

C/OPT Receipt Printer Upgrade Option Procedure Guide

Please Note: This manual and its contents are subject to engineering changes.

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Safety Precautions

For proper installation of your new C/OPT Receipt Printer, please follow the following replacement instructions:

- Before beginning, turn OFF power to the unit by unlocking, opening the door, and turning off the power supply located in the left rear corner of the upper enclosure, via the red toggle switch.
- Observe ESD precautions at all times.
- Observe proper orientation of connections with their corresponding sockets.
- Ensure connector latches are properly engaged.
- Read and understand this document thoroughly before beginning installation.

C/OPT Receipt Printer Upgrade - Introduction

Important! Before upgrading your C/OPT Receipt Printer, the C/OPT main circuit board must be upgraded with any C/OPT purchased prior to May 1st, 2011*.

*If your C/OPT was purchased after May 1st, your terminal is configured to support the C/OPT Printer Sub-Assembly (p/n 20-6203).

Before Proceeding with Receipt Printer Installation:

You must first determine the model of your C/OPT main circuit board:

If the C/OPT contains the PV330/296 board with one of the following software options installed, you will require the upgrade kit that corresponds with your main board software version for a complete upgrade to the C/OPT Receipt Printer-12 VDC.

20-4417-1 C/OPT w/330/296 - Standard:

QTY	P/N	Part
1	20-4339	C/OPT Receipt Printer Option
1	20-4286-1	C/OPT Main Board Upgrade
1	20-4233	Door Bracket with Magnetic Coil
1	M1703	C/OPT Receipt Printer Upgrade Installation Guide

20-4417-2 C/OPT w/330/296 - Imperial:

QTY	P/N	Part
1	20-4339	C/OPT Receipt Printer Option
1	20-4286-2	C/OPT Main Board Upgrade
1	20-4233	Door Bracket with Magnetic Coil
1	M1703	C/OPT Receipt Printer Upgrade Installation Guide

20-4417-2 C/OPT w/330/296 - Comdata:

QTY	P/N	Part
1	20-4339	C/OPT Receipt Printer Option
1	20-4286-2	C/OPT Main Board Upgrade
1	20-4233	Door Bracket with Magnetic Coil
1	M1703	C/OPT Receipt Printer Upgrade Installation Guide

Please refer to manual M00-20-4286 C/OPT Main Board Upgrade, follow installation instructions, then proceed with uninstalling your current C/OPT receipt printer below on page 10.

If the C/OPT contains the PV343 board purchased prior to May 1st, 2011, read and follow replacement instructions on page 7.

C/OPT Receipt Printer Option, p/n 20-4339:

QTY	P/N	Part	
1	75-0124-12V	C/OPT Printer 12 VDC	} C/OPT Printer Sub- Assembly p/n 20-6203
1	20-1679	Modified Data Cable	
1	20-1677	Modified Power Cable	
1	280-007	Cable Tie	
1	50-3203	Adapter Block	
2	50-0391	Screw 10-32 x 1/2" PHIL PH ZP	
4	50-0229	Screw 8-32 x 5/8 PHIL PANHD	
1	54-1106	Thermal Paper 4" Dia. Roll	
1	50-2127	Cable Clamp	

If your C/OPT is Equipped with the PV343 Board:

For those of you who have a C/OPT with a PV343 board and an installed Seiko printer, you will need to replace this board with the supplied PV343 board.

20-4416-2 C/OPT w/343- prior to May 1st:

QTY	P/N	Part
1	20-4339	C/OPT Receipt Printer Option
1	20-0343	C/OPT PV343 Main Board
1	20-4233	Door Bracket with Magnetic Coil
1	M1703	C/OPT Receipt Printer Upgrade Installation Guide

Step 1. Unlock and open the enclosure

Step 2. Turn the unit power OFF.

Step 3. On the back of the door, you will see door electronics similar to the example shown in Figure 1. Your hardware may vary, depending on original options installed.

