FUJITSU

Installation & Maintenance Manual

TeamPoS 3000 XL



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*Team***PoS** *3000*®
Installation and Maintenance Manual

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This document is the first issue.

Regulatory Information

EMC

Radio Frequency Interference Requirements – U.S.A.
This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Radio Frequency Interference Requirements – Canada
This Class A digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Radio Frequency Interference Requirements – Europe
This apparatus has been tested and found to comply with the limits for a Class A digital device, per EN55022, for use in Information Technology equipment. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. This apparatus also meets the susceptibility requirements per EN55024. Overall the product qualifies for and bears the CE mark.

Safety

Lead Acid Battery



Caution: Danger of explosion if the lead acid battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Hazardous Voltage



Caution: Hazardous voltage, service engineer only to open front cover and rear backplane.

Recycling



WARNING: The LCD's used with this product may contain a backlight that contains mercury. Please dispose of according to local, state, or federal laws.

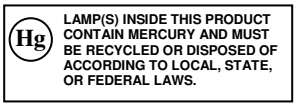


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Chapter 1 Overview

This manual is provided to illustrate how to install and maintain the TeamPoS 3000 and describes in detail the procedures required for field installation and maintenance, including site preparation, equipment inspection, BIOS setting, and trouble shooting the controller.

The following sections provide a brief overview of the TeamPoS 3000 control units (standard and compact) and peripherals:



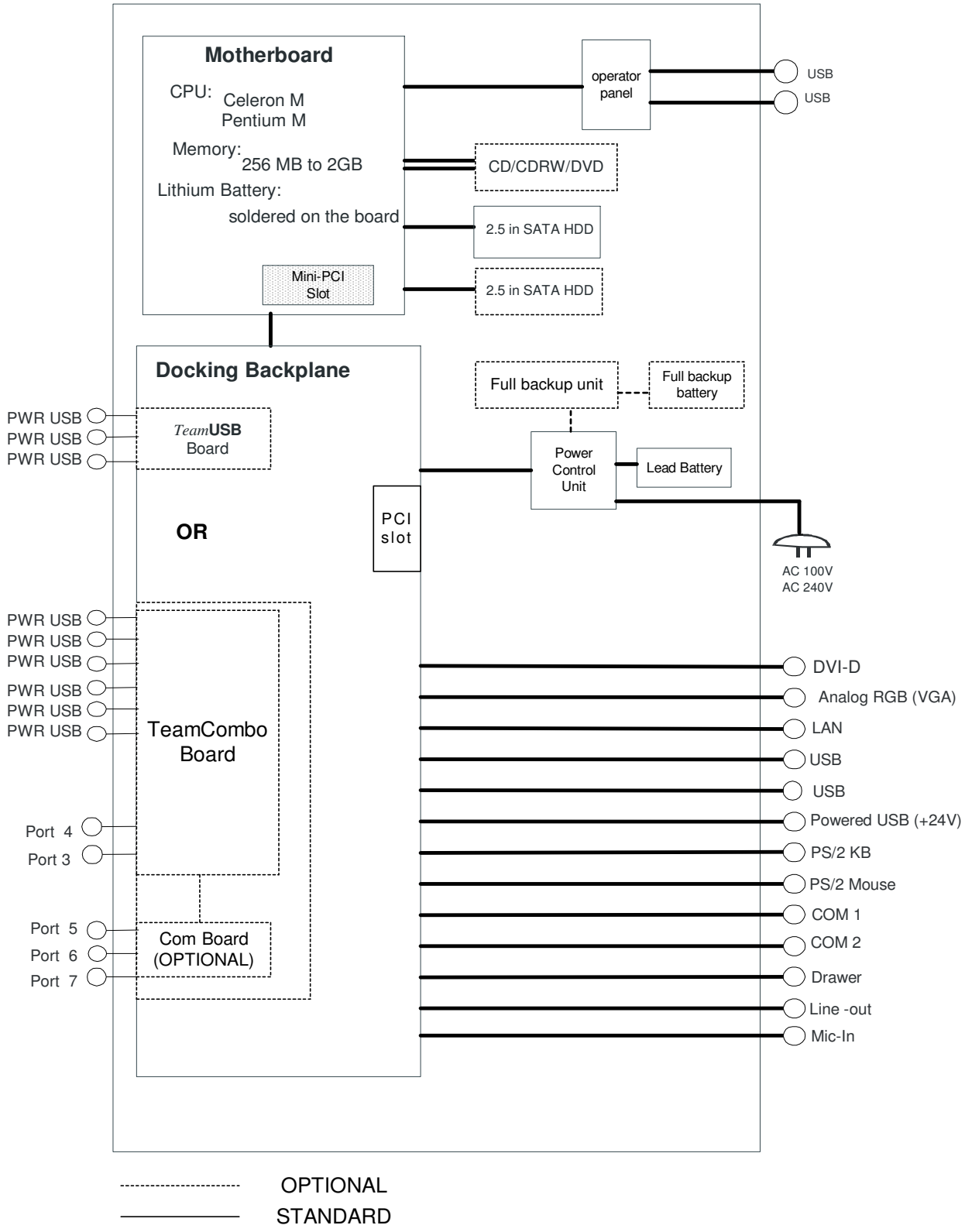
TeamPoS 3000 w/12.1" LCD



TeamPoS 3000 w/15" LCD

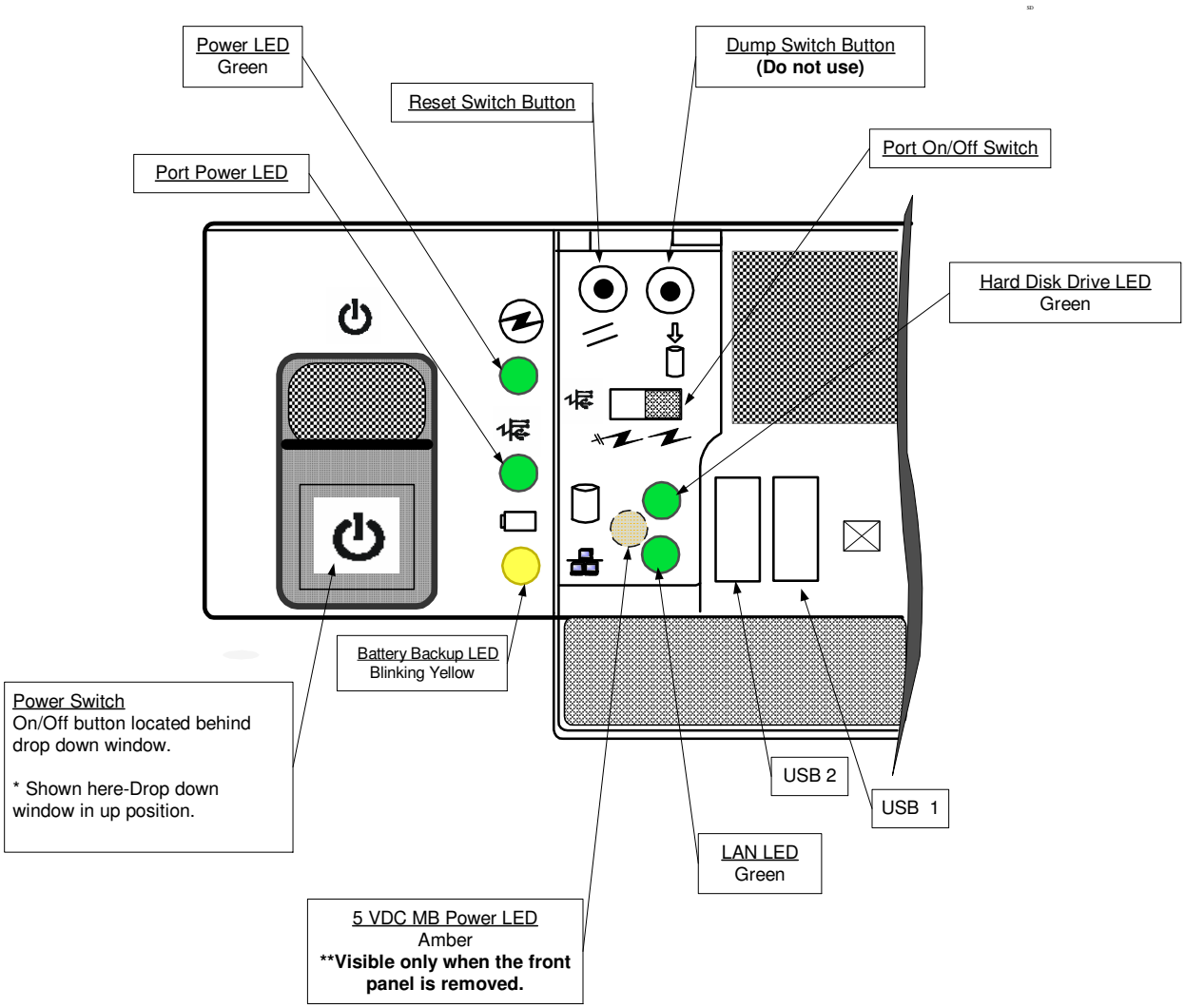
The TeamPoS 3000 is a state-of-the-art Point-of-Sale (PoS) terminal. Built on an industry standard platform the TeamPoS 3000 leverages Intel embedded components and standard operating system, software applications and peripherals. It supports standard PC components such as high-performance CPUs, memory, hard disk, video and audio. It can be used as a PC, to run standard PC applications, such as word processing, spreadsheets, etc. , subject to operating system and licensing restrictions. This controller offers duplicate 2.5" hard disk drives, on board LAN, 12.1 or 15" LCDs; USB, Combo and COM I/O boards and Microsoft Windows XP Professional. The TeamPoS 3000 also contains functionality required by retail application software and is "retail hardened" to support the harsh environments found in most retail stores. Depending on the application requirements, there are a very large number of possible configurations. Memory capacity, number of hard disks, CPU speed, and the number of powered RS232 and USB ports are selectable by the customer. Chassis configurations, memory, memory storage devices (such as CD and DVD), and operating systems are also selectable.

1.1 *TeamPoS 3000* Control Unit Flow Diagram



1.2 Front Panel LEDs and Switches

The following graphic and table show the TeamPoS 3000 unit LEDs and switches:



1.2.1 TeamPoS 3000 Front Panel Switch and LCD Matrix

Symbols	Name Switch/LED	Mounting Position	LED Color	Remark
	Power Switch	Under drop down window in front panel	--	Depending on the BIOS setup, the power switch can be instant off or delayed off.
	Power LED	Outside of front door.	Green	Indicates AC power is supplied to the power supply and all DC voltages are available to the motherboard and other devices.
	Port Power LED	Outside of front door, below the Power LED.	Green	Indicates +24 and +5 V power is on the printer and RS232 ports. Turning off the port switch will cause this light to turn off after 5 or more seconds.
	Battery Backup LED	Outside of front door below the Port Power LED.	Blinking Yellow	Indicates terminal is running on battery backup when "ON."
	Reset Switch	Inside front panel door.	--	Resets terminal, all data in memory will be lost..
	Dump Switch	Inside front panel door.	--	Not used.
	Port Switch	Inside front panel door	--	Default setting is "ON" (right position). Turns on/off power to all RS232 ports (including COM 1 & COM 2).
N/A	5VDC MB Power LED	Behind front panel.	Amber	Indicates AC power is supplied to the power supply and standby voltages for motherboard are available. Note: Do not remove motherboard from chassis when light is "ON" Unplug AC cord before removing motherboard.
	HDD LED (Hard Disk Drive)	Inside front panel door.	Green	Indicates hard disk drive activity.
	LAN LED	Inside front panel door.	Green	Indicates activity on the LAN when lit
	USB-IF2 & IF	Inside front panel door.	--	USB ports with +5V power supplied when AC power light is "ON"

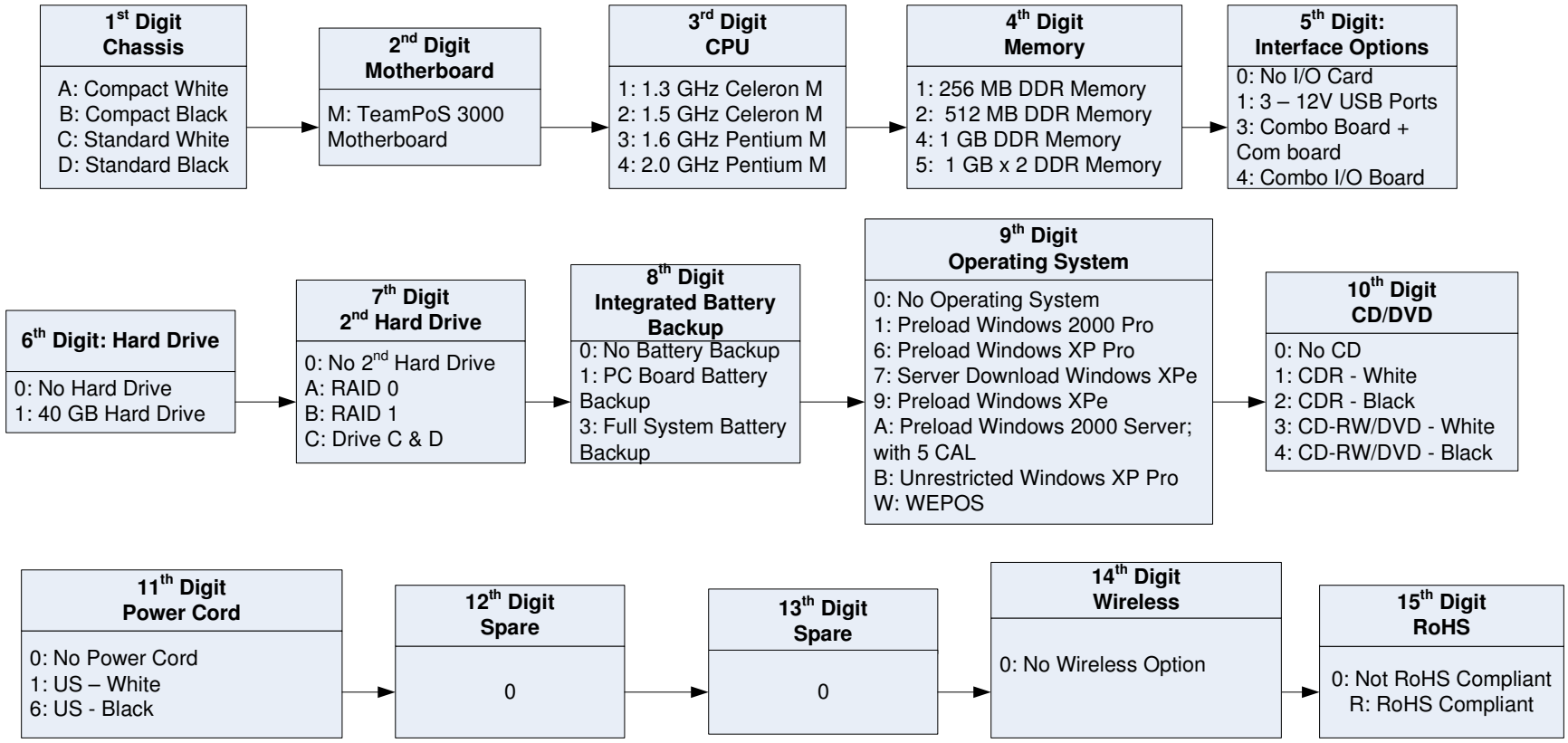


Caution: It is assumed that the user of this manual fully understands and strictly adheres to proper Electrostatic Discharge (ESD) precautions. Failure to adhere to precautions can cause damage to this equipment.
Always remove the power cord from the unit prior to performing any controller maintenance.

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1.3 Intelligent PINs (Product Identification Numbers)

TeamPoS 3000 Controller
Intelligent PIN Configuration Guidelines



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Chapter 2 Environmental Specifications



Note: This is a typical integrated configuration. Depending on the store environment, the configuration and components may differ.

2.1 Environmental Specifications

Specifications		Unit			
		TP3000 XL With Covers		DT50III	CT10 Printer
		Compact	Standard		
External dimensions mm (inches)	Width	348 (13.7)	450 (17.7)	188 (7.4)	128 (5.0")
	Depth	470 (18.5)	498 (19.6)	300 (11.8)	222 (8.7)
	Height	110 (4.3)	110 (4.3)	184 (7.2)	134 (5.3)
Weight kg (lbs)		12 (26.5)	13 (28.7)	5.8 (12.8)	2.0 (4.3)
Maintenance area mm (inches)	Front	1000	1000	---	---
	Rear	1000	1000	---	---
	Right	1000	1000	---	---
	Left	1000	1000	---	---
Power requirements	Voltage	AC100-240	AC100-240	Supplied from the main unit	Supplied from the main unit
	Frequency	50/60Hz	50/60Hz		
Dissipation power (W) Max		270	270	120W-	144W
Temperature ℃ (°F)	Operating	0～40 32~104	0~40 32~104	5~45 41-113	0～40 32~104
	Not operating	-5～50 23-122	-5~50 23-122	-10~50 14-122	-5～50 23-122
Humidity (%) (Non-condensing)	Operating	10～95	10～95	10~90	10～95
	Not operating	8～95	8～95	10~90	8～95
（G）		0.2	0.2	0.2	0.2
Dust（mg/m3） weight density Steering acid standard		0.3	0.3	0.3	0.3
Noise（dB） Operating: Idle:		65dB or less 50dB or less			

Environmental Specifications (cont.)

Specifications		Unit		
		LCD display D22 – w/o stand	LCD display D25 – w/o stand	VFD (Customer display) – w/o stand
External dimensions in mm (inches)	Width	300 (11.8)	246 (9.7)	359 (14.1)
	Depth	57 (2.2)	41 (1.6)	59 (2.3)
	Height	250 (9.8)	100 (3.9)	292 (11.5)
Weight kg (lbs)		2.3 (5.2)	3.6 (8.0)	.8 (1.8)
Power requirements	Voltage	Supplied from the main unit	Supplied from the main unit	Supplied from the main unit
Dissipation power (W) Max		10W	12W	4W

Specifications		Unit	
		Cash drawer (Standard type)	Cash drawer (Compact type)
External dimensions in mm (inches)	Width	450 (17.7)	340 (13.4)
	Depth	450 (17.7)	450 (17.7)
	Height	124 (4.9)	124 (4.9)
Weight kg (lbs)		----	----
Power requirements	Voltage	Supplied from the main unit	Supplied from the main unit
Dissipation power (W) Max		----	----

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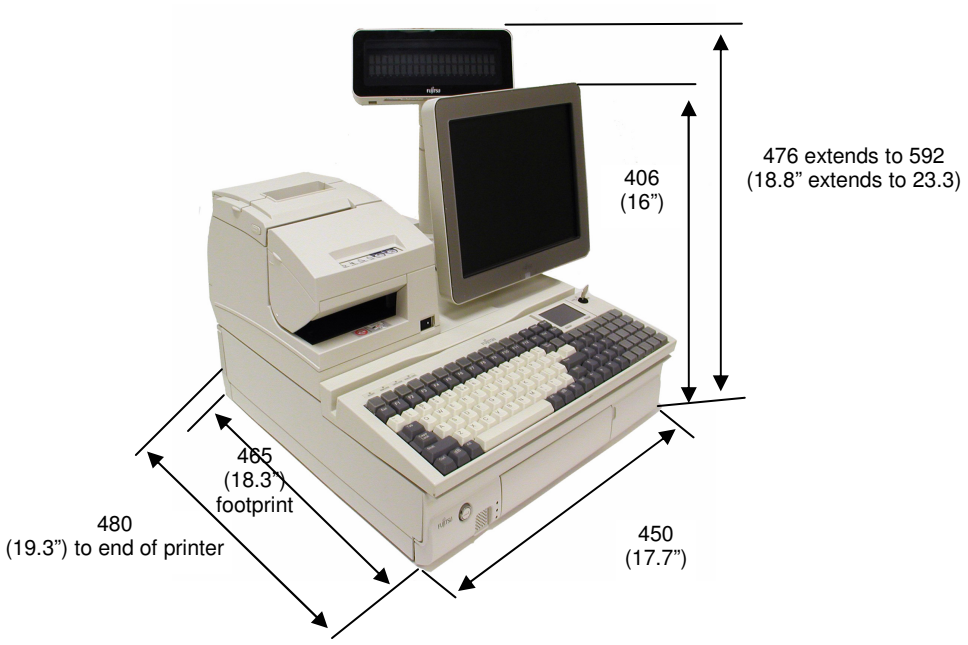
Chapter 3 - DIMENSIONS

This section shows the dimensions of the TeamPoS 3000 control units and peripherals. For peripherals not shown, refer to the appropriate documentation. *Note: All dimensions are expressed as mm (inches).*

The TeamPoS 3000 control unit is available in two sizes, compact and standard, and in two colors, black and white. Comparable black and white units are the identical size.

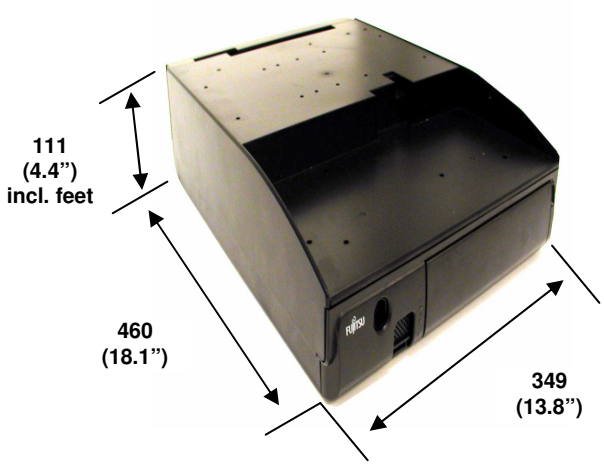
The standard unit can be stacked where peripherals (printer, keyboard, operator display and customer display) are stacked *on top of* the control unit. This requires brackets to be installed on the control unit that restrain movement of the peripherals. The cash drawer, if stacked, is located *under* the control unit. In this case, brackets are installed on top of the cash drawer to restrain the controller.

3.1 Standard TeamPoS 3000 12" LCD Stacked Configuration Dimensions

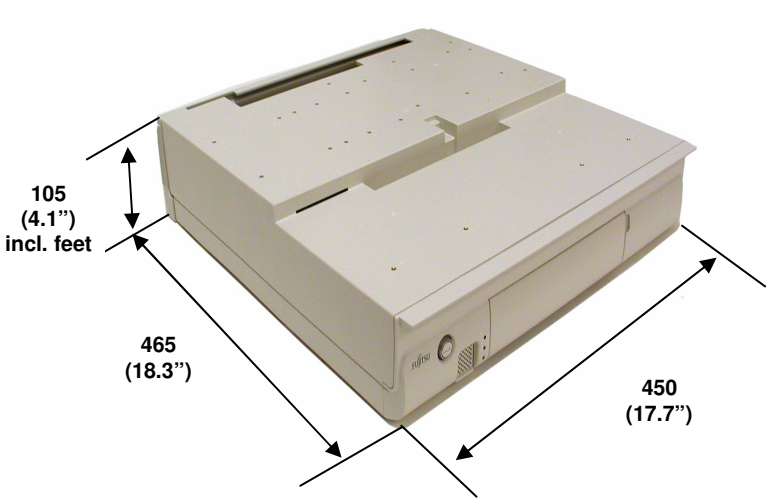


Note:	Dimensions taken with monitor facing straight forward. The 12.1" LCD overhangs the right edge of the controller. In this position the widest point is 20.1". The customer display is mounted on a stacked adjustable pole which can extend up to 23.3". The printer overhangs the rear edge by 1 inch. The longest dimension front to back is 19.3".

3.2 Control Units



Compact TeamPoS 3000
Control Unit (without brackets installed)



Standard TeamPoS 3000
Control Unit (without brackets installed)

3.3 Keyboards

3.3.1 Model 133 UQ Keyboard Dimensions

(PIN #s 11000199-200, 900001515, 900014930)
[11000200 shown]



3.3.2 Model 92U Keyboard Dimensions

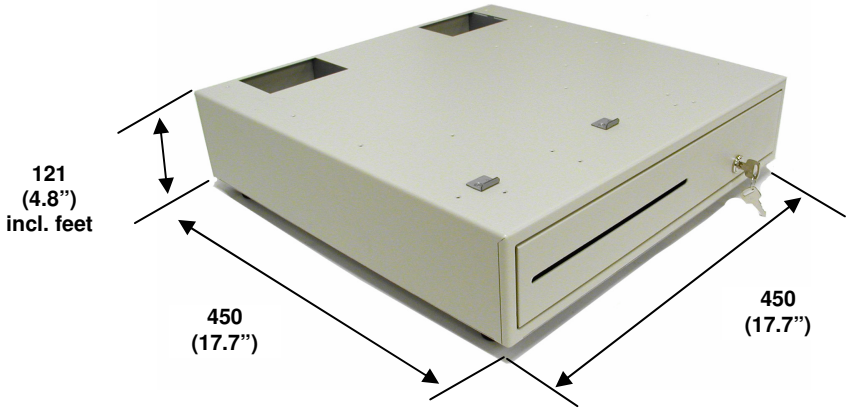
(PIN # 90000630)



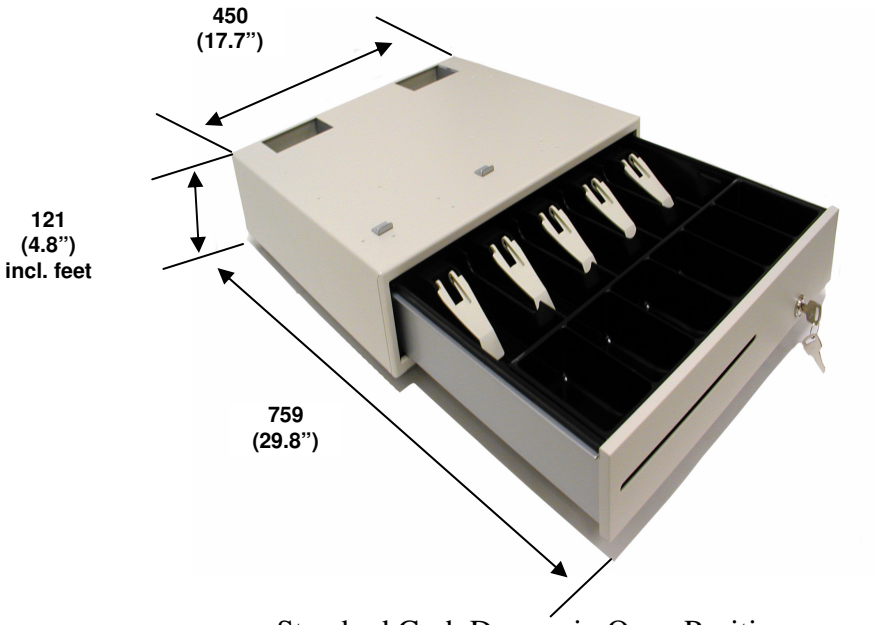
3.4 Cash Drawers

3.4.1 Model TP15 Cash Drawer - Standard

(PIN #'s KD30903-2351 & -2361, KD30903-2301 & 2311)
[KD30903-2301 shown]



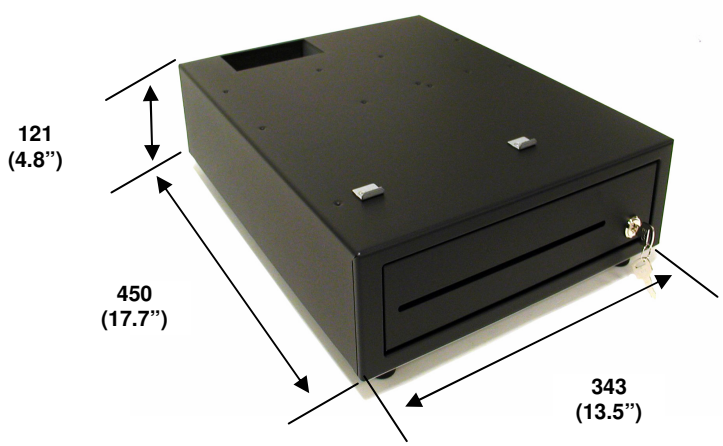
Standard Cash Drawer



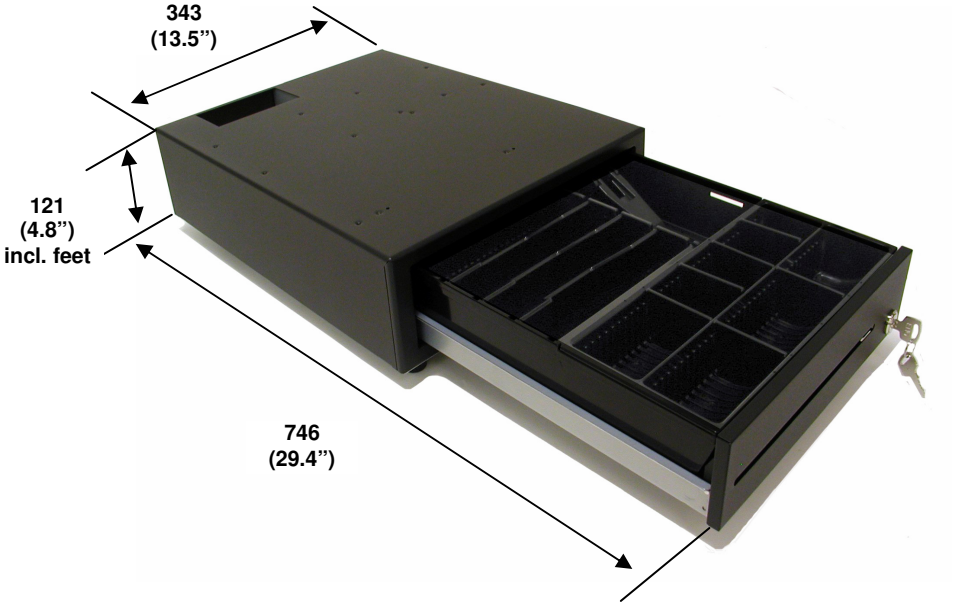
Standard Cash Drawer in Open Position

3.4.2 Model TP5C Cash Drawer - Compact

(PIN #'s KD30903-2203 & -2213)
[KD30903-2213 shown]



Compact Cash Drawer



Compact Cash Drawer in open position

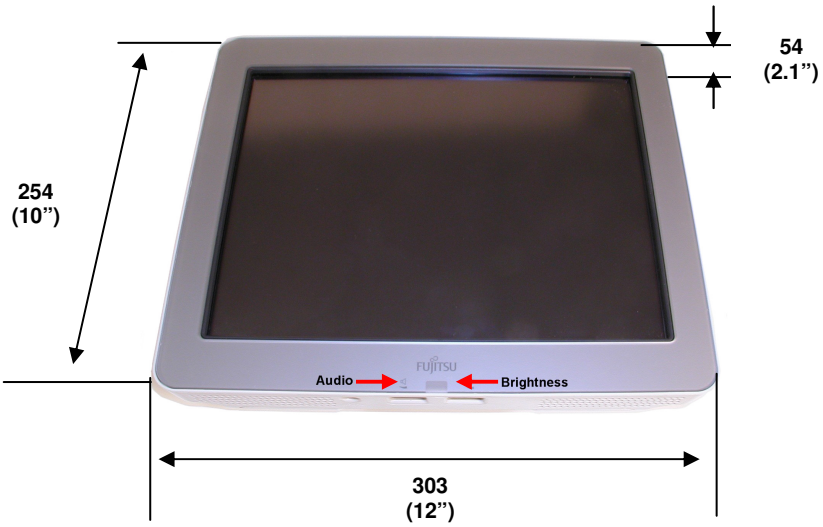
3.5 Displays

3.5.1 Model D22 LCD and Model D25 LCD Displays

The D22 LCD is a 12.1" LCD and the Model D25 LCD is a 15" LCD. Both LCDs support both analog and digital interfaces in the same unit. To use either of the LCDs as an analog device simply connect with a VGA cable. To switch from analog to digital use a DVI cable. Download video drivers from the following website: http://us.fujitsu.com/support.

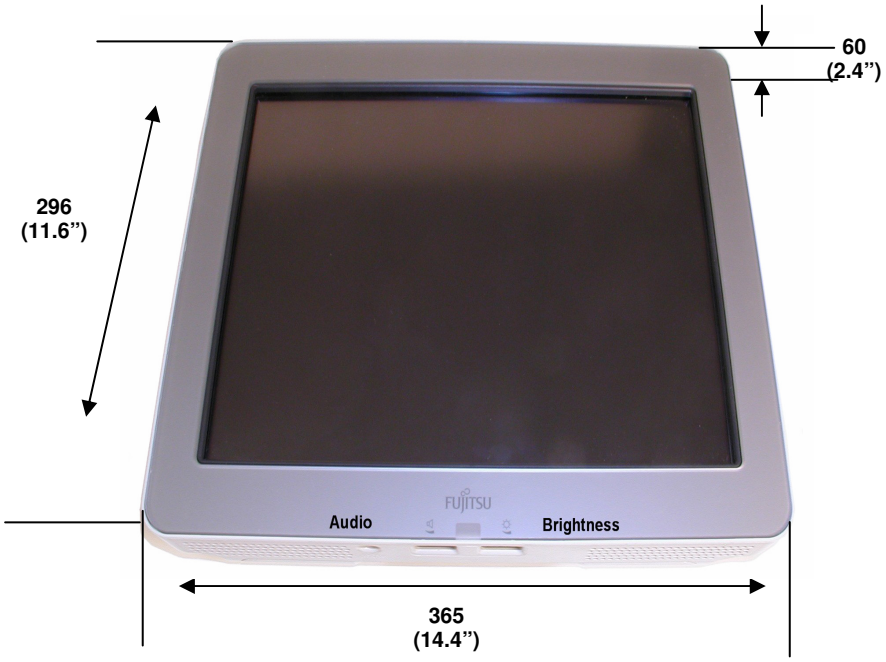
The D22 and D25 come with non-touch, 5-wire resistive. The D25 comes with infrared touch. Options include a 3-track MSR which can be added separately or with a 5x8 keypad/MSR (future release). Speakers are standard. The D25 with MSR and keypad can only be stacked on a standard PoS unit. All LCD monitors come with an audio adjustment dial and a brightness adjustment dial on the bottom edge of the monitor.

(PIN #'s KD03207-B161 & B171, KD03207-B261 & B271)
[KD03207-B171 shown]



Model D22 LCD Display

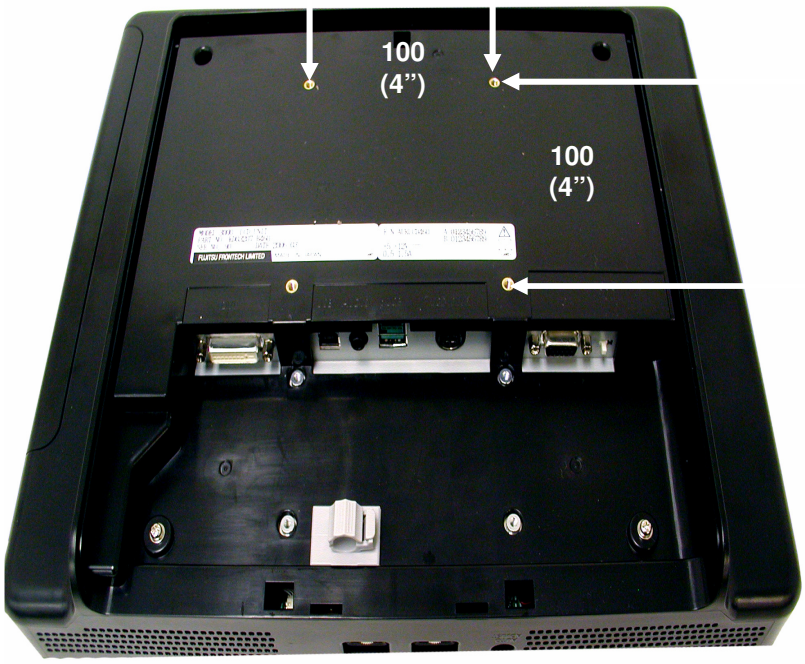
(PIN #'s KD03207-B381, -B361, B371 & KD03207-B481, B461, B471)
[KD03207-B361 shown]



Model D25 LCD Display

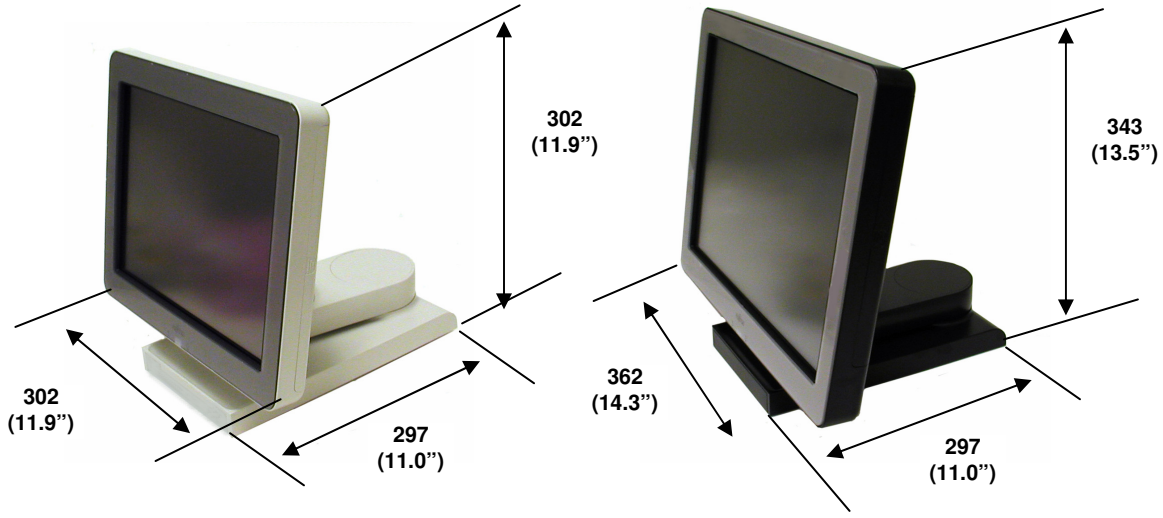
3.5.2 LCD VESA Bracket Mounting

Although usually mounted on Fujitsu mounts, the D22 and D25 LCDs can both use a standard 100mm (4") VESA mount.



