



MODEL 9100 TO X2 FIELD CONVERSION PROCEDURE

TDN 07100-00089 03/2008

CORPORATE HEADQUARTERS:

522 E. Railroad Street
Long Beach, MS 39560
Phone: (228) 868-1317
Fax: (228) 868-0437

COPYRIGHT NOTICE

© 2008 Triton. All Rights Reserved. TRITON logo is a registered trademark of Triton Systems of Delaware.

CONTENTS

PERFORMING THE 9100 TO X2 CONVERSION

INTRODUCTION2
SCOPE.....2
OVERVIEW2
REQUIRED PARTS AND TOOLS3
REMOVAL OF THE EMV DIP CARD READER4
REMOVAL OF THE 9100 SINGLE POWER SUPPLY4
REMOVAL OF THE 9100 CONTROL PANEL6
INSTALLATION OF THE EMV DIP CARD READER (9100 X2 CONTROL PANEL).....7
INSTALLATION OF DUAL POWER SUPPLY8
INSTALLATION OF 9100 X2 CONTROL PANEL AND COMPRESSION DAMPENER8
REMOVAL OF THE 9100 CONTROL PANEL LOCK BRACKET11
INSTALLATION OF THE 9100 X2 CONTROL PANEL LOCK BRACKET11
LAYOUT OF THE 9100 X2 CONTROL PANEL11

INTRODUCTION

This guide covers the steps for converting your current 9100 terminal to the X2 standard. The following procedures include a list of tools and the hardware required for the conversion.

SCOPE

The following procedures apply to all Triton certified service personnel involved in the process of maintaining or converting Triton ATMs.

OVERVIEW

The 9100 to X2 conversion will require a complete exchange of the control panel and replacement of the power supply assembly. This will include all cabling and associated mounting hardware. A compression dampener system will replace the tension spring hinge mechanisms and a new control panel lock bracket will be installed. The single power supply will be replaced with a dual power supply and its associated mounting bracket. The EMV dip card reader will need to be removed from the original 9100 control panel and installed in the new X2 control panel. A new communication cable for the EMV card reader, as well as a new DC power cable for the TDM dispenser will also be provided.

FIELD CONVERSION PROCEDURE

REQUIRED PARTS AND TOOLS

TOOLS REQUIRED		
#1 and #2 Phillips screwdriver (Magnetic recommended) 11/32" (9mm) nutdriver ESD wrist strap with grounding cord		
9100 TO X2 CONVERSION		
PARTS SUPPLIED		
PART NUMBERS	DESCRIPTION	QUANTITY
	9100 X2 Control Panel Assembly (w/o a card reader) Includes all cables (except for the EMV card reader)	1
ACCESSORY BOX		
09200-00094	Dual Power Supply	1
03011-05216	Dual Power Supply Adaptor Bracket	1
	Dual Power Supply Adaptor Bracket Mounting Screws	2
02301-00024	#8-32 w/SEM Mounting Nut	3
09120-07030	TDM DC Power Cable	1
09120-07034	TDM to Power Supply Ground Strap	1
	Dampener Assembly - Complete Includes Compression Dampener (1), End Fittings (2), 8/32 Nut (2), #18 5/32 Lock Nut (2), , Cabinet Dampener Support (1)	1
02054-00166	#8-32 1/2 in. Phillip head screw w/tooth washer	2
09120-07052	EMV Card Reader Cable	1
02054-0165	#6-32 3/8 in. Phillip head screw w/cone washer	4
03011-05063	Lock Bracket	1
07103-00152	Model RL2000 ATM User Manual	1
07103-00155	Model RL2000 ATM Installation Manual	1
07103-00158	Model RL2000 ATM Quick Reference Guide	1

REMOVAL OF THE EMV DIP CARD READER

1. Refer to Figure 1. Disconnect the TVS cable from the EMV dip card reader.
2. Refer to Figure 1. Remove the mainboard mounting screw that secures the EMV read head ground wire at the L-shaped bracket on the side of the mainboard metal casing.