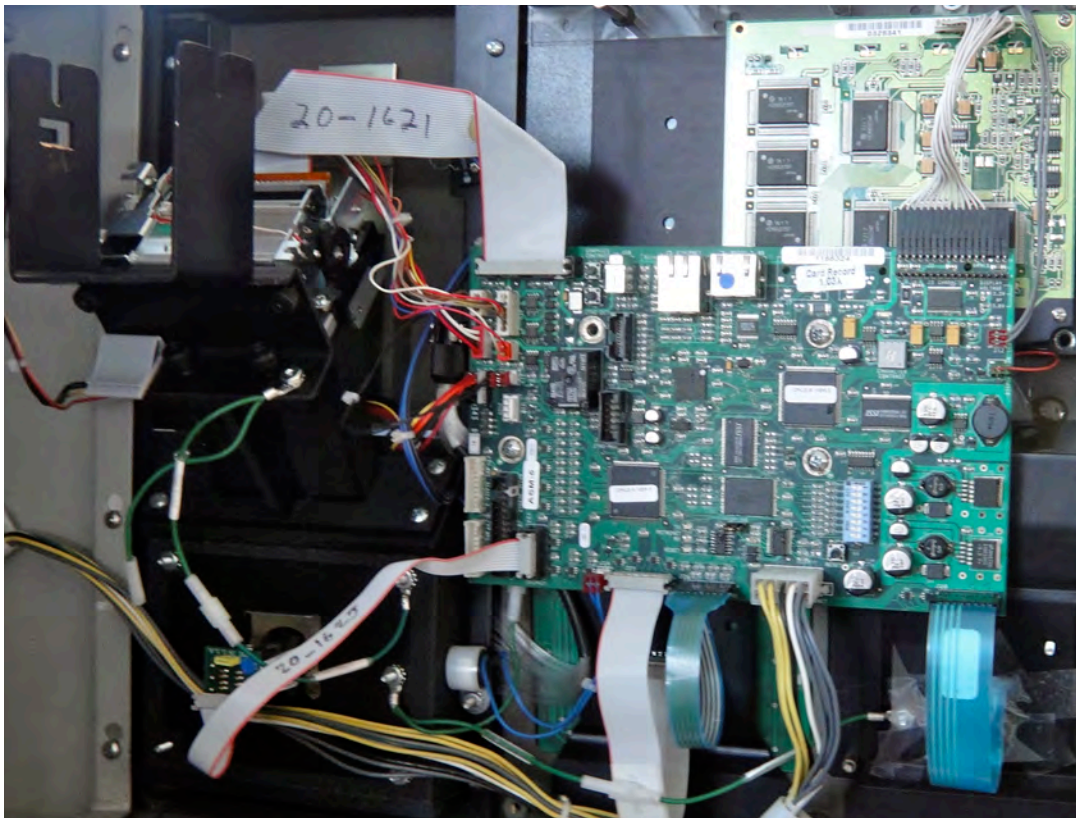


Figure 1: Cable Connections to (original) PV343 Board

Step 4. Disconnect all cables form the main circuit board.

Step 5. Remove the four mounting screws holding the PV343 Board to the door.

Step 6. Install the upgraded PV343 main board, using the four mounting screws removed in Step 5.

Step 7. Reconnect the cables from the door-mounted equipment:

Note: Do not reconnect the printer cables: J16, J10, J9, J13 or J14, since you will be removing the printer after you have finished installing the new PV343 board.

- Display cable to J2.
- Ensure cable wires exit both the PV343 main board and display connections in a downward direction. This will avoid damage, and ensure correct display operation. See Figure 2 below.

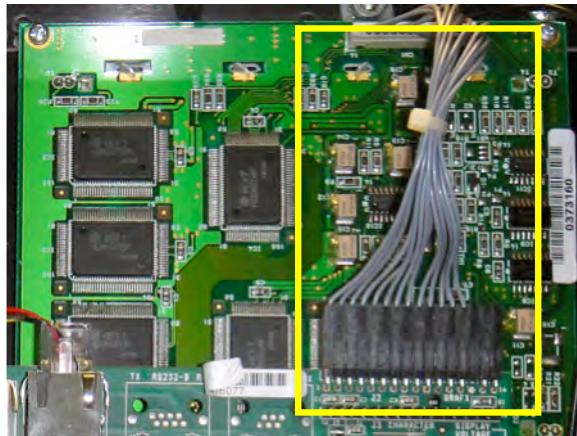


Figure 2: Display Cable Connection to the PV343 Board J2 Socket

- Display temperature sensor to J12.
- Display fan to J15.
- Numeric keypad to J28 "keyboard-1".
- Alpha keypad to J25 "keyboard-2".
- Function keypad to J26 "function keyboard". Do NOT twist the cable!
- Beeper to J24 "speaker".
- Door solenoid to J18 "door".
- Light fiber bundles to J17 "lights".
- Card readers to J20, J21, or J22 as appropriate for the installed hardware.
 - If the door is equipped with a magnetic card reader, an updated cable will be required.
 - The replacement 20-1627 proximity card reader cable terminates differently at terminals 4 and 6 of connector-2 of the Wiegand to strobed converter, as compared to the old (incompatible) 20-1620 cable.

