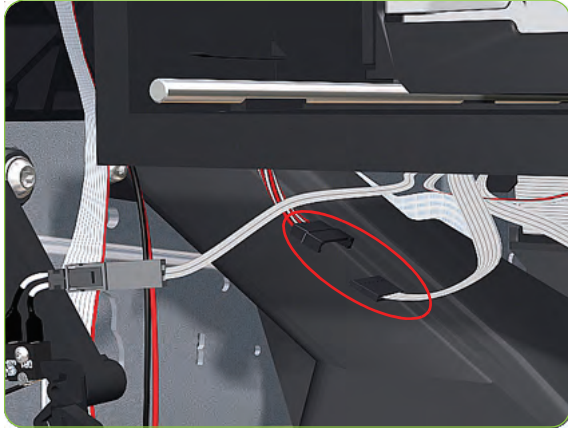6. Remove the Aerosol Fan from the Service Station.

7. If necessary, remove the Aerosol Fan Filter from the Aerosol Fan.
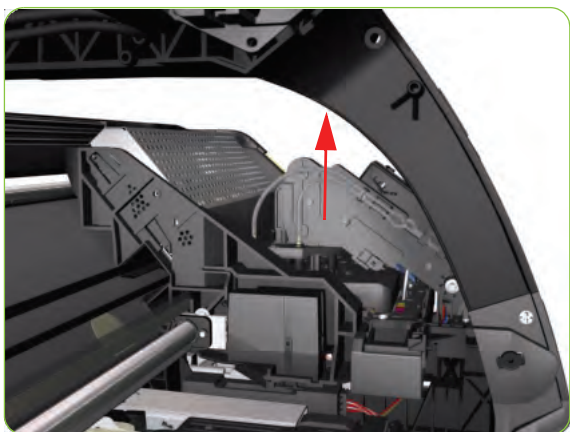
Drop Detector

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Disconnect the Drop Detector Cable from the Service Station Cable.

3. Release the Drop Detector Cable from the Service Station.

4. Pull out the Maintenance Cartridge fully from the Service Station to release the Carriage Assembly.

5. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.
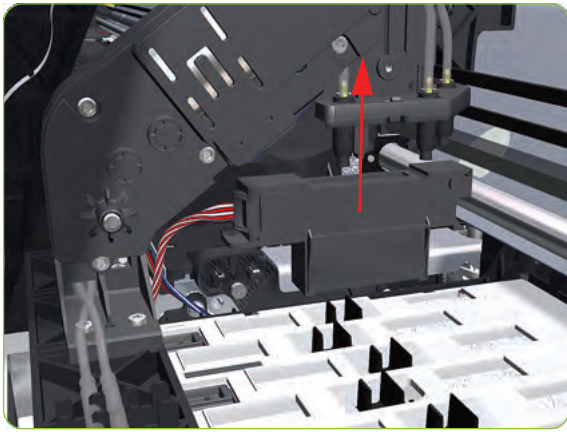
6. Slide the Carriage Assembly into the print path so you access the Drop Detector.
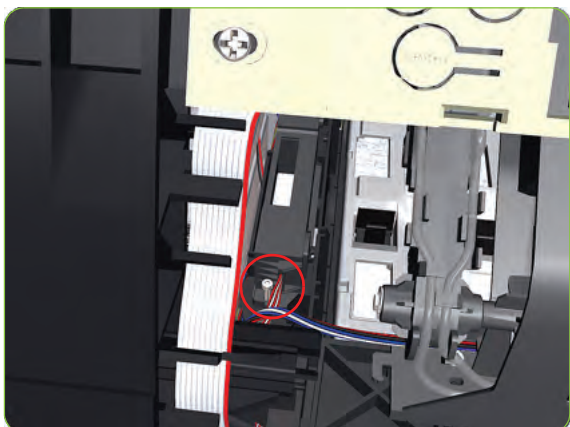
7. Remove one T-8 screw (**Type K**) that secures the Drop Detector to the Service Station.

8. Slide the Drop Detector forward so you can release it from the Service Station.

9. Remove the Drop Detector from the Printer.

> 📝 **NOTE:** After installing the NEW Drop Detector, make sure you perform the following Service Calibration:

- Drop Detector Calibration ⇒ Chapter 5.

Ink Supply Tubes and Trailing Cable

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

⚠️ **CAUTION:** You MUST NEVER replace both the Hard Disk Drive and the Ink Supply Tubes and Trailing Cable at the same time. If both parts need to replaced, you MUST first replace one part and then power ON the Printer until it completely initializes. Then you can power OFF the Printer and replace the other part.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Remove the Top Cover ⇒ See page 261.

4. Remove the Rear Door ⇒ See page 267.

5. Remove the Right Connector Cover⇒ See page 269.

6. Disconnect the Trailing Cable from the Interconnect PCA and the Sausalito PCI.
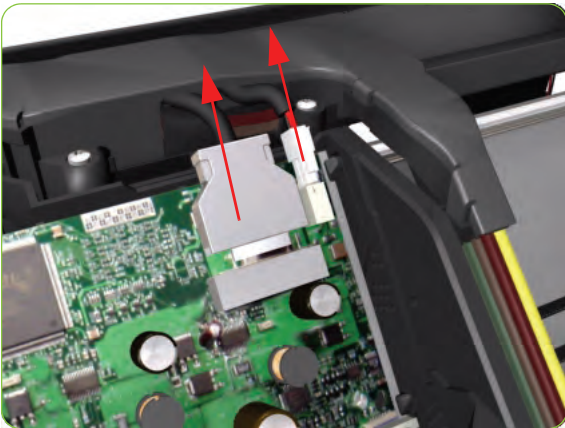

7. Release the Trailing Cable from the cable clamp.
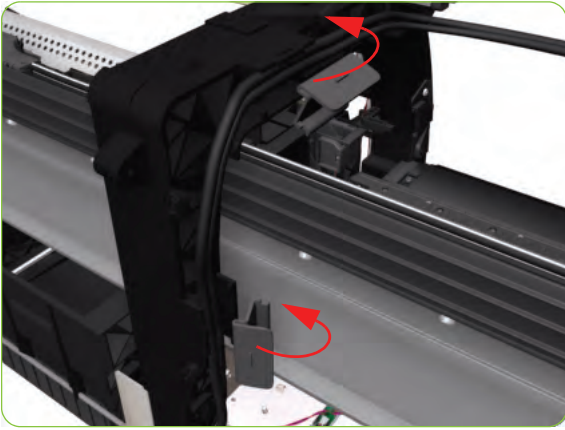
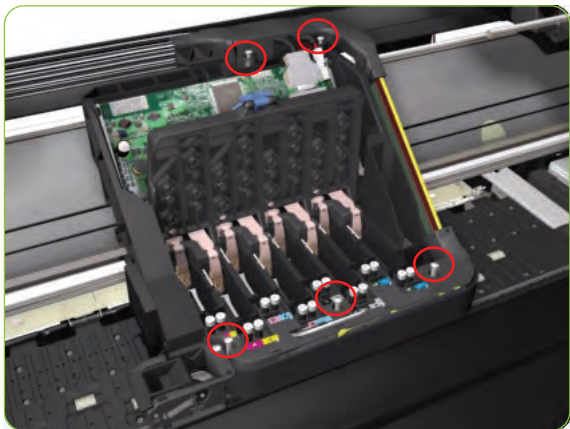8. Release the two plastic clips securing the Trailing Cable to the Right Arc.
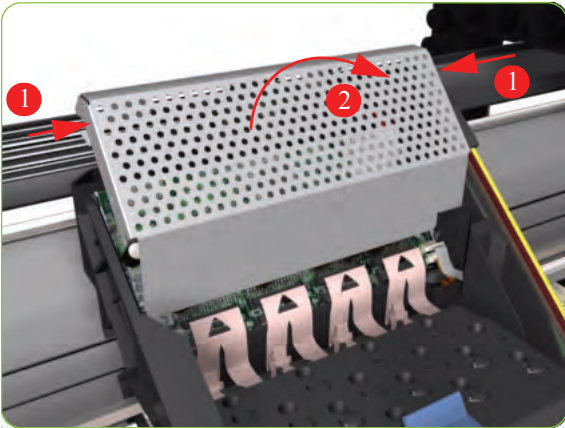
9. Press the two side of the Carriage PCA Cover and unclip from the Carriage Assembly.


10. Disconnect the Trailing Cable from the Carriage PCA.

11. Open the Carriage Cover and remove ALL the Printheads from the Carriage Assembly.

Ink Supply Tubes and Trailing Cable   297
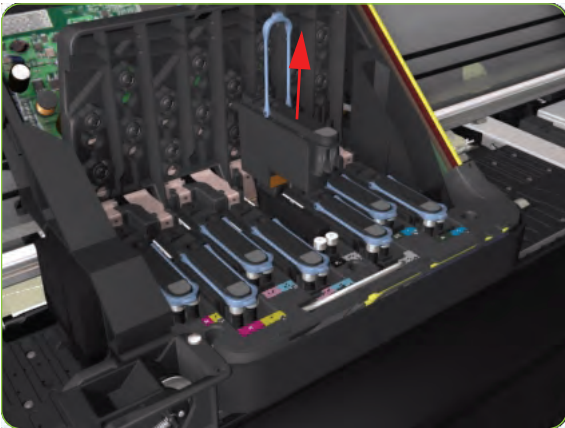
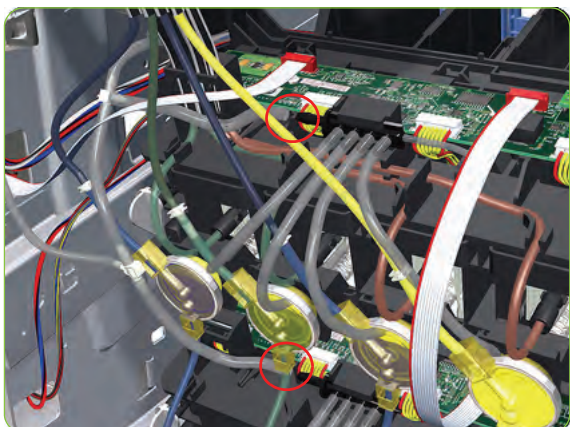12. Remove five T-15 screws (**Type G**) that secure the Ink Supply Tubes to the Carriage Assembly.

13. Remove the Ink Supply Tubes from the Carriage Assembly and safely place to one side of the Printer.
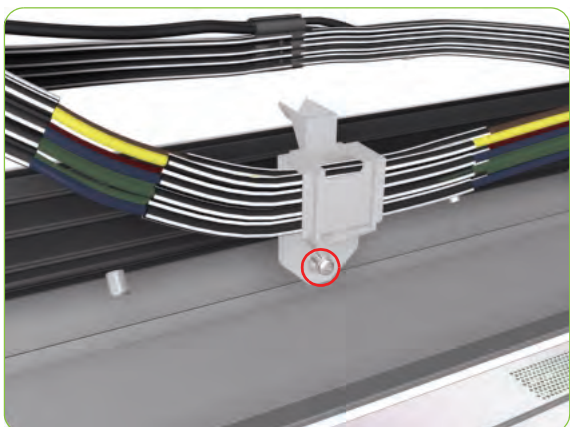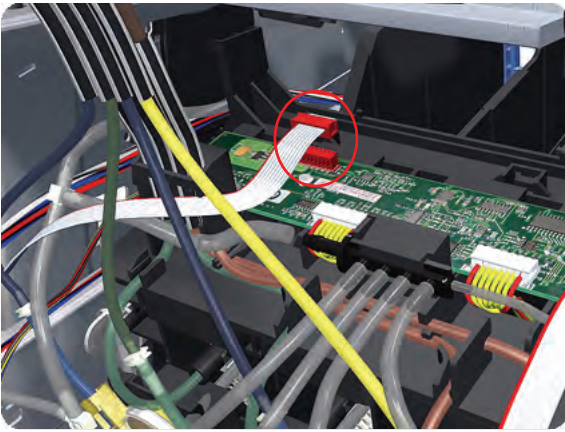
14. Remove one T-20 screw (**Type B**) from each plastic holder at the rear of the Printer.
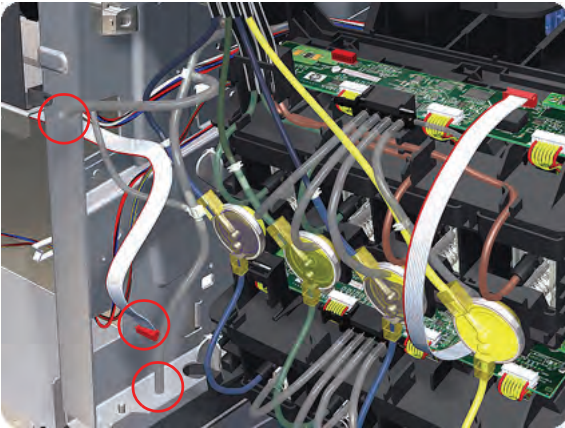
15. Remove one T-15 screw that attaches the bonding cable to the printer chassis.
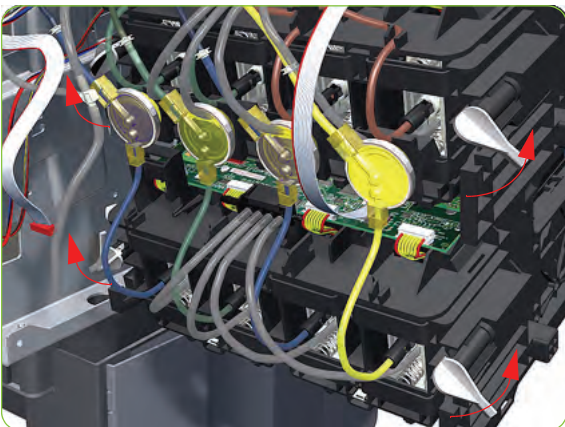
16. Disconnect the Air Tubes from the Ink Cartridge Tube Connector.

17. Disconnect the Electrical Cable from the rear of the Ink Cartridge Tube Connector.
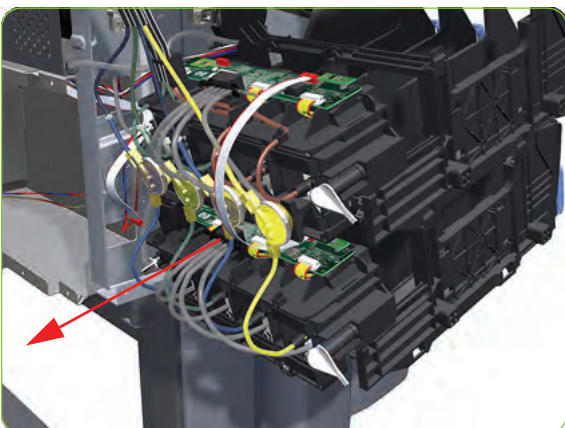

18. Unroute the Electrical Cable and Air Tubes from the rear of the Ink Cartridge Tube Connector.
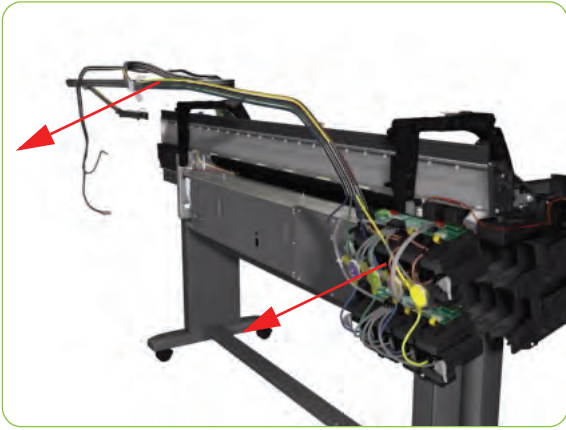

19. Twist the four latches at the rear of the Ink Cartridge Tube Connector and release the complete assembly.

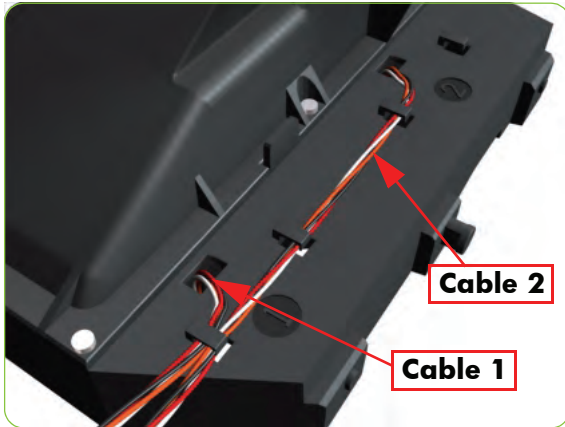   **NOTE:** Be careful not to damage the inter-connecting cable.

20. Carefully slide the Ink Cartridge Tube Connector off the Ink Supply Station.

21. Remove the Ink Supply Tubes and Trailing Cable from the Printer.

Installation of the Ink Supply Tubes and Trailing Cable

Cable 2

Cable 1

NOTE: After installing the NEW Ink Supply Tubes and Trailing Cable, make sure you perform the following Service Utility:

- Reset life counter scan cycles tubes/cable ⇒ Chapter 4.
-

NOTE: When installing the Ink Supply Tubes and Trailing Cable on to the Top Cover, take note of the of the two red marks on the Ink Supply Tubes. These two red marks should be aligned with the first slot in the Top Cover as this will help with the rest of the installation.

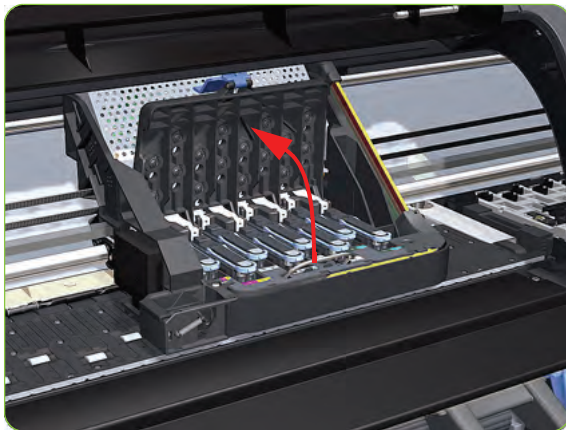# ISS to Cartridge Cables

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
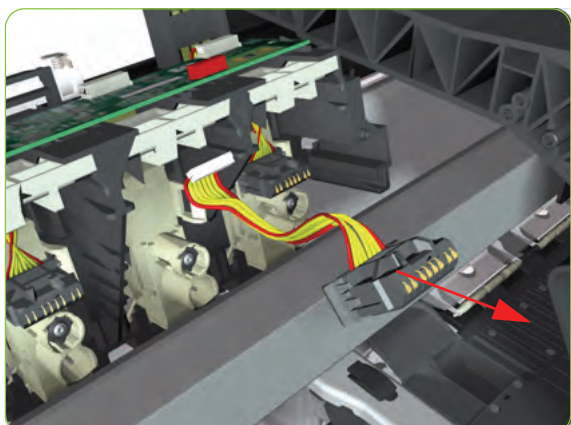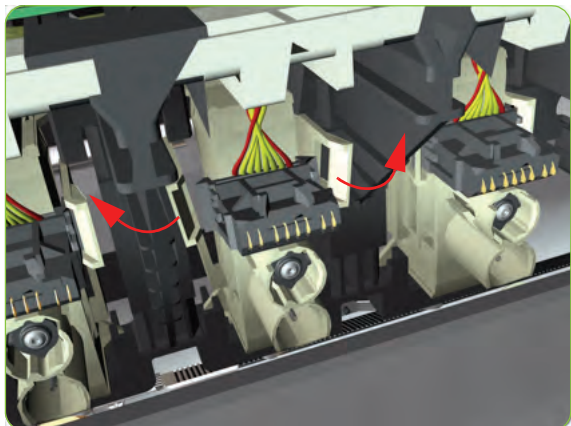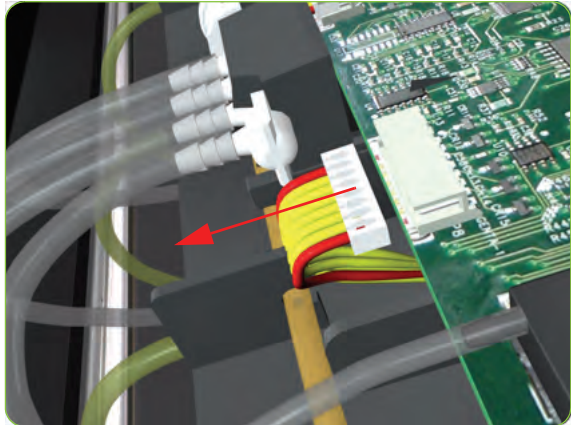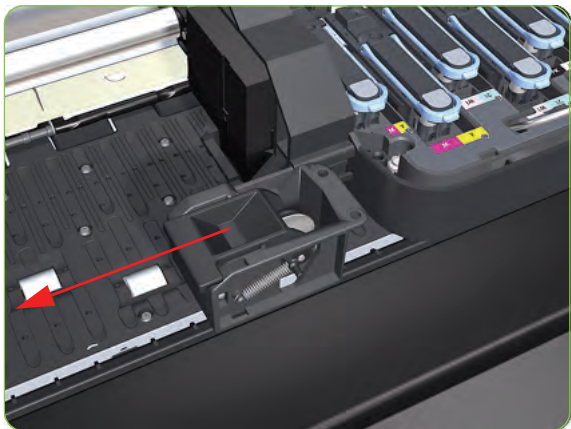

1. Remove the Left Cover ⇒ See page 254.
2. Disconnect the ISS to Cartridge Cable from the ISS PCA.

3. Release the clips securing the ISS to Cartridge Cable.

4. Remove the ISS to Cartridge Cable from the Printer.

Cutter Assembly

Removal

1. Select "Replace Cutter" from Service Menu (refer to Chapter 4) and follow the instructions on the Front Panel.

2. Open the Window.

3. Open the Carriage Cover.

4. Remove one T-15 screw (**Type G**) that secures the Cutter Assembly to the Carriage Assembly.
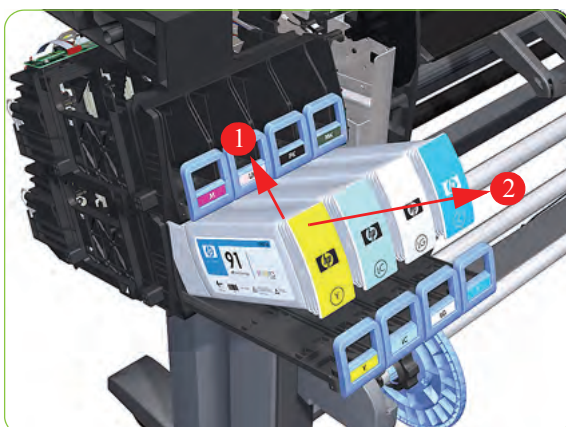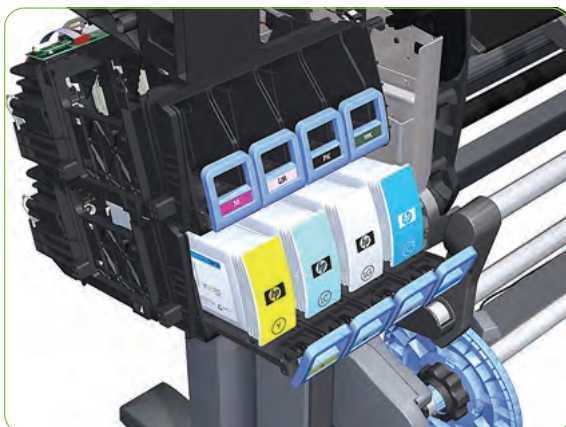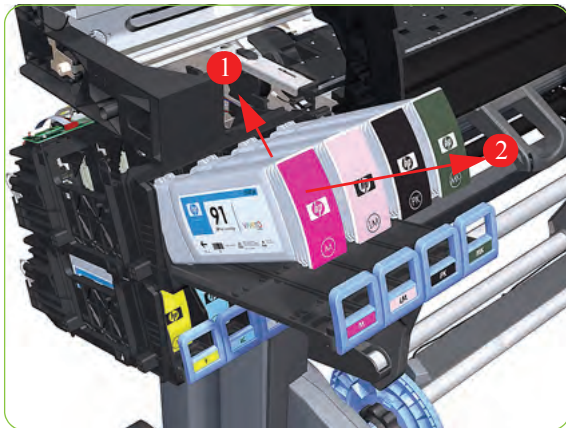
5. Slide the Cutter Assembly to the left and remove from the Printer.
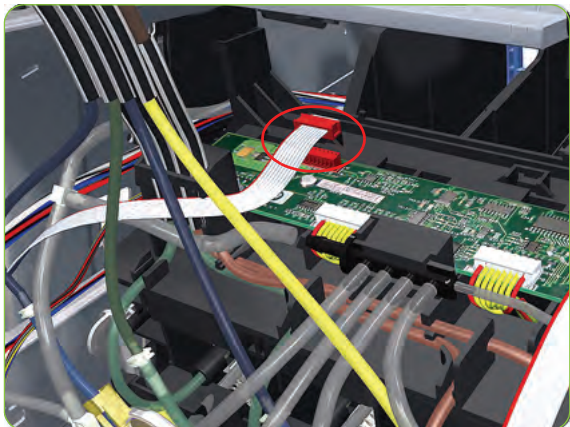
Ink Supply Station (ISS)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Left Cover ⇒ See page 254.

2. Remove the Scan-Axis Motor ⇒ See page 330.

3. Remove the Left Spittoon ⇒ See page 312.

4. Pull out the top row of Cartridge Trays and remove the Ink Cartridges.

5. Close the top row of Cartridge Trays and pull out the bottom row.

6. Pull out the bottom row of Cartridge Trays and remove the Ink Cartridges.
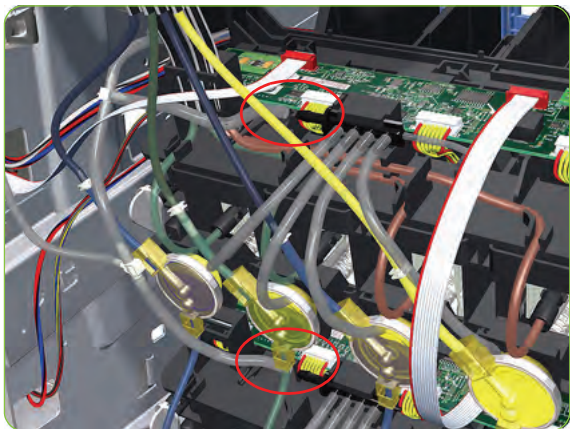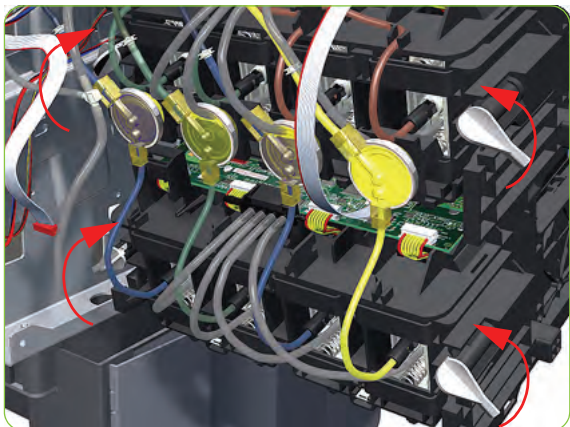
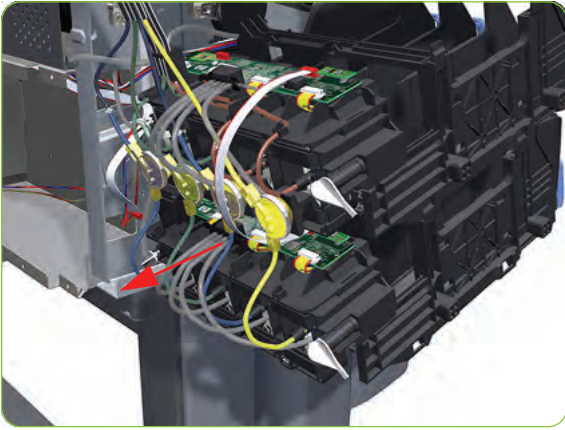7. Disconnect the top and bottom Air Tubes from the Ink Supply Tubes.

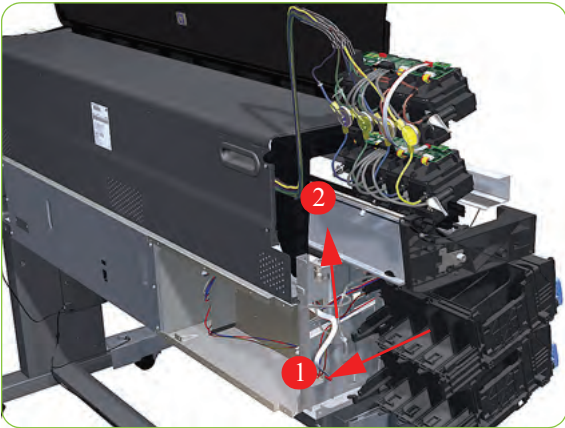8. Disconnect the Electrical Cable from the rear of the Ink Cartridge Tube Connector.
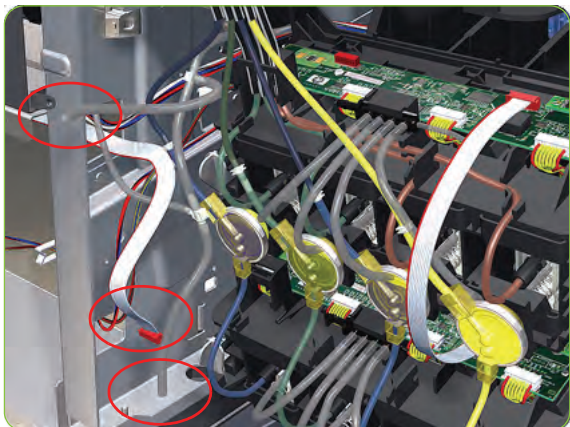
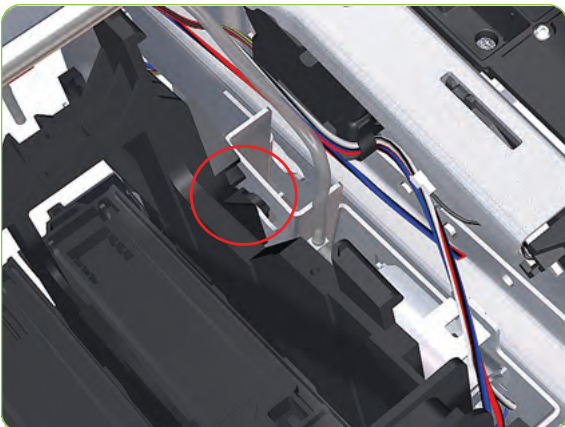9. Unroute the Air Tubes and Electrical Connector.

10. Twist the four latches at the rear of the lower Ink Cartridge Tube Connector and release the complete assembly.
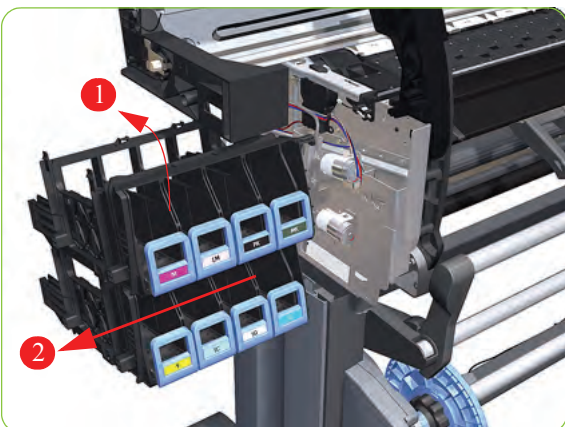
11. Lift the Cartridge Tube Connector off the Ink Supply Station.

12. Remove the Cartridge Tube Connector from the Ink Supply Station.

13. Unhook Ink Supply Station cables from the printer.

14. Remove the complete Ink Supply Station (upper and lower assemblies) from the Printer.

APS Assembly

## Removal

---

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

---

1. Remove the Left Cover ⇒ See page 248.

2. Remove:

• The Left Connector Cover or the 42-inch model ⇒ See page 271.

• The Electronics Module Extension the 60-inch model ⇒ See page 272.

3. Remove the Scan-Axis Motor ⇒ See page 330.

4. Remove the Left Spittoon ⇒ See page 312.

5. Remove the ISS ⇒ See page 305.

6. Disconnect the APS 1 (Top unit) valve electrical connectors from the PCA.
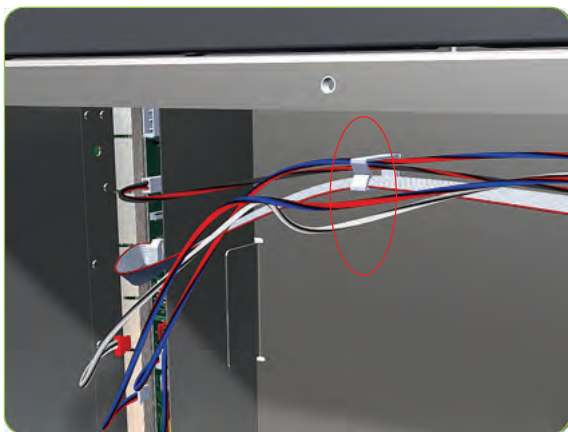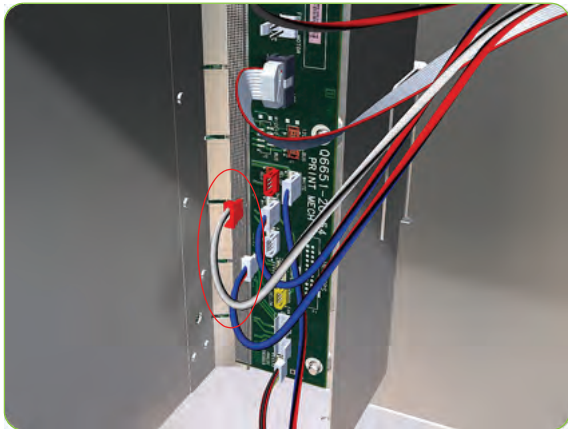
7. Unclip the APS 1 electrical cables from the cable clamps in the left connector panel

Removal & Installation
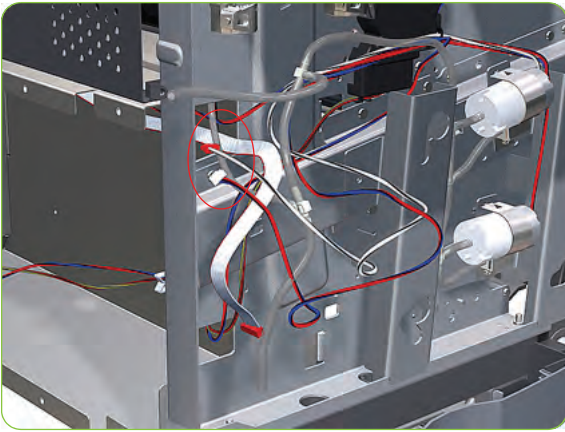
8. Unroute the APS 1 electrical connections from the left connector panel.
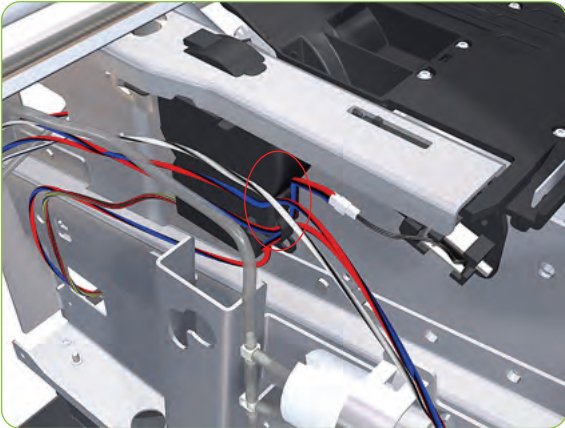
9. Unroute the electrical connections from the printer.