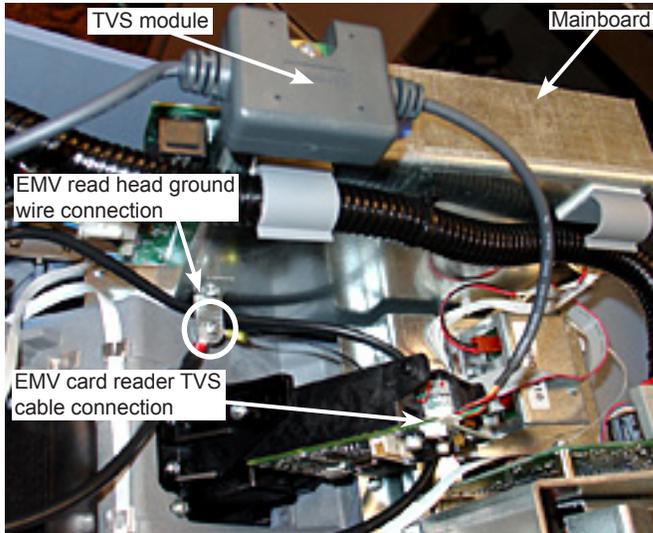


Figure 1. EMV card reader communication and read head ground cable connections

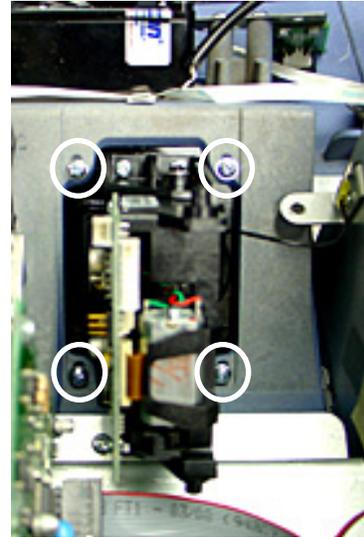


Figure 2. EMV card reader mounting points

3. Refer to Figure 2. Remove the four (4) mountings screw that secure the EMV dip card reader and slide it out of the 9100 control panel.

REMOVAL OF THE 9100 SINGLE POWER SUPPLY

1. Refer to Figure 3. Disconnect the AC line cord and the topper (if present) at the DC power supply.

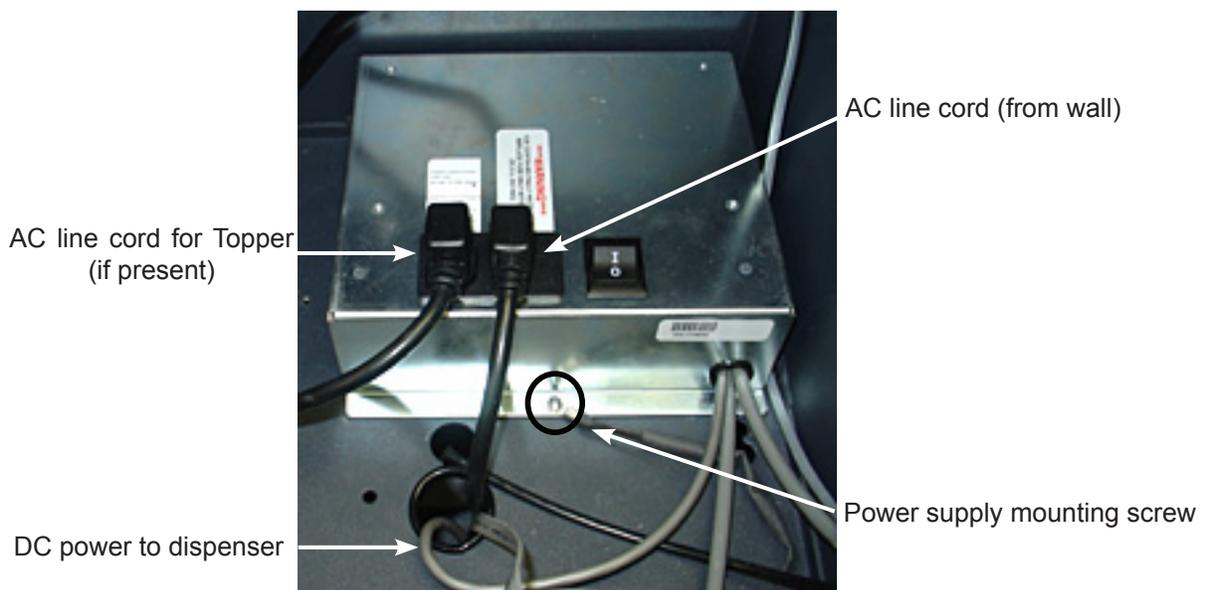


Figure 3. Disconnecting the 9100 single DC power supply

FIELD CONVERSION PROCEDURE

2. Refer to Figure 3. Disconnect the input AC line cord (from the wall) at the DC power supply.
3. Refer to Figure 23 on page 10. Disconnect the DC power cable for the dispenser at the dispenser. Feed the cable up into the top cabinet enclosure.
4. Refer to Figure 4. Disconnect the DC power cable for the receipt printer at CN1 (located on the printer controller PCB).
5. Refer to Figure 5. Disconnect the DC power cable for the mainboard at J4 (located on the inside edge connector of the mainboard).
6. Refer to Figure 23 on page 10. Disconnect the dispenser communication cable at the dispenser and pull it

