

Kit Instructions

Truly Camera, Wide Angle

7709-K562
Issue B



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Revision Record

Issue	Date	Remarks
A	Oct 2020	First Issue
B	May 2021	Updated the Camera Bracket part number and artworks

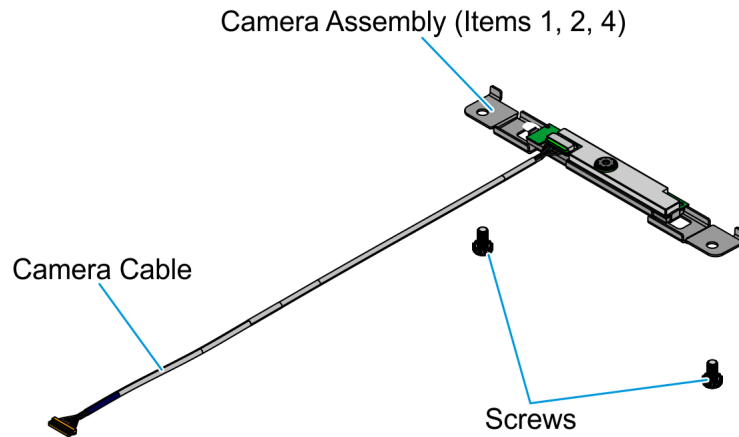
Truly Camera, Wide Angle

This publication provides procedures for installing the Wide Angle Camera to the NCR SelfServ™ 90 (7709) Kiosk.



Note: This kit is compatible with 7709 release versions R2.0 and R2.1 only.

Kit Contents



CCP-80916

Part Number		Description
497-0529935		Truly Camera, Wide Angle
1	497-0530165	Bracket, Camera - 2 Deg Angle
2	497-0528735	Truly Camera Module Model CSE456-U2SF-E
3	497-0505959	Cable, Camera
4	497-0501317	Foam, Camera
5	006-8613167	Screw - SEMS, M3x6mm PH Phillips Machine Screw External-Tooth Washer, Zinc Plate (2 pcs)
6*	497-0480073	Cable Management Tape
7*	497-9999670	Carton - 555 Series Corrugated with Convulated Foam 6x6x2
8*	006-8616588	Static Shielding Bag - 5"x10", Open End
9*	497-9999639	Static/ESD Warning Label, 1 3/4 X 2 1/2
10*	006-8623359	Bag, 2x2 Zip Lock
11*	497-0423108	Instructions-Kit (Reference Sheet)
12*	006-8615143	Cable Tie, 142mm x 3.6mm (10 pcs)



Note: Items marked with an asterisk (*) are not shown in the image.

Installation Procedures



Warning: Disconnect the AC power cord before disassembling the Terminal.

Installing the Wide Angle Camera kit on an NCR 7709 unit involves the following procedures:


1. Open the NCR 7709 unit and disconnect all cables from the Motherboard. For more information, refer to [Opening the R2.x Kiosk](#) on page 5.
2. Remove the Receipt Printer. For more information, refer to [Removing the Receipt Printer](#) on page 6.
3. Remove the Imaging Scanner. For more information, refer to [Removing the Imaging Scanner](#) on page 8.
4. If present, remove the EAS Antenna. For more information, refer to [Disconnecting or Removing the EAS Antenna](#) on page 11.
5. Remove the PIN Pad. For more information, refer to [Removing the PIN Pad](#) on page 13.
6. Remove the Supervisor Switch. For more information, refer to [Removing the Supervisor Switch](#) on page 16.
7. Remove the Coupon Sensors. For more information, refer to [Removing the Coupon Sensors](#) on page 17.
8. Remove the Display Head. For more information, refer to [Removing the Display Head](#) on page 18.
9. Remove the Motherboard Sled. For more information, refer to [Removing the Motherboard Sled](#) on page 20.
10. Install the Camera. For more information, refer to [Installing the Camera](#) on page 23.
11. Re-install the Motherboard Sled. For more information, refer to [Installing the Motherboard Sled](#) on page 25.
12. Re-install the Display Head. For more information, refer to [Installing the Display Head](#) on page 28.
13. Re-install the Coupon Sensors. For more information, refer to [Installing the Coupon Sensors](#) on page 30.
14. Re-install the Supervisor Switch. For more information, refer to [Installing the Supervisor Switch](#) on page 31.
15. Re-install the PIN Pad. For more information, refer to [Installing the PIN Pad](#) on page 33.
16. Re-install the EAS Antenna. For more information, refer to [Connecting or Installing the EAS Antenna](#) on page 36.

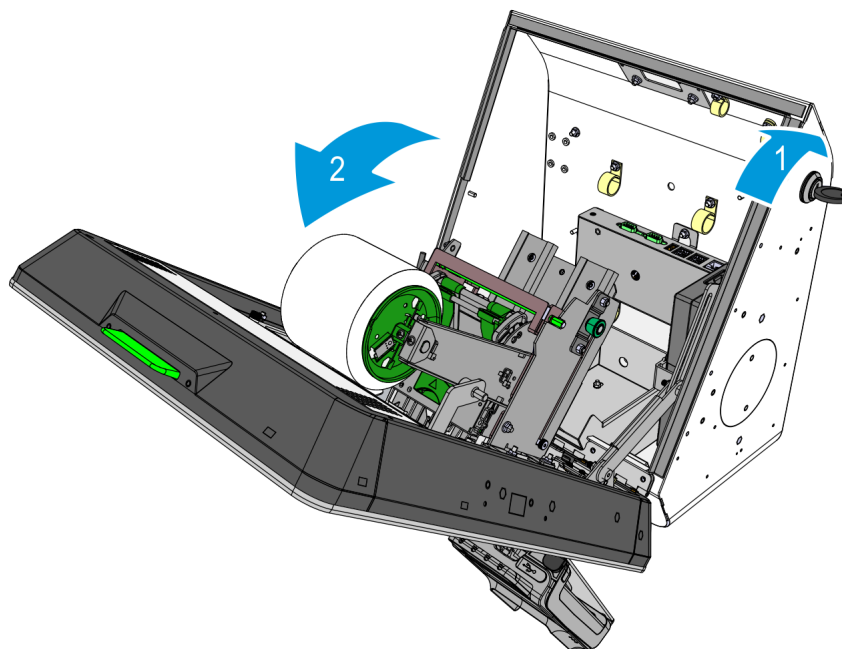
17. Re-install the Imaging Scanner. For more information, refer to [Installing the Imaging Scanner](#) on page 38.
18. Re-install Receipt Printer. For more information, refer to [Installing the Receipt Printer](#) on page 43
19. Reconnect all cables to the Motherboard. For more information, refer to [Connecting Cables](#) on page 45.

Opening the R2.x Kiosk

To access the kiosk components, follow this step:

- Insert the key into the lock at the right-hand side of the kiosk, turn the key clockwise and then, carefully open the front of the kiosk.

 **Caution:** Do NOT abruptly open and release the front of the kiosk. Hold and support the front of the kiosk until fully extended.

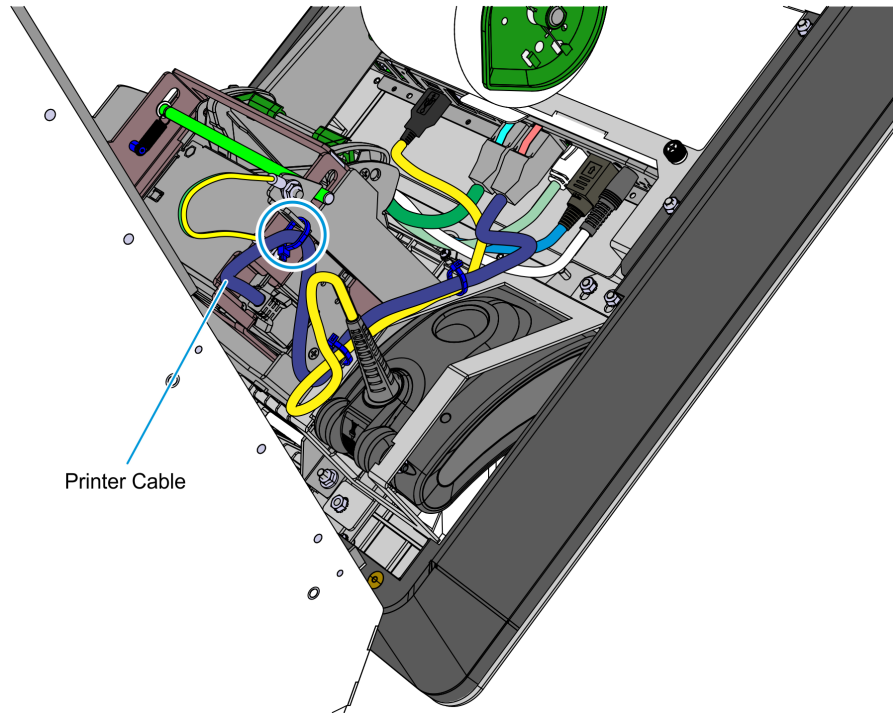


CCP-77624

Removing the Receipt Printer

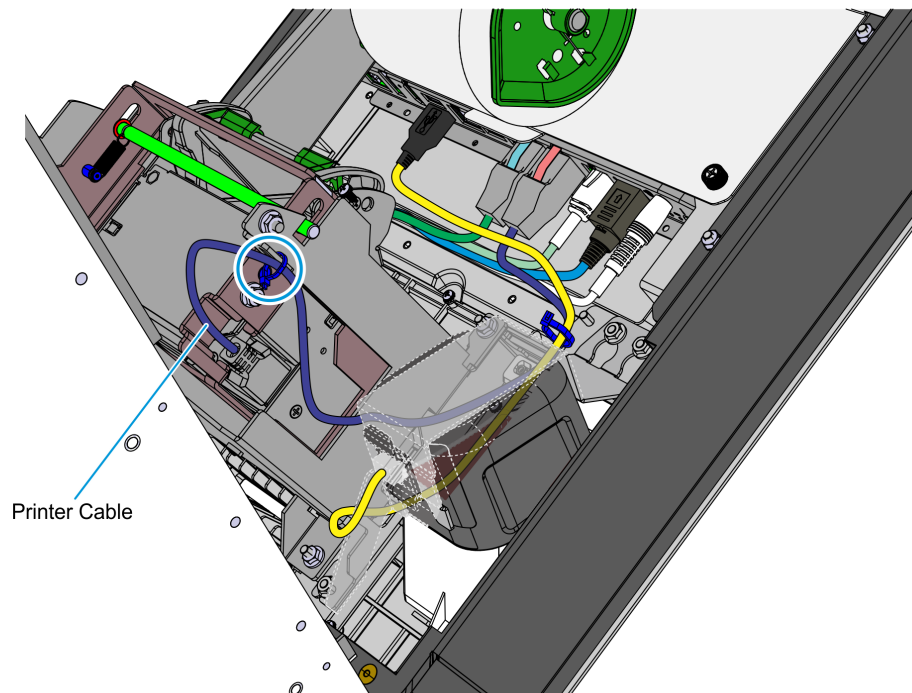
1. Remove the cable tie that secures the Printer cable to the printer bracket, and then disconnect the Printer cable from the printer.

With Honeywell 7580G Imaging Scanner



CCP-77996

With Datalogic 1500i Imaging Scanner

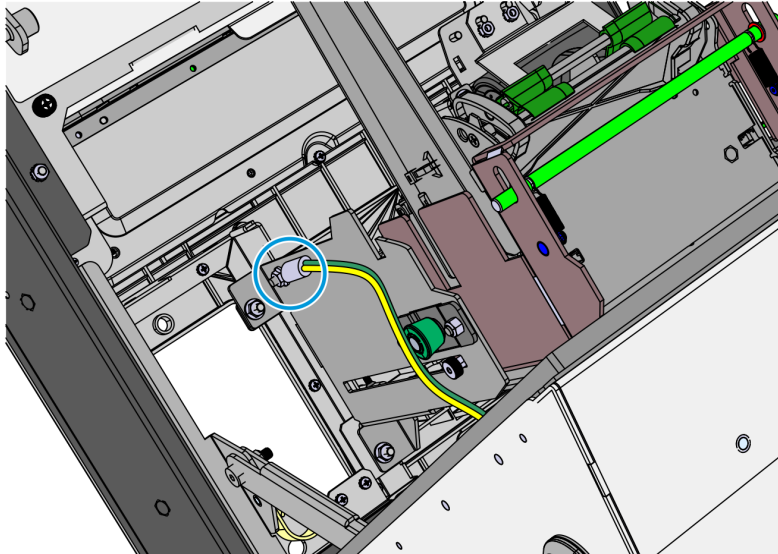


CCP-79464

2. Remove the nut that secure the ground cable to the printer bracket.

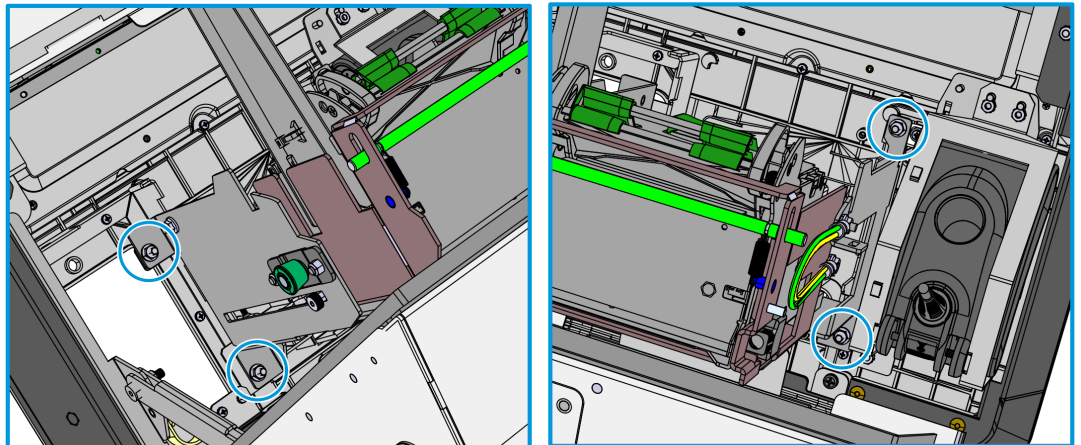


Note: The other end of this ground cable is connected to the kiosk enclosure.



CCP-77998

3. Remove the four nuts (two on each side) that secure the Printer assembly to the kiosk, and place the assembly on a flat surface.