10. Disconnect both air tubes from APS 1.

11. Remove one T-20 attachment screw from APS 1 (Top unit).

12. Remove APS 1 (Top unit) from the printer.

13. Remove the ISS ⇒ See page 305.

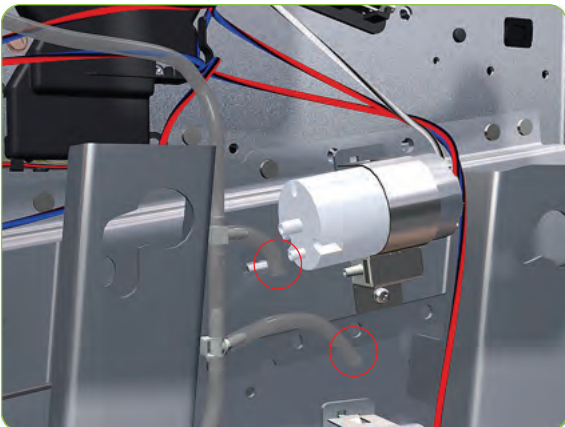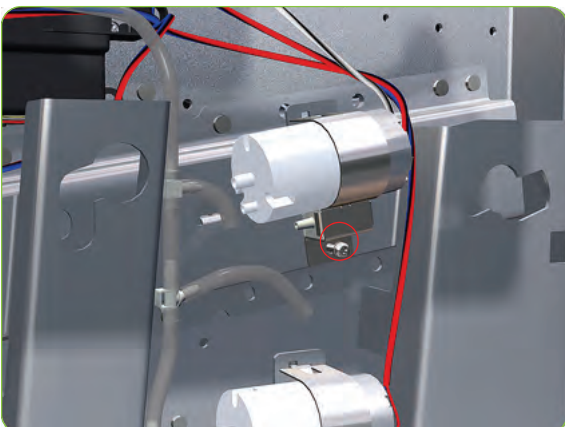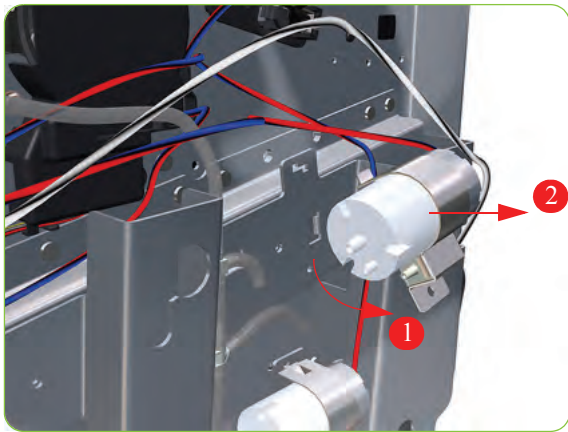**14.** Disconnect the APS 2 (Top unit) valve electrical connectors from the PCA.

15. Unclip the APS 2 electrical cable from the cable clamps in the left connector panel

16. Unroute the APS 2 electrical connection from the Media Path Cover Encoder.
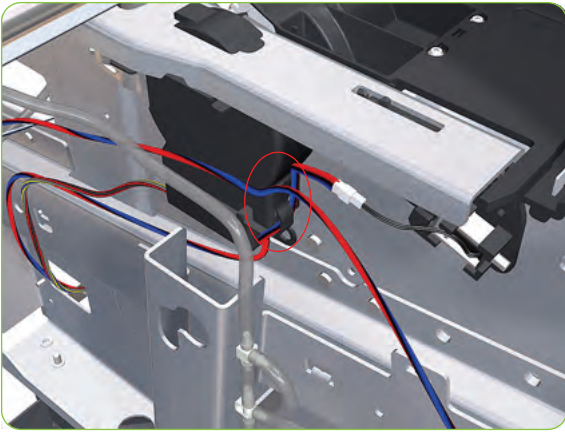
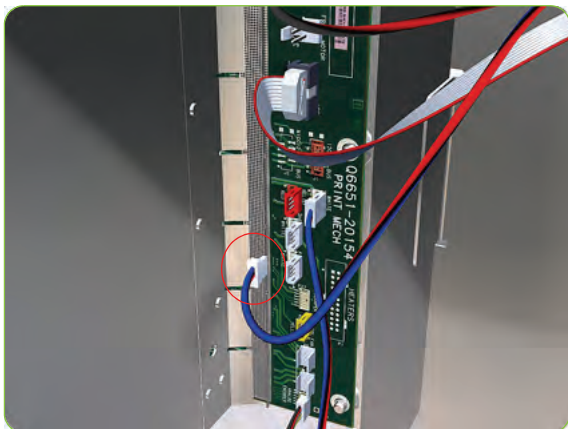17. Unroute the APS 2 electrical connection from the printer.

18. Disconnect both air tubes from APS 2.
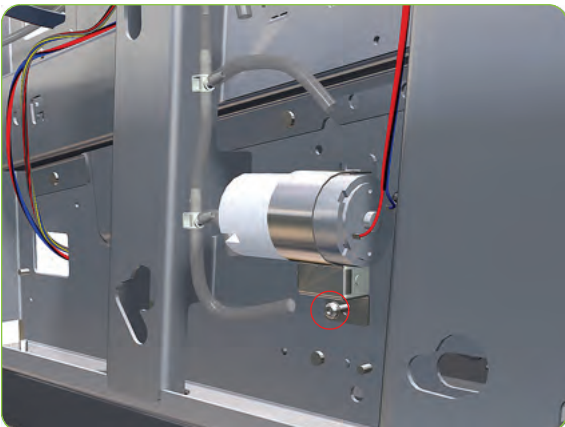
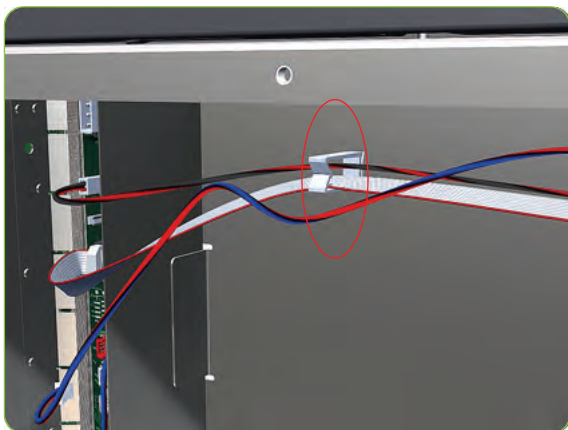19. Remove one T-20 attachment screw from APS 1 (Top unit).
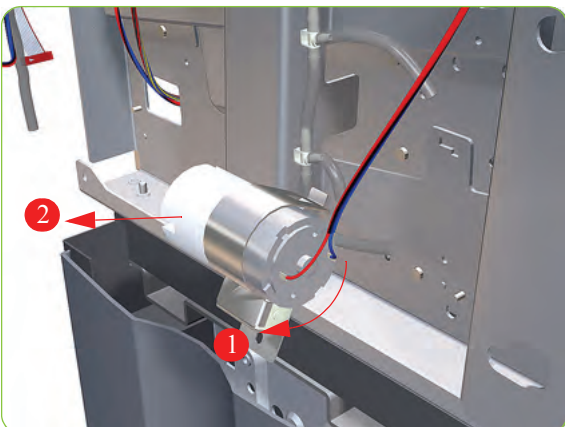
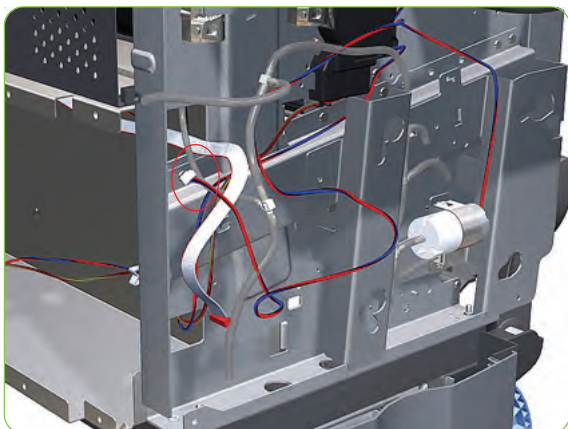20. Remove APS 2 (Bottom unit) from the printer.

Left Spittoon

Removal
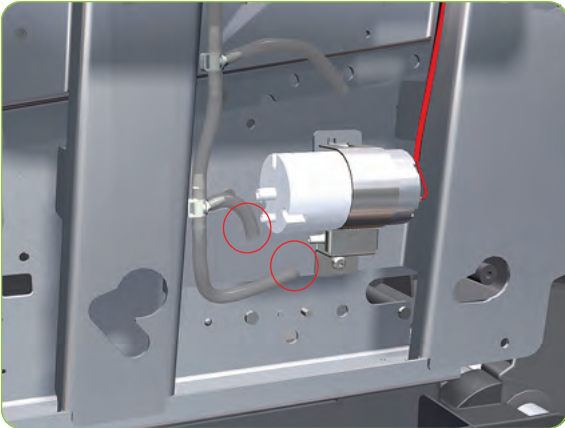
⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Left Cover ⇒ See page 254.

2. Remove:
   - The Left Connector Cover or the 42-inch model ⇒ See page 271.
   - The Electronics Module Extension the 60-inch model ⇒ See page 272.

3. Remove the Scan-Axis Motor ⇒ See page 330.

4. Disconnect the Left Spittoon Fan cable from the PrintMech PCA.

5. Unroute the Left Spittoon Fan cable.
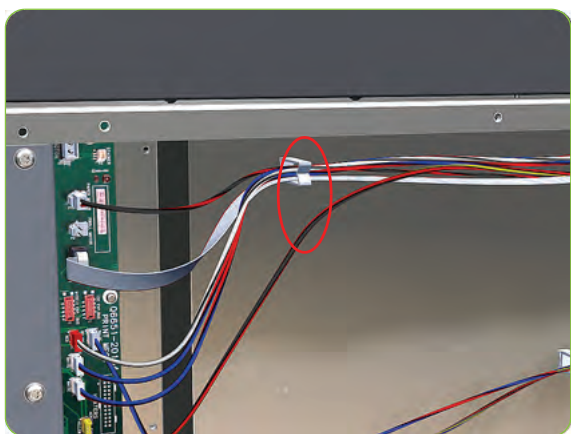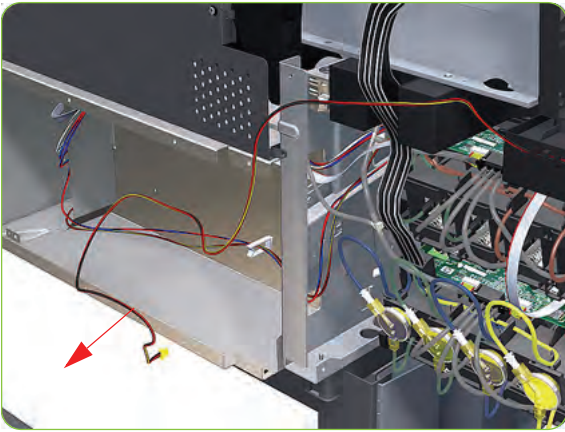
6. Unroute the Left Spittoon Fan cable.
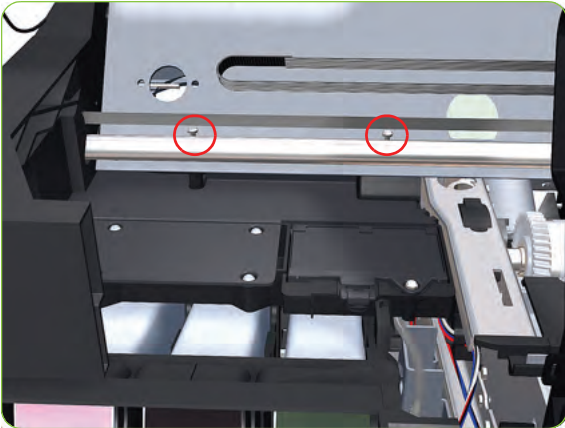
7. Remove two T-15 attachment screws (**Type J**) from the Scan-Axis Beam.

> **NOTE:** Be very careful not to damage the encoder strip while removing the attachment screws.
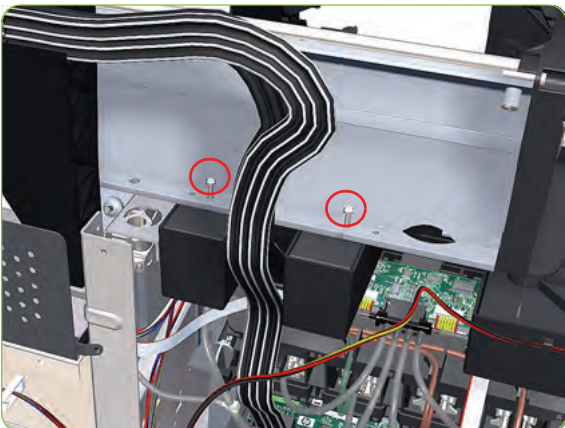
8. Remove two T-15 attachment screws from the Scan-Axis Beam.

9. Remove one T-15 attachment screw.
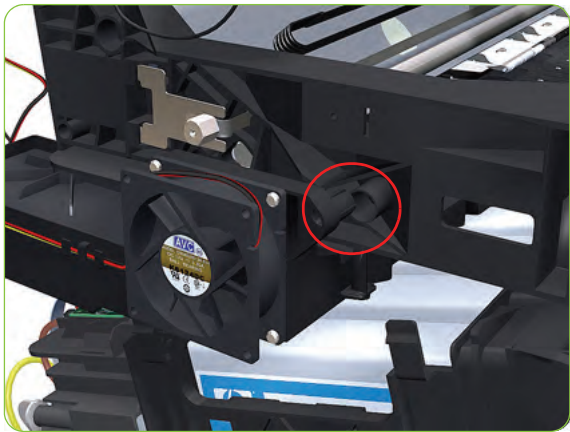
10. Unclip the Spittoon attachment point so yo can rotate it in the next step.
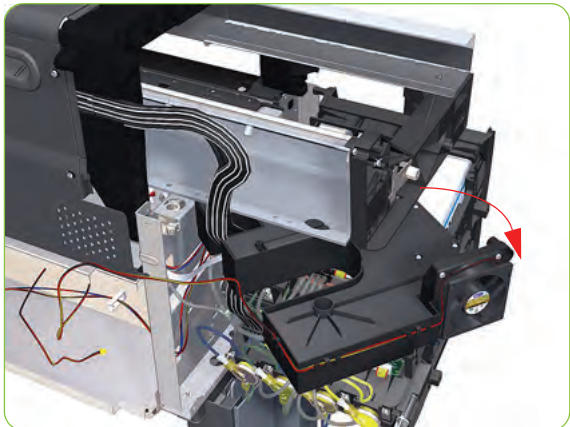
11. Rotate the Left Spittoon clockwise.
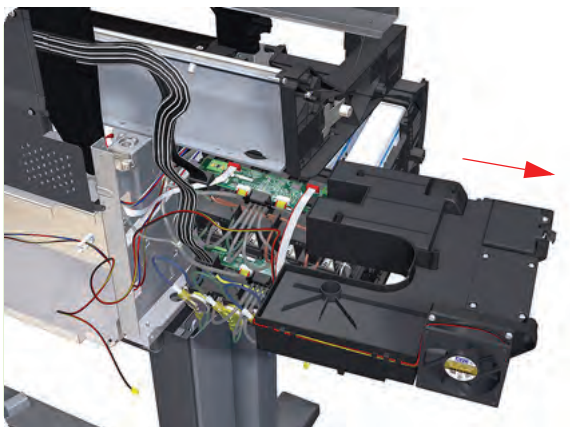
12. Remove the Left Spittoon from the Printer.

> 📝 **NOTE:** After installing the NEW Left Spittoon, make sure you perform the following Service Utility:

• Reset life counter left spittoon ⇒ Chapter 4.

Encoder Strip and Encoder Sensor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
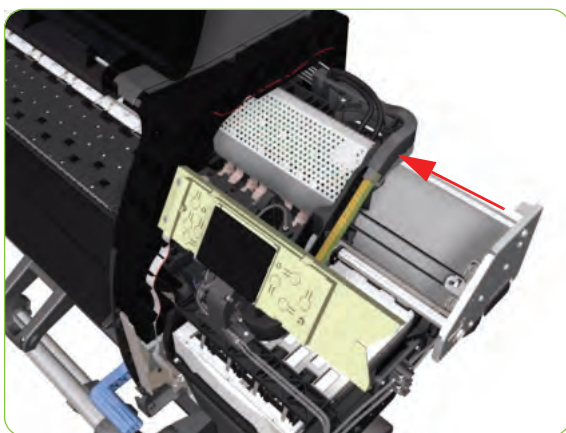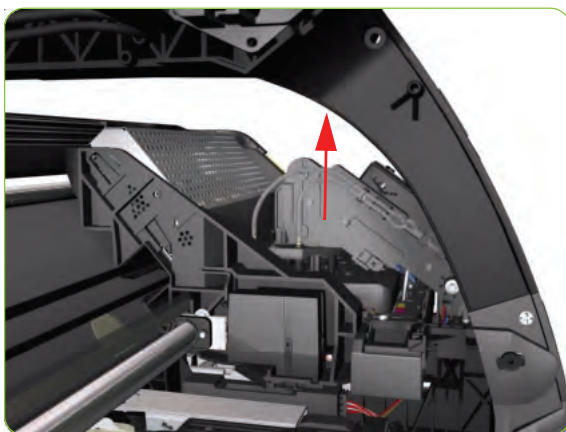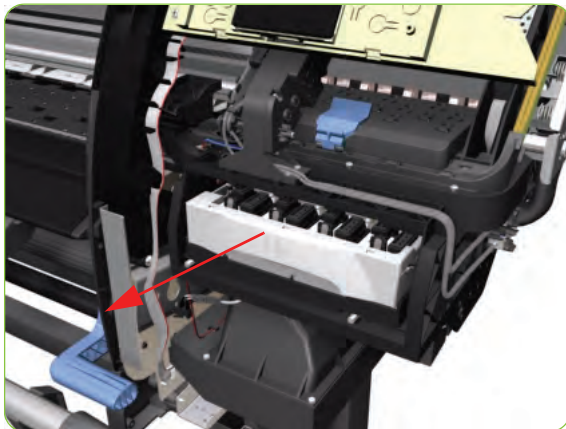
1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Uncap the Carriage Assembly by manually pulling out the Printhead Maintenance Cartridges tray.

4. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.

5. Move the Carriage Assembly out of the Service Station.

Removal & Installation

6. Remove one T-10 screw (**Type I**) that secures the Encoder Strip on the right hand side of the Printer.

7. Release the Encoder Strip from the locating pins on the right hand side of the Printer.
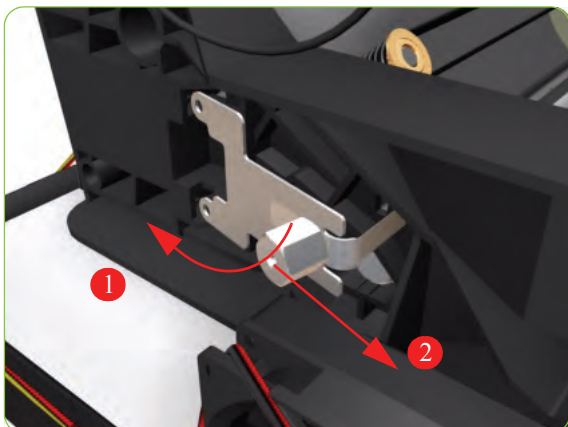
8. Release the Spring Clip from the Bracket on the left hand side of the Printer.
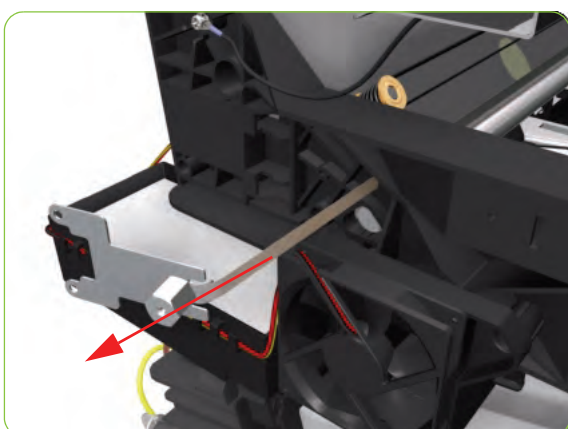
9. Carefully pull the Encoder Strip out of the left hand side of the Printer.
10. Remove the Carriage PCA ⇒ See page 318.
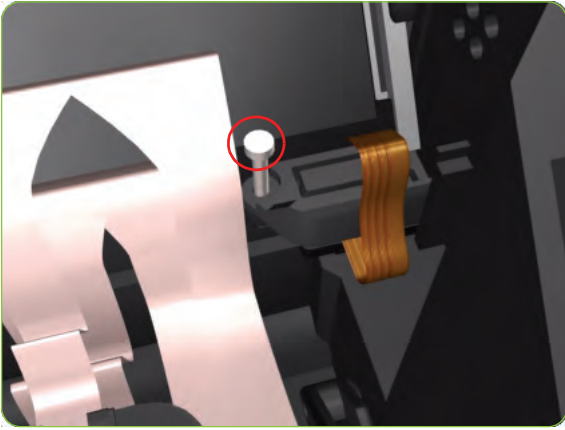
11. Remove one T-8 (**Type L**) screw that secures the Encoder Sensor to the Carriage Assembly.
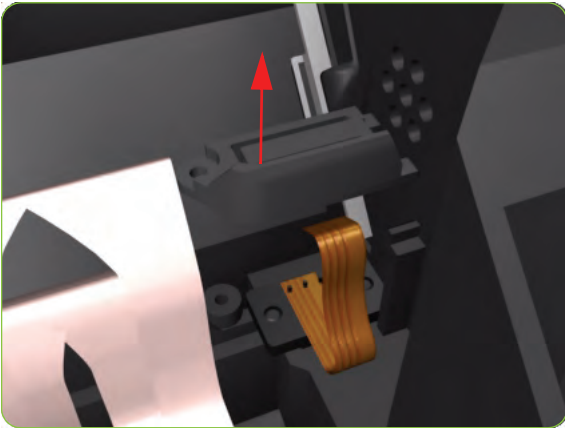
12. Remove the plastic cover from the Encoder Sensor.
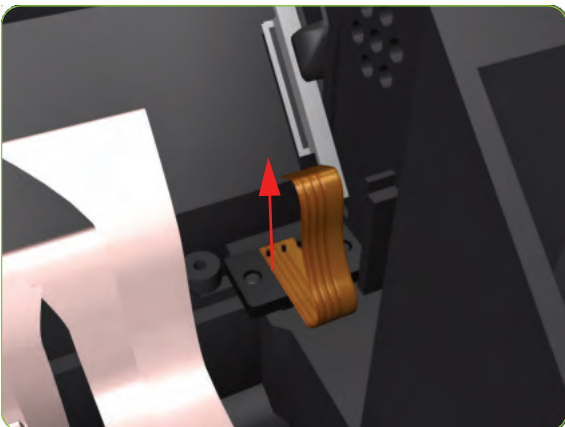
13. Remove the Encoder Sensor from the Printer.

> **NOTE:** After installing the NEW Encoder Strip and Encoder Sensor, make sure you perform the following Service Calibration:

- Scan-Axis Calibration ⇒ Chapter 5.

Carriage PCA

Removal

WARNING!: Switch off the printer and remove the power cable.
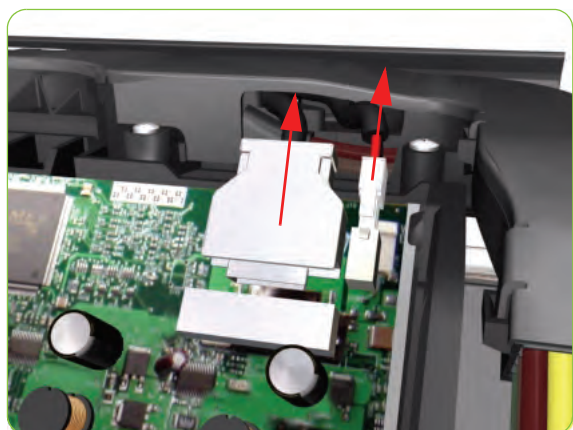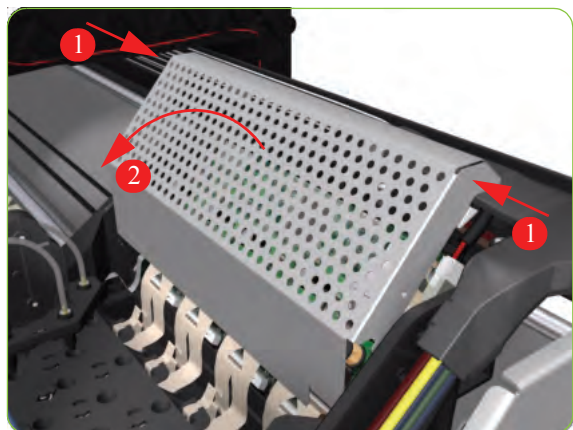
1. Remove the Right Cover ⇒ See page 248.
2. Press the two side of the Carriage PCA Cover and unclip from the Carriage Assembly.

3. Disconnect the Trailing Cable from the Carriage PCA.

4. Use a flat bladed screwdriver to release the ALL the clips, securing the Carriage Flex Cables to the Carriage Assembly, by pulling upwards.

Removal & Installation

5. Disconnect the Flex Cables from the Carriage PCA.
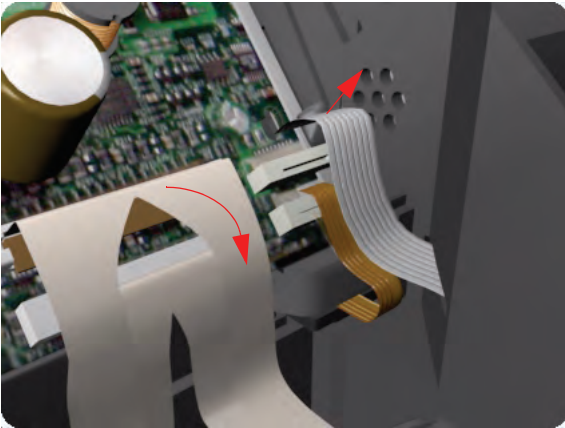
6. Disconnect the Line Sensor Cable and the Encoder Sensor Cable from the Carriage PCA.
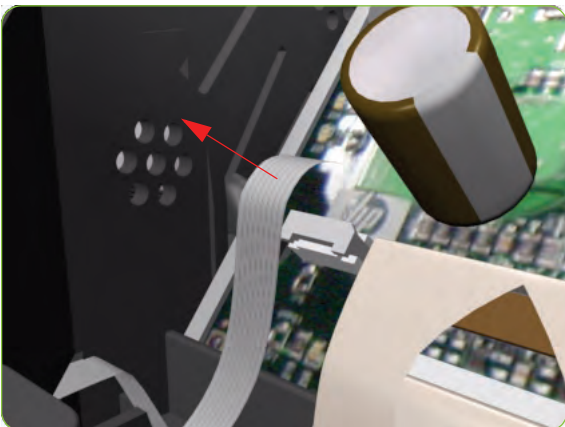
7. Disconnect the Color Sensor Cable from the Carriage PCA.

8. Push inwards the four clips that secure the Carriage PCA.
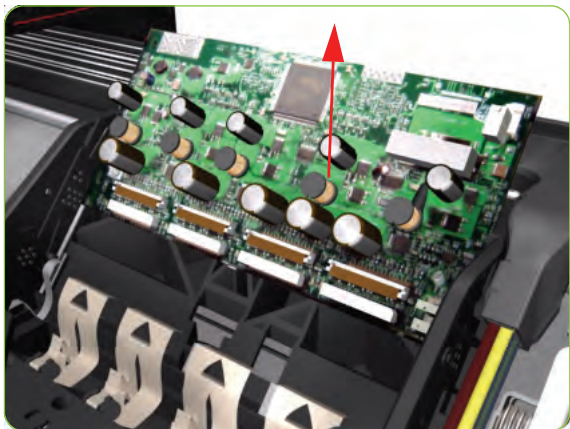
9. Remove the Carriage PCA from the Printer.

> **NOTE:** Once you have installed a NEW Carriage PCA, you MUST perform the following steps to ensure that the Printer will function correctly:

1. Power ON the Printer.
2. Execute the "Carriage Setup" Utility from the Service Utility Menu (Refer to Chapter 4 for more information).
3. Install the Printheads once the Utility has been completed successfully.
4. Reset life counter Carriage PCA ⇒ Chapter 4.

Carriage Flex Cables

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
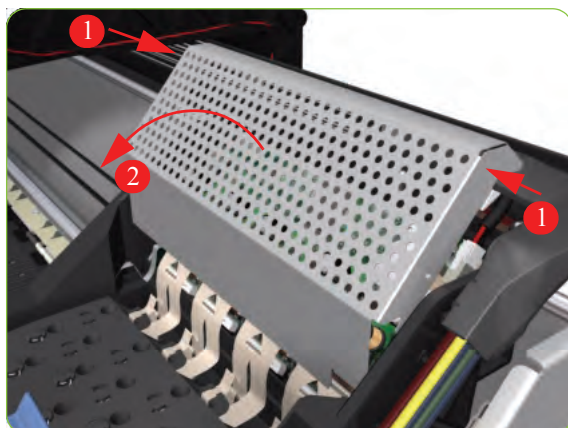
1. Remove the Right Cover ⇒ See page 248.
2. Remove the Front Panel ⇒ See page 276.
3. Remove the Primer Assembly ⇒ See page 278.
4. Press the two side of the Carriage PCA Cover and unclip from the Carriage Assembly.

5. Use a flat bladed screwdriver to release the ALL the clips, securing the Carriage Flex Cables to the Carriage Assembly, by pulling upwards.

6. Disconnect the ALL the Flex Cables from the Carriage PCA.

7. Remove eight T-8 screws (**Type L**) that secure the Carriage Flex Cables to the Carriage Assembly.

8. Open the Carriage Cover and remove ALL the Printheads from the Carriage Assembly.

9. Remove the Carriage Flex Cable from the Printer.

Carriage Assembly
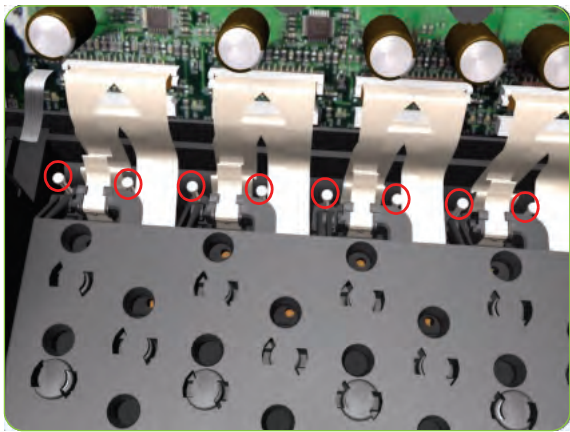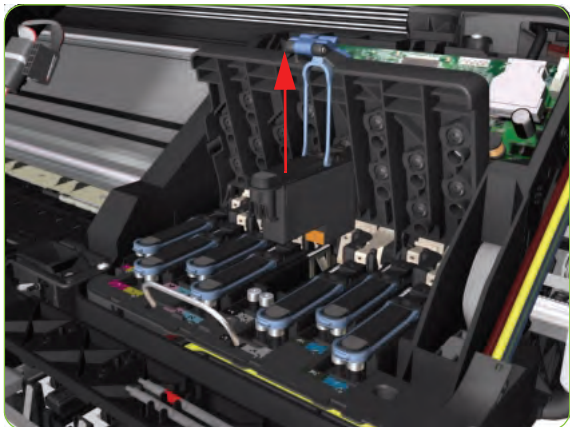
Removal

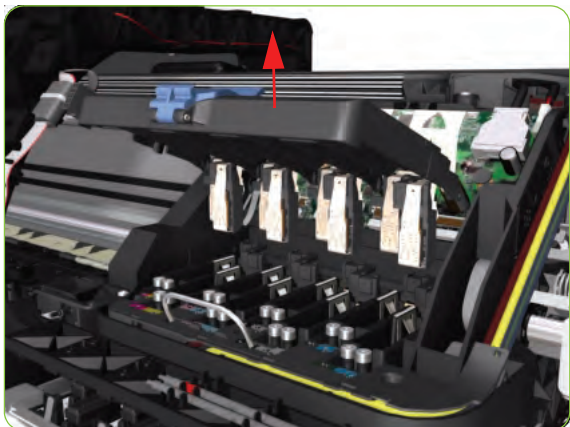⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⟹ See page 248.

2. Remove the Front Panel ⟹ See page 276.

3. Remove the Primer Assembly ⟹ See page 278.

4. Remove the Left Cover ⟹ See page 254.

5. Remove the Encoder Strip ⟹ See page 315.

6. Pull out the Printhead Maintenance Cartridges tray.
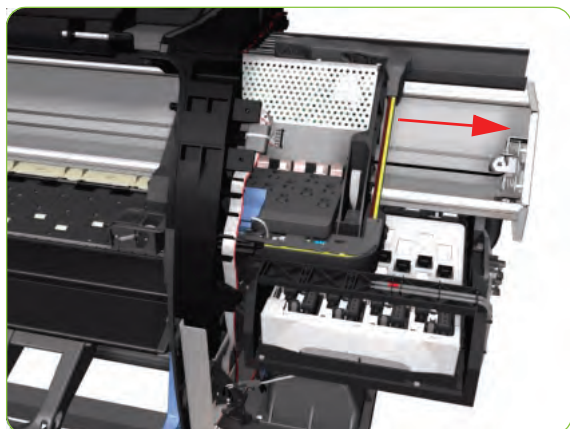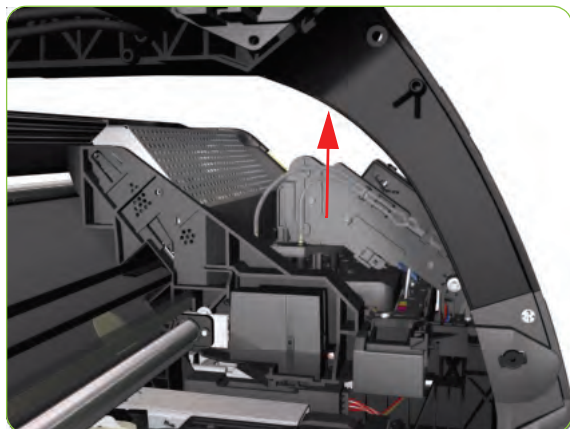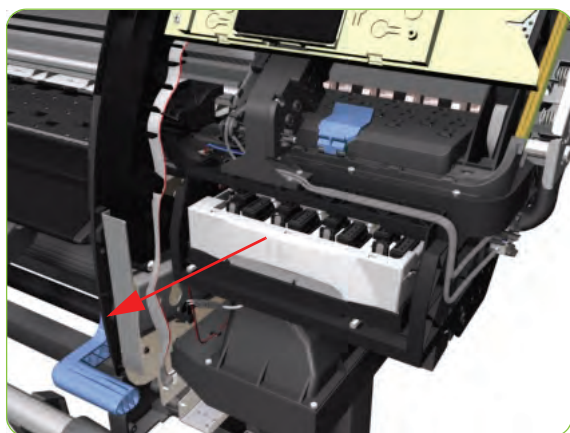
7. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.