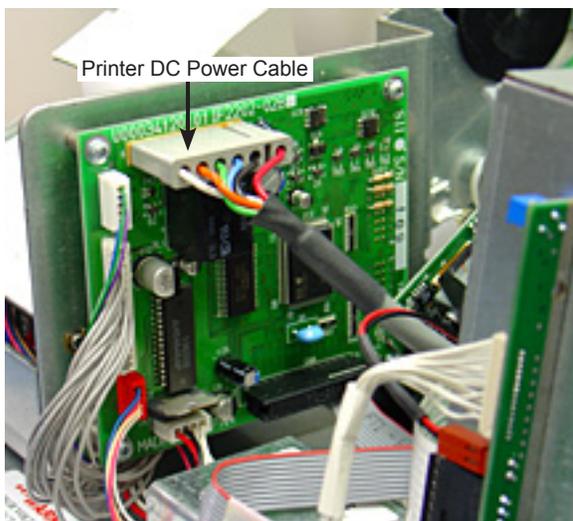


Figure 4. DC power connection at CN1 on the Printer Controller PCB

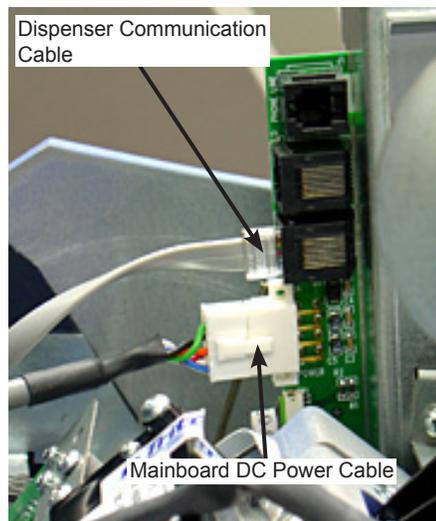


Figure 5. DC power connection at J4 on the Mainboard

up into the top cabinet enclosure. Refer to Figure 5. Leave the other end connected at J3 (located on the inside mainboard edge connector of the mainboard).

7. Refer to Figure 6. Remove the DC power supply mounting screw (and ground straps if present) along the front edge of the power supply case.
8. Refer to Figure 7. Slide the DC power supply forward until it stops and then carefully lift it straight up from the top cabinet enclosure (with attached cables).

REMOVAL OF THE 9100 CONTROL PANEL

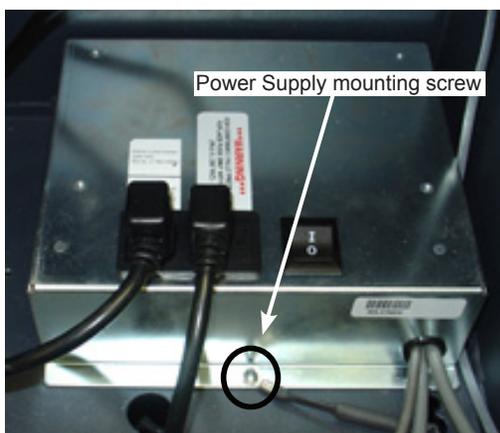


Figure 6. Location of single power supply mounting screw



Figure 7. Removal of the single power supply from the cabinet top enclosure

1. Carefully support the control panel in the open position so that it has the least amount tension on the hinge springs as possible (about halfway). Make sure it is still possible to reach in and access the mounting screws for the left and right keepers.
2. Refer to Figures 8 and 9. With both sides of the control panel supported, carefully remove the mounting screws for the left and right keepers. Slowly release any remaining tension on each hinge spring.
3. Refer to Figure 9. Allow the hook end of the keeper latch to release from the latch holes on the left and

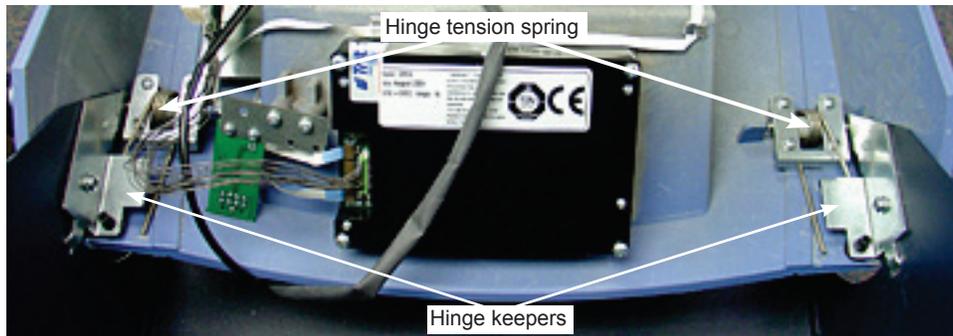


Figure 8. Primary components of the control panel hinge mechanism

right side panels of the top cabinet enclosure.