3.5.3 Model D22 & D25 LCDs on Stacked Stand.

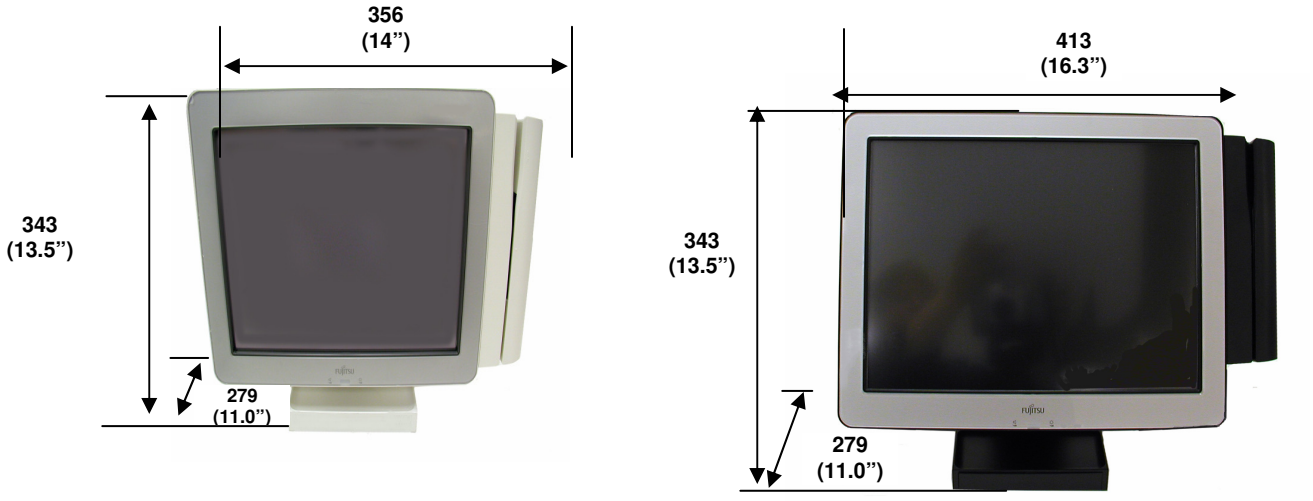
(PIN #'s 11000064, 11000073)
[Both shown]



D22 D25

3.5.4 Model D22 & D25 LCDs w/MSR

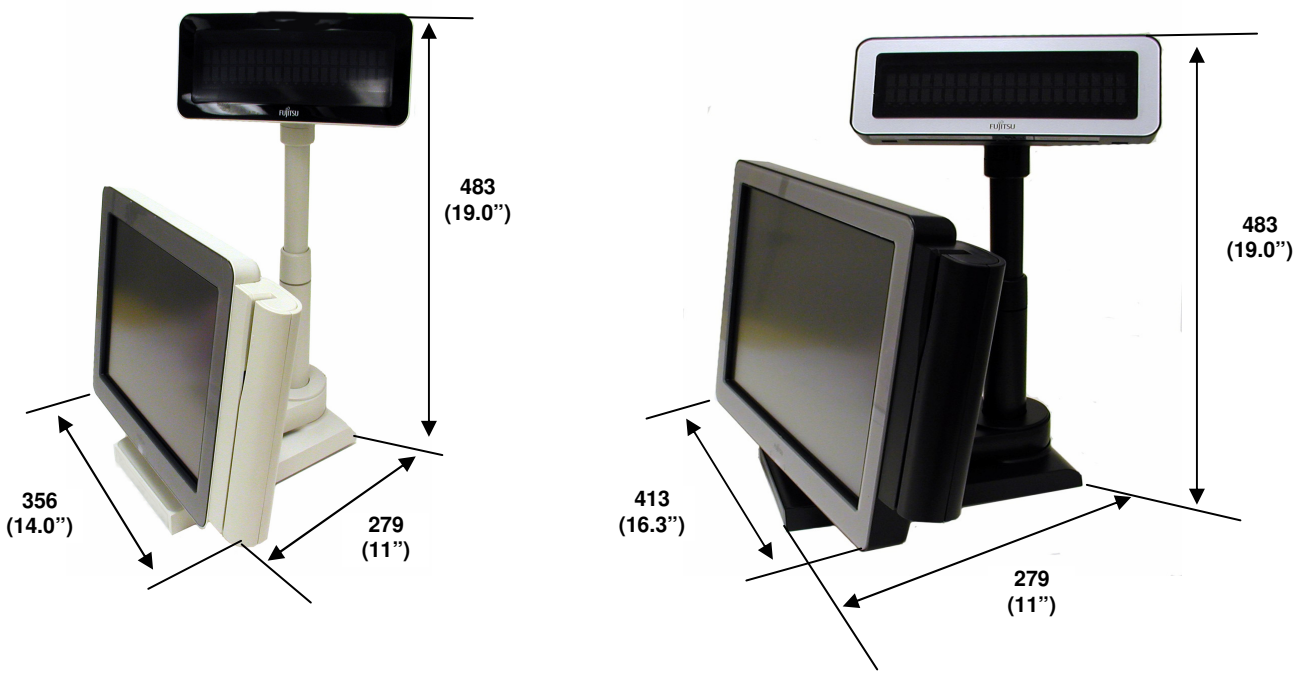
(PIN #'s 11000091, 11000094)
[Both shown]



D22 D25

3.5.5 Model D22 & D25 LCD on Single Stacked Stand w/MSR & VF60 Display

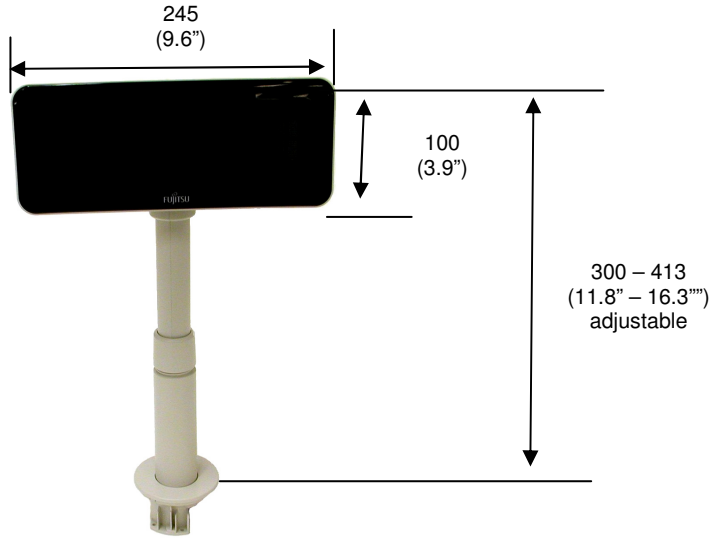
(PIN #'s 11000076-11000077)
[Both VF60'shown]



3.5.6 VF60 Customer Display (stacked)

The customer display is mounted on a stacked adjustable pole which reaches up to 16.3" from the display mount to the top of the display. The display rotates 330° horizontally and tilts 30° vertically

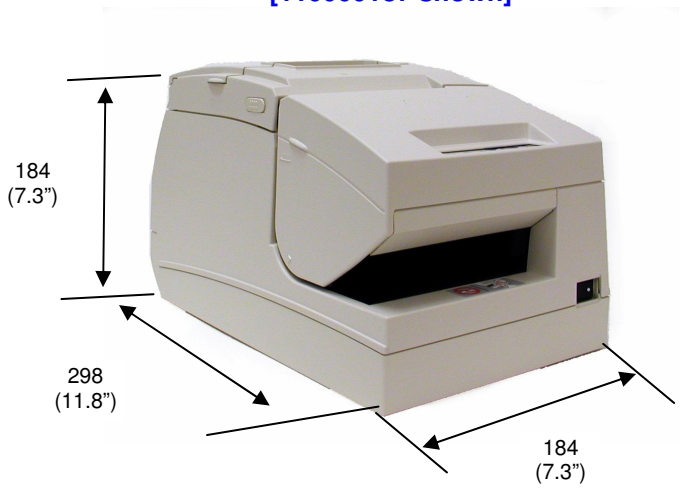
(PIN #'s 11000076-11000077)
[11000076 shown]



3.6 Printers

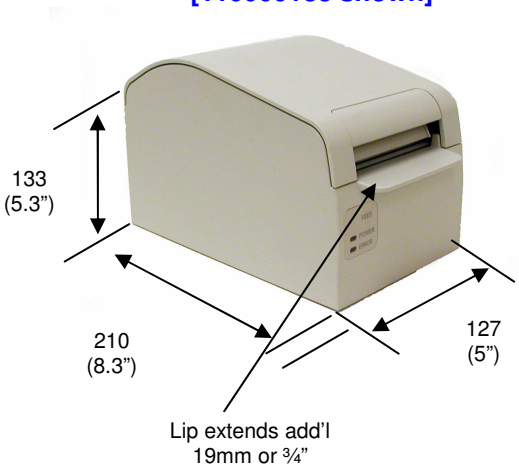
3.6.1 Model DT50III Printer

(PIN #'s 110000187, 90000197)
[110000187 shown]



3.6.2 Model CT10 Printer

(PIN #'s 110000133-110000134)
[110000133 shown]



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Chapter 4 SITE PREPARATION

This chapter defines the following pre-installation details for the TeamPoS 3000:

- Shipment inspection and return
- Anti-static protection
- Electrical supply requirements
- Mains power cables
- Warning labels

The procedures assume that in-store wiring for the terminals, its peripherals, and terminal-to-terminal communications have been installed.

4.1 Unpacking

1. Check delivered components to ensure they match the items listed on the packing list. If components are missing, contact your Help Desk for instructions.
2. Remove the unit and components from the box and check for damage. If the unit or components are damaged, contact your Help Desk for instructions.

4.2 Inspecting the Shipment

TeamPoS Series terminals are thoroughly inspected prior to shipment; however, damage can occur during transit. Any damage to the terminal can lead to problems after installation. Before accepting a shipment, inspect all shipping containers for external damage. Ensure that all packages listed on the shipment billing form have been delivered. Carefully unwrap and inspect all equipment:

- Verify that all the accessories listed on the packing list have been included in the shipment. Report shortages and damage to CustomerCare. The customer needs to provide the sales order number and a description of the piece of equipment damaged. The customer should then telephone 1-800-780-5525 and a Customer Care representative will arrange for replacement. CustomerCare is not responsible for equipment damaged by the customer after it is delivered.
- Inspect the exterior of each shipping box noting damage on the shipping documents so that the carrier has a record.
- Inspect the exterior of each unit for any obvious physical damage (scratches or abrasion on painted or display surfaces, or on plastic surfaces) that could have occurred during shipping.
- Damaged equipment received from a source other than Fujitsu Transaction Solutions Inc.'s Foothill Ranch facility should be reported to the sender.

4.3 Reporting Shipment Damage

If any damage is detected, it is both the recipient's and the carrier's responsibility to note the damage. Follow all applicable policies and procedures for notifying the carrier, management, and Fujitsu Transaction Solutions of the damage, and for filing damage claims.

Please note that all components are packaged separately. Keep the packaging in case it is necessary to return any of the components.

4.4 Returning Equipment

All equipment returned to the factory must be packed in either the original container or a substitute container of equal strength and durability. Packing material, about 76.0 mm (3.0 inches) thick, should surround all protruding edges, switches, and surfaces. Parts shipped in a package separate from the unit must also be repacked and included in the return. Each return must include the following information:

- Description of the equipment defect
- RMA number (received from CustomerCare representative)
- Order number
- Date received
- Name, address, and phone number of the person making the return

4.5 Using Anti-static Protection

When installing and disassembling equipment, be sure to follow anti-static protection procedures. All controllers, terminals, peripherals, and boards are susceptible to damage due to electrostatic discharge. Insufficient anti-static protection when handling boards causes failure, degraded operation, and reduced reliability.



Caution: Avoid touching connector pins on data cables or units. Touching exposed connector pins could cause a discharge into the circuitry resulting in failed components.

4.6 Preparing for Installation:

Before installing equipment, perform the following steps:

- Move all terminal components, accessories, and cables to the locations specified in your local site plan.
- Position the cables according to the site plan. Make sure you have the correct data cable at each terminal location.
- Place the optional equipment next to the terminal to which it will be connected.
- Remove the shipping tape from those components that have been taped.

4.7 Determining Power Requirements

Electrical power to the equipment must comply with all local, state, and national wiring codes and meet the requirements described here. If you do not have qualified in-house personnel to ensure that power requirements are met, an electrical contractor familiar with computer equipment should be hired. This section provides the electrical supply data and main power cable information to prepare a site for the installation of the TeamPoS 3000 Series terminal. This product is also designed for IT power systems with phase-to-phase voltage of up to 240V.

Before installing the terminal, check the power lines for loads that could cause large variations in voltage. Electrical devices that use a great deal of power such as air conditioners, elevators, copying machines and large motors can cause large drops in voltage. When severe electrical interference occurs, installing radio frequency (RF) filters, or isolation transformer, or both may be necessary. If voltage surges caused by lightning are likely to occur, install an arrester.



Caution: To prevent data loss, do not plug other equipment that can produce sudden surges (i.e., vacuum cleaners) into the same power circuit as the terminal.

4.8 General Requirements

1. The safety standards for Information Technology Equipment are only valid if the building installation conforms to the National Electrical Code for the country where the equipment is being installed.

2. For equipment that has a pluggable connection to its power source, the power source outlet socket must be located near the equipment and must be easily accessible.

3. For protection against electric shock, certain parts of this equipment, including the interface connections have been designed so that the voltage is limited to a safe value. In order to maintain this protection it is essential that any equipment connected to Fujitsu products shall have interface connections which are similarly protected.

4. When installing and disassembling equipment, be sure to follow anti-static protection procedures. All controllers, terminals, peripherals, and boards are susceptible to damage due to electrostatic discharge. Insufficient anti-static protection when handling boards causes failure, degraded operation, and reduced reliability.

The following are general electrical supply requirements:

a. Line noise limitations must not exceed 1250V with a maximum 1µs duration, and the repetition rate not to exceed 100Hz

b. Socket outlets must provide protective earth grounding and be of a polarized type

c. Before installing the terminal, check the power lines for loads that could cause large variations in voltage. Electrical devices that use a great deal of power such as air conditioners, elevators, copying machines, and large motors can cause large drops in voltage. When severe electrical interference occurs, installing radio frequency (RF) filters, or isolation transformer, or both may be necessary. If voltage surges caused by lightning are likely to occur, install an arrester.

d. Fujitsu supplied cables should be used to connect the system to the power supply outlet but, where this is not possible, the minimum requirement for the mains cables is as follows: For connection to 100-240V phase-to-neutral power supply systems; power supply cord to be rated at phase-to-neutral power supply systems; power supply cord to be unshielded and rated at 5 amps (minimum), 240 volts with one end terminated in a plug suitable for that location and the other end terminated in a mould IEC type CEE-22 female connector.

e. This ITE is designed for use on a power system with an earthed neutral, i.e., a TN or TT power system. The terminals must not be directly connected to a power system with an impedance earthed neutral, i.e., an IT power system.

f. For pluggable equipment, the supply plug shall be connected as follows:

Black or Brown	Live (Hot)
White or Blue	Neutral
Green or Yellow	Ground/Earth

To the User:

- DO read the operating instructions carefully before you attempt to use this equipment.
- DO ensure that the supply connector or isolator is readily accessible to enable isolation of the equipment
- DO ensure that a competently trained person checks that all electrical connections (including the supply plug and any extension leads) are properly made in accordance with the instructions.
- DO NOT allow the supply cord to be positioned where it may be snagged, trodden-on or stretched across sharp edged
- DO NOT continue to operate the equipment if you have ANY doubt about it working normally, or if it is damaged in any way. Instead, switch it off and, if the equipment is pluggable, remove the supply cord and contact your local service agent.
- DO NOT remove any fixed covers unless you are qualified / authorized to do so for the preparation of the equipment. There are no user serviceable parts under the covers unless expressly indicated in the equipment governing manual. Always remove the supply plug from the power source before removing any covers, and ensure ALL covers are replaced and correctly secured before re-connecting the supply plug.
- DO NOT obstruct any of the ventilation slots in the equipment. Obstruction of these slots can cause overheating, reduce equipment reliability and shorten the life of the equipment.
- DO NOT expose the equipment to spilled liquids

- DO NOT replace the supply cable with a different type than is called up in the instruction documentation or supplied with the equipment.

4.9 Installation with other equipment

In most cases, dedicated AC mains circuits are not required for the TeamPoS 3000 terminals. In rare instances, other electrical equipment sharing power with the terminal may cause adverse effects on the terminal. When this occurs, electrical isolation may be required and is the responsibility of the customer or installing contractor.

Terminals at 100-240 volts

The table below details the power requirements for the TeamPoS series control unit. Provide 100-240 volts AC, 50/60 Hz, single phase, with the following amperage requirements:

Property	Value or Description
Earthing	The terminals are Class 1 equipment and must be supplied via a socket-outlet which has a protective ground contact connected to the protective ground of the terminal.
Power system	The terminals are designed for use on a power system with a grounded neutral, i.e., a TN or TT power system. The terminals must not be directly connected to a power system with an impedance grounded neutral, i.e., an IT power system.
Rated voltage and frequency	100 - 240 volts, 50/60 Hz
Rated current	3.6 A
Operational frequency limits	47 – 63 Hz
Earth leakage current	< 1.0 mA
Power dissipation	250 watts
Maximum HRC fuse rating for external short-circuit protection	20 A
Main power cord: Length Diameter Minimum bend radius	 3.00 m (9.80 ft.) 8.0 mm (0.30 in.) 10.0 mm (0.40 in.)

4.10 Mains power cables

The mains power cables for the TeamPoS 3000 terminals are terminated with a plug suitable for the ordering country.

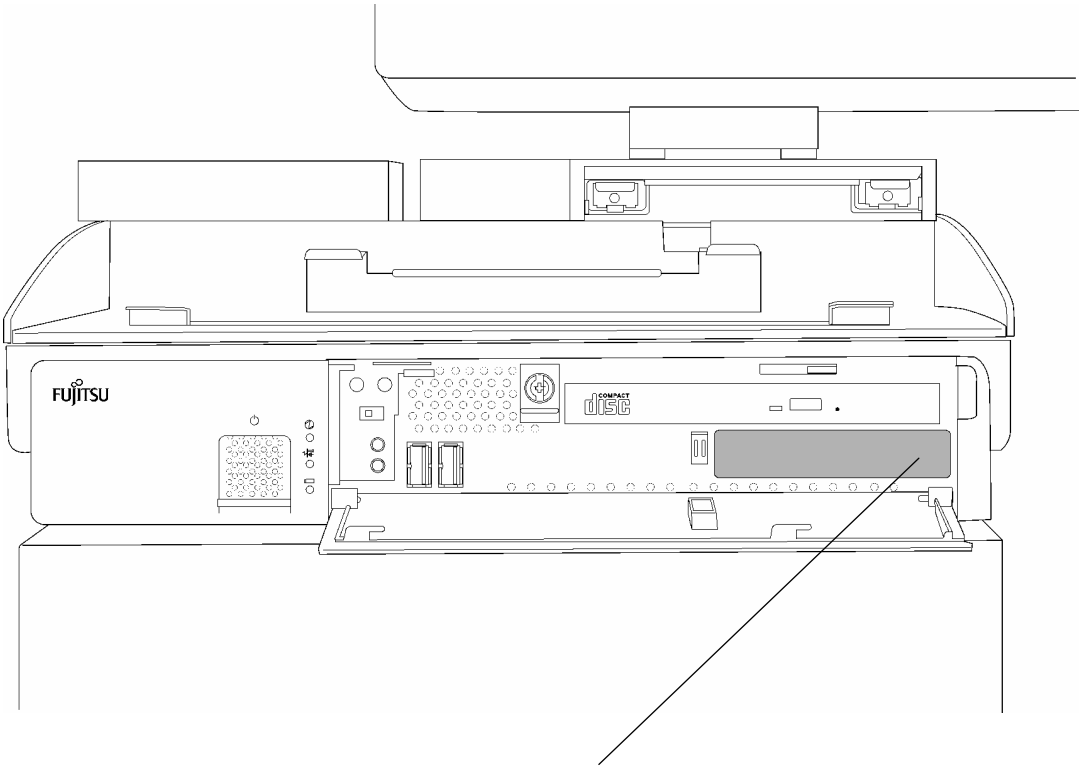
Caution: The power supply cord is used as the main disconnect device. Ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

4.11 Warning Labels

The equipment contains warning labels shown below.

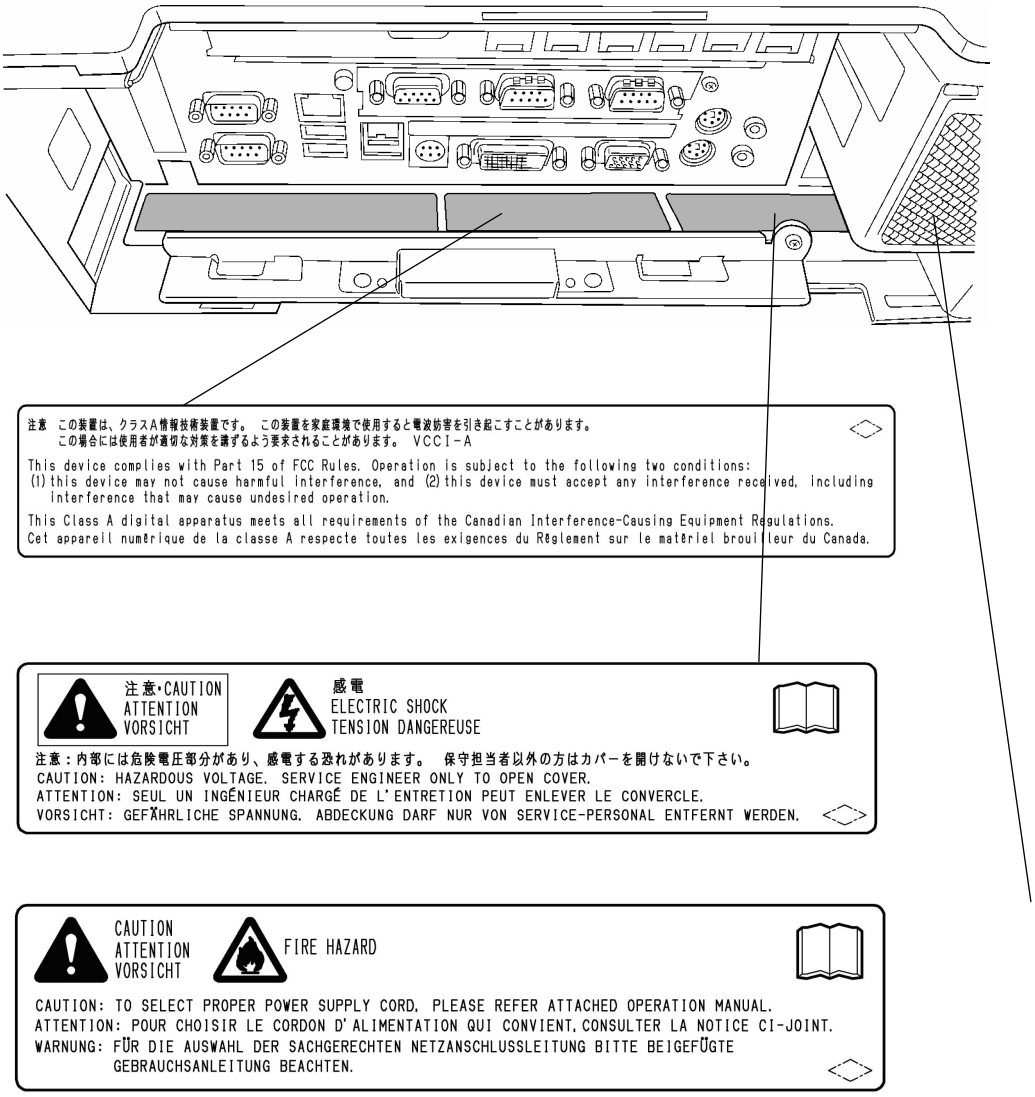
Do not remove any warning label. If a label becomes damaged or soiled to the point where it is illegible, contact your Customer Service Engineer

Interior of the front panel of the control unit

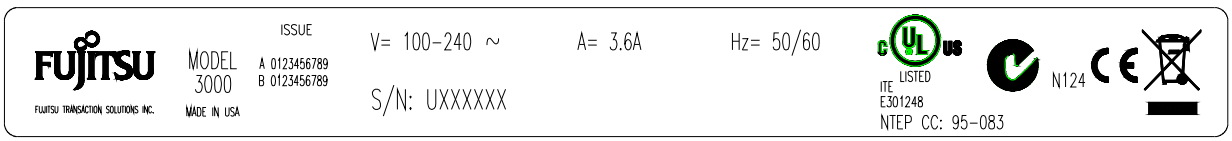




Back View of control unit



Bottom of the TeamPoS Controller



Chapter 5 - INSTALLATION



Caution: Confirm that the external power source is 100-240 VAC before starting the operation. To prevent electric shock, confirm that the AC cable is removed from the AC outlet anytime the panels are removed. Be sure to observe all ESD precautions and power OFF procedures.

5.1. Panel Removal/Installation Process

In many cases, TeamPoS 3000 control units will be fully configured from the factory or at configuration centers. Others will be configured during installation. This section shows how to access the control unit components to add or change configurations and installation of Team PoS 3000 peripherals. Accessing the TeamPoS 3000 internal components always requires the removal of the front panel.

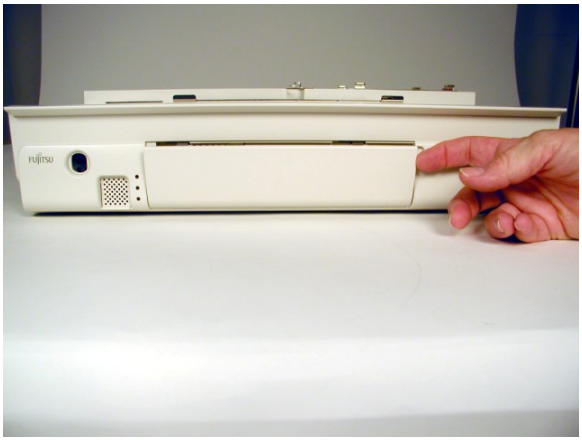
5.1.1. Front Panel

Removing the front panel gives access to the motherboard, disk drives, CD/DVD and optional partial and full battery backup.



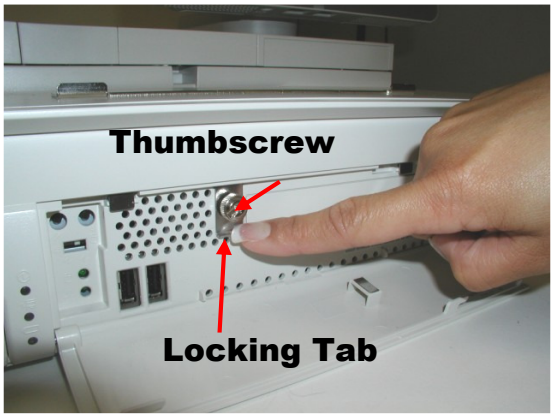
Caution: Be sure to observe all ESD precautions and power off procedures.

1. To remove the front panel, open front door by pulling forward from the notch. .



2. Loosen thumbscrew.

3. The metal locking tab (behind the thumbscrew) will likely drop down and unlock of its own accord. If not, gently pull down on the locking tab.



4. Rock front panel out at the top and remove.

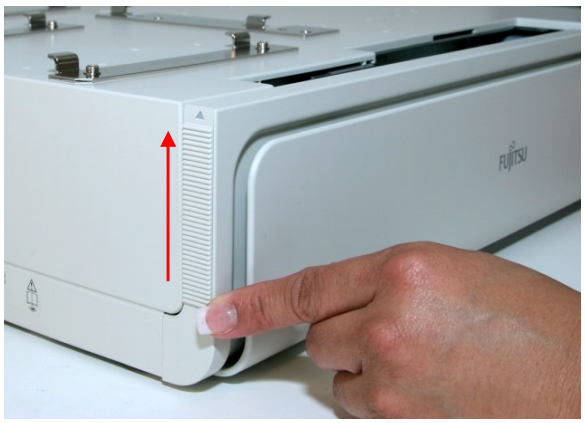


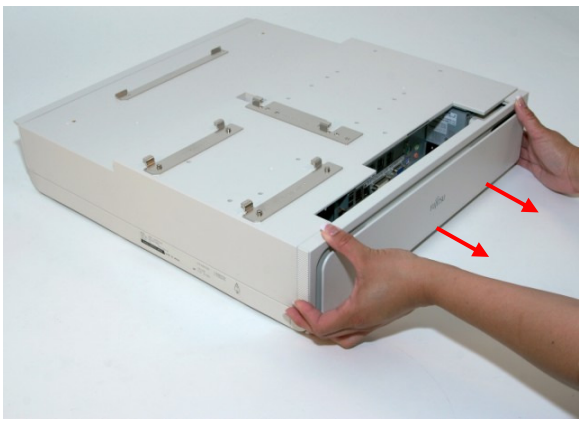
5. To reinstall, insert the tabs of the front panel into notches in the chassis.
6. Rock the front panel up and back until it snaps into the chassis.
7. Make sure the front panel is properly seated all the way around.
8. Lift up on the metal tab located behind the thumbscrew.
9. Tighten the thumbscrew.

5.1.2. Rear Panel

Removing the rear panel gives you access to the docking backplane assembly.

1. To remove the rear panel, lift up on the locking tabs at the sides of the rear panel.





2. Pull back to remove. This gives you access to the docking backplane assembly, where PCI cards and I/O boards are installed.

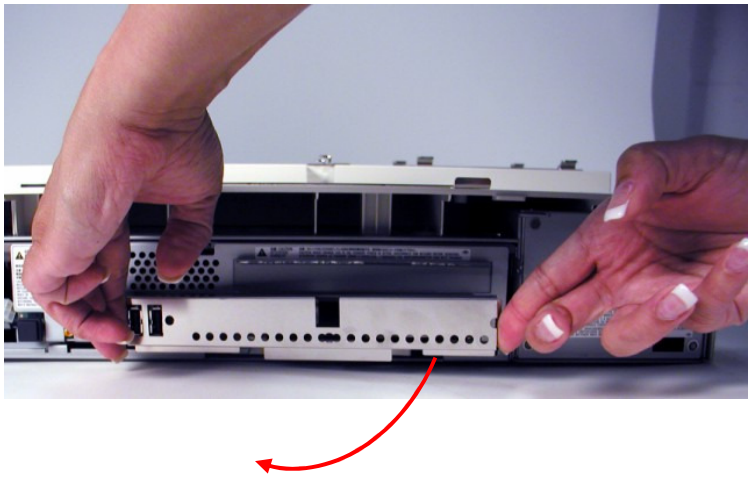
To reinstall the rear panel, insert the metal tabs into the sides of the chassis and slide the locking tabs

5.2. Removing the motherboard assembly.

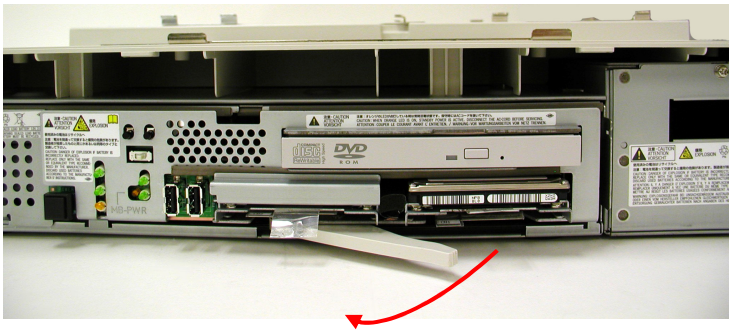


Caution: Be sure to observe all ESD precautions and power off procedures.

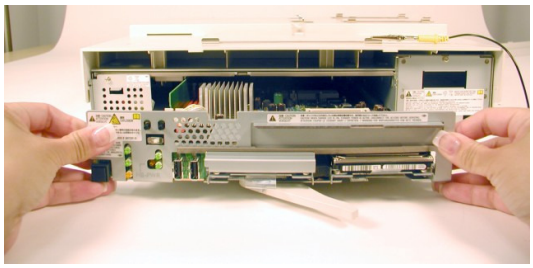
1. Remove the back panel (See Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel (See Section 5.1.1). The Yellow LED should be off. (See Section 1.2).
4. Remove hard disk drive shield by pushing in on the right side and pulling outward.

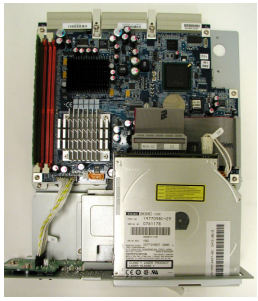


5. Pull white release lever below the motherboard assembly out and to the left.



6. Pull the entire assembly out of the controller.



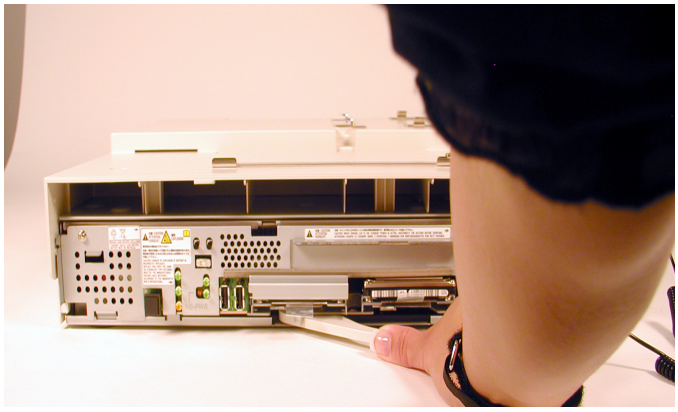


7. To reinstall, make sure that the assembly rails line up with the rails in the chassis.

8. Slide the motherboard assembly in with the release lever at 45° angle.

9. Push in slowly until motherboard assembly engages the lever.

10. Use the lever to fully seat the motherboard assembly.

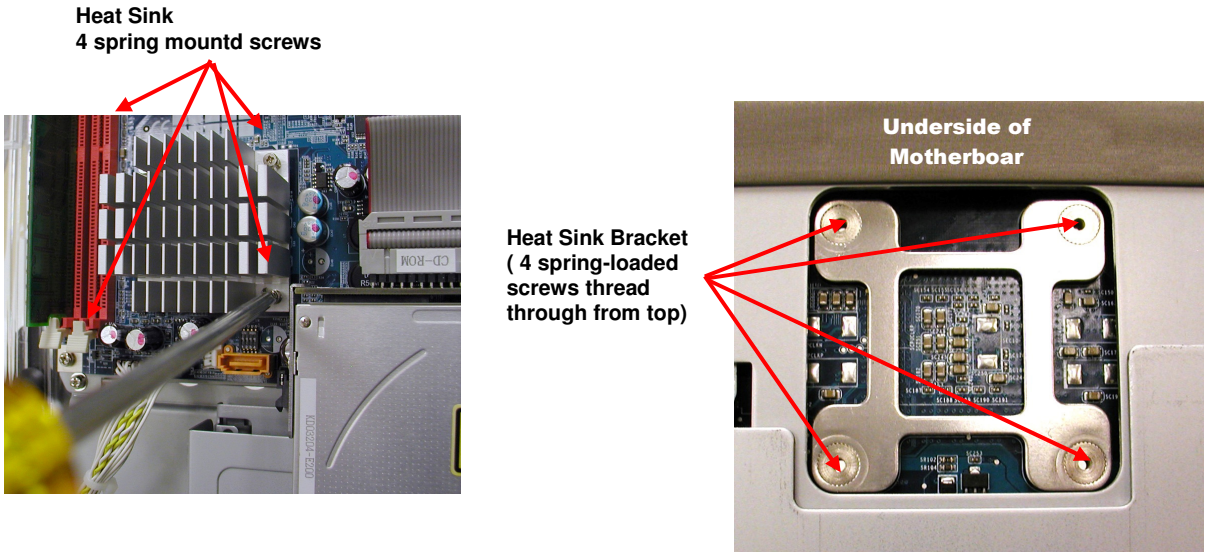


5.3. Installing CPU and Heat Sink

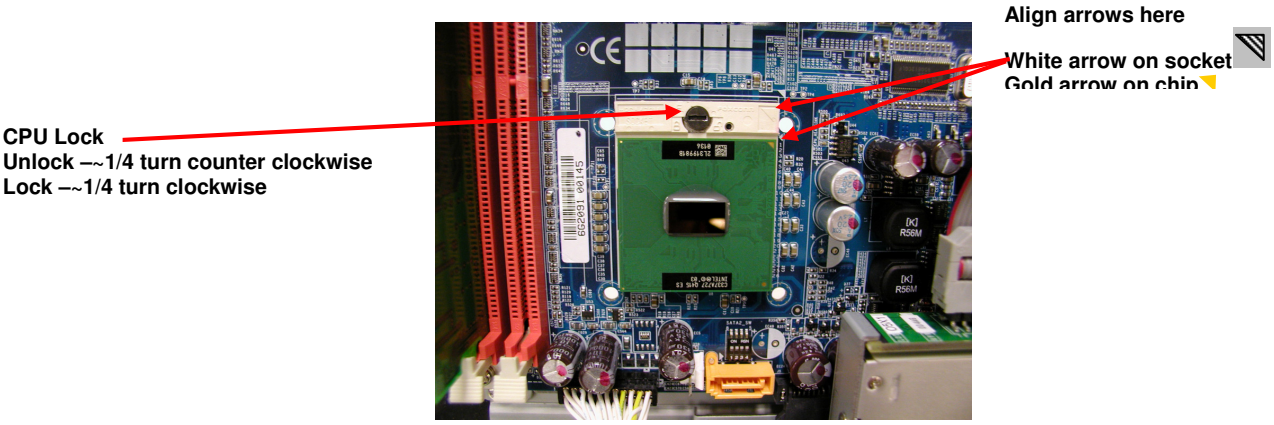
Caution: Be sure to observe all ESD precautions and power off procedures.

The heatsink and CPU are installed on the motherboard (towards the front of the motherboard) just to the right of the memory. Both parts come in the same kit.

1. Remove the rear panel from the controller (see Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel (see Section 5.1.1). Yellow LED should be off. (See Section 1.2)
4. Remove the motherboard assembly (see Section 5.2).
5. Remove the heat sink by loosening the 4 spring-loaded screws that attach it to the motherboard. There is a mounting bracket on the bottom of the motherboard.

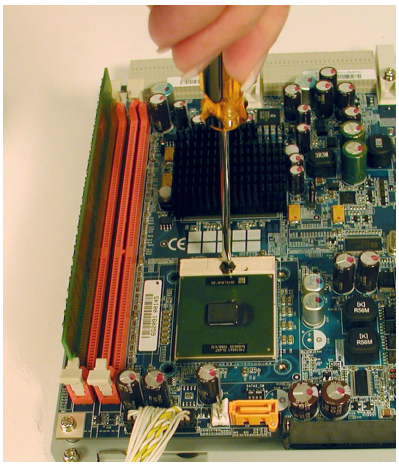


6. Open the CPU lock by turning approximately ¼ turn counterclockwise. Lock and Unlocked icons are imprinted in the CPU mount as a reminder.

