



CONTROLLER PC HARD DRIVE REMOVE AND REPLACE PROCEDURE GUIDE (MODELS RL/FT5000^{XP})

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INTRODUCTION

This guide details the steps to safely remove and replace the Hard Drive as a separate, internal component of the RL/FT5000^{XP} Controller PC Assembly. It includes the necessary steps to remove and replace the Controller PC from the RL/FT5000^{XP} terminals.

This Following procedures must be performed by a qualified (trained) technician.

SAFETY

Observe all standard safety practices, as they apply to High Voltage and Electrostatic discharge.

TOOLS REQUIRED

- RL/FT5000^{XP} User and Service Manuals
- Anti-static wrist strap
- USB Thumb Drive
- Small cross point screw driver
- Number 1 or 2 cross point screw driver
- Small flat tip screw driver
- Key for the security lock of the terminal
- New RL/FT5000^{XP} Hard Drive

PRELIMINARY REQUIREMENTS

****IMPORTANT****

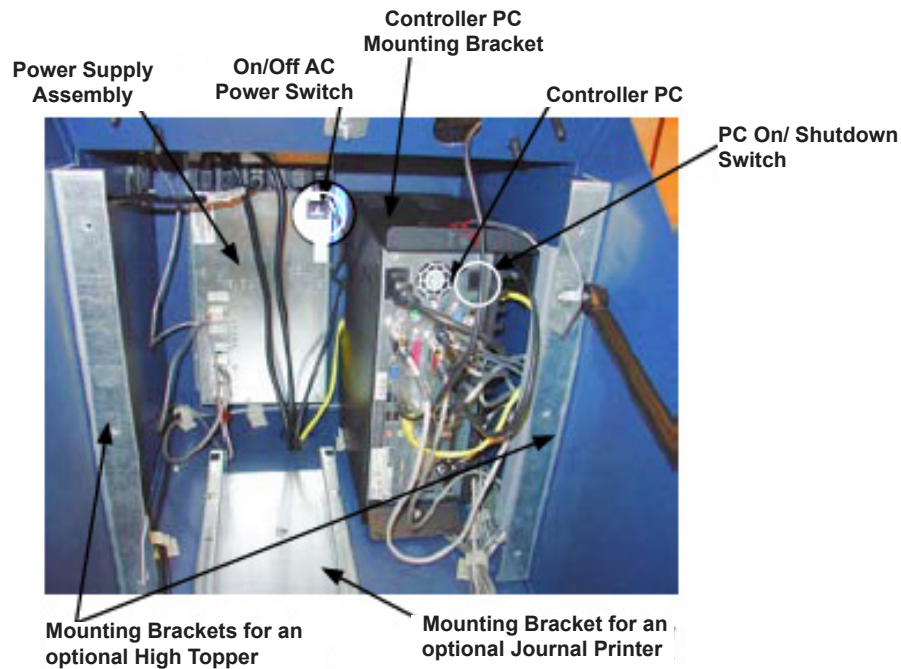
Prior to performing the remove and replace procedures, it is imperative that the technician use a USB thumb drive to copy the CONFIGURATION PARAMETER files of the terminal. Failure to do so will require extensive re-configuration of the terminal upon completion of the Hard Drive replacement.

1. Press Cntrl + 1 on the RSP keyboard and log into Management Functions.
2. Install a USB external storage device (i.e. thumb drive) into one of the Controller PC's USB ports.
3. Select Option 8, **Terminal Status**.
4. Select Option 1, **Display Configuration Summary**. Save the summary to the USB storage device.
5. Select Option 2, **Save Parameters to External Storage**. Save the parameters to the USB storage device.
6. Select Option 5, **System Parameters**.
7. Select Option 3, **Shutdown Terminal**.
8. Select Option 1 to answer **Yes, Shutdown Terminal**.
9. Switch off the Power Supply.

REMOVAL OF THE RL5000^{XP} CONTROLLER PC

DISCONNECTING THE CABLES FROM THE RL5000^{XP} CONTROLLER PC

The RL5000^{XP} Controller PC is located in the back right corner of the top enclosure.