8. Move the Carriage Assembly to the extreme right of the Printer.
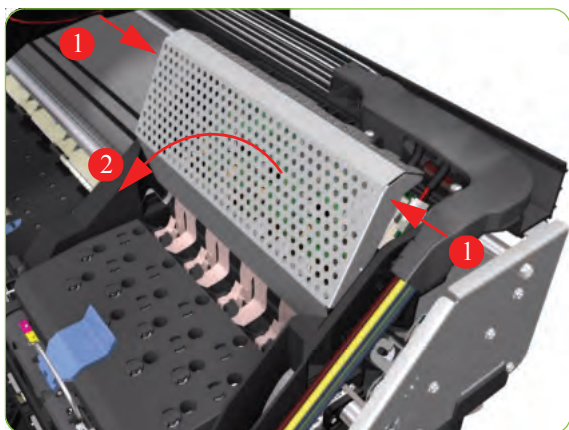
9. Press the two side of the Carriage PCA Cover and unclip from the Carriage Assembly.
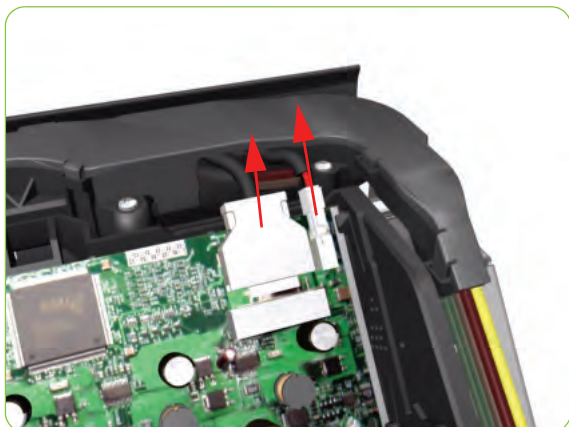
10. Disconnect the Trailing Cable from the Carriage PCA.

11. Open the Carriage Cover and remove ALL the Printheads from the Carriage Assembly.

12. Remove five T-15 screws (**Type G**) that secure the Ink Supply Tubes to the Carriage Assembly.

13. Remove the Ink Supply Tubes from the Carriage Assembly and safely place to one side of the Printer.
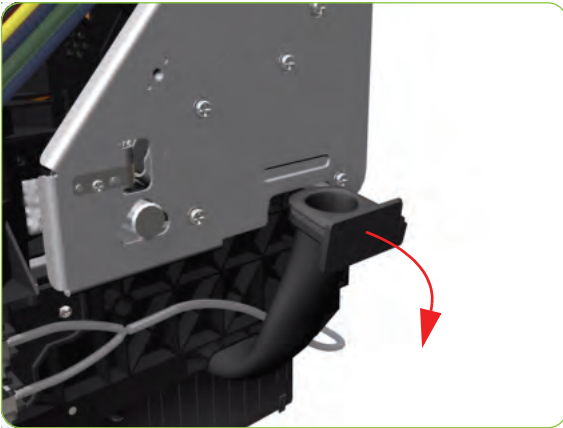
14. Disconnect the Aerosol Fan Tube from the Chassis.

15. Remove one T-20 screw (**Type A**) that secures the Belt Tensioner to the Chassis.

16. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.
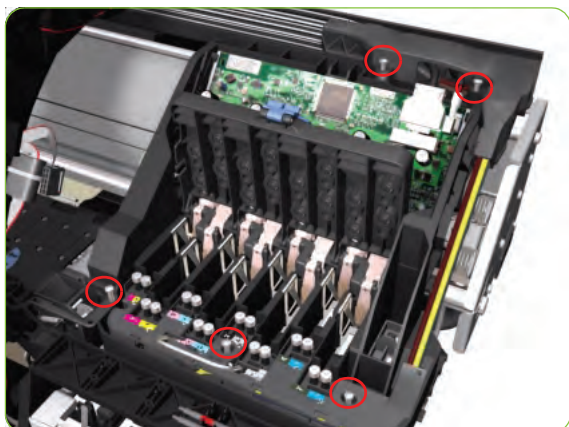
17. Move the Carriage Assembly slightly away from the right Scan-Axis Bracket.

18. Release the Carriage Belt from the Scan-Axis Motor on the left hand side of the Printer.

19. Remove one T-10 screw (**Type C**) that secure the Encoder Strip.

20. Remove four T-20 screws (**Type N**) that secure the right Scan-Axis Bracket.

> **NOTE:** Note that these are Chassis screws and in normal circumstances should NEVER be removed, but in this case we need to remove them in order to remove the Carriage Assembly.

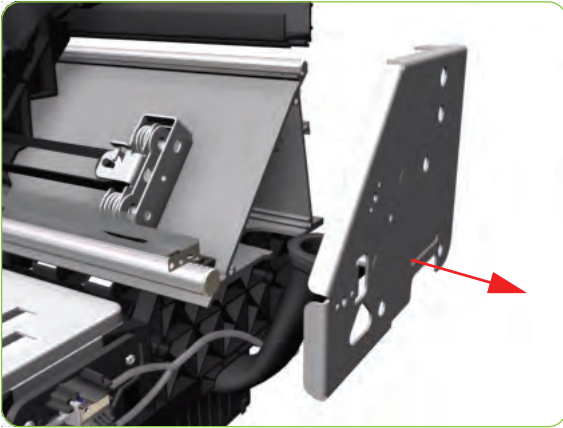21. Remove the right Scan-Axis Bracket from the Printer.

22. Remove the Carriage Stopper Screw (T-20) from the Chassis.
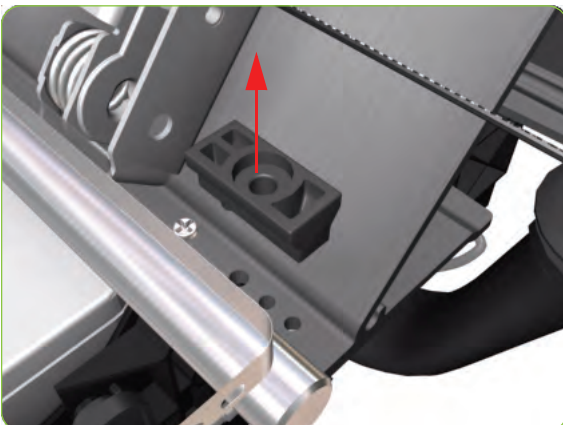
23. Remove the Carriage Stopper from the Printer.

24. Slide the Carriage Assembly (including the belt) to the right and out of the Printer.

25. If the Carriage Assembly is to be replaced, make sure that you remove the Belt, the Carriage PCA, Color Sensor, Encoder and Line Sensors and the Cutter Assembly (in order to install them on the new Carriage Assembly).

> **NOTE:** After installing the NEW Carriage Assembly, make sure you perform the following Service Utility:

- Reset life counter Carriage ME $\Rightarrow$ Chapter 4.

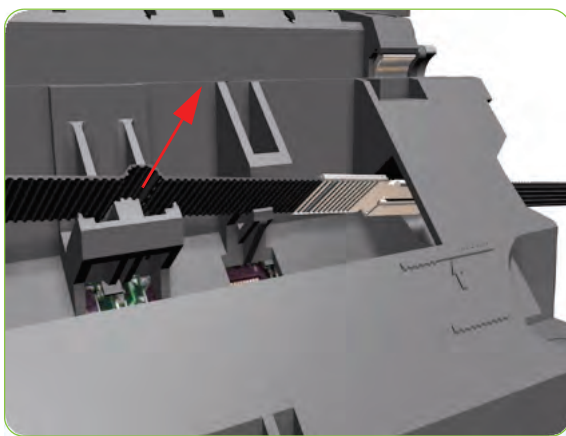**NOTE:** After installing the NEW Carriage Assembly, make sure you perform the following Service Calibrations:

- Scan-Axis Calibration $\Rightarrow$ Chapter 5.
- Service Station Calibration $\Rightarrow$ Chapter 5.
- Line Sensor Calibration $\Rightarrow$ Chapter 5.

Belt Assembly

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Left Cover ⇒ See page 254.
3. Remove the Top Cover ⇒ See page 261.
4. Remove the Encoder Strip ⇒ See page 315.
5. Remove the Carriage Assembly ⇒ See page 323.
6. Release the Belt from the bottom of the Carriage Assembly.

📝 **NOTE:** After installing the NEW Belt Assembly, make sure you perform the following Service Utility:

• Reset life counter scan cycles belt ⇒ Chapter 4.

Scan-Axis Motor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Remove:
   - For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   - For the 60-inch model, the Electronics Module Extension⇒ See page 272.

4. Uncap the Carriage Assembly by manually pulling out the Printhead Maintenance Cartridges tray.

5. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.
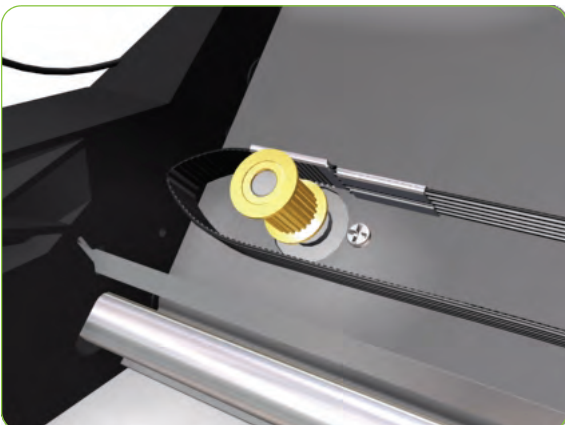
Removal & Installation
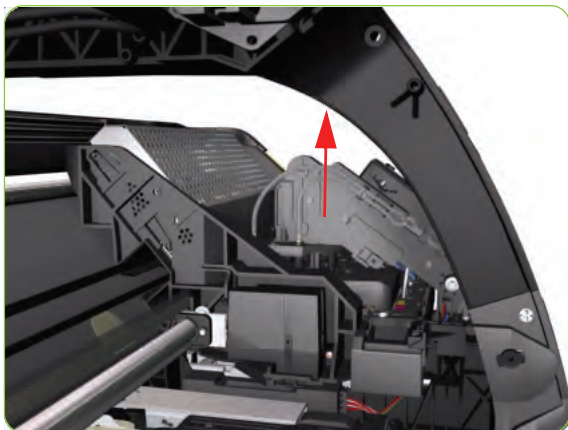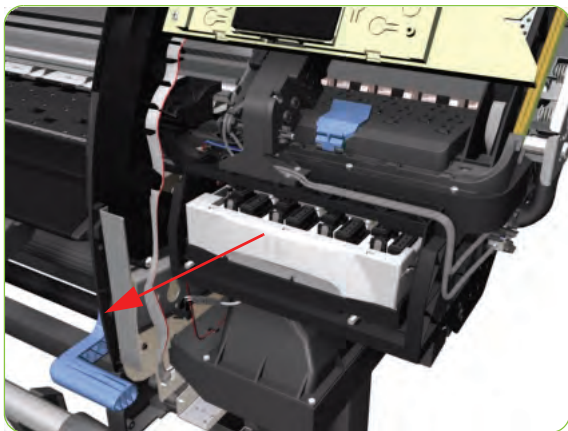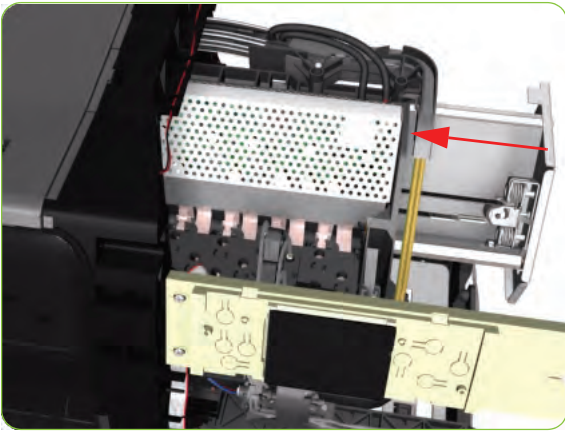
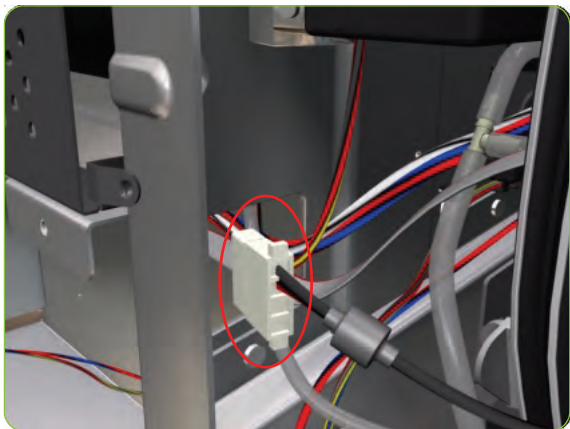6. Move the Carriage Assembly slightly away from the right Scan-Axis Bracket.

7. Remove one T-15 screw that secures the Belt Tensioner to the Chassis.
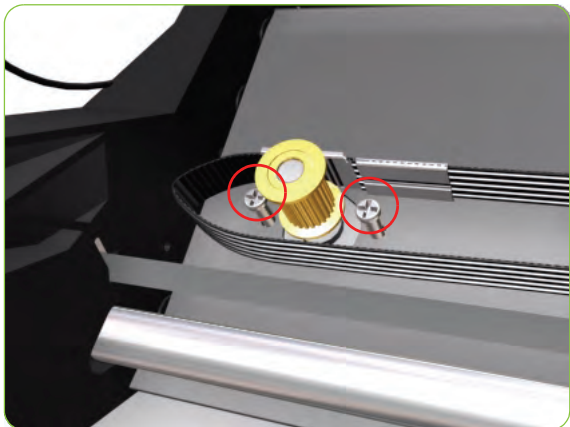

8. Release the Carriage Belt from the Scan-Axis Motor on the left hand side of the Printer.

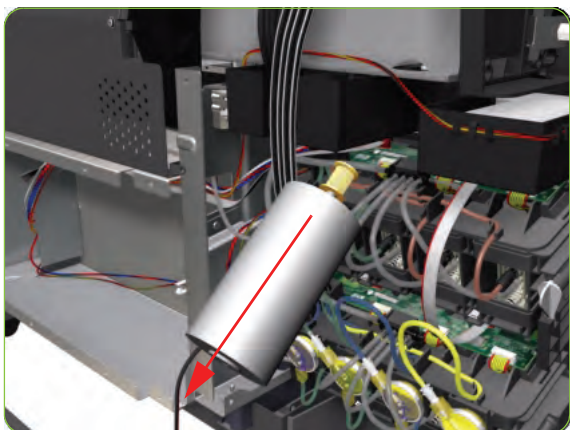9. Disconnect the Scan-Axis Motor cable from the PrintMech PCA.

10. Unroute the Scan-Axis Motor cable from the chassis.

11. Remove two T-20 screws (**Type A**) that secure the Scan-Axis Motor.

> **NOTE:** Make sure you hold the Scan-Axis Motor securely when removing the screws.

12. Remove the Scan-Axis Motor from the Printer.

> **NOTE:** After installing the NEW Scan-Axis Motor, make sure you perform the following Service Utility:
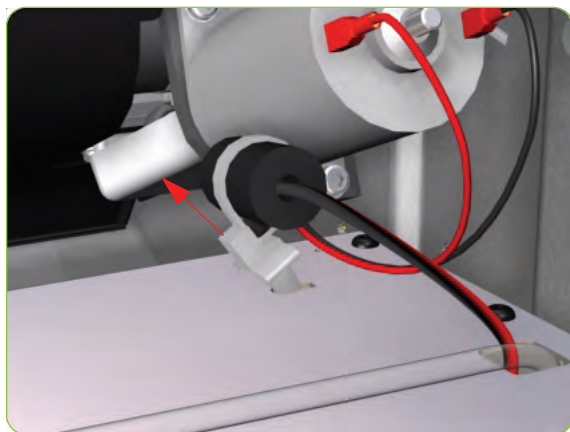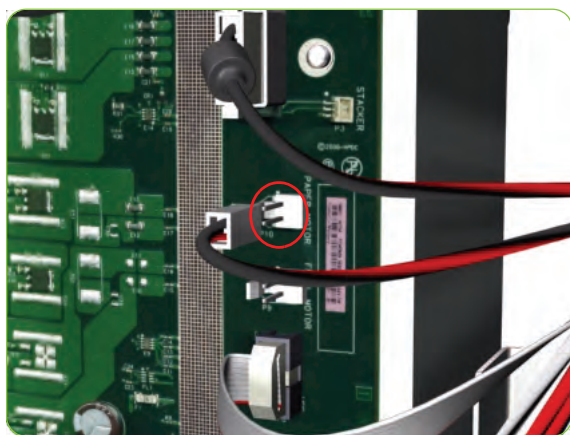>
> • Reset scan motor life counter ⇒ Chapter 4.

Media-Axis Motor

Removal

1. Remove the Left Cover ⇒ See page 254.

2. Remove the Rear Door ⇒ See page 267.

3. Remove:
   - For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   - For the 60-inch model, the Electronics Module Extension⇒ See page 272.

4. Disconnect the Media-Axis Motor cable from the PrintMech PCA.

5. Detach the clamp of the ferrite core of the Media-Axis Motor cable from the printer chassis.
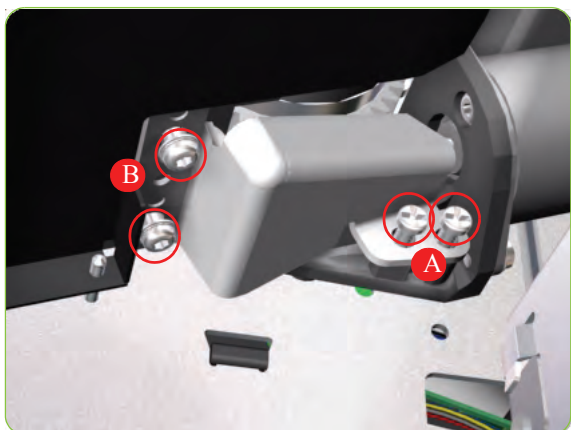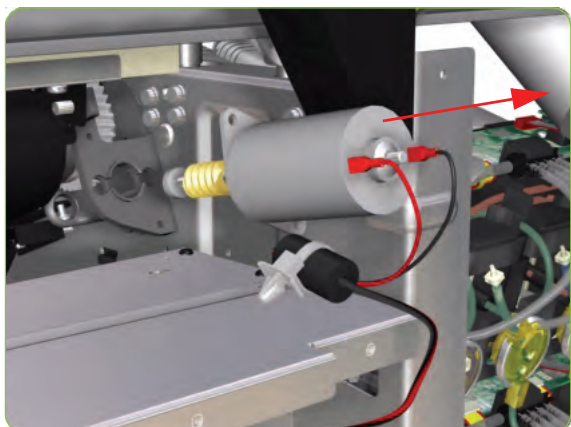
6. Remove the T-15 screws (**Type R**) identified (A) and loosen the T-15 screws (**Type R**) identified (B) that secure the Media-Axis Motor.
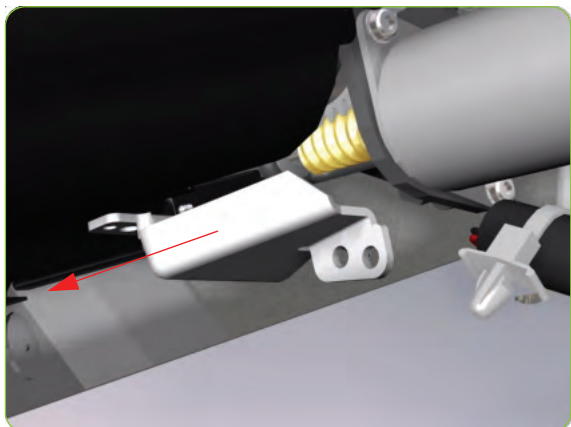
7. Remove the Media-Axis Motor Bracket.
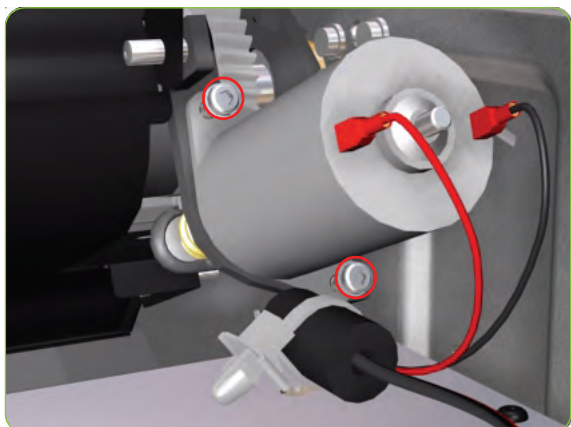
8. Remove two T-20 screws (**Type B**) that secure the Media-Axis Motor Bracket.

9. Remove the Media-Axis Motor from the Printer.

> 📝 **NOTE:** When reinstalling the parts, make sure you apply the grease (included with the support part) to the gears.
>
> **NOTE:** After installing the NEW Media-Axis Motor, make sure you perform the following Service Calibration:

• Paper Advance Calibration ⇒ Chapter 5.

Optical Media Advance Sensor (OMAS)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

📝 **NOTE:** The removal procedure differs depending on the Printer model, 42-inch or 60-inch.

42-inch model ONLY

1. Open the Rear Door. and go to step 4.
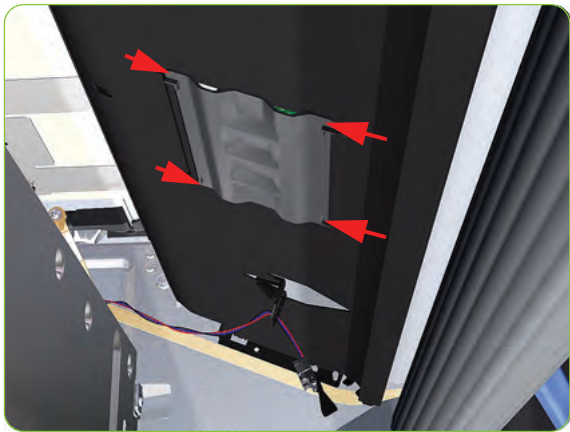
60-inch model ONLY

2. Remove the Left Cover ⇒ See page 254.

3. Remove the Rear Door ⇒ See page 267.

Both models

4. Remove media if installed.

5. Squeeze the clips to unclip the Media Sensor from the Center Guide.

6. Let the Media Sensor hang below the Center Guide. This is to ensure it does not get damaged by the ribbon cable of the OMAS during the removal procedure.
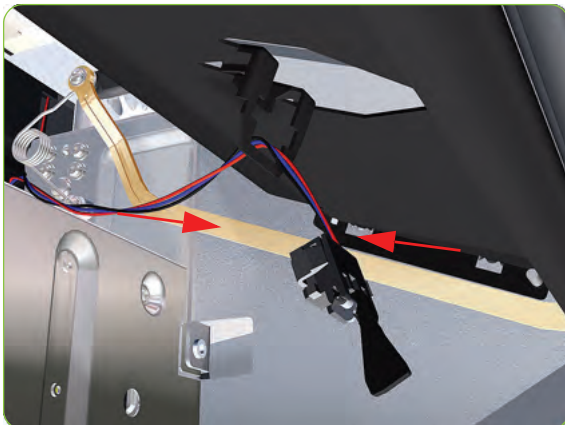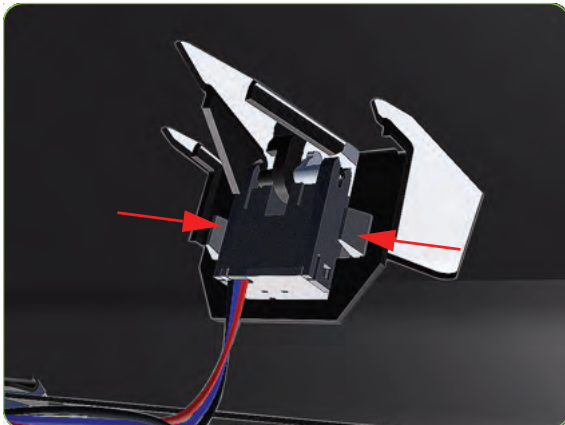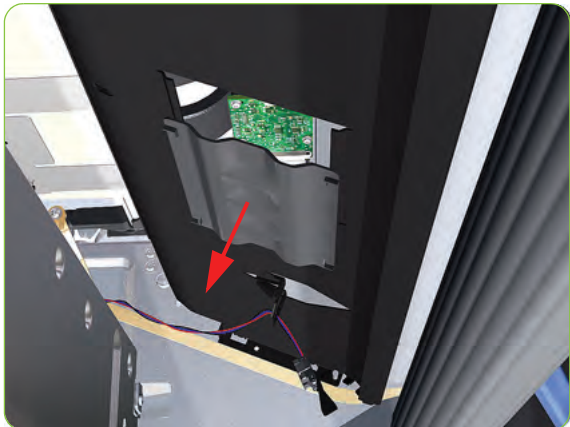
7.   Squeeze the corners of the OMAS Access Cover release it from the bottom of the printer.

8.   Remove the OMAS Access Cover the printer.

9.   Insert the T-20 thin bladed torx screwdriver (supplied with the replacement OMAS) into the access hole at the rear of the printer.

10.   Remove and discard one T-20 screw which secures the OMAS horizontally to the printer.
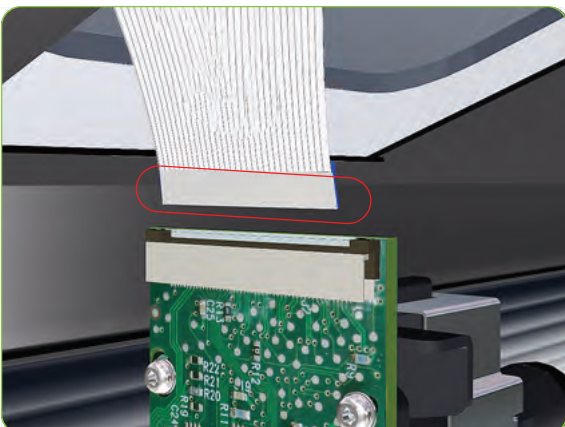
11. From the bottom of the printer, remove and discard one T-20 screw which secures the OMAS vertically to the printer.
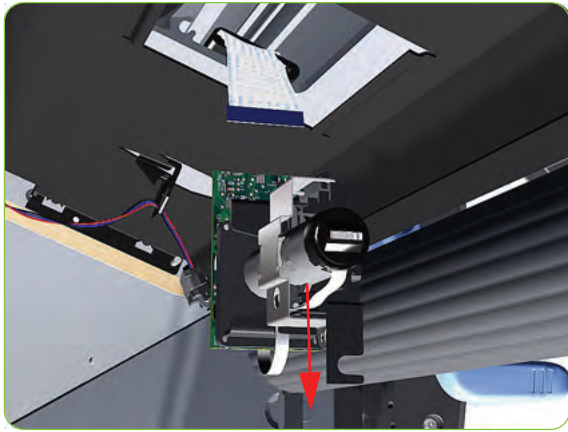

12. Carefully lower the OMAS from the printer as far as you can with the large ribbon cable still connected.
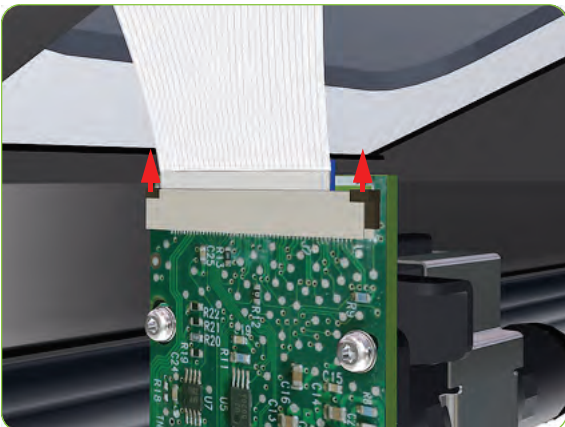
13. Release the two locking clips of the large ribbon cable connector.

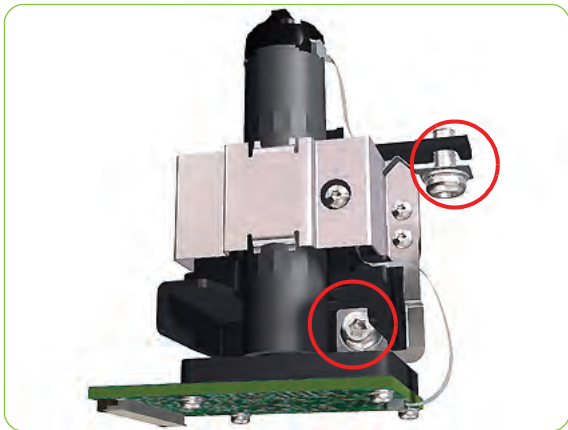14. Disconnect the large ribbon cable from the OMAS.

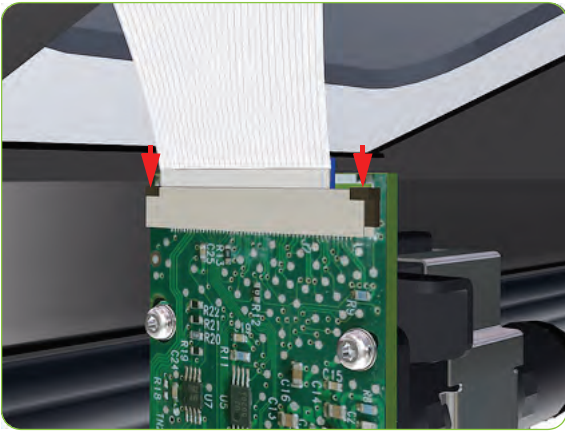15. Remove the OMAS Sensor from the printer.

Installation

> 📝 **NOTE:** To simplify the installation of the OMAS an Attachment Screw Retainer has been added to hold the two T-20 attachment screws. This part is delivered attached to the replacement OMAS unit with the two attachment screws. It is also delivered as a separate part with the Center Platen in case the OMAS is completely removed during its replacement.

1. Verify that the two T-20 attachment screws are correctly positioned in the Attachment Screw Retainer.
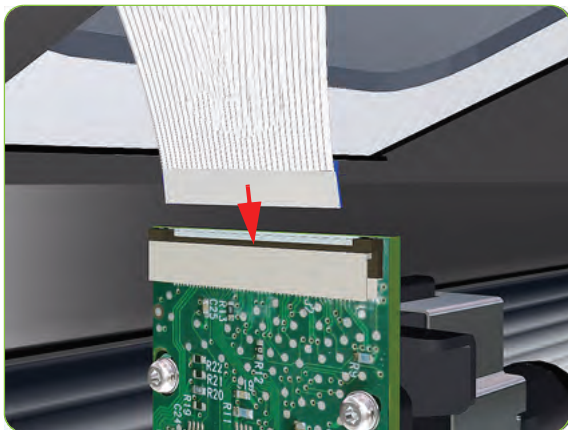
2. Position the OMAS under the Printer and connect the large ribbon.

3. Lock the clips of the large ribbon cable connector.

4. Carefully push the OMAS fully up into its mounting so that the OMAS window protrudes slightly **ABOVE** the Center Platen (approximately 0-2 mm). To ensure the OMAS is correctly positions, slide a sheet of paper over the Platen Ribs until it is stopped by the OMAS. This ensures the OMAS is protruding slightly above the platen.

⚠ **CAUTION:** Make sure the OMAS is pushed completely up into its mounting or you will encounter an error during the OMAS calibration because it will not be able to focus on the paper.
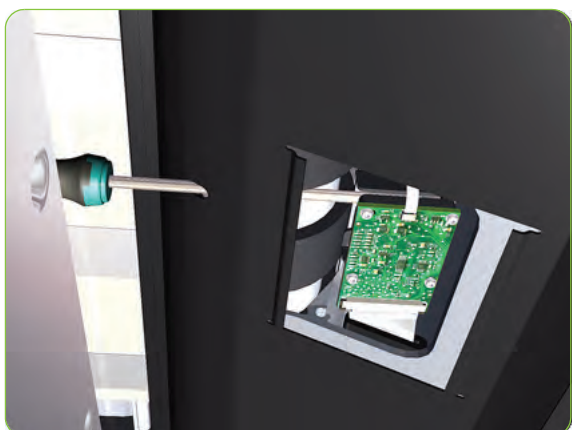

5. Slide a sheet of paper over the OMAS window, if the paper is not stopped by the OMAS, repeat step 4 to ensure the OMAS is pushed fully up into its the mounting.
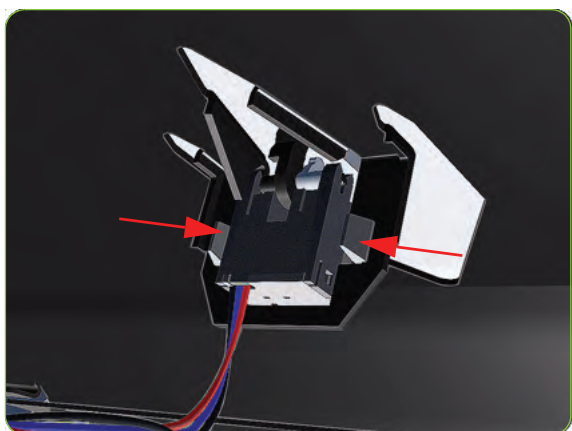

6. **FULLY** tighten the T-20 vertical attachment screw.

7. Insert the T-20 thin bladed torx screwdriver into the access hole at the rear of the printer.

8. Fully tighten the T-20 horizontal attachment screw which secures the OMAS to the printer.

9. Clip the Media Sensor to the Center Guide.

10. Clip the OMAS access cover back into place by sliding one edge of the cover into the slot and then applying enough pressure to it so you can clip it into the other slot.

11. Calibrate the OMAS ⇒ See page 156.

12. If the calibration fails, repeat the procedure from step 4 above to ensure it is correctly positioned.
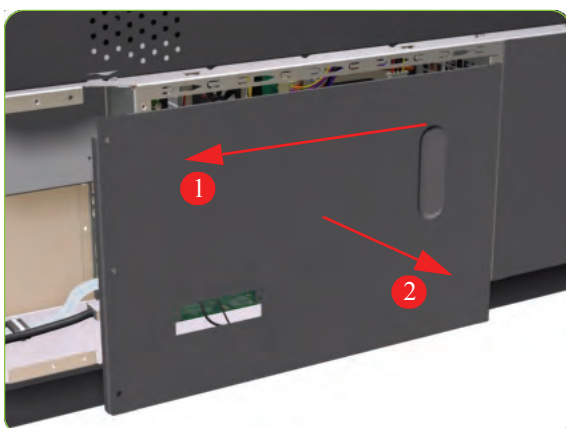
Interconnect PCA

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
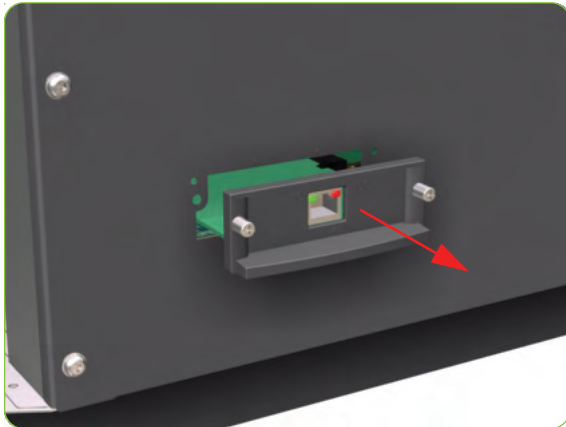
1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the JetDirect Card (if installed).

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

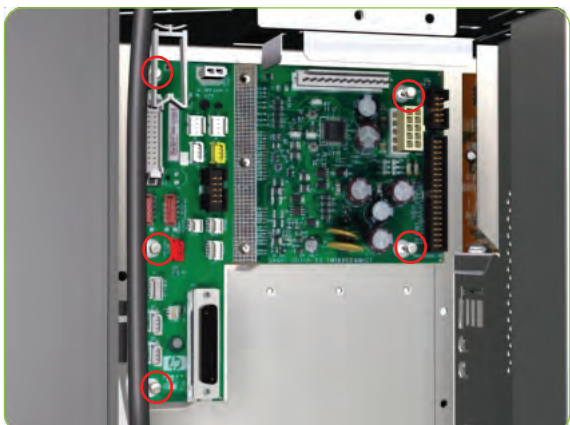4. Remove the Main PCA Cover from the Printer.