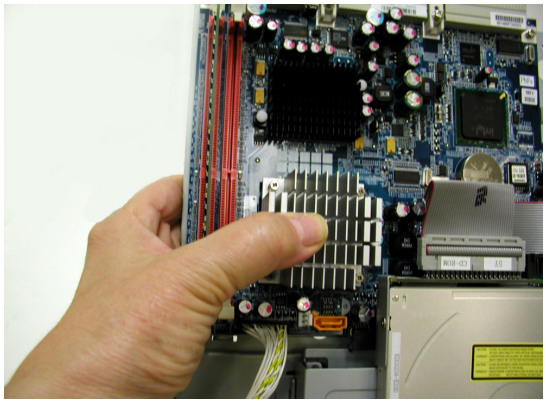


7. Place the CPU on the CPU socket with the arrows aligned.

8. Using a small flathead screwdriver, rotate the lock 1/4 turn clockwise to the lock position.



9. Place the heat sink over the CPU with fins aligned front to back and secure the heat sink with the four screws attached to it. Grip the heat sink bracket to hold it in place while the spring-mounted screws are tightened.

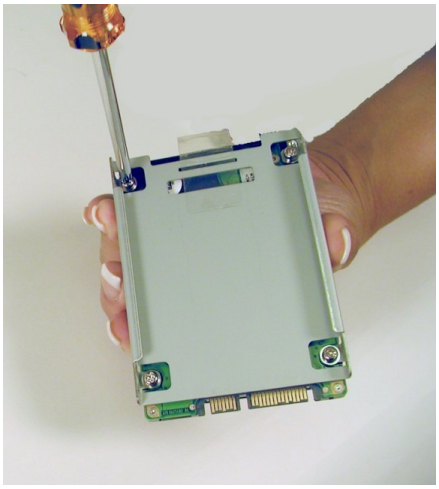


5.4. Installing the Hard Disk Drives



Caution: Be sure to observe all ESD precautions and power off procedures.

1. Remove the rear panel (See Section 5.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel.(See Section 5.1.1).Yellow LED should be off. (See Section 1.2).
4. Attached hard disk drive to hard drive bracket and secure with four screws.



5. Slide the new hard disk drive into the bay making sure that the runners align with the guides.



6. Press firmly to make the connection.
7. Reinstall the front panel.

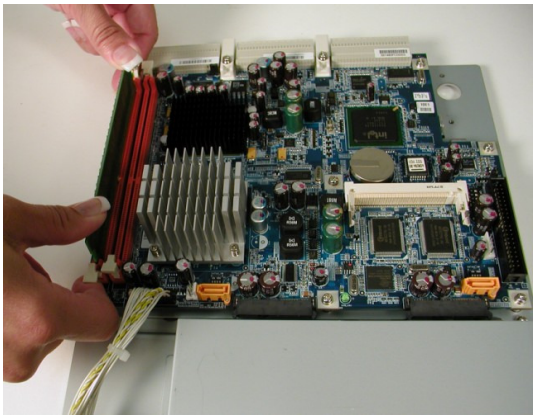
5.5. Installing Memory



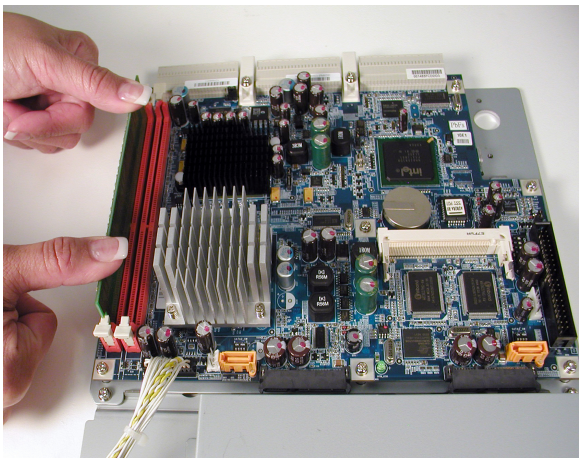
Caution: Be sure to observe all ESD precautions and power off procedures.

The TeamPoS 3000 has two memory sockets or slots and can use 256MB, 512MB or 1GB memory in combination.

1. Remove the rear panel (See Section 5.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel.(See Section 5.1.1).Yellow LED should be off. (See Section 1.2).
4. Remove the motherboard assembly (See Section 5.2)
5. Insert memory (or additional memory) into an empty socket. (There is only one way the memory stick will fit.)



6. Check to make sure that both levers for the socket are locked into place.



7. If this is an upgrade, install the upgrade label that comes with the upgrade kit on the side of the unit near the serial number.



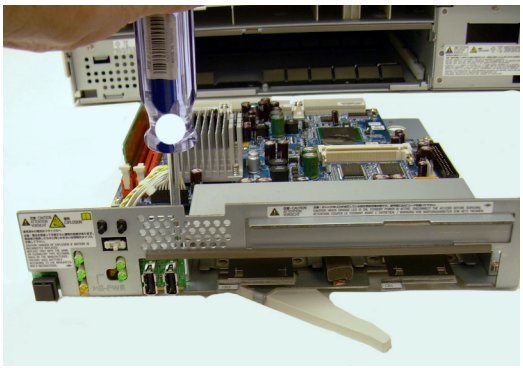
5.6. Installing the CD/DVD



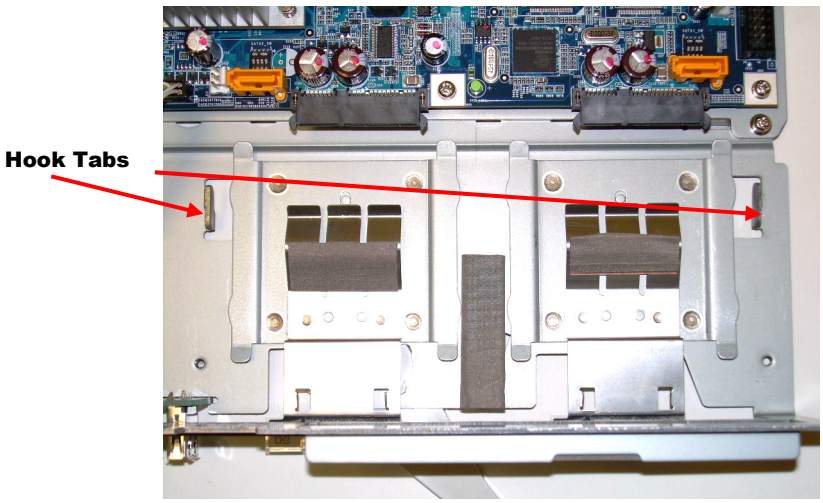
Caution: Be sure to observe all ESD precautions and power off procedures.

The CD/DVD rides on top of the motherboard assembly and requires a narrow Phillips-head screwdriver to install.

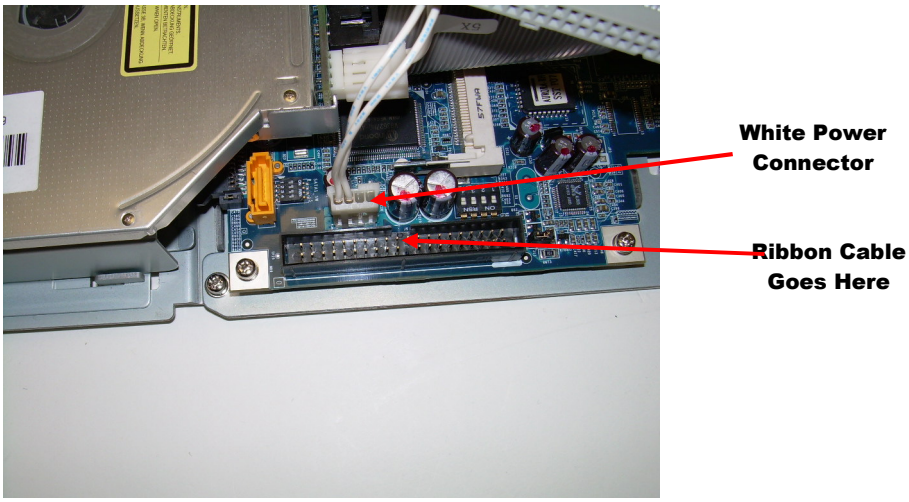
1. Remove the rear panel (See Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel (See Section 5.1.1) Yellow LED should be off.
4. Remove motherboard assembly. (See Section 5.2).
5. Remove the metal blanking plate by removing the 2 screws holding it in place. Retain the screws.



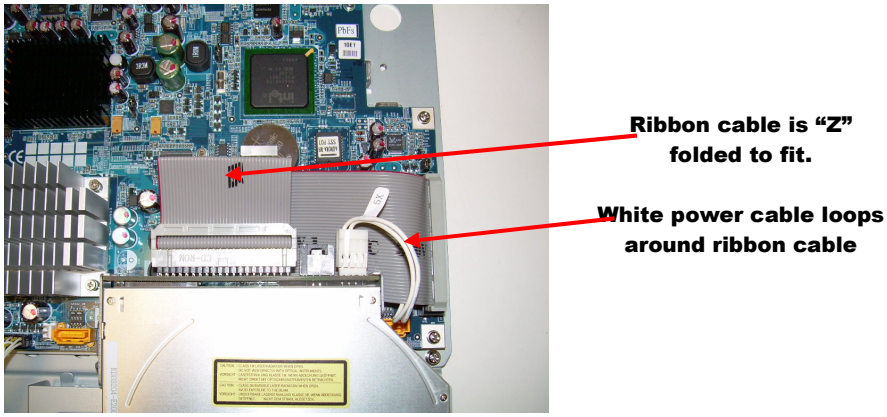
6. The CD/DVD comes already mounted onto a bracket. Align the slots in the mounting bracket so that they pass over the hook tabs on the chassis. Slide the CD/DVD forward so that it fits into the opening in the chassis and the holes in the bracket are aligned with the holes in the chassis. Attach the bracket to the chassis with the two screws retained in Step 5 above.



7. The power cable and ribbon cable come atttached to the back of the CD/DVD. Attach the other end of the white power cable to the motherboard as shown in the photo.



8. Attach the gray ribbon cable to the motherboard. The white power cable needs to loop around the ribbon cable as in the attached photo.



9. Reinstall the motherboard. (see Section 5.2). Make sure the cables are clear of any obstruction.

10. Pop out the cosmetic filler in the front panel.



11. Reinstall the front panel.(See Section 5.1.1).



5.7. Installing the Battery (Partial Backup)

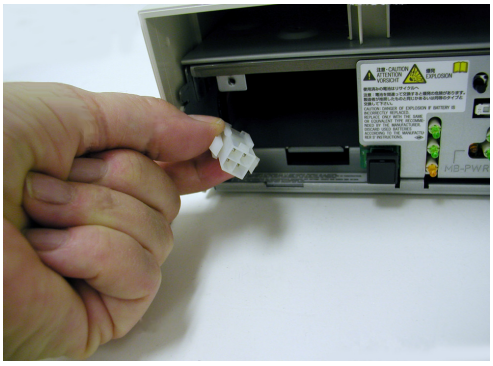
Caution: Be sure to observe all ESD precautions and power off procedures.

The partial backup battery is located on the front of the TeamPoS 3000 on the left.

1. Remove the rear panel. (See Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See Section 5.1) Yellow LED should be off. (See Section 1.2).
4. Remove the protective front metal covering as shown.

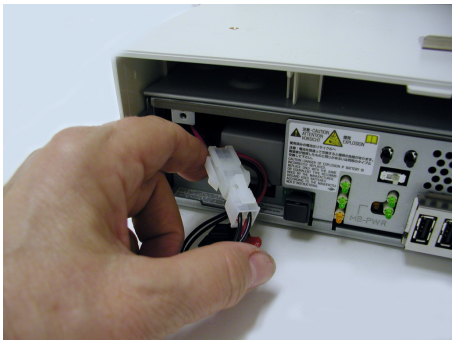


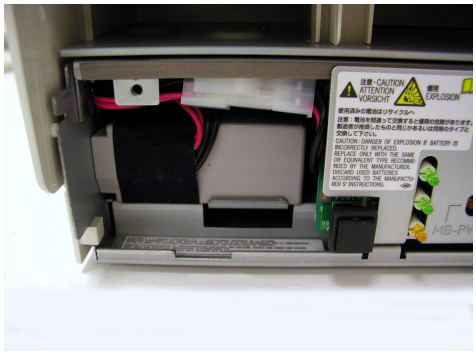
5. Gently pull the white power cable for the battery out of the way and insert the battery.





6. Connect the white connector attached to the battery to the white power cable in the controller. Tuck the cables out of the way - on top of the battery.





7. Reinstall protective front covering.

8. Replace front panel and reconnect power cable.

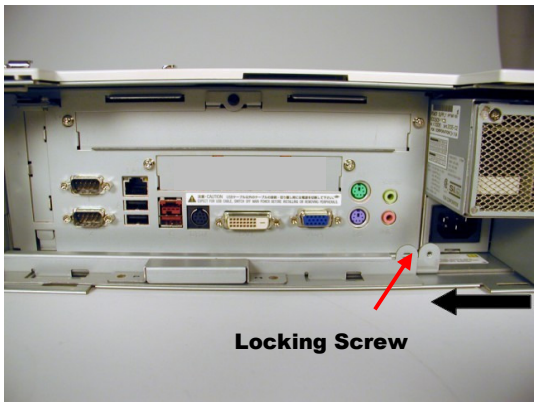
9. Replace rear panel.

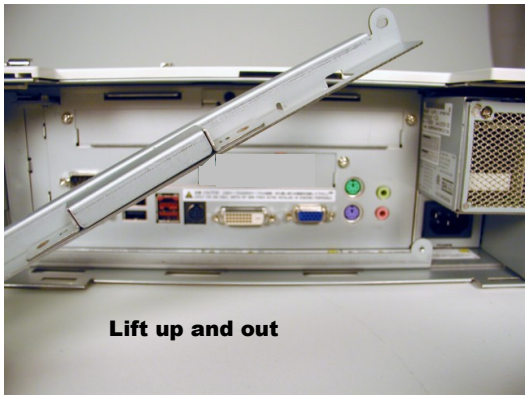
5.8. Removing the Backplane Assembly

Caution: Be sure to observe all ESD precautions and power off procedures.

Looking from the rear, the power supply is on the right.

1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
4. Unseat the motherboard assembly. (See Section 5.2)
5. At the rear, remove the locking screw on the right hand side of the backplane assembly.
6. Slide the locking bar to the left and lift it out. The entire backplane assembly and power supply will slide out.
7. Reinstall backplane assembly and lock into place before reseating the motherboard.





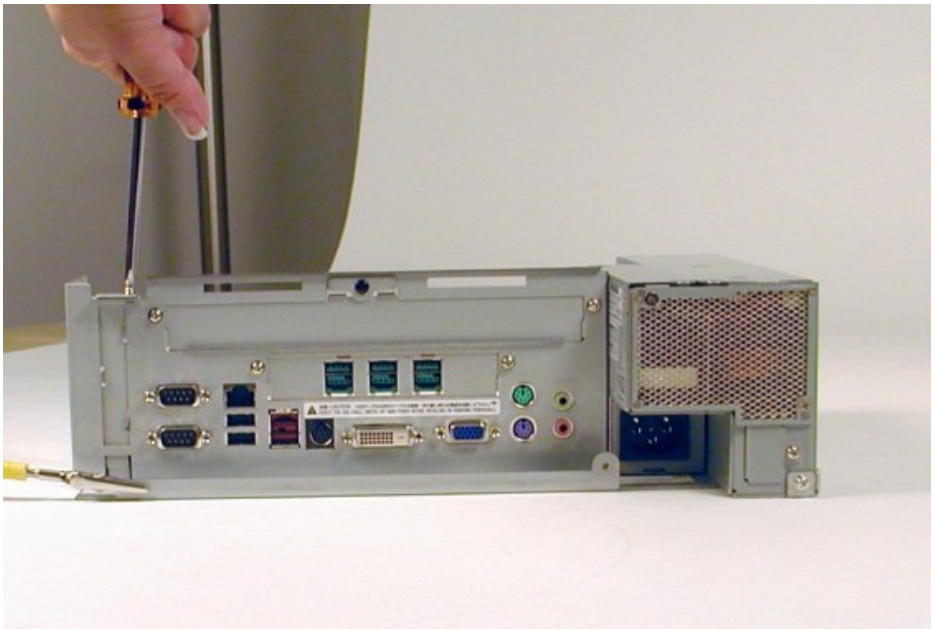


5.9. Installing PCI Add-In Card(s)

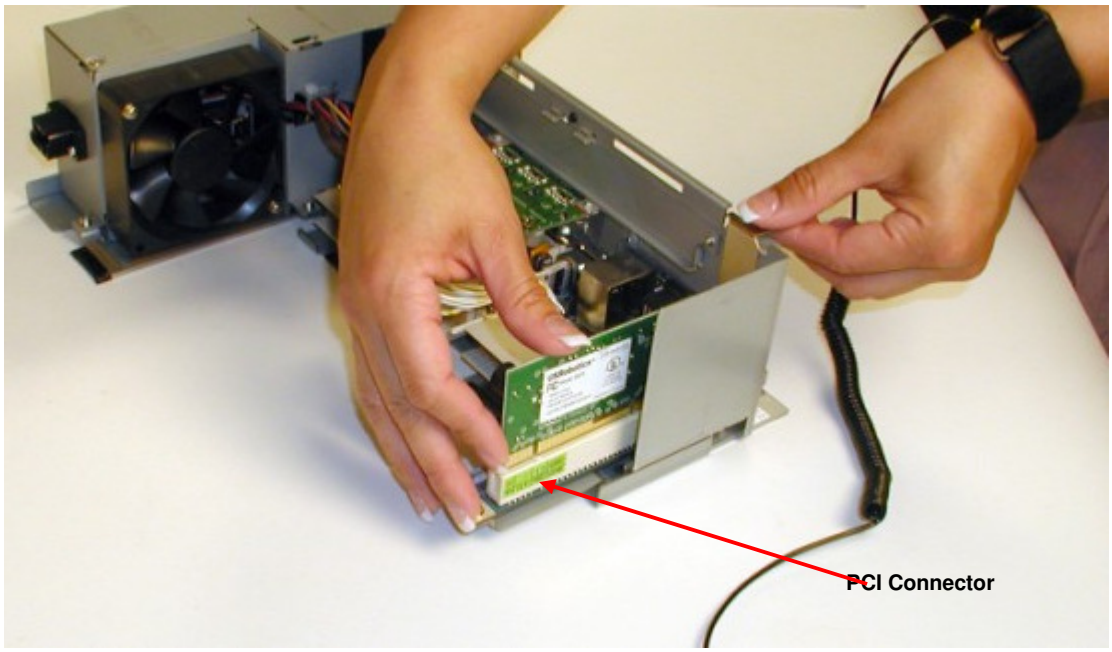
Caution: Be sure to observe all ESD precautions and power off procedures.

Viewing the backplane assembly from the rear, there is a vertical slot on the left hand side for the ½ height PCI card. The PCI connector is located directly below this slot.

1. Remove the back panel. (See section 5.1.2.)
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See section 5.1.1) Yellow LED should be off (See Section 1.2).
4. Unseat the motherboard by pulling gently on the seating lever. (See section 5.2)
5. Remove the backplane assembly. (See Section 5.8)
6. Remove the locking screw from the PCI slot filler plate. Retain the screw for anchoring the PCI card.



7. Insert the PCI card into the slot and seat firmly.



8. Secure PCI card with the screw that was used for the blanking plate.

9. Reinstall the backplane assembly and secure into place using the locking bar before reseating the motherboard.

5.10. Installing the I/O boards



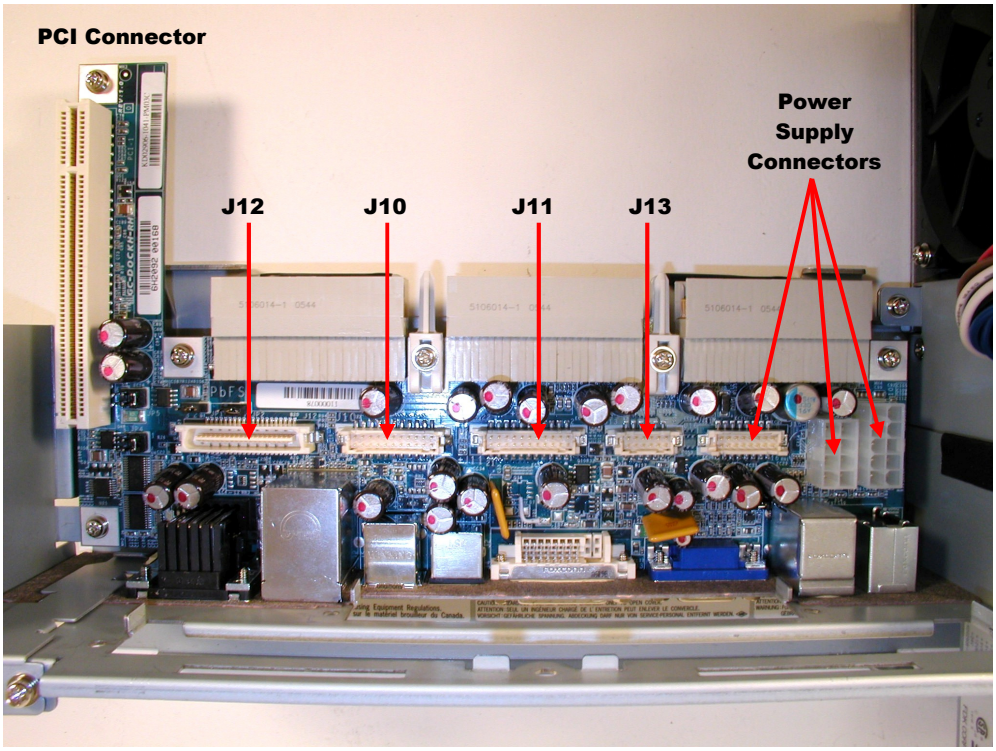
Caution: Be sure to observe all ESD precautions and power off procedures.

The following I/O board options are available on the TeamPoS 3000XL:

1. No I/O board.
2. Single Powered USB (one board with 3 powered USB ports)
3. Combo Board (one board with 6 powered USB ports, 2 RS 232 ports)
4. Combo Board with COM Board (Combo board in #3 plus COM Board ports: 3x RS232 ports)

Note: Combo board cannot be combined with single powered USB. The Combo board can be installed without the COM board, but the COM board cannot be installed without the Combo board.

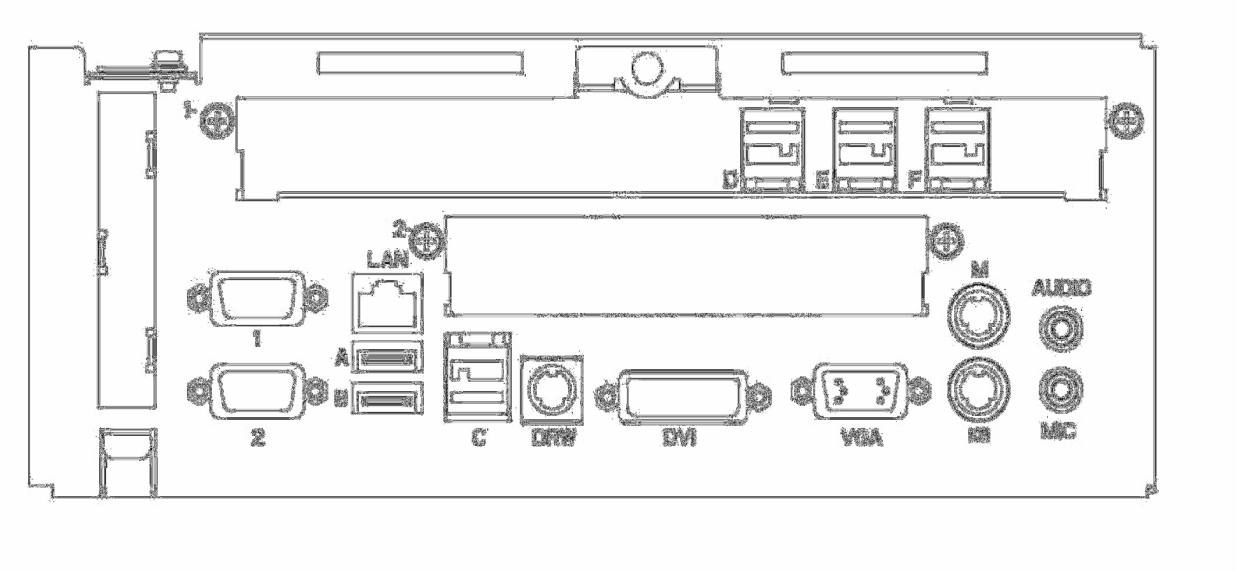
I/O boards are connected to the backplane assembly. Refer to the instructions that follow to identify which connectors support which I/O board.



5.10.1. No I/O Board

Backplane assembly will have two filler plates, a long one and a short one.

5.10.2. Powered USB I/O Board

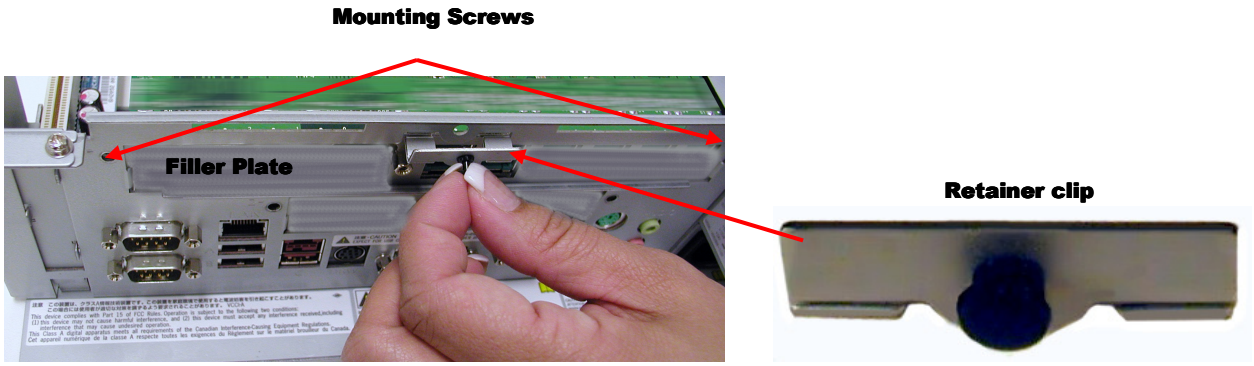


Caution: Ports designated as Port C on the backplane (24V PUSB) and Port 3 on the Combo board (24V RS232) do not meet UL limited power source (LPS) requirements. These ports are limited to only allowing 24V Retail POS RS232 or powered USB peripherals that do not exceed a rated current of 4 Amps. Peripherals intended to be connected via - Jacketed Cable for external use rated 30 V, max 3.05m long, marked VW-1 or FT-1

Caution: Be sure to observe all ESD precautions and power off procedures.

Powered USB (has 3, 12V powered USB connections): Installed in the top slot (the long slot).

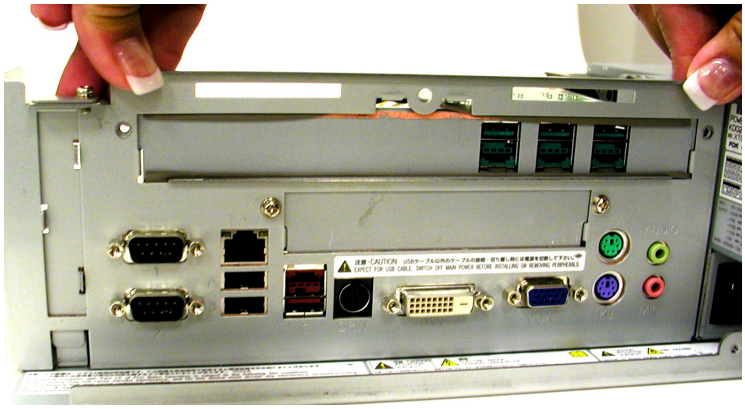
1. Remove the rear panel. (See Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2)
4. Unseat the motherboard .
5. Remove the backplane assembly. (See Section 5.8)
6. Remove top filler plate by first removing the retainer clip at the center of the filler plate. To do this pull outward on the black plug. Retain the retainer clip.



7. Remove 2 mounting screws holding the upper filler plate. Retain the screws.

8. Invert the USB board so the ports face away from the backplane. Connect the white cable to J11 connector. The J11 connector is labeled. It is the second white connector from the left when looking at the backplane from the rear.

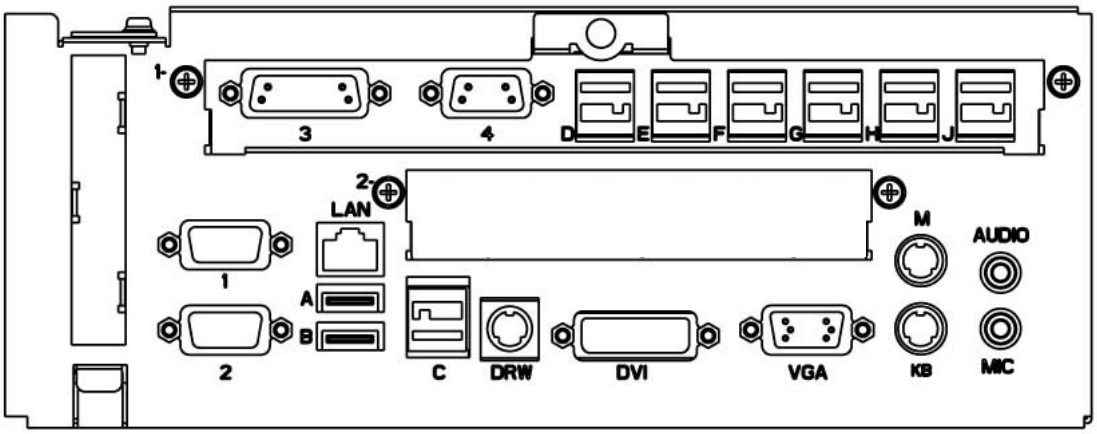
9. Flip the USB board over, slide it into the slots at the side of the top opening and attach it with the two screws.



10. Replace the retainer clip and secure by pressing in on the black plug.

5.10.3. Combo Board

Caution: Be sure to observe all ESD precautions and power off procedures.

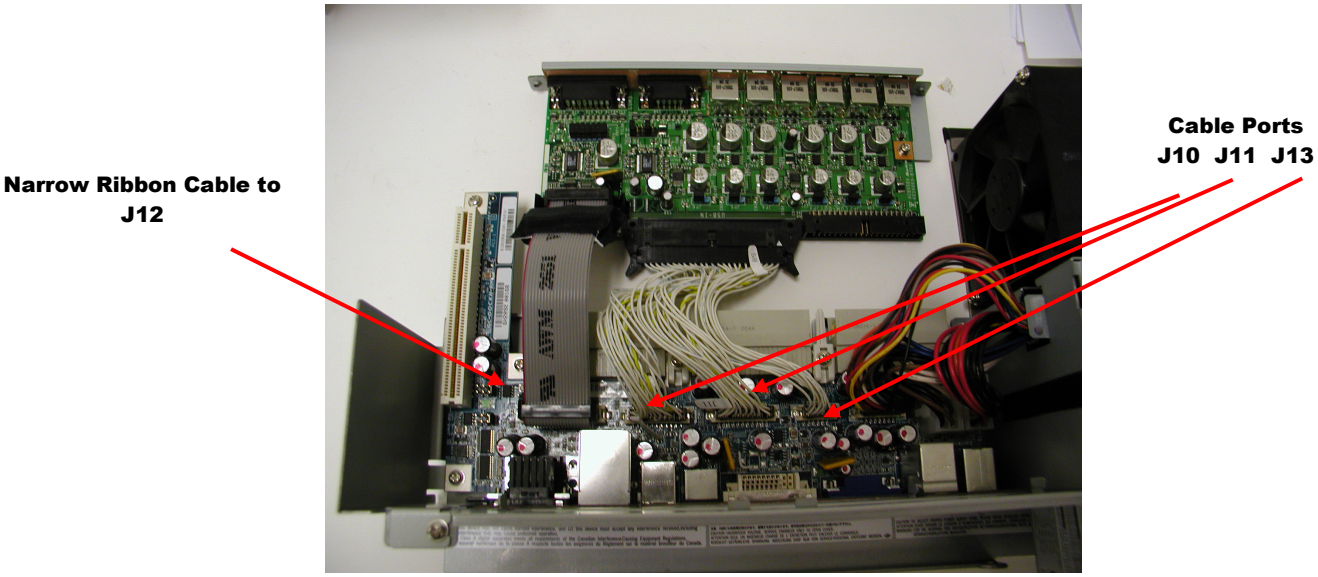


Caution: Ports designated as Port C on the backplane (24V PUSB) and Port 3 on the Combo board (24V RS232) do not meet UL limited power source (LPS) requirements. These ports are limited to only allowing 24V Retail POS RS232 or powered USB peripherals that do not exceed a rated current of 4 Amps. Peripherals intended to be connected via - Jacketed Cable for external use rated 30 V, max 3.05m long, marked VW-1 or FT-1.

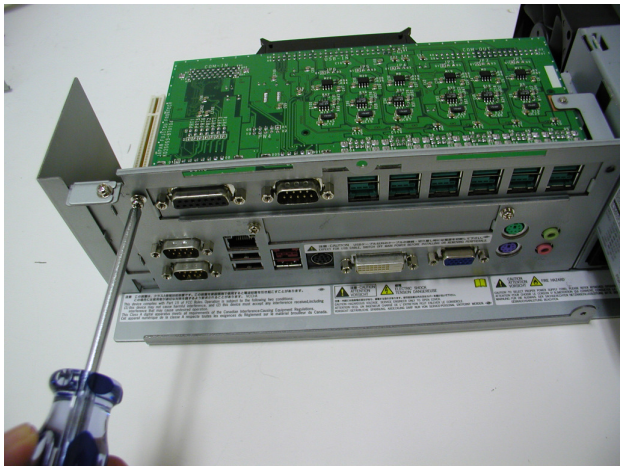
Note: When Combo Board is installed, only one 24V port should be used for 24V printer. Port 3 and Port C cannot provide 24V power to 2 printers simultaneously.

1. Remove the back panel. (See Section 5.1.2)
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED light should be off. (See Section 1.2)
4. Unseat the motherboard . (See Section 5.2)
5. Remove the backplane assembly. (See Section 5.8)

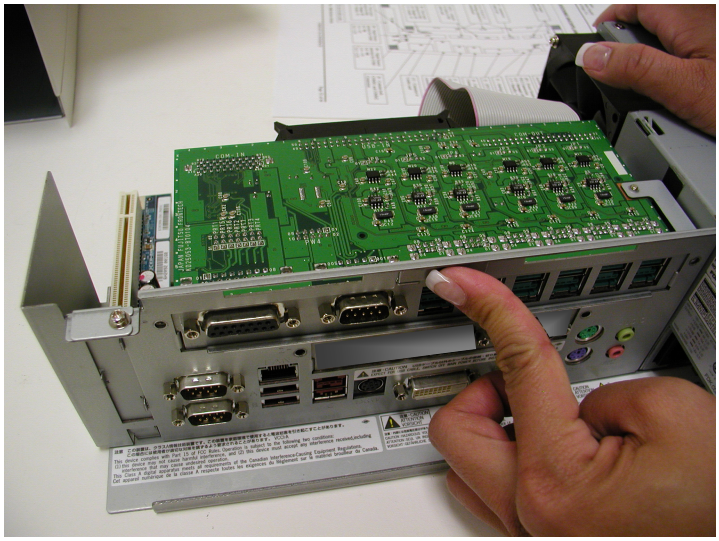
6. Remove top filler plate by first removing retainer clip by pulling on the black plug at the center of the filler plate then remove the 2 mounting screws. Retain screws and clip. (See Section 5.10.2)
7. Invert combo card so that ports face away from the backplane. Connect the three port cables to the following ports on the backplane: J13, J11, and J10. The ports are labeled on the backplane.
8. Connect the narrow ribbon cable to port J12 on the backplane.



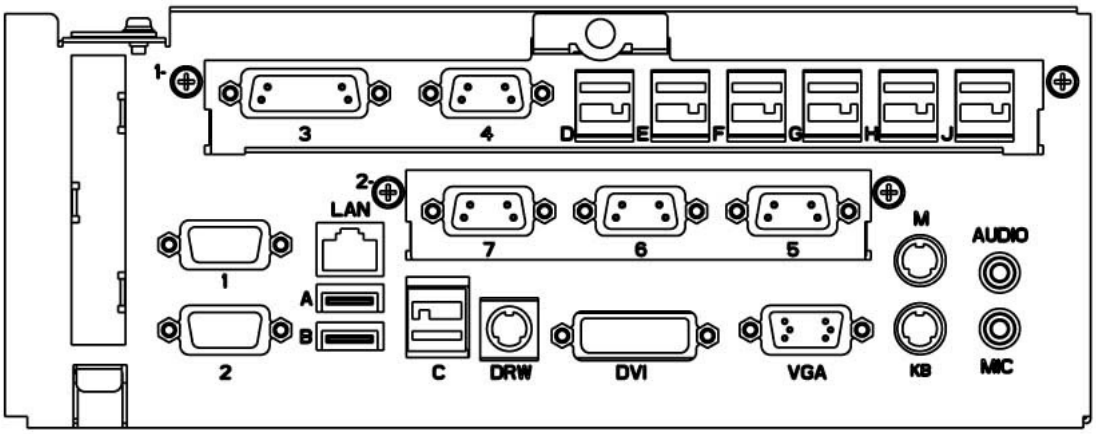
9. Flip combo board, slide it into the slots at the side of the top opening and attach it with the two screws.



10. Reattach the retainer clip and secure by pressing in the black plug.



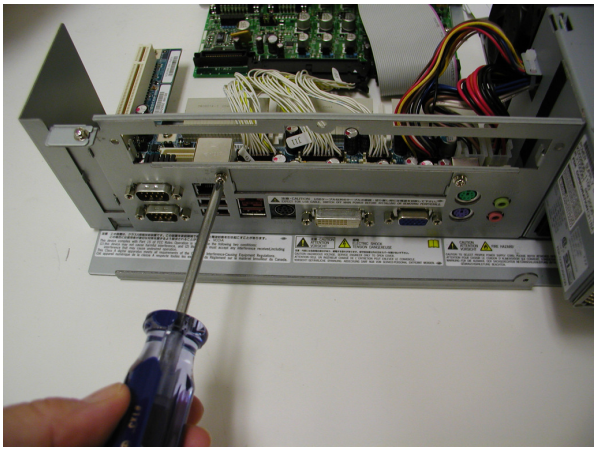
5.10.4. Combo Board with COM Board



Caution: Ports designated as Port C on the backplane (24V PUSB) and Port 3 on the Combo board (24V RS232) do not meet UL limited power source (LPS) requirements. These ports are limited to only allowing 24V Retail POS RS232 or powered USB peripherals that do not exceed a rated current of 4 Amps. Peripherals intended to be connected via - Jacketed Cable for external use rated 30 V, max 3.05m long, marked VW-1 or FT-1.