Refer to Figure 1. Disconnect the following cables from the RL5000^{XP} Controller PC Assembly:

- > The following cables are to be disconnected by hand:
 - AC Power Plug
 - External Mouse* (Green)
 - External Keyboard* (Purple)
 - LAN Ethernet
- * If Used
- > Using the small cross point screwdriver, loosen the hold down screws and disconnect the following connectors:
 - COM 1 (EPP Assembly)
 - GPIO (Presenter)
 - COM 4 (UPS - if used)
 - COM 5 (Host PC)
 - COM 6 (Card Reader)
 - COM 2 (Receipt Printer)
 - Printer (Journal Printer - if used)
- > Using your fingers, loosen the hold down and disconnect the following connector:
 - COM 3 (Dispenser via the Security Module)
- > Using the small flat tip screw driver, loosen the hold down screws and disconnect the following connector:
 - LVDSI (Control Panel Display)

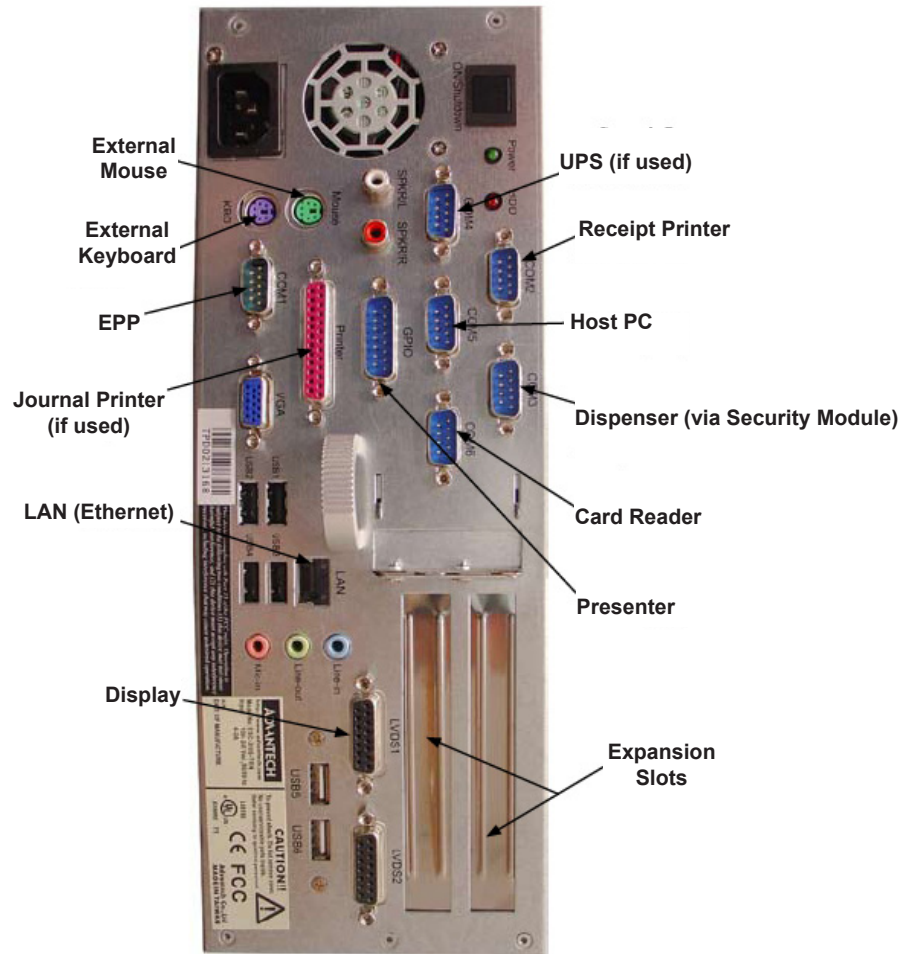


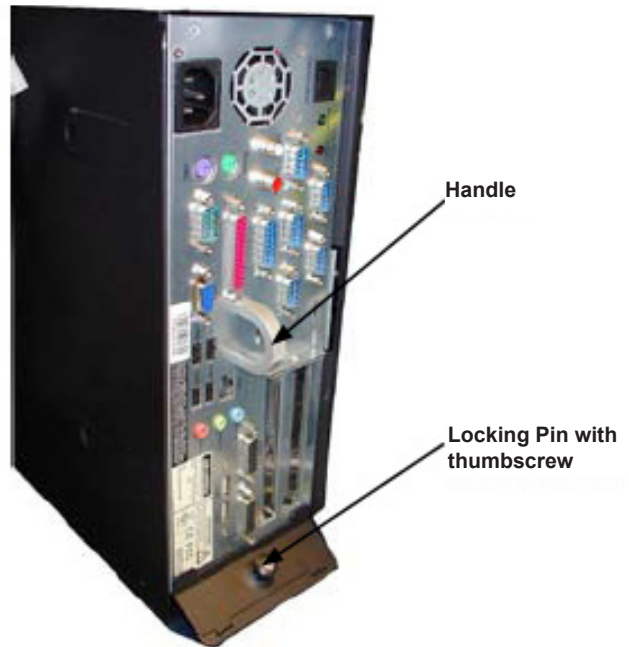
Figure 1. RL5000^{XP} Controller PC connector layout

REMOVING THE RL5000^{XP} CONTROLLER PC FROM THE MOUNTING BRACKET

1. Using a large cross point screwdriver or your fingers, release the thumb screw securing the Locking Plate that holds the Controller PC in the mounting bracket.
2. Take hold of the Controller PC Assembly by the handle located in the middle of the rear panel.