5. Remove six T-10 screws (**Type I**) that secure the Interconnect PCA Cover.

6. Remove the Interconnect PCA Cover from the Printer.

7. Disconnect ALL cables from the Interconnect PCA.

8. Remove five T-10 screws (**Type I**) that secure the Interconnect PCA.
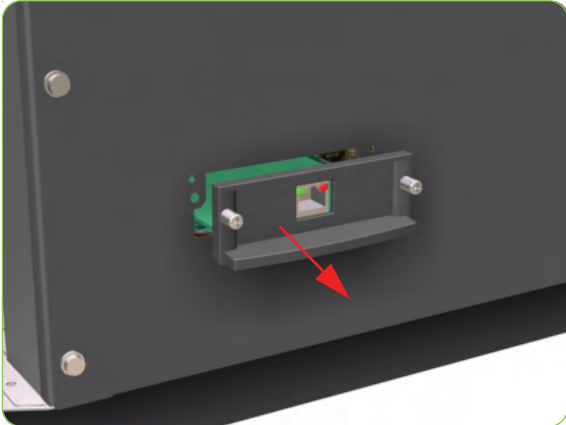
9. Remove the Interconnect PCA from the Printer.

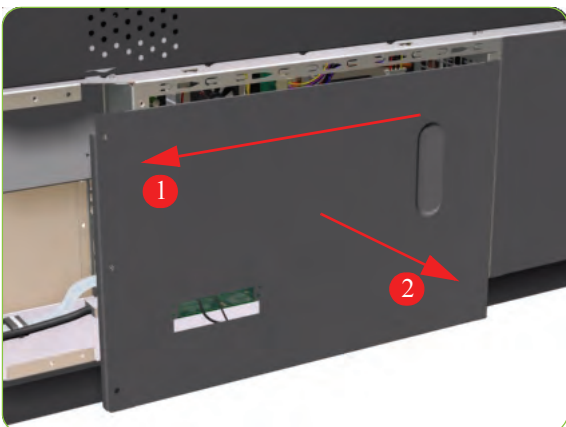# EIO to PCA Interface Card

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Connector Cover ⇒ See page 269.
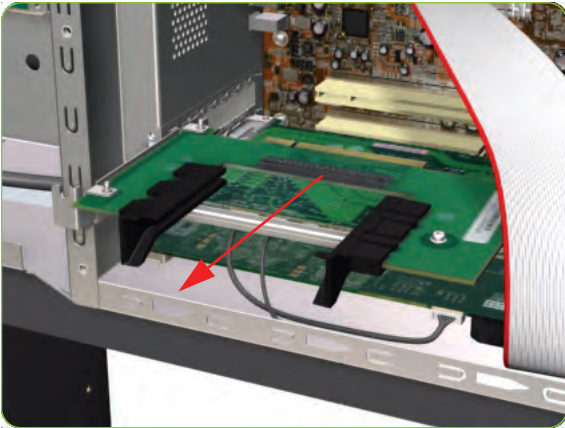2. Remove the JetDirect Card (if installed).

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

4. Remove the Main PCA Cover from the Printer.

Removal & Installation

5. Remove one T-10 screw (**Type I**) that secures the Interface Card.

6. Disconnect the Interface Card from the Main PCA and remove from the Printer.
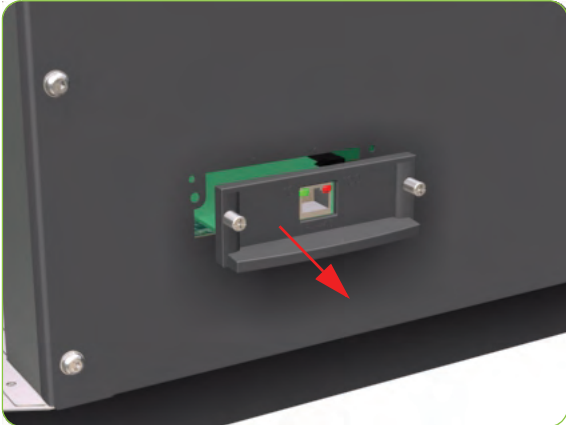
OMAS Controller Card

Removal

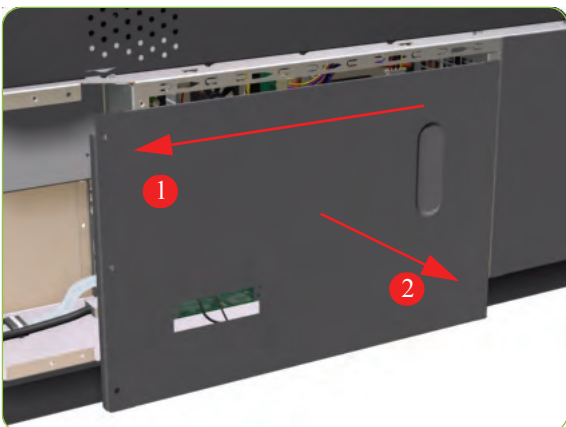⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Connector Cover ⇒ See page 269.
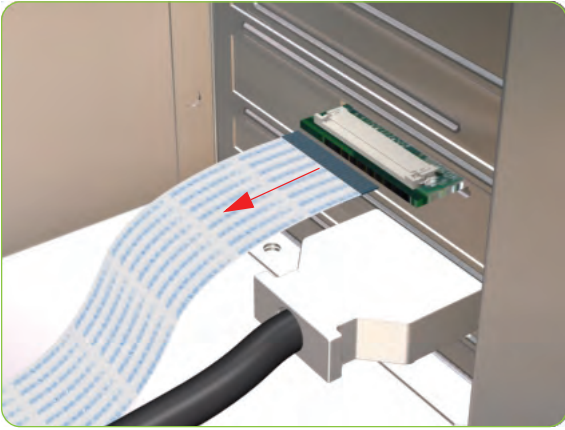2. Remove the JetDirect Card (if installed).

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

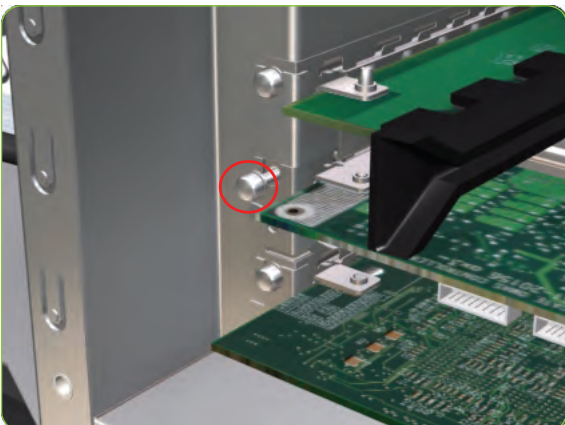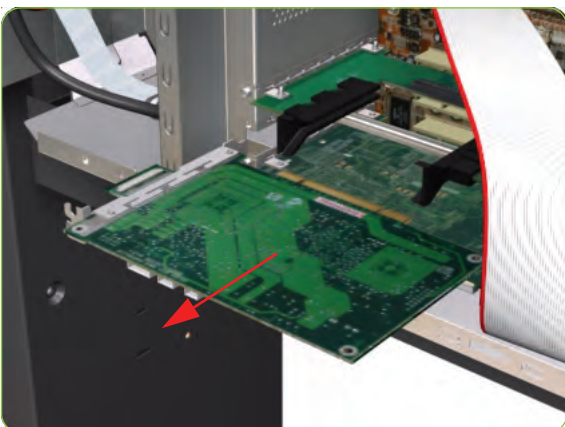4. Remove the Main PCA Cover from the Printer.

Removal & Installation

5. Disconnect the OMAS Controller Card to OMAS ribbon cable.

6. Disconnect the OMAS Controller Card to PrintMech and Sausalito PCI connection cables.

7. Remove one T-10 screw (**Type I**) that secures the OMAS Controller Card.

8. Disconnect the OMAS Controller Card from the Main PCA and remove from the Printer.

OMAS Cable

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
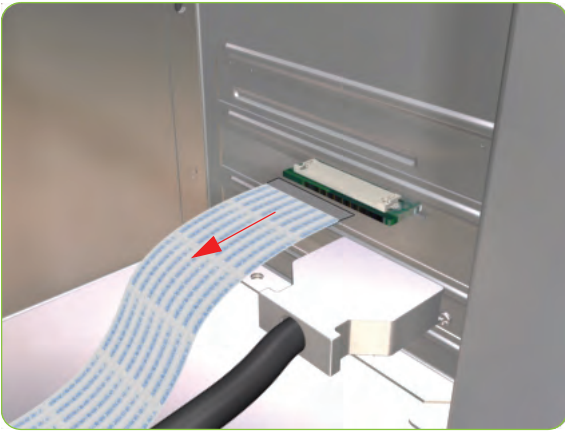
1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Remove the Service Station ⇒ See page 284.
4. Remove the OMAS ⇒ See page 335.
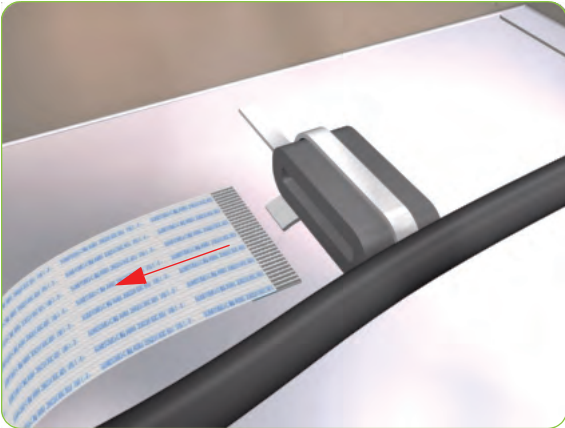5. Remove one T-15 screw that secures the OMAS Cable clamp from the printer.

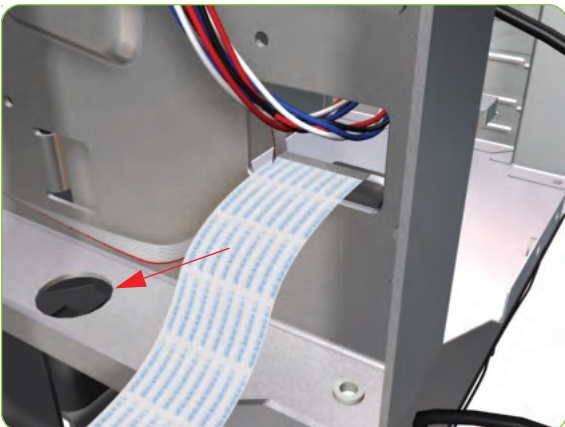6. Remove the OMAS Cable clamp from the printer.

7. Carefully Pull the OMAS Cable out of the Vacuum Beam.

8. Disconnect the OMAS Cable form the OMAS Controller Card.

9. Unroute the OMAS Cable from the Ferrite Core.

10. Unroute and remove the OMAS Cable from the Printer.

OMAS Cable   349

Installation

⚠️ **CAUTION:** It is critical that the OMAS Cable is correctly positioned in the Vacuum Beam so that it does not cause physical interference to the Media Sensor.

The following illustration shows a cross-section of the Vacuum Beam with the OMAS Cable correctly routed to avoid interference to the Media Sensor.
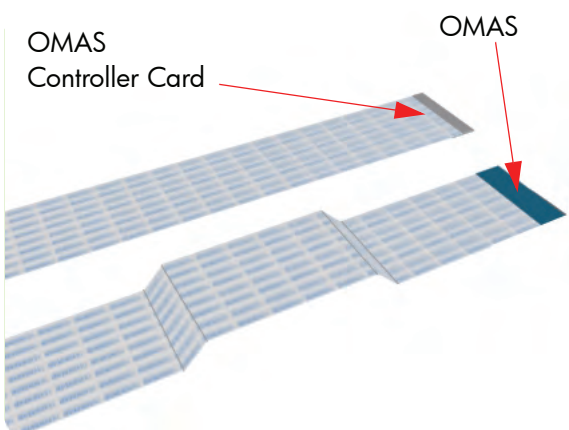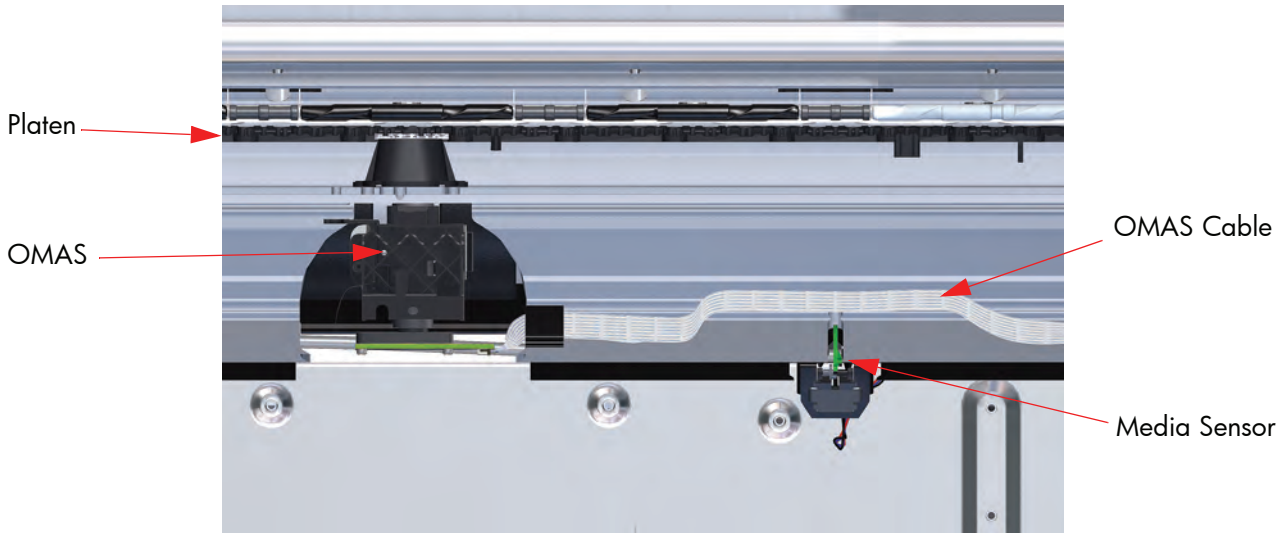
1. Before you can start to install the OMAS Cable you must first identify which end connects to which component. The end of the cable that has the most perpendicular and diagonal folds is the end that connects to the OMAS with the blue reinforcing on the top. The other end must be connected to the OMAS Controller Card with the blue reinforcing on the bottom.
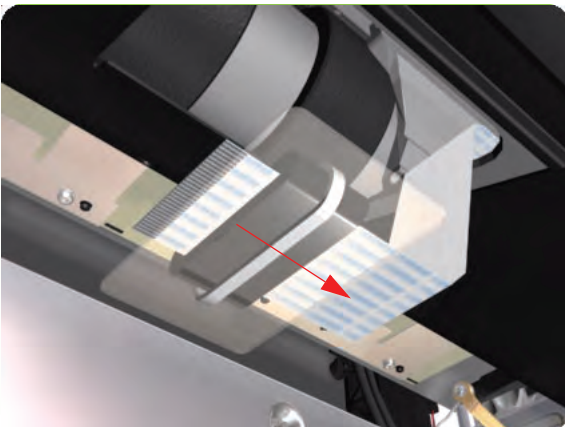

1. Carefully slide the Ferrite Core and its associated attachment plate out of the vacuum beam.
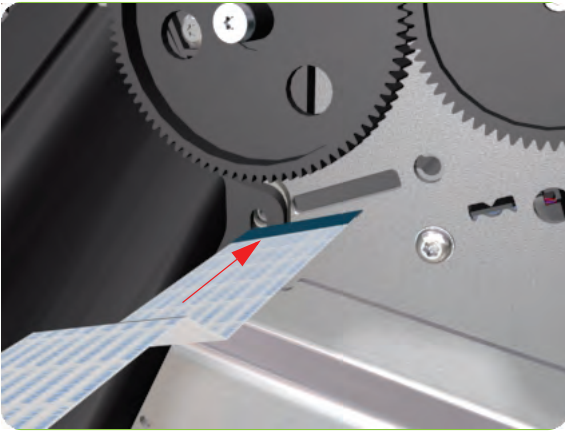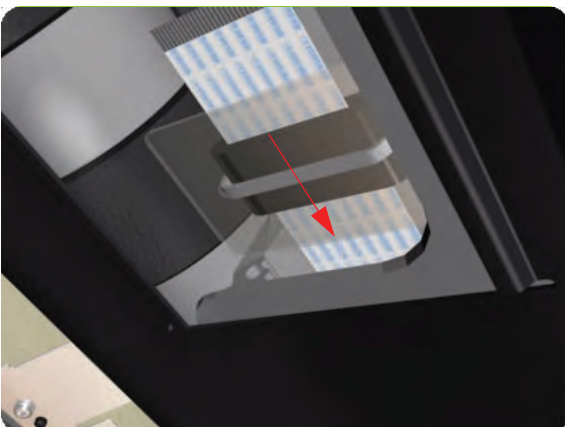
2. Position the OMAS Cable in the Vacuum Beam slot so that the blue reinforcement enters first.
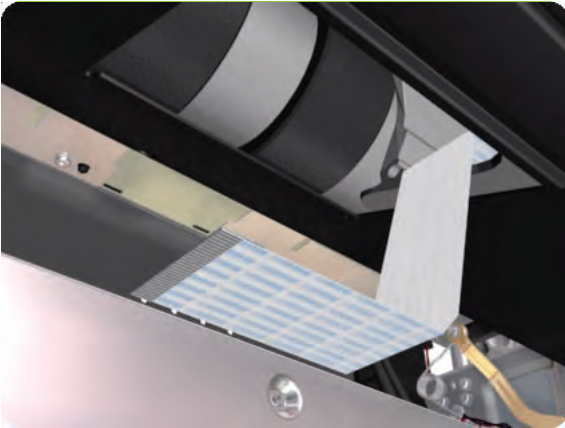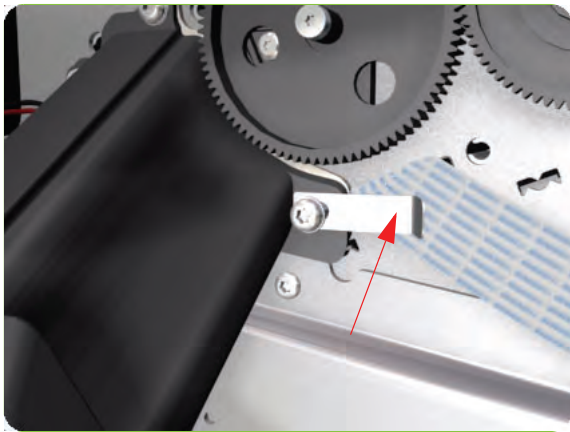
3. Carefully feed the OMAS cable through the Vacuum Beam sufficiently to have approximately 20 cm hanging from the OMAS installation position.

4. Slide the Ferrite Core and its associated Attachment Plate (on the top) onto the OMAS Cable.

5. Push the Attachment Plate into its slot in the Vacuum beam until it is level with the edge of OMAS installation position.

6. Carefully pull the OMAS Cable back into the Vacuum Beam (from the Service Station end) until the straight fold immediately before the first diagonal fold (from the OMAS sensor end) is aligned with the slot, fold the OMAS Cable across the diagonal fold, and install the cable clamp to lock the OMAS Cable in the correct position.

7. Route the OMAS Cable to the Ferrite Core in the Right Interconnect panel.
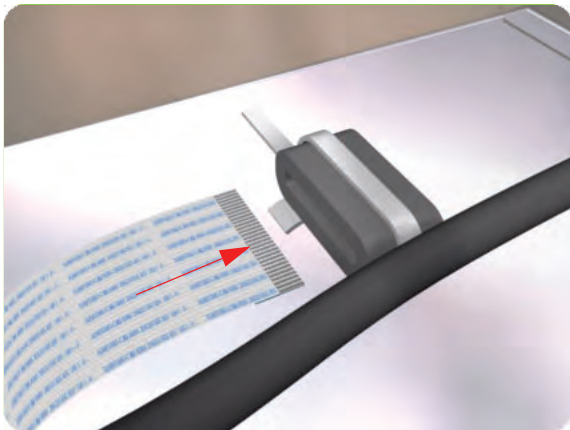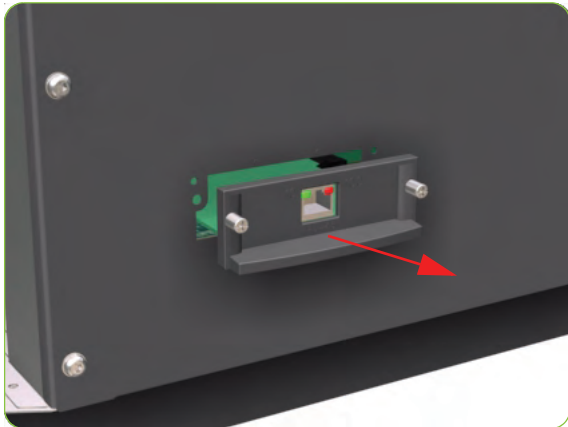

8. Feed the OMAS Cable through Ferrite Core.
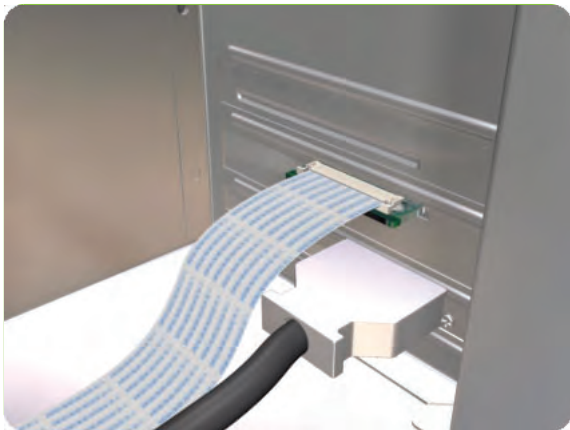
9. Connect the OMAS Cable to the OMAS Controller Card with the connections on the top.
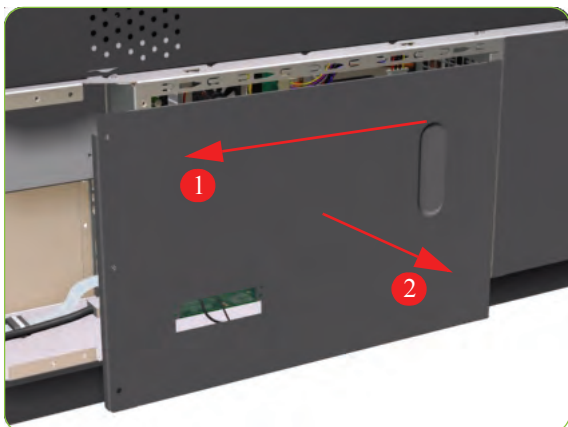
Sausalito PCI PCA

Removal

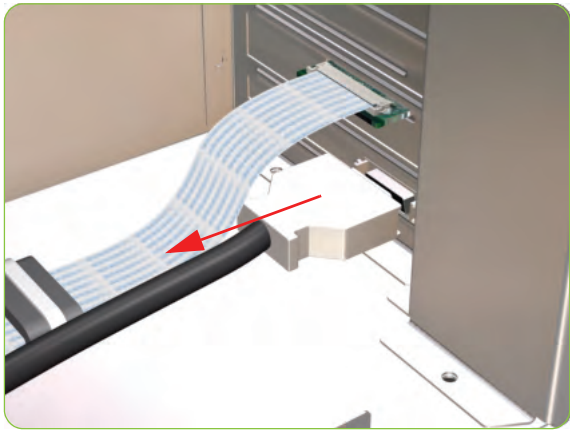⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the JetDirect Card (if installed).

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

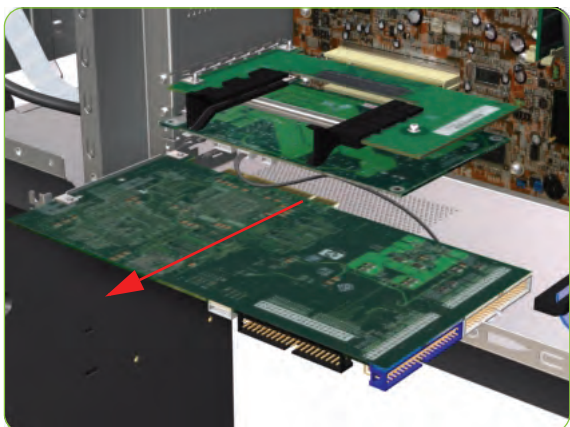4. Remove the Main PCA Cover from the Printer.

5. Disconnect the Trailing Cable from the Sausalito PCI PCA.

6. Disconnect ALL cables connected to the Sausalito PCI PCA.

7. Remove one T-10 screw (**Type I**) that secures the Sausalito PCI PCA.
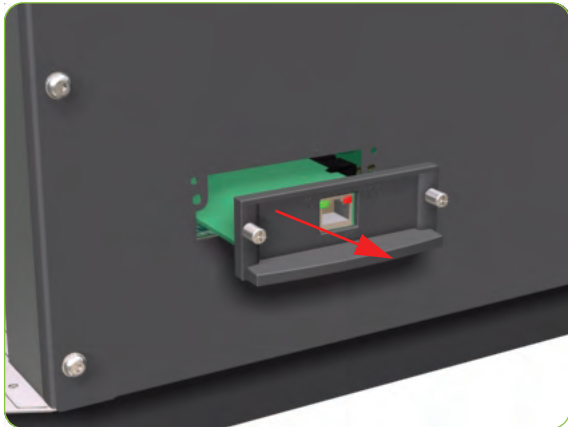

8. Disconnect the Sausalito PCI PCA from the Main PCA, unclip it, and remove it from the Printer.

Removal & Installation
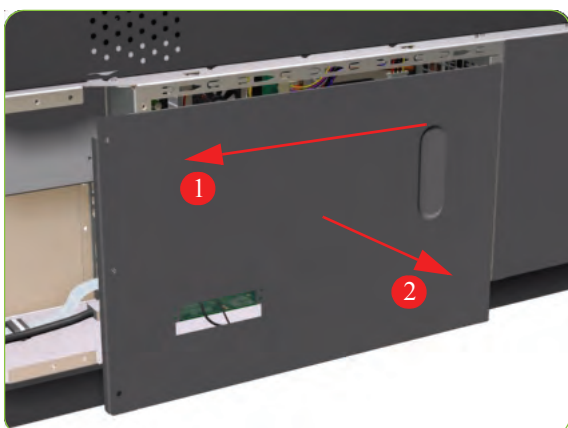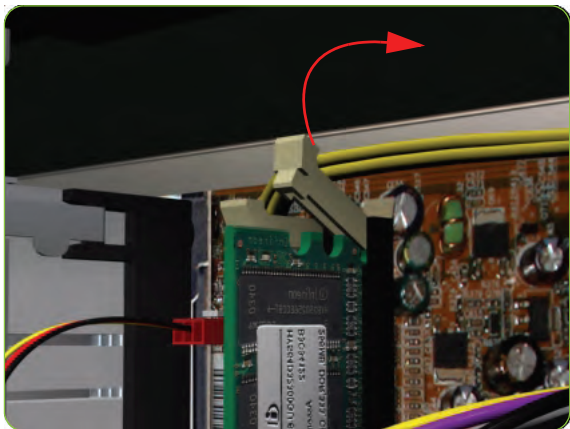
Memory Module

Removal

1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the JetDirect Card (if installed).
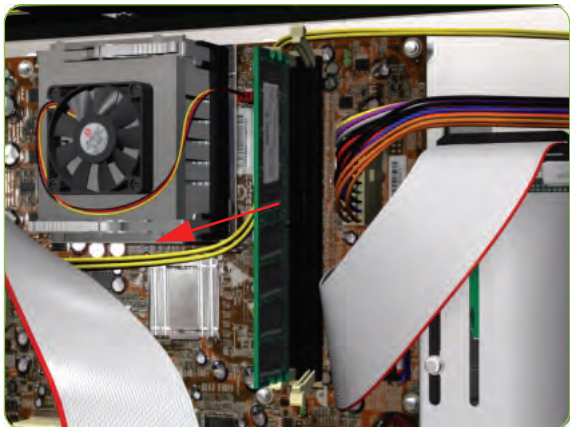

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

4. Remove the Main PCA Cover from the Printer.

Removal & Installation

5. Push the Memory Module Connector clips up and down to release the Memory Module.

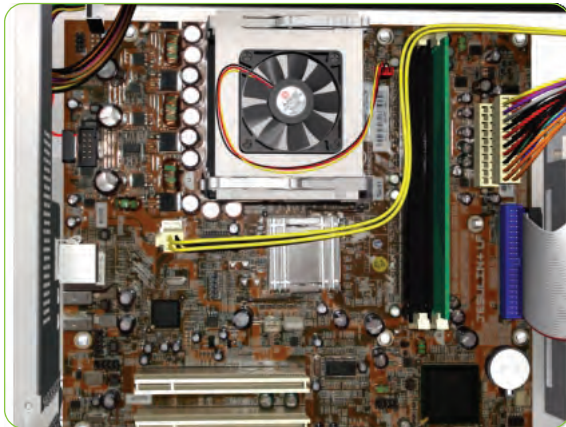6. Remove the Memory Module from the Printer.
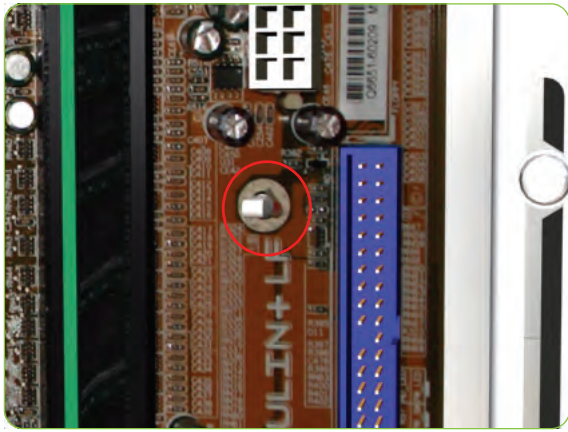
Main PCA Formatter

Removal

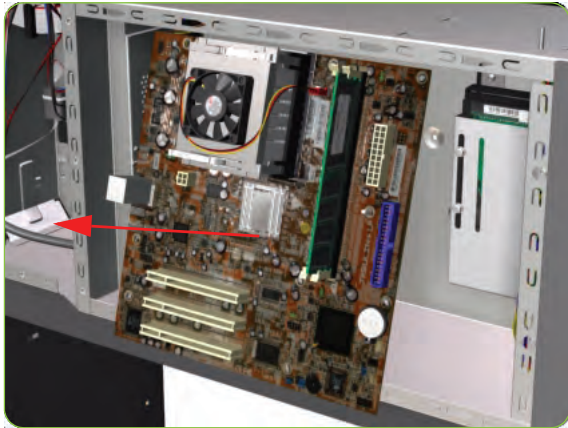⚠️ **WARNING!:** Switch off the printer and remove the power cable.

⚠️ **CAUTION:** Do NOT remove the Fan or the Processor (located under the Fan) from the Main PCA Formatter - The Fan and the Processor are part of the Main PCA Formatter support part and should be replaced as one assembly.

1. Remove the EIO to PCI Interface Card ⇒ See page 344.
2. Remove the Sausalito PCI PCA ⇒ See page 353.
3. Remove the Memory Module ⇒ See page 355.
4. Disconnect ALL cables connected to the Main PCA Formatter.

5. Remove eight T-10 screws (**Type I**) that secure the Main PCA Formatter.

6. Release the plastic locating pin that secures the Main PCA Formatter.

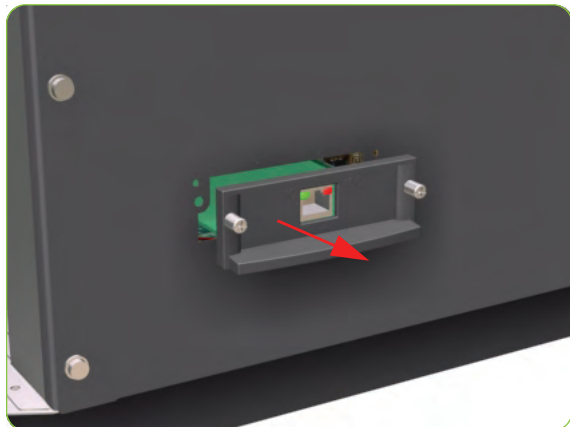7. Remove the Main PCA Formatter from the Printer.

> **NOTE:** When installing the Main PCA Formatter, make sure that you first locate it on the plastic locating pin and then install the screws.
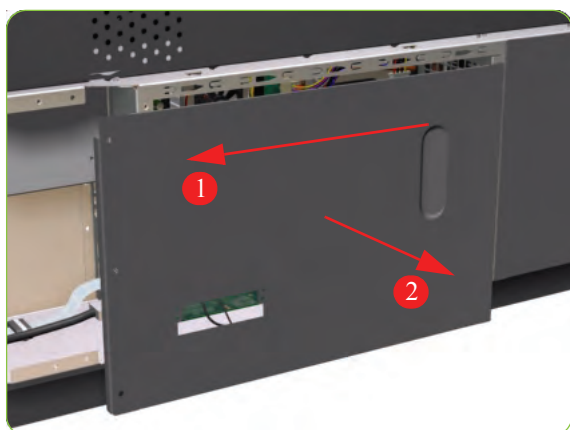
Hard Disk Drive (HDD)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
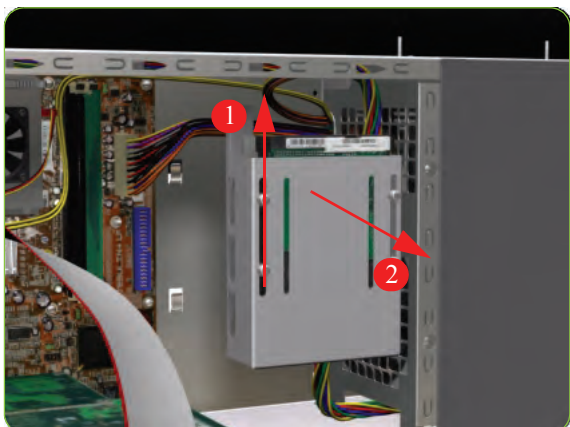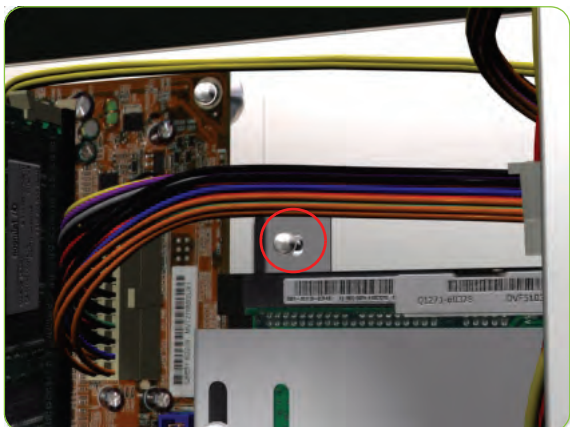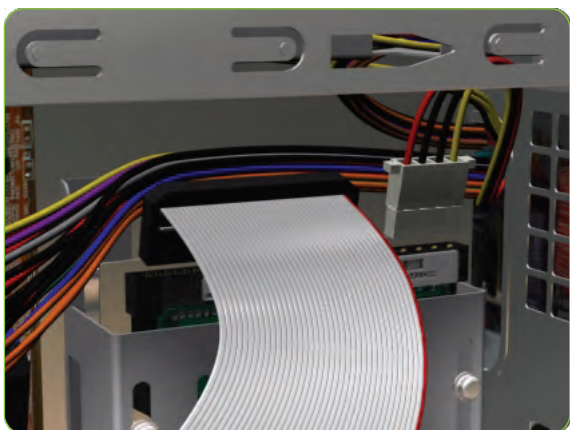
---

1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the JetDirect Card (if installed).

3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

4. Remove the Main PCA Cover from the Printer.

5. Disconnect ALL cables connected to the Hard Disk Drive.

6. Remove one T-10 screw (**Type I**) from the HDD Holder.

7. Slide the Hard Disk Drive upwards and remove from the Printer.

> **NOTE:** It is not necessary to remove the screws securing the HDD inside the metal casing.
>
> **NOTE:** After installing the NEW HDD, make sure you perform the following User Calibrations:

- Printhead Alignment.
- Paper Advance Calibration.
- Color Calibration.