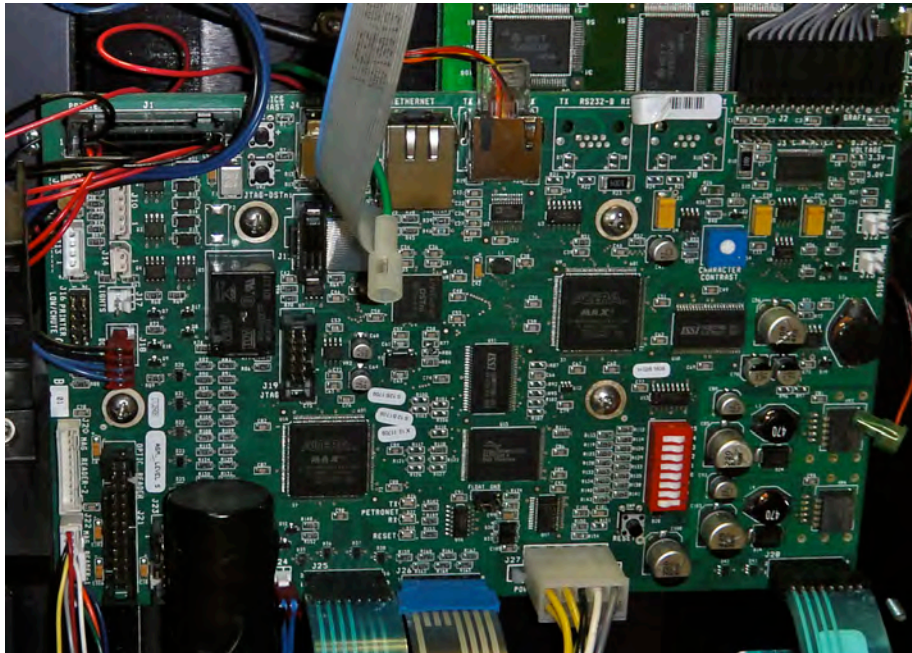


Figure 3: Cable Connects to Upgraded PV343 Board

Step 8. Depending on original options installed, proceed with installing the power-supply adapter board if required.

- Install the power-supply adapter board on the bottom two standoffs, using the two lower mounting holes of the adapter and two 8-32 x 5/16" Philips PANHD screws.
- Install jumper power cable.
- Attach the power wiring harness to the power adapter board at the three connector locations.

Step 9. Double-check all connectors for correct location and orientation before continuing on with uninstalling your current C/OPT Receipt Printer Option on page 10.

Note: Do not throw away your old PV343 board, as it may be returned to OPW-FMS for core credit.

Uninstalling your Current C/OPT Receipt Printer Option:

Before installing your new C/OPT Receipt Printer Option, you must first uninstall your current receipt printer.

- Step 1.** Make sure the C/OPT unit power is OFF.
- Step 2.** Remove any paper, if present, out of the printer by turning the switch arm, located on the printer, clockwise and removing the paper roll from the bracket.
- Step 3.** Ensure all of the printer cables have been disconnected.
- Step 4.** Unscrew the printer's four mounting screws. See Figure 4 below.