****IMPORTANT****

Move all cables out of the path of the Controller PC Assembly so they won't be damaged.



3. Carefully pull the Controller PC Assembly out of the mounting bracket

> Refer to the RL/FT5000^{XP} Hard Drive removal and replacement instructions in this document.

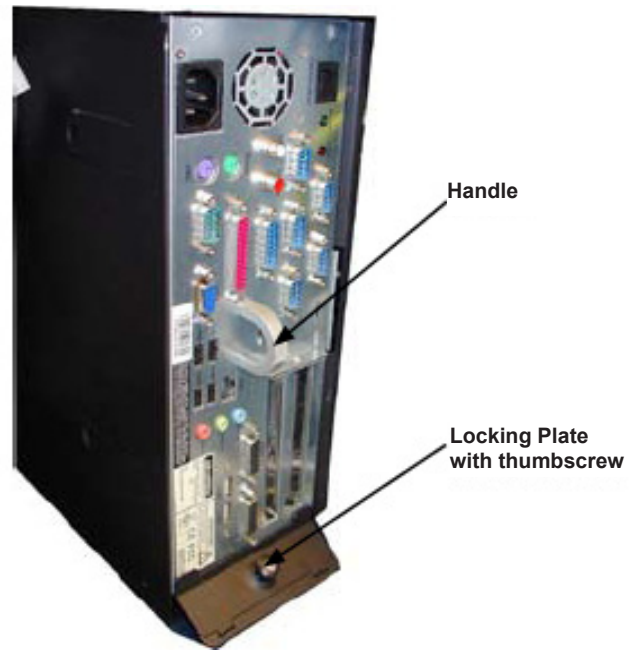
INSTALLATION OF THE RL5000^{XP} CONTROLLER PC

INSTALLING THE RL5000^{XP} CONTROLLER PC IN THE MOUNTING BRACKET

****IMPORTANT****

Move all cables out of the path of the Controller PC Assembly so they won't be damaged.

1. Take hold of the Controller PC Assembly by the handle (located in the middle of the rear panel) and the case. Carefully align and slide the Controller PC Assembly into the mounting bracket as shown.
2. Put the Locking Plate in place and secure it with the thumb screw. Make sure it holds the Controller PC in the mounting bracket as shown.



CONNECTING THE CABLES TO THE RL5000^{XP} CONTROLLER PC

Refer to Figure 2. Connect the following cables from the RL5000^{XP} Controller PC Assembly:

> The following cables can be connected by hand:

- AC Power Plug
- External Mouse* (Green)
- External Keyboard* (Purple)
- LAN Ethernet

* If Used

> Connect the following cables. Using a small cross point screwdriver, tighten the hold down screws.

- COM 1 (EPP Assembly)
- GPIO (Presenter)
- COM 4 (UPS - if used)
- COM 5 (Host PC)
- COM 6 (Card Reader)
- COM 2 (Receipt Printer)
- Printer (Journal Printer - if used)

> Using your fingers, connect the cable and tighten the hold down screws.

- COM 3 (Dispenser via the Security Module)

> Connect the following cables. Using a small flat tip screw driver, tighten the hold down screws.

- LVDSI (Control Panel Display)