> **NOTE:** After installing the NEW HDD, make sure you perform the following Service Utility:

- Carriage PCA Setup ⇒ Chapter 4.

> **NOTE:** You MUST NEVER replace both the Hard Disk Drive and the Ink Supply Tubes and Trailing Cable at the same time. If both parts need to replaced, you MUST first replace one part and then power ON the Printer until it completely initializes. Then you can power OFF the Printer and replace the other part.

Power Supply Unit (PSU)

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
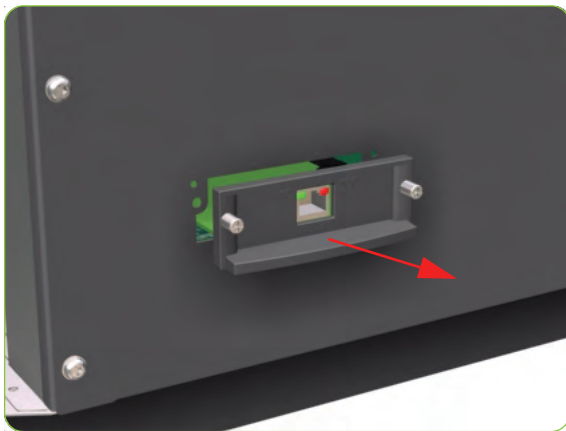
1. Remove the Left Cover ⇒ See page 254.

1. Remove the Right Connector Cover ⇒ See page 265.

2. Remove:
   - For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   - For the 60-inch model, the Electronics Module Extension⇒ See page 272.

3. Remove the JetDirect Card (if installed).

4. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.
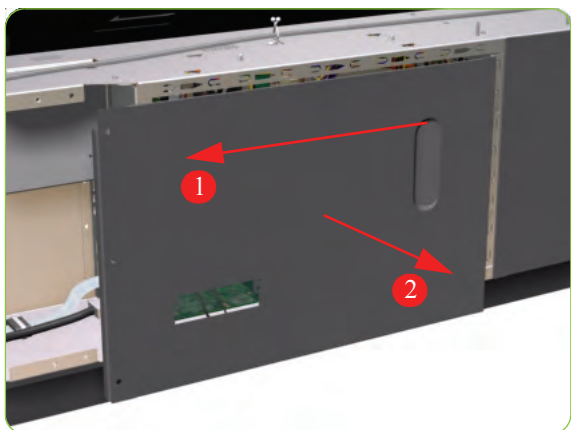
5. Remove the Main PCA Cover from the Printer.
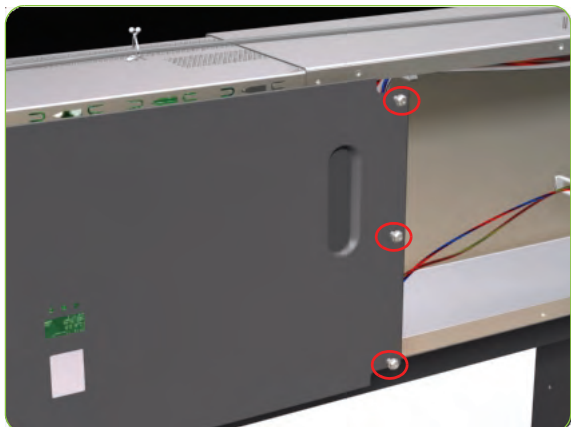
6. Remove three T-15 screws (**Type A**) that secure the PSU cover.
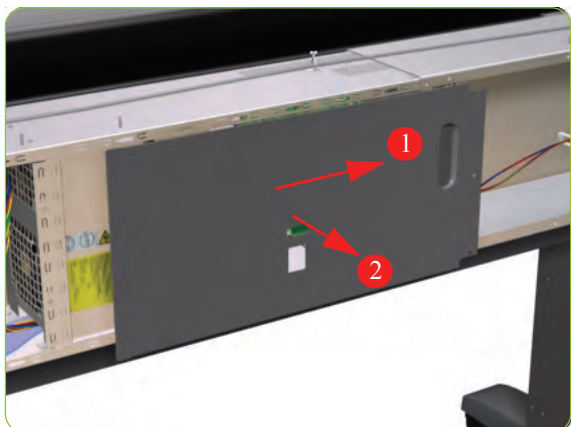
7. Remove the PSU Cover from the Printer.

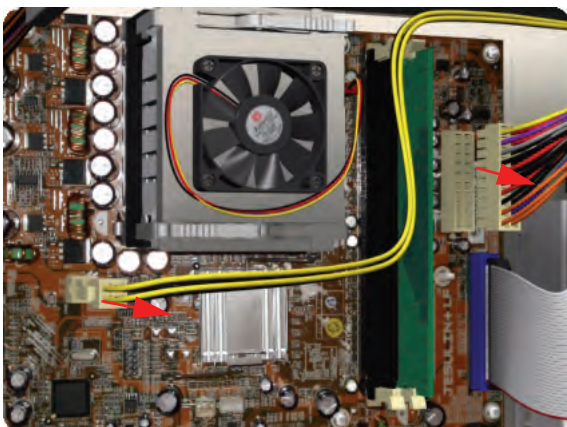8. Disconnect the Power Supply and Interconnect cables from the PrintMech PCA.

9. Remove six T-10 screws (**Type I**) that secure the Interconnect PCA Cover.
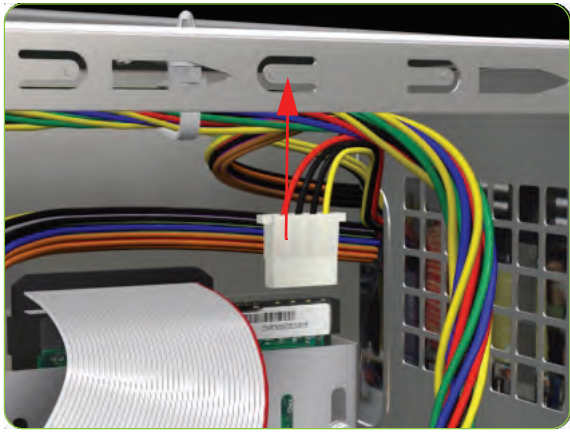

10. Remove the Interconnect PCA Cover from the Printer.
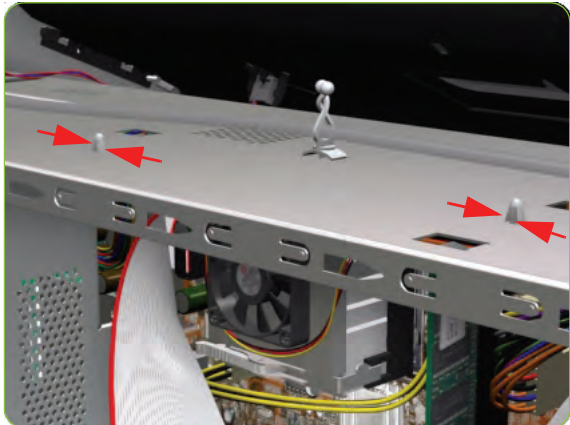

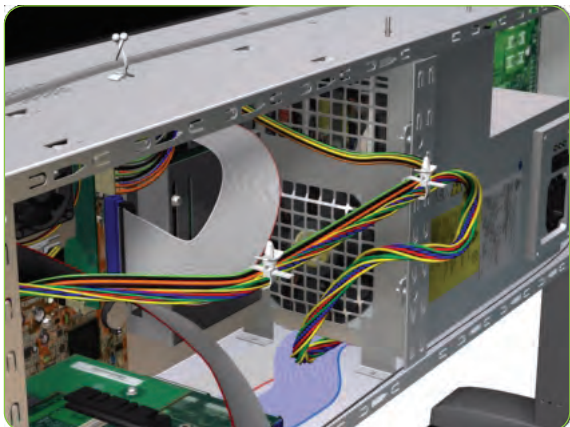11. Disconnect one cable from the Interconnect PCA.

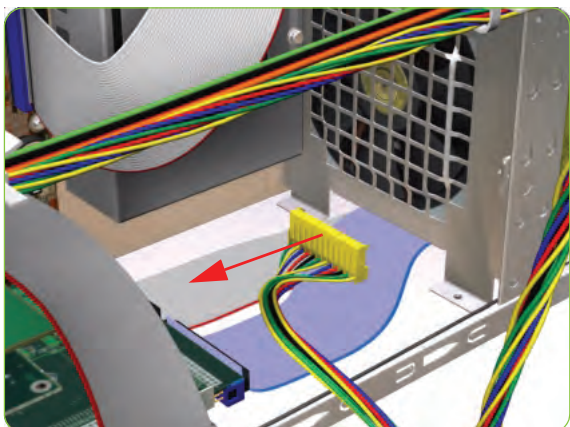12. Disconnect two power supply cables from the Main PCA.

13. Disconnect one cable from Hard Disk Drive.

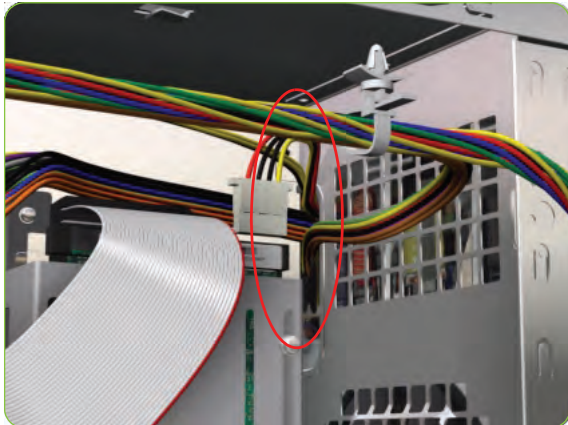14. Squeeze both Cable Clamps to release from the Electronics Module.

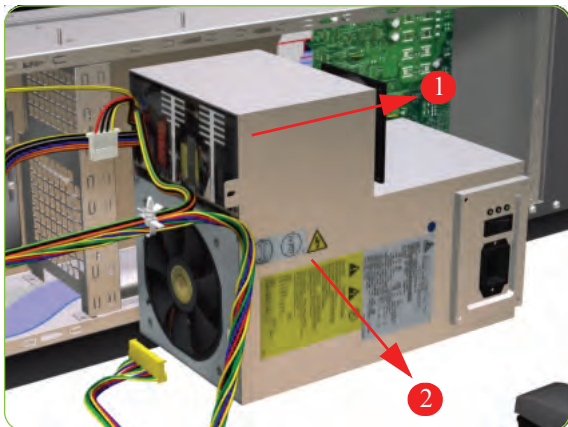15. Lower the cables out of the way.

16. Unroute the Interconnect Cables disconnected in step 8 from below the Power Supply Unit.

17. Remove four T-10 screws (**Type I**) that secure the Power Supply Unit.

18. Route the cables through the hole in the Electronics Module.

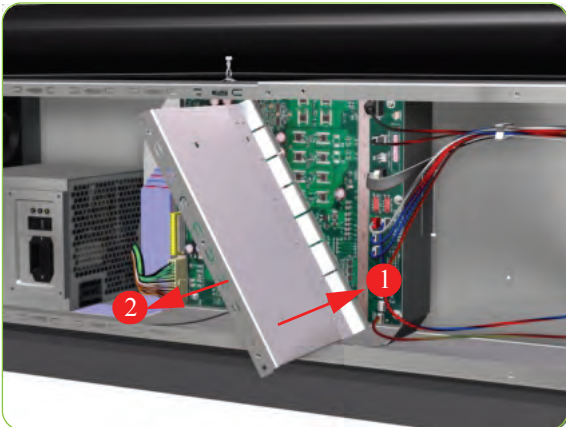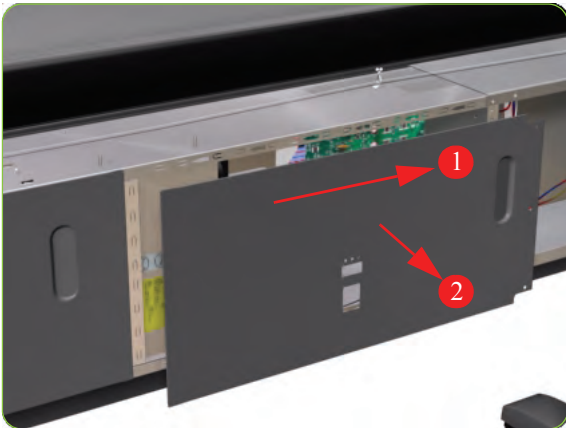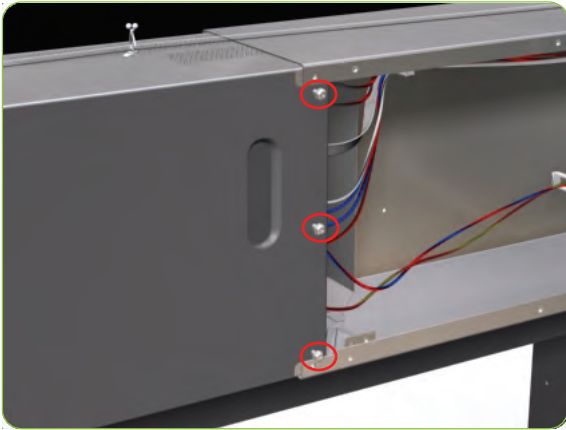19. Remove the Power Supply Unit from the Printer.
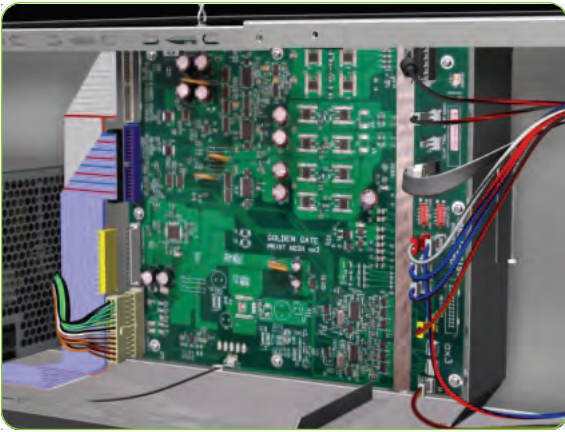
PrintMech PCA

Removal

⚠️   **WARNING!:** Switch off the printer and remove the power cable.

1. Remove:
   - For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   - For the 60-inch model, the Electronics Module Extension⇒ See page 272.

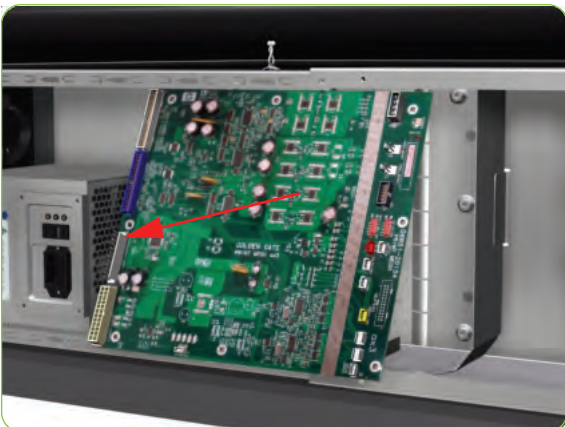2. Remove three T-15 screws (**Type A**) that secure the PSU cover.

3. Remove the PSU Cover from the Printer.

4. Slide the PrintMech Cover out of the Printer.

5. Disconnect ALL cables from the PrintMech PCA.

6. Remove eight T-10 screws (**Type I**) that secure the PrintMech PCA.

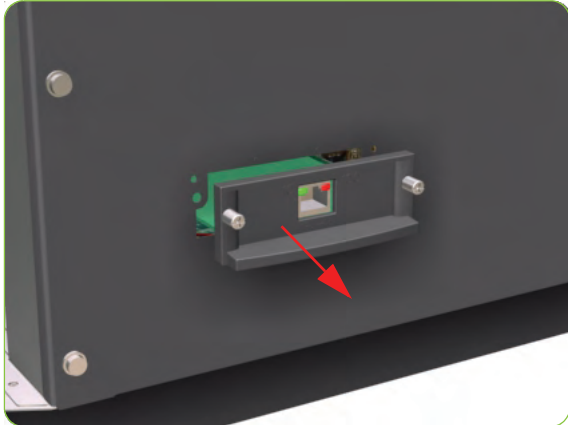7. Remove the PrintMech PCA from the Printer.

Formatter Battery

Removal

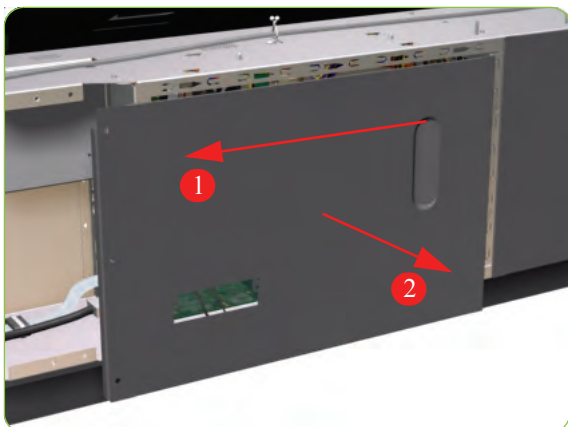⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the JetDirect Card (if installed).
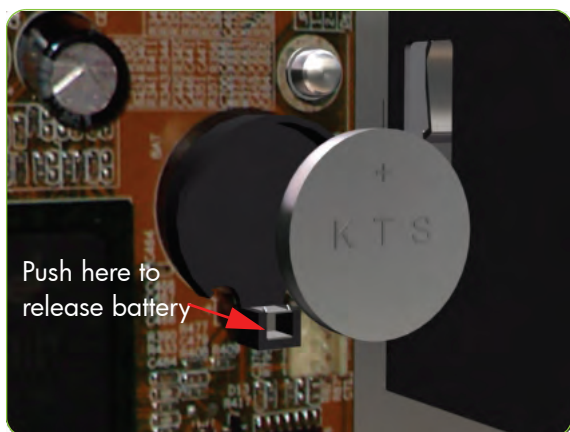
3. Remove three T-15 screws (**Type A**) that secure the Main PCA cover.

4. Remove the Main PCA Cover from the Printer.

Push here to
release battery

5. Push the clip down and release the battery from the Main PCA.
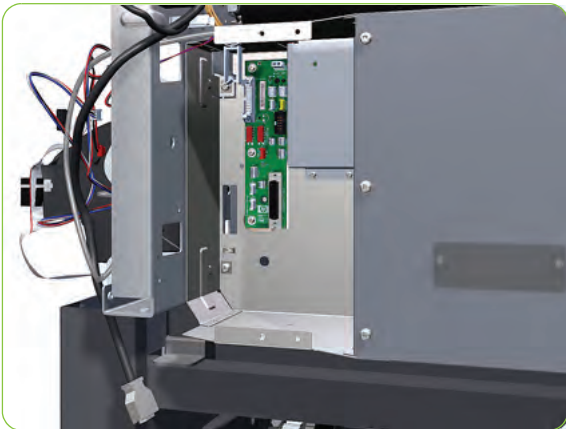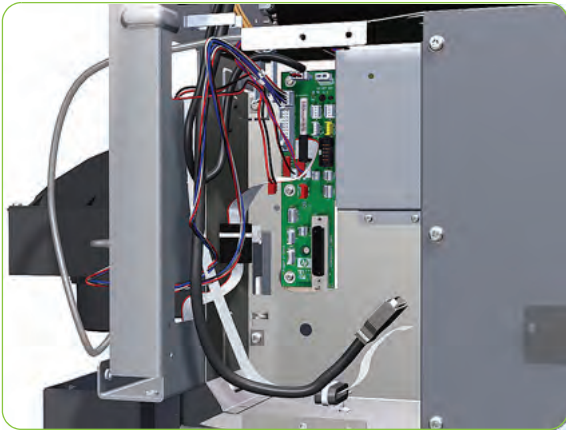
Formatter Battery   369
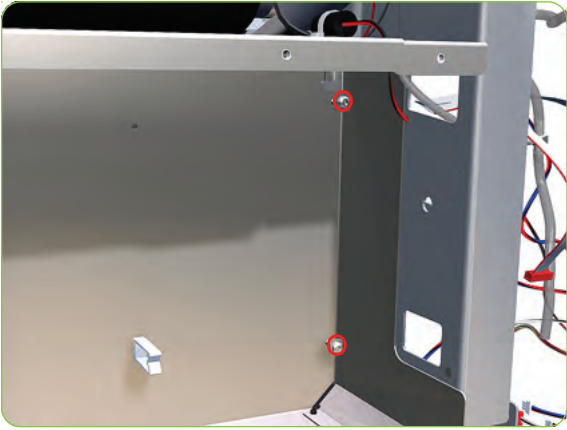
Electronics Module

Removal

WARNING!: Switch off the printer and remove the power cable.

1. Remove the Right Connector Cover ⇒ See page 269.
2. Remove the Left Connector Cover:
   - For the 42-inch model ⇒ See page 271.
   - For the 60-inch model ⇒ See page 272.
3. Disconnect ALL the cables connected to the right Interconnect PCA and the Sausalito PCI PCA.

4. Unroute all the disconnected cables so they are clear of the Electronics Module.

5. Remove two T-20 screws (**Type B**) that secure the right side Electronics Module.

6. Remove two T-20 screws (**Type B**) that secure the left side Electronics Module.
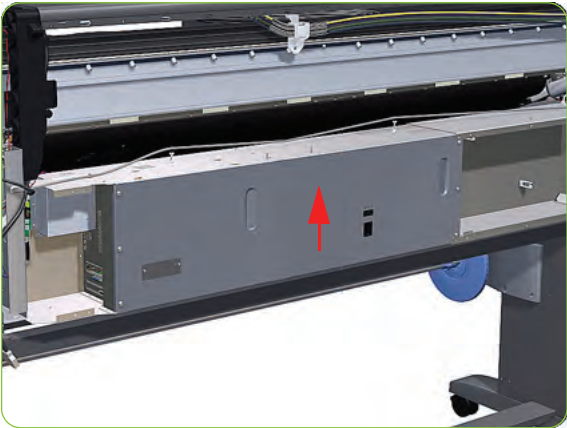
7. Lift the Electronics Module sufficiently (approximately 2 cm) to release it from the attachments.

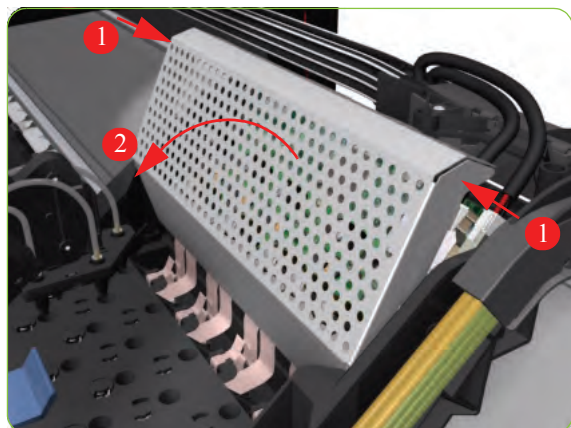8. Remove the Electronics Module from the Printer.
9.

Line Sensor Assembly

Removal

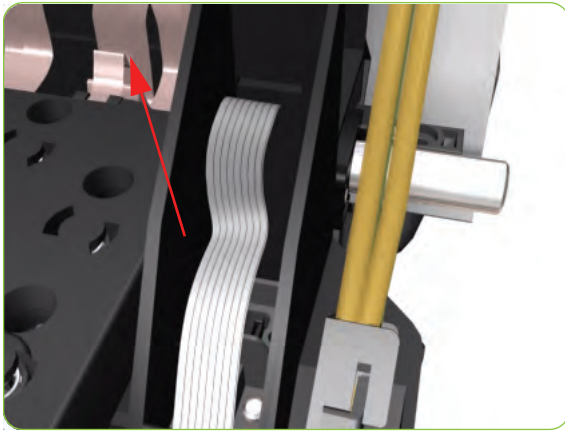**WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Press the two side of the Carriage PCA Cover and unclip from the Carriage Assembly.

3. Release the clip and disconnect the Line Sensor cable from the Carriage PCA.

4. Remove one T-15 screw (**Type G**) that secures the Line Sensor to the carriage Assembly.

Removal & Installation

5. Remove the Line Sensor from the Carriage Assembly.

> **NOTE:** After installing the NEW Line Sensor, make sure you perform the following Service Calibrations:
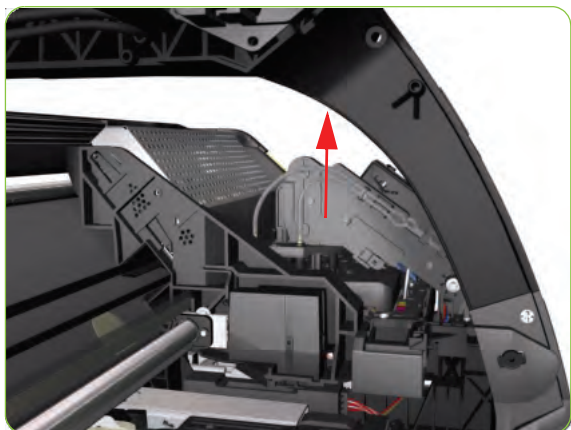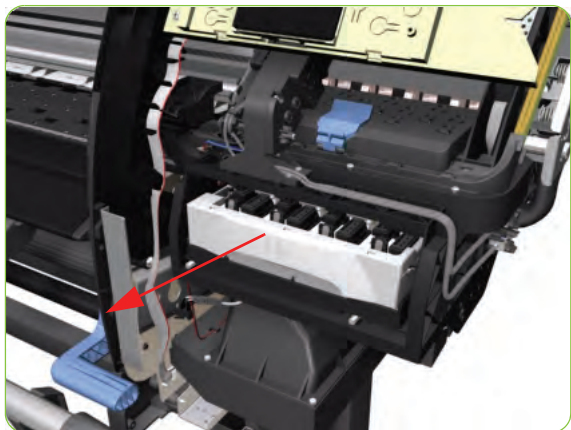
- Line Sensor Calibration $\Rightarrow$ Chapter 5.

Removal & Installation

Color Sensor Assembly

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Open the Window.
2. Remove the Right Cover ⇒ See page 248.
3. Remove the Left Cover ⇒ See page 254.
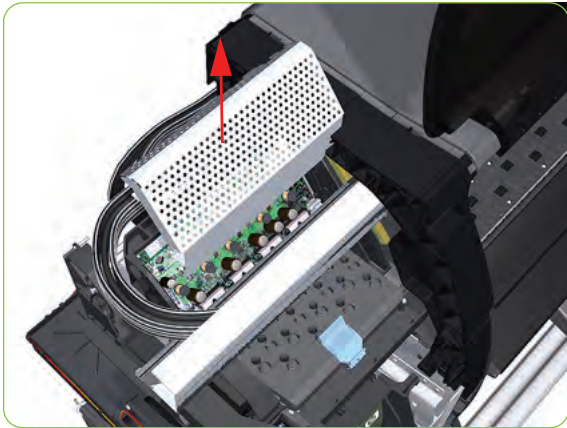4. Uncap the Carriage Assembly by manually pulling out the Printhead Maintenance Cartridges tray.

5. Lift the Primer and hold the Primer to its maximum position to avoid damaging it when you move the Carriage Assembly in the next step.
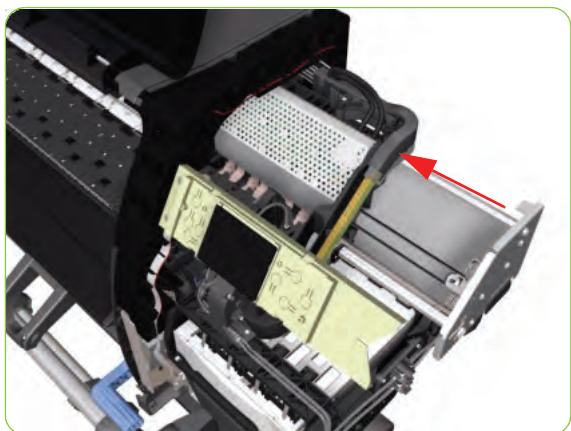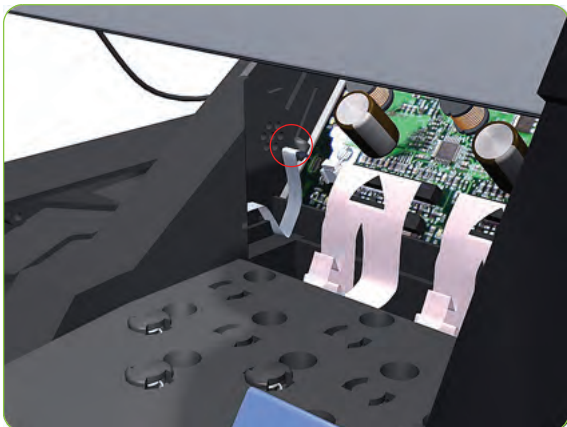
6. Move the Carriage Assembly out of the Service Station.
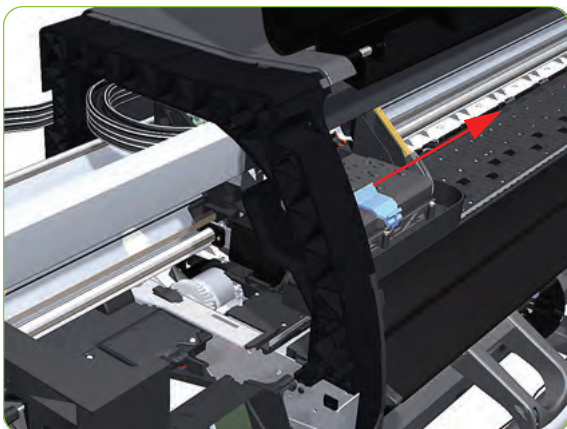
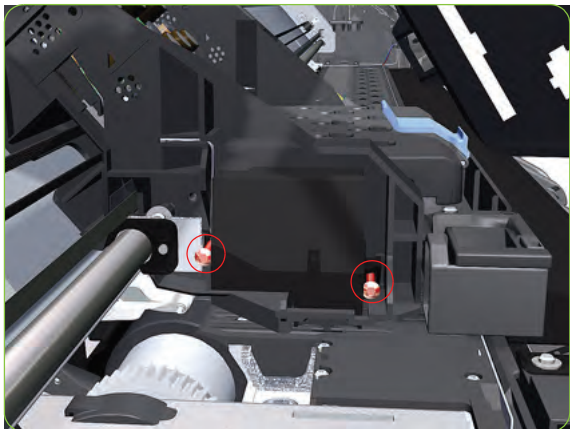7. Move the Carriage to the fully left position.

8. Press the two sides of the Carriage PCA Cover, unclip it from the Carriage Assembly and remove it.
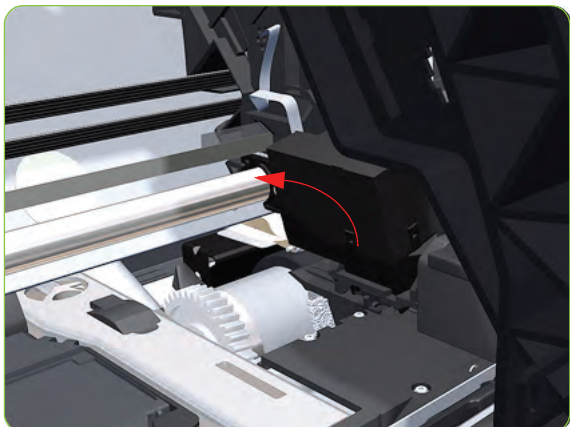

9. Release the clip and disconnect the Color Sensor cable from the Carriage PCA.

10. Move the carriage sufficiently to the right to gain access the Color Sensor attachment screws.

11. Remove two T-15 screw (**Type G**) that secures the Color Sensor to the carriage Assembly.

12. Tilt the Color Sensor so it can be removed.
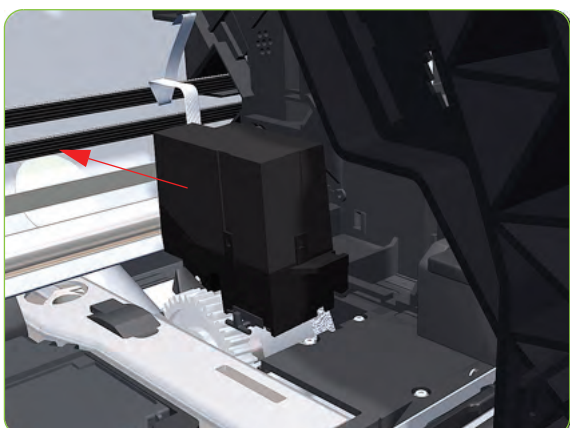
13. Remove the Color Sensor from the Carriage Assembly.

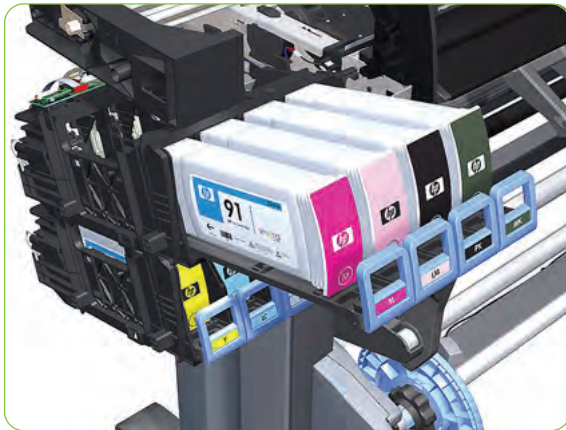📝 **NOTE:** After installing the NEW Color Sensor, make sure you perform the following Service Calibrations:

• Color Sensor Calibration ⇒ Chapter 5.

Color Sensor Actuator Assembly

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.
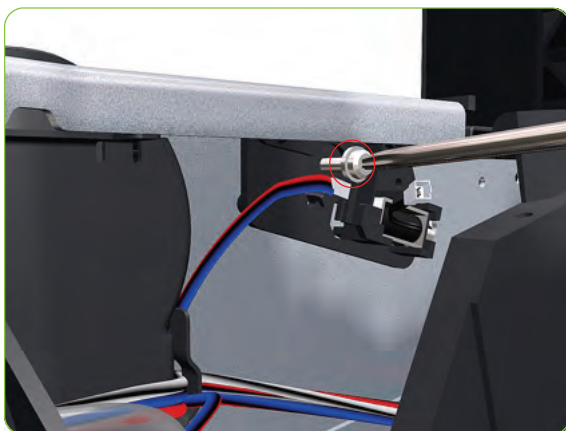
1. Remove the Left Cover ⇒ See page 254.
2. Remove the Left Spittoon ⇒ See page 312.
3. Slide out the top row of Ink Cartridges from the Ink Supply Station
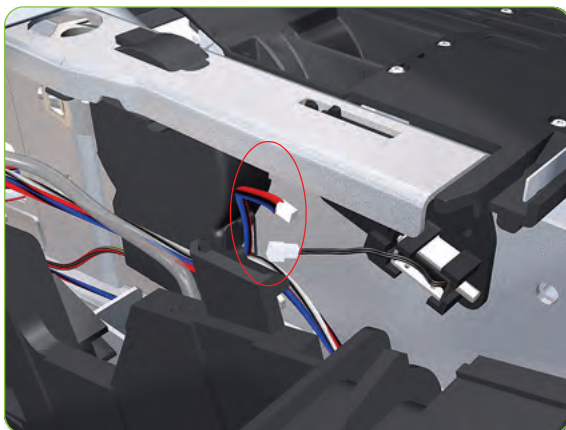
4. Disconnect the Color Sensor Actuator Assembly.

5. Remove one T-15 screw (**Type G**) that secures the Color Sensor Actuator Assembly to the printer.
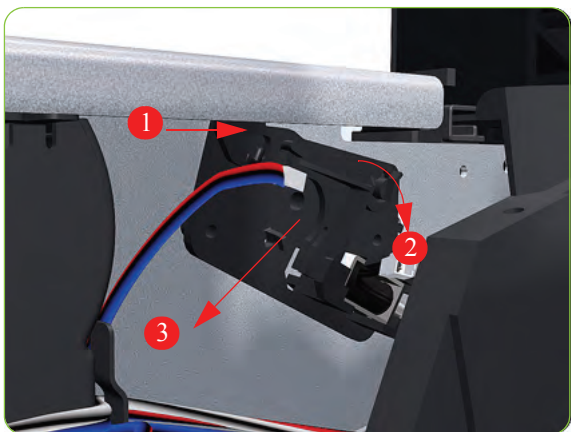
6. Remove the Color Sensor Actuator Assembly to the printer.