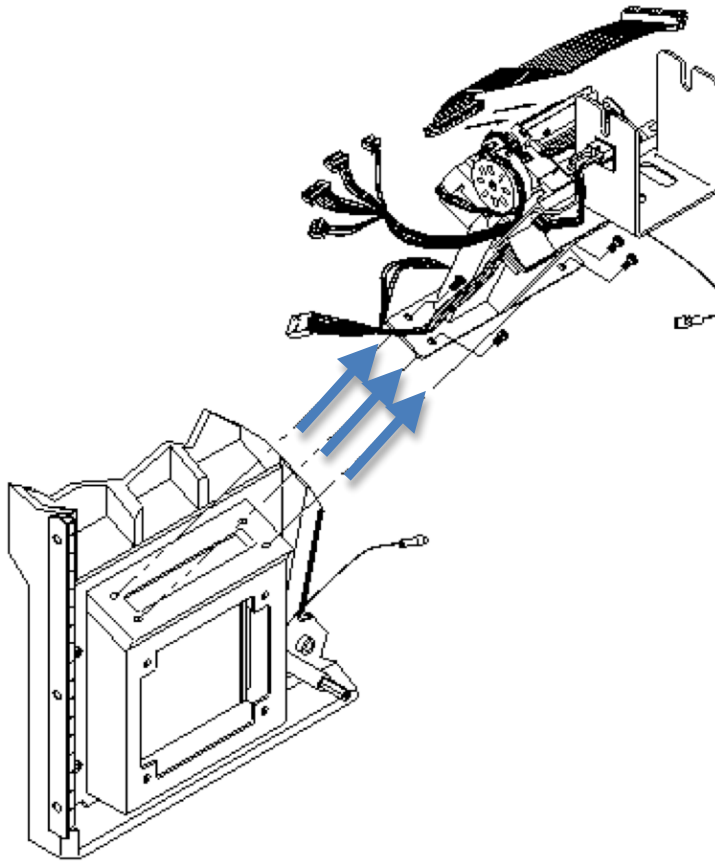


Figure 4: Uninstalling Current C/OPT Receipt Printer Option

Installing the Door Electro Mag Bracket (p/n 51-0231)

Now that the PV343 board has been replaced and the old C/OPT receipt printer has been removed, the door electro mag bracket must be replaced in order to accommodate the new printer.

Step 1. Remove the magnet assembly from current door bracket, and disconnect J18 "door" connection.

Step 2. Unscrew the two screws attaching the current door bracket to the door.

Step 3. Using these two screws mount the newly modified supplied bracket. See Figure 5 below.

Step 4. Reconnect cable to J18 "door" connection on the PV343 board.

Step 5. Please proceed with installing the new C/OPT Receipt Printer Option on page 12.

Warning Note*: *Polarity Sensitive! Check door to verify magnet is functioning properly; if not, reverse wires on connectors.*

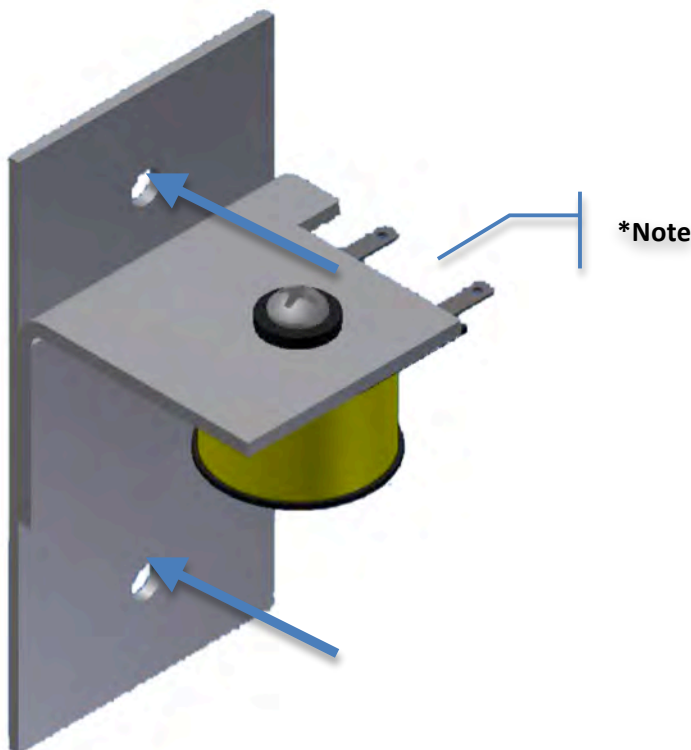


Figure 5: Mounting Holes for Door Electro Mag Bracket

Installing your new C/OPT Receipt Printer Option:

20-4416-3 C/OPT w/343- after May 1st:

QTY	P/N	Part
1	20-4339	C/OPT Receipt Printer Option
1	M1703	C/OPT Receipt Printer Upgrade Installation Guide

During receipt printer installation, please refer to the below image for mounting orientation.