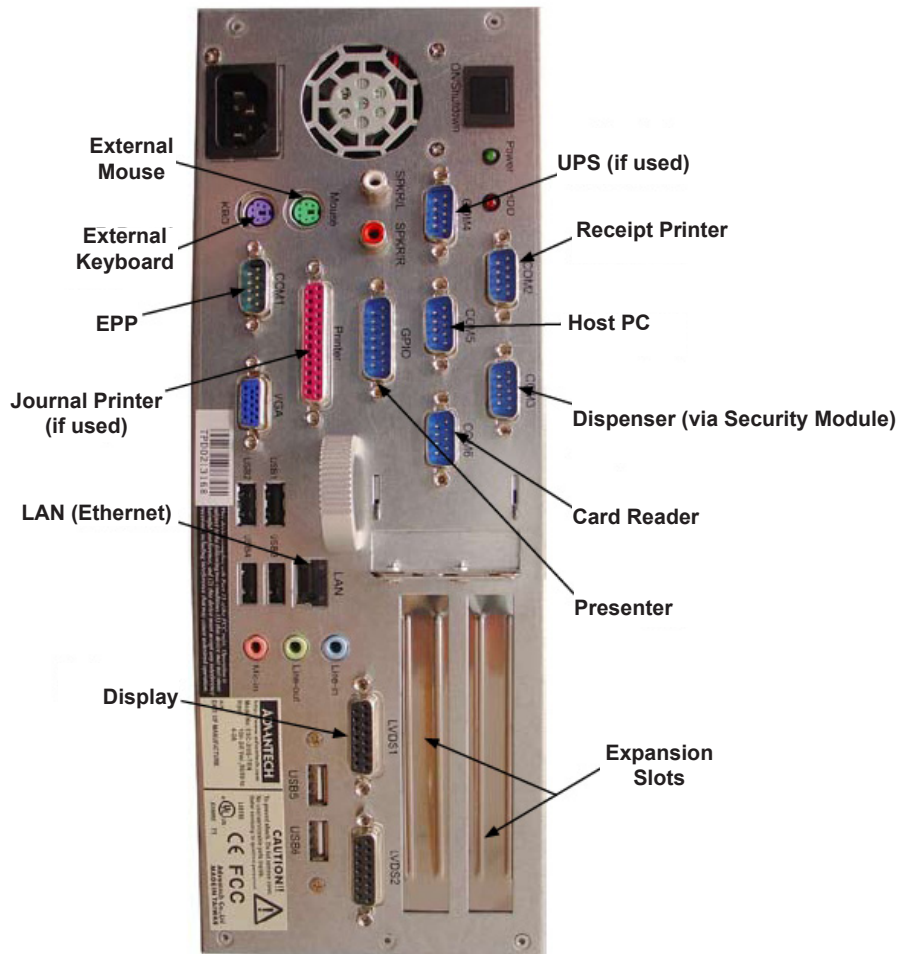


Figure 2. RL5000^{XP} Controller PC connector layout

****IMPORTANT****

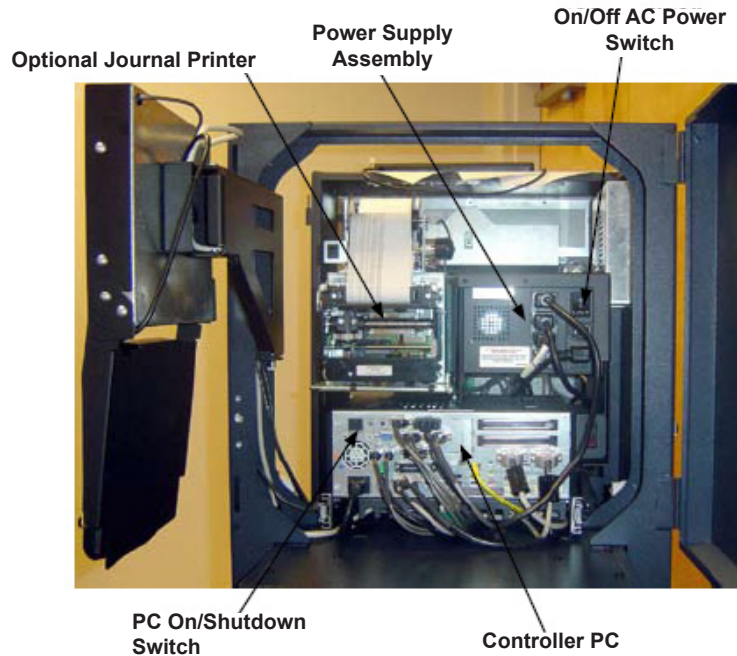
Restoring the parameters that were saved at the beginning of this procedure will save time re-configuring the terminal. After the terminal has been re-configured, print out a copy of the CONFIGURATION SUMMARY and compare it with the copy that was saved at the beginning of this procedure. Make sure everything is correct.

1. Ensure all cables are properly routed and connected.
2. Switch On the Power Supply.
3. Press Cntrl + 1 on the RSP keyboard and log into Management Functions.
4. Install the USB external storage device (i.e. thumb drive) with the previously "Saved" terminal parameter file into one of the Controller PC's USB ports.
5. Select Option 8, **Terminal Status**.
6. Select Option 3, **Restore Parameters from External Storage**. Restore the parameters to the terminal
7. Select Option 1, **Display Configuration Summary**. Print a copy and compare it to the previously "Saved" copy of the Configuration Summary. Make any corrections as necessary.
8. Perform a complete offline diagnostic test of the system from Management Functions.
9. Perform a complete online performance test from Customer Transactions.