CCP-77997

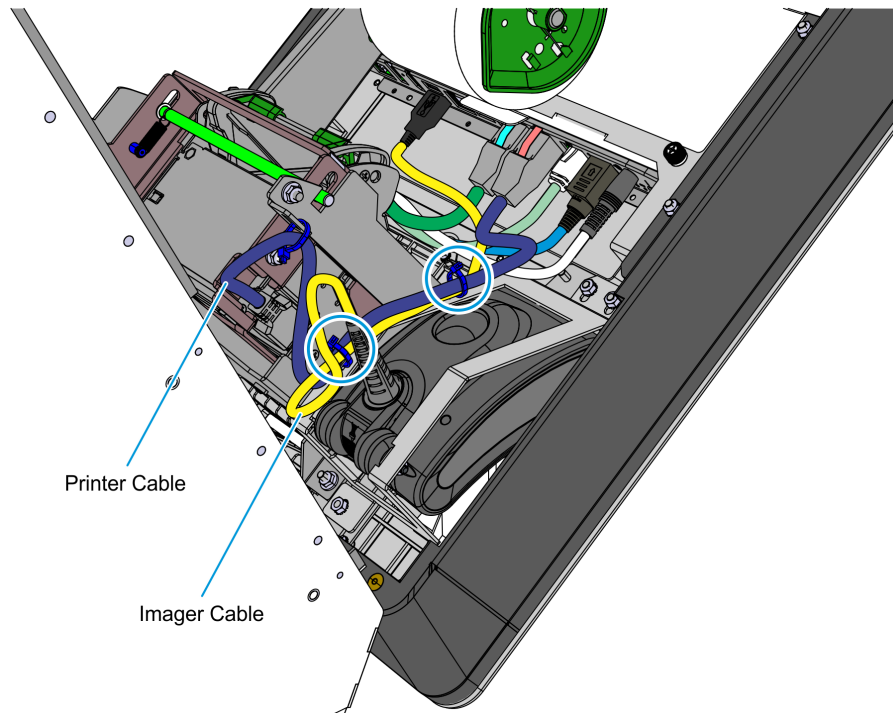
Removing the Imaging Scanner

Refer to the following sections for procedures in removing the Imaging Scanner from **NCR 7709 R2.x** units:

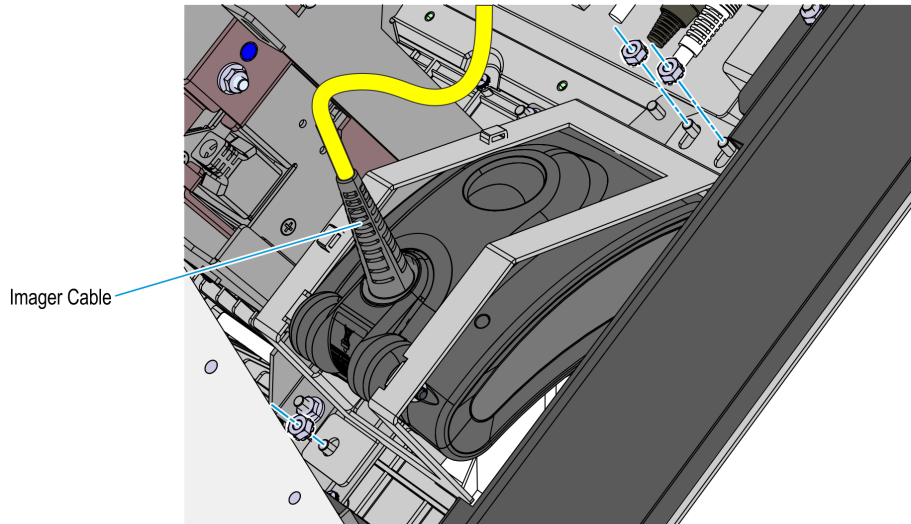
- [Removing the Honeywell 7580G Imaging Scanner](#) below
- [Removing the Datalogic 1500i Imaging Scanner](#) on the facing page

Removing the Honeywell 7580G Imaging Scanner

1. Cut off the cable ties securing the cables routed at the back of the scanner.



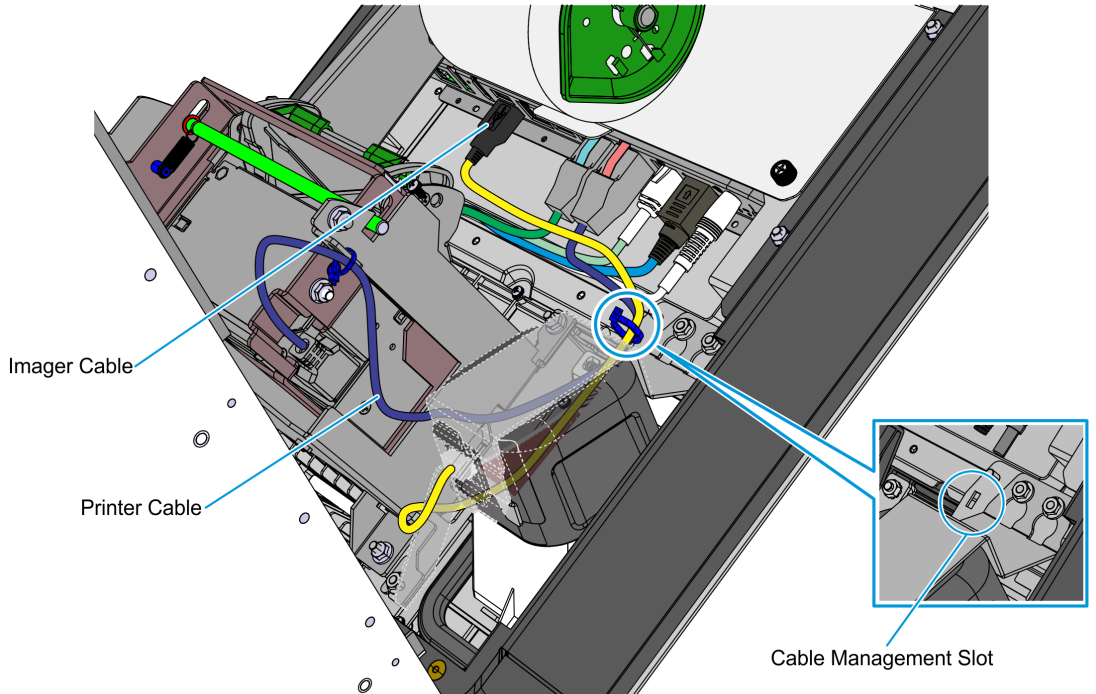
2. Remove the three nuts securing the Imager to the kiosk and then lift the Imager out of its mounting area.



CCP-77975

Removing the Datalogic 1500i Imaging Scanner

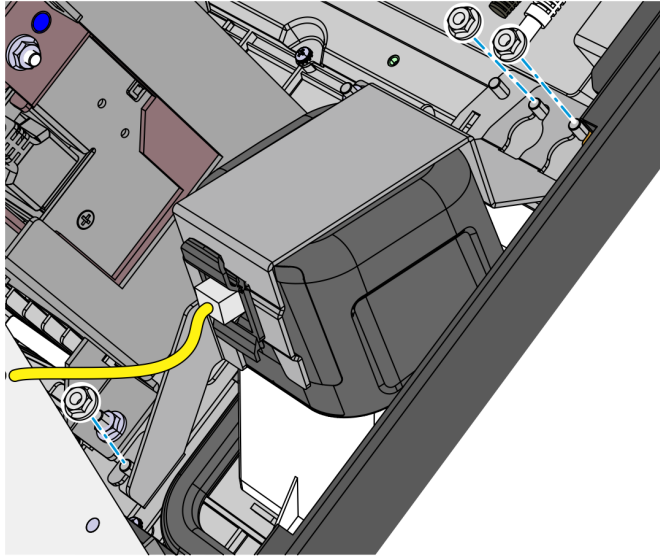
1. Remove the cable tie securing the Printer cable and the Imaging Scanner cable to the cable management slot shown in the image below.



CCP-79466

2. Disconnect the Imaging Scanner cable from the **USB B** port of the motherboard.

3. Remove the three nuts securing the Imaging Scanner assembly to the kiosk, and then remove the assembly from its mounting location.



CCP-79470

Disconnecting or Removing the EAS Antenna

Refer to the following sections for procedures in removing the EAS Antenna from **NCR 7709 R2.x** units:

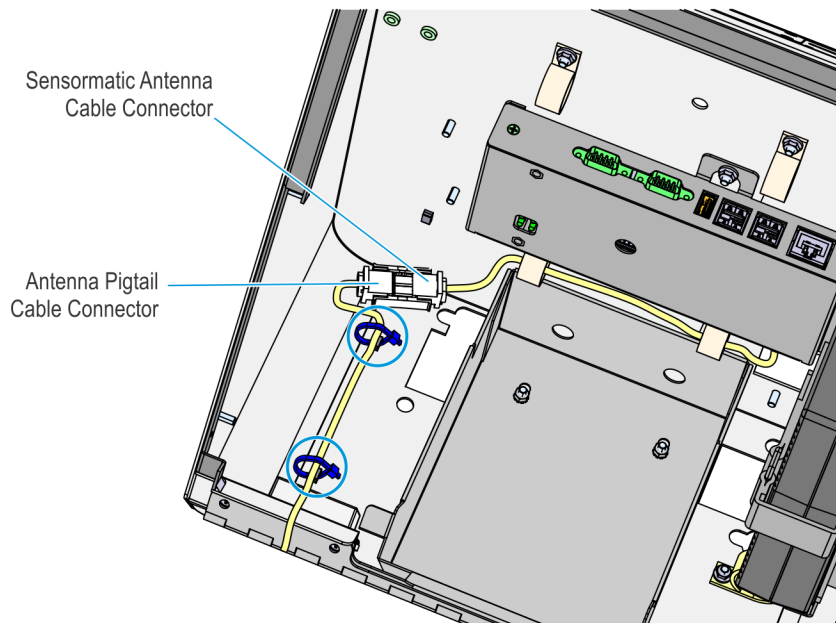
- [Disconnecting the Sensormatic Cable](#) below
- [Removing the Checkpoint Antenna Cable](#) on the next page

Disconnecting the Sensormatic Cable



Caution: Make sure that the Sensormatic Controller is powered OFF. Do NOT connect or disconnect the Sensormatic Cables or Antenna from the Sensormatic Controller when power is ON as this could damage the controller.

- Disconnect the Sensormatic Antenna Pigtail Cable from the Antenna Cable and remove the cables ties.

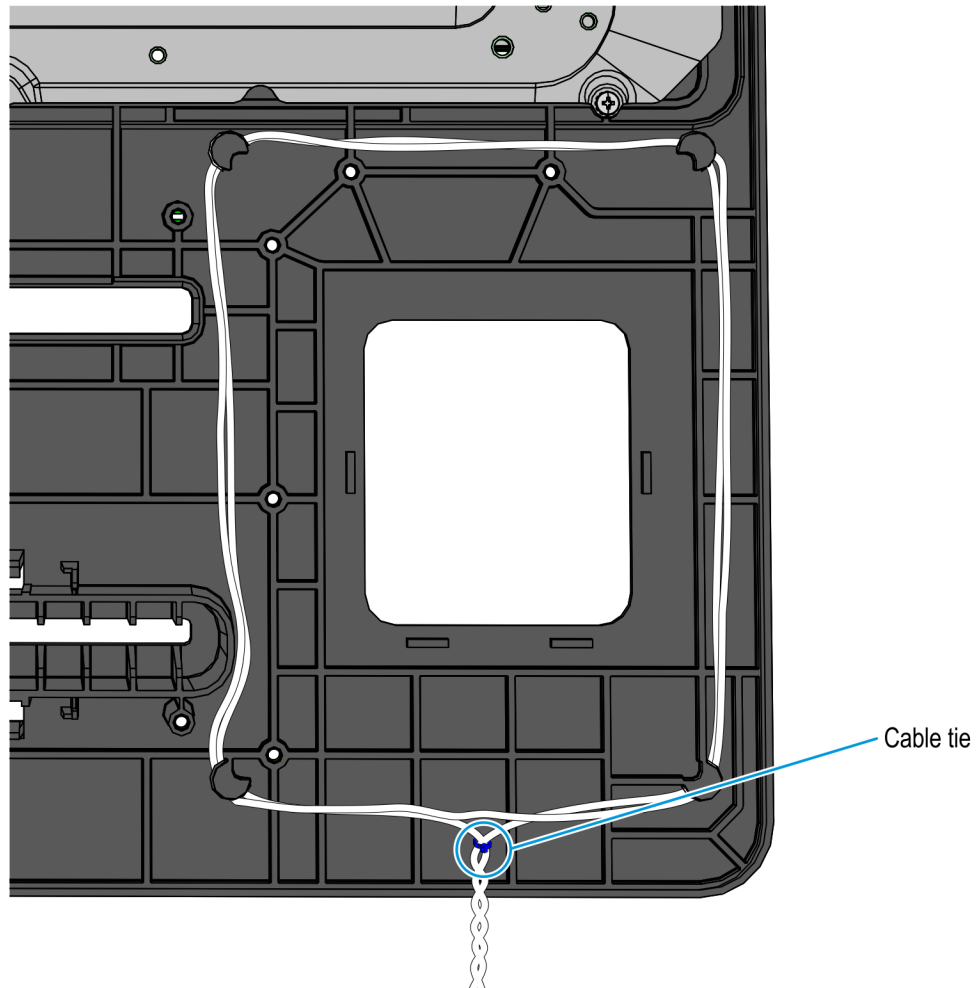


Removing the Checkpoint Antenna Cable

- Remove the Checkpoint Antenna Cable from around the scanning window.



Note: If the cable loop is too tight, pull the cable tie downward to loosen the loop.



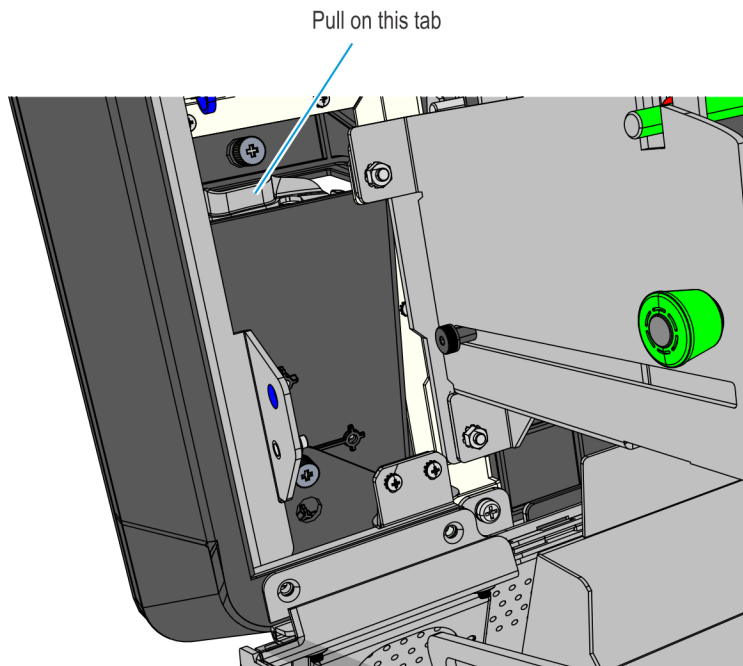
Removing the PIN Pad

Refer to the following for procedures in removing the PIN Pad from **NCR 7709 R2.x** units:

- [Removing the Ingenico IPP320/350 PIN Pad](#) below
- [Removing the Verifone VX805/820 PIN Pad](#) on page 15

Removing the Ingenico IPP320/350 PIN Pad

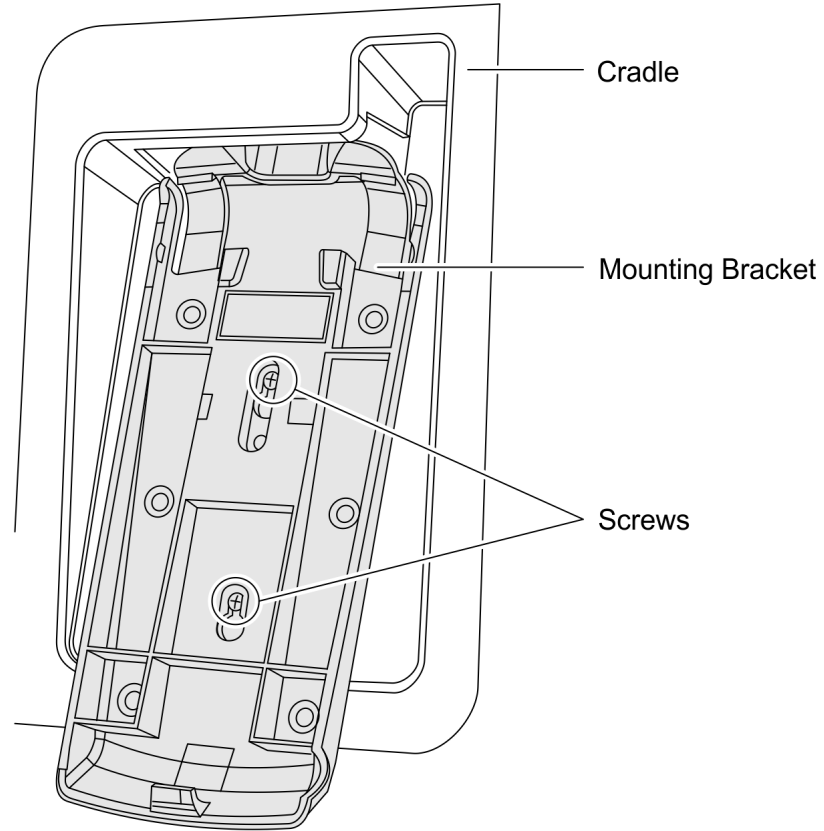
1. While holding the PIN Pad from outside of the kiosk, pull on the tab on the upper portion of the Mounting Bracket (accessed from the inside of the kiosk), and then remove the PIN Pad.