4. Refer to Figures 10 and 13. Slowly lift the control panel assembly up along the open face of the top cabi-

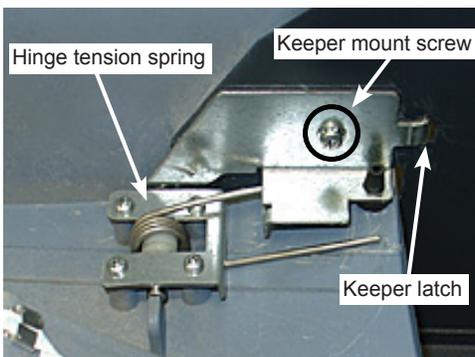


Figure 9. Primary components of the hinge keeper

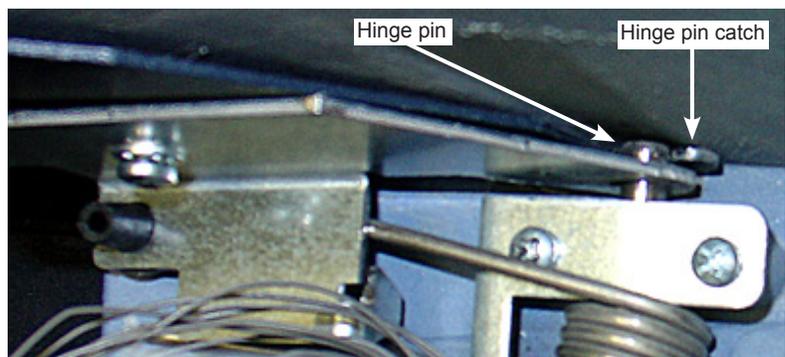


Figure 10. Location of the hinge pin catch on the side panel of the cabinet top enclosure

net enclosure until the hinge pins clear the hooked catches in side panels (It will be necessary to keep the control panel closed enough to allow the hinge pin to pull free from the hinge catch, and the bottom edge of the control panel to clear the side panels of the top cabinet enclosure).

5. Carefully remove the 9100 control panel (along with the attached dispenser communication cable) from the cabinet and set it aside.

INSTALLATION OF THE DUAL POWER SUPPLY

1. Refer to Figure 11. Start nuts on the two (2) base mounting studs on the power supply adaptor bracket. Do not tighten.
2. Refer to Figures 11 and 12. Mount the power supply on the power supply adaptor bracket. Make sure the guide pins and base studs on the bracket fit into the corresponding locations on the backside of the power supply. Make sure the lower edge of the power supply slips onto the base studs between the nuts and the bracket.
3. Press down on the power supply until the guide pin on the bracket slide all the way up into the correspond-

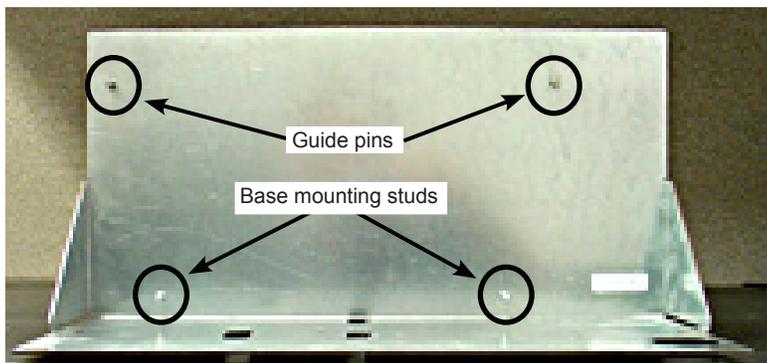


Figure 11. Power supply mounting points on the power supply mounting bracket

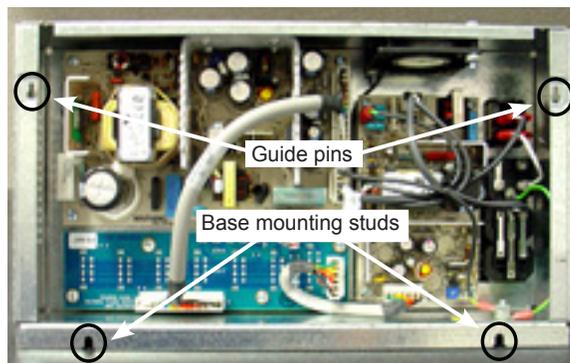


Figure 12. Mounting points on the backside of the power supply

ing slots on the power supply. Tighten the nuts on the base mounting studs.