Media Deflector

Removal

1. Remove two T-20 screw (**Type B**) that secures the Media Deflector that needs to be replaced.
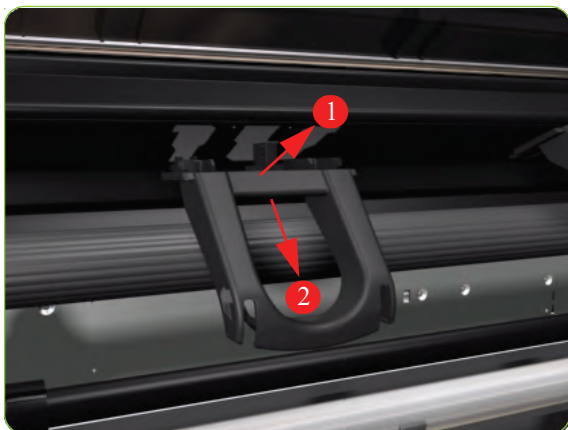
2. Remove the Media Deflector (slide upwards first) from the Printer.

Output Platen

Removal

⚠ **WARNING!:** Switch off the printer and remove the power cable.

1. Open the Window.

2. Remove four T-15 screws and two cross-head screws that secure the Output Platen.

3. Release the clips on the left and right hand sides of the Front Platen.
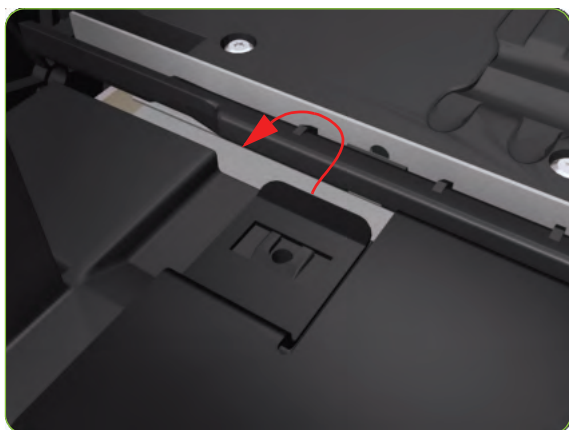
4. Pull out the right hand side of the Front Platen.

5. Carefully slide the Front Platen to the right and then remove from the Printer.

NOTE: If a NEW Front Platen is to be installed, make sure that you first remove ALL Media Deflectors (See page 379) from the OLD Front Platen and install them on the New Front Platen.

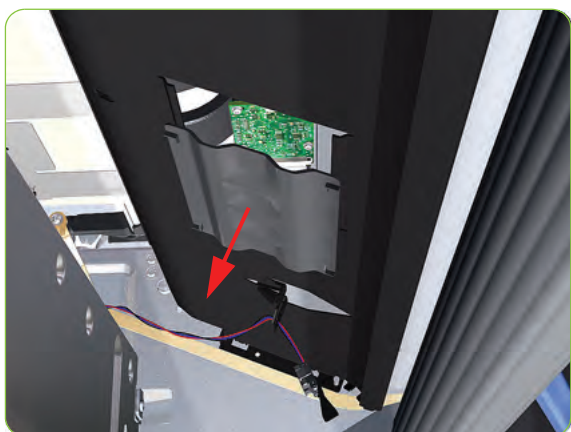# Center Platen

Removal

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Left Cover ⇒ See page 254.
3. Remove the Top Cover ⇒ See page 261.
4. Remove the Service Station ⇒ See page 284.
5. For the 42-inch model, remove the Rear Door ⇒ See page 265.
6. Squeeze the corners of the OMAS Access Cover release it from the bottom of the printer.
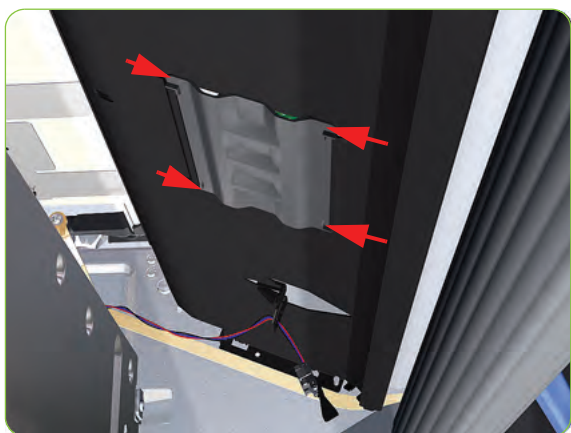
7. Remove the OMAS Access Cover from the printer.
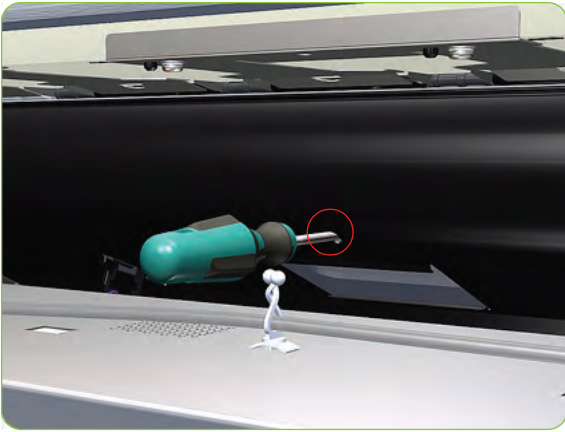
8. Insert the T-20 thin bladed torx screwdriver (supplied with the replacement OMAS) into the access hole at the rear of the printer.
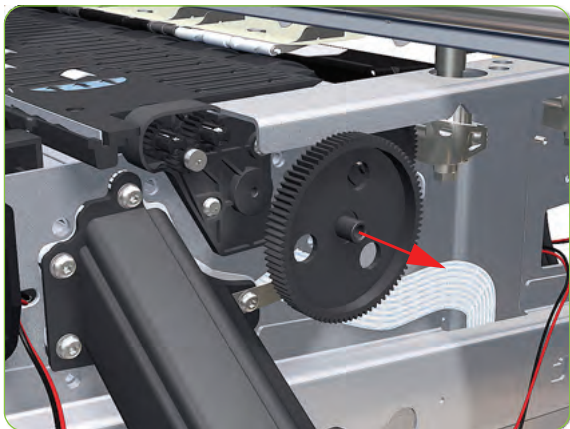

9. Loosen approximately two turns the T-20 screw which secures the OMAS horizontally to the printer.

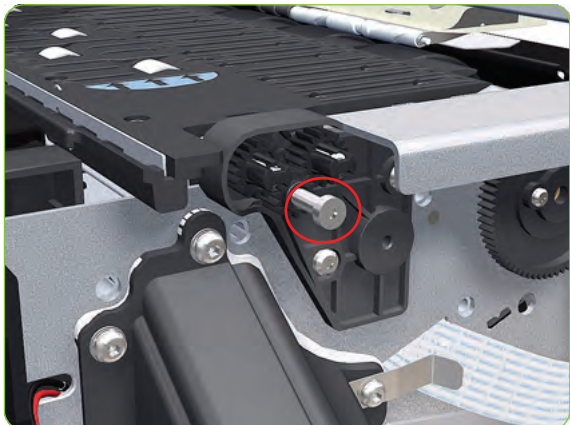10. From the bottom of the printer, loosen approximately two turns the T-20 screw which secures the OMAS vertically to the printer.
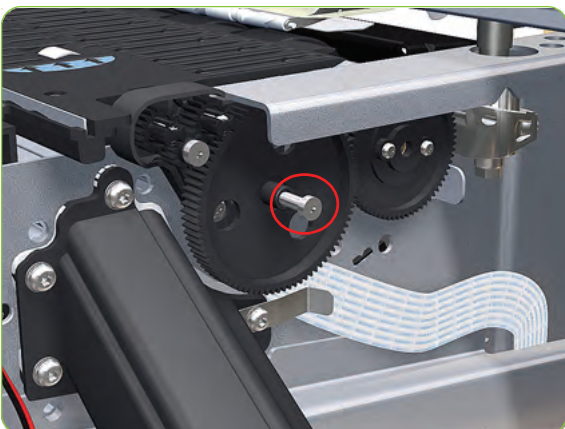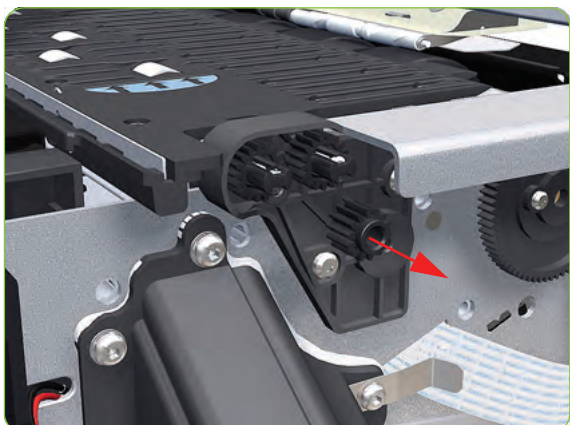

11. Remove one T-15 screw (**Type P**) that secures the Center Platen Gear.

12. Remove the Center Platen Gear from the Printer.

13. Remove one T-15 screw that secures the small Gear.

14. Remove the small Gear from the Printer.

15. Remove the two small Platen Gears by releasing the clips.
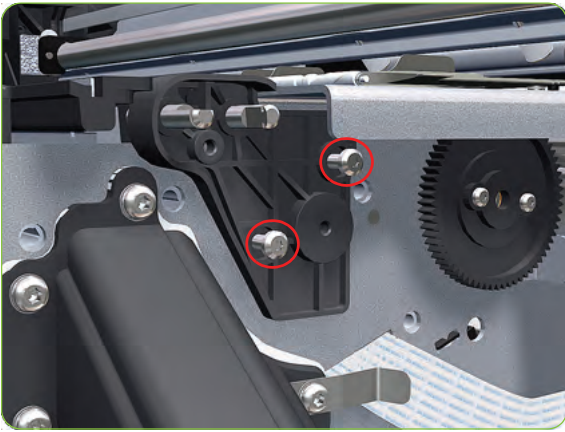
16. Remove two T-20 screws (**Type Q**) that secure the Gear Bracket.
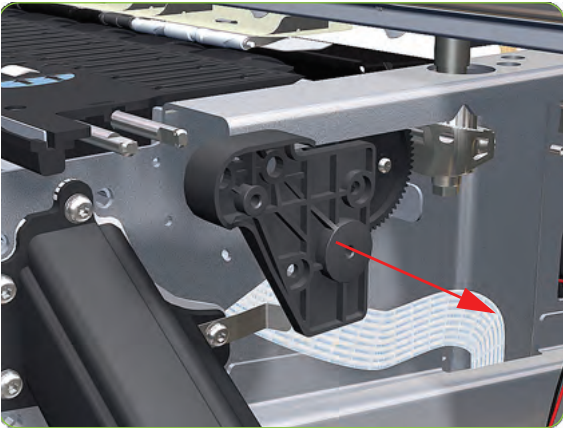
17. Remove the Gear Bracket from the Printer.

18. Move the Carriage Assembly fully to the right.

19. Remove all the T-10 screws (**Type C**) that secure the Center Platen:
• 80 T-10 screws for the 42-inch model
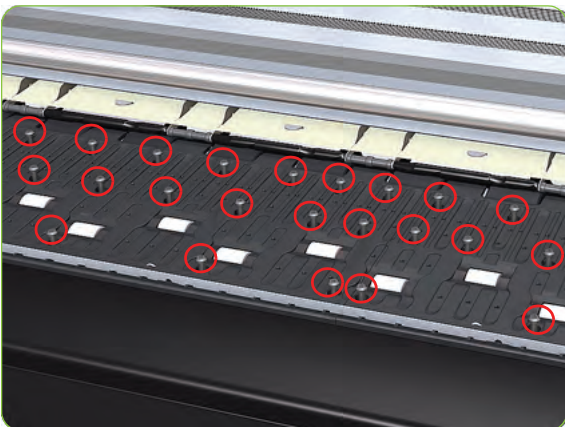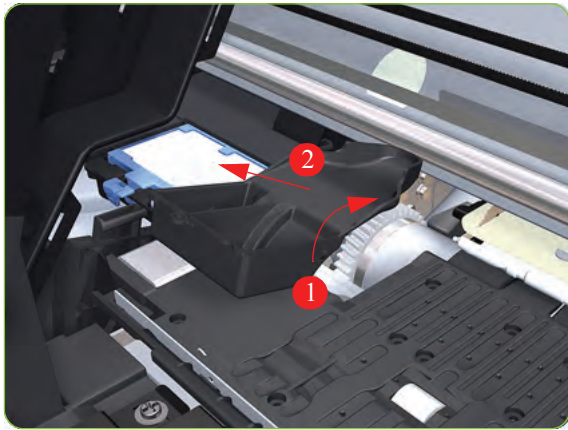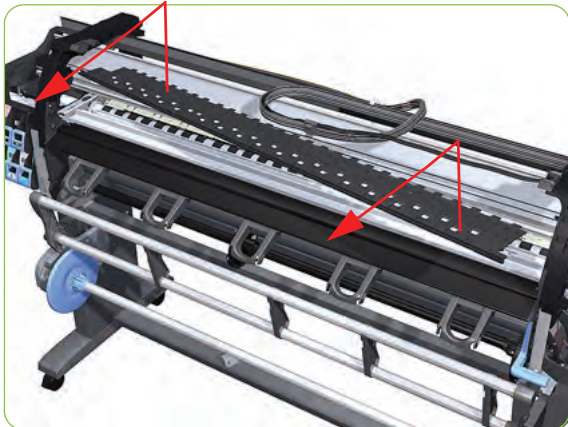• 116 T-10 screws for the 60-inch model.

20. Remove the Secondary Spittoon Blank.

21. Remove the Center Platen from the Printer.

Installation of the Foams

Before installing the Center Platen, make sure you check the foams that are stuck on the Vacuum Beam. These foams should ONLY be changed if they are damaged. In the circumstance where they do need to be changed, use the following illustrations to guide you:

Foams will need to be trimmed when stuck to the Vacuum Beam

NOTE: Make sure you take note of the positions of the Foams located underneath the center Platen.

NOTE: When reinstalling the parts, make sure you apply the grease (included with the support part) to the gears.

NOTE: After installing the NEW Center Platen, make sure you perform the following Service Calibration:

- Paper Advance Calibration ⇒ Chapter 5.

Installation

NOTE: To simplify the installation of the OMAS an Attachment Screw Retainer has been added to hold the two T-20 attachment screws. This part is delivered with the Center Platen in case either of the OMAS attachment screws are completely removed during the removal of the Center Platen.

OMAS Attachment Screws Completely Removed during Center Platen Removal

1. Completely remove OMAS from the Printer ⇒ See
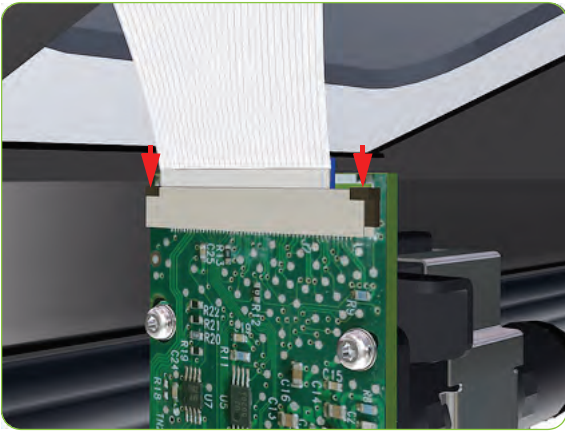
page 335.

2. Install the Center Platen.

📝 **NOTE:** When reinstalling the parts, make sure you apply the grease (included with the support part) to the gears.

3. Position the Attachment Screw Retainer on the OMAS and secure it with the T-8 attachment screw provided with Center Platen.

4. Verify that the two T-20 attachment screws are correctly positioned in the Attachment Screw Retainer.

5. Position the OMAS under the Printer and connect the large ribbon.

Removal & Installation
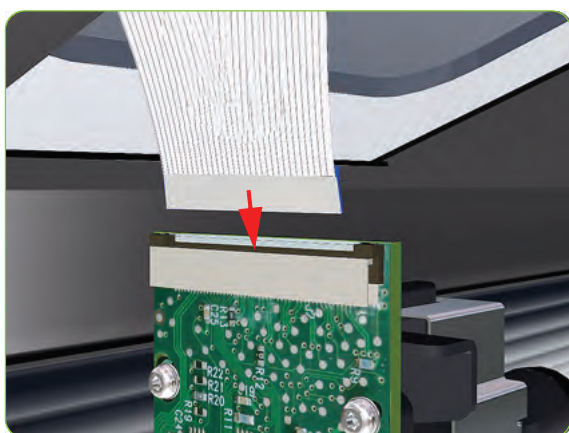
6. Lock the clips of the large ribbon cable connector.

7. Carefully push the OMAS fully up into its mounting so it protrudes slightly (approximately 0.1 mm) above the Center Platen. To ensure the OMAS is correctly positions, slide a sheet of paper over the Platen Ribs until it is stopped by the OMAS. This ensures the OMAS is protruding slightly above the platen.

⚠ **CAUTION:** Make sure the OMAS is pushed completely up into its mounting or you will encounter an error during the OMAS calibration because it will not be able to focus on the paper.
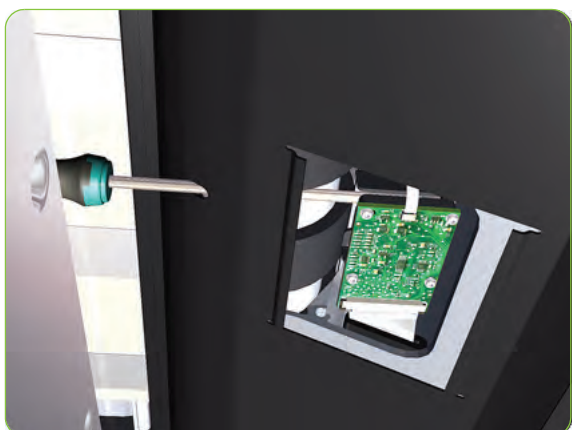

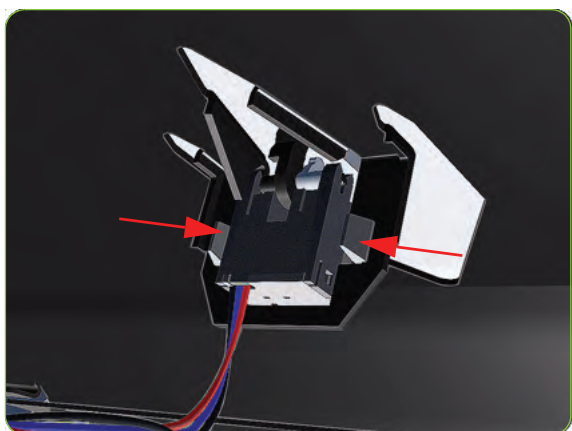8. If the paper is not stopped by the OMAS, repeat step 4 to ensure the OMAS is push fully up into its the mounting.

9. Fully tighten the T-20 vertical attachment screw.

Center Platen   389

10. Insert the T-20 thin bladed torx screwdriver into the access hole at the rear of the printer.

11. Fully tighten the T-20 horizontal attachment screw which secures the OMAS to the printer.

12. Clip the Media Sensor to the Center Guide.

13. Clip the OMAS access cover back into place by sliding one edge of the cover into the slot and then applying enough pressure to it so you can clip it into the other slot.

14. Calibrate the following:
   • OMAS ⟹ See page 156.
   • Paper Advance Calibration ⟹ See page 146.

Cartridge Tray

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Release the Tray Lever of the required color and pull out the Tray.

2. Remove the Ink Cartridge if installed.

3. Press down on the Tray clip.

4. Pull the Tray completely out of the Printer.

📝 **NOTE:** Note that each Cartridge Tray is different even though they look very similar. When selecting the Cartridge Tray from the Support Part (it contains eight Cartridge Trays), choose the Tray that exactly matches the one that you have just removed.
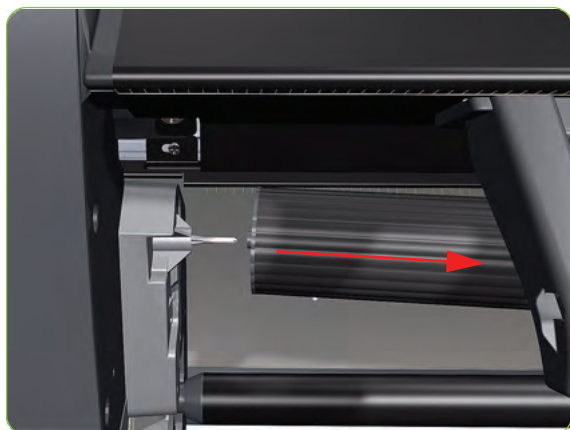
Input Roller

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

---
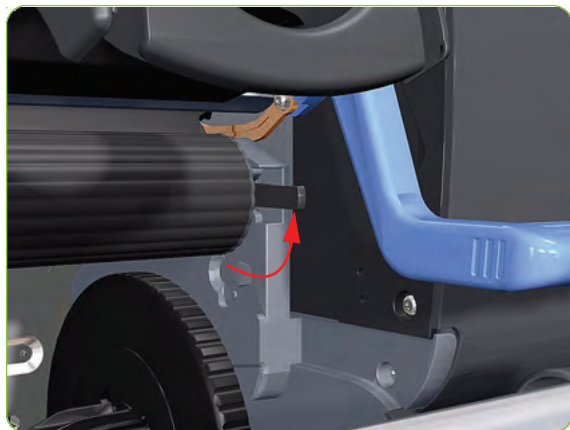
1. Raise the right lever to release the right hand end of the Input Roller.

2. Pull out the right hand end of the Input Roller from the Printer.

3. Move the Input Roller to the right to disengage it from the Printer.

4. Remove the Input Roller from the Printer.

Maintenance Cartridge Door

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Open the Maintenance Cartridge Door.

2. Unclip and remove the Maintenance Cartridge Door from Right Cover.

Removal & Installation

Maintenance Cartridge Door Sensor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Disconnect the Maintenance Cartridge Door Sensor cable.

3. Release one T-10 screw the attaches the Maintenance Cartridge Door Sensor assembly to the printer.

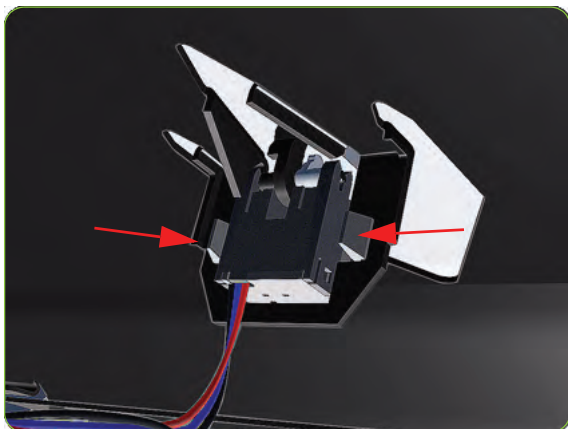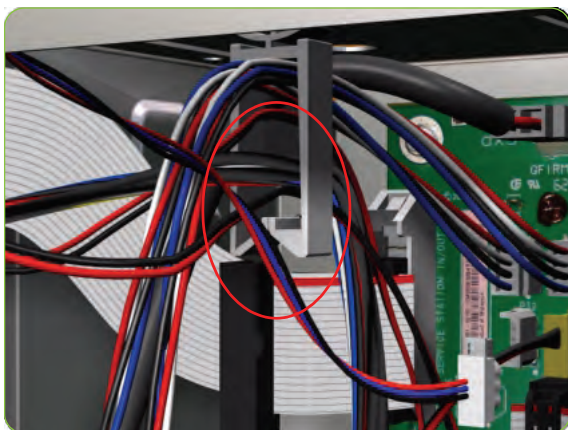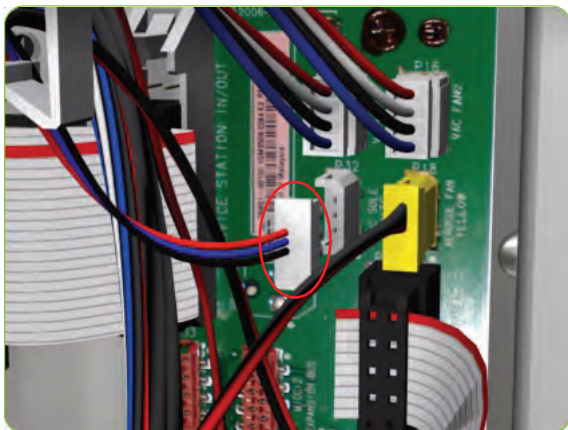4. Remove the Maintenance Cartridge Door Sensor assembly to the printer.
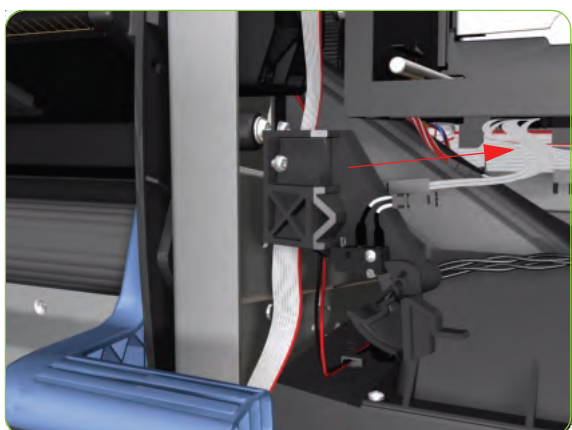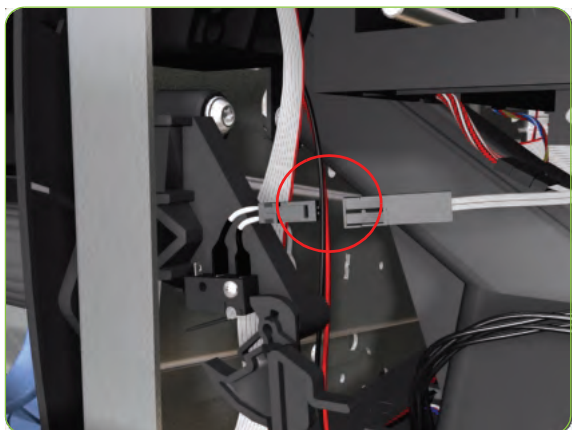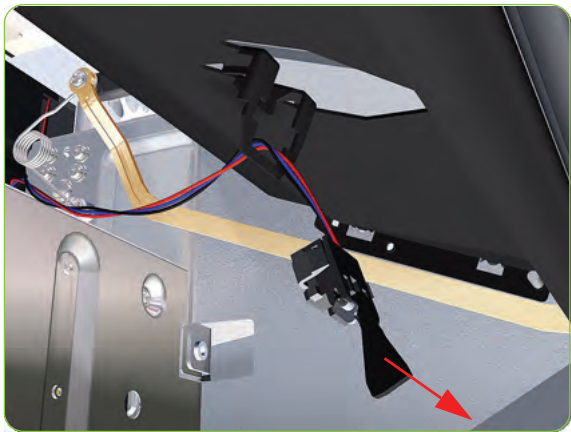
Media Sensor

Removal

⚠ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Rear Door ⇒ See page 267.
2. Remove the Right Connector Cover ⇒ See page 269.
3. Disconnect the Media Sensor cable from the Interconnect PCA.

4. Release the Media Sensor cable from the clip located on the Electronics Module.

5. Unclip the Media Sensor from the Center Guide.

6. Pull the cable and connector through the mounting hole and remove the Media Sensor from the Printer.
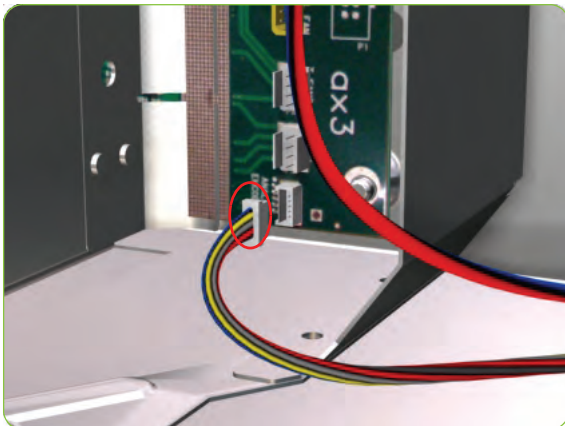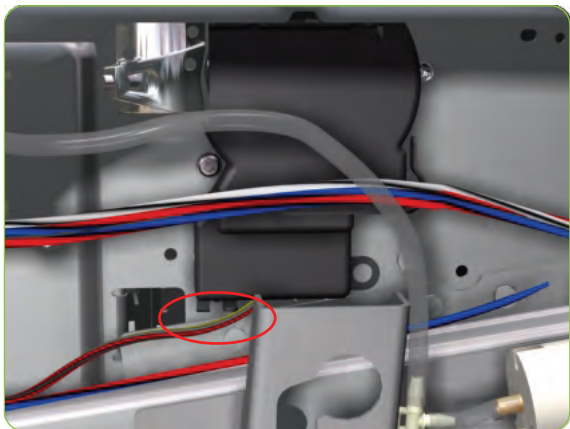
Encoder Disc and Sensor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

⚠️ **CAUTION:** Please handle the Encoder Disc very carefully since any finger prints, scratches or stains could cause the Printer to malfunction.

1. Remove the Left Cover ⇒ See page 254.
2. Remove:
   * For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   * For the 60-inch model, the Electronics Module Extension⇒ See page 272.
3. Remove the Ink Supply Station ⇒ See page 305.
4. Disconnect the Encoder Sensor cable from the PrintMech PCA.

5. Release the Encoder Sensor cable from the clip located on the Electronics Module.
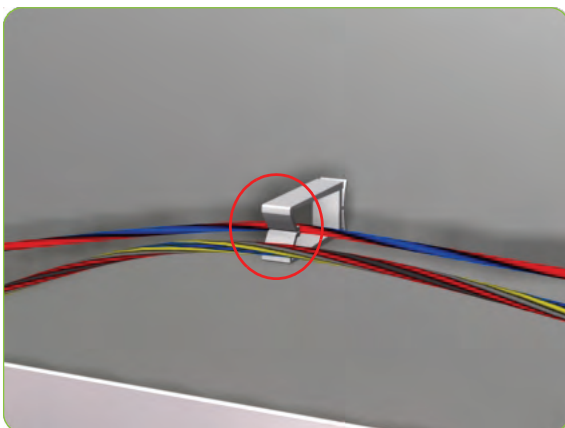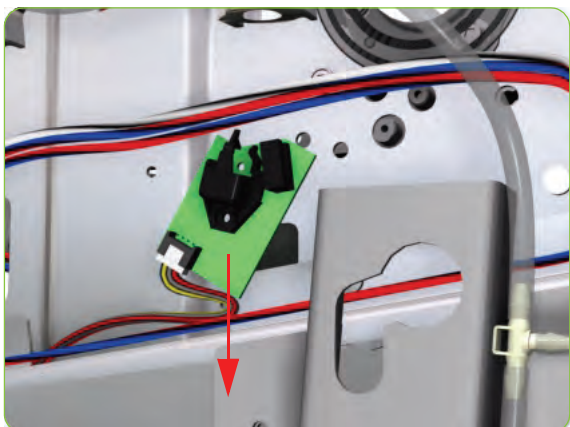
6. Release the Encoder Sensor cable from the clip located on the Encoder Disc Cover.
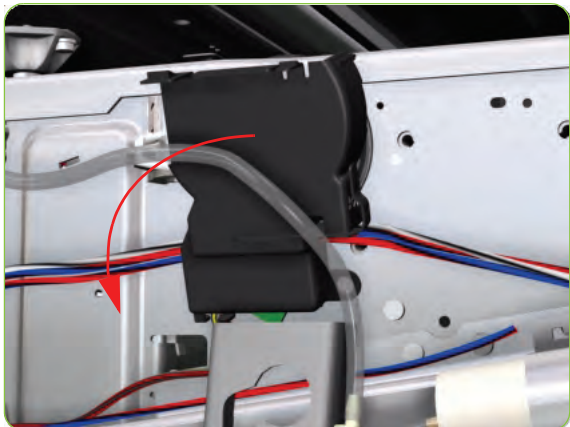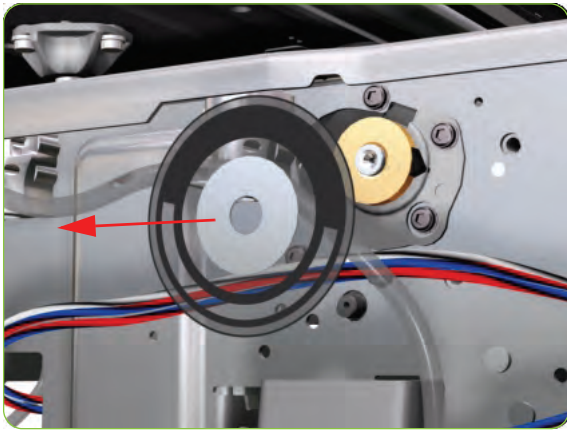

7. Unclip the Encoder Disc Cover and remove from the Printer.

8. Remove one T-8 screw (**Type D**) that secures the Encoder Sensor to the Chassis.

9. Remove the Encoder Sensor from the Printer.

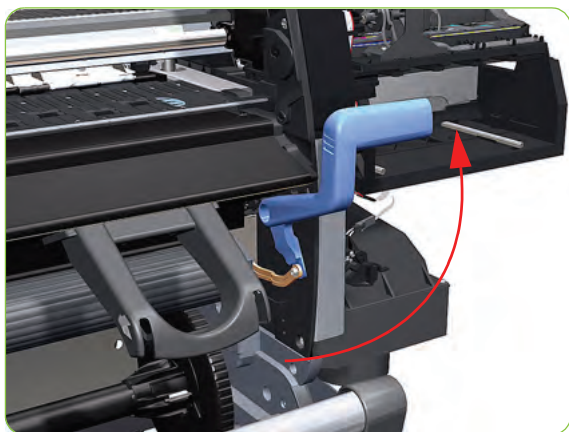10. Carefully peel the Encoder Disc from the Drive Roller.
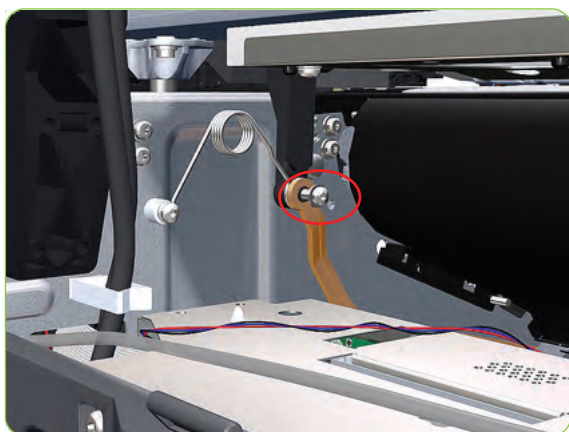
Media Lever Assembly

Removal

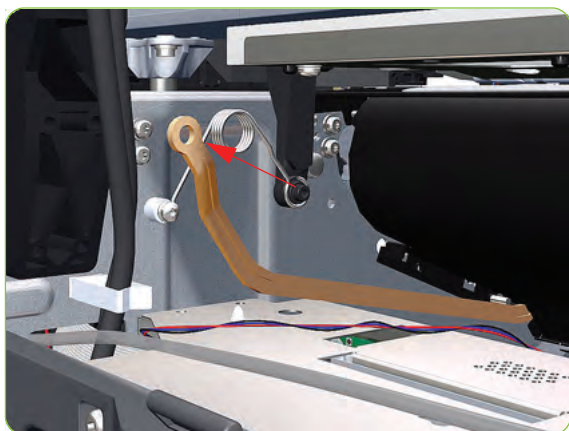⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⟹ See page 248.
2. Remove the Rear Door ⟹ See page 267.
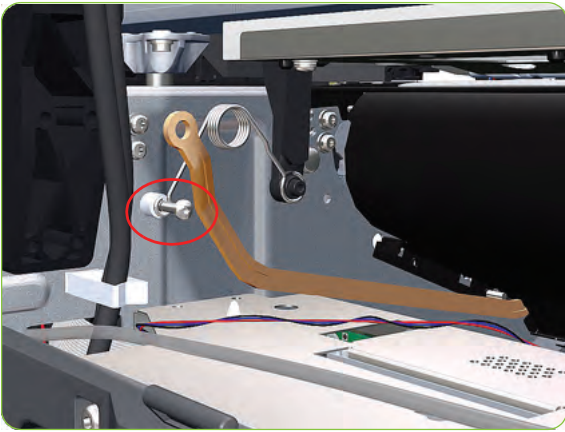3. Raise the Media Lever.