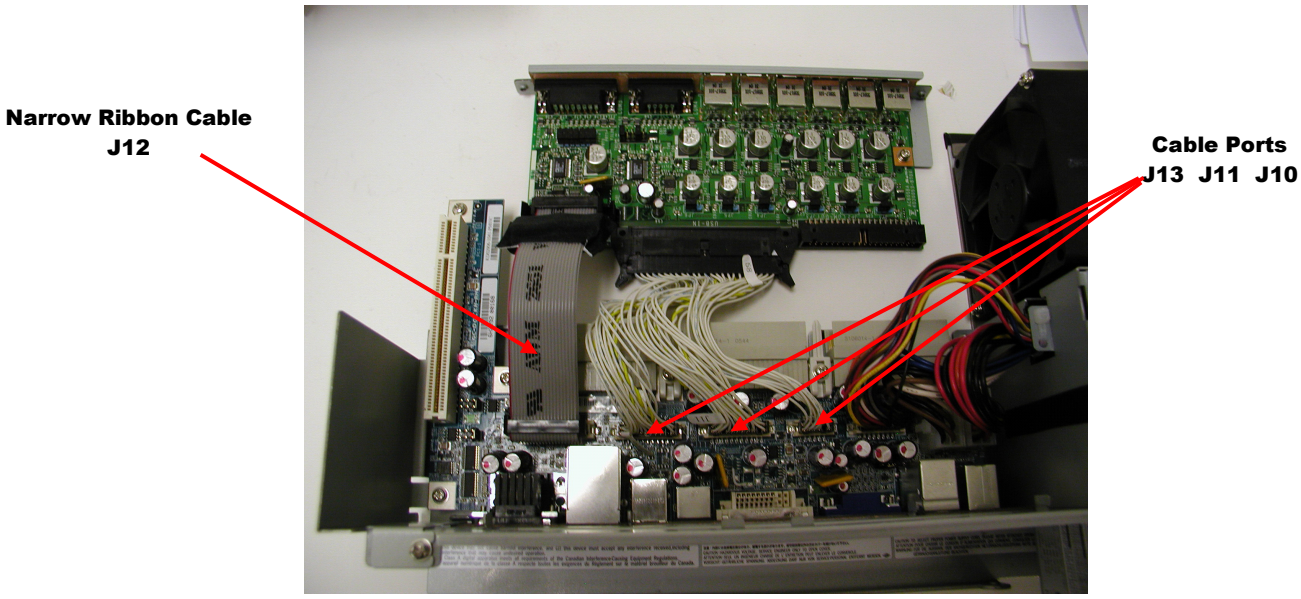
Note: When Combo Board is installed, only one 24V port should be used for 24V printer. Port 3 and Port C cannot provide 24V power to 2 printers simultaneously.

1. Remove the back panel. (See Section 5.1.2).
2. Disconnect the AC power cord from the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
4. Unseat the motherboard . (See Section 5.2).
5. Remove the backplane assembly. (See Section 5.8).
6. Remove top filler plate by removing the black pin and retainer clip at the center of the filler plate and unscrewing the filler plate. Retain the screws and clip.
7. Remove the bottom filler plate by removing the two screws.

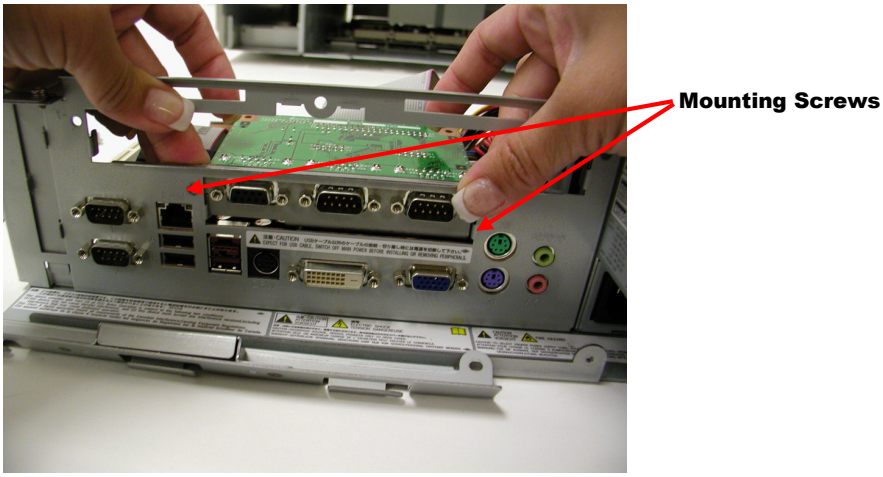


8. Invert Combo card (ports face away from the backplane). Connect the three port cables to the following ports on the backplane: J13, J11, and J10

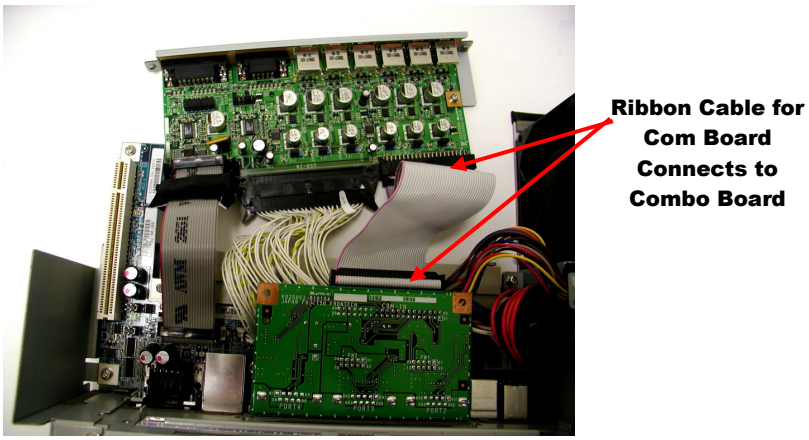
9. Connect the narrow ribbon cable to port J12 on the backplane and to Combo card.



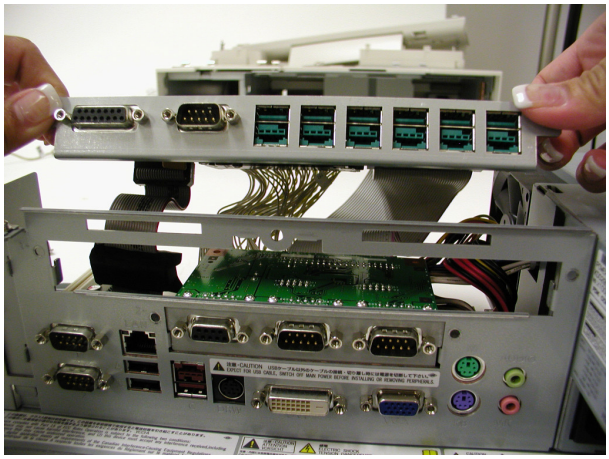
10. Attach the COM board to the bottom opening in the backplane assembly by sliding downward into notches on the chassis and secure with the 2 mounting screws.

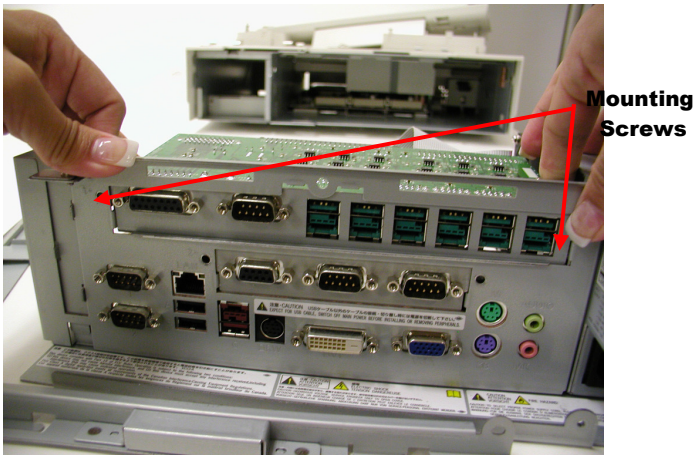

Mounting Screws

11. Connect the wide ribbon cable on the COM board to the ribbon socket on the Combo board



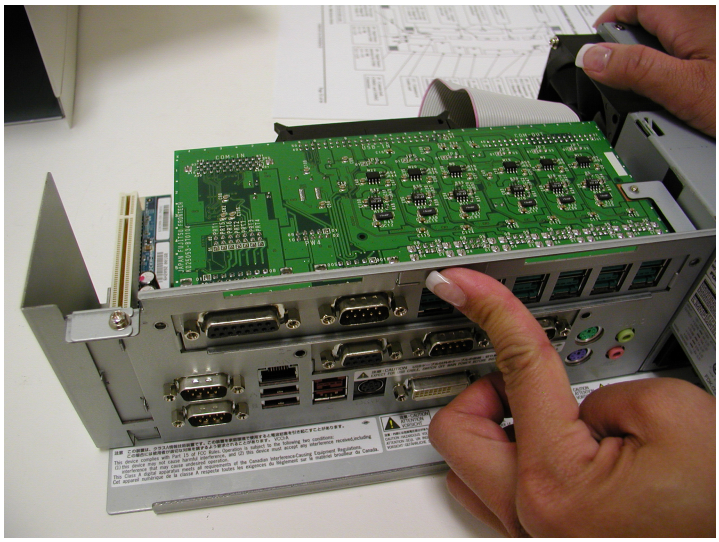
12. Flip combo board and attach it to the top opening of the chassis of the backplane assembly by sliding it down into the notches on the chassis. Secure board with the 2 mounting screws.





13. Make sure that the cables do not interfere with the motherboard. Bend and fold the ribbon cables as needed to clear the motherboard.

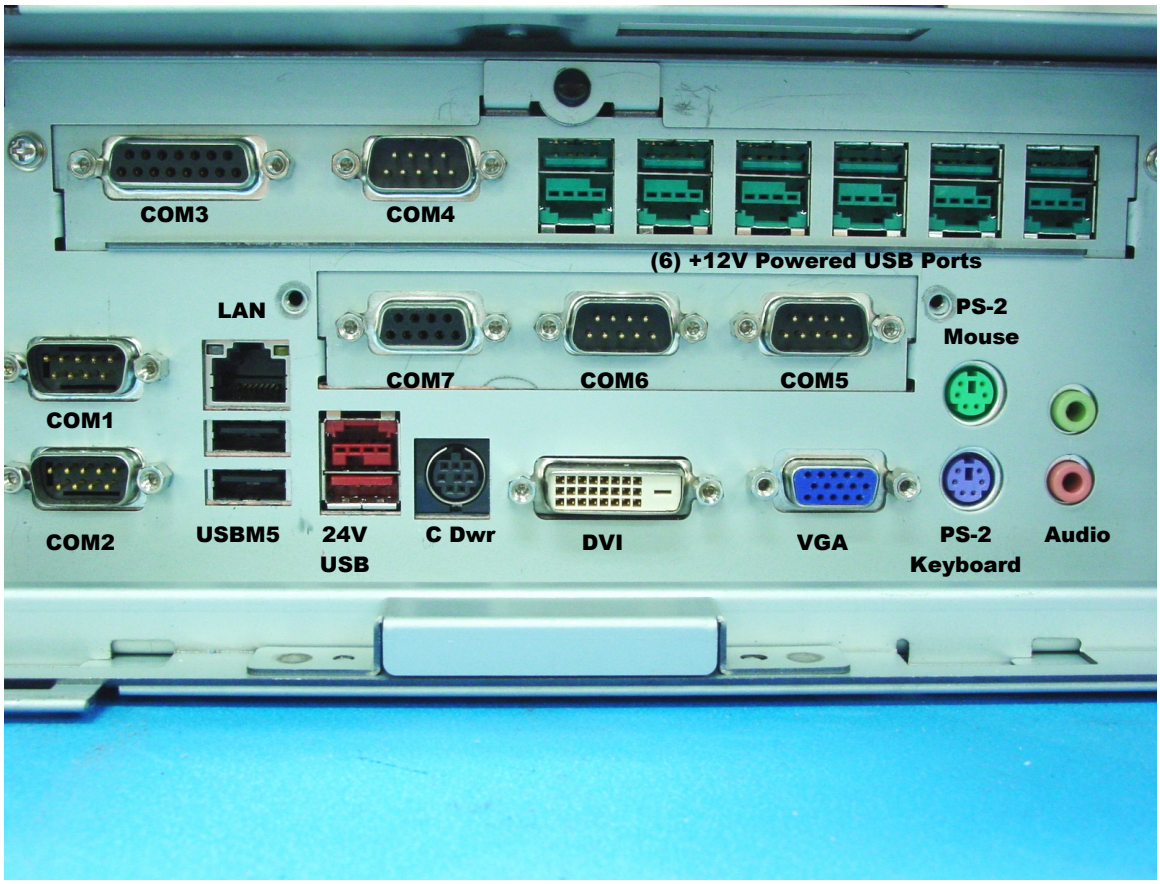
14. Reattach the retainer clip and the black pin.



15. Ensure that all connectors are securely installed.

5.11. Port Labels

Port Identification



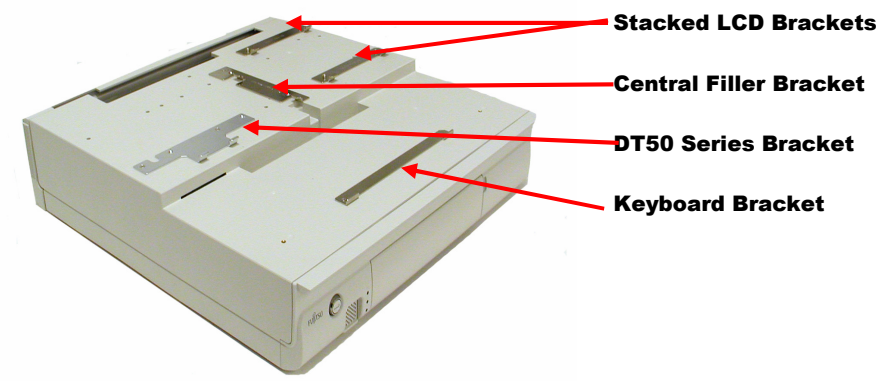
5.12. Standard Bracket Locations

For stacked configurations, keyboard, printer filler and operator display brackets are available. The brackets attach to the top of the control unit and restrain the peripherals from sliding. When installing peripheral brackets, install each bracket using the two screws that have been provided with the bracket. For most stacked installations keyboard, printer, filler and display brackets will be required.

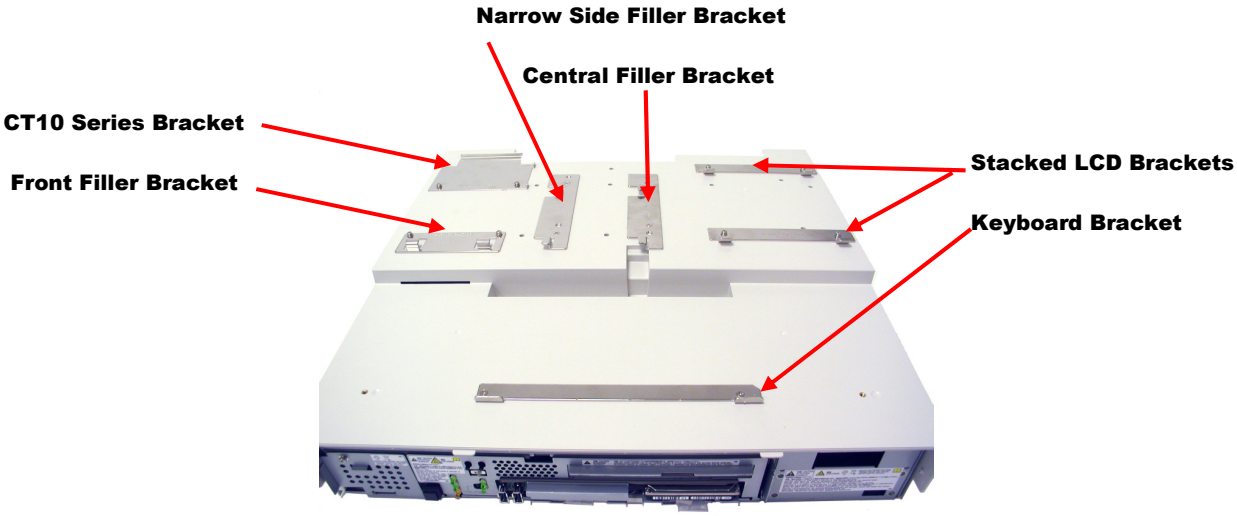
> **Note:** See bracket options in Chapter 10 for part numbers. When installing do not overtighten screws.

Installing the brackets requires placing the bracket on the appropriate screw holes on the top of the chassis and securing with the two screws provided for each bracket. To prevent dust and moisture penetration, apply a screw-hole cover label from the provided label sheet over each screw hole on the top cover where a bracket will not be used.

The following shows peripheral bracket locations for the standard control unit. If an LCD is installed on a standard unit with a DT50 Series printer, a central filler occupies the space between them. When a CT10 printer is used, an additional two-part filler occupies the space to the right and front of the printer..



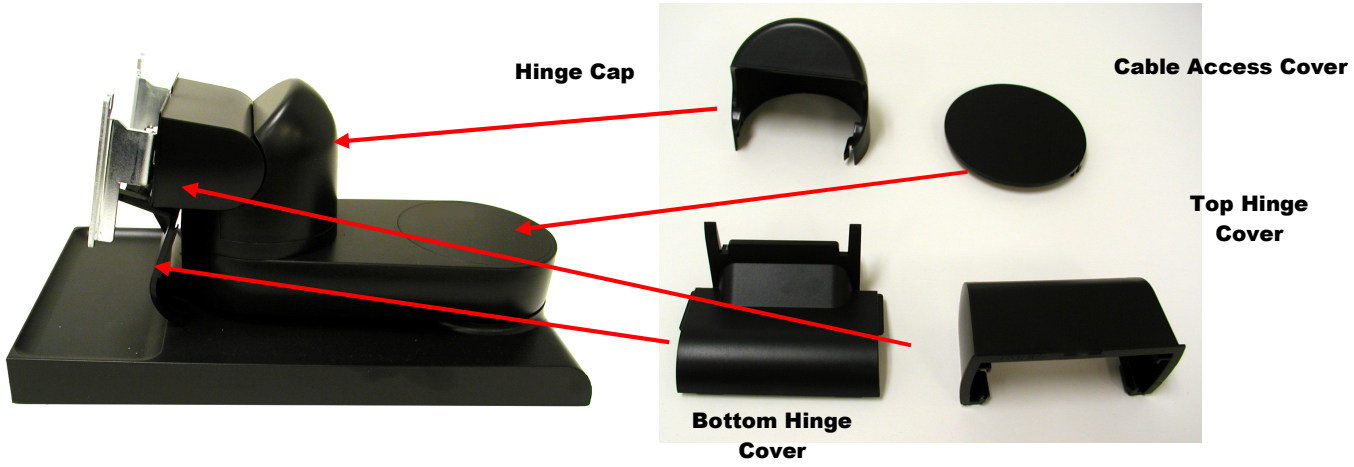
Standard Unit showing
Bracket Configuration for DT50 Series



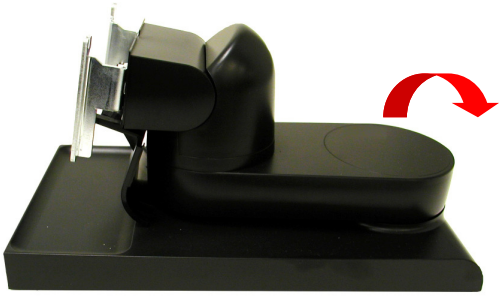
Standard Unit showing
Bracket Configuration for CT10

5.13. Assembling the LCD & Stacked Stand

1. Remove cosmetic covers from the stacked stand. The cable access cover just pops out when pressed from the underside.

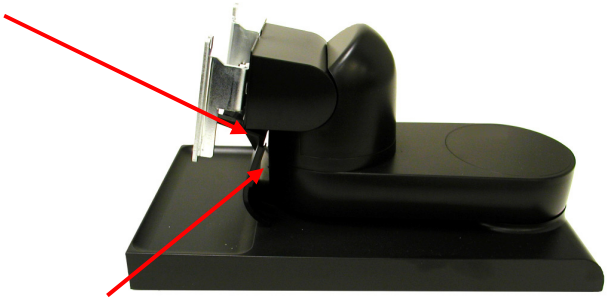


Cable Access Cover



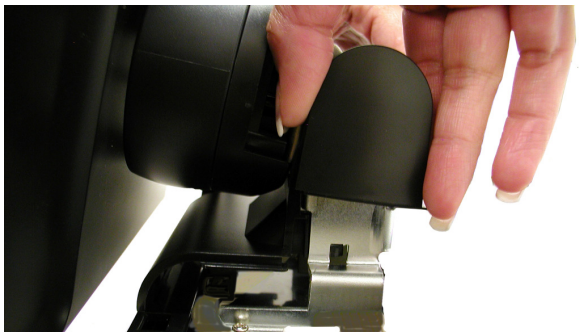
Push up from below.

Hinge Cap



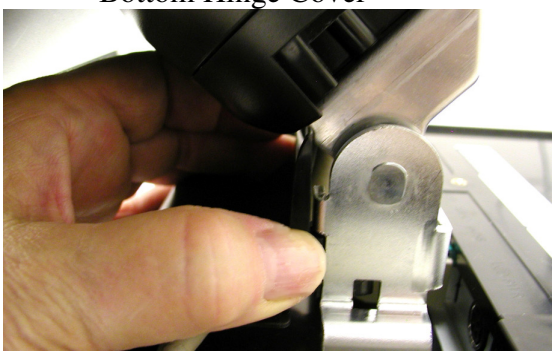
With the stand facing away from you, grip the cap with one hand. Squeeze in gently with thumb and middle finger. Remove one side then the other.

Top Hinge Cover



Pull firmly out on ends of cover while easing the cover towards back of stand

Bottom Hinge Cover



Squeeze in on sides of cover and ease outwards.

2. Thread the cables through the stacked stand beginning with the larger cables first. Video cable (either DVI or VGA) and Powered USB are required. Audio cable is optional. Rotate the monitor stand as needed so that you can reach the cables as they are threaded through the stand.

DVI Cable Configuration with optional Audio Cable



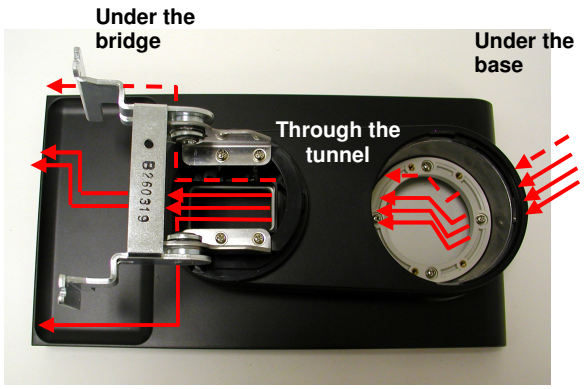
Audio DVI USB

VGA Cable Configuration with optional Audio Cable

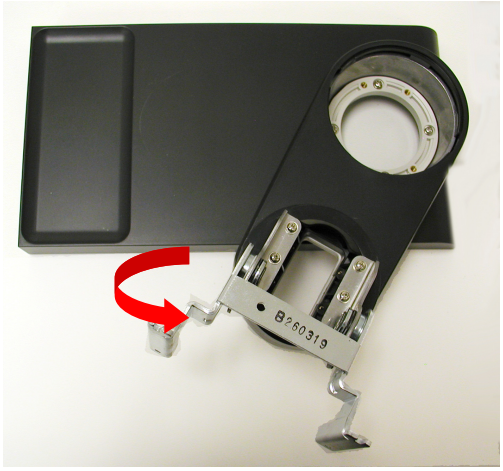


Audio VGA USB

Stacked Stand in Forward Position



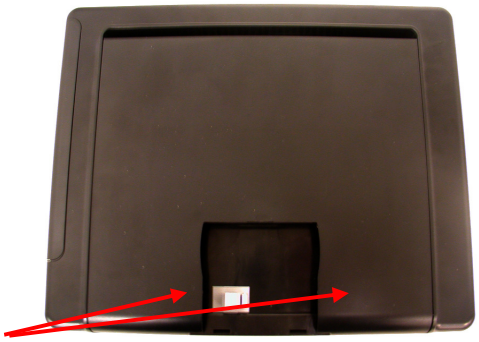
Stacked Stand w/Arm Rotated to Side



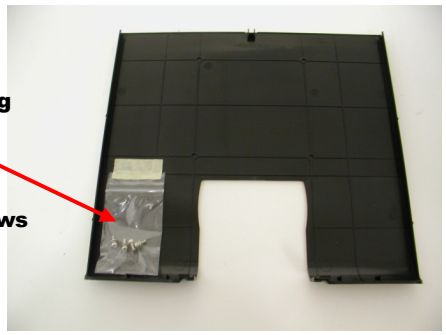
Use DVI or VGA, not both. Bend DVI (or VGA) 90° at the bridge towards the outside of the bracket and then 90° again towards the LCD.

3. Place the LCD face down on a clean dry surface. Remove the back cover by pressing in where indicated by symbol. Note the screws required to attach the LCD are taped to the inside of this cover.

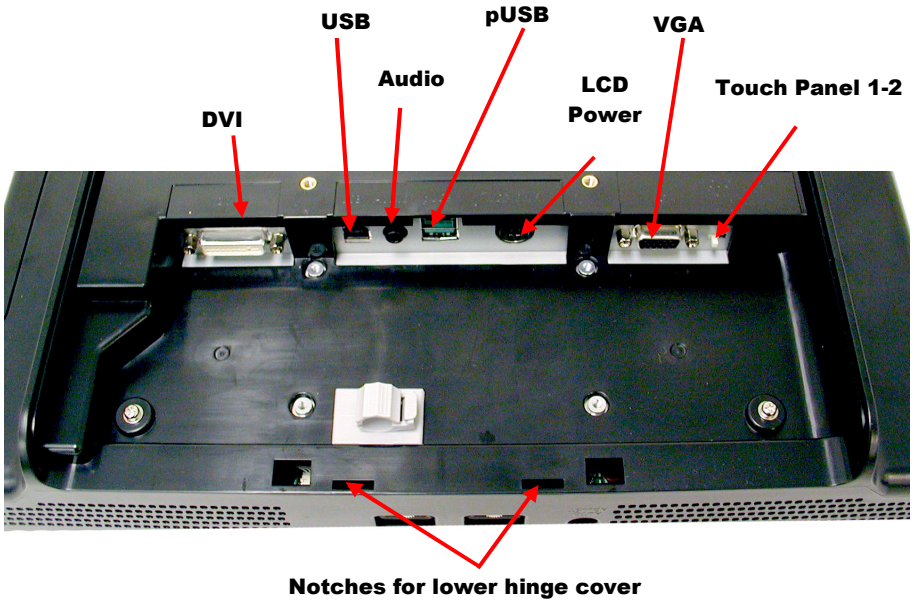
Back of LCD



Back Cover

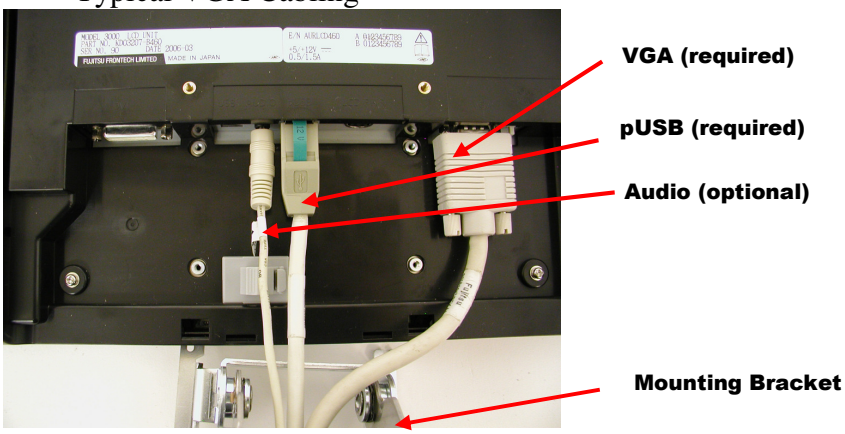


4. Attach the cables to the connectors on the LCD. Connectors labels are etched into the plastic casing of the LCD monitor.



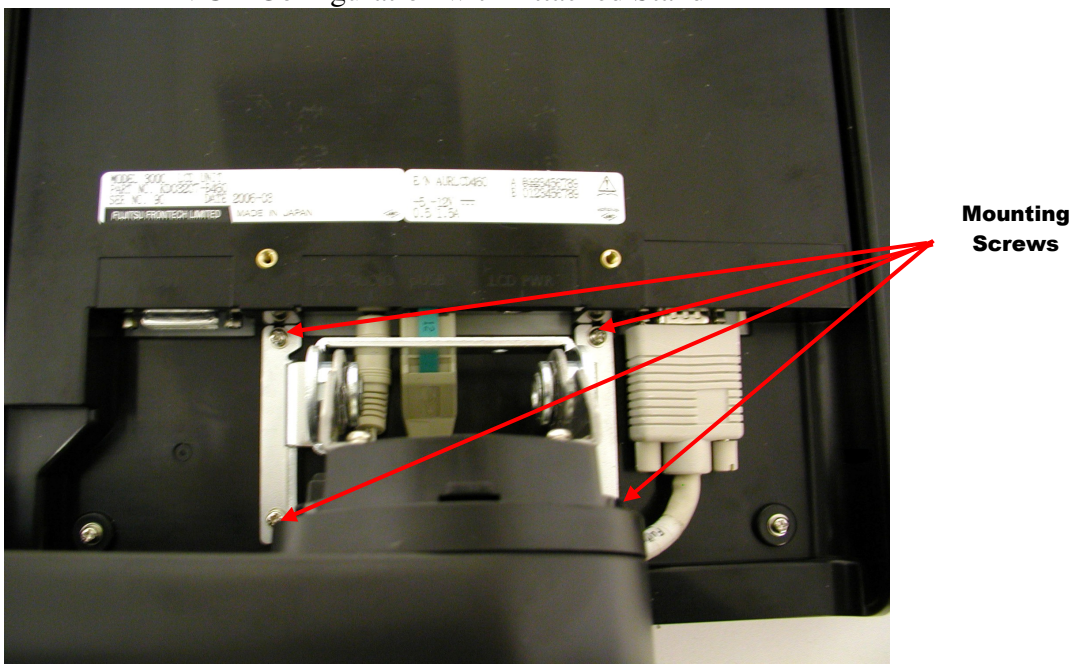
5. USB, LCD Power are not currently used. Touch Panel 1-2 is a switch used to determine the primary LCD in a 2–LCD confugration. Where two 12" LCDs are used, choose setting 1 for the primary LCD and setting 2 for the other. Where a 12" and a 15" LCD are used in a configuration, set the 12" LCD as #1.

Typical VGA Cabling



6. Attach the stand to the back of the LCD with the screws provided.

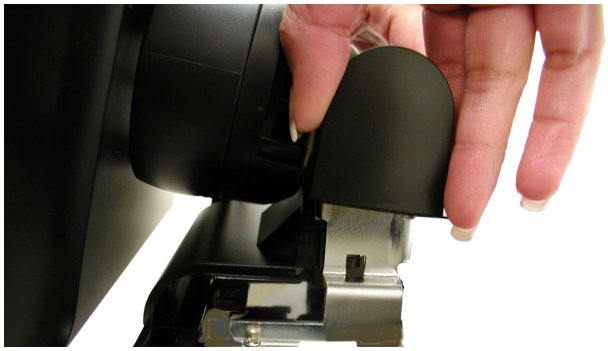
VGA Configuration with Attached Stand



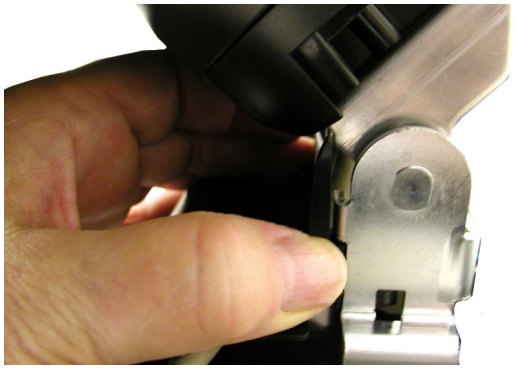
Note that the Video (VGA) cable is routed so that it comes out the ***right*** side of the bracket rather than at the top. Where the DVI cable is used, it is routed so that it comes out the ***left*** side of the bracket.

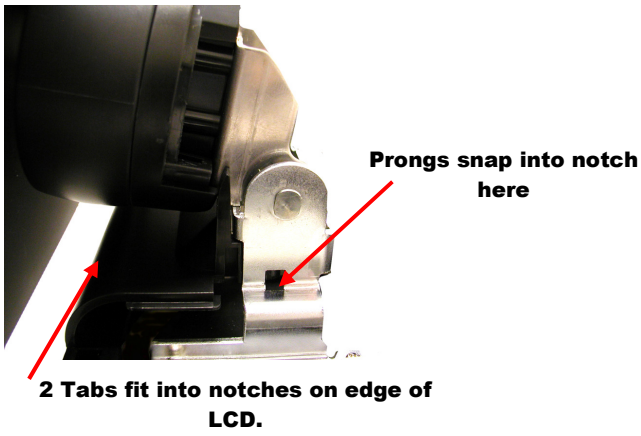
7. Replace the back of the monitor. The stand needs to be perpendicular to the monitor to do this. The back of the monitor must be replaced before replacing any of the other cosmsetic covers. Replace circular filler, rotating it until it is flush with the stand.

8. Replace the top hinge cover by spreading the ends and easing it forward onto the hinge.

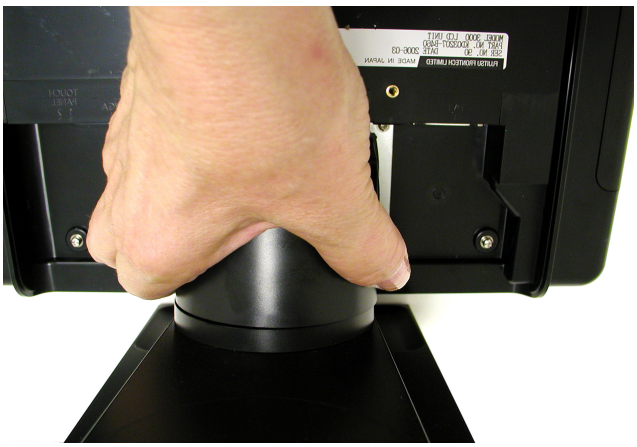


9. Replace the bottom hinge cover by squeezing the prongs slightly and easing them into the underside of the bracket until they snap in place. There are two small notches on the bottom edge of the bracket. These notches need to snap in place for a smooth fit.





10. With stand facing away from you ease hinge cap onto the last remaining part of the hinge until it snaps in place. Make sure that the tabs on each side ease into the notch..





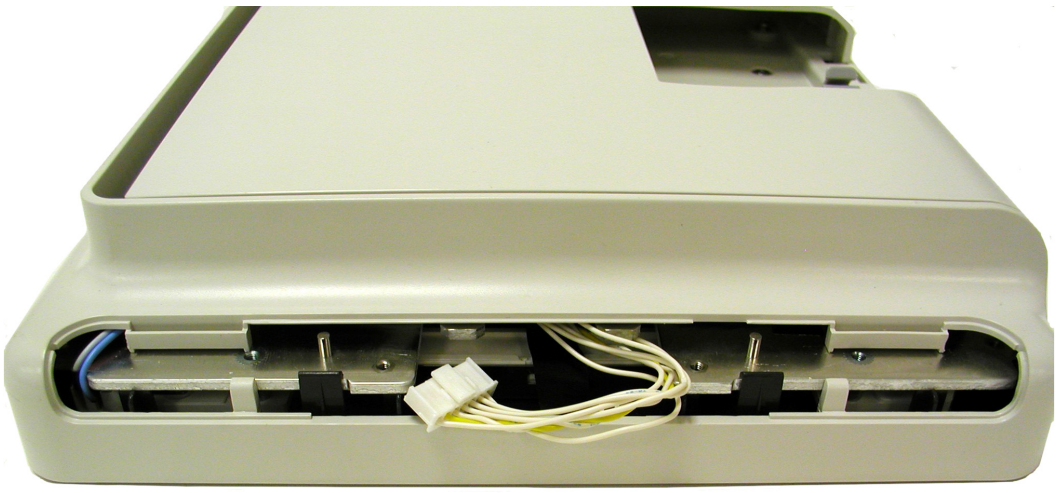
5.14. Installing the MSR or Keypad/MSR

The following instructions show the Keypad/MSR being installed on a D22 LCD, but the process is the same for both the D22 and the D25 LCD. Installation procedures for the Keypad/MSR and MSR are identical. They both use the same connector located in the back of the LCD. Screws to attach the Keypad/MSR or MSR to the LCD are inside the LCD.

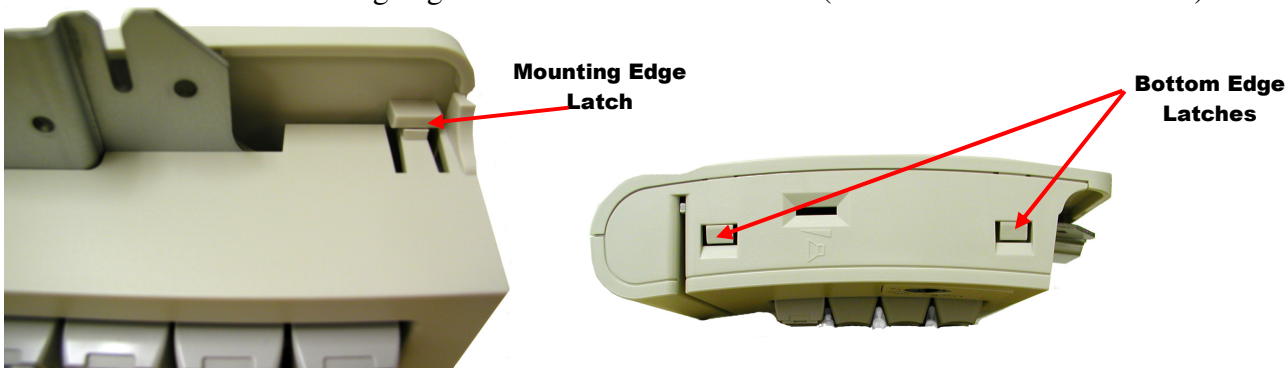
1. Place the LCD face down on a clean dry surface with the left side of the LCD facing you.