4. Refer to Figure 13. Set the adaptor bracket for the dual power supply in the back of the top enclosure with the base plate down and the angle sides facing forward. Make sure the four (4) locking tabs on the adaptor bracket slip into the four (4) open slots on the base of the top cabinet enclosure.
5. Push the power supply adaptor bracket towards the rear until it locks into place.
6. Refer to Figures 13 and 14. Secure the power supply adaptor bracket to the two (2) holes provided in the base of the top cabinet enclosure with the supplied mounting screws.

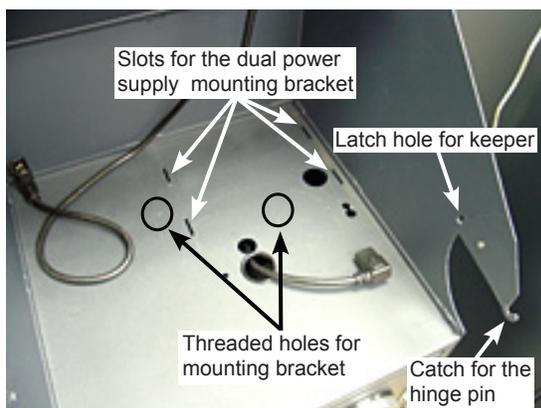


Figure 13. Mounting points for the dual power supply mounting bracket.

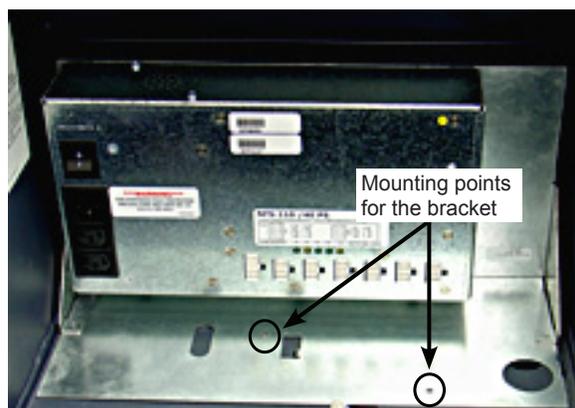


Figure 14. Power supply and mounting bracket secured in the top cabinet enclosure

7. Connect the AC line cord (and the topper AC cord if present) to the AC plug on the power supply.

INSTALLATION OF THE EMV CARD READER (RL2000 X2 CONTROL PANEL)

1. Refer to Figure 15. Properly align and slide the EMV card reader into the open slot on the control panel.



Figure 15. EMV card reader orientation as viewed from the front of the 9100 X2 control panel

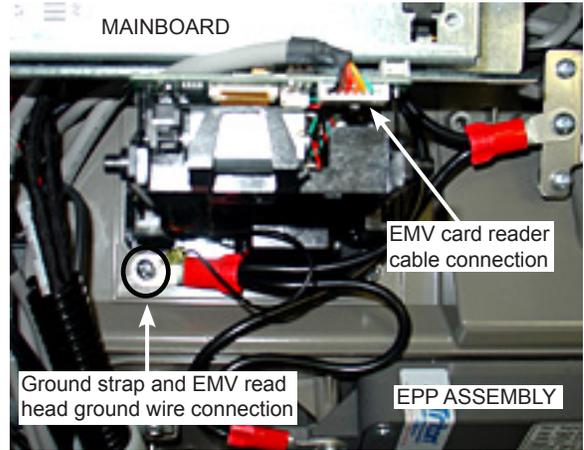


Figure 16. Connections for the EMV card reader cable and the read head ground wire

2. Refer to Figure 15 and Figure 2 on page 4 (card reader mount locations). Secure the EMV card reader (removed from the original 9100 control panel) in the 9100 X2 control panel at each corner with the four (4) mounting screws. Refer to Figure 16. Make sure the read head ground wire is secured (along with the ground straps) with one the mounting screws.
3. Refer to Figure 16 (rear view). Connect the supplied EMV Card Reader Cable at the card reader. Make sure any unnecessary slack in the cable is taken up in the plastic cable clamp. The clamp is located between the inside edge of the EMV card reader and the LCD bracket assembly.