4. Remove one T-15 screw (**Type F**) that secures the Linkage to the Spring.
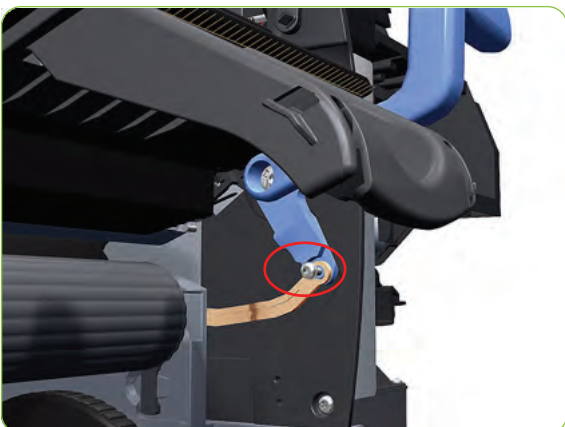

5. Remove the Linkage from the Spring.

6. Remove one T-20 screw (**Type A**) that secures the Spring to the Spacer.
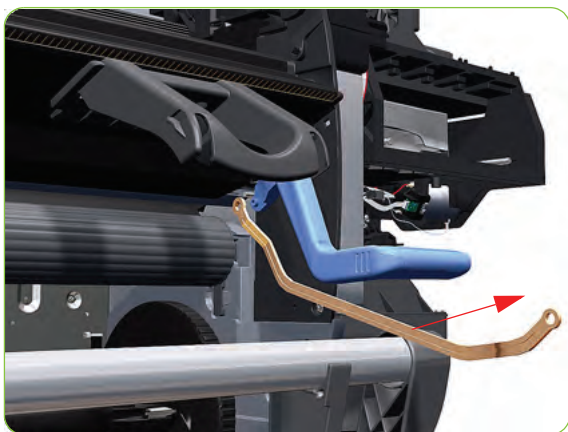

7. Remove the Spring and plastic washer.

8. Raise the Media Lever to gain access to the linkage attachment screw.
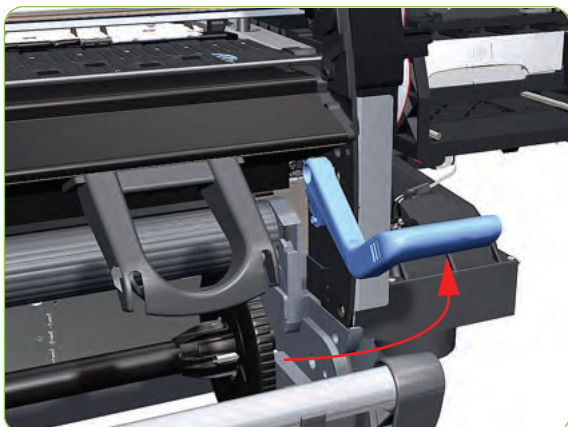

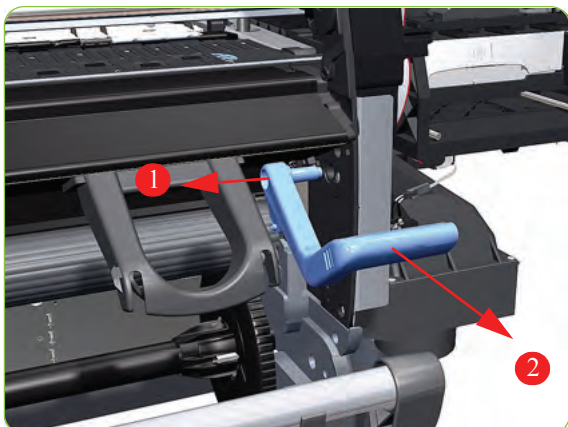9. Remove one T-15 screw (**Type F**) that secures the Media Lever to the Linkage.

10. Remove the Media Lever Linkage from the Printer.

11. Remove one T-20 screw (**Type O**) that secures the Media Lever to the Right Trim.
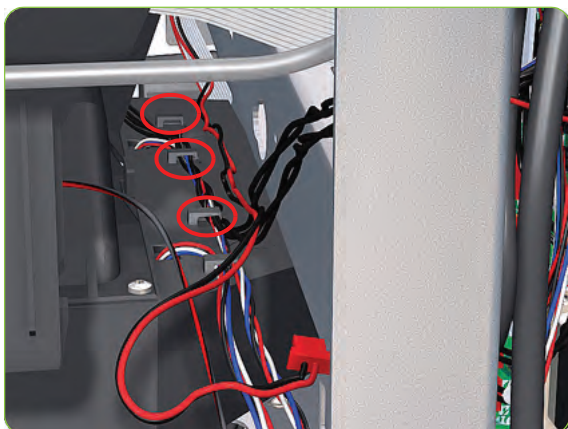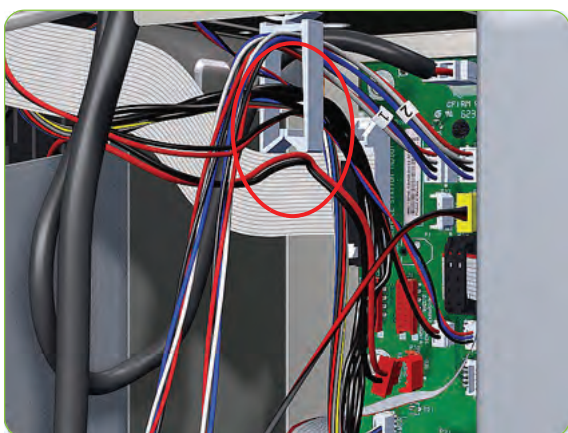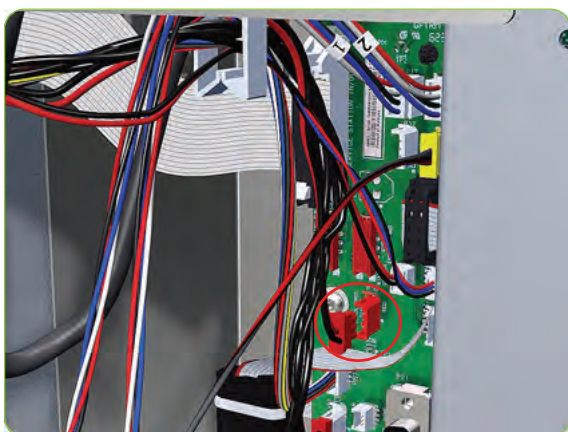

12. Raise the Media Lever.

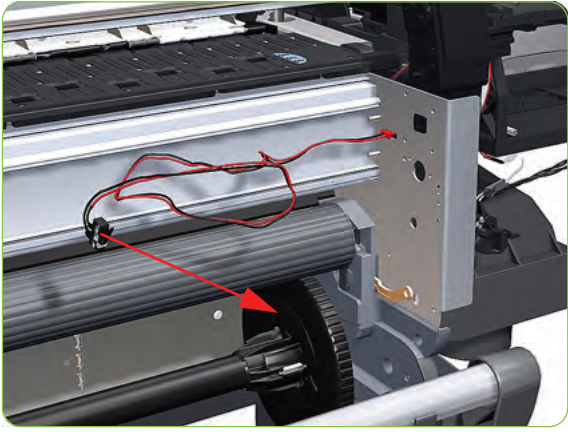13. Remove the Media Lever from the Printer.

Media Lever Sensor

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Right Trim ⇒ See page 251.
3. Remove the Right Connector Cover ⇒ See page 265.
4. Remove the Output Platen ⇒ See page 380.
5. Disconnect the Media Lever Sensor cable from the Interconnect PCA.

6. Unroute the Media Lever Sensor cable from the cable clamp.

7. Release the Media Lever Sensor Cable from the three clips on the Vacuum Fan.
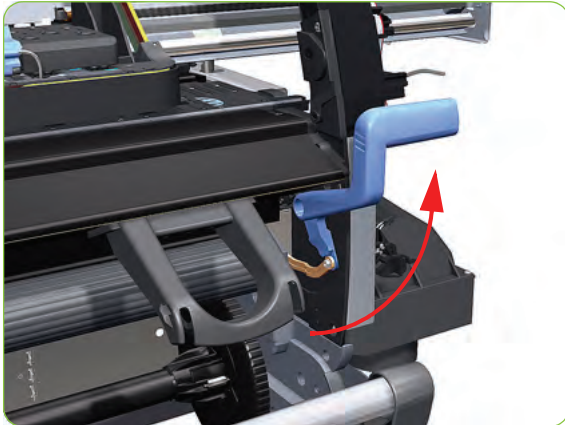
8. Remove the Media Lever Sensor from the Printer.
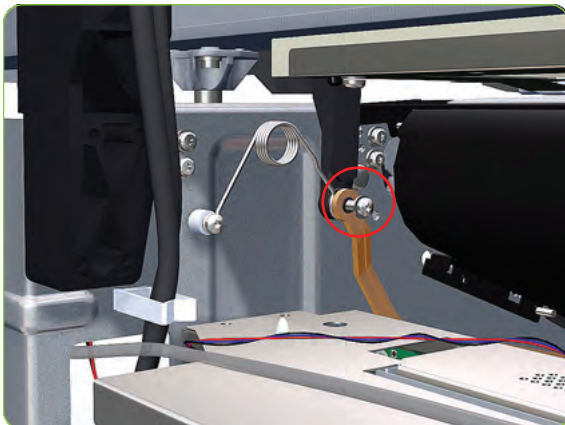
Pinchwheel Assembly

Removal

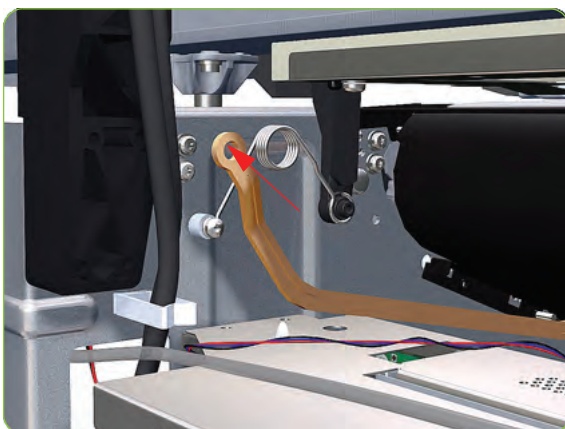⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.
2. Remove the Rear Door ⇒ See page 267.
3. Remove the Service Station ⇒ See page 284.
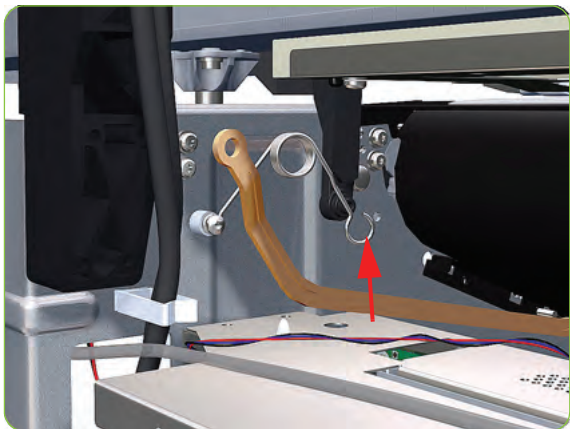4. Raise the Media Lever.

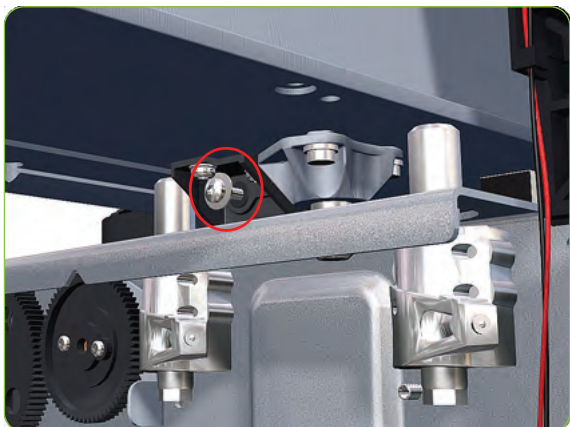5. Remove one T-20 screw that secures the Linkage to the Spring.

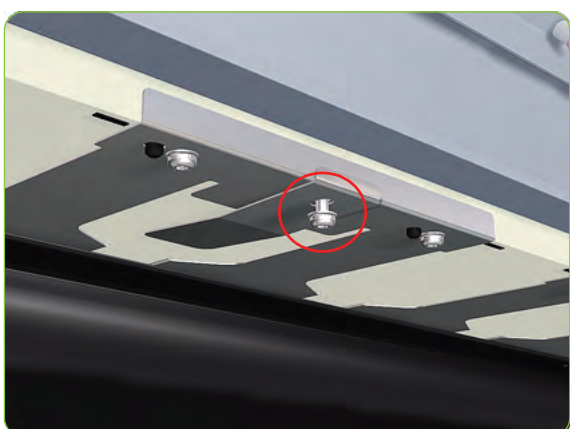6. Disconnect the linkage from the Pinch Wheel cam-arm.

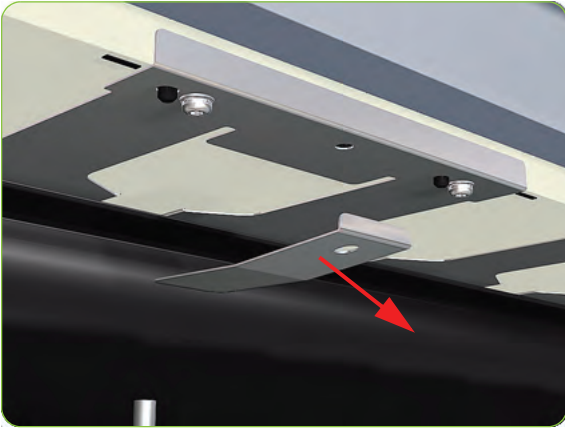7. Disconnect the spring from the Pinch Wheel cam-arm.

8. Remove one T-20 screw that secures the Cam to the Cam Lever.

9. Insert a plastic stud in to each Pinchwheel Subassembly (the Plastic Studs can be found in the replacement Pinchwheel Assembly kit).

10. For the 60-inch model, remove one T-20 screw that secures the attachment plate to the center Pinchwheel Subassembly.
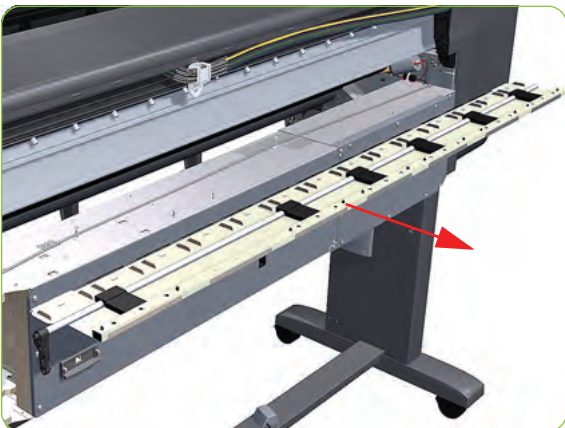
11. For the 60-inch model, remove the attachment plate from the center Pinchwheel Subassembly.
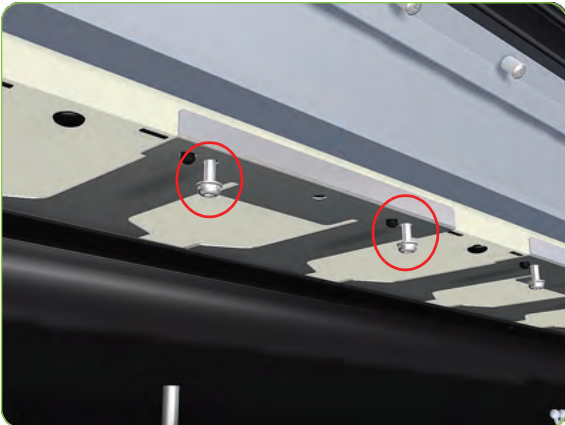
12. Remove two T-20 screws (**Type M**) from each Pinchwheel Subassembly (a 90 degree angle screwdriver is included with the replacement Pinchwheel Assembly).

> **NOTE:** The illustration shows the 60-inch model center Pinchwheel Subassembly.

13. Remove the complete Pinchwheel Assembly (including the Cam and Cam Lever) from the Printer.

> **NOTE:** Before installing the NEW Pinchwheel Assembly, insert the plastic studs in to each Pinchwheel subassembly. This will make it easier to install the complete Pinchwheel Assembly.
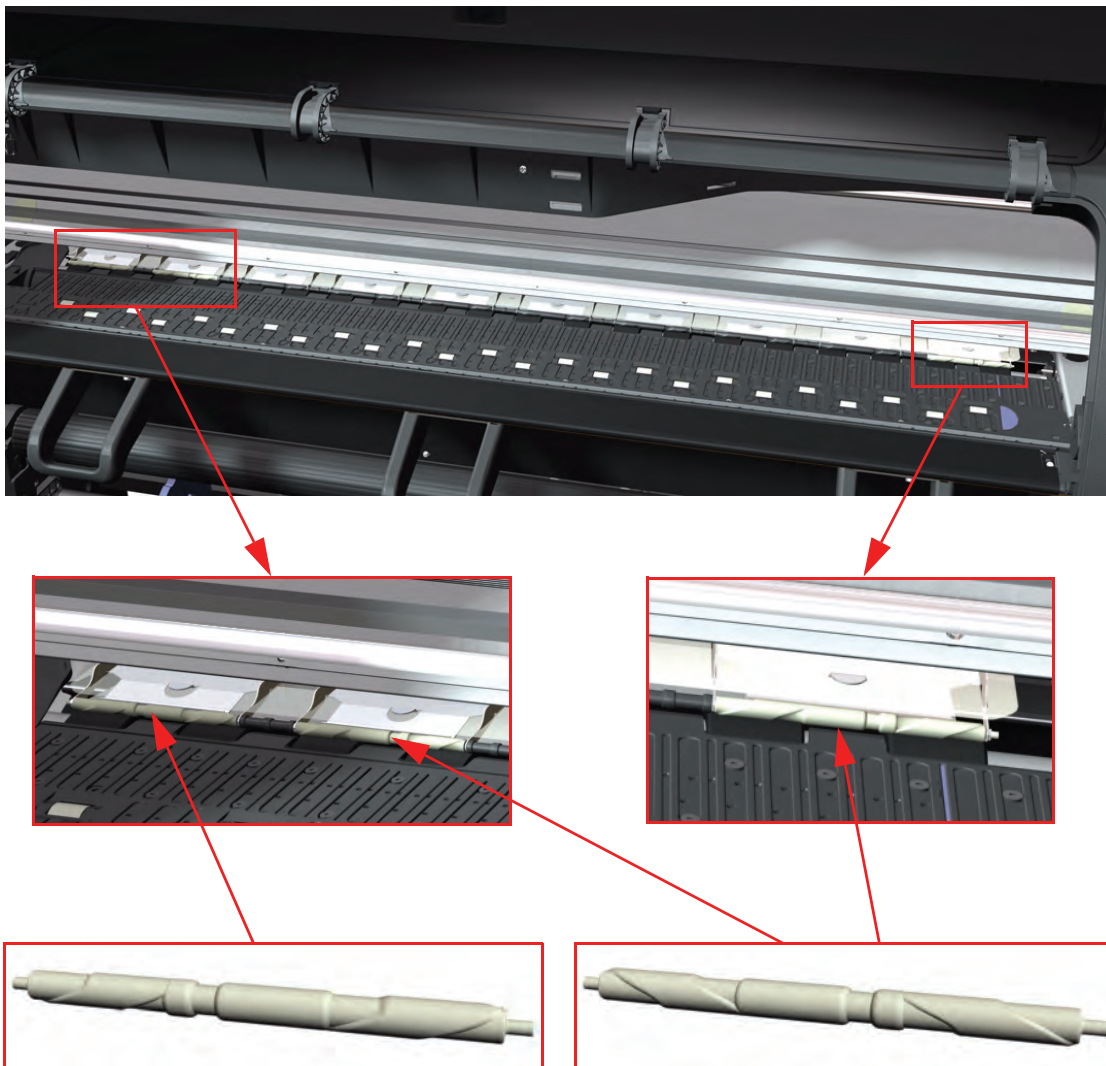
Pinchwheel Assembly   409

Removing individual Pinchwheel Rollers

1. To remove an individual Pinchwheel roller, push apart the metal part that secures the Pinchwheel roller and then pull out the individual Pinchwheel roller.

Important Information on Installation of Pinchwheels

The Pinchwheel Assembly contains 3 white Pinchwheels and several black Pinchwheels. The black Pinchwheels are symmetrical so can be installed without any problems, BUT the white Pinchwheels are NOT symmetrical so it is VERY IMPORTANT to install them correctly using the following illustration:

Check the orientation of the Pinchwheel before installing

Center Guide

Removal

**WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Remove the Primer Assembly ⇒ See page 278.

4. Remove the Right Connector Cover ⇒ See page 265.

5. Remove:
   • For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   • For the 60-inch model, the Electronics Module Extension⇒ See page 272.

6. Remove the Service Station ⇒ See page 284.

7. Remove the Ink Supply Station ⇒ See page 305.

8. Remove the Media Sensor ⇒ See page 405.

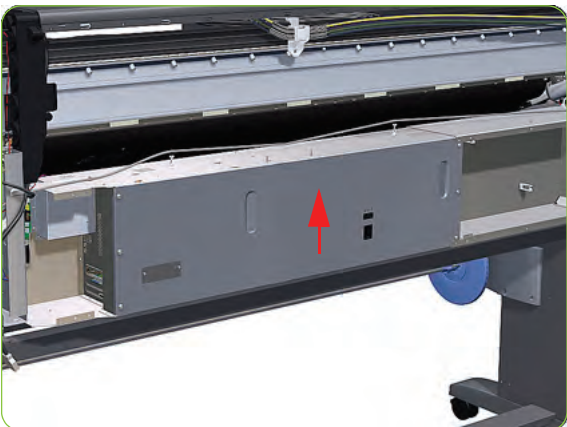9. Disconnect ALL the cables connected to the right Interconnect PCA and the Sausalito PCI PCA.
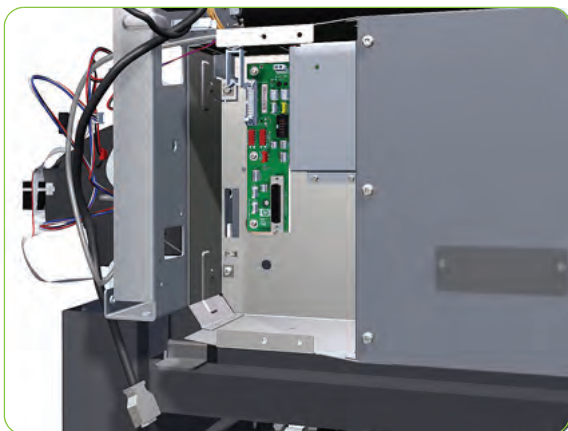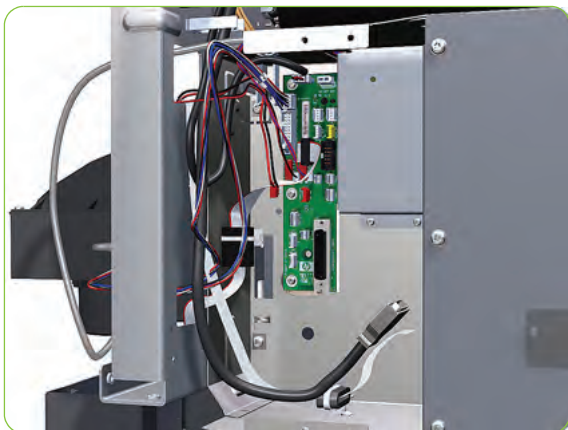
10. Unroute all the disconnected cables so they are clear of the Electronics Module.

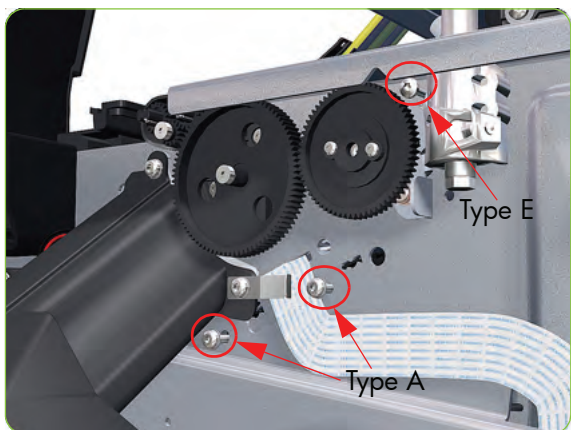11. Remove two T-20 screws (**Type B**) that secure the right side Electronics Module.
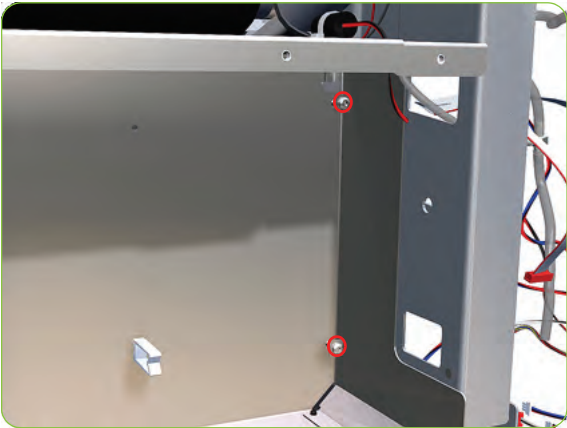
12. Remove two T-20 screws (**Type B**) that secure the left side Electronics Module.
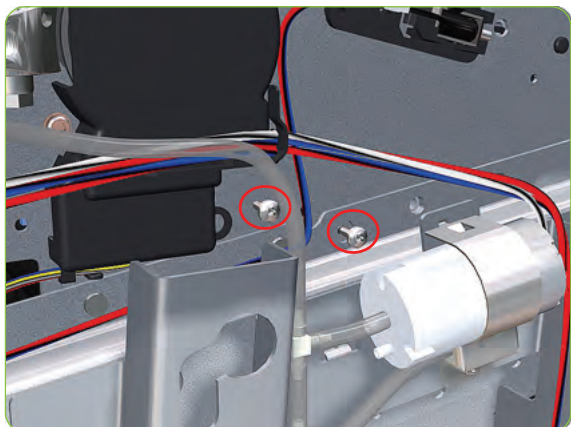
13. Lift the Electronics Module sufficiently (approximately 2 cm) to release it from the attachments.
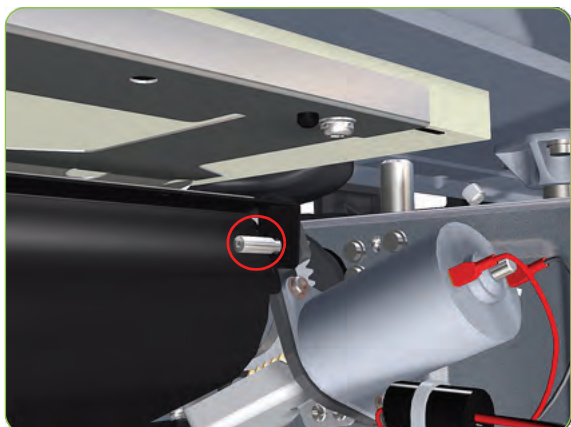
14. Remove the Electronics Module from the Printer.

15. Remove one T-15 screw (**Type E**) and two T-20 screws (**Type A**), that secure the Center Guide, from the right hand side of the Printer.

16. Remove two T-15 screws (**Type E**), that secure the Center Guide, from the left hand side of the Printer.

17. Remove one T-15 screw (**Type S**), that secures the Center Guide, from underneath the Printer.
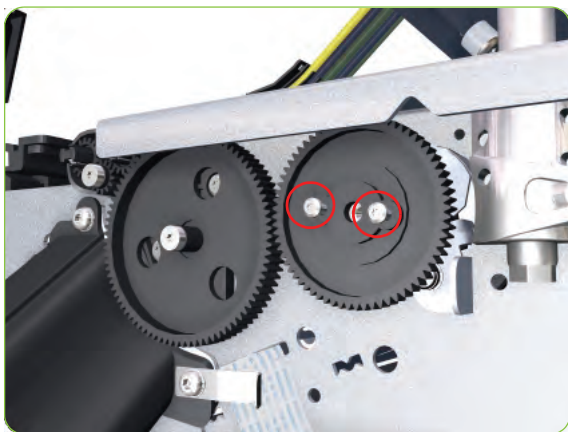

18. Remove the Center Guide from the Printer.

Drive Roller

Removal

⚠ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Right Cover ⇒ See page 248.

2. Remove the Left Cover ⇒ See page 254.

3. Remove the Right Connector Cover ⇒ See page 265.

4. Remove:
   - For the 42-inch model, the Left Connector Cover ⇒ See page 271.
   - For the 60-inch model, the Electronics Module Extension⇒ See page 272.

5. Remove the Service Station ⇒ See page 284.

6. Remove the Ink Supply Station ⇒ See page 305.

7. Remove the Media-Axis Motor ⇒ See page 333.

8. Remove the Encoder Disc and Sensor ⇒ See page 399.

9. Remove the Media Lever Assembly ⇒ See page 402.

10. Remove the Media Sensor ⇒ See page 405.

11. Remove the Center Guide ⇒ See page 412.

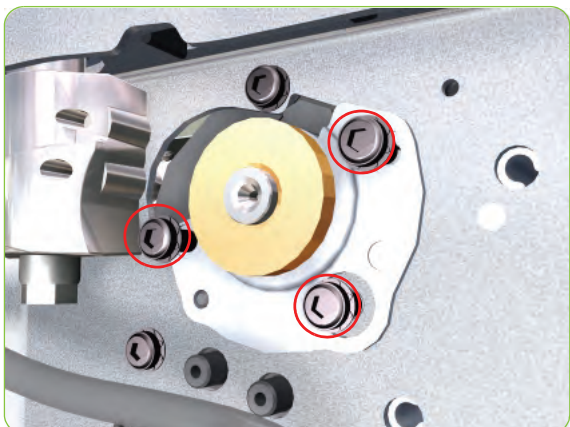12. Remove two T-10 screws that secure the Drive Roller Gear.
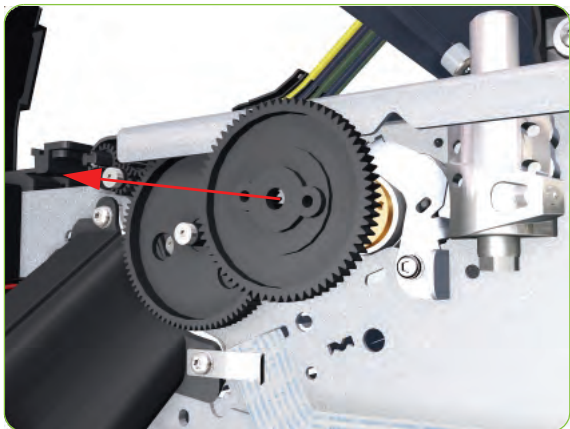
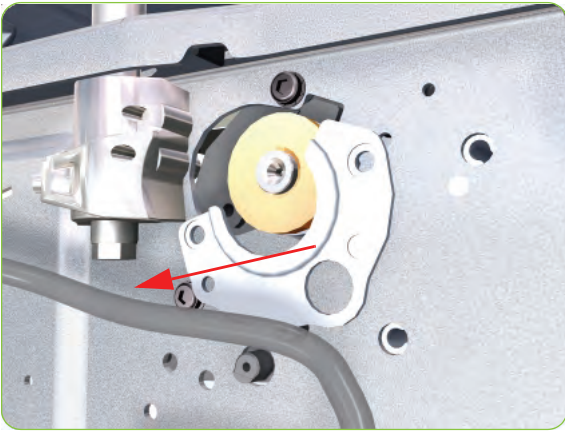13. Remove the Drive Roller Gear from the Printer.
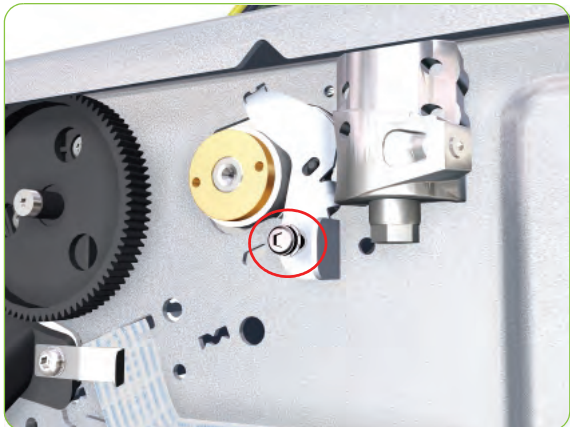
14. Remove one T-20 screw (**Type B**) that secures the cover on the right hand side of the Printer.
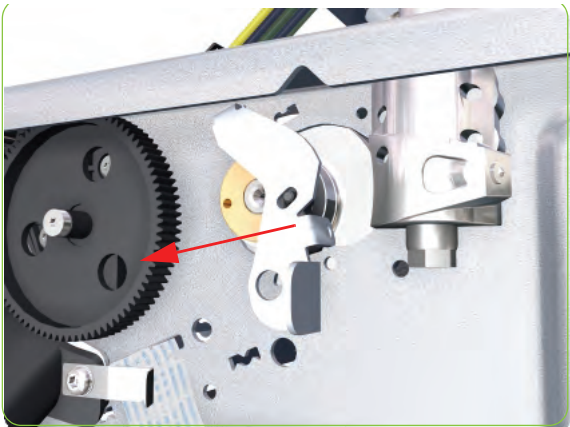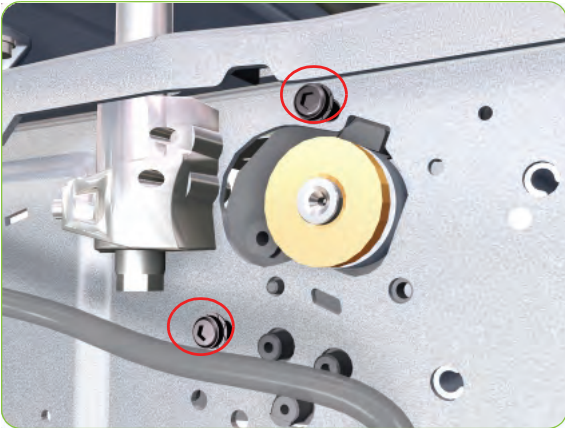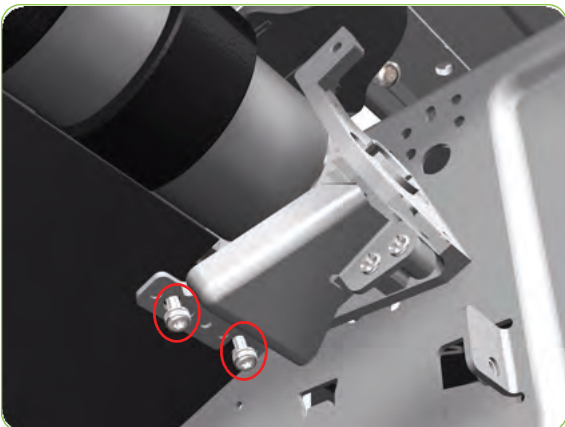

15. Remove the Cover.

16. Remove three T-20 screws that secure the cover on the left hand side of the Printer.
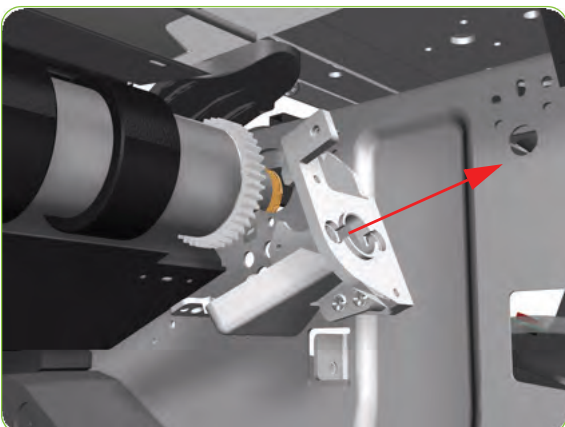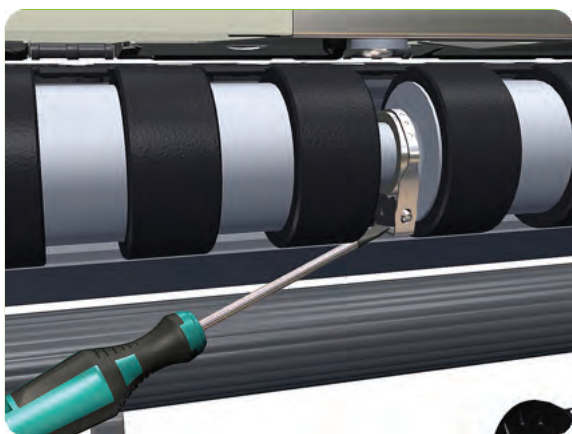
17. Remove the Cover.