REMOVAL OF THE FT5000^{XP} CONTROLLER PC

DISCONNECTING THE CABLES FROM THE FT5000^{XP} CONTROLLER PC

The FT5000^{XP} Controller PC is located at the bottom rear of the top enclosure.



Refer to Figure 3. Disconnect the following cables from the RL5000^{XP} Controller PC Assembly:

- > The following cables are to be disconnected by hand:
 - AC Power Plug
 - RSP Mouse (Green)
 - RSP Keyboard (Purple)
 - LAN Ethernet

- > Using your fingers, loosen the hold down and disconnect the following connector:
 - COM 3 (Dispenser via the Security Module)

- > Using the small cross point screwdriver, loosen the hold down screws and disconnect the following connectors:
 - COM 1 (EPP Assembly)
 - GPIO (Presenter)
 - COM 4 (UPS - if used)
 - COM 5 (Host PC)
 - COM 6 (Card Reader)
 - COM 2 (Receipt Printer)
 - Printer (Journal Printer - if used)

- > Using the small flat tip screw driver, loosen the hold down screws and disconnect the following connectors:
 - LVDS1 (Control Panel Display)
 - LVDS2 (RSP Display)

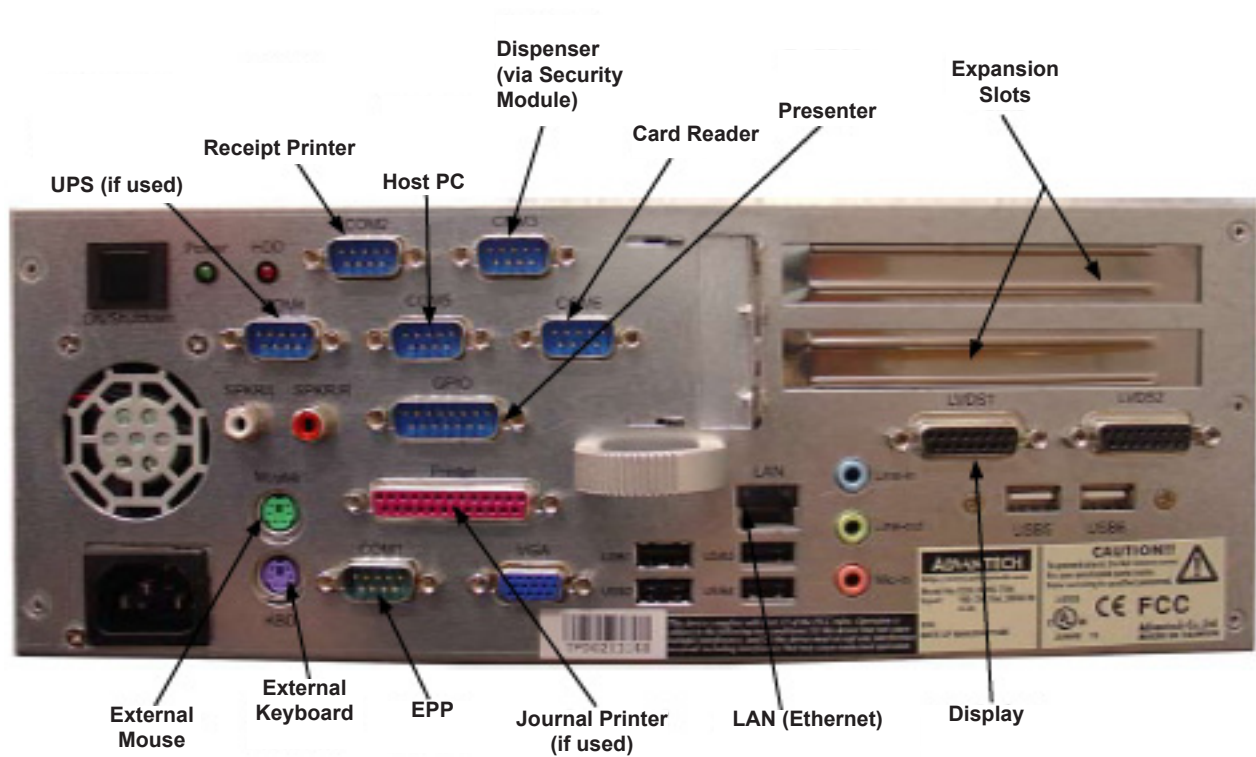
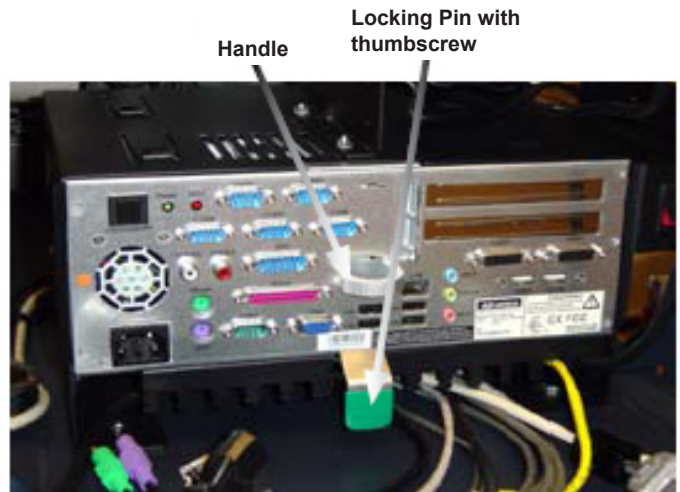