CCP-77992

2. Disconnect the PIN Pad Cable from the PIN Pad.

3. Loosen the two screws that secure the Mounting Bracket to the PIN Pad Cradle.

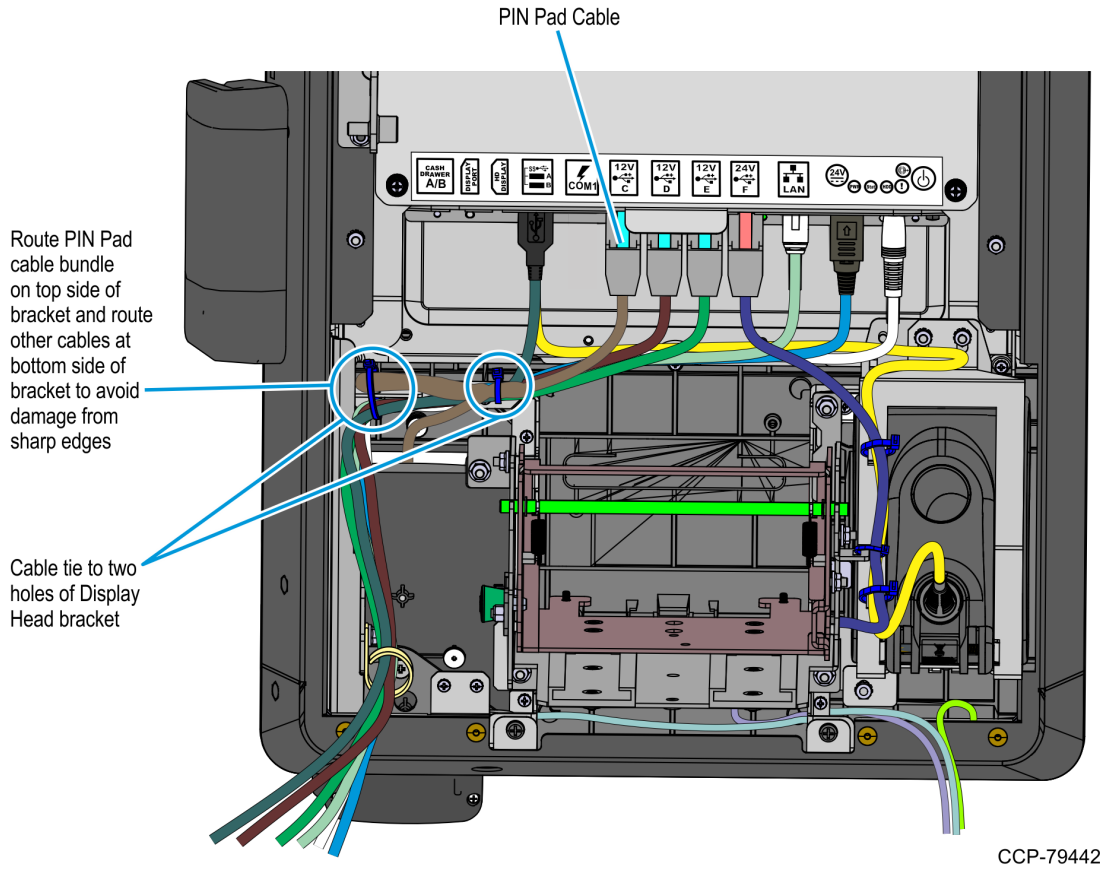


CCP-60090

4. Slide up and remove the Mounting Bracket.

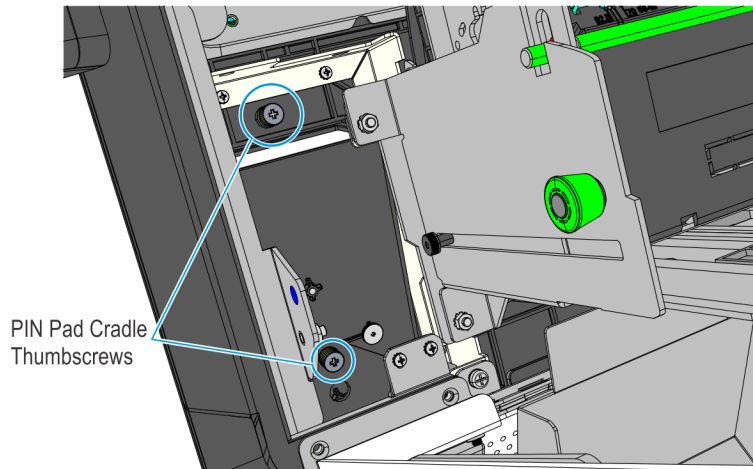
Removing the Verifone VX805/820 PIN Pad

1. Disconnect the PIN Pad Cable from the Motherboard and cut off cable ties as necessary.



CCP-79442

2. While holding the PIN Pad from outside the Kiosk, loosen the two thumb screws securing the PIN Pad Cradle to the Display Head and then remove the PIN Pad and PIN Pad Cradle Assembly.

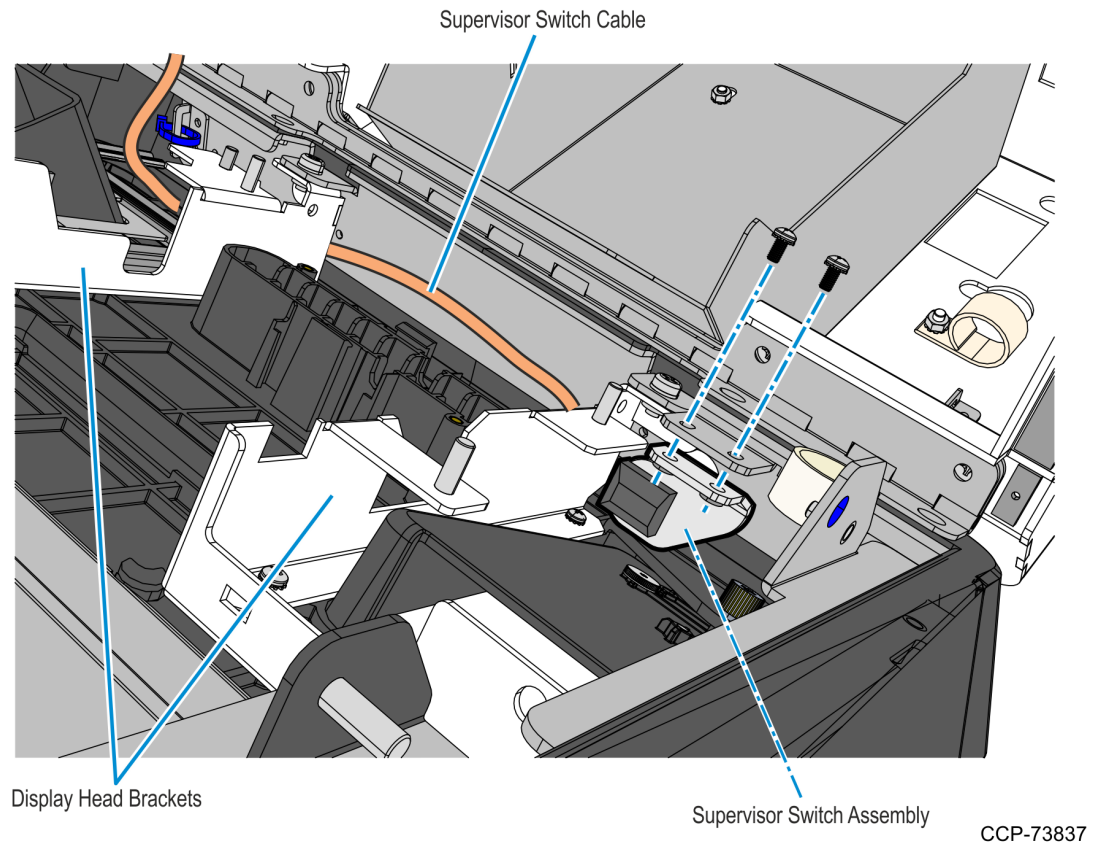


CCP-78706

3. Remove the two screws securing the PIN Pad to the PIN Pad Cradle.
4. Disconnect the PIN Pad Cable from the PIN pad.

Removing the Supervisor Switch

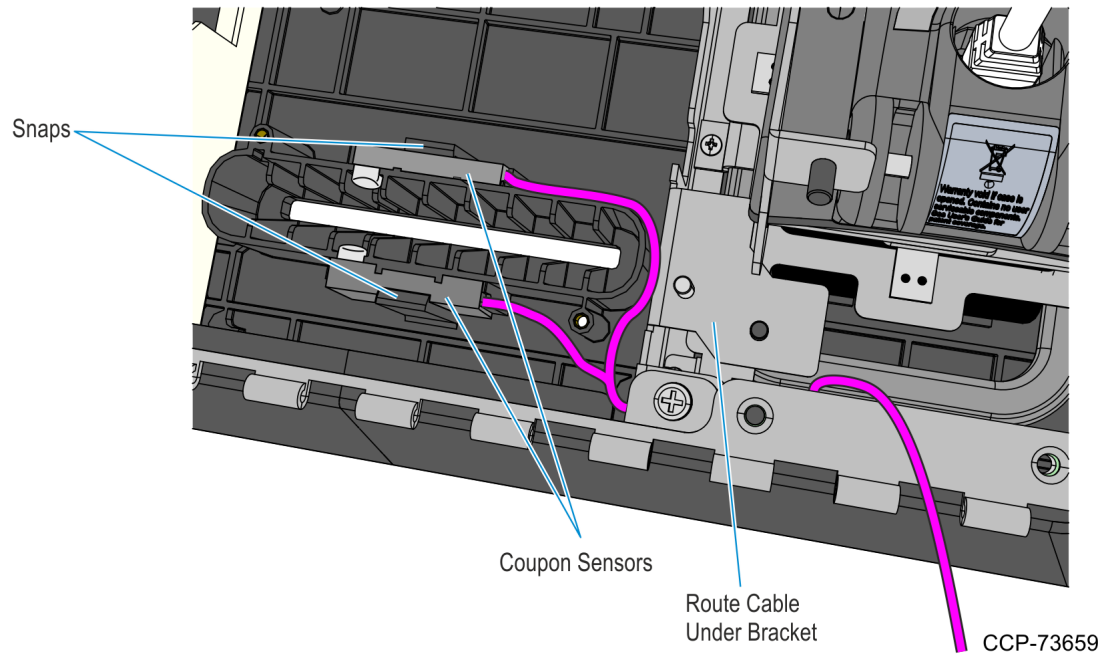
1. Remove the two M4 screws securing the Supervisor Switch assembly to the Display Head and route out the cable from under the two Display Head Brackets shown below.



2. Remove cable tie that secures the Supervisor Switch cable to the Display Head, and then temporarily place the Supervisor Switch assembly inside the main cabinet.

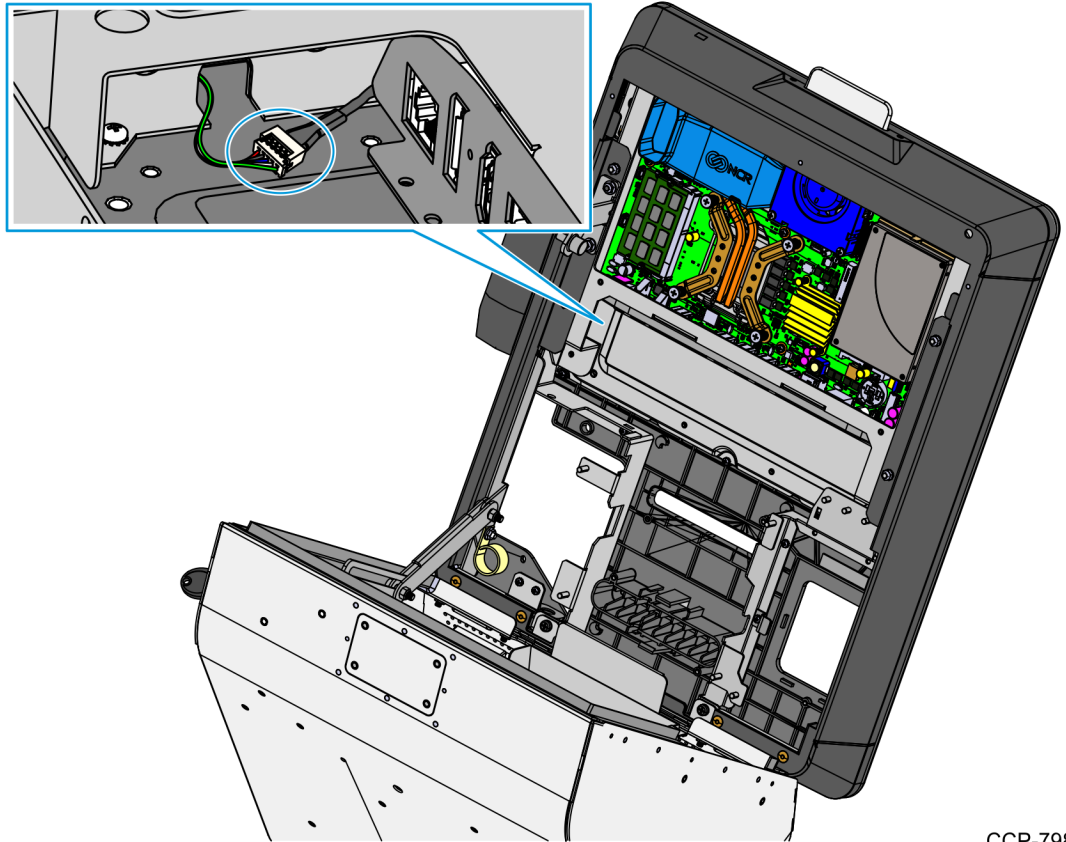
Removing the Coupon Sensors

- Remove the Coupon Sensors from the Cable Snaps and route the cable out of the bracket.



Removing the Display Head

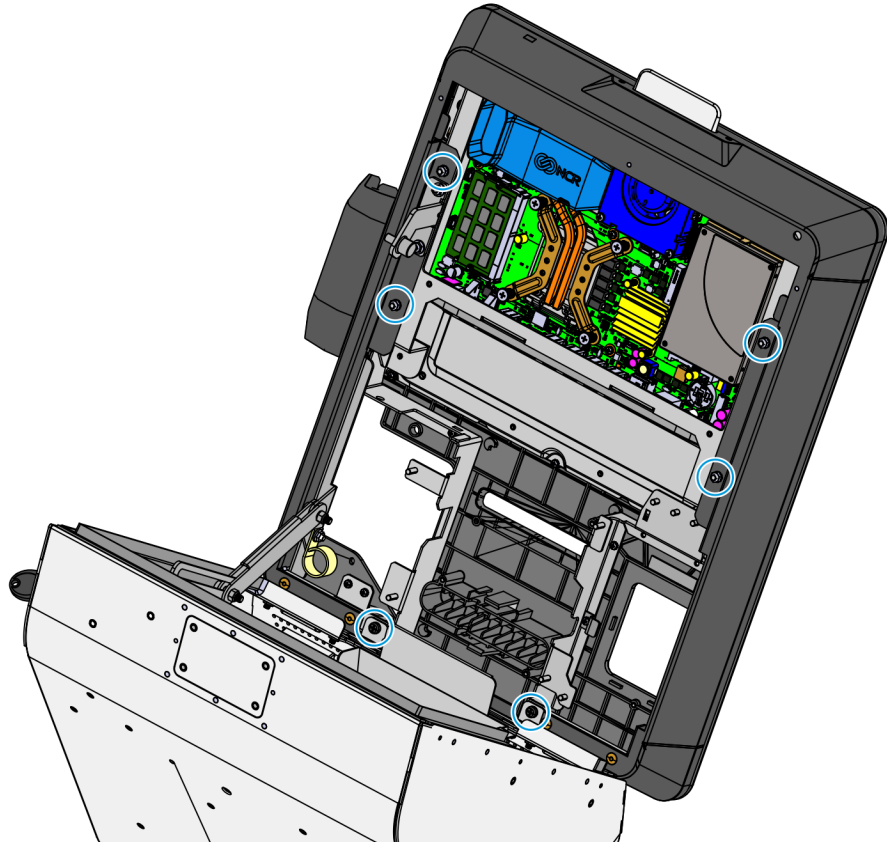
1. Underneath the left-hand motherboard cover bracket, disconnect the MSR cable from its extension cable.



CCP-79807

2. While supporting the Motherboard and Display assembly on the front side, remove the following:

- two nuts on the right-hand side bracket
- two nuts on the left-hand side bracket
- two screws on the bottom brackets.



CCP-79806

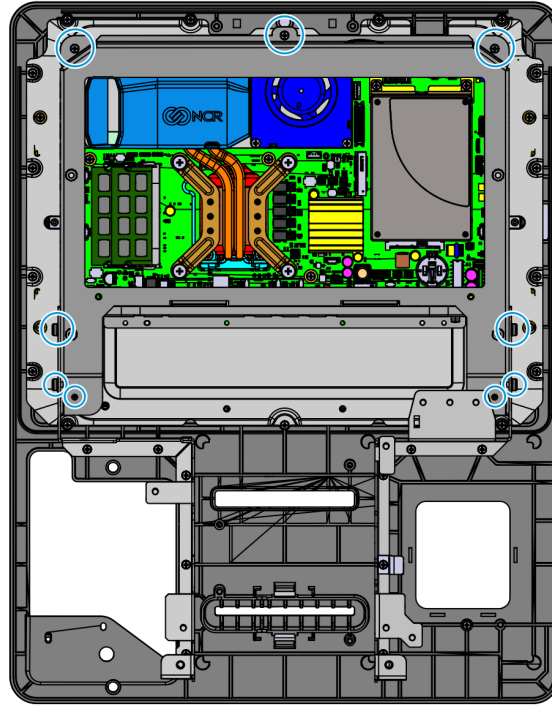
3. Carefully place the front of the kiosk on a flat surface cushioned with bubble wrap or soft cloth.