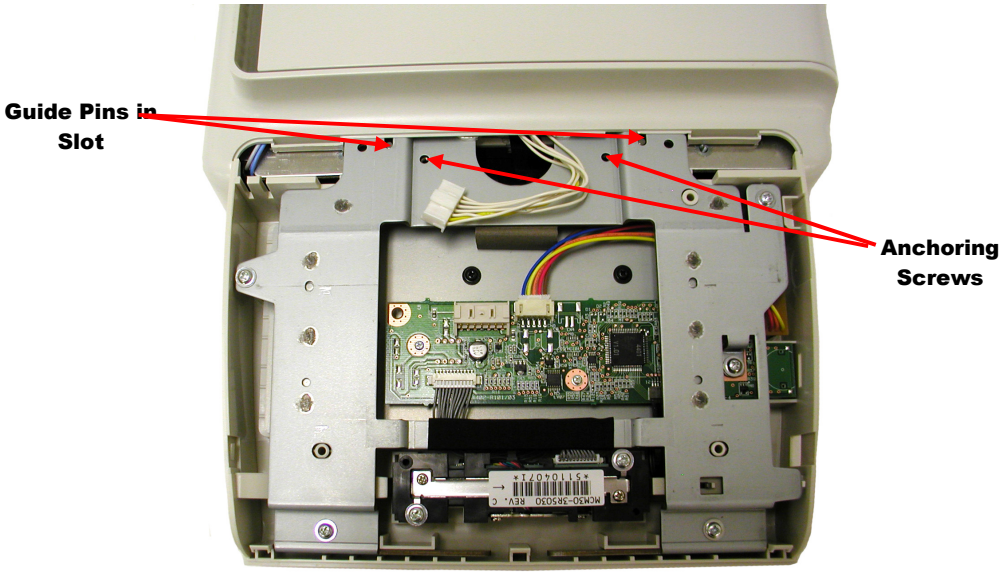
2. Gently press in and up on the arrow icon on the side panel and remove. Discard side panel.
3. Remove the tape holding the cable connector. Ease the end of the connector cable out of the side of the LCD.



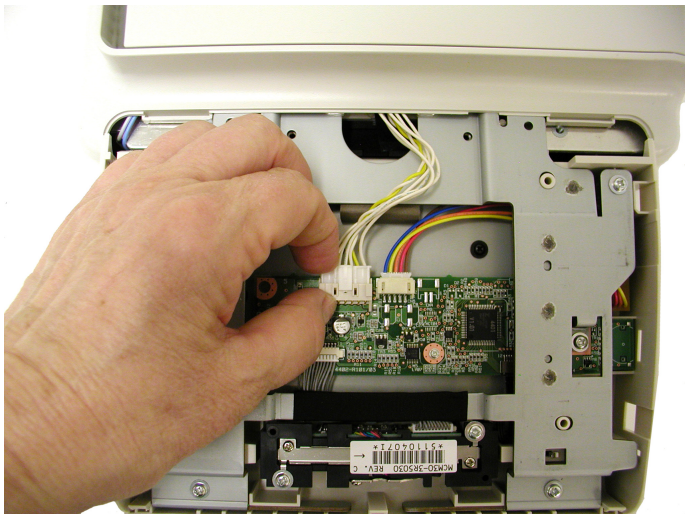
4. With the Keypad/MSR facing down, remove the back cover by pushing in on the latches at the bottom and long edge then lift off the back cover. (The MSR has one one latch.)



5. With Keypad/MSR face down, slide it into the side of the LCD so that the guide pins slide into the slots. Make sure that the connector cable is not pinched between the Keypad/MSR and the LCD. Fasten with screws.



6. Insert connector cable into the connector in the Keypad/MSR. The cable only fits one way and will snap into place.



7. Reattach rear cover of keypad/MSR. Align the top and outer edges first, then ease the tabs at the lower edge inside the shell until they snap into the notches.

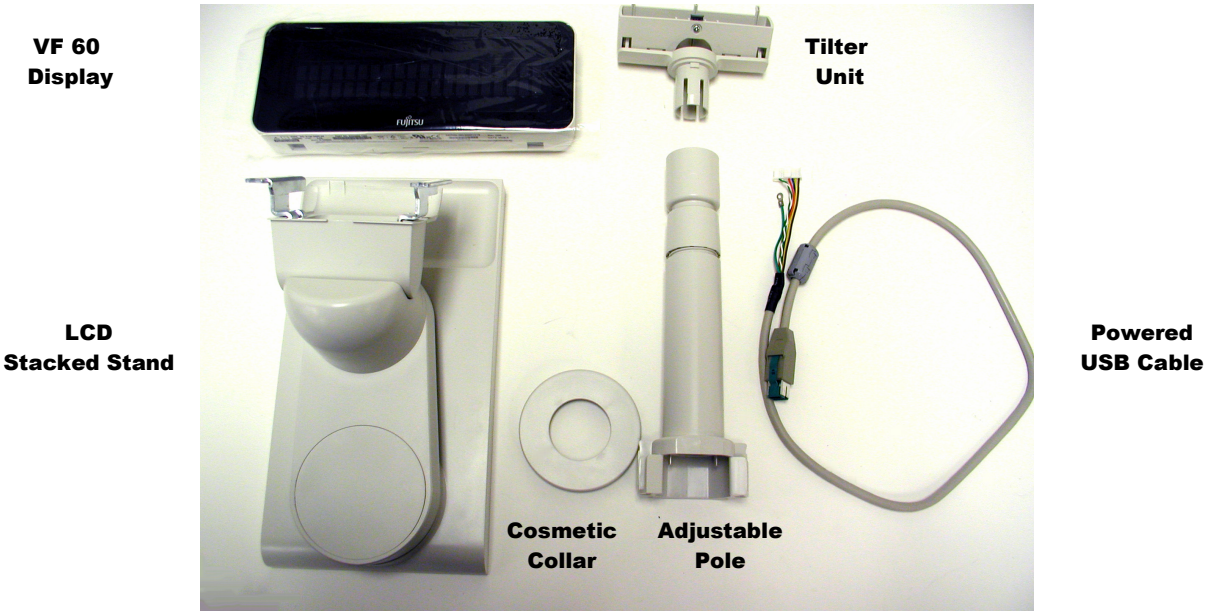
8. For keypad/MSR installation only, snap the keycaps onto the keys.



5.15. Installing the VF60 in Stacked Stand

Parts required for assembly of the VF60 customer display in the stacked stand:

- VF60 display (2x20)
- LCD stacked stand
- Adjustable pole
- Cosmetic collar
- Tilter unit
- Powered USB cable (pUSB)

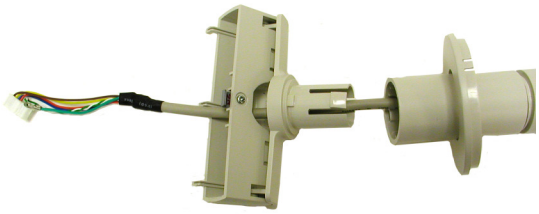


1. Place the above parts on a clean dry surface. The lens on the VF60 is fragile and can be easily scratched so leave the protective film on the VF60 display until the entire installation is complete.

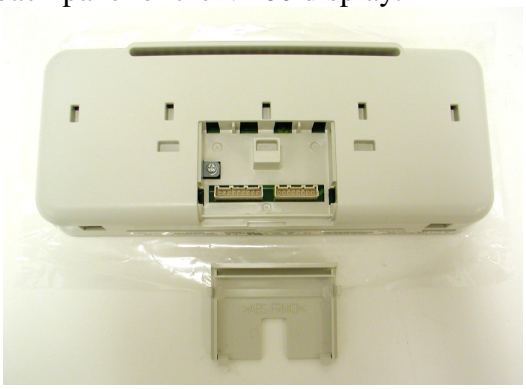
2. Slip the cosmetic collar over the top end of the adjustable pole. Gently twist the powered USB cable connector and ground so that they are compact and will not catch on edges in the pole or tilter display.

3. Thread the powered USB cable through the adjustable pole and the tilter unit.

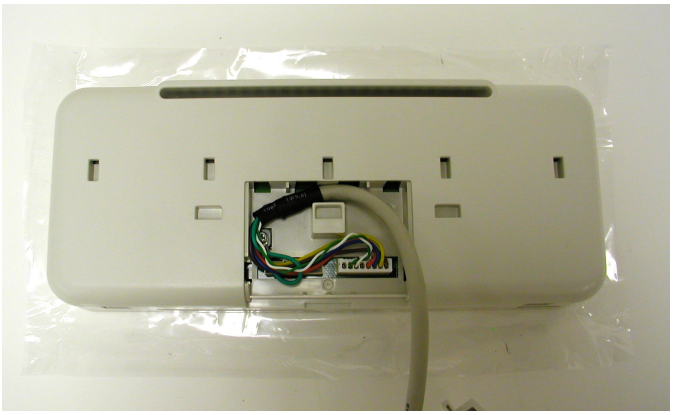




4. Remove the cosmetic back panel of the VF60 display.



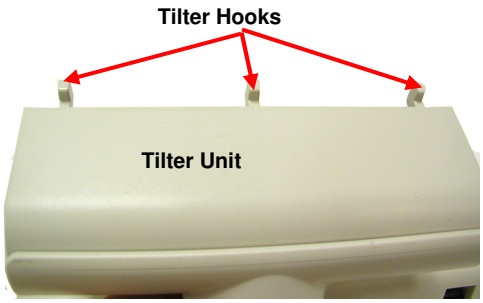
5. Connect the white USB connector (fits only one way) and ground to the back of the display with the screw provided.

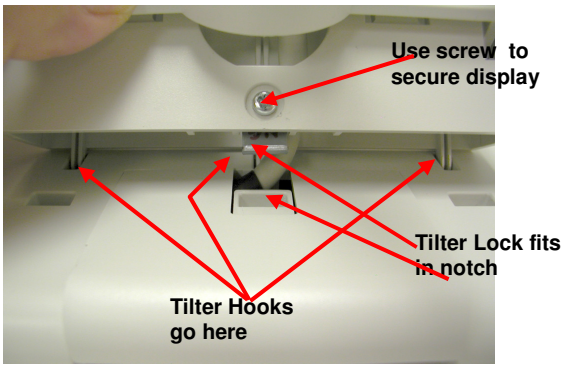


6. Reattach the cosmetic back panel of the VF60 display. Flatten the cable so that the black tape on the cable is inside the VF60.



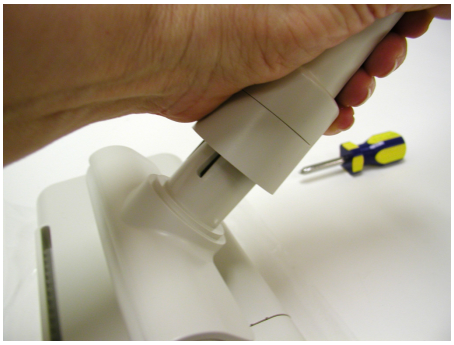
7. Fit the hooks of the tileter mechanism into the openings in the back of the display. Align so the tilter lock fits into the notch in the back of the display and tighten the screw until it feels snug.



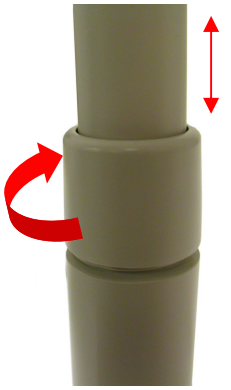




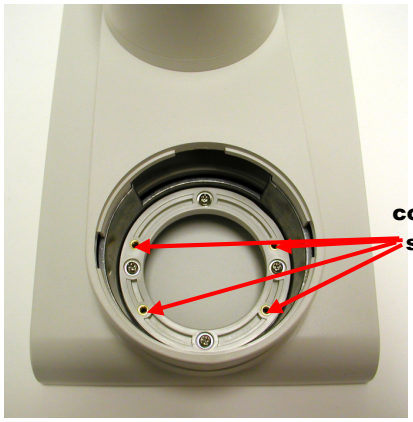
8. Slip the tilter mechanism into the adjustable pole until it snaps.



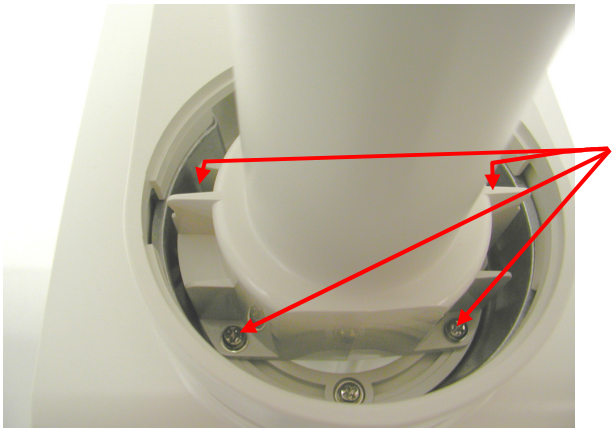
9. Adjust the pole to the desired height and tighten locking collar in a clockwise direction. To adjust the height of the pole, turn the locking collar in a counter clockwise direction to loosen, adjust the length of the pole and tighten the locking collar again.



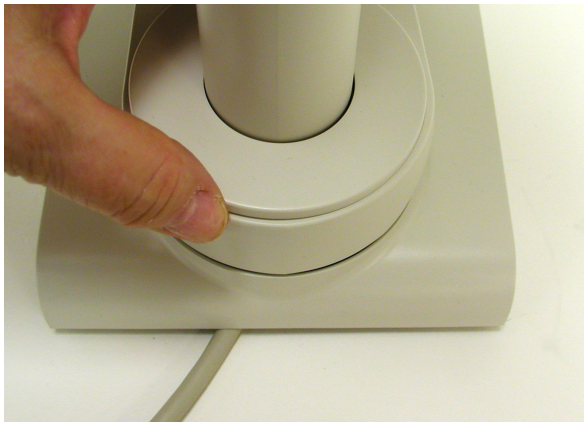
10. Pop the circular filler out of the LCD stand and discard.



11. Thread the cable through the opening in the stand and attach with the four screws provided. This will be easier to do if the cosmetic collar is taped to the pole to keep it out of the way while attaching the screws.



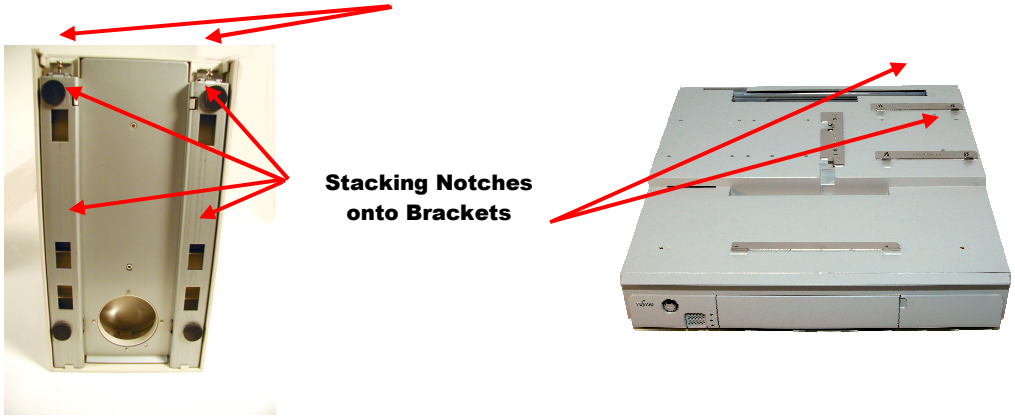
12. Fit the collar into place.



13. Install on TeamPoS 3000 controller (See section 5.13).

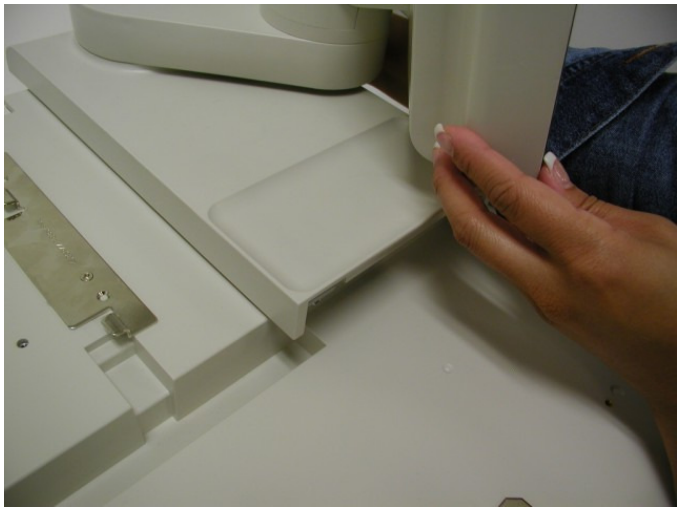
5.16. Stacking the LCD Monitor

The LCD monitor has notches in the bottom of the stand that fit over the LCD brackets attached to the top of the controller. There are also latches in the bottom of the stand that provide additional security for the stacked stand. These are held in place with locking screws.

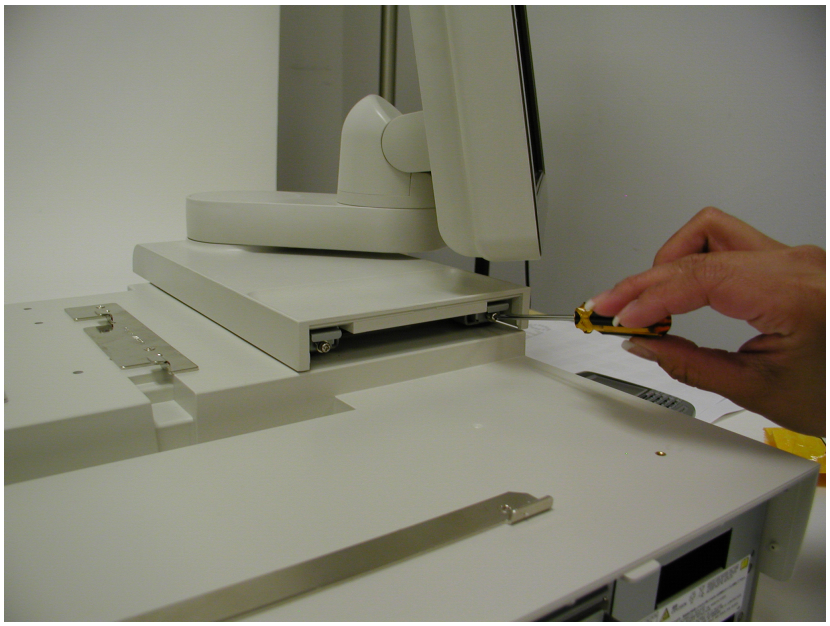


1. Remove the cosmetic cover on the front of the stand with a small flathead screwdriver.

2. Slide display into place by setting it so that the front edge of the LCD stand extends approximatly ½" over the lip in the center of the chassis with the right side aligned with the right edge of the chassis. The brackets should align with the openings in the bottom of the LCD stand. Push the stand back until the front edge of the LCD stand aligns with the edge of the lip.



3. Press back on the latches in the front of the stand to lock the LCD into place and secure with the screws



4. Put cosmetic face plate over the opening in the stand.

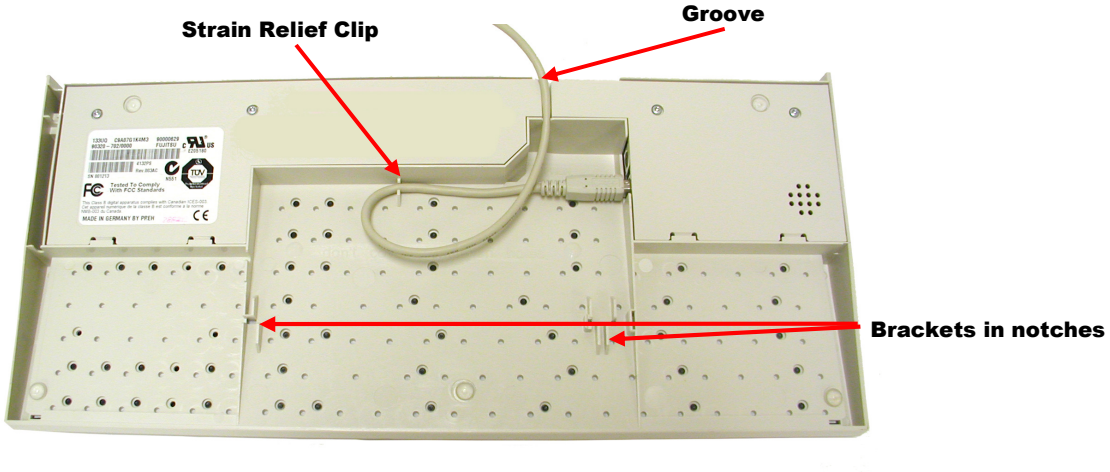


5. When removing the stand for maintenance, the screws holding the latches need to be loosened and the latches pulled forward. Finally, the entire monitor and stand need to be firmly lifted up and then pulled forward for the stand to clear the brackets

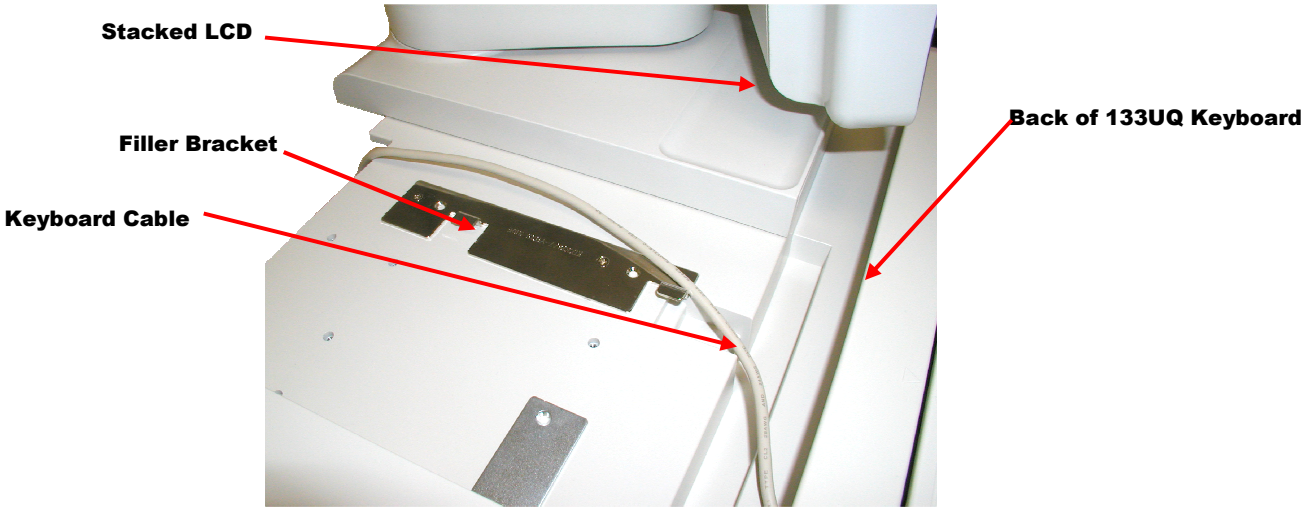
5.17. Installing the Central Filler and Keyboard

5.17.1. Installing the Keyboard

1. Insert the keyboard cable into the USB connector on the bottom of the keyboard. Run the cable through the strain relief clip and then out the back of the keyboard through the groove.



2. Place the 133UQ keyboard on the ledge for the keyboard,

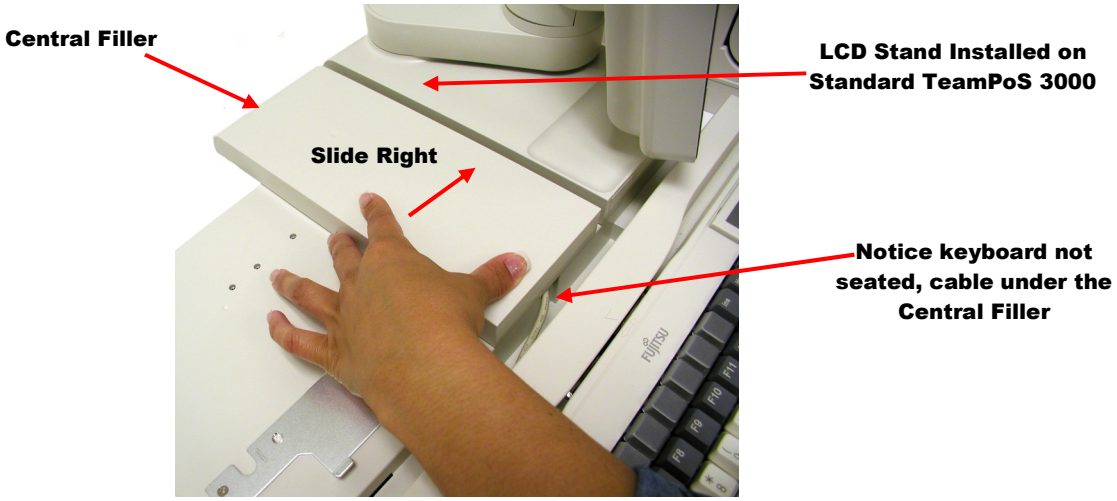


3. Run keyboard cable under the Central Filler. The keyboard cable should be positioned behind the Central Filler bracket as shown. *Do not seat the keyboard on the bracket until the printer, filler(s) and LCD are installed.*

5.17.2. Installing the Central Filler

The Central Filler is used to occupy the free space on a standard control unit with a stacked LCD (either D22 or D25) and a model DT50III printer. The cable for the keyboard is threaded through the underside of the central filler and therefore the keyboard is installed at the same time as the Central Filler.

1. Install Central Filler by placing it on the chassis with the front edge aligned with the central lip and ½" to the left of the LCD (facing the front of the unit).



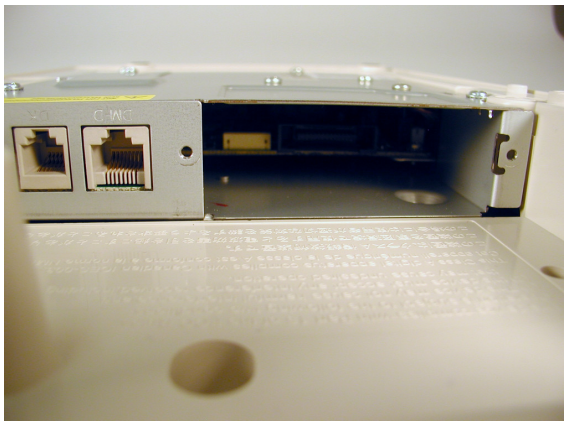
2. Slide Central Filler to the right so that the front and back of the Central Filler align with the front and back of the LCD.

5.18. Installing the Printer I/O Board (DT50 Series only).

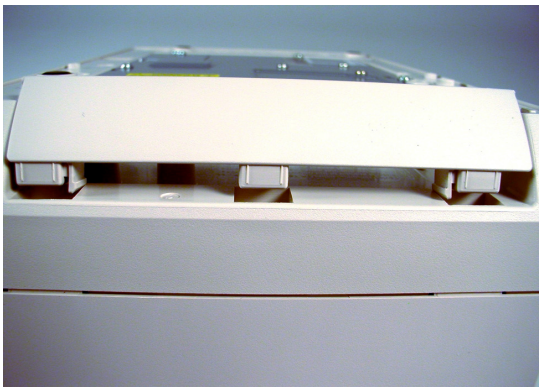
The DT 50 Series printer comes without the I/O board installed. The I/O Board is ordered separately and either installed at the Foothill Ranch facility or in the field.

1. Turn printer upside down on a clean dry surface.

2. Remove blanking plate for I/O port if necessary.



3. Remove cosmetic back panel if it interferes with installation.



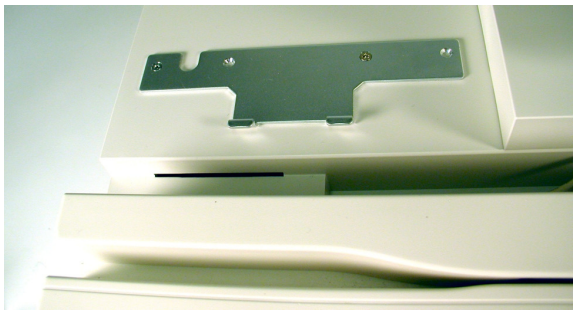
4. Insert the I/O board (it only fits one way) and attach with screws.

5. Attach powered USB cable

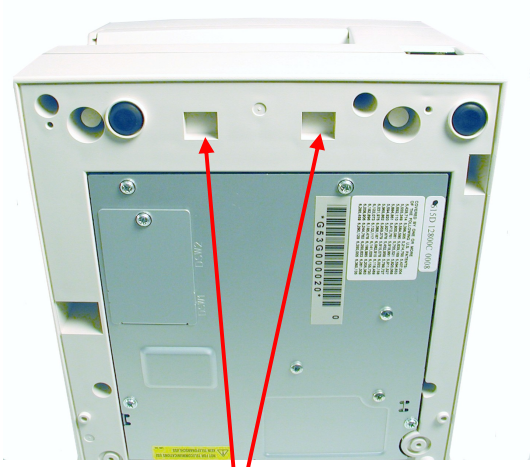
5.18.1. Stacking the Printers

Both the DT50 Series and the CT-10 printers stack on the TeamPoS 3000 controller and are restrained from shifting by brackets attached to the controller. A filler is ued to occupy the free space on a standard control unit with a stacked LCD (either D22 or D25) and a DT50 Series printer. The cable for the keyboard is threaded through the underside of the central filler and therefore the keyboard is installed at the same time as the central filler.

5.18.1.1. Stacking the DT50 Series Printer



DT50 Series Printer Bracket



Notches on underside of DT50 Series Printer

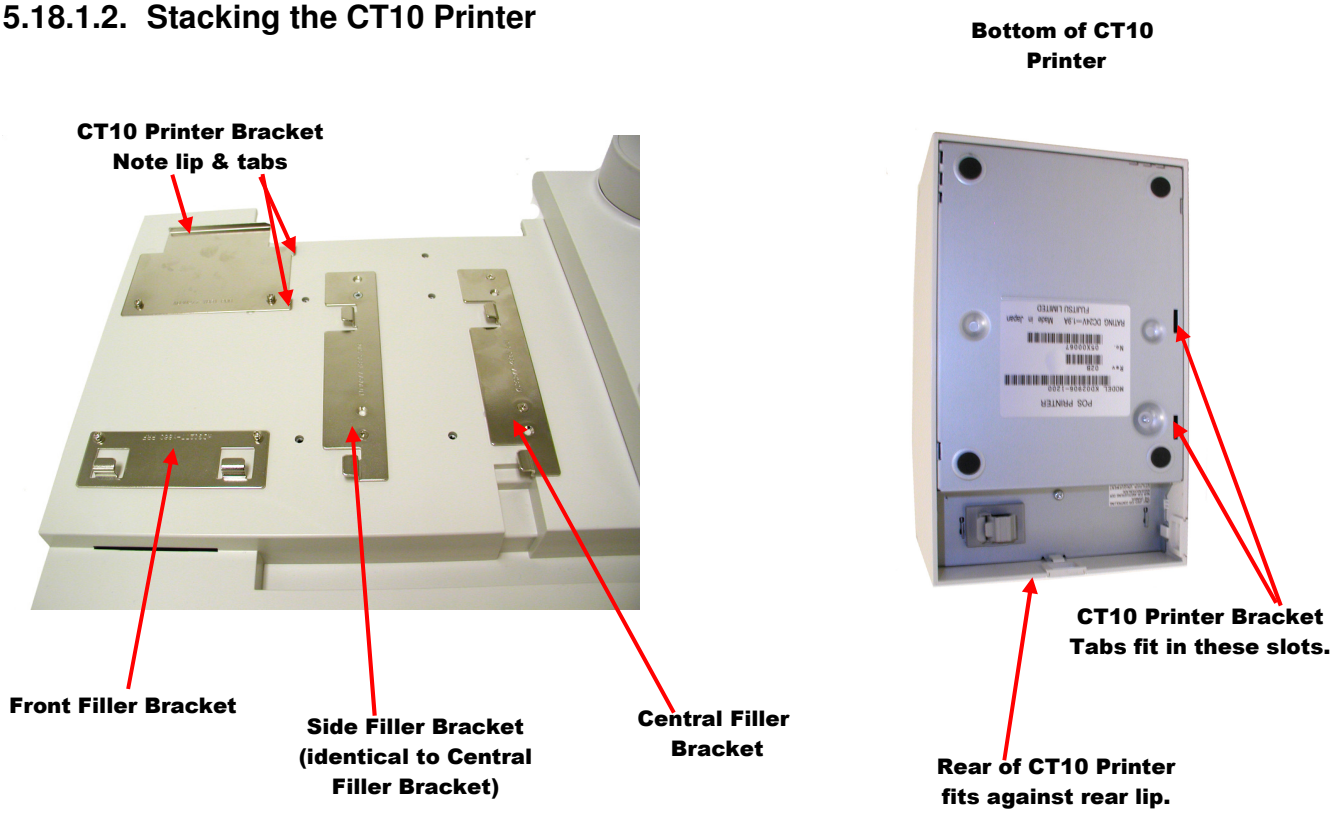
1. After installing the I/O board and the cable, the printer is ready to be stacked on the TeamPoS 3000 controller.

2. Place the printer approximately ½" in front of the keyboard lip with the left side aligned with the left side of the controller chassis. Push toward the rear to lock. The DT50 Series printer should fit snugly against the Central Filler and align with the outside edge of the controller.

3. When LCD, filler and printer have been stacked, seat keyboard so that bracket resists shifting.



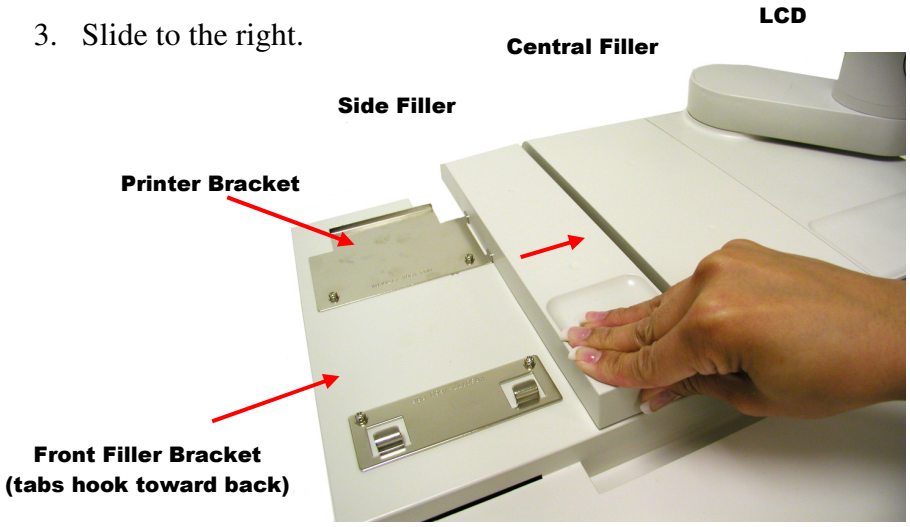
5.18.1.2. Stacking the CT10 Printer



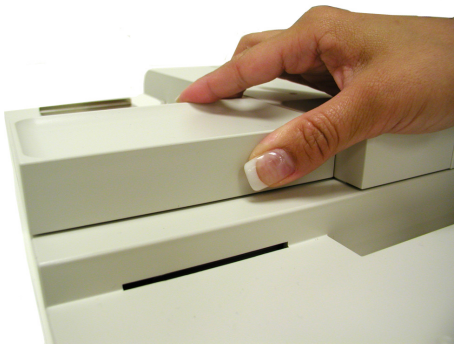
1. Install Central Filler (See Section 5.17.2)

2. Install narrow Side Filler by placing it on the chassis with the front edge aligned with the Central Filler and ½" to the left of the Central Filler (facing the front of the unit).

3. Slide to the right.



4. Slide Front Filler from back to front until it catches the bracket. If the front filler is installed properly, the front edge will align with the lip of the chassis. If there is an overhang, turn the filler around and install from the other side.



5. Set the CT10 Printer in place.



Chapter 6 - General Operations

Note: The procedures in this chapter are intended for **store personnel**. The procedures in succeeding chapters are for **authorized service personnel only**.

6.1 System Operations

This section contains general and periodic care and maintenance, and power ON and OFF procedures for the TeamPoS terminals.

6.1.1 General Care and Maintenance

General cleaning of the terminal, peripherals, and MSR is required on a regular basis. In particular, dust must be removed from external components, air vents, fans, and exhaust screens to allow sufficient airflow to maintain proper internal operating temperatures. Printers must also have paper dust and other foreign matter removed regularly to maintain proper printer operation. The frequency of this cleaning depends on installed environments. Lack of this cleaning will greatly reduce equipment reliability.

To achieve the maximum reliability of the MSR, cleaning with an MSR cleaner card must be performed approximately every 1,000 passes.

To keep the terminal and its peripherals in good working condition, follow the guidelines in this section.

1. Wipe the terminal and peripherals with a clean, soft cloth, dampened with water and mild soap. Never use abrasive pads or cleansers.

2. Handle the touchscreen with reasonable care when not integrated into a monitor. Do not pull or stress the cables. Clean the touchscreen with Isopropyl Alcohol 99% and lint free wipes. Always dampen the wipes and then clean the touchscreen.

3. Vacuum the paper wells of the receipt and journal printers to remove paper particles and dust.

4. Clean the MICR mechanism on the printer once a month or after every 6,000 checks. See cleaning instructions in printer manual.

5. If the keyboard or LCD has the MSR option installed, pass a magnetic stripe reader cleaner through the magnetic stripe reader to remove dust particles from the reader. The cleaner is a card covered with cloth on one side. Pass the card through the reader with the cloth side facing the MSR head. An embossed arrow on the keyboard shows where the MSR head is located.

6. Never remove covers from the control unit and peripherals while power is connected.

7. Keep the rear cover of the TeamPoS 3000 terminal installed at all times unless the terminal is being serviced. The cover protects the cable connections and ensures adequate clearance for proper ventilation.

8. Make sure all cable connectors are securely installed on the terminal and peripherals to prevent the cables from being accidentally pulled off. Disconnecting and connecting cables (except USB cables) to the terminal while the power is on could cause damage to the terminal and its peripherals.

9. Do not expose the terminal to liquids. Although the units are designed to resist liquids from entering the internal components, liquids should be kept away from the terminal.

6.1.2 Power ON and OFF Sequence

This section presents the general procedures for powering the TeamPoS 3000 control unit ON and OFF. The instructions in this section assume that the terminal, operating system, and the application software have been installed. For any additional power on and off procedures dictated by the retail application, refer to the manuals provided with your PoS and application software.



Caution: With the exception of USB peripherals, never remove or connect any peripheral while power is on its port. To avoid damage to the control unit and peripherals, when connecting and disconnecting RS232 peripherals from the I/O Boards, the turn power OFF with the ports OFF switch (see Section 1.2), the TeamPoS 3000 power switch (in the front of the unit) or by disconnecting AC power.