Figure 3. FT5000^{XP} Controller PC connector layout

REMOVING THE FT5000^{XP} CONTROLLER PC FROM THE MOUNTING BRACKET

****IMPORTANT****
 Move all cables out of the path of the Controller PC Assembly so they won't be damaged.

1. Take hold of the Controller PC Assembly by the handle located in the middle of the rear panel.
2. Remove the PC Assembly by pushing down on the latch with green plastic sheath and pulling the Controller PC Assembly out of the mounting bracket by the handle.
3. Place the PC Assembly in a safe location to prevent it from being damaged.



> Refer to the RL/FT5000^{XP} Hard Drive removal and replacement instructions in this document.

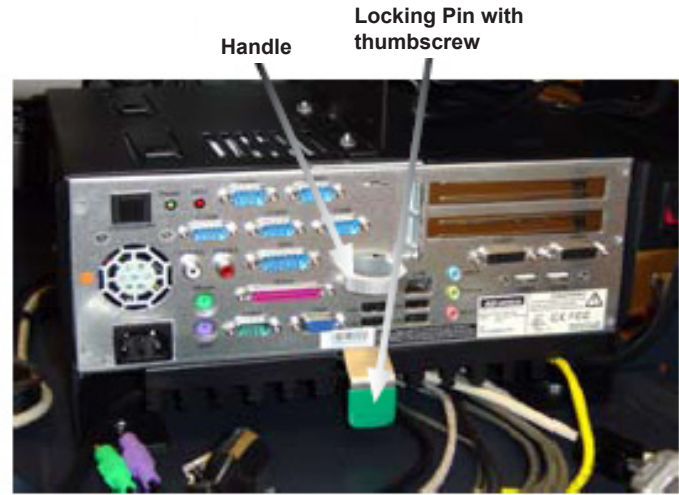
INSTALLATION OF THE FT5000^{XP} CONTROLLER PC

INSTALLING THE FT5000^{XP} CONTROLLER PC IN THE MOUNTING BRACKET

****IMPORTANT****

Move all cables out of the path of the Controller PC Assembly so they won't be damaged.

1. Take hold of the Controller PC Assembly by the handle (located in the middle of the rear panel) and the case.
2. Carefully align the Controller PC Assembly with the mounting bracket. Push down on the latch with green plastic sheath and slide the Controller PC Assembly into the mounting bracket as shown.
3. Make sure the Controller PC Assembly is held in place by the mounting bracket.



CONNECTING THE CABLES TO THE FT5000^{XP} CONTROLLER PC

Refer to Figure 4. Connect the following cables from the RL5000^{XP} Controller PC Assembly:

- > The following cables are to be connected by hand:
 - AC Power Plug
 - RSP Mouse (Green)
 - RSP Keyboard (Purple)
 - LAN Ethernet
- > Using your fingers, connect the cable and tighten the hold down screws.
 - COM 3 (Dispenser via the Security Module)
- > Connect the following cables. Using a small cross point screwdriver, tighten the hold down screws.
 - COM 1 (EPP Assembly)
 - GPIO (Presenter)
 - COM 4 (UPS - if used)
 - COM 5 (Host PC)
 - COM 6 (Card Reader)
 - COM 2 (Receipt Printer)
 - Printer (Journal Printer - if used)
- > Connect the following cables. Using a small flat tip screw driver, tighten the hold down screws.
 - LVDS1 (Control Panel Display)
 - LVDS2 (RSP Display)