Caution: Be careful not to scratch nor damage the display.

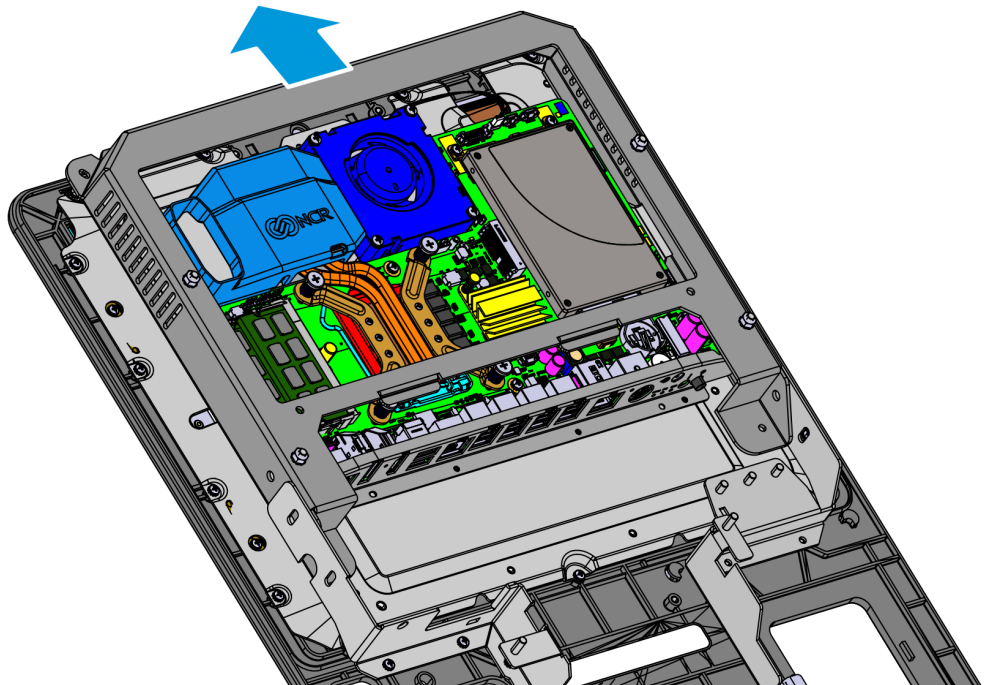
Removing the Motherboard Sled

1. Remove the Motherboard Bracket.
 - a. Remove the nine screws that secure the Motherboard Bracket to the Display Head.



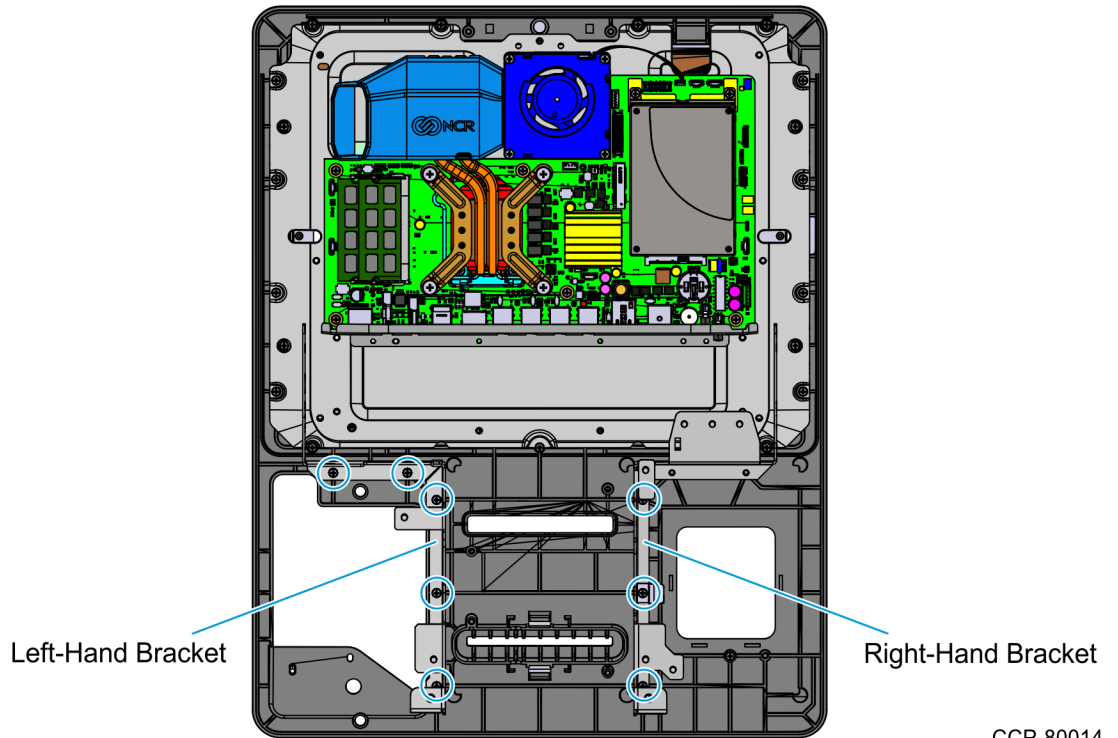
CCP-79801

- b. Slide and lift the Motherboard Bracket from the Display Head.

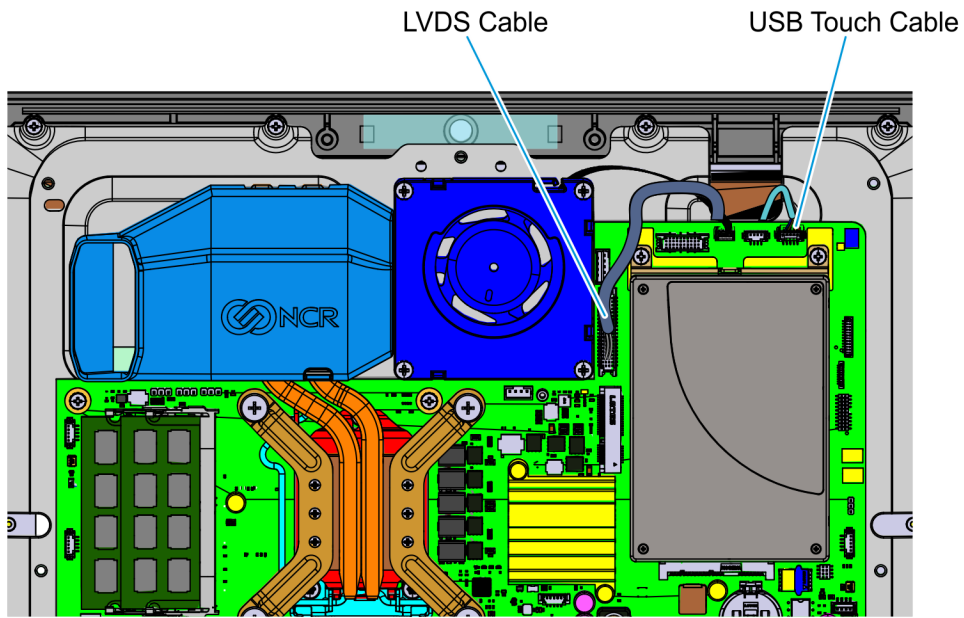


CCP-80013

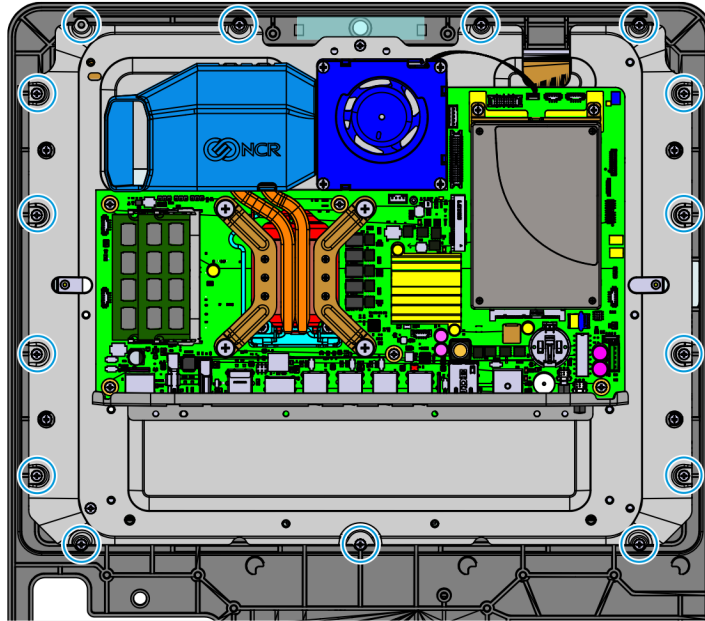
2. Remove the left and right hand Z-shaped support brackets by removing screws as shown below.



3. Carefully disconnect the LVDS and the USB Touch cables from the Motherboard.



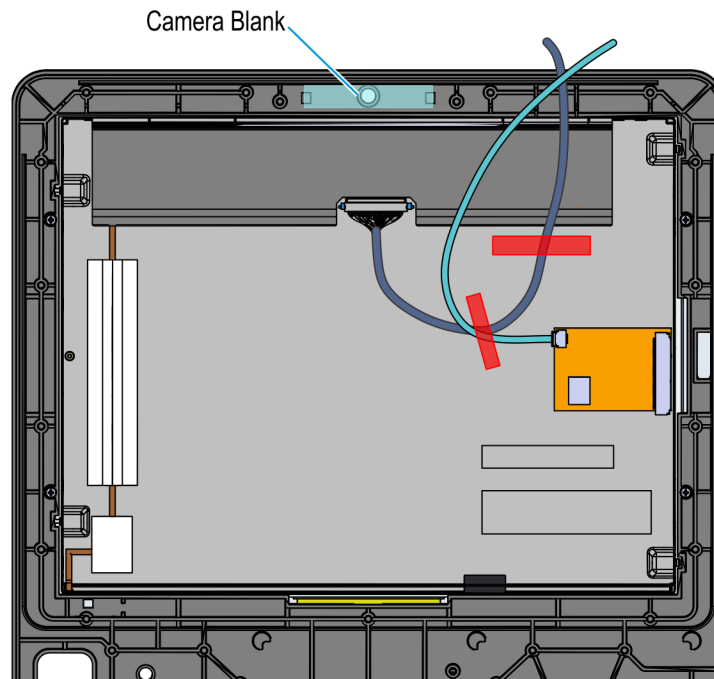
4. Remove the 15 screws that secure the Motherboard Sled to the Display Head.



CCP-80018

Installing the Camera

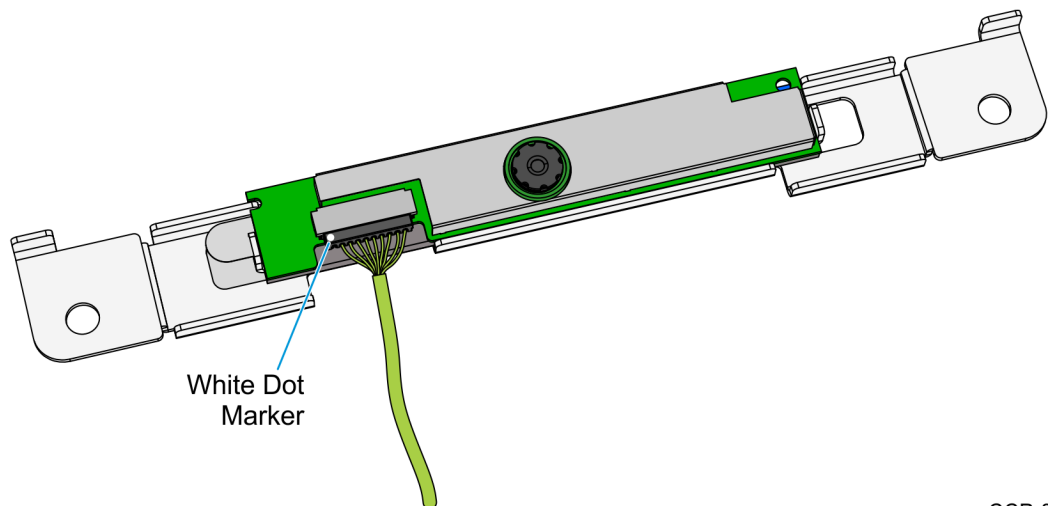
1. Remove the Camera Blank Filler by removing the tape that secures it to the back of the display carrier.



CCP-80019

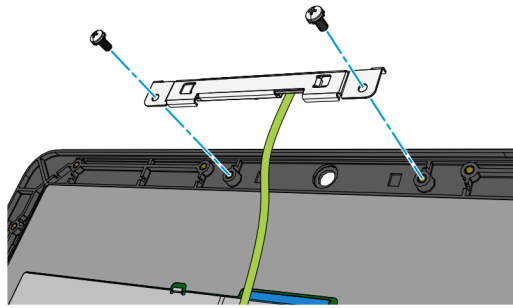
2. Connect the Camera Cable to the Camera.

! Important: The white dot indicator on the cable connector should be facing upward and on the left-hand side.



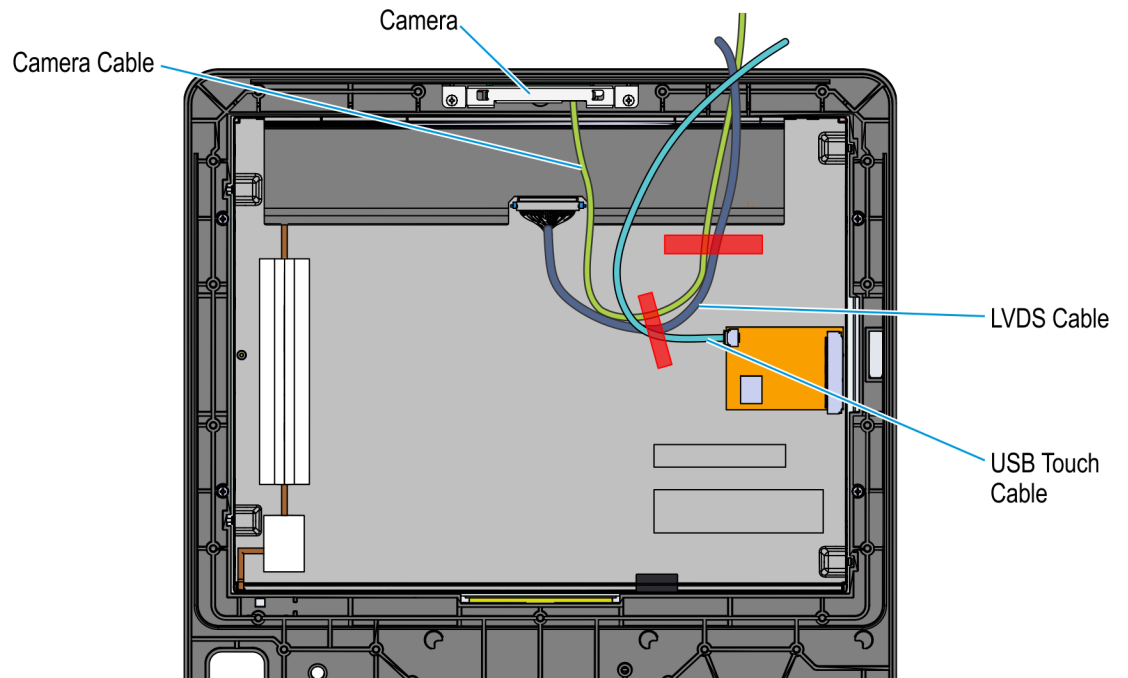
CCP-80915

3. Mount and secure the Camera assembly to the Display Head using two screws.



CCP-80908

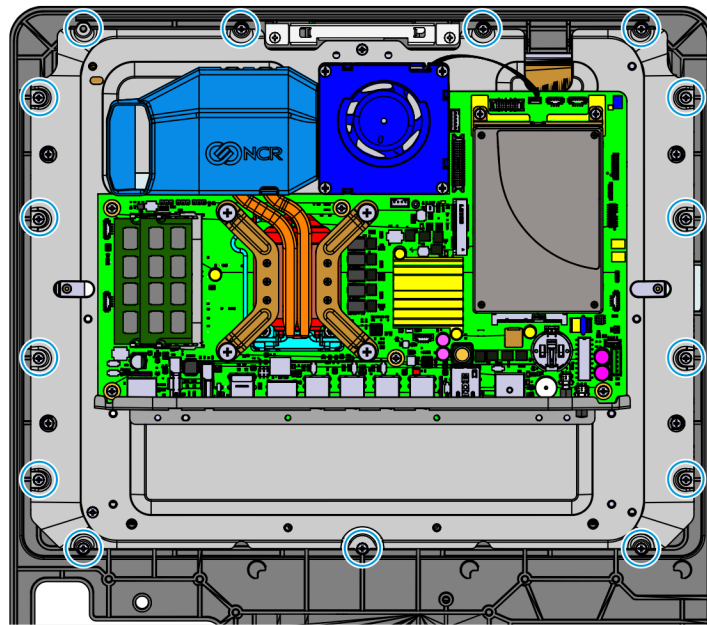
4. Use two strips of cable management tape to secure the Camera Cable to the Display Panel together with the LVDS and USB Touch cables.