6.1.3 Powering ON

1. Make sure all peripherals are securely connected to the control unit.

2. Make sure the power cord is plugged into the power source.

3. Lift the plastic switch cover at the front of the control unit.

4. Press the ON switch.

5. Confirm the power/battery status LED is ON and not blinking, indicating the successful completion of power-up diagnostics.

Any hardware errors detected on power up will appear on the operator display (CRT or LCD). Note that the Model VF60 two-line alphanumeric display does not display error messages.

6.1.4 Powering OFF

> Note: Some peripherals, such as scanners and scales, may be separately powered. Check the peripheral manuals for instructions for these peripherals.

1. Lift the plastic switch cover.

2. Press the ON/OFF switch.

> **Note:** Depending on BIOS setup, a momentary depression of the switch may signal the application to shut the unit down, which could take a few minutes. If power is not immediately turned off, either wait for the application to shut the unit down, or keep the switch depressed for approximately 4 seconds. For proper shutdown procedures, see the application software documentation.

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Chapter 7 - Maintenance



Caution: Confirm that the external power source is 100-240 VAC before starting the operation. To prevent electric shock, confirm that the AC cable is removed from the AC outlet anytime the covers are removed. Be sure to observe all ESD precautions and power OFF procedures.

7.1 Periodic Maintenance

Only trained personnel must perform the following:

Vacuum all ventilation passageways on the control unit and peripherals. Ensure that these passageways are open and free of dust and other debris that could restrict airflow.
Check the PSU fan for proper operation annually. See BIOS settings for typical fan speeds. If fan speed is approaching the low end, the fan should be replaced. Fan speeds can be found under the hardware monitoring section of the BIOS. Replace lead acid batteries every three years.
If the model DT50III has the MICR option, check the function of, and clean, the MICR after every 6000 checks.

7.1.1 Power ON and OFF Sequence

This section presents the general procedures for powering ON and powering OFF the TeamPoS 3000 control unit. The instructions in this section assume that the terminal, operating system, and the application software have been installed. For any additional power-up procedures dictated by the retail application, refer to the manuals provided with the application software.



Caution: With the exception of USB peripherals, never disconnect or connect a peripheral while power is on its port. To avoid damage to the control unit and peripherals, when connecting and disconnecting RS232 peripherals from the Boards, turn power OFF with the ports OFF switch (see section 1.2), the TeamPoS 3000 power switch in the front of the unit or by disconnecting AC power.

7.1.1.1 Powering On

1. Make sure all peripherals are securely connected to the control unit.
2. Make sure the power cord is plugged into the power source.
3. Lift the plastic switch cover at the front of the control unit.
4. Press the ON switch.
5. Confirm the power/battery status LED is lit solid, indicating the successful completion of power-up diagnostics.

Note: Some peripherals, such as scanners and scales, may be separately powered. Check the peripheral manuals for instructions on powering on these peripherals.

Any hardware errors detected on power up will appear on the operator display (LCD). Note that the model VF 60 two-line alphanumeric display does not display error messages.

Note: Depending on setup, a momentary depression of the switch may signal the application to shut the unit down, which could take a few minutes. If power is not immediately turned off, either wait for the application to shut the unit down, or keep the switch depressed for approximately 4 seconds. For proper shutdown procedures, see the application software documentation.

7.1.1.2 Powering OFF

1. Lift the plastic switch cover.
2. Press the ON/OFF switch.

Note: For proper shutdown procedures, see the application software documentation.

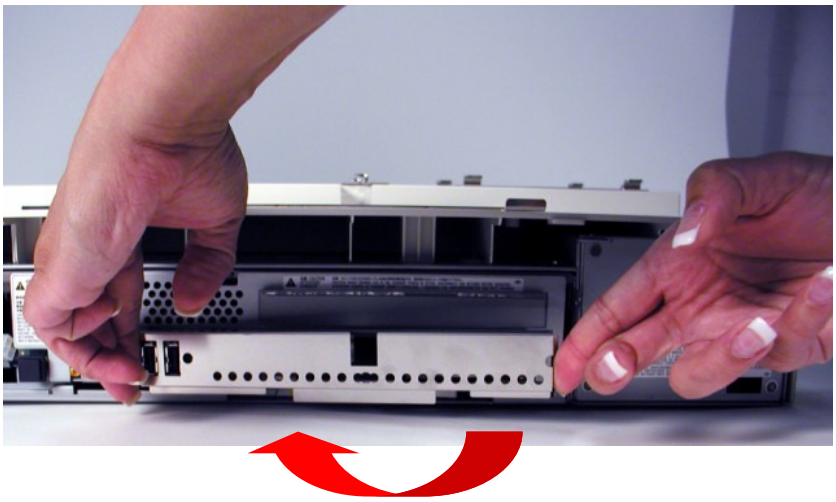
7.2 Replacing the Motherboard



Caution: Be sure to observe all ESD precautions and power off procedures.

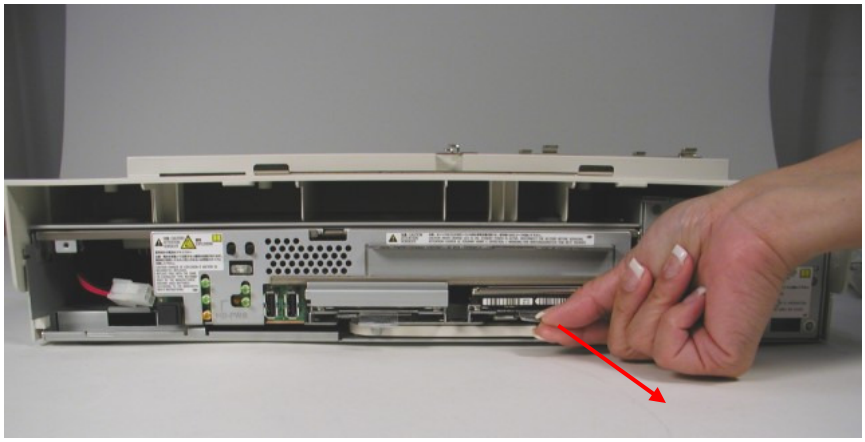
Before installing a new motherboard, ensure that the replacement motherboard jumpers have been set correctly. See Section 7.3.1, Motherboard Settings and Section 7.3.2, Picture of Motherboard.

1. Remove the back panel (See Section 5.1.2).
2. Disconnect the power cable from the controller
3. Remove the front panel (See Section 5.1.1). . Yellow LED should be off. (See Section 1.2).
4. Remove hard disk drive shield by pushing in on the right side and pulling off.

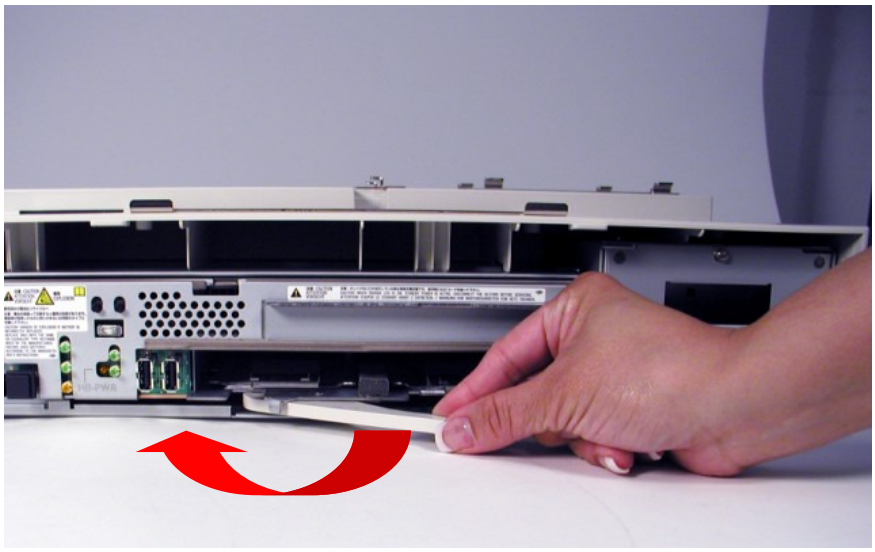


Note: Where more than one drive is used, notice which bay each disk drive is in. It is important for correct reinstallation of the drives.

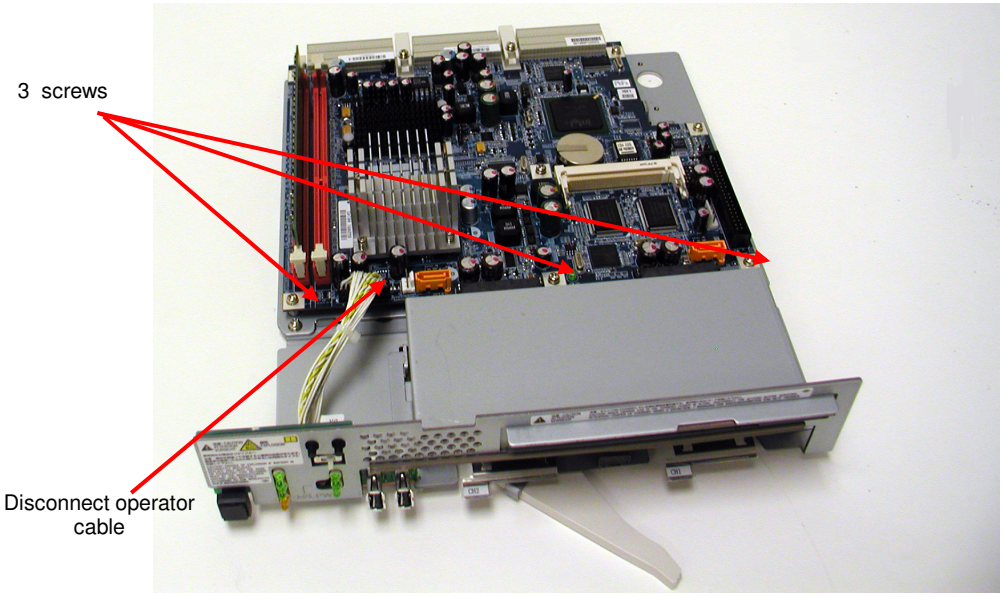
5. Remove hard disk from unit by pulling on the clear plastic tab.



6. Pull on the white release lever below the motherboard assembly.



7. Pull the entire assembly out of the controller. Unscrew motherboard from chassis (3 screws) and disconnect the operating panel cable from the motherboard.

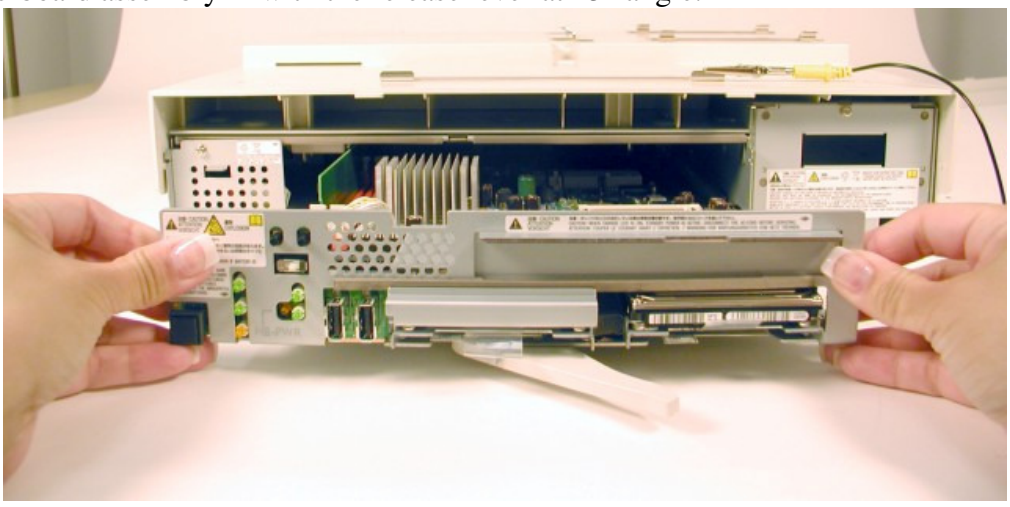


Note: Depending on your maintenance procedures, it may be necessary to remove the CPU, heat sink, memory, CD drive and/or mini-PCI card from the old motherboard and re-install on the new motherboard. See appropriate sections of this chapter for removal and replacement instructions.

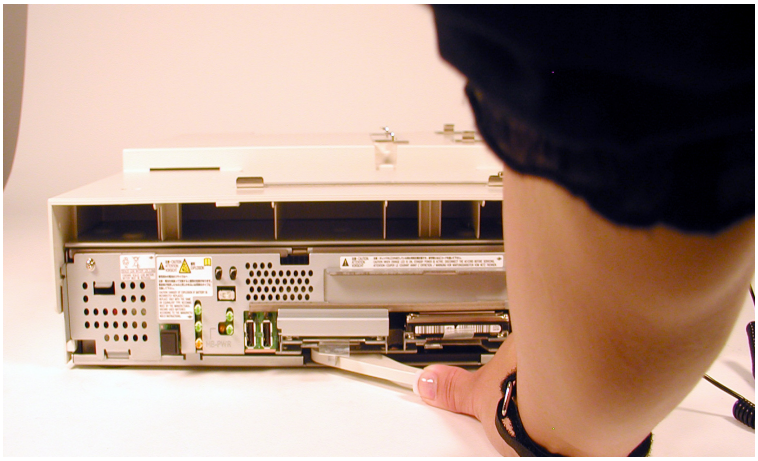
8. Insert the replacement board onto the chassis and secure with 3 screws.

9. Reconnect the operating panel cable. Reinstall hard drives. Be susre to keep them in the same bay. Reinstall any other optional hardware. See note above.

10. Make sure that the assembly rails line up with the rails in the chassis. Slide the motherboard assembly in with the release lever at 45° angle.



11. Push in slowly until motherboard assembly engages the lever.



12. Use the lever to fully seat the motherboard assembly.

13. Reinstall hard disk drives.

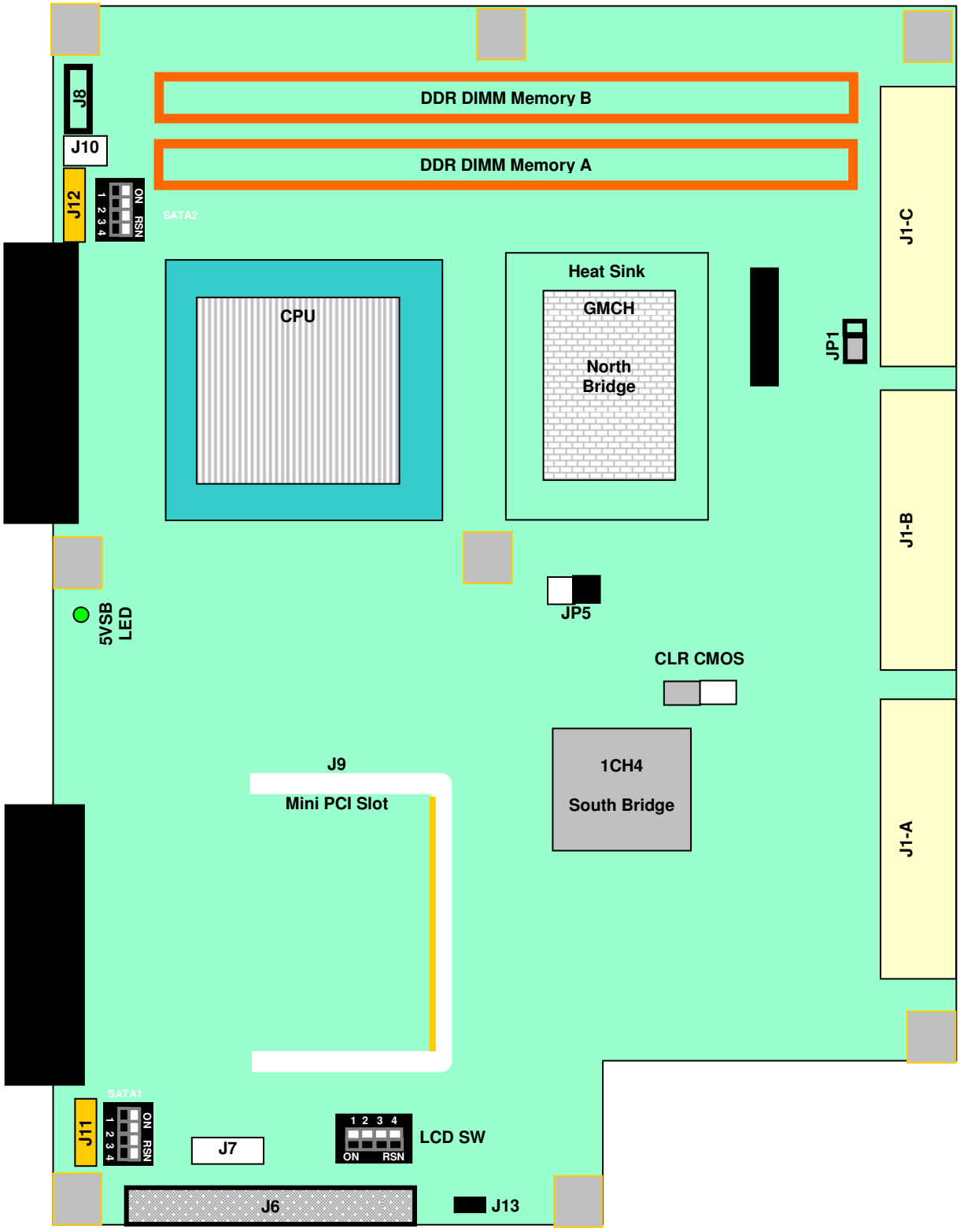
14. Reattach front panel..

15. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number.



Note: The system CMOS must be set after replacing the motherboard. Be sure to execute the BIOS Setup Operation on the BIOS setup screen. (For BIOS Setup Procedures please see Chapter 9 BIOS.)

7.3 Motherboard Layout

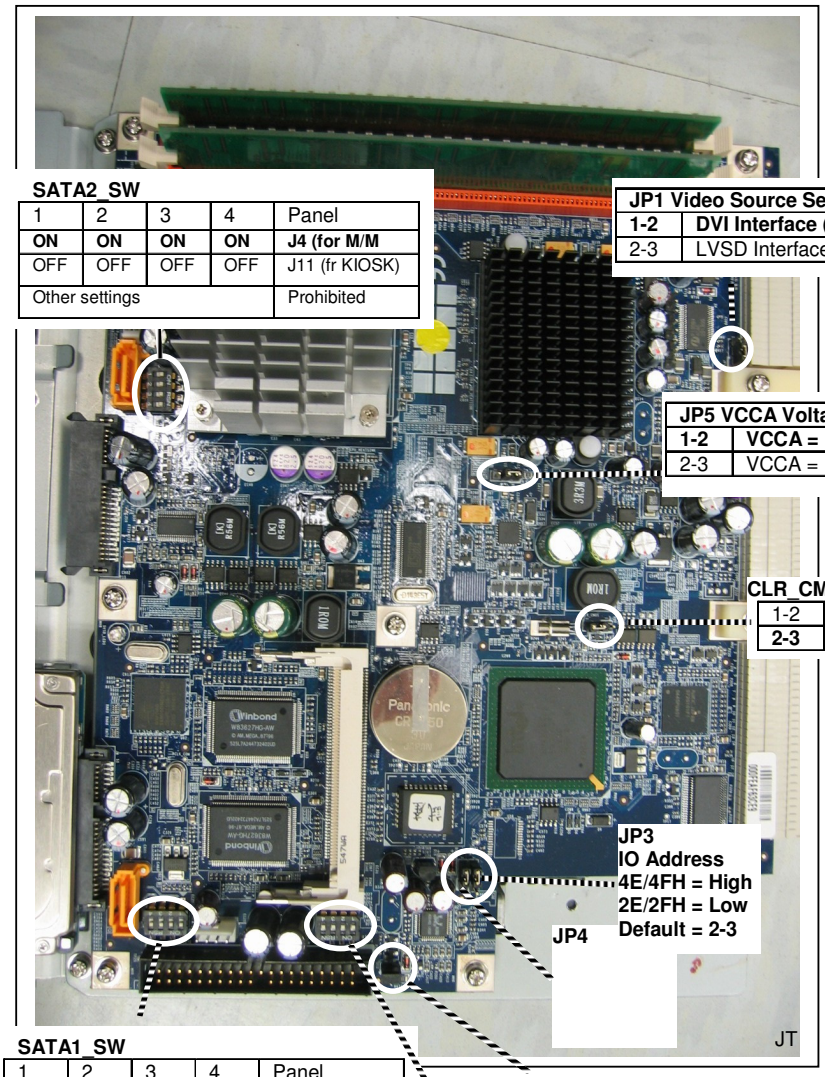


7.3.1 Motherboard Settings

Switch and Jumper settings on the TP3000 motherboard

<table>
<tr><th>Setting Pin#</th><th>Function</th><th>Default Setting</th></tr>
<tr><td>JP1</td><td>Video source selection of 1st display
1-2 – XL – DVI Interface
2-3 – XT – Kiosk LVDS Interface</td><td>1-2</td></tr>
<tr><td>JP5</td><td>VCCA voltage selection
1-2 – only - VCCA is 1.8V for PentiumM and CeleronM
2-3 – Do not use. VCCA is 1.5V for PentiumM</td><td>1-2</td></tr>
<tr><td>J13</td><td>Beep sound enable</td><td>Short</td></tr>
<tr><td>CLR_CMOS</td><td>CMOS Clear
1-2 -
2-3 -</td><td>2-3</td></tr>
<tr><td>LCD_SW</td><td>Panel selection for LVDS panel
<table>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>Panel</th></tr>
<tr><td>OFF</td><td>OFF</td><td>OFF</td><td>—</td><td>12.1 inch SVGA</td></tr>
<tr><td>ON</td><td>OFF</td><td>OFF</td><td>—</td><td>15 inch XGA</td></tr>
<tr><td>OFF</td><td>ON</td><td>OFF</td><td>—</td><td></td></tr>
<tr><td>ON</td><td>ON</td><td>OFF</td><td>—</td><td></td></tr>
<tr><td colspan="3">Other setting</td><td>—</td><td>Reserved</td></tr>
</table></td><td>1 OFF
2 OFF
3 OFF
4 OFF</td></tr>
<tr><td>SATA1</td><td>Connector selection of 1st SATA HDD
<table>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>Panel</th></tr>
<tr><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>J4 XL</td></tr>
<tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>J11 XT (Kiosk)</td></tr>
<tr><td colspan="4">Other setting</td><td>Prohibited</td></tr>
</table></td><td>1…ON
2…ON
3…ON
4…ON</td></tr>
<tr><td>SATA2</td><td>Connector selection of 2nd SATA HDD
<table>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>Panel</th></tr>
<tr><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>J4 XL</td></tr>
<tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>J11 XT (KIOSK)</td></tr>
<tr><td colspan="4">Other setting</td><td>Prohibited</td></tr>
</table></td><td>1 ON
2 ON
3 ON
4 ON</td></tr>
</table>

7.3.2 Picture of Motherboard



SATA2_SW

1	2	3	4	Panel
ON	**ON**	**ON**	**ON**	**J4 (for M/M**
OFF	OFF	OFF	OFF	J11 (fr KIOSK)
Other settings				Prohibited

JP1 Video Source Selection 1st Disp	
1-2	**DVI Interface (for M/M)**
2-3	LVSD Interface (for KIOSK)

JP5 VCCA Voltage Selection	
1-2	**VCCA = 1.8V 400MHz FSB**
2-3	VCCA = 1.5V 533MHz FSB

CLR_CMOS

1-2	CMOS Clear
2-3	**Normal**

JP3
IO Address
4E/4FH = High
2E/2FH = Low
Default = 2-3

JP4

SATA1_SW

1	2	3	4	Panel
ON	**ON**	**ON**	**ON**	**J4 (for M/M**
OFF	OFF	OFF	OFF	J11 (fr KIOSK)
Other settings				Prohibited

BEEP Sound Enabl

Short	Enable
Open	Disable

LCD_SW

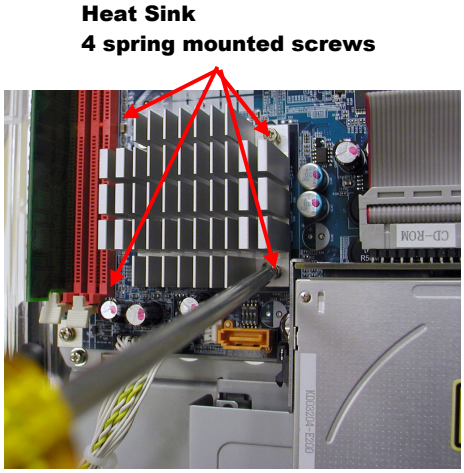
1	2	3	4	
OFF	**OFF**	**OFF**	**-**	**12.1" SVGA**
ON	OFF	OFF	-	15" XGA
OFF	ON	OFF	-	17" SGA
ON	ON	OFF	-	10.42 VGA
Other setting			-	Prohibited

7.4 Replacing the CPU and Heat Sink

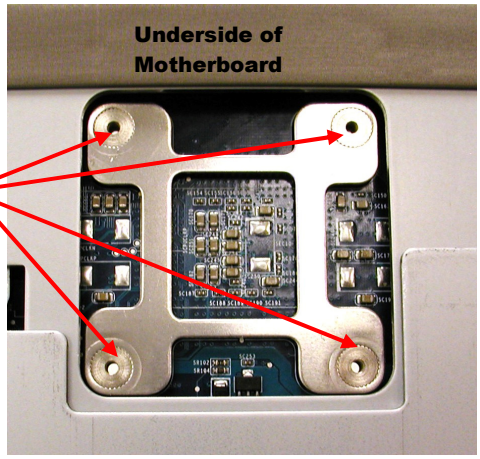
Caution: Be sure to observe all ESD precautions and power off procedures.

The heatsink and CPU are installed on the front of the motherboard (viewed from the front of the unit) just to the right of the memory. Both parts come in the same kit.

1. Remove the back panel. (See section 5.1.2)
2. Disconnect the power cable from the controller.
3. Remove the front panel. (See Section 5.1.1). Yellow LED should be off. (See Section 1.2).
4. Remove the motherboard assembly (See Section 5.2).
5. Remove the heat sink by loosening the 4 spring-loaded screws that attach it to the motherboard. There is a mounting bracket on the bottom of the motherboard. Leave this mounting bracket in place.

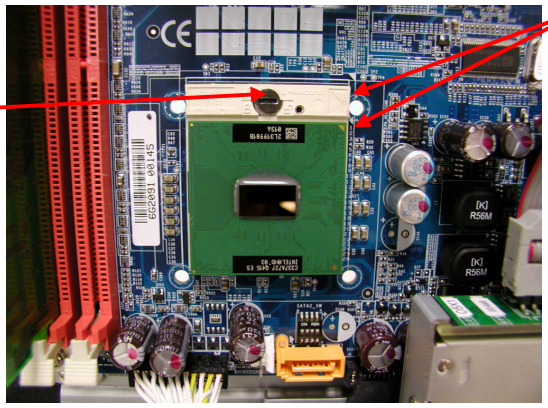


Heat Sink Bracket
(4 spring-loaded screws thread through from top)



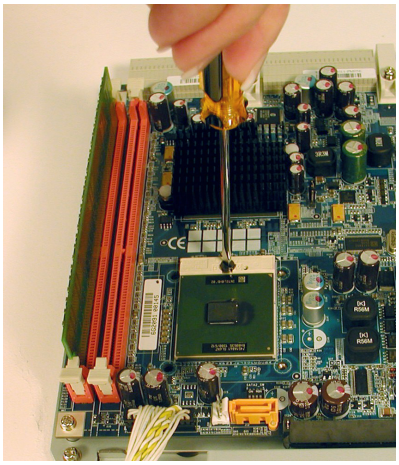
6. Open the CPU lock by turning ¼ turn counterclockwise. Lock and Unlocked icons are imprinted in the CPU mount as a reminder. Remove the CPU chip.

CPU Lock:
Unlock –1/4 turn counter clockwise
Lock –1/4 turn clockwise

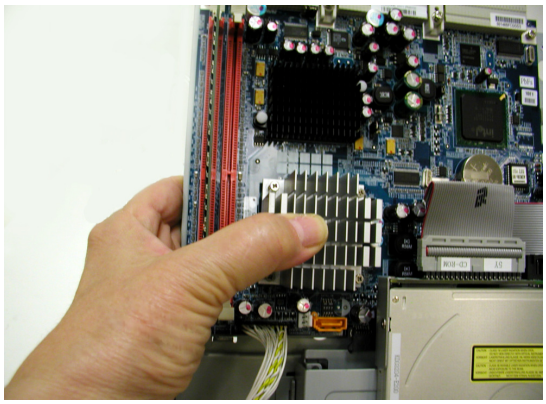


7. Place the new CPU on the CPU socket aligning the gold arrow on the corner of the chip with the white arrow etched on the corner of the socket.

8. Using a small flathead screwdriver, rotate the lock 1/4 turn clockwise to the lock position.



9. Place the heat sink over the CPU with fins aligned front to back and secure the heat sink with the four screws attached to it. Grip the heat sink bracket to hold it in place while the spring-mounted screws are tightened.



10. Reinstall the motherboard (See Section 7.2).

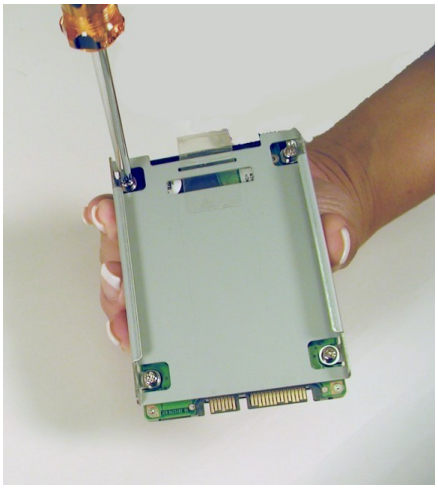
11. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number (See Section 7.2).

7.5 Replacing the Hard Disk Drives



Caution: Be sure to observe all ESD precautions and power off procedures.

1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller. (Yellow LED should be off.)
3. Remove the front panel. (See Section 5.1.1)
4. Remove existing hard drive from motherboard by pressing down on the metal tab (below the hard drive bracket near the left side) and pulling on the transparent pull tab.
5. If the removal tab does not come installed on the new hard drive, install it to the hard drive bracket in the location shown below.



6. While holding down the metal tab, slide the new hard disk drive or hard drive filler into the bay making sure that the runners align with the guides.



7. Press firmly to make the connection.
8. Reinstall the front panel. (See Section 5.1.1)
9. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number. (See Section 7.2).

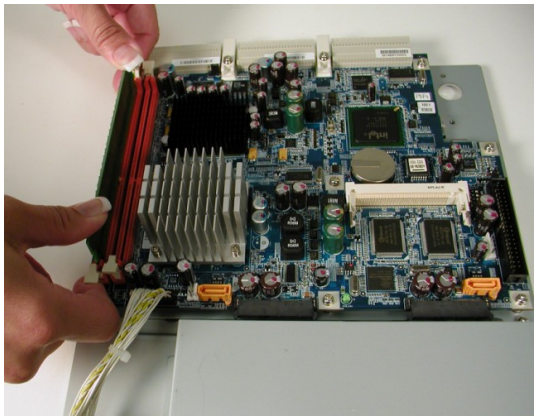
7.6 Adding or Replacing Memory



Caution: Be sure to observe all ESD precautions and power off procedures.

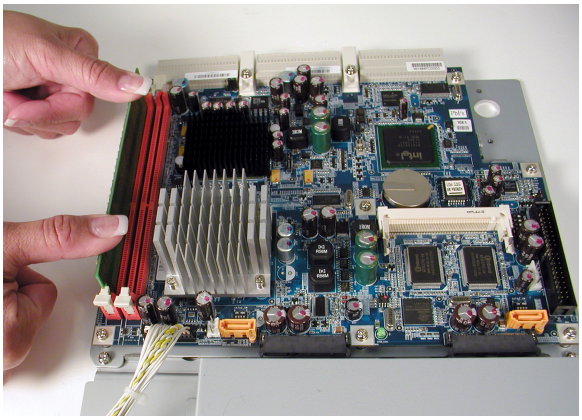
The TeamPoS 3000 has two memory sockets or slots and can use 256MB, 512MB or 1GB memory in combination.

1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
4. Remove the motherboard assembly (See Section 5.2)
5. Remove memory by pressing down on the white locking levers at the side of each socket.



6. Insert memory (or additional memory) into an empty socket. (There is only one way the memory stick will fit.)

7. Check to make sure that both levers for the socket are locked into place.



8. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number. (See Section 7.2).



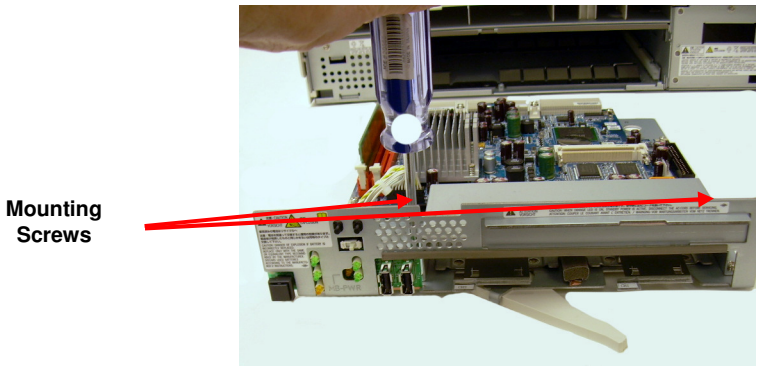
7.7 Replacing the CD/DVD



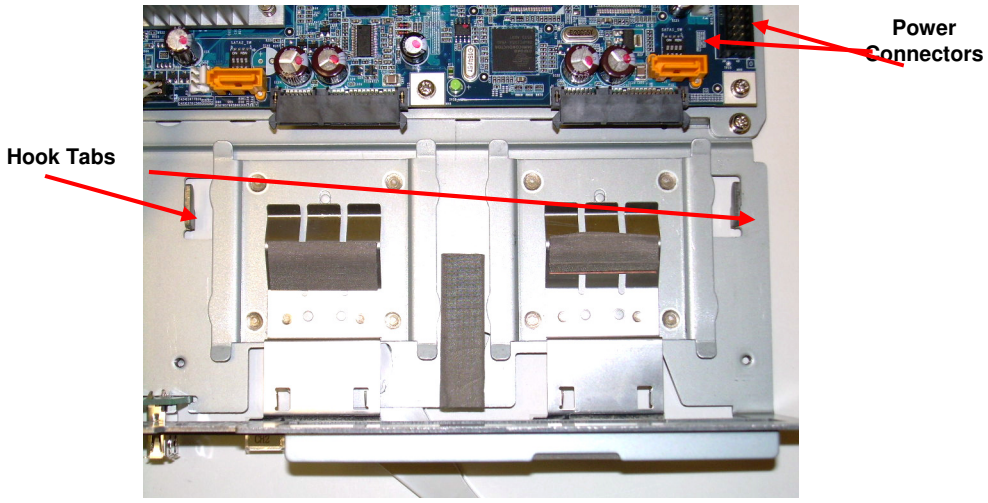
Caution: Be sure to observe all ESD precautions and power off procedures.

The CD/DVD rides on top of the motherboard assembly and requires a narrow Phillips-head screwdriver to install. The CD/DVD kit comes with the white bezel installed on the DVD. For black units, the white bezel needs to be removed and the black bezel installed.

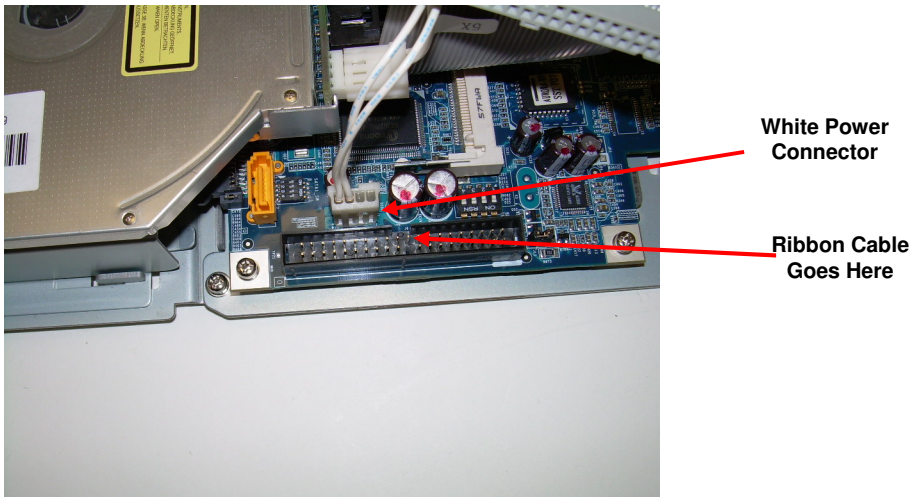
1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller.
3. Remove the front panel (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
4. Remove motherboard assembly by pulling outwards on the seating lever to unseat the motherboard. Then pull the motherboard entirely out of the chassis. (See Section 5.2)
5. Disconnect the CD/DVD ribbon cable and the white power cable from the motherboard.
6.
7. Remove the metal mount with the old CD/DVD attached unscrewing the 2 screws holding it in place. Retain the screws.



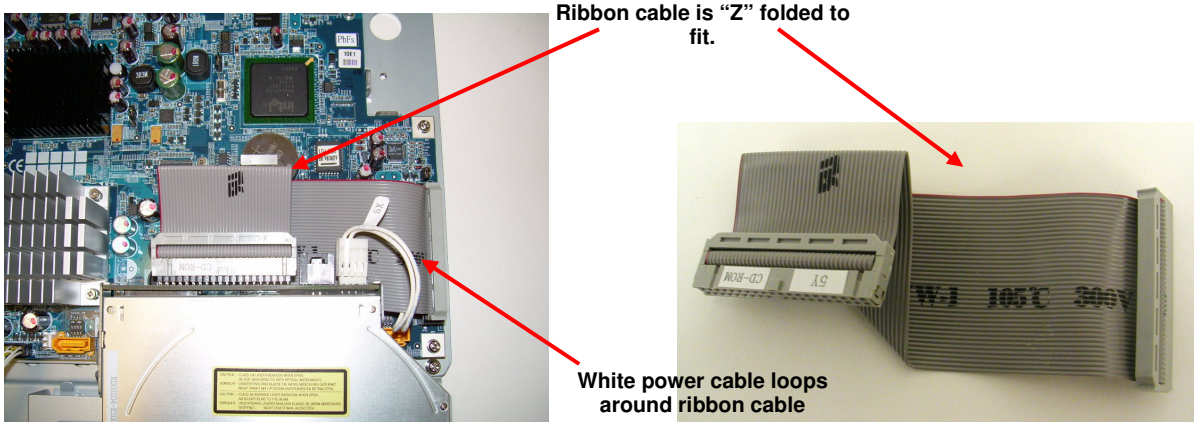
8. The replacement CD/DVD comes already mounted onto a bracket. Align the slots in the mounting bracket so that they pass over the hook tabs on the chassis. Slide the CD/DVD forward so that it fits into the opening in the chassis and the holes in the bracket are aligned with the holes in the chassis. Attach the bracket to the chassis with the two screws retained in #5 above.