INSTALLATION OF THE 9100 X2 CONTROL PANEL AND COMPRESSION DAMPENER

1. Refer to Figure 17 and 18. Position the 9100 X2 control panel so it is nearly flat against the opening in the top cabinet enclosure and just above the hooked hinge pin catches on the side panels. Slowly lower control panel until the hinge pins slip into their respective catches on the side panels. Make sure the metal cabinet side panels slip in between the keepers and the plastic sides of the control panel.

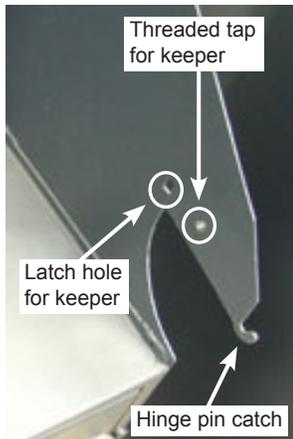


Figure 17. Side panel mounting locations

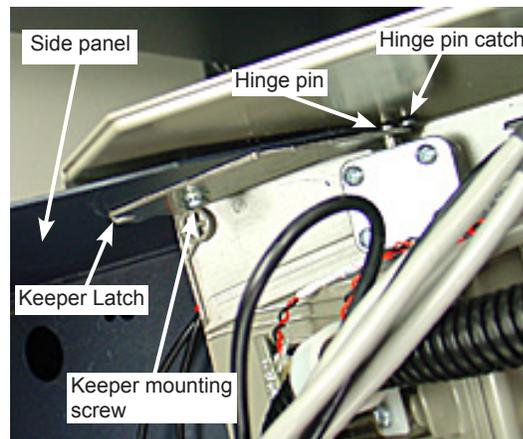


Figure 18. Primary mounting points for the hinge assembly on the X2 control panel

FIELD CONVERSION PROCEDURE

2. Open the RL2000 X2 control panel to it full, open position. Make sure it is supported from underneath.
3. Refer to Figure 17 and 18. Fit the keepers (one at time, left and right) flat against the inside edge of the top cabinet enclosure side panels with the hook end set into the latch holes. Secure the keepers to the side panels of the cabinet top enclosure with the mounting screws.
4. Refer to Figure 19. Secure the cabinet dampener support (with dampener) to the upper panel, front left corner of the top cabinet enclosure with the two (2) enclosed mounting screws and nuts (If a topper is installed, remove the two (2) mounting nuts, slip the dampener mounting bracket over the two (2) screws and secure it with the original two (2) nuts).



Figure 19. Dampener support bracket with attached dampener

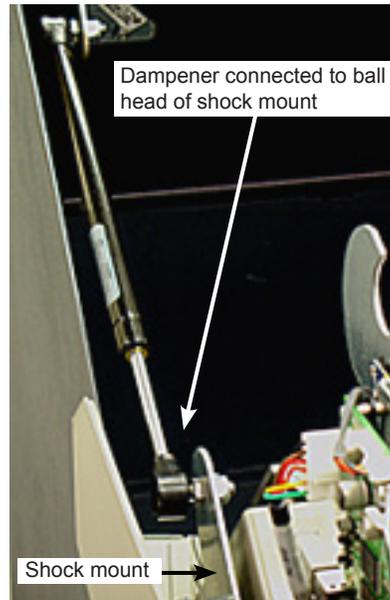


Figure 20. Completed installation of the dampener assembly

5. Refer to Figure 20. Extend the compression damper and press fit the dampener end fitting onto the ball head of the shock mount.
6. Make sure the new control panel opens and closes in a smooth, clean fashion. Make sure the compression dampener holds the weight of the control panel and lowers it to the open position.
7. Refer to Figures 21 and 22. Connect the DC power cables from the printer and docking board into any of the six (6) available common 8-pin DC output connectors on the power supply.