CCP-80909

Installing the Motherboard Sled

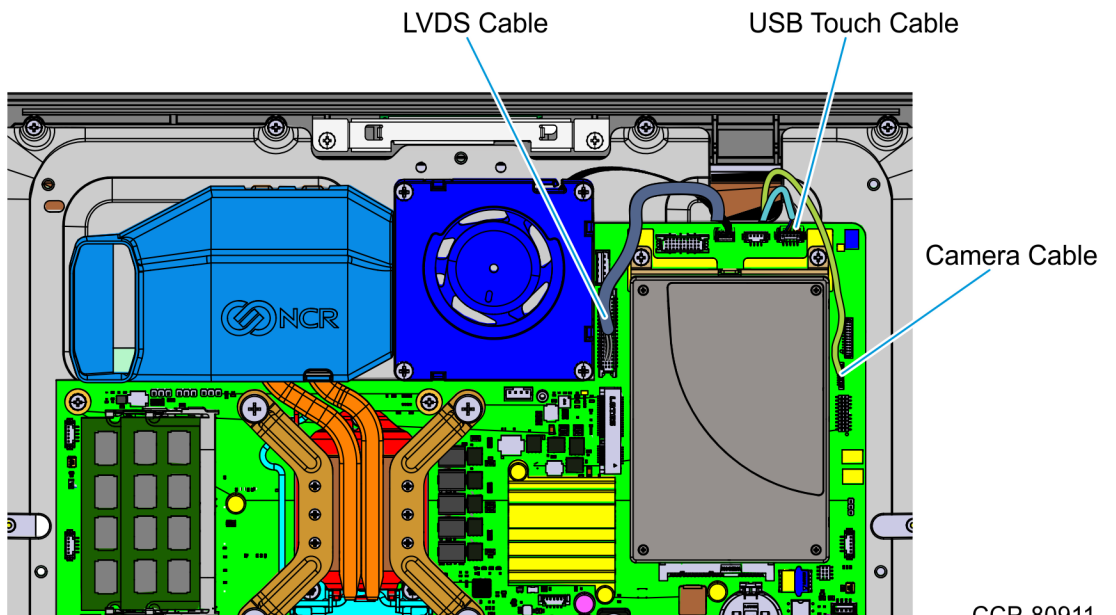
1. Mount the Motherboard Sled to the Display Head and secure it using 15 M3 screws.



CCP-80910

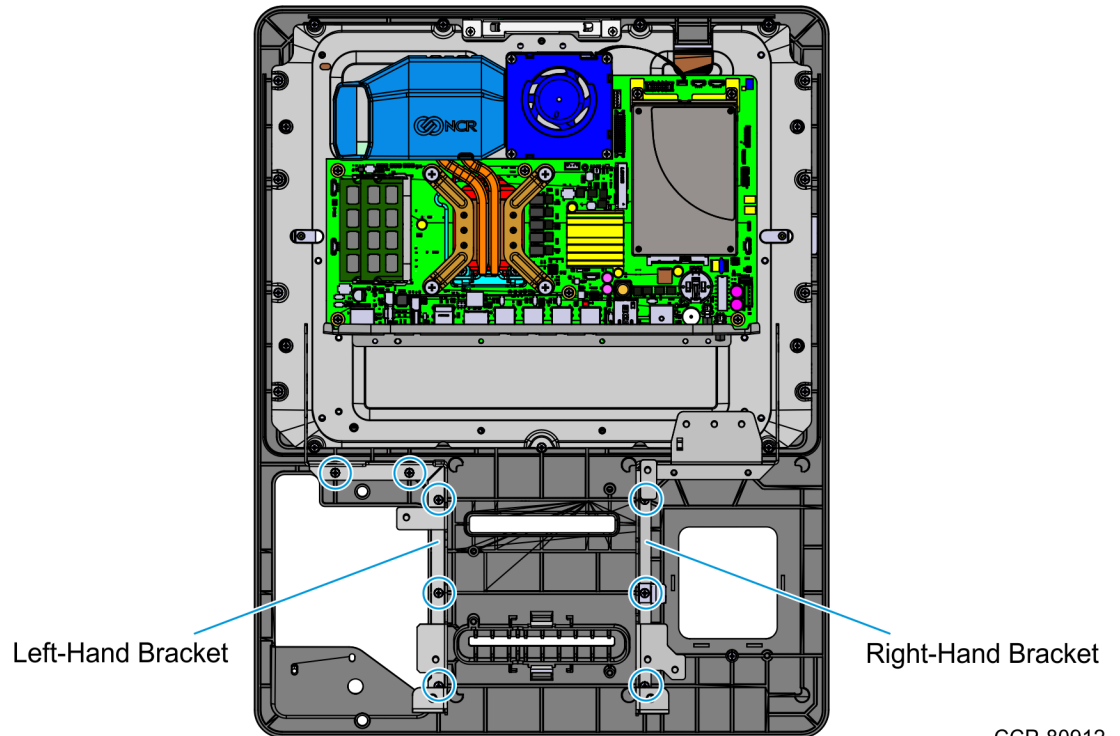
2. Connect the following cables to the Motherboard:

- Camera cable
- USB Touch cable
- LVDS cable

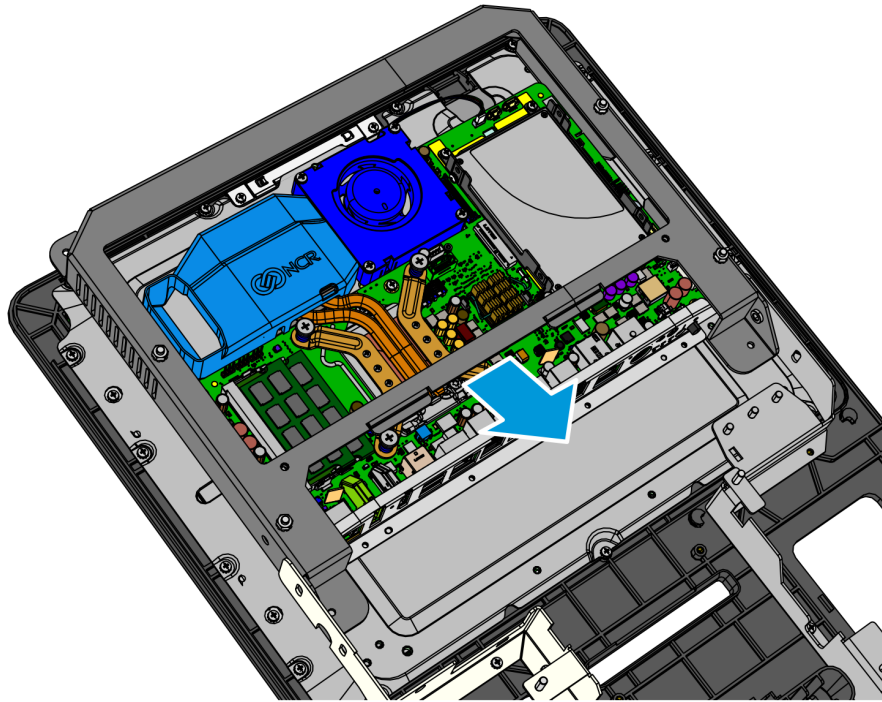


CCP-80911

3. Mount the left-hand and right-hand Z brackets to the Display Head and secure them using screws as shown below.

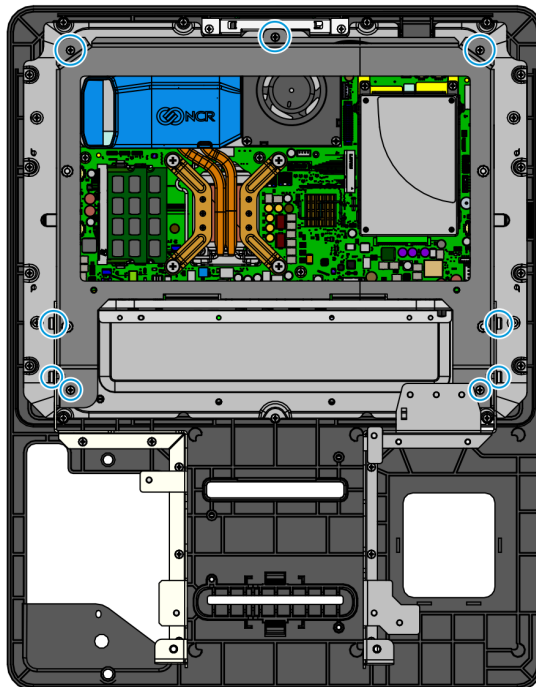


4. Mount and secure the Motherboard Bracket.
 - a. Slide the bracket into the Z-shaped bracket on the display head.



CCP-80913

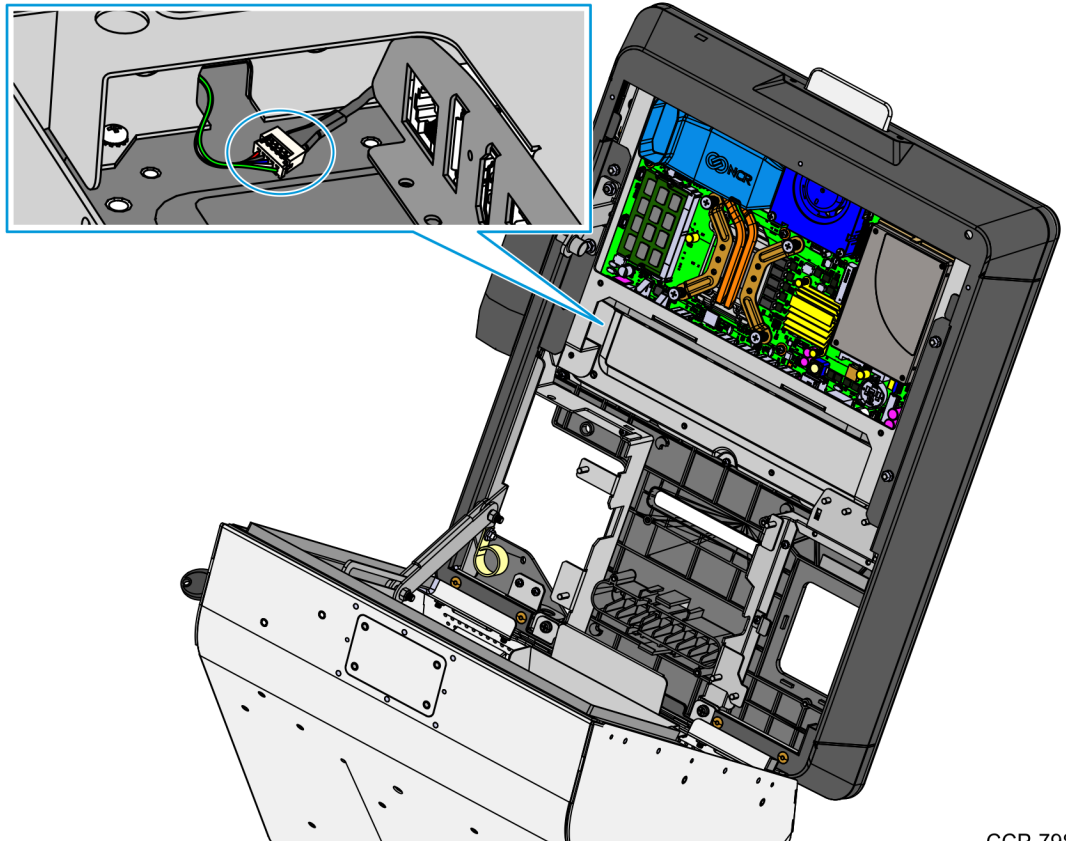
- b. Secure the bracket to the display head using nine screws.



CCP-80914

Installing the Display Head

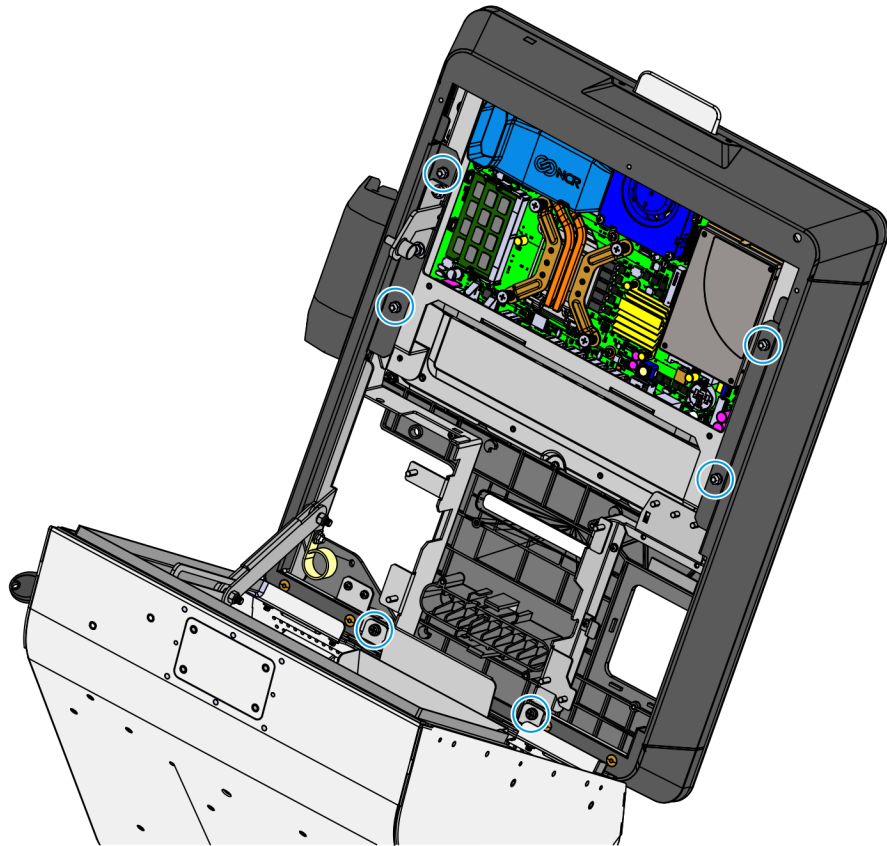
1. Position the Display Head assembly in front of the Display Rear Cover, inserting the MSR cable into the access hole of the Motherboard Bracket.