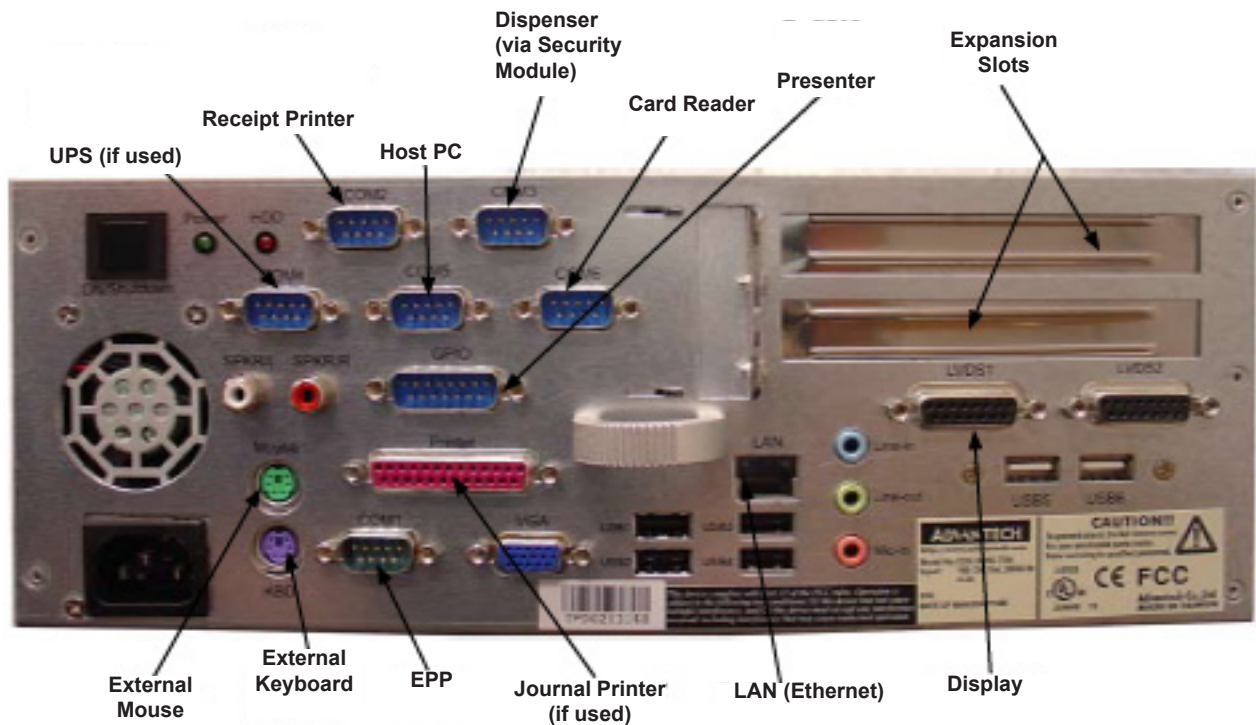


Figure 4. FT5000^{XP} Controller PC connector layout

****IMPORTANT****

Restoring the parameters that were saved at the beginning of this procedure will save time re-configuring the terminal. After the terminal has been re-configured, print out a copy of the CONFIGURATION SUMMARY and compare it with the copy that was saved at the beginning of this procedure. Make sure everything is correct.

1. Ensure all cables are properly routed and connected.
2. Switch On the Power Supply.
3. Press Cntrl + 1 on the RSP keyboard and log into Management Functions.
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5. Select Option 8, **Terminal Status**.
6. Select Option 3, **Restore Parameters from External Storage**. Restore the parameters to the terminal
7. Select Option 1, **Display Configuration Summary**. Print a copy and compare it to the previously "Saved" copy of the Configuration Summary. Make any corrections as necessary.
8. Perform a complete offline diagnostic test of the system from Management Functions.
9. Perform a complete online performance test of the system from Customer Transactions.