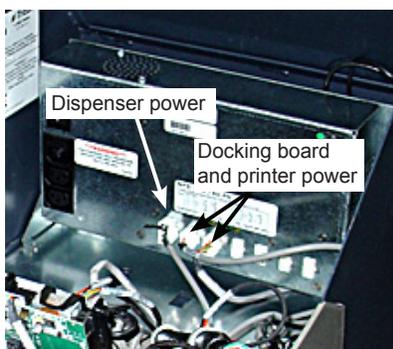


Figure 21. Power supply external DC connections

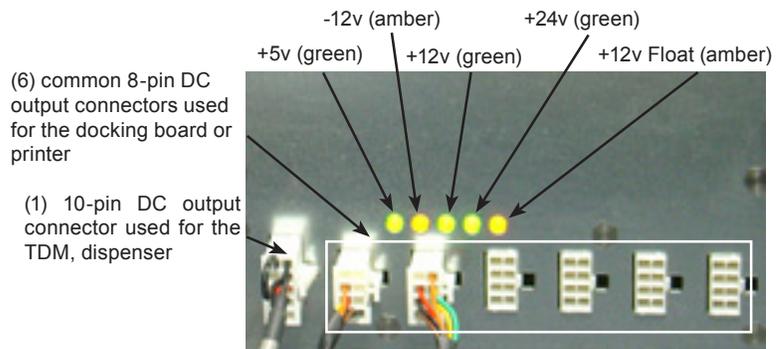


Figure 22. Power Supply DC Outputs and LED indicators

8. Refer to Figures 21 and 22. Connect the DC power cable from the dispenser to the to the single 10-pin DC output connector on the power supply (far left).

- Refer to Figure 23. Secure the ground straps for the control panel and one end of the ground strap for the dispenser to the power supply.

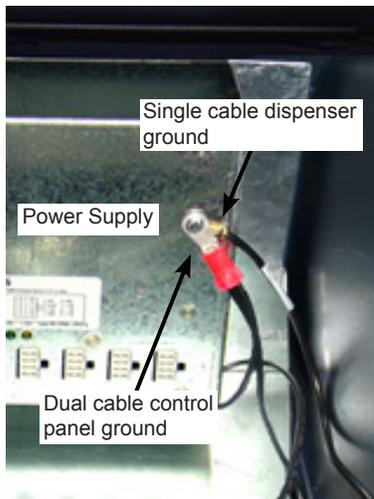


Figure 23. Control panel and dispenser ground connection

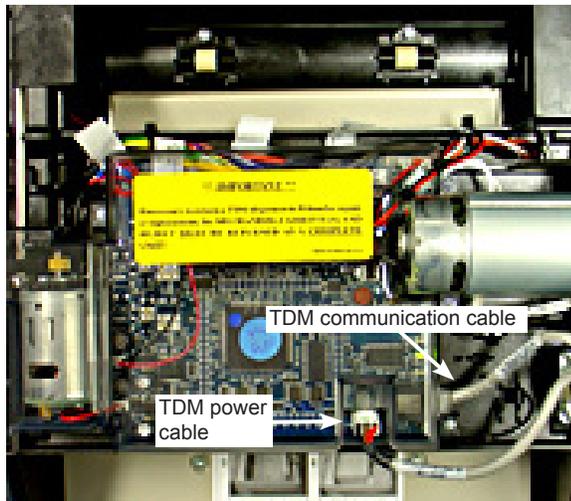


Figure 24. The TDM dispenser communication and power cable connections

- Feed the other end of the dispenser DC power cable and the dispenser communication cable down through the opening in the bottom plate of the top cabinet enclosure.
- Feed the other end of the dispenser ground strap down through the opening in the bottom plate of the top cabinet enclosure.
- Refer to Figures 24. Connect the DC power and communication cables to the TDM dispenser..
- Refer to Figure 25. Run the dispenser ground strap down the left side of the dispenser. Secure the dispenser ground strap to the dispenser with the top left mounting screw for the clear plastic cover for the belt pulleys.
- Refer to Figure 26. Slip any excess slack in the cabling in the cabinet top enclosure behind the power supply adaptor bracket.

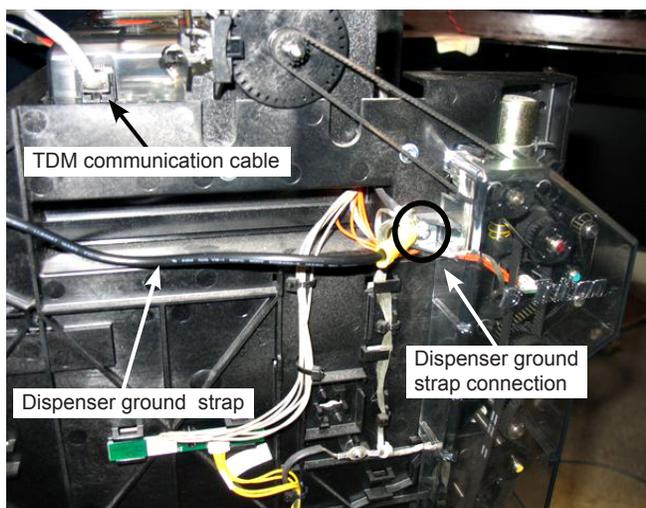


Figure 25. Securing the dispenser ground strap to the dispenser



Figure 26. Slack in cabling tucked behind the power supply adaptor bracket

- Plug the input AC line cord into the power supply.