9. The power cable and ribbon cable come atttached to the back of the CD/DVD. Attach the other end of the white power cable to the motherboard as shown in the photo.



10. Attach the ribbon cable to the motherboard. The white power cable needs to loop around the ribbon cable as shown in the photo below.



11. Reinstall the motherboard. (See Section 5.2.) Make sure the cables are clear of any obstruction.

12. Reinstall front panel.



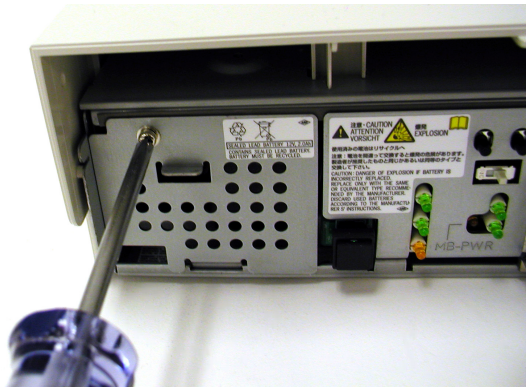
13. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number. (See Section 7.2).

7.8 Replacing the Battery (Partial Backup)

Caution: Be sure to observe all ESD precautions and power off procedures.

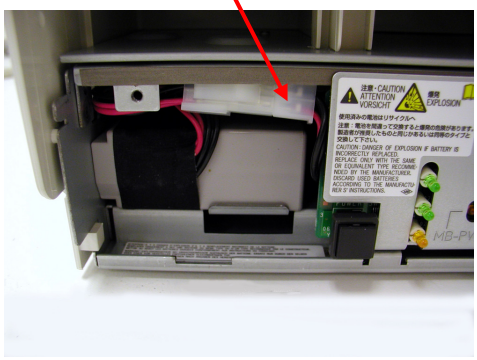
The partial backup battery is located on the front of the TeamPoS 3000 on the left.

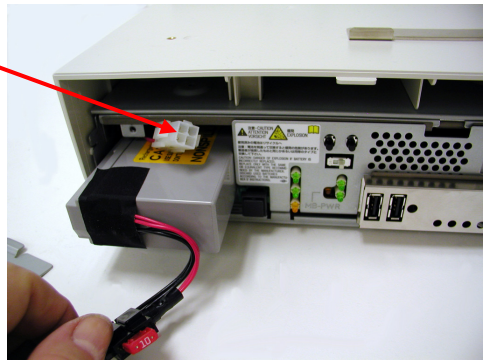
1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller.
3. Remove the front panel (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
4. Snap off the protective front metal covering.



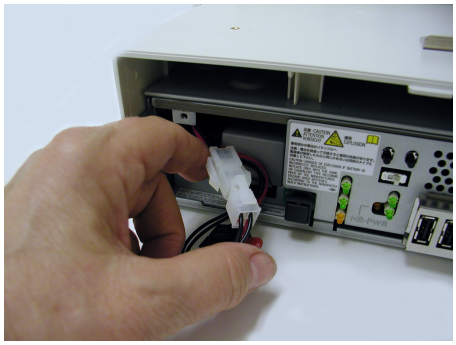
White Power Cable

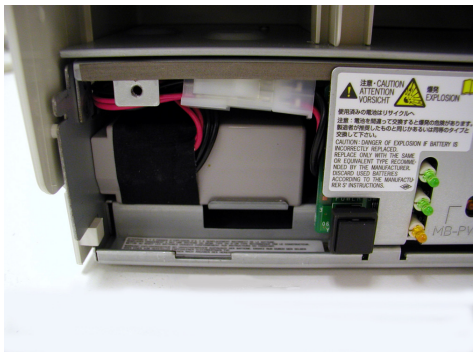
5. Disconnect the the white power cable for the battery and remove the old battery.





6. Insert the new battery and connect the white connector attached to the battery to the white power cable in the controller. Tuck the cables out of the way - on top of the battery.





7. Attach the protective front cover with retained screws.

8. Replace front panel and reconnect power cable. (See Section 5.1.1)

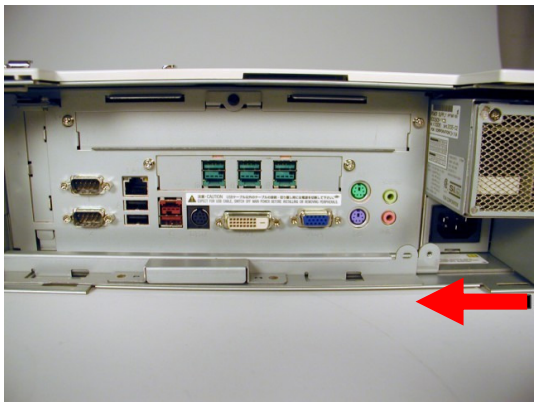
9. If this is an upgrade, install the upgrade label that comes with the upgrade kit to the side of the unit near the serial number. (See Section 7.2).

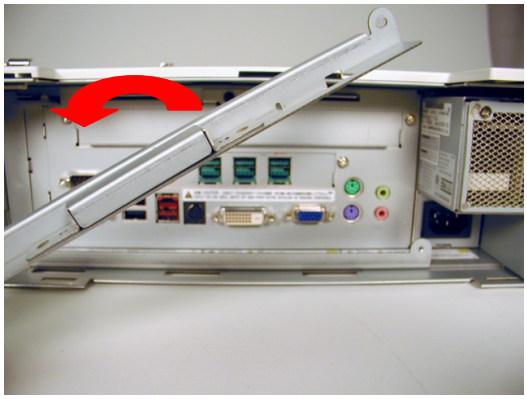
7.9 Removing the backplane assembly

Caution: Be sure to observe all ESD precautions and power off procedures.

Looking from the rear, the power supply is on the right.

1. Remove the rear panel. (See Section 5.1.2).
2. Disconnect the power cable from the controller
3. Remove the front panel. (See Section 5.1.1) . Yellow LED should be off. (See Section 1.2)
4. Unseat the motherboard assembly (See Section 5.2)
5. At the rear, remove the locking screw on the right hand side of the backplane assembly.
6. Slide the locking bar to the left and lift it out. The entire backplane assembly and power supply will slide out.







7. The backplane assembly contains the power supply and I/O boards.

7.10 Installing I/O boards



Caution: Be sure to observe all ESD precautions and power off procedures.

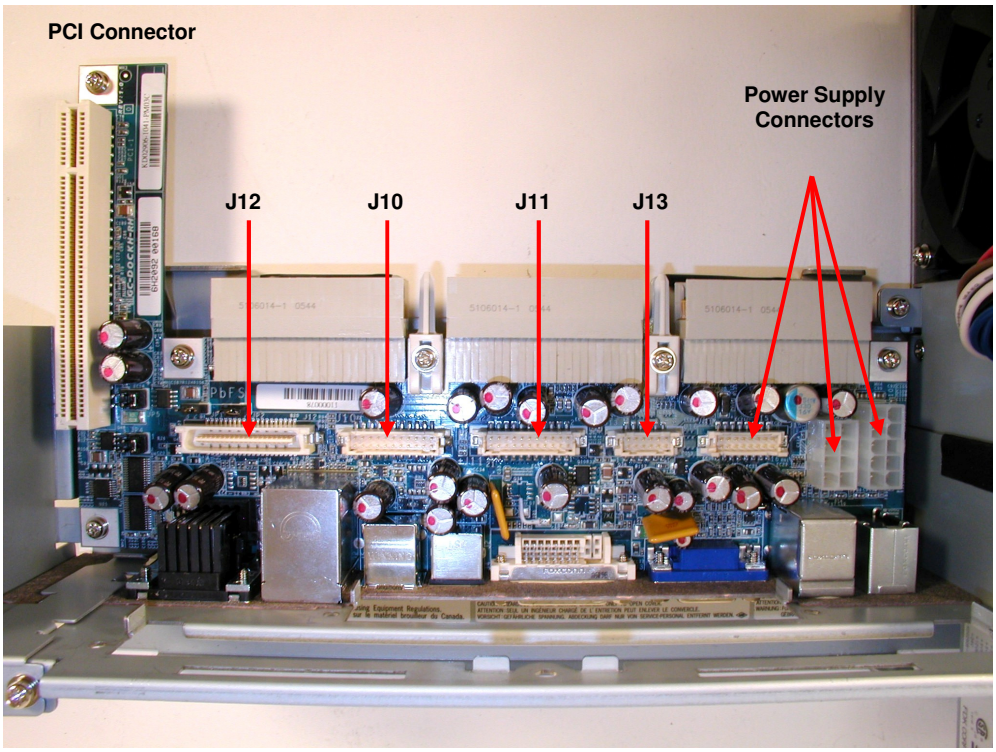
The following I/O board options are available on the TeamPoS 3000:

No I/O board.
Powered USB (one board with 3 powered USB ports.)
Combo Board (one board with 6 powered USB ports, 1 RS 232 male, 1 15-pin)
Combo Board with COM Board (Combo board as shown above plus COM Board ports of 3 RS232, 2 male and 1 female)

Note: Combo board cannot be combined with single powered USB. The Combo board can be purchased without the COM board, but the COM board cannot be purchased without the Combo board.

Note: The powered USB board cannot be combined with the COM board.

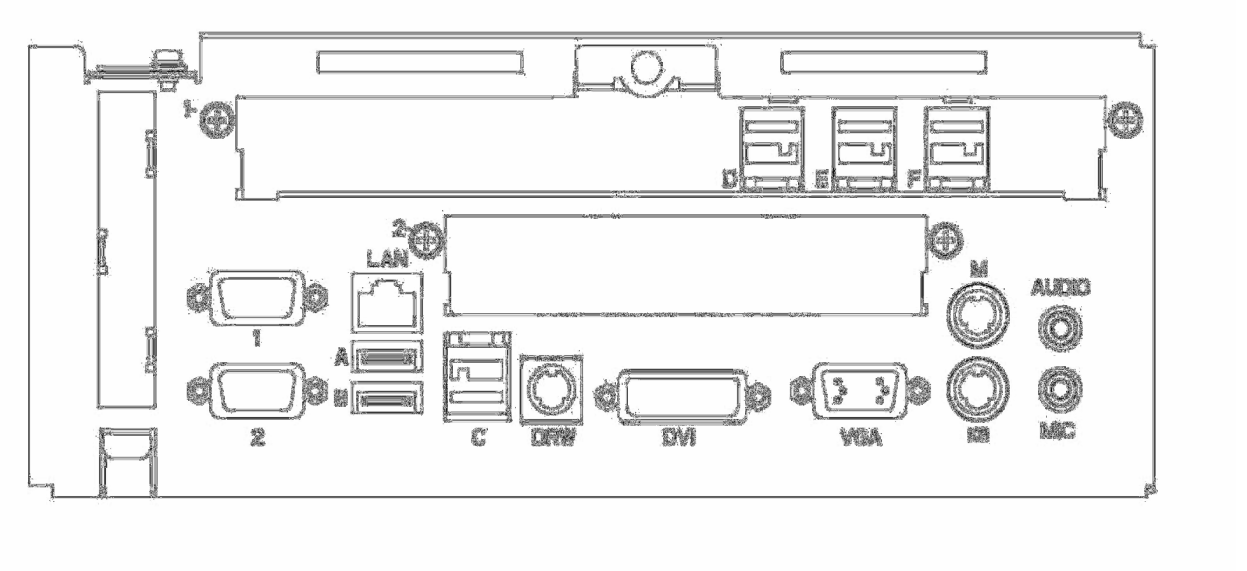
I/O boards are connected to the backplane assembly. Refer to the instructions which follow to identifiy which connectors support which I/O board.



7.10.1 No I/O Board

Backplane assembly will have two filler plates, a long one and a short one.

7.10.2 Powered USB I/O Board

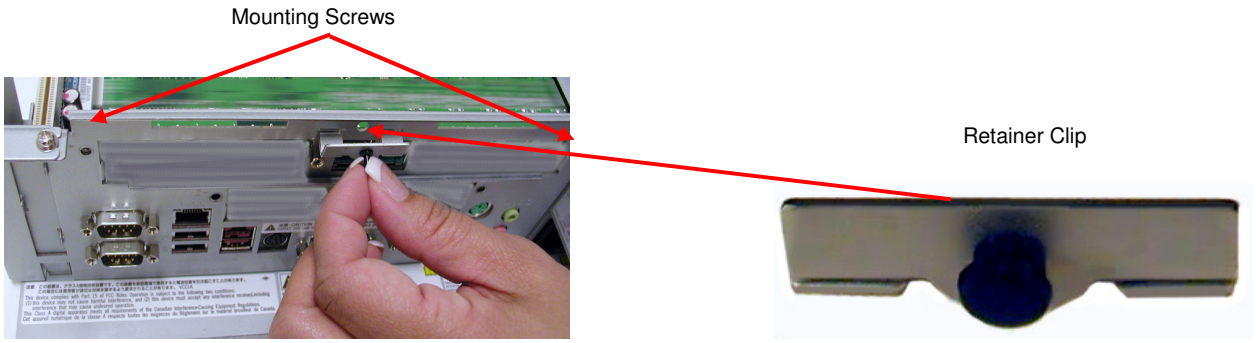


Caution: Ports designated as Port C on the backplane (24V PUSB) and Port 3 on the Combo board (24V RS232) do not meet UL limited power source (LPS) requirements. These ports are limited to only allowing 24V Retail POS RS232 or powered USB peripherals that do not exceed a rated current of 4 Amps. Peripherals intended to be connected via - Jacketed Cable for external use rated 30 V, max 3.05m long, marked VW-1 or FT-1

Caution: Be sure to observe all ESD precautions and power off procedures.

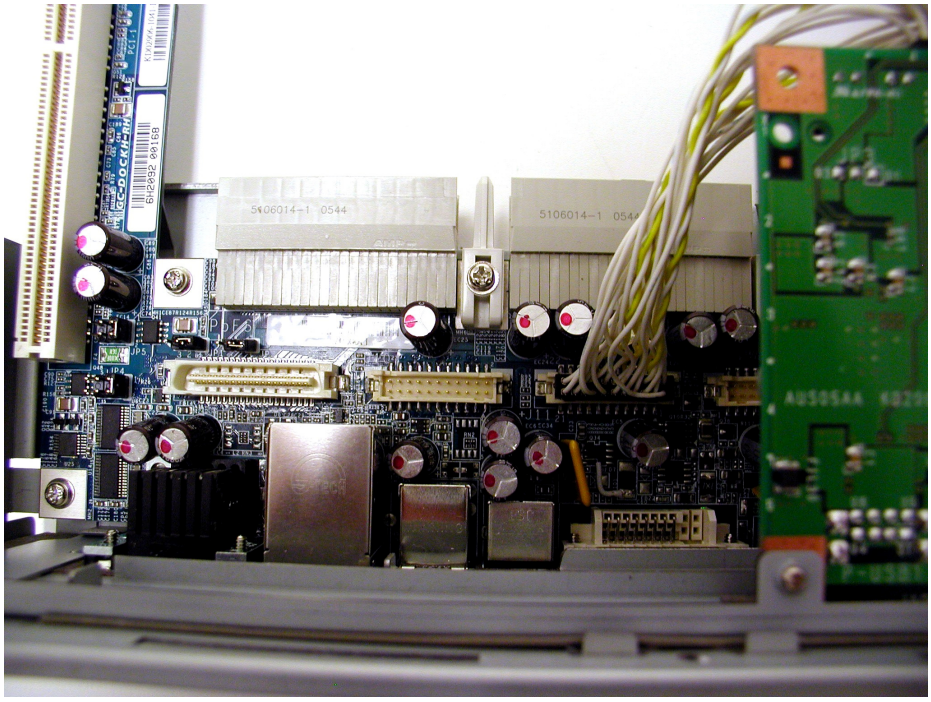
The Powered USB (has 3, 12V powered USB connections): It is installed in the top slot of the backplane assembly and cannot be used in combination with any of the other I/O boards.. A blanking plate fills in the short slot.

1. Remove the back panel. (See Section 5.1.2)
2. Disconnect the power cable from the back of the controller.
3. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2)
4. Unseat the motherboard.
5. Remove the backplane assembly. (See Section 7.9)
6. Remove top filler plate by removing the plug & retainer clip the center of the filler plate

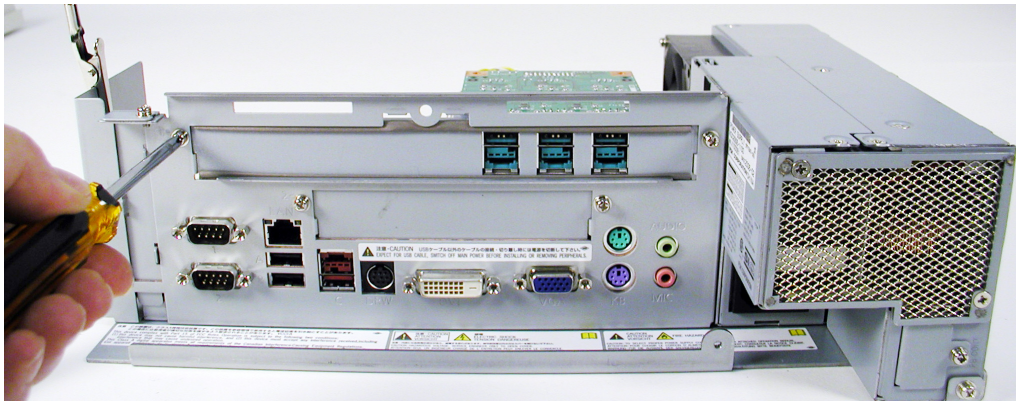


7. Remove 2 mounting screws holding the upper filler plate.

8. Connect the USB board into connector J11. The connector is labeled. (second white connector from the left when looking at the backplane assembly from the rear).



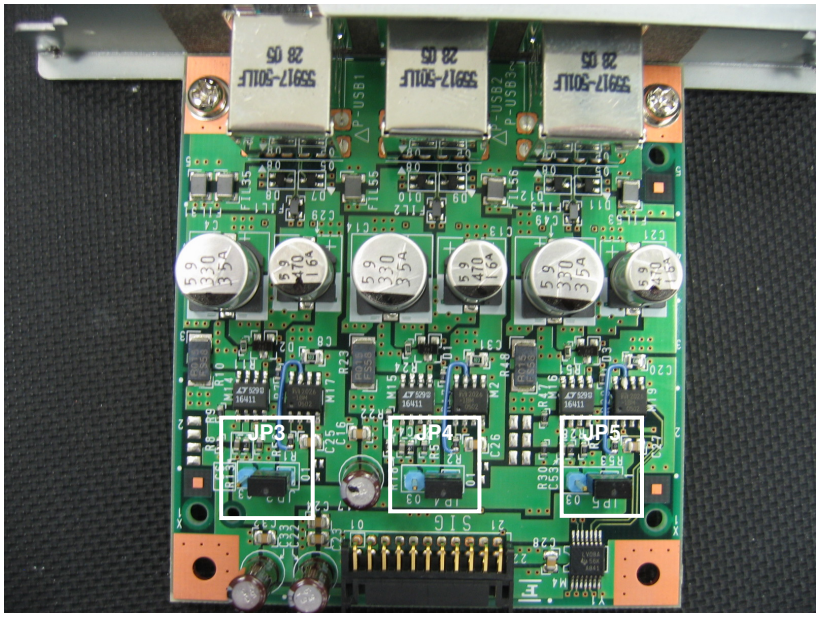
9. Slide the USB board into the slots and attach it with the two screws.



10. Replace the locking bracket with the plug.



7.10.2.1 USB Board Jumper Settings



JP3, 4 & 5 Power Source	
1-2	+5V
2-3	+5VSB (Standby power always on.

Powered Retail USB connector (24 VDC or 12VDC)

Pin #	DC-Out Mode	
1	5VDC USB Power	Std. USB Signals
2	Data -	
3	Data +	
4	Ground	
5	12 VDC PIN 5 & 6 Power PIN 5 & 8 Return	12 VDC Power
6	12 VDC PIN 5 & 6 Power PIN 5 & 8 Return	
7	12 VDC PIN 5 & 6 Power PIN 5 & 8 Return	
8	12 VDC PIN 5 & 6 Power PIN 5 & 8 Return	

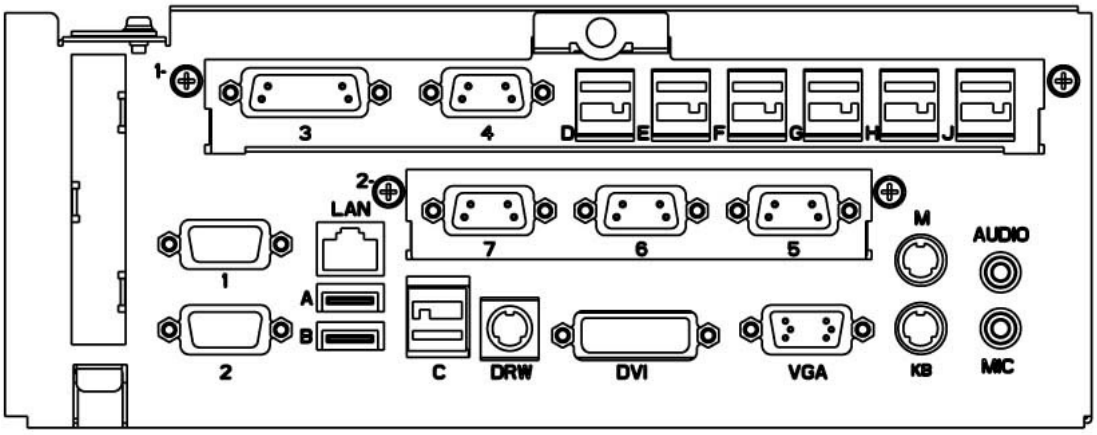
Note: The powered USB connector will also accommodate a standard USB connector, that is pins 1-4. (Top portion of the connector.)

7.10.3 Combo Board

Combo cards provide support for both USB and legacy devices. The Combo card can be used by itself or with the COM card. It contains six +12V powered USB ports, a DB9 - RS232 port(COM 4), and a DB15 connector for a +24V powered printer (COM 3).

Caution: Be sure to observe all ESD precautions and power off procedures.

The diagram below shows the Combo Board with the COM Board installed beneath it. It can be installed by itself or with the COM card.

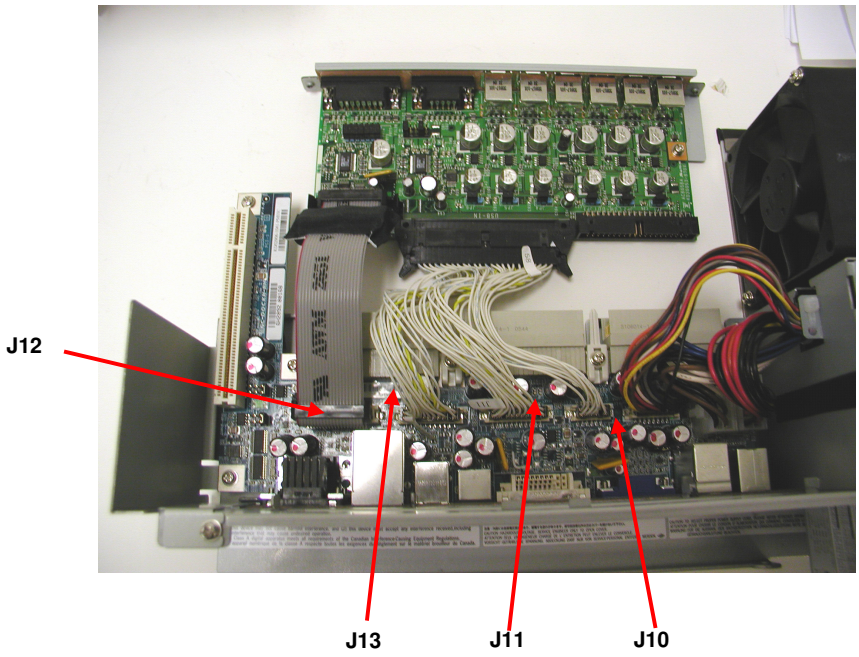


Caution: Ports designated as Port C on the backplane (24V PUSB) and Port 3 on the Combo board (24V RS232) do not meet UL limited power source (LPS) requirements. These ports are limited to only allowing 24V Retail POS RS232 or powered USB peripherals that do not exceed a rated current of 4 Amps. Peripherals intended to be connected via - Jacketed Cable for external use rated 30 V, max 3.05m long, marked VW-1 or FT-1 .

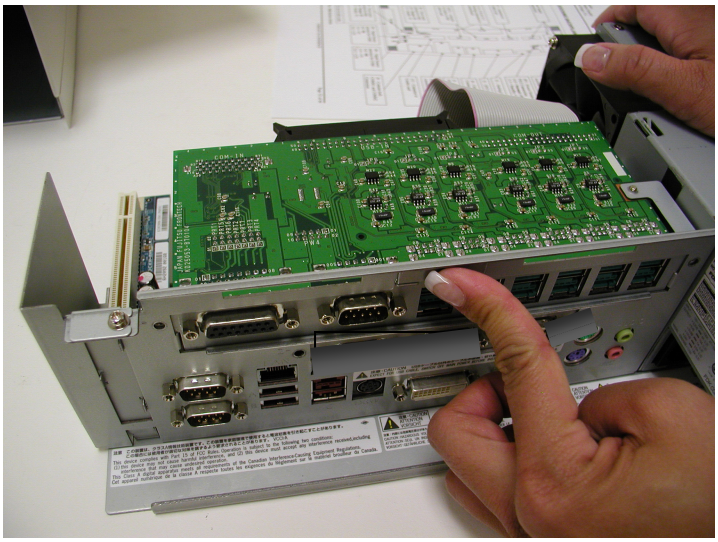
Note: When Combo Board is installedonly one 24V port should be used for 24V printer. Port 3 and Port C cannot provide 24V power to 2 printers simultaneously.

7.10.3.1 Combo Board Installation

1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cable from the back of the controller.
3. Remove the front panel. (See Section 5.1.1). Yellow LED should be off. (See Section 1.2).
4. Unseat the motherboard. (See Section 5.2)
5. Remove the backplane assembly. (See Section 7.9)
6. Remove top filler plate by removing the black pin and retainer clip at the center of the filler plate and 2 mounting screws (retain screws and pin). (See Section 7.10.2)
7. Invert combo card (ports facing away from the backplane). Connect the three port cables to the following ports on the backplane: J13, J11, and J10. Connect the narrow ribbon cable to port J12 on the backplane and to Combo board.

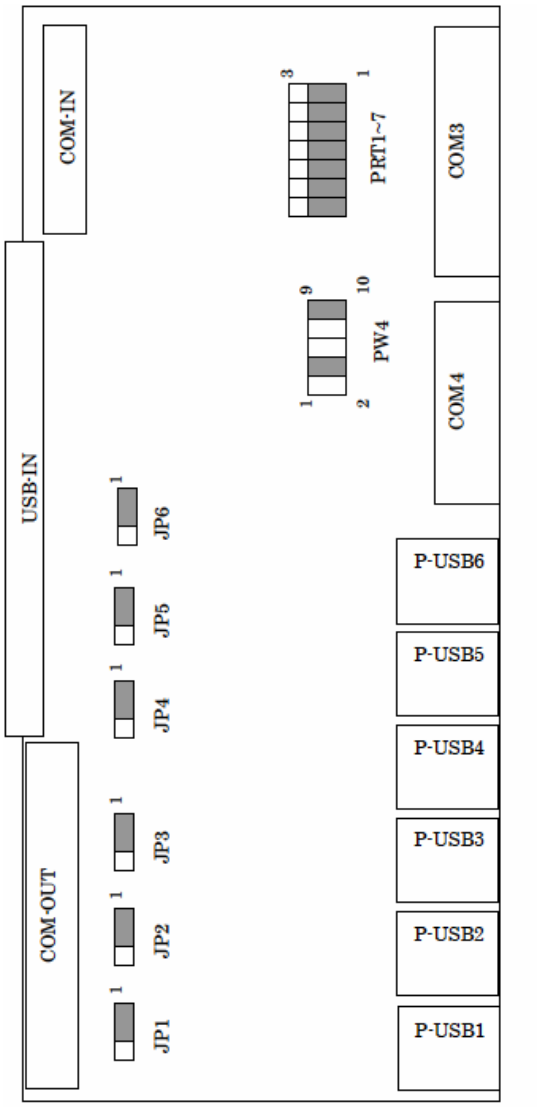


8. Flip Combo board and attach the it to the top opening of the chassis by sliding it down to position. Secure board with the 2 mounting screws. Reattach the retainer clip and the black pin.



7.10.3.2 Combo Board Diagram

The following illustration shows the TeamPoS 3000 Combo Board and the coinciding jumper configurations.



Combo Board

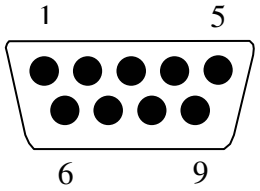
7.10.3.3 Combo Board Jumper Settings

The jumper block with 7 connectors (PRT1-7) and the right most of the two jumper blocks (PW4) define the printer type to be used on COM3. The default for this jumper block is the Fujitsu FD20 and FD21 printers. The default mode is with all 7 jumpers toward the metal strip. Move the 7 jumpers towards the wire harness connectors to support ESC POS printers. The jumper settings are shown below.

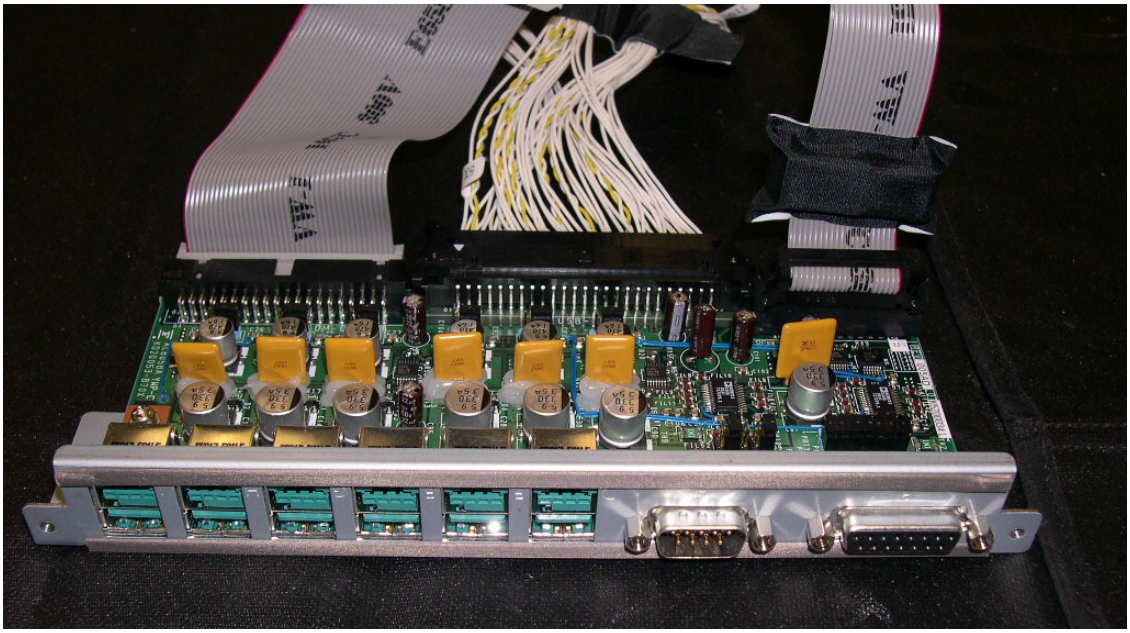
Jumper	Description	Default
JP1	Power source selection for USB connector 1 1-2 Normal +5V 2-3 Standby +5V	1-2
JP2	Power source selection for USB connector 2 1-2 Normal +5V 2-3 Standby +5V	1-2
JP3	Power source selection for USB connector 3 1-2 Normal +5V 2-3 Standby +5V	1-2
JP4	Power source selection for USB connector 4 1-2 Normal +5V 2-3 Standby +5V	1-2
JP5	Power source selection for USB connector 4 1-2 Normal +5V 2-3 Standby +5V	1-2
JP6	Power source selection for USB connector 6 1-2 Normal +5V 2-3 Standby +5V	1-2
PW4	COM 4 Signal selection for D-Sub 9 connector 1-2 RI 3-4 +5V 5-6 +12V 7-8 DCD 9-10 N.C.	 1-2 Open 3-4 Short 5-6 Open 7-8 Open 9-10 Short
PRT1-7	COM 3 DT50 Series & TPG Printers Fujitsu (Asia) **2-3** 1-2	1-2

Connector type: Male DB9, (RS-232 ports)

Pin #	Signal when DC Powered Mode	Signal when Standard Com Mode
1	NC	CD
2	RX	RS
3	TX	TX
4	DTR	DTR
5	SG	SG
6	DSR	DSR
7	RTS	RTS
8	CTS	CTS
9	+5V	RI



7.10.3.4 Combo Board (picture)

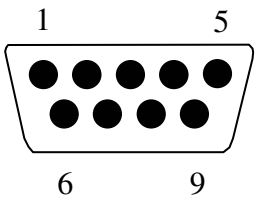


Combo Board

7.10.3.5 Combo Board COM Port Connector Signals

COM Port Pinouts

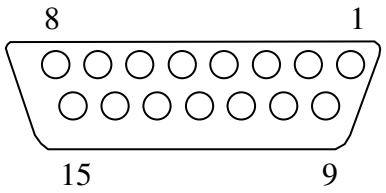
Pin #	COM 4 Male connector
1	Data Carrier Detect (DCD)
2	RX
3	TX
4	DTR
5	Ground
6	DSR
7	RTS
8	CTS
9	RI or +5V or +12V depending upon jumper on PW2



7.10.3.6 Printer (PTR) Connector signals

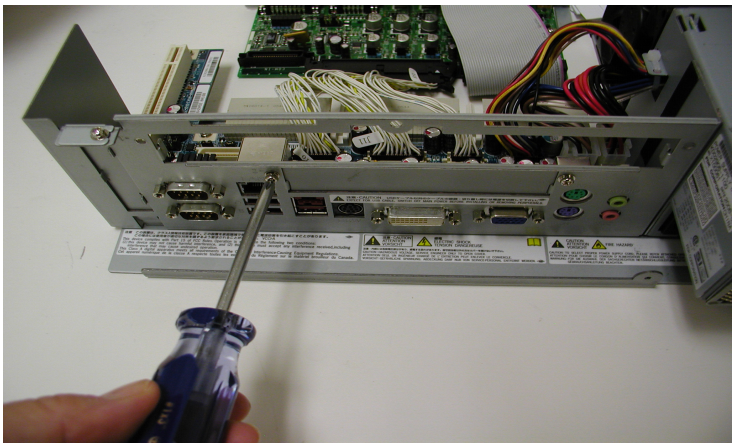
Connector type: Female D15

Pin #	Signal ESC/PoS Mode
1	GND
2	RX
3	TX
4	CTS
5	DSR
6	CD
7	SG
8	+24V RET
9	RI
10	+5V
11	DTR
12	RTS
13	GND
14	+24V
15	+24V

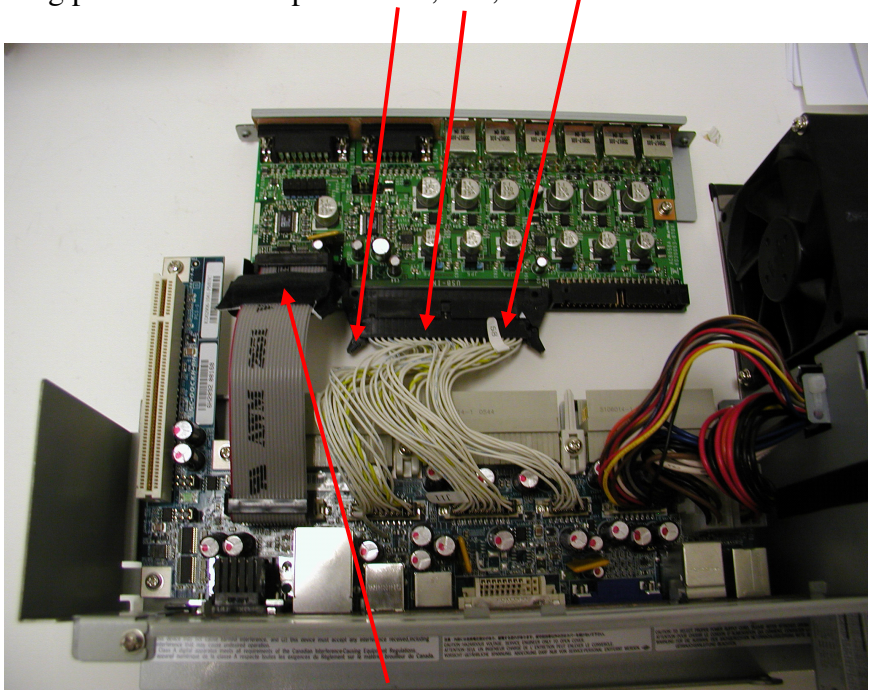


7.10.4 Combo Board with COM Board

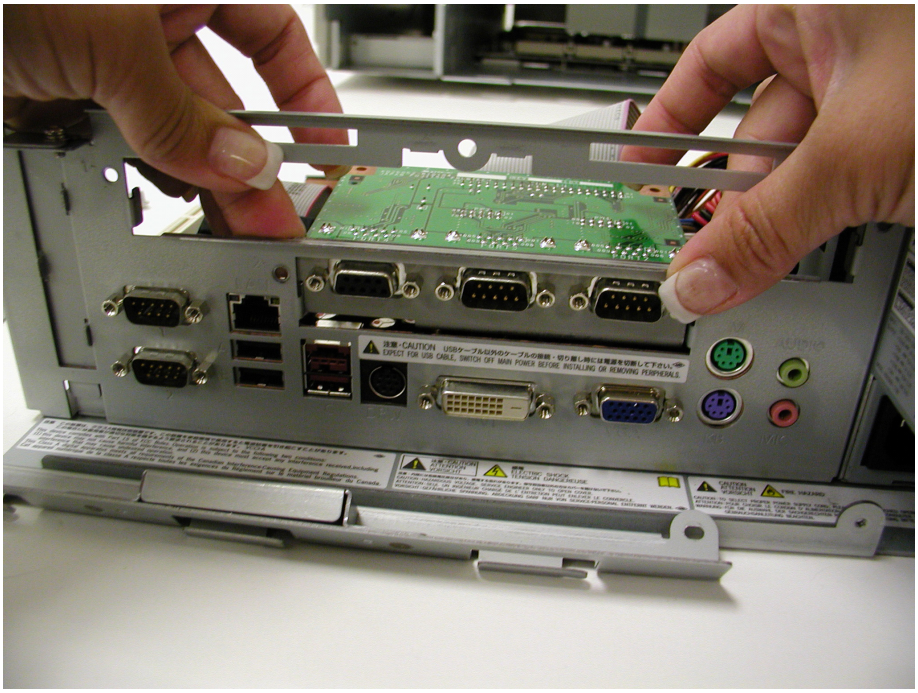
1. Remove the rear panel. (See Section 5.1.2)
2. Disconnect the power cord from the back of the controller
3. Remove the front Panel. (See Section 5.1.1) Yellow LED light will be off. (See Section 1.2).
4. Unseat the motherboard.
5. Remove the backplane assembly. (See Section 7.9)
6. Remove the old Combo board by removing the black pin and retainer clip at the center of the Combo board and removing the screws (retain screws, black pin and clip).
7. Remove the old COM board by removing the two screws



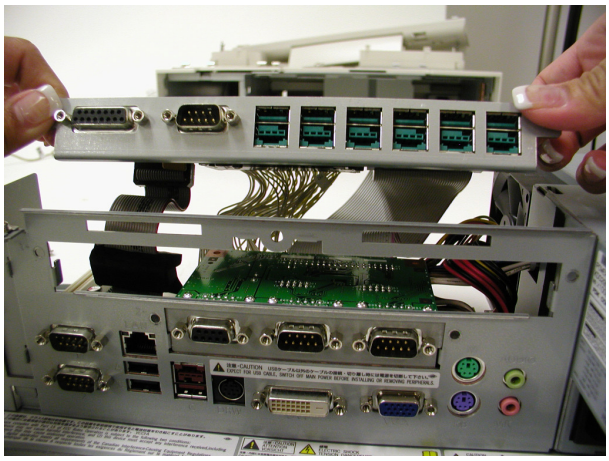
8. Invert Combo board (ports face away from the backplane). Connect the three port cables to the following ports on the backplane: J13, J11, and J10. The connectors are labeled.