REMOVAL AND REPLACEMENT OF THE RL/FT5000^{XP} CONTROLLER PC HARD DRIVE

REMOVING THE HARD DRIVE FROM THE RL/FT5000^{XP} CONTROLLER PC

1. Lay the Controller PC on a non conductive surface, on its side with the fan opening facing up.

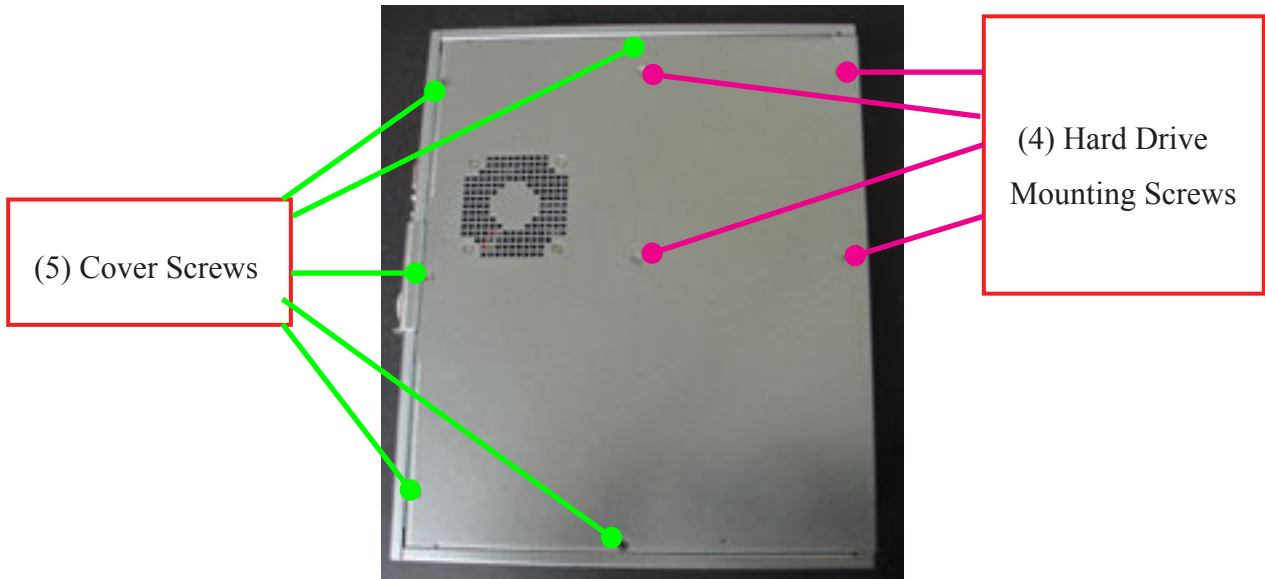


Figure 5. Top cover of the Controller PC

2. Refer to Figure 5. Remove the five (5) perimeter screws (retain these screws).
3. Refer to Figures 6 and 7. Open the cover carefully and note the Hard Drive is mounted underneath. Ensure cables have freedom of movement.
4. Refer to Figure 7. Disconnect the power cord from the Hard Drive (note that the connector is keyed and will only reattach one way).
5. Disconnect the ribbon cable connector from the Hard Drive (note that the connector is keyed and will only reattach one way, with the red marked cable positioned next to the power cord connector)
6. Refer to Figures 5 and 7. Hold the Hard Drive in one hand while removing the four (4) mounting screws (retain these screws). Remove the Hard Drive with the two (2) mounting brackets from the cover.



Figure 6. Removing the cover from the Controller PC assembly.

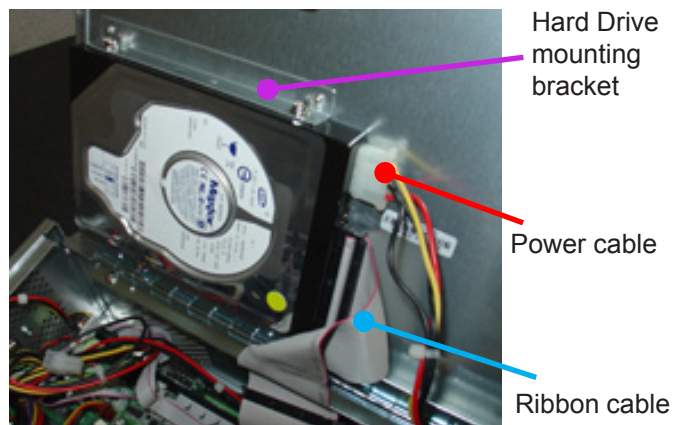


Figure 7. Hard drive mounted on bottom side of the Controller PC cover.

7. Place the Hard Drive on a non conductive surface.

8. Refer to Figure 7. Using a cross point screwdriver, remove the two (2) mounting screws from each of the two (2) Hard Drive mounting brackets. Set these brackets and screws aside to be used with the new Hard Drive (note the position of the screw alignments in the mounting brackets and Hard Drive).

INSTALLING THE HARD DRIVE IN THE RL/FT5000^{XP} CONTROLLER PC

1. Refer to Figure 7 (reference the proper alignments of the mounting brackets and the Hard drive). Attach the two (2) mounting brackets to the new Hard Drive with the four (4) Hard Drive mounting screws.
2. Refer to Figures 5 and 7. Using the four (4) Hard Drive mounting bracket cover screws, attach the Hard Drive to the cover of the Controller PC..
3. Refer to Figure 7. Connect the ribbon cable to the Hard Drive, noting that it is keyed with the red stripe wire closest to the power connector.
4. Connect the power connector, noting that it is keyed.
5. Refer to Figures 5. Using the five (5) perimeter cover screws, secure the cover to the Controller PC.
6. Refer to the RL5000^{XP} or FT5000^{XP} Controller PC installation procedures as applicable..