CCP-79807

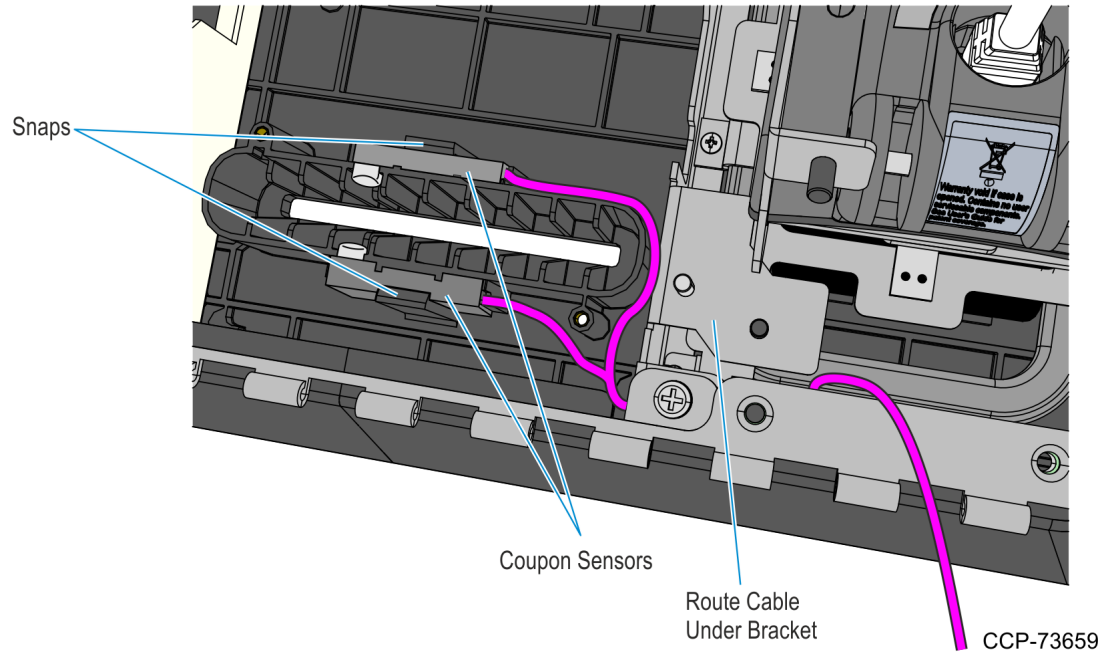
2. Secure the Display Head assembly to the cover using the following:

- two nuts on the right-hand side bracket
- two nuts on the left-hand side bracket
- two screws on the bottom brackets



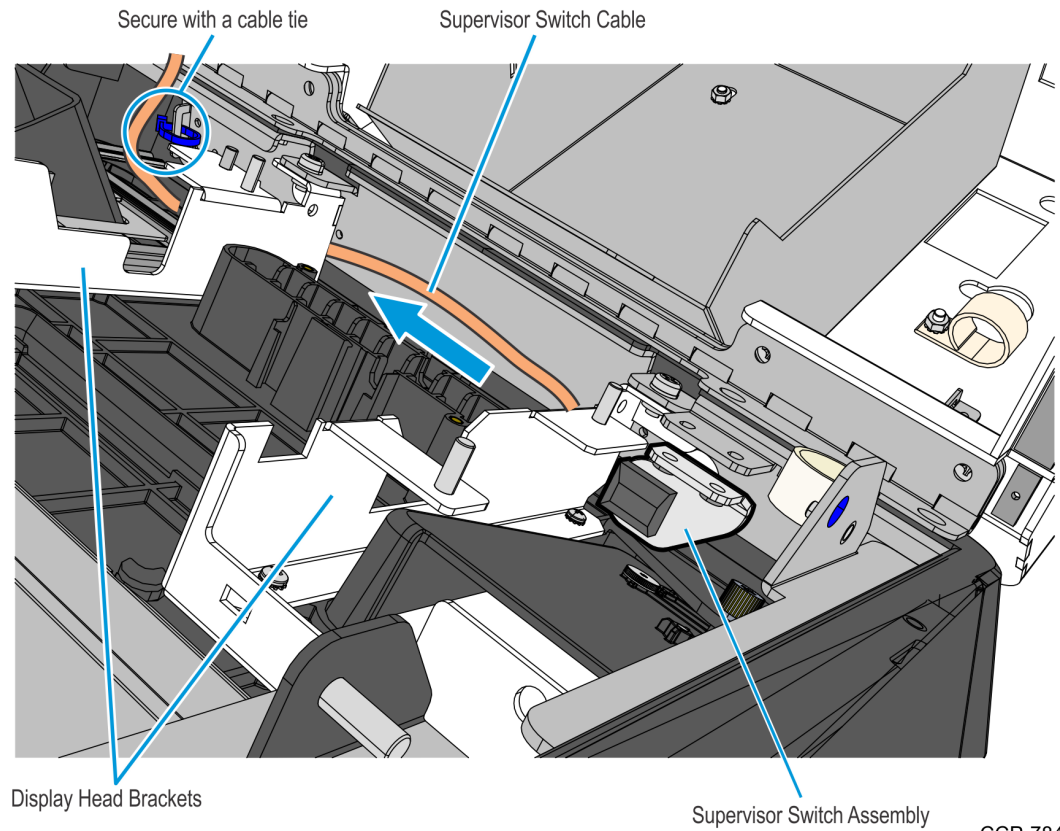
Installing the Coupon Sensors

- On the Display Head, route the cable under the Imager Bracket and snap the Coupon Sensors near the coupon entry slot.



Installing the Supervisor Switch

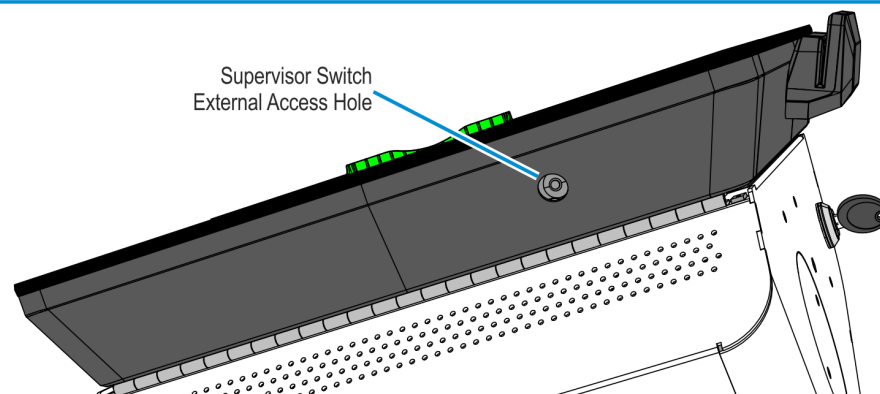
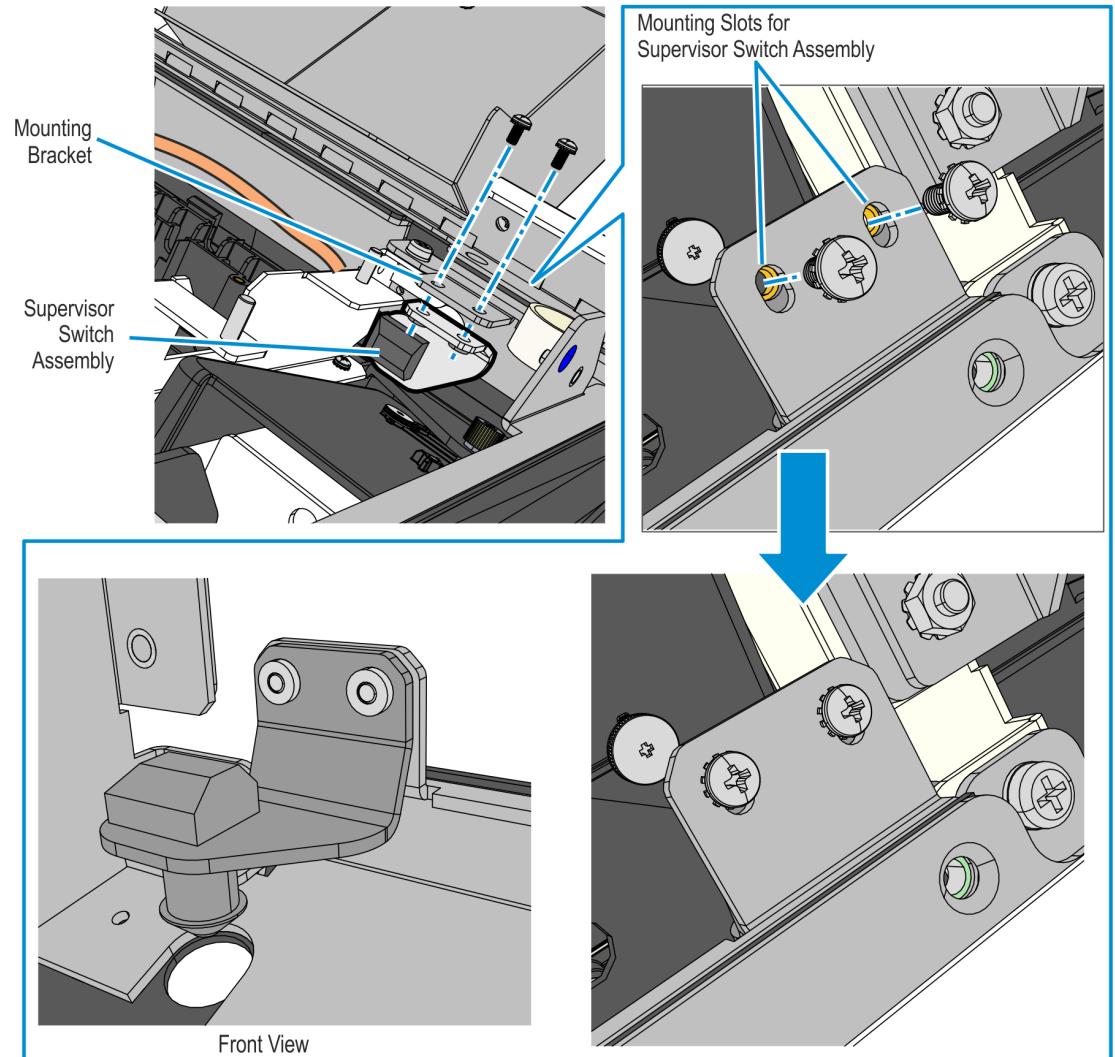
1. Route the Supervisor Cable from the PIN Pad side towards the Imager side, passing the cable under the two Display Head Brackets shown below. Using a cable tie, secure the Supervisor Switch cable to the Display Head.



2. Mount and secure the Supervisor Switch assembly to the Display Head using two screws.

! Important: Make sure that the Supervisor assembly is mounted parallel with its mounting bracket and secured to the top side of the mounting slots.

This position provides the appropriate space for the assembly and properly aligns the Supervisor Switch to its external access hole.



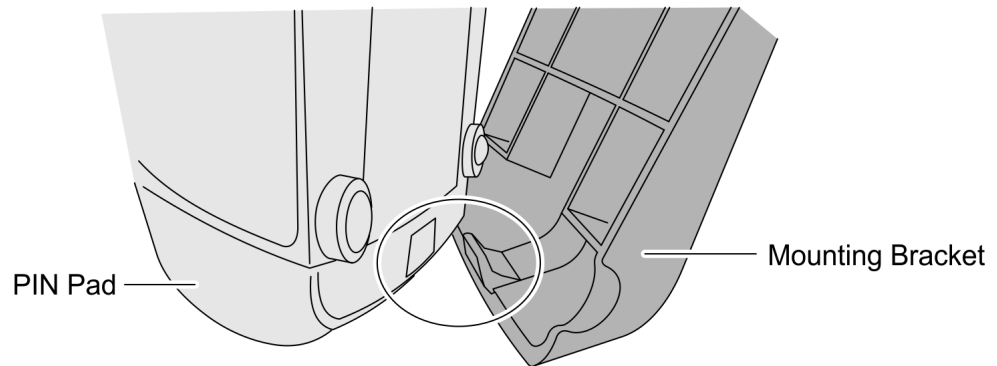
Installing the PIN Pad

Refer to the following sections for procedures in installing the PIN Pad on **NCR 7709 R2.x** units:

- [Installing the Ingenico IPP320/350 PIN Pad](#) below
- [Installing the Verifone VX805/820 PIN Pad](#) on the next page

Installing the Ingenico IPP320/350 PIN Pad

1. Position the Mounting Bracket onto the screws, and then tighten the screws.
2. Connect the PIN Pad Cable to the PIN Pad.
3. Mount the PIN Pad to the Mounting Bracket by aligning the slot on the lower back of the PIN Pad with the small tab on the lower portion of the Mounting Bracket.

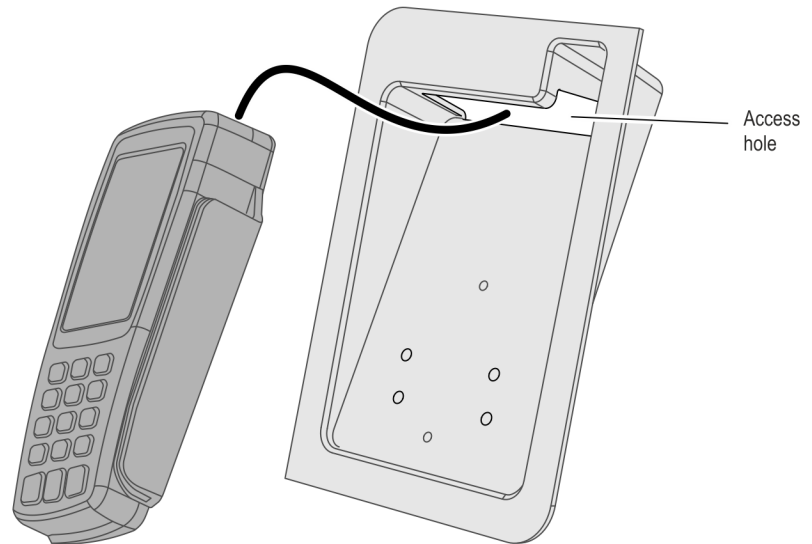


CCP-60071

4. Push the PIN Pad until it snaps to the upper portion of the Mounting Bracket.

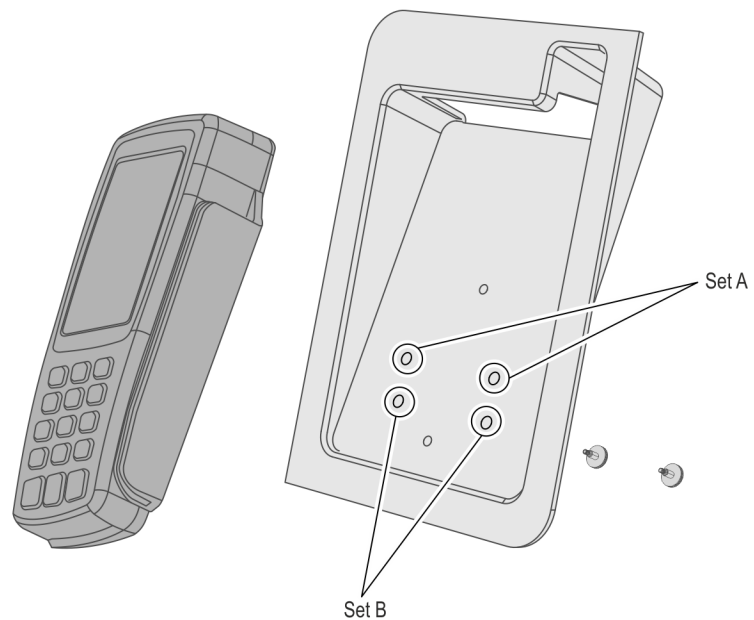
Installing the Verifone VX805/820 PIN Pad

1. Connect the PIN Pad Cable to the PIN pad and route the cable through the access hole on the PIN Pad cradle.



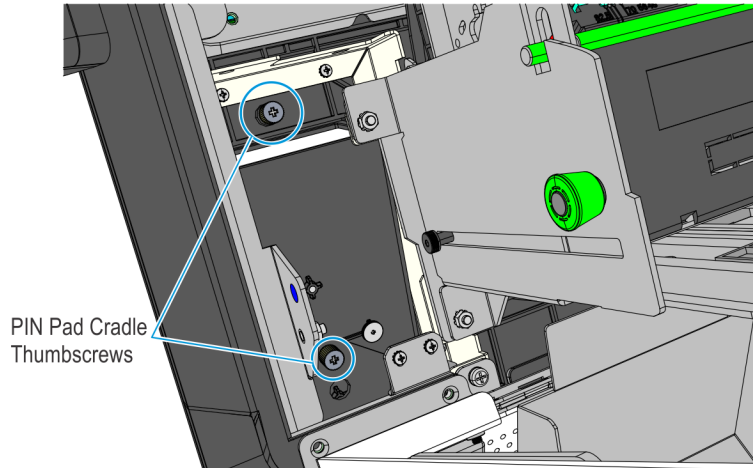
CCP-61344

2. Align the PIN pad mounting holes to the appropriate mounting holes set on the PIN pad cradle as shown below and secure the PIN Pad with two screws.
 - Use Set A mounting holes for VX 805 PIN pad.
 - Use Set B mounting holes for VX820 PIN pad