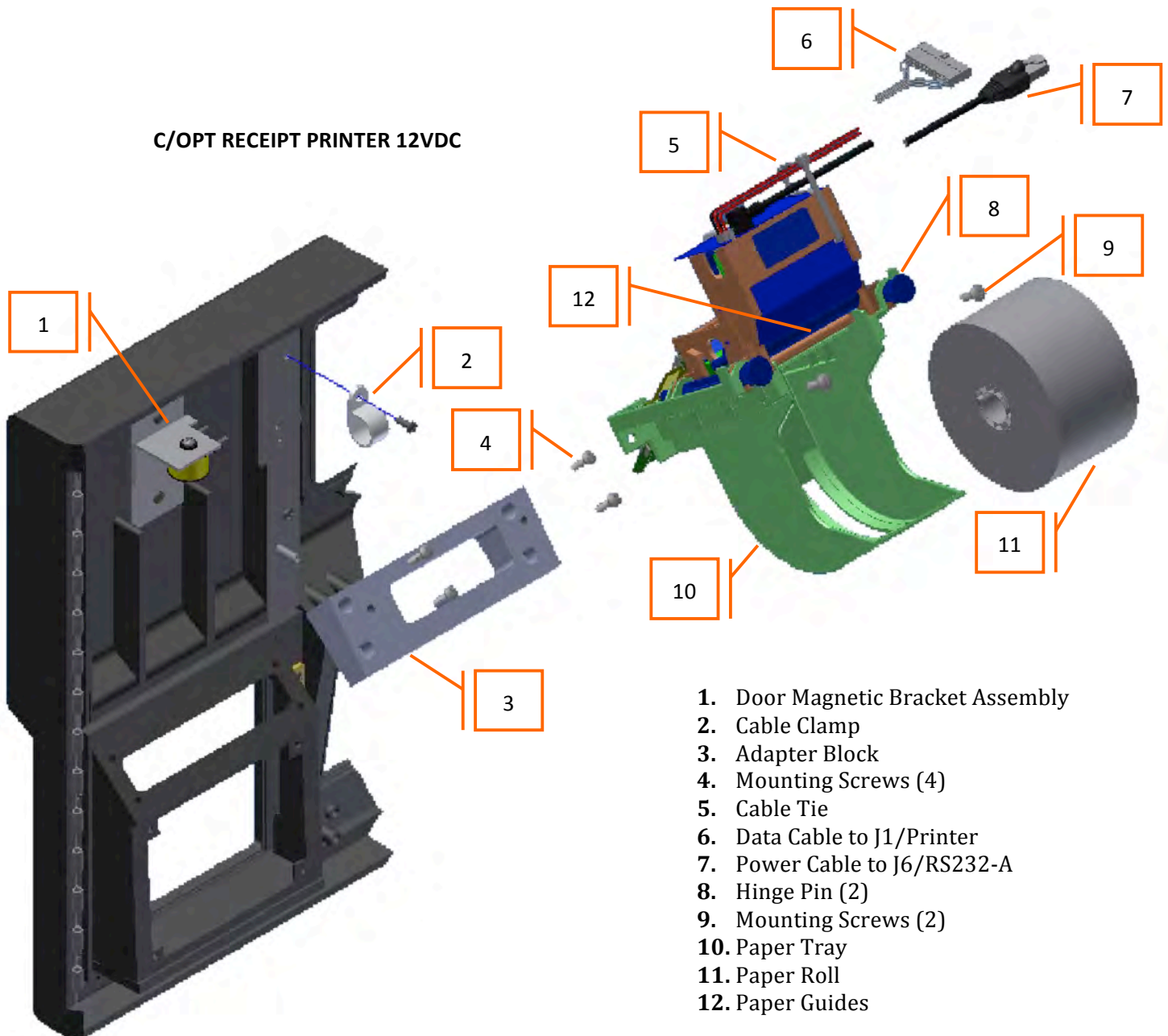


Figure 6: C/OPT Receipt Printer Assembly

Now that your C/OPT main circuit board has been upgraded the receipt printer removed and the door electro magnetic bracket installed, follow the following procedures for uninstalling your old Seiko printer or depending on original options installed (i.e. no printer option installed), simply unscrew the cover plate located over the printer mounting location.

Step 1. Position the adapter block on to the printer mounting area as seen in Figure 6.

Step 2. Screw the adapter block in place using the four supplied 8-32 x 5/8" PHIL PANHD screws.

Note: Observe correct adapter block orientation by referring to Figure 6.

Step 3. Position the printer unit to align with the inner screw holes of the adapter block.

Step 4. Mount the printer to the adapter block using the two supplied 10-32 x 1/2"PHIL PH ZP screws.

Step 5. Mount the supplied cable clamp utilizing the screw located above and to the right of the newly installed printer on the enclosure door. See Figure 7.

Note: See Steps 5 & 6 before screwing clamp securely to enclosure door.