18. Remove T-20 screws that secure the Media-Axis Motor Bracket to the side-plate.
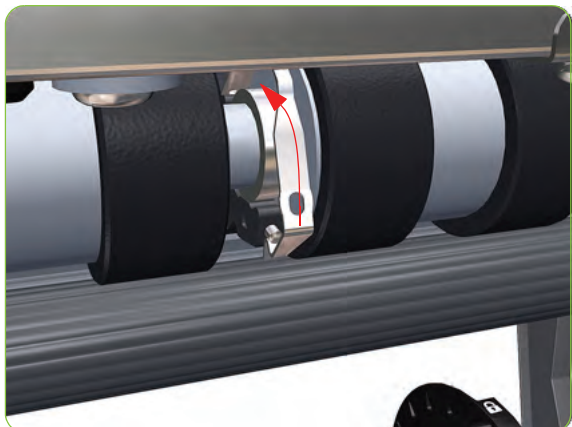
19. Remove two T-20 screws (**Type A**) that secure the Media-Axis Motor Bracket to the Chassis.
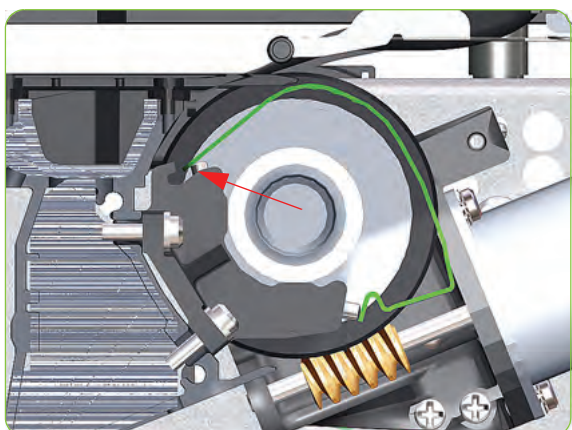
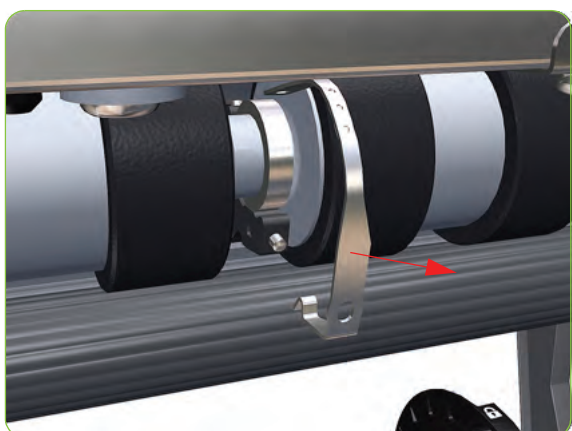20. Remove the Media-Axis Motor Bracket from the Printer.

21. For the 60-inch model, use a flat bladed screwdriver to unclip the Roller Middle Support Cover.
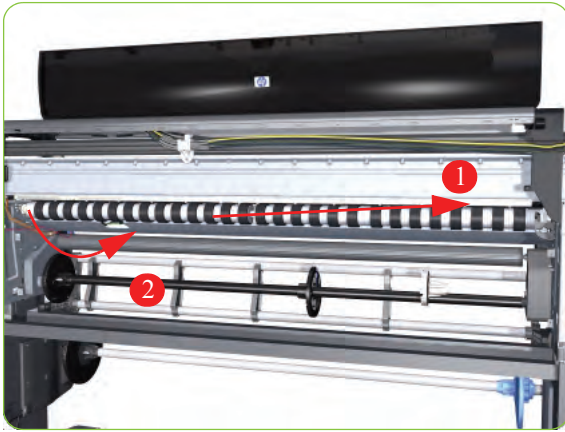

22. For the 60-inch model, rotate the Roller Middle Support Cover vertically.

23. For the 60-inch model, release the Roller Middle Support Cover from its attachment point.

24. For the 60-inch model, remove the Roller Middle Support Cover.

25. Remove the Drive Roller by sliding it to the right, then downwards and then out of the Printer.
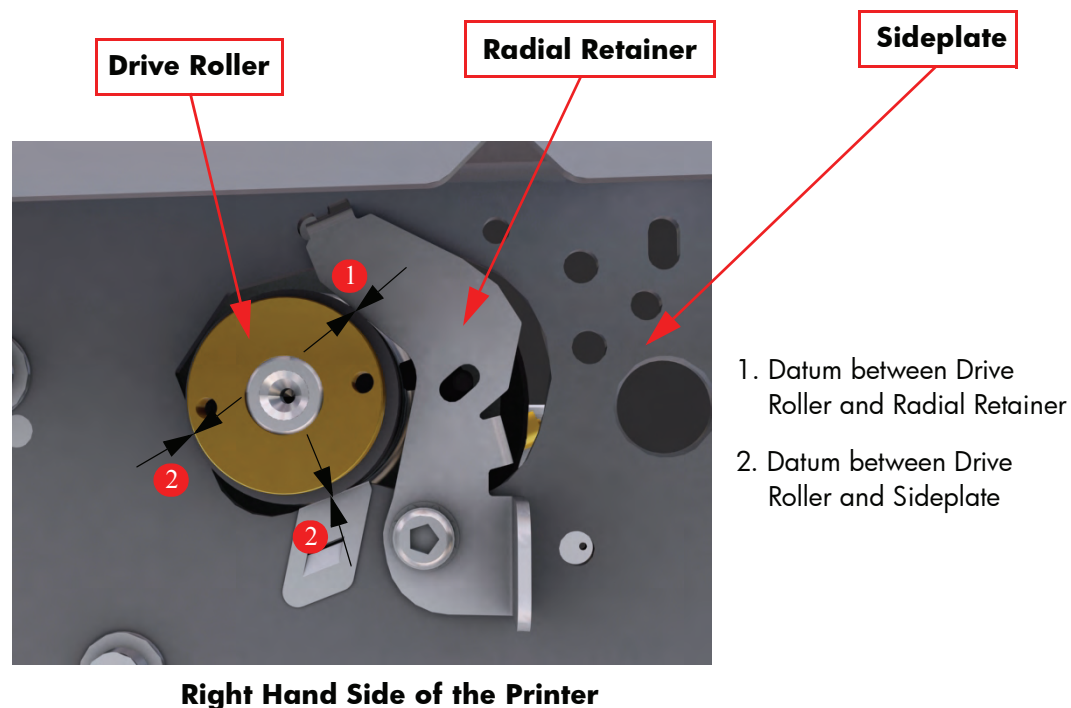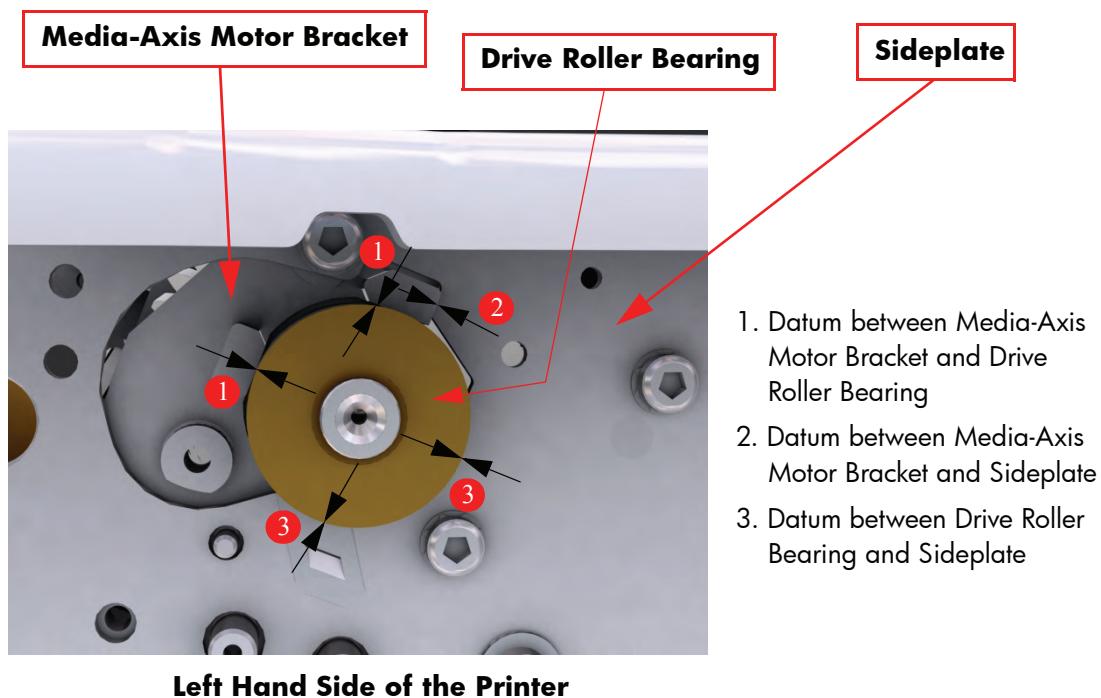
> **NOTE:** When reinstalling the parts, make sure you apply the grease (included with the support part) to the gears.
>
> **NOTE:** After installing the NEW Drive Roller, make sure you perform the following Service Calibration.

- Paper Advance Calibration ⇒ Chapter 5.

Installation of the Drive Roller

When installing the Drive Roller, several different datums have to be met in order to ensure that the Drive Roller has no axial play. Use the following illustrations to ensure that ALL the datums are met:

Media-Axis Motor Bracket **Drive Roller Bearing** **Sideplate**

1. Datum between Media-Axis Motor Bracket and Drive Roller Bearing

2. Datum between Media-Axis Motor Bracket and Sideplate

3. Datum between Drive Roller Bearing and Sideplate

Left Hand Side of the Printer

Drive Roller **Radial Retainer** **Sideplate**

1. Datum between Drive Roller and Radial Retainer

2. Datum between Drive Roller and Sideplate

Right Hand Side of the Printer

To make sure that ALL the datums are met when installing the Media-Axis Motor Bracket, make sure you follow these

instructions:
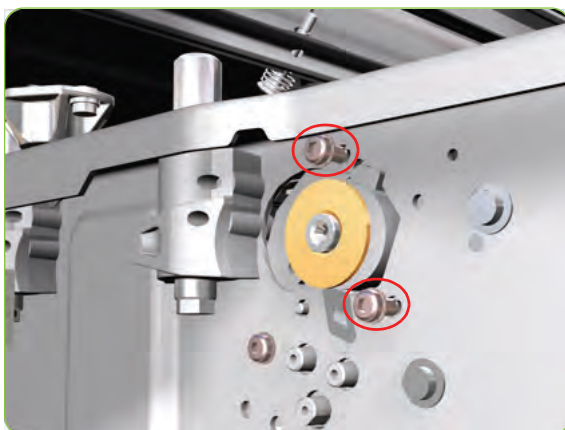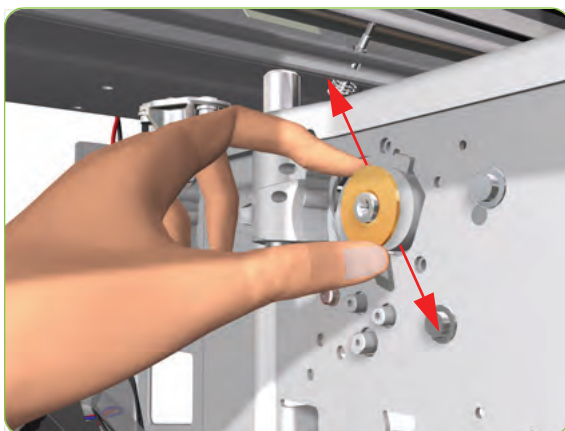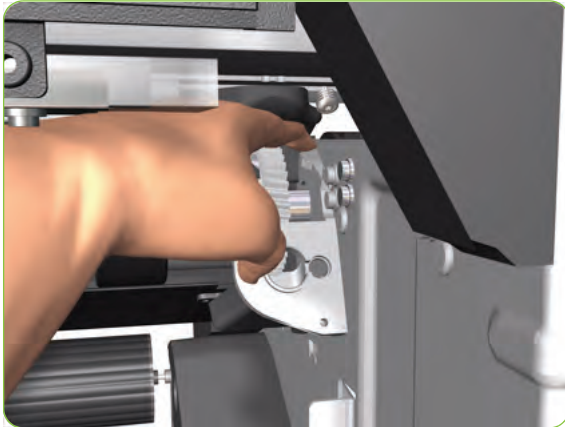
1. Place the Media-Axis Motor Bracket in the correct position on the Printer. Make sure you keep it pushed down (as shown in the illustration) until the first screw has been installed and fully tightened.

2. Install the first screw (T-15) in the position shown. Make sure you tighten the screw fully so that the Media-Axis Motor Bracket cannot be moved.

3. Check that there is no play (movement) between the Media-Axis Motor Bracket and the Drive Roller. If there is play, then check that the screw installed in the previous step is fully tightened.

4. Install the remaining two screws (T-15) that secure the Media-Axis Motor Bracket.
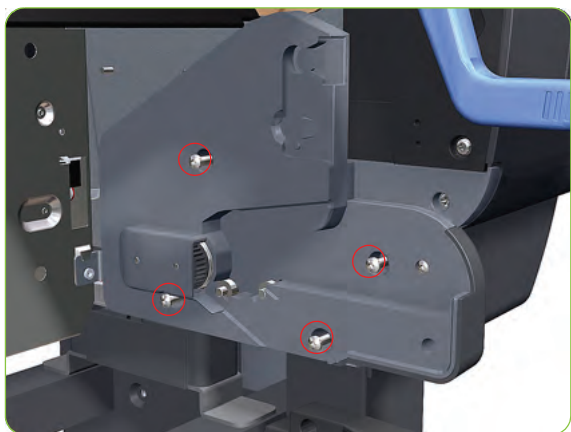
Right Rollfeed Module Assembly
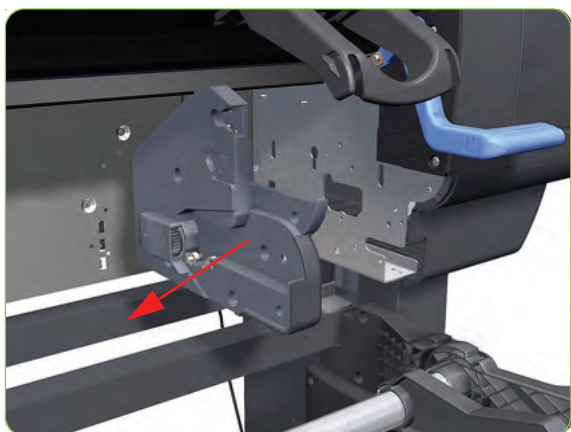
Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Input Roller ⟹ See page 393.
2. Remove the Media Spindle (if installed).
3. Remove four T-20 screws that secure the Right Rollfeed Module.

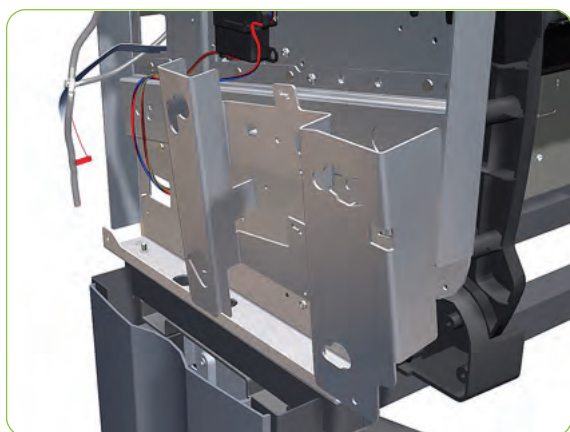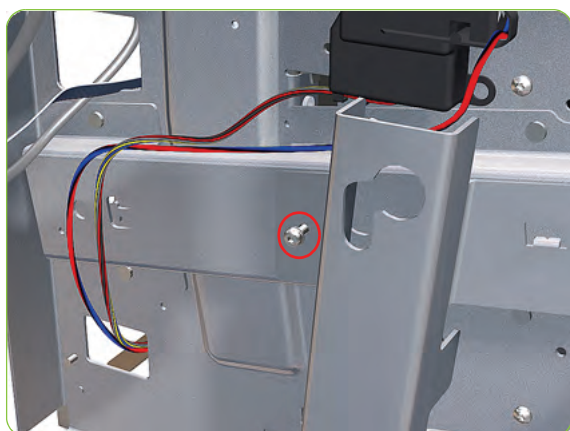4. Remove the Right Rollfeed Module from the Printer.
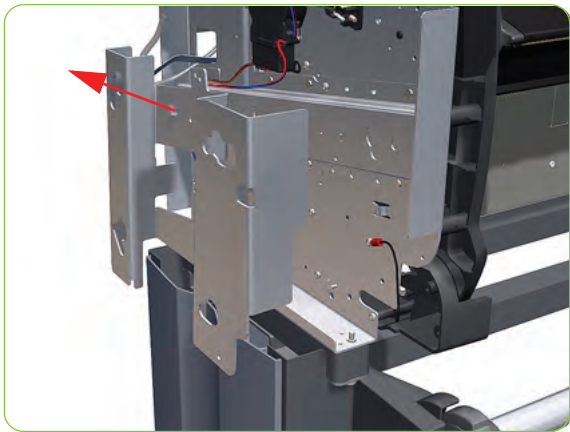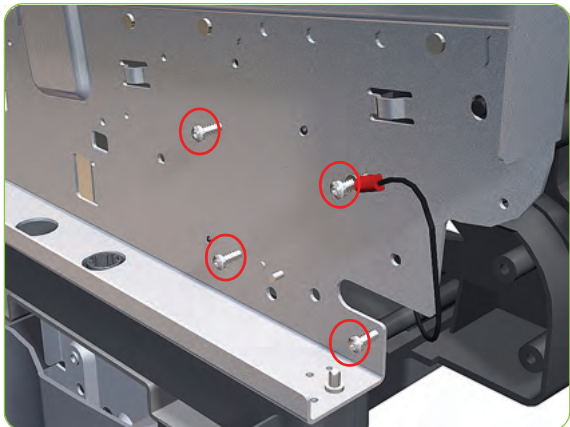
Left Rollfeed Module Assembly

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Remove the Left Cover ⇒ See page 254.
2. Remove the Ink Supply Station ⇒ See page 305.
3. Remove the Input Roller ⇒ See page 393.
4. Remove the APS Assembly ⇒ See page 308.
5. Remove the Left Spittoon ⇒ See page 312.
6. Remove the Media Spindle (if installed).
7. Remove one T-15 screw that secures the APS Mounting Plate to the Printer.

8. Tilt out the top of the APS Mounting Plate support.

9. Remove the APS Mounting Plate support from the Printer.

10. Remove four T-20 screws that secure the Left Rollfeed Module to the Printer.
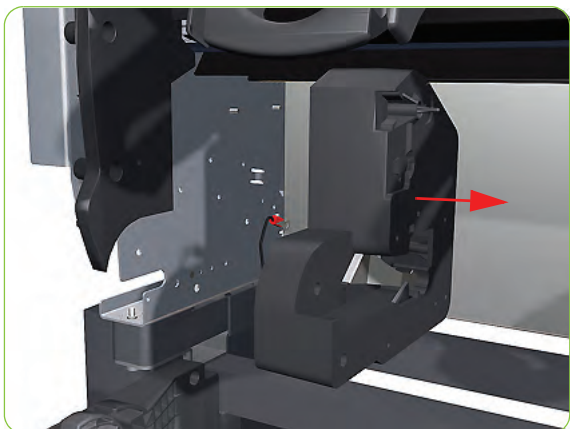
11. Remove the Left Rollfeed Module from the Printer.
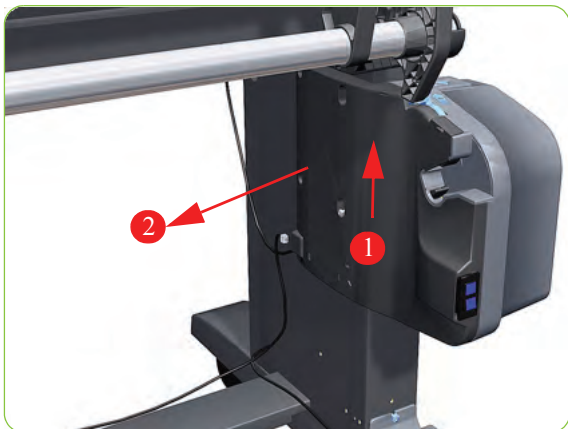
Take-Up Reel Motor

Removal

WARNING!: Switch off the printer and remove the power cable.

1. Close the Paper Bin (if open).
2. Disconnect the Take-Up Reel Motor from the Parallel Port on the rear of the printer.

3. Remove the two rear T-20 screws that attach the Take-Up Reel Motor to the Right Leg Assembly.

4. Loosen the two front T-20 screws that attach the Take-Up Reel Motor to the Right Leg Assembly.

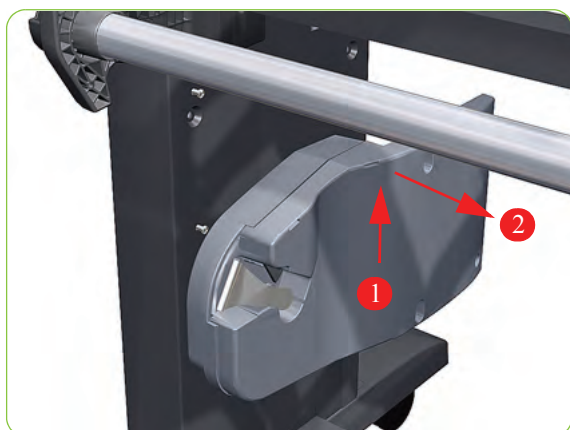5. Disconnect the Take-Up Reel Sensors from the Take-Up Reel Motor.

6. Lift the Take-Up Reel Motor sufficiently so you can remove it from the Right Leg Assembly.

Take-Up Reel Left Hand Module

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Close the Paper Bin (if open).

2. Remove one rear T-20 screws that attaches the Take-Up Reel Left Hand Module to the Left Leg Assembly.

3. Loosen the two front T-20 screws that attach the Take-Up Reel Left Hand Module to the Left Leg Assembly.

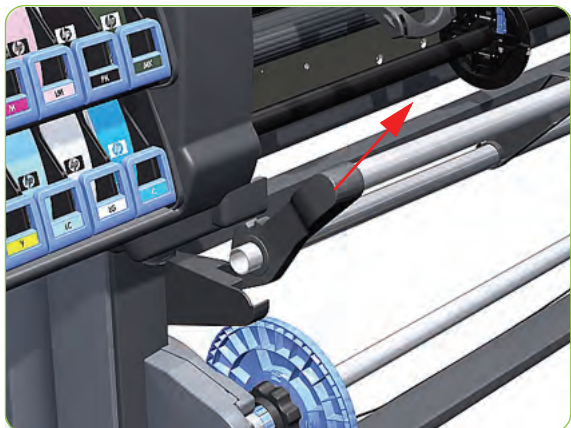4. Lift the Take-Up Reel Left Hand Module sufficiently so you can remove it from the Left Leg Assembly.

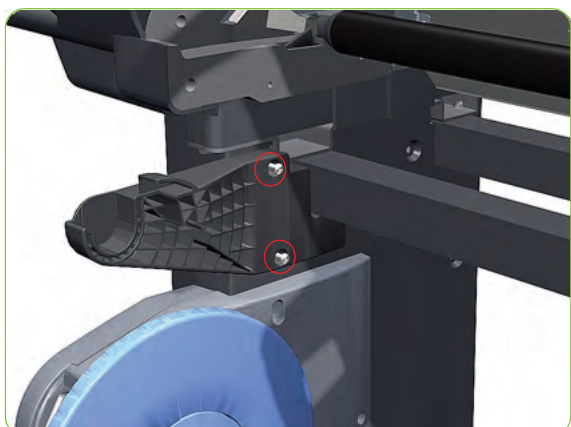# Take-Up Reel Deflector Supports

Removal

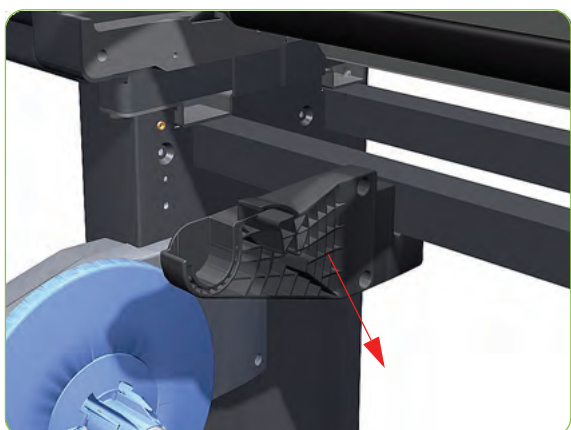⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Close the Paper Bin (if open).
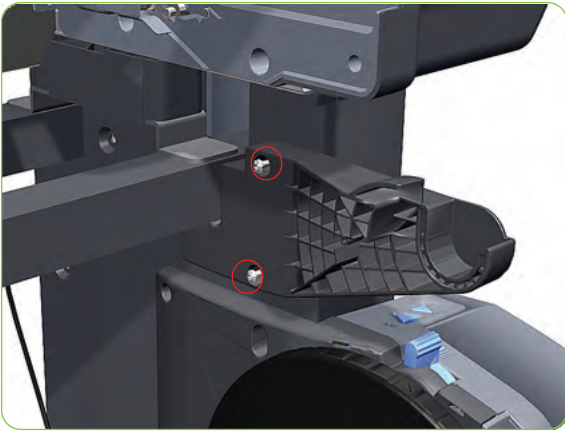2. Remove the Take-Up Reel Deflector from the printer.

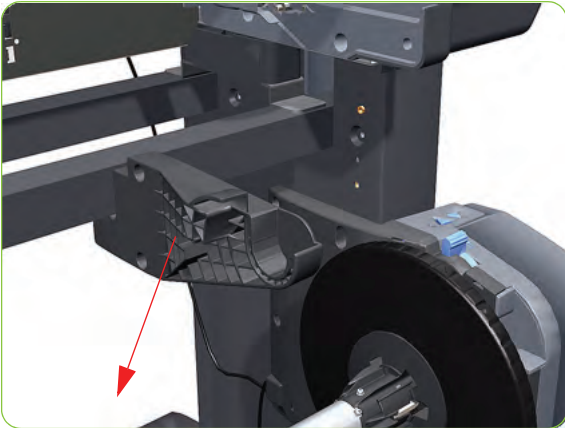3. Remove the two T-20 screws that attach the Left Hand Deflector Support to the Left Leg Assembly.

4. Remove the Left Hand Deflector Support.

5. Remove the two T-20 screws that attach the Right Hand Deflector Support to the Right Leg Assembly.


6. Remove the Right Hand Deflector Support.

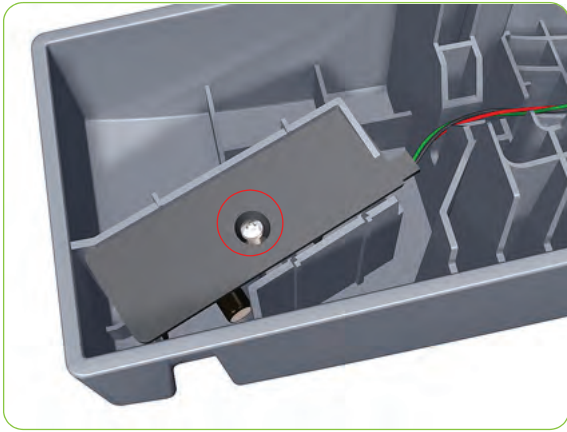Take-Up Reel Deflector Supports   429

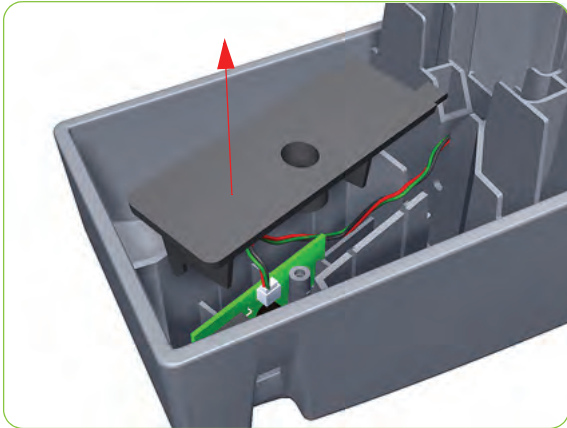# Take-Up Reel Sensors

Removal

⚠️ **WARNING!:** Switch off the printer and remove the power cable.

1. Close the Paper Bin (if open).
2. Disconnect the Take-Up Reel Sensors.

3. Remove the blue thumbscrew that attaches the Take-Up Reel Sensors to the Right Foot Assembly.

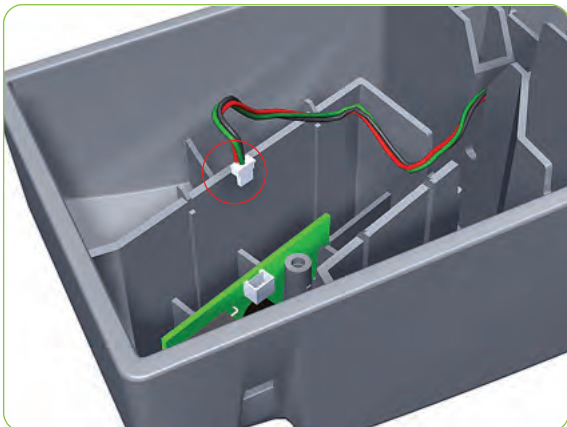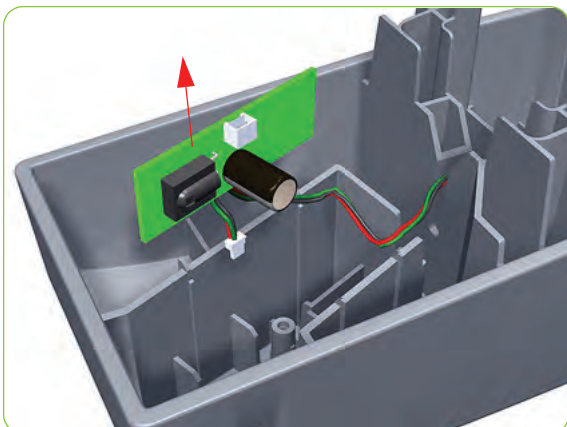4. Slide the Take-Up Reel Sensors off the Right foot Assembly.
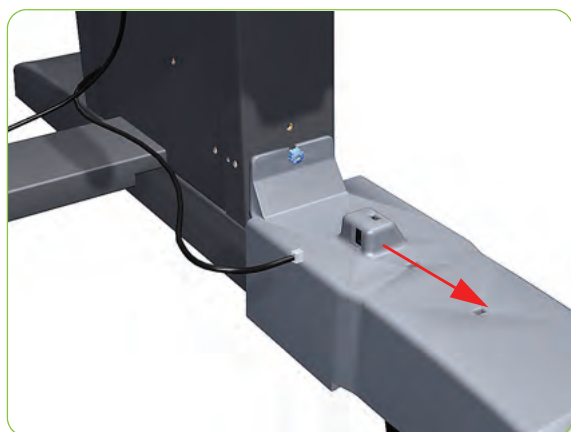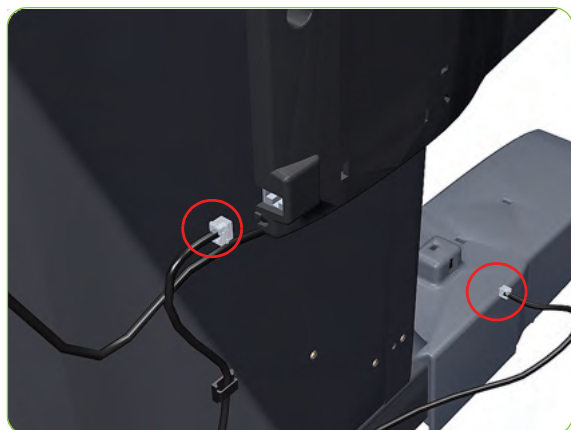
5. Remove one T-15 screw that attaches the cover of the receiver sensor to the housing.
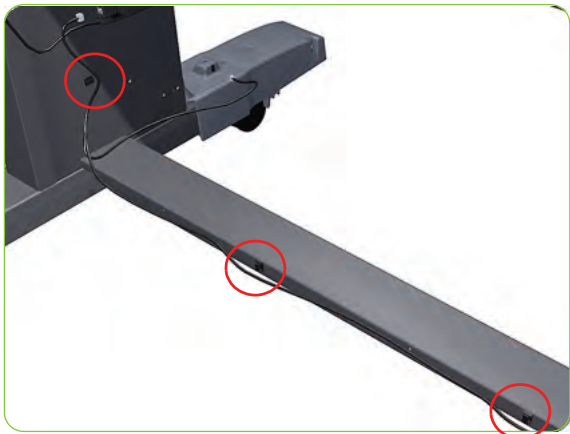

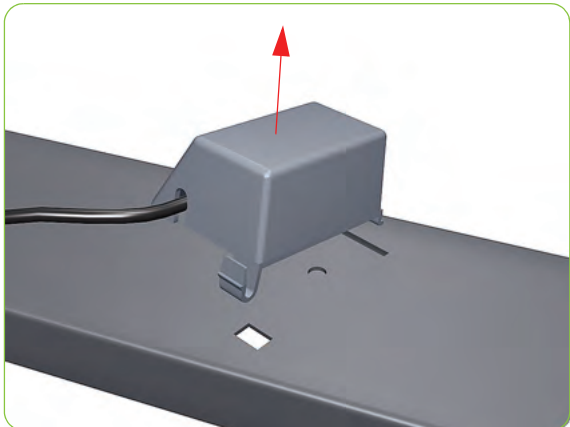6. Remove the cover of the receiver sensor to the housing.

7. Disconnect the connector from the receiver sensor.

8. Remove the receiver sensor from the housing.

9. Unroute the Take-Up Reel Transmitter Sensor cable.

10. Unrclip and remove the Take-Up Reel Transmitter Sensor from the X-Brace Assembly.