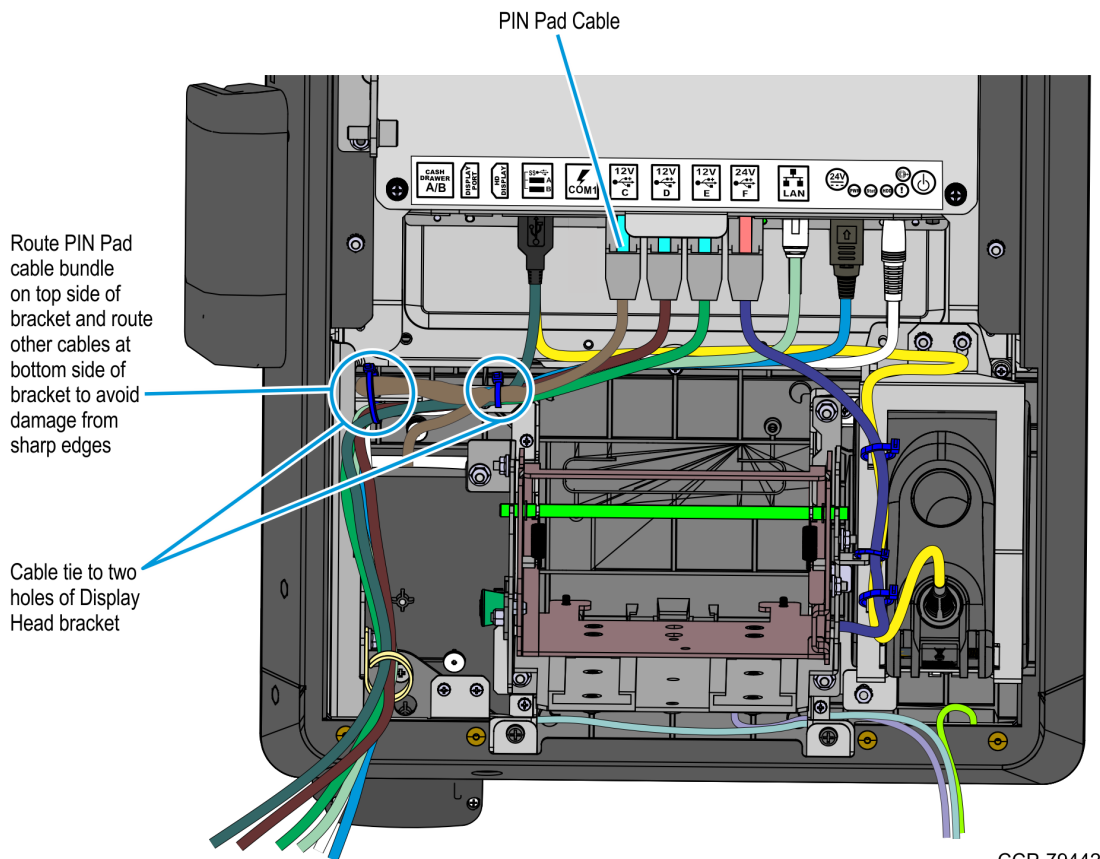
CCP-61346

3. Mount the PIN Pad and Cradle Assembly on the Display head and secure with two thumbscrews.



CCP-78706

4. Connect the PIN Pad Cable to the PIN Pad. Cable tie the extra length of the cable as shown below.



CCP-79442

Connecting or Installing the EAS Antenna

Refer to the following sections for procedures in installing the EAS Antenna on **NCR 7709 R2.x** units:

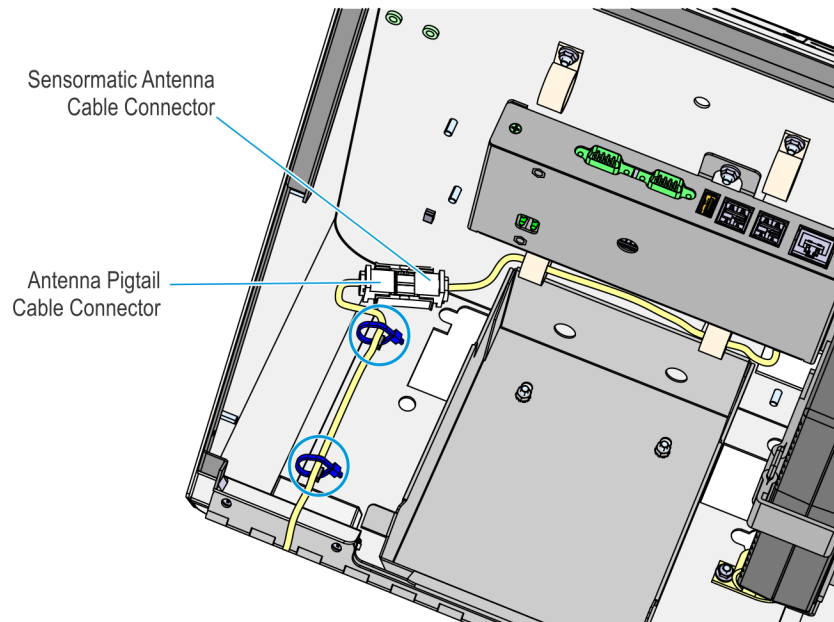
- [Connecting the Sensormatic Cable](#) below
- [Installing the Checkpoint Antenna Cable](#) on the facing page

Connecting the Sensormatic Cable



Caution: Make sure that the Sensormatic Controller is powered OFF. Do NOT connect or disconnect the Sensormatic Cables or Antenna from the Sensormatic Controller when power is ON as this could damage the controller.

- Reconnect the Sensormatic Antenna Pigtail Cable to the Antenna Cable, and secure the Sensormatic Antenna Pigtail Cable with two cables ties.

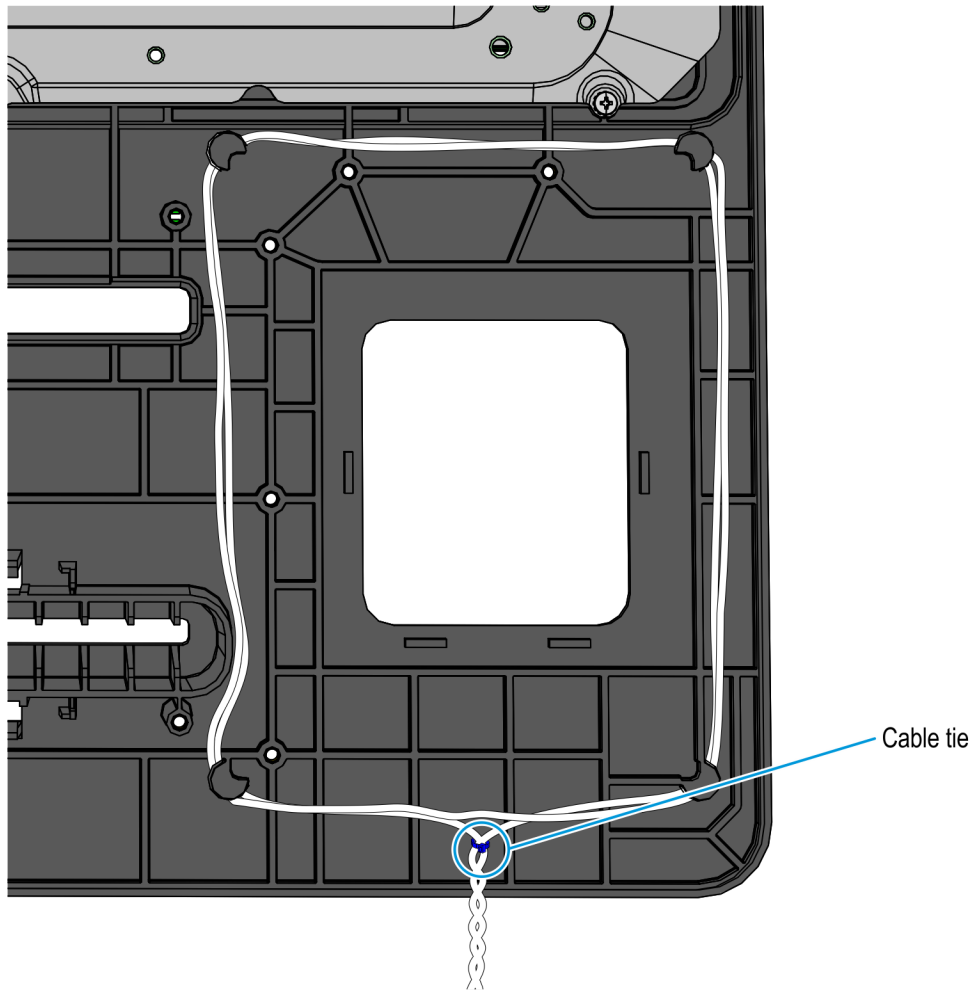


Installing the Checkpoint Antenna Cable

- Loop the Checkpoint Antenna Cable **twice** around the scanning window, positioning the cable tie on the bottom of the loop.



Note: If the cable loop is too tight, pull the cable tie downward and adjust the loop.



Installing the Imaging Scanner

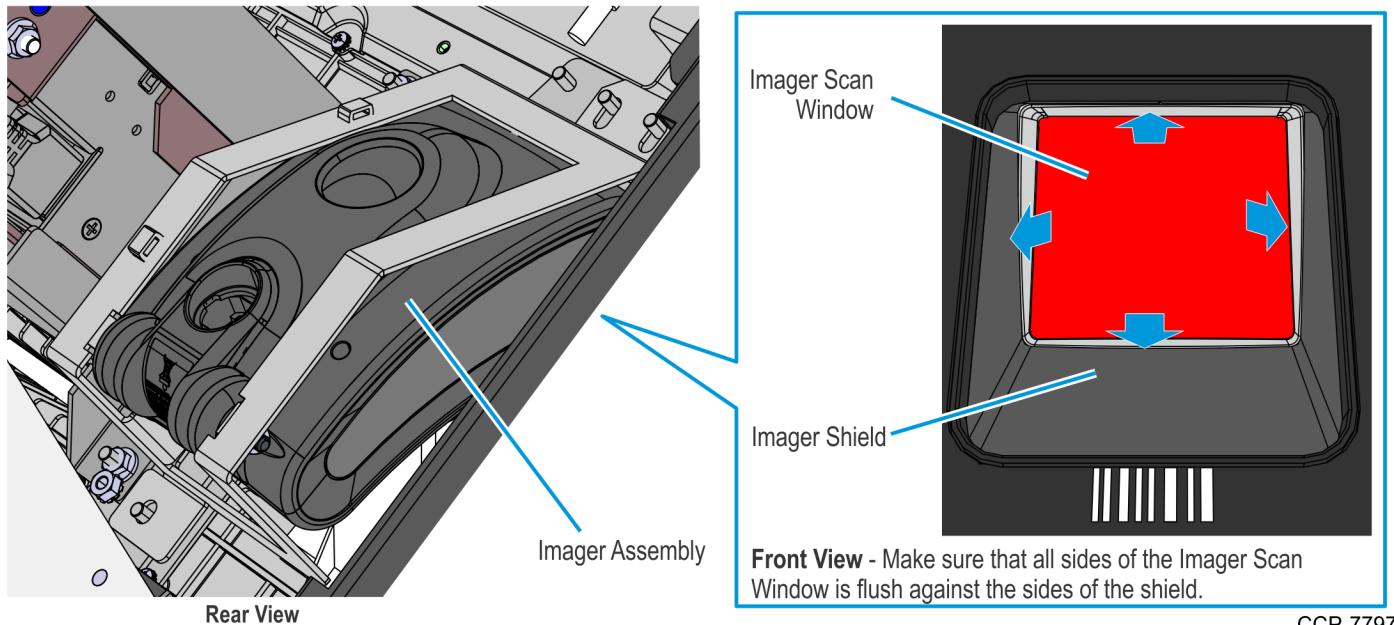
Refer to the following sections for procedures in installing the Imaging Scanner on **NCR 7709 R2.x** units:

- [Installing the Honeywell 7580G Imaging Scanner](#) below
- [Installing the Datalogic 1500i Imaging Scanner](#) on page 40

Installing the Honeywell 7580G Imaging Scanner

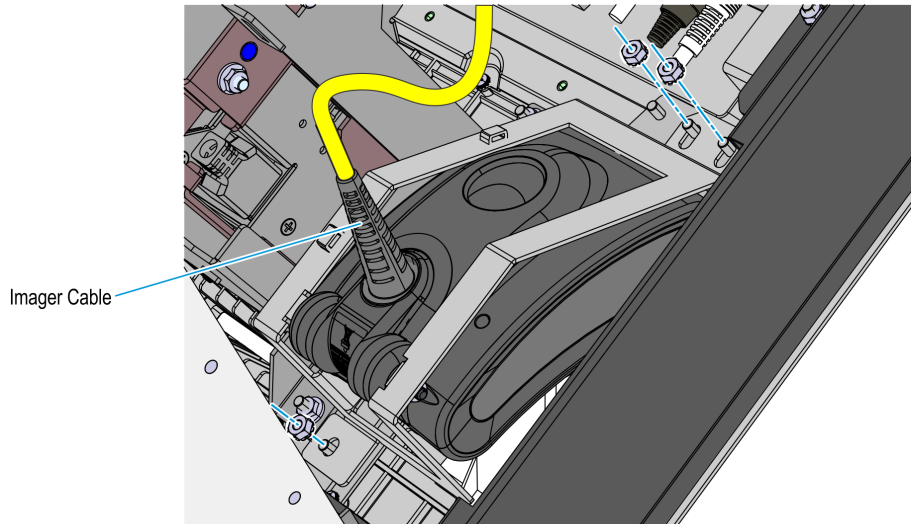
1. Mount the Imager assembly over the Imager Shield.

! Important: On the front side of the fascia, make sure that all sides of the Imager Scan Window is flush against the sides of the Imager Shield. Adjust the alignment of the Imager accordingly.



CCP-77974

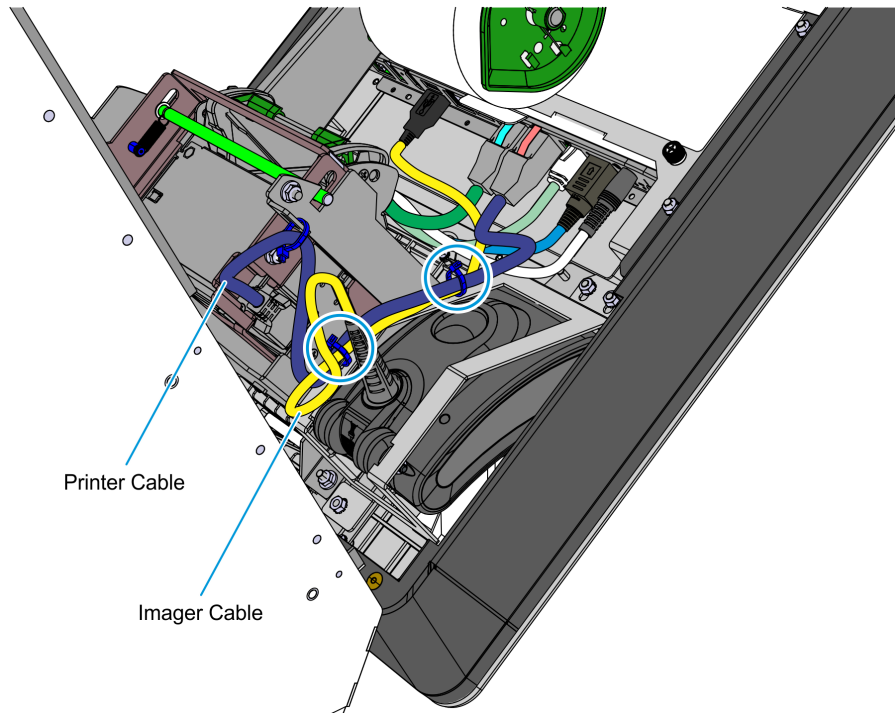
2. Secure the Imager assembly to the kiosk using three nuts.



CCP-77975

3. Bundle the following cables together and secure them to the Imager bracket using two cable ties:

- Imager cable
- Printer cable

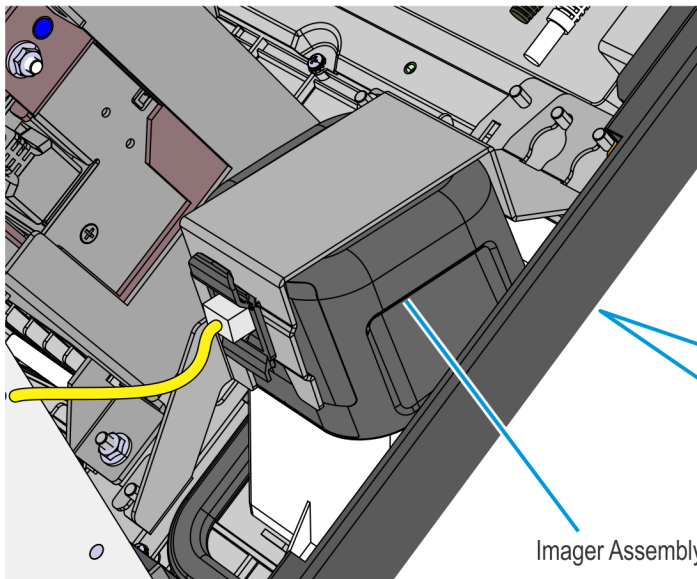


CCP-77965

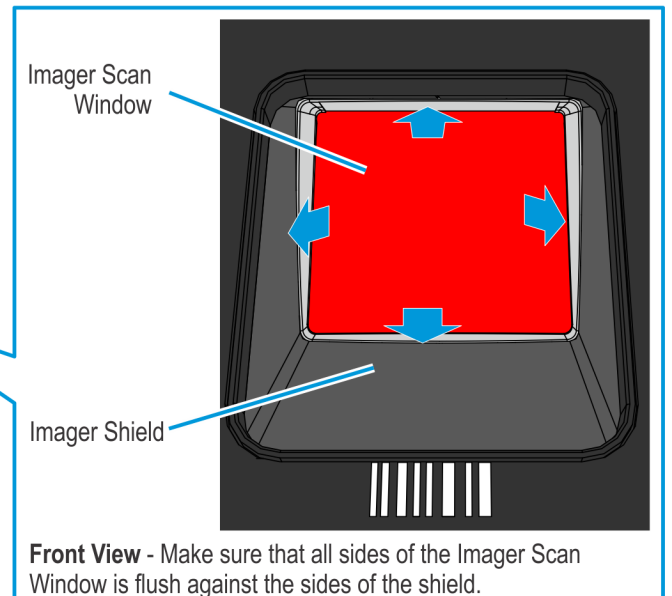
Installing the Datalogic 1500i Imaging Scanner

1. Mount the Imaging Scanner assembly over the Imager Shield.

! Important: On the front side of the fascia, make sure that all sides of the Imager Scan Window is flush against the sides of the Imager Shield. Adjust the alignment of the Imager accordingly.