REMOVAL OF THE 9100 CONTROL PANEL LOCK BRACKET

1. Refer to Figures 27 and 28. Remove the nut that secures the 9100 control panel lock bracket to the upper panel of the top cabinet enclosure. Remove the control panel lock bracket.

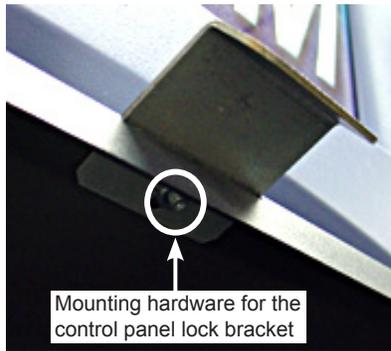


Figure 27. Mounted control panel lock bracket

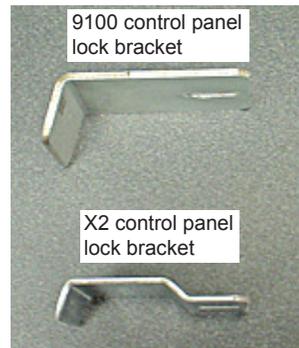


Figure 28. Control panel lock brackets

INSTALLATION OF THE 9100 X2 CONTROL PANEL LOCK BRACKET

1. Refer to Figures 27 and 28. Mount the new 9100 X2 control panel lock bracket over the screw on the upper panel of the top cabinet enclosure and secure it with the nut.

***** RADIO PAD *****
 If "Radio Pad" is used for communications, connect the Radio Pad cable to J5 on the Docking Board.

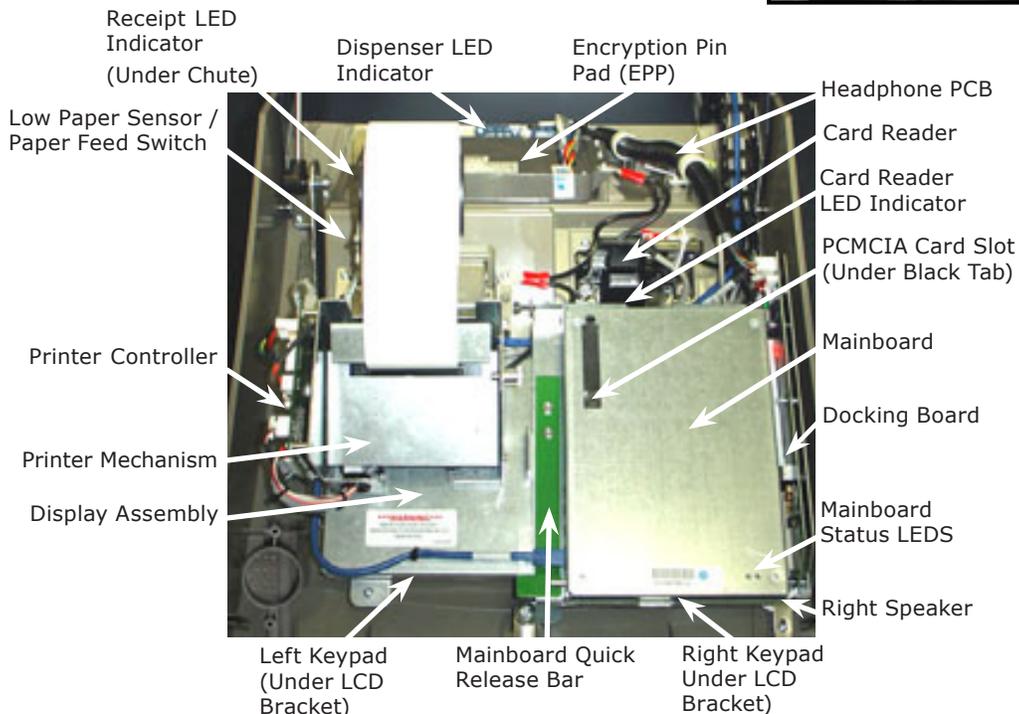
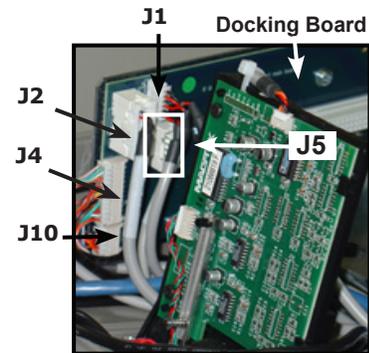


Figure 29. Basic layout of the 9100 X2 Control Panel