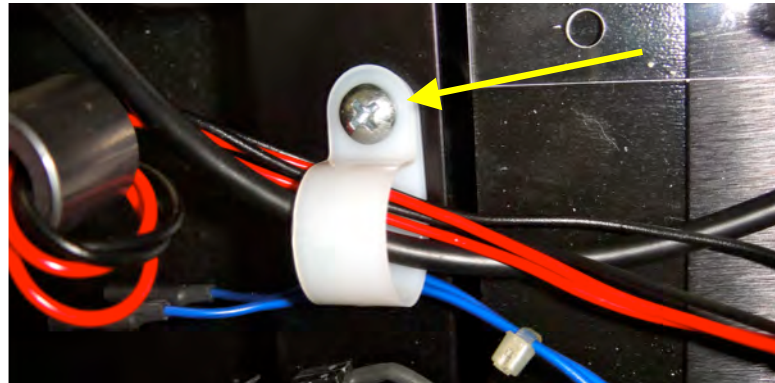


Figure 7: Cable Clamp Installation

Step 6. Route the data cable through the cable clamp and connect the data cable to the PV343

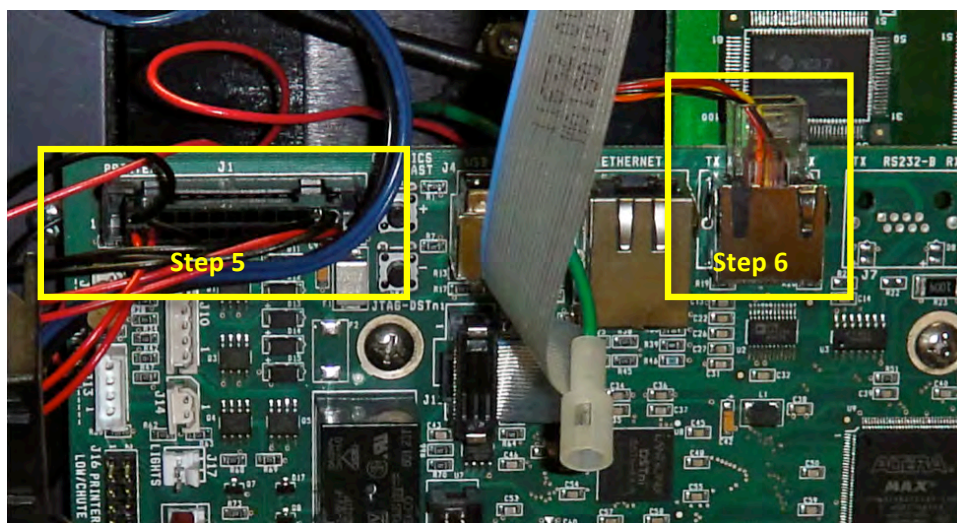


Figure 8: Printer Data & Power Cable Connections to PV343 Board

board J1/Printer socket. See Figure 8 above.

Step 7. Route the power cable through the cable clamp and connect the power cable to the PV343 board J6/RS232-A socket. See Figure 8 above.

Step 8. Mount the cable clamp securely to the enclosure door using the screw located in Step 5.

Receipt Paper Loading Instructions:

Step 1. Turn ON the C/OPT unit by locating the power supply in the left rear corner of the upper enclosure, via the red toggle switch.

Step 2. Remove any packaging material from the roll of paper.

Step 3. Place the roll of 4" diameter paper in the paper tray.

Note: Paper must feed from the TOP of the roll.

Step 4. Feed the paper into the printer by inserting the paper through the paper guide slots. The sensor in the paper guide will detect the paper and activate the printer to automatically load the receipt paper.

Important: If the printer activates, but will not automatically load the paper in, press the paper release lever (see Figure 9) while feeding the receipt paper until the paper advances.

Step 5. Cut off the extra paper appearing in the eject chute by pulling it out.

Step 6. Your receipt printer is ready for use.

Note: Please refer the M1700 FSC3000 Installation Guide for printer operation and configuration.

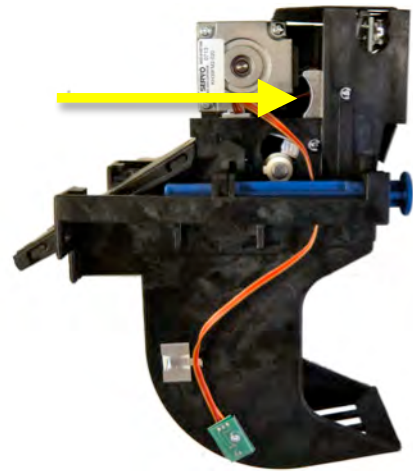


Figure 9: Paper Release Lever