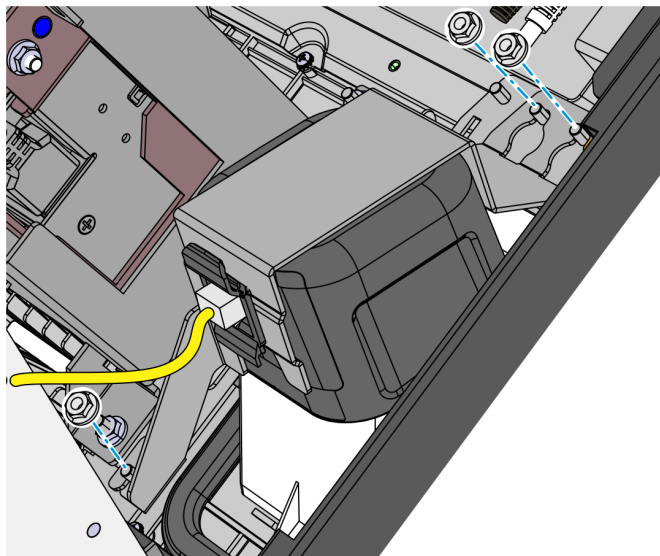


Rear View



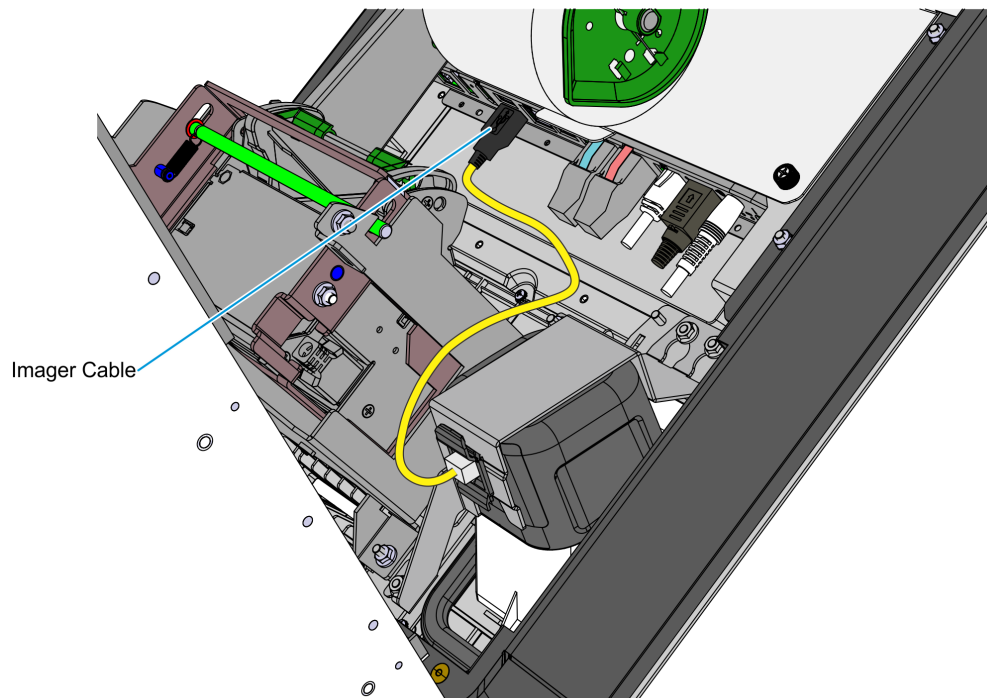
CCP-79471

2. Secure the Imaging Scanner assembly to the kiosk using three nuts.

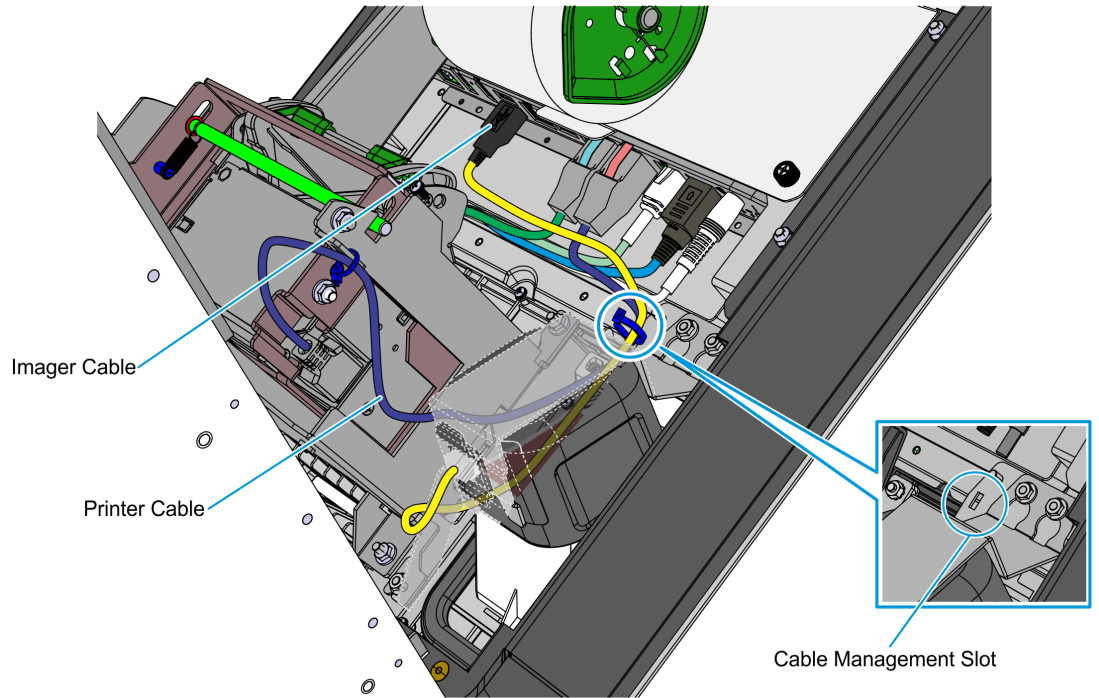


CCP-79470

3. Connect the Imaging Scanner cable to the **USB B** port of the motherboard.

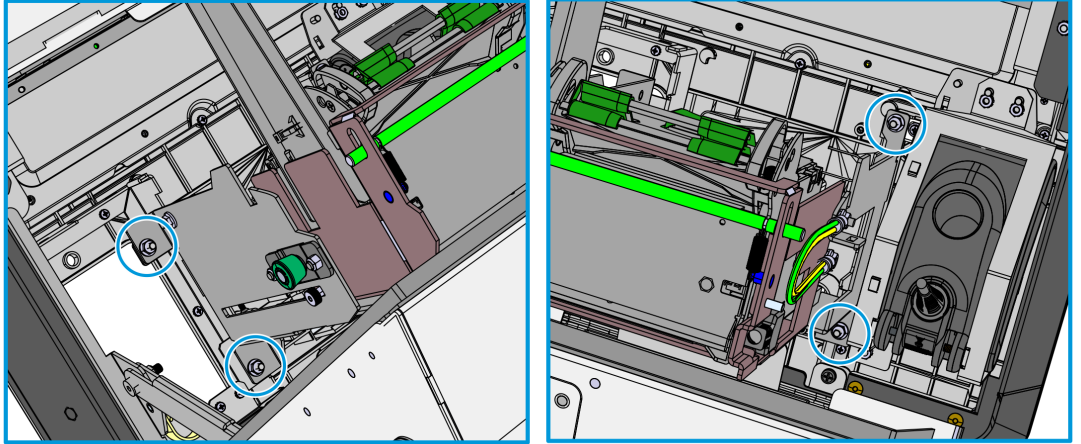


4. Route the following cables on the left side of the Imaging Scanner assembly and use a cable tie to secure the cables to the cable management slot shown in the following image.
 - Imager USB cable
 - Printer USB and Power cable



Installing the Receipt Printer

1. Mount the printer assembly onto its four mounting studs on the back of the display, and secure it with four nuts.



CCP-77997

2. Connect the previously removed ground cable by securing it with a nut to the printer bracket.



Note: The other end of this ground cable is connected to the kiosk enclosure.



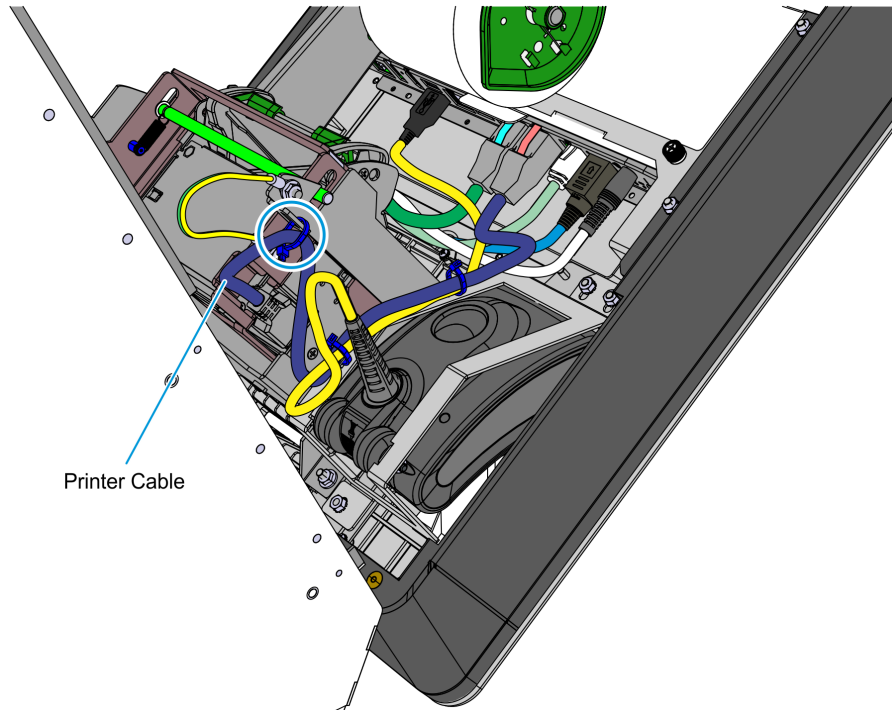
CCP-77998

3. Connect the printer cable to the printer and secure it with a cable tie to the printer bracket.



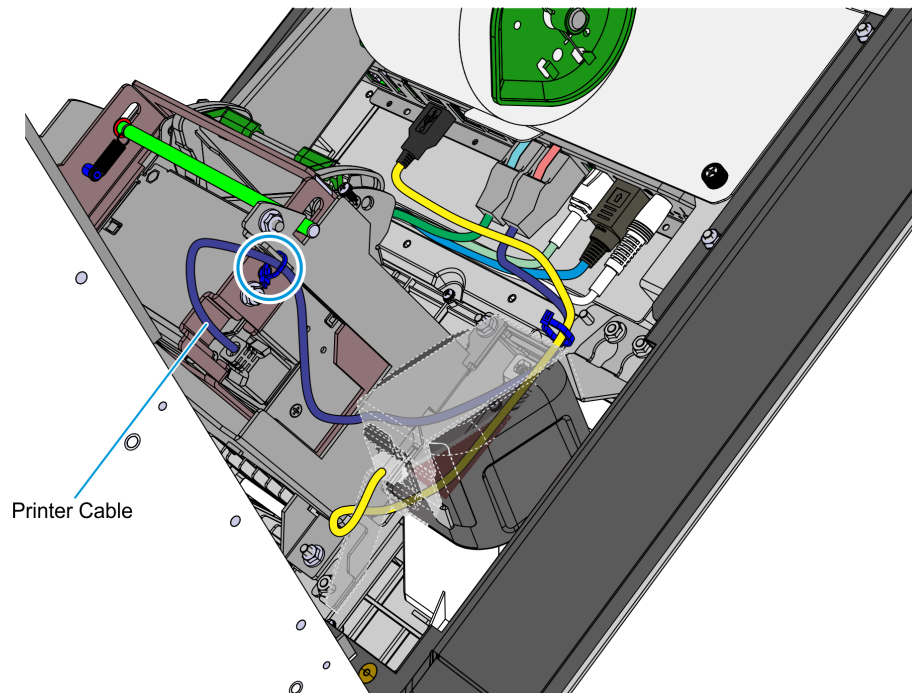
Note: There should be enough slack to allow the Printer Tray to slide upward.

With Honeywell 7580G Imaging Scanner



CCP-77996

With Datalogic 1500i Imaging Scanner

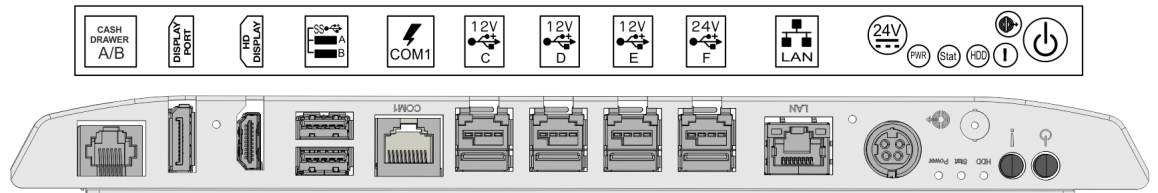


CCP-79464

Connecting Cables

The NCR SelfServ™ 90 (7709) Kiosk Kiosk provides labels that show the connectors of the Motherboard and the Adapter. The tables below indicate the type of device or of cable for each connector.

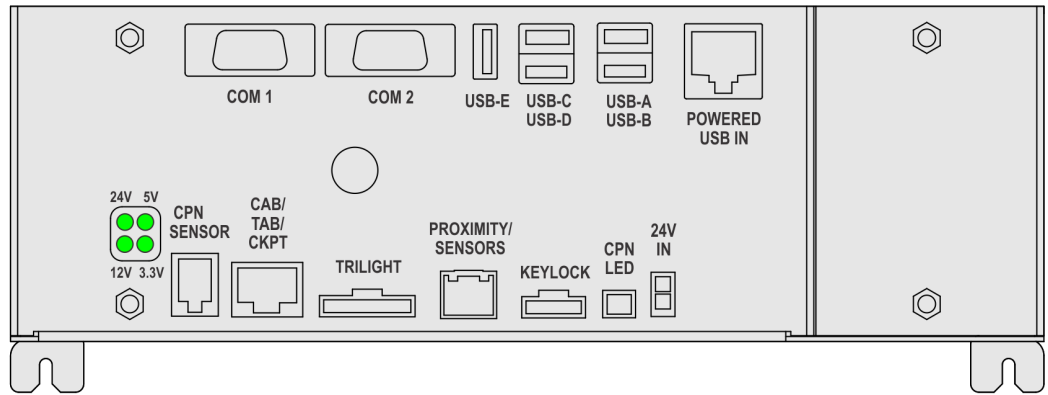
I/O Motherboard



CCP-61343

Connector	Device/Cable
COM 1	Ingenico IPP320, IPP350, or Lane 5000 PIN Pad
LAN	LAN Ethernet Cable
24V	Power Supply Cable
Line Out	Dual Speaker
USB A	Sensormatic Controller
USB B	Imaging Scanner
USB C	Verifone VX805, VX820, or MX915 PIN Pad
USB D	Security Scale
USB E	I/O Adapter
USB F	Receipt Printer

I/O Adapter



CCP-78119

Connector	Device/Cable
USB A	Handheld Scanner
TRILIGHT	Indicator Light
CAB/TAB/CKPT	Checkpoint Signal Cable
CPN SENSOR	Coupon Sensor Cable
KEYLOCK	Supervisor Switch
PROXIMITY/SENSORS	Turntable Kit