9. Connect the narrow ribbon cable to port J12 on the backplane and to Combo card.
10. Connect the wide ribbon cable on the COM board to the ribbon socket on the Combo board
11. Attach the COM board to the bottom opening in the backplane assembly by sliding downward into the chassis and secure with the 2 mounting screws.

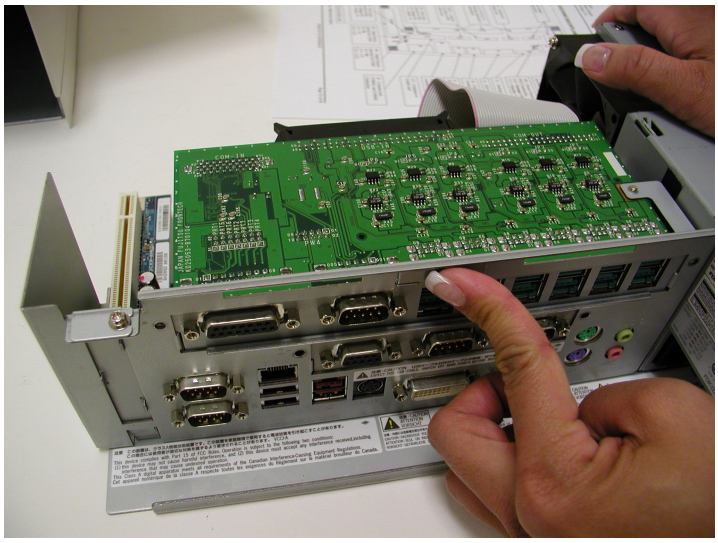


12. Flip combo board and attach the combo board to the top opening of the chassis of the backplane assembly by sliding it down to position. Secure board with the 2 mounting screws.





13. Reattach the retainer clip and the black pin.



14. Insert the backplane assembly into the chassis making sure to align the edges of the backplane assembly with the slots in the chassis. Push in firmly until notches in chassis for locking bar show.
15. Replace the locking bar before reseating the motherboard.

7.10.4.1 COM Board Connectors

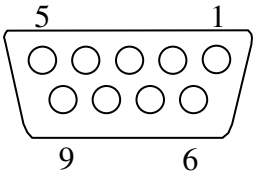


COM Card

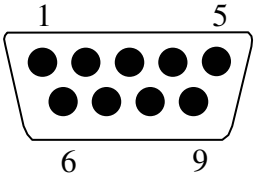
COM Port Pinouts

Pin Number	COM 7 Female Connector	COM 6 Male connector	COM 5 Male Connector
1	Ground	Data Carrier Detect (DCD)	Data Carrier Detect (DCD)
2	RX	RX	RX
3	TX	TX	TX
4	24V	DTR	DTR
5	Ground	Ground	Ground
6	+5V	DSR	DSR
7	RTS	RTS	RTS
8	CTS	CTS	CTS
9	Ground	RI or +5V or +12V depending upon jumper on PW2	RI or +5V or +12V depending upon jumper on PW1

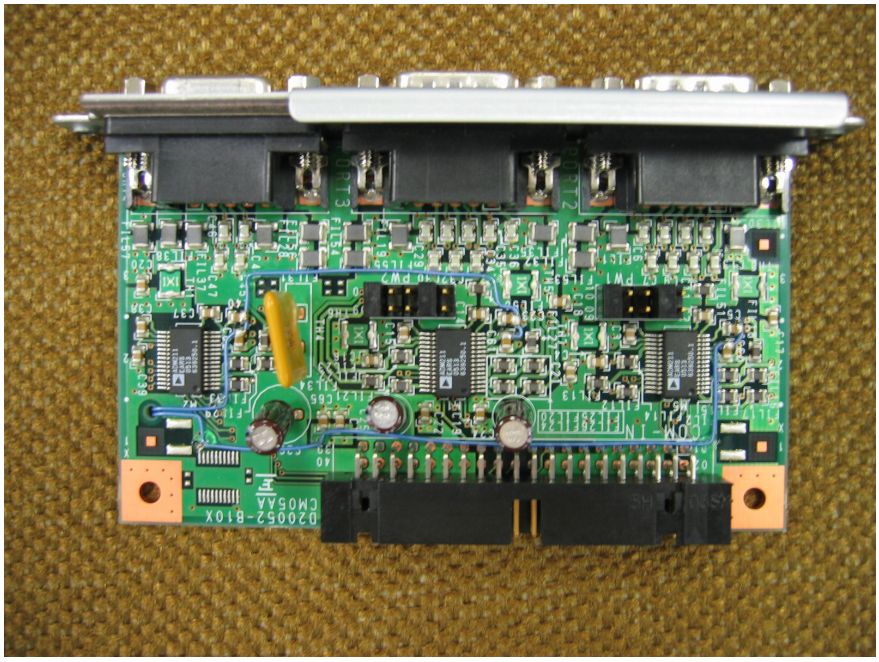
Female Connector D9



Male Connector D9



7.10.4.2 COM Board Jumpers



PW2 COM6	
1-2	RI
3-4	**+5VSB**
5-6	+12V
7-8	DCD
9-10	NC

PW1 COM5	
1-2	RI
3-4	**+5VSB**
5-6	+12V
7-8	DCD
9-10	NC



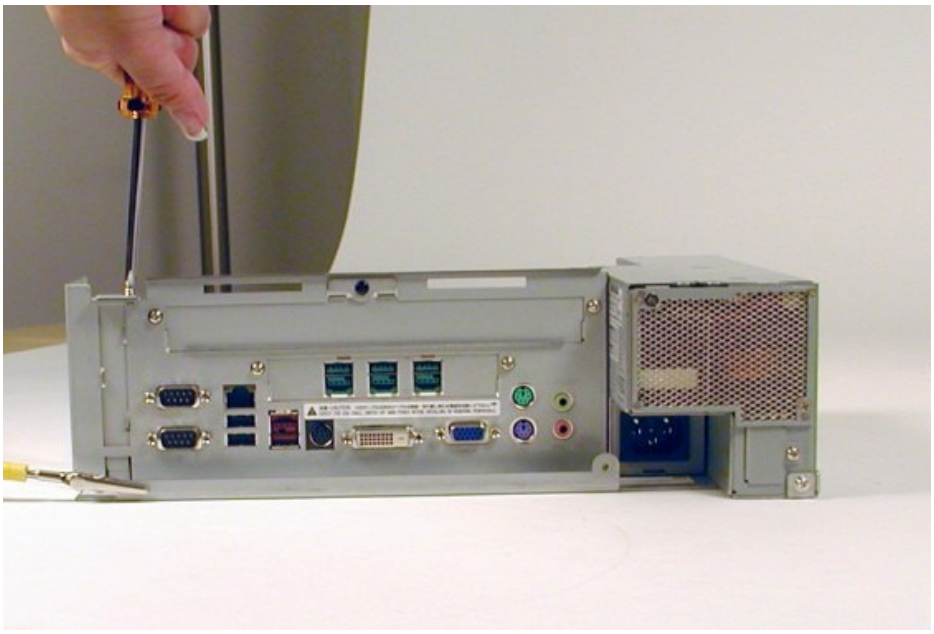
Caution: **Only one position of the first three options must be selected (RI, or +5VSB, or +12V) Pins 2, 4,and 6 of PW1 / PW2 are tied together and only one source must be used.**

7.11 Replacing PCI Add-In Card(s)

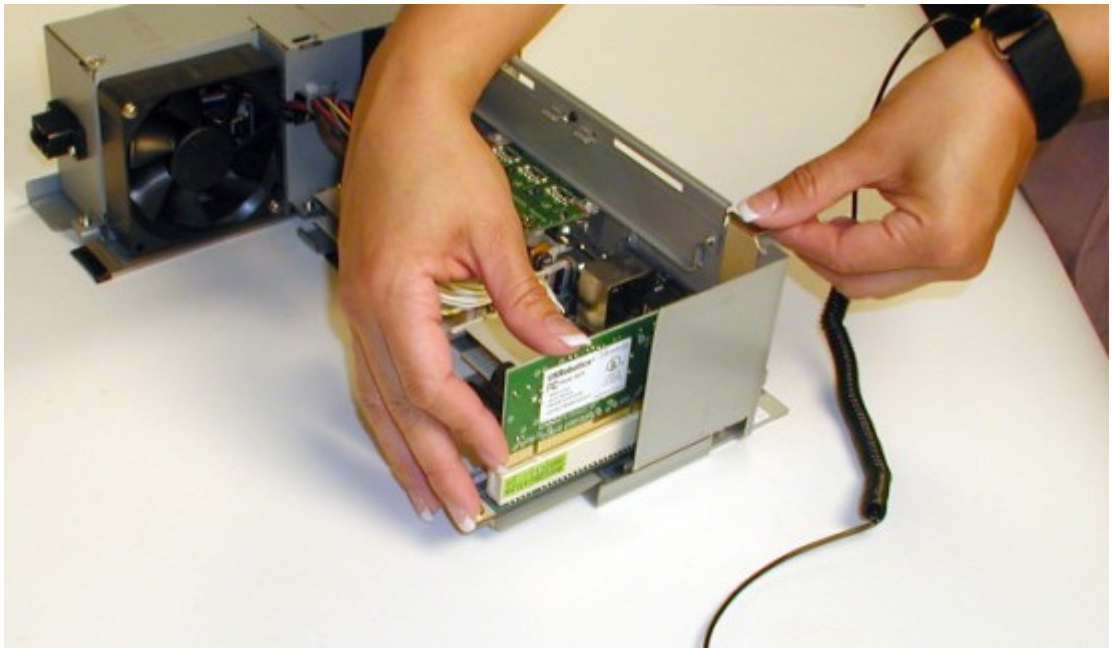
Caution: Be sure to observe all ESD precautions and power off procedures.

Viewing the back plane assembly from the rear, there is a vertical slot on the left side for the ½ height PCI card. The TP3K XL does not support full size PCI cards. The connector for the PCI is located directly below this slot.

1. Remove the back panel. (See Section 5.1.2)
2. Disconnect power cable from the controller..
3. Remove the front panel. (See Section 5.1.1) Yellow LED light should be off. (See Section 1.2).
4. Unseat the motherboard.
5. Remove the backplane assembly. (See Section 7.9).
6. Remove old PCI card,



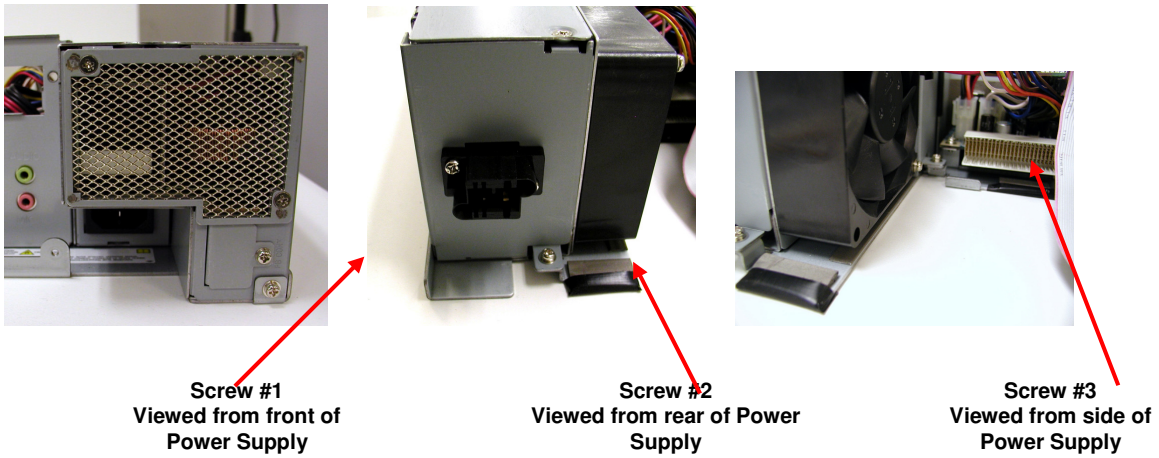
7. Insert the new PCI card into the slot and seat firmly.



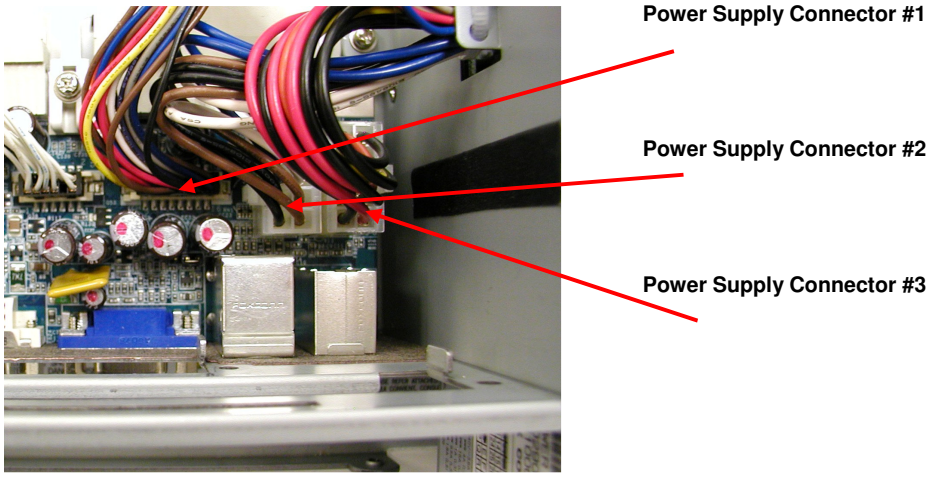
8. Secure PCI card with the screw that was used for the blanking plate.
9. Reinstall the backplane assembly and reseat the motherboard.

7.12 Replacing the Power Supply

1. Remove the back panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller..
3. Remove the front panel. (See Section 5.1.1) Yellow LED light should be off. (See Section 1.2).
4. Unseat the motherboard.
5. Remove the backplane assembly. (See Section 7.9).
6. Unseat any installed I/O boards. It is not necessary to disconnect the cables, just remove from the chassis to allow access to one of the mounting screws and the power supply cables.
7. Remove the 3 mounting screws. Retain the screws.



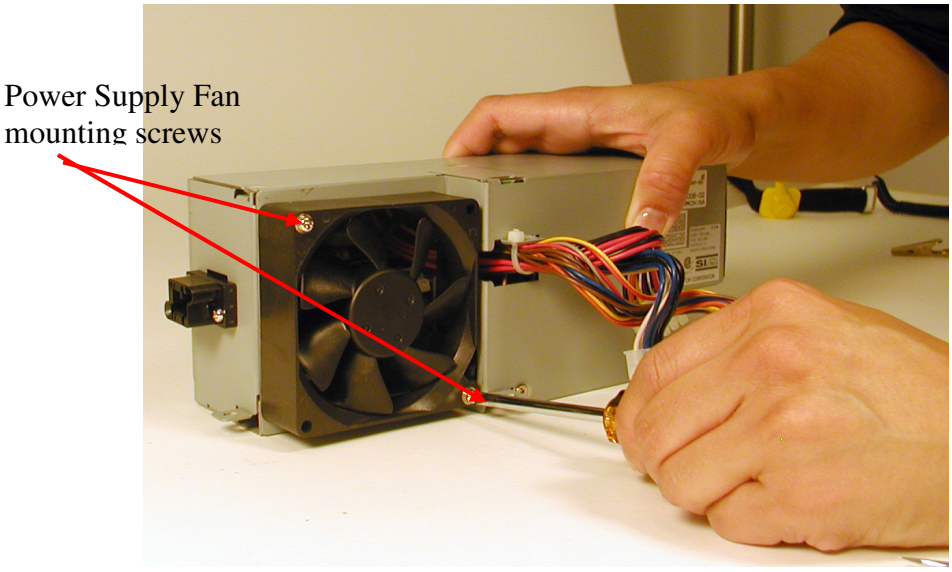
8. Remove the three connectors for the power supply.



9. Install the new power supply using the three retained screws.
10. Connect the power supply connectors (they are keyed so that they cannot be incorrectly connected). Reinstall the backplane assembly.

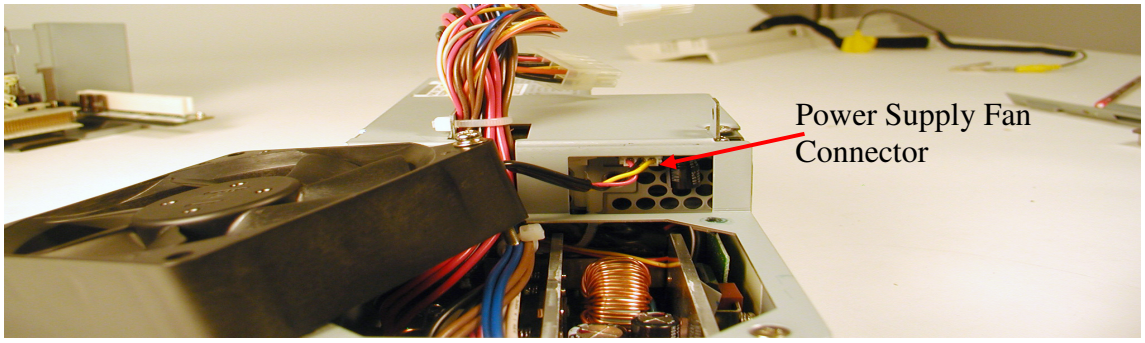
7.13 Replacing the Power Supply Fan:

1. Remove the back panel. (See Section 5.1.2)
2. Disconnect the power cable from the controller.
3. Remove the front panel. (See Section 5.1.1). Yellow LED light should be off. (See Section 1.2).
4. Unseat the motherboard.
5. Remove the backplane assembly. (See Section 7.9)
6. The power supply fan can be replaced without removing the power supply (although there is more room to maneuver with the power supply removed.)
7. Remove the two screws holding the power supply fan to the power supply.



8. Remove the fan and disconnect it from the power supply by pulling gently on the small white connector inside the power supply.

9. Install the new power supply fan by first connecting the cable and then mounting the fan to the power supply using the screws removed from the old fan.



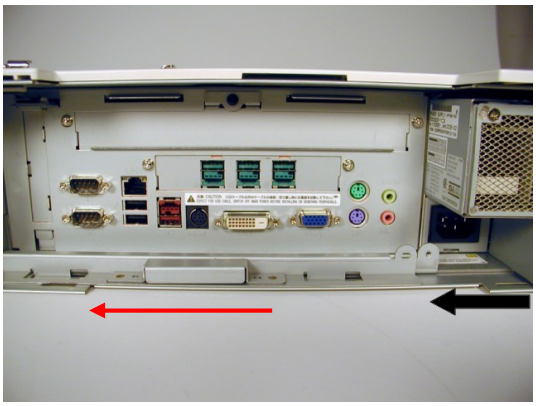
7.14 Replacing the Backplane

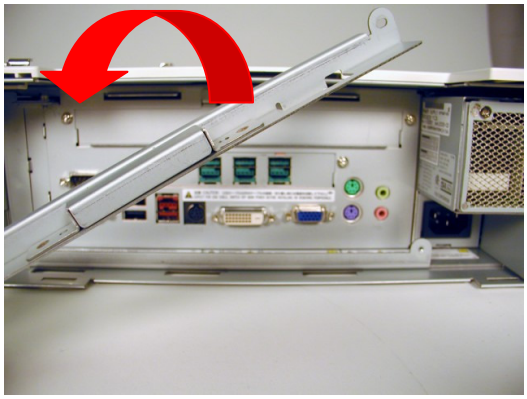


Caution: Be sure to observe all ESD precautions and power off procedures.

The backplane assembly contains the power supply and I/O boards. The backplane PCB is spared as an individual board and requires removal of the power supply and I/O boards before removing the screws attaching the PCB to the assembly.

1. Looking from the rear, the power supply is on the right.
2. Remove the rear panel. (See Section 5.1.2)
3. Disconnect the power cable from the controller.
4. Remove the front panel. (See Section 5.1.1) Yellow LED should be off. (See Section 1.2).
5. Unseat the motherboard assembly .
6. At the rear, remove the locking screw on the right hand side of the backplane.
7. Slide the locking bar to the left and lift it out. The entire backplane and power supply will slide out.

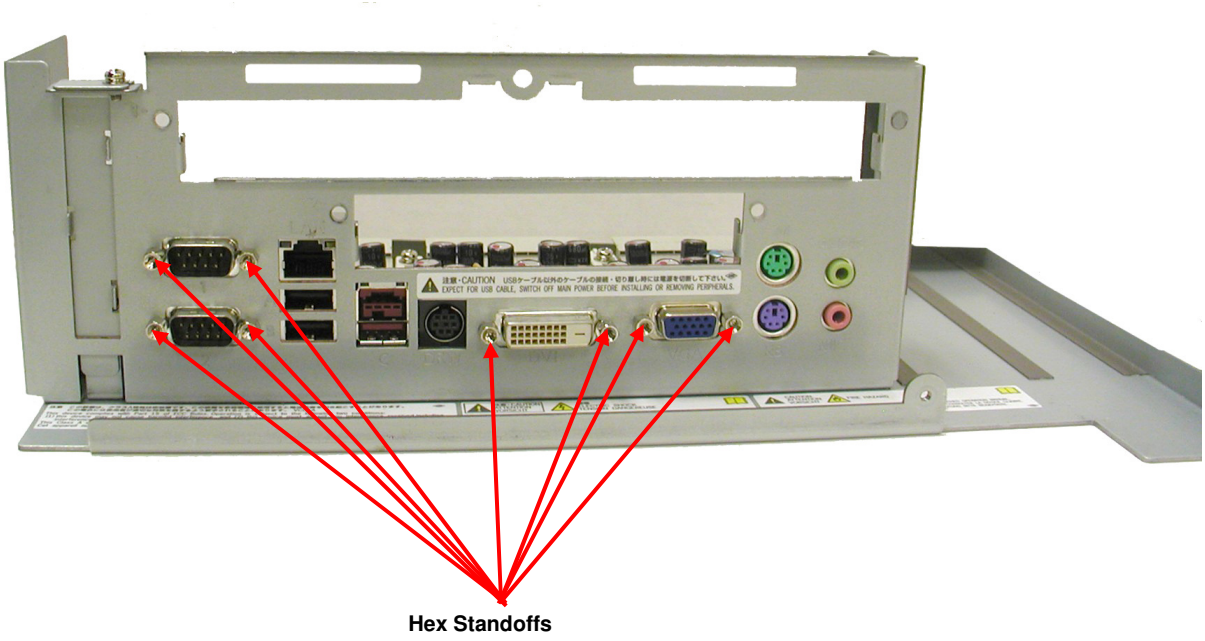




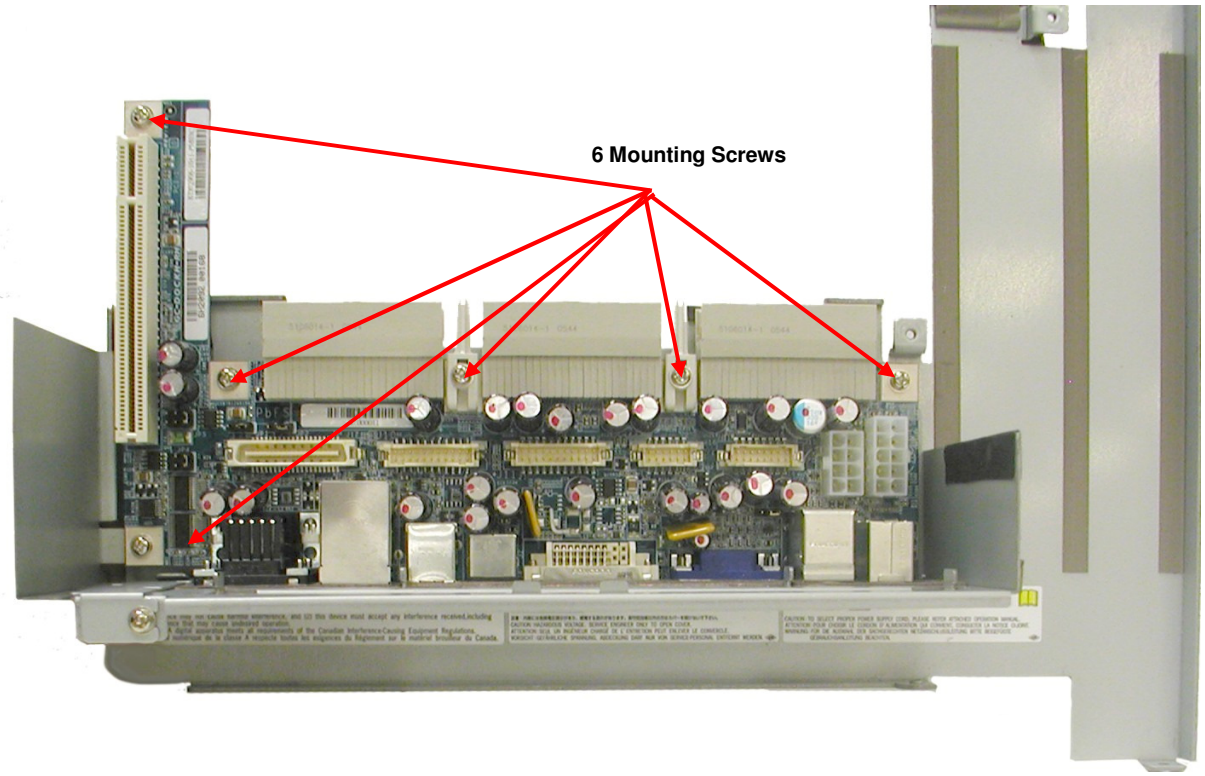


8. Remove the power supply. (See Section 7.12.)
9. Remove the PCI card (if needed).(See Section 7.11)

10. Remove the I/O board(s) (See Section 7.10)
11. Remove the 8 hex standoffs of the COM ports. (Retain standoffs.)



12. Remove the 6 screws attaching the backplane (retain screws) and remove the PCB from the chassis.



13. Insert new backplane PCB into the chassis fitting the com ports into the openings. Attach with the 6 screws.

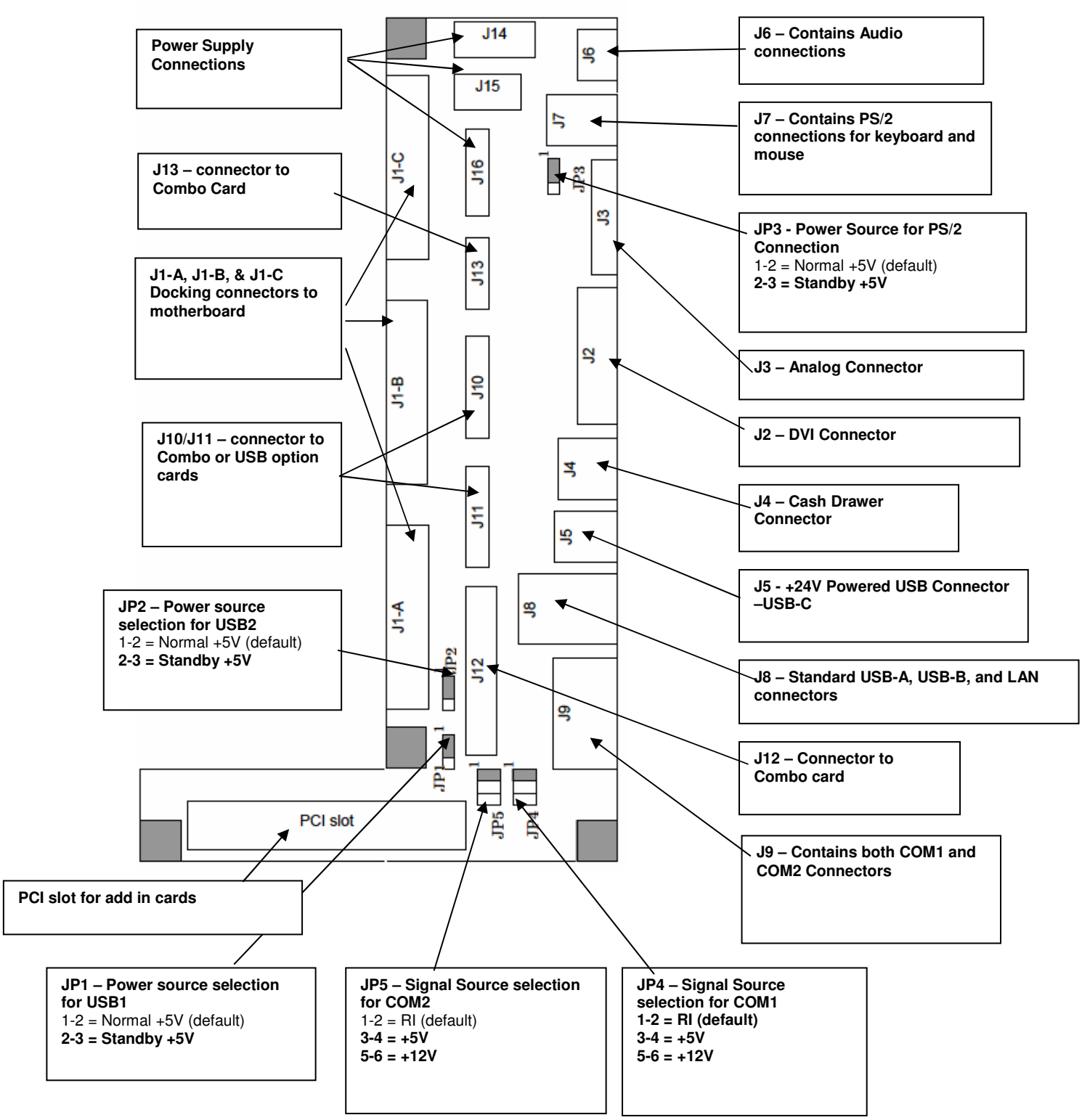
14. Attach the Hex Standoffs.

15. Reattach all I/O boards (Section 7.10) , PCI card (Section 7.11) and the power supply (Section 7.12).

16. Reinstall backplane assembly into the chassis.

Note: Before installing the new docking plane, be sure to set the jumper switches as indicated in the Docking Backplane Jumper Settings table below.

7.15 Backplane Jumpers & Connectors



Chapter 8 - Troubleshooting

8.1 Power cannot be turned on or the unit powers off after a few minutes. The power LED next to the power switch does not light up.

NOTE: Assume Windows operating system and OPOS/JavaPOS

No	Check item	Judgment	Action
1	Is the power cable connected?	Y N	Go to No. 2. Connect the power cable.
2	Is there power to the AC outlet? (Test with device known to work.)	Y N	Go to No.3. Turn on power to the distribution panel.
3	Does the power shut off after a few minutes?	Y N	Go to No. 4. End.
4	Go into the BIOS by hitting "F2" during boot up and "Load Optimized Defaults". Does the power stay on?	Y N	End. Go to No. 5.
5	Go into the BIOS ("F2") and go to the "hardware monitoring" section. Are there any warnings or readings close to a warning?	Y N	Correct situation (ex. replace PS fan, remount heatsink, clean vents, etc.) – End. Go to No. 6.
6	Is the 5V Standby LED light on?	Y N	Go to No. 8. Go to No. 7.
7	Is the cable from the operation panel to the motherboard securely installed?	Y N	Go to No. 8. Verify functionality after securely installing the cable. If still no power go to No 8.
8	Check pins on Docking Backplane connectors to insure they are not bent or shorted. Are any pins bent or shorted together?	Y N	Replace Docking Backplane – End. Go to No.9.
9	Can the power be turned on after replacing the power supply unit?	Y N	End. Go to No. 10.
10	Can the power be turned on after replacing the motherboard?	Y N	End. Go to No.11.
11	Can the power be turned on after replacing the Docking Backplane?	Y N	End. Go to No.12.
12	Can the power be turned on after replacing the operator panel?	Y N	End. Go to No. 13.
13	Can the power be turned on after replacing the I/O boards?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.2 System will not boot up

(The system fails to start up even though the power is turned on)

No	Check item	Judgment	Action
1	Is data displayed on the monitor during Power On Self Test (POST)?	Y N	Go to No.2., or go to LCD troubleshooting section if display goes blank after POST. Go to LCD troubleshooting section if no display.
2	Is there an error message displayed on the monitor?	Y N	See the POST message & act accordingly. Go to No.3.
3	Does the system get through the POST without hanging up?	Y N	Go to No. 7. Go to No. 4.
4	Replace Memory – Does system get through POST?	Y N	End. Go to No. 5.
5	Replace CPU chip – Does system get through POST?	Y N	End. Go to No. 6.
6	Replace motherboard – Does system get through POST?	Y N	End. Go to No. 13.
7	Can BIOS be accessed by hitting F2 during POST?	Y N	Load BIOS Defaults/Save & Exit/Go to #8. Go to No. 12.
8	Has the system(O/S)been installed?	Y N	Go to No.9. Install O/S and reboot.
9	Can the system boot up in “Safe Mode” by hitting F8 during POST?	Y N	O/S or driver reload is probably required. Go to No. 10.
10	Are the HDD cable/s or the CD-ROM cable connected?	Y N	Go to No.11. Connect the cable/s.
11	Can the system boot up from a bootable USB key or bootable CD by changing the BIOS to boot from that device first?	Y N	Reload O/S and reboot – If unable to load O/S go to No. 13. Go to No. 12.
12	Can the system be started after replacing the motherboard?	Y N	End. Go to No.13.
13	Can the system be started after replacing the HDD and reloading the O/S?	Y N	End. Go to No.14.
14	Can the system be started after replacing the power supply and docking backplane?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.3 Display/LCD shows correctly during Power On Self Test (POST), but fails when the Operating System (OS) starts

No	Check item	Judgment	Action
1	Does the display show properly if terminal is booted up in "Safe Mode" (F8 pressed during POST) (Windows Only)	Y N	Display drivers wrong or not installed properly – Go to Device Mgr and update all display adapters while in safe mode by right clicking on each driver and updating to the correct driver, if failure still occurs O/S could be corrupted – reload. Go to No. 2
2	Does the display go blank at different times when the OS is running?	Y N	Go to No 5 Go to No. 3
3	Does the display work properly if terminal is booted up from another device? (ex. USB key, CD, floppy)	Y N	Operating System could be corrupted on hard drive or hard drive is bad. Reseat hard disk and reboot. If failure still occurs reload software or remove and replace HDD. Go to No. 4
4	Go into the BIOS by hitting F2 during POST, and "Load Optimized Defaults". Does the display work properly?	Y N	End Go to No 5
5	Does the display function in Analog (VGA) mode but fail to display when when in digital mode (DVI)?	Y N	Check JP-1 on motherboard Go to No. 6
6	Does the display work properly after replacing the LCD?	Y N	End Go to No.6.
7	Does the display work properly after replacing the motherboard	Y N	End. Go to No. 7
8	Does the display work properly after replacing the Docking Backplane?	Y N	End Go to No. 8
9	Does the display work after replacing the Combo and/or the USB board?	Y N	End. Go to No. 10.
10	Does the display work after replacing the power supply?	Y N	End Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.4 Display/LCD is blank at all times

No	Check item	Judgment	Action
1	Is there power to the terminal and other peripherals?	Y N	Go to No. 2. Go to the Power Cannot Be Turned. On in troubleshooting section.
2	Are the display cables connected securely at both ends?	Y N	Go to No. 3. Connect the cable/s properly and retest.
3	Is display correct after adjusting brightness/contrast on the LCD?	Y N	End. Go to No. 4.
4	Is the display getting power? (Note: the D22 and D25 have a green LED on the front of the panel that will be lit if either the power or signal is supplied to the LCD. Having the light lit does not necessarily mean there is power to the LCD)	Y N	Go to No. 5. Replace source of power (ex. AC adapter, Powered USB I/O Board in Controller, powered USB cable, etc.).
5	Is there a signal getting to the LCD? While still powered up and running, remove the powered USB cable to the D22 or D25 to see if the green light stays lit.	Y N	Go to No. 6. Go to No. 7.
6	Does the display function after replacing the data cable?	Y N	End. Go to No. 7.
7	Does the display function after replacing the LCD/display?	Y N	End. Go to No. 8.
8	Does the display function after replacing the motherboard?	Y N	End. Go to No. 9.
9	Does the display function after replacing the docking backplane?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.5 Printing errors

No	Check items	Judgment	Action
1	Is receipt paper set correctly?	Y N	Go to No. 2. Set the receipt paper correctly.
2	Can you feed the paper with the paper feed key?	Y N	Go to No. 5. Go to No. 3.
3	Is the printer cable connected correctly?	Y N	Go to No. 4. Connect the cable correctly.
4	Is power applied to the printer? (Check the +24V)	Y N	Go to No. 5. Go to No. 7.
5	Can you execute test printing using the test program?	Y N	Check the software and printer cable. Go to No. 6.
6	Can you print after replacing the printer?	Y N	End. Go to No. 7.
7	Can you print after replacing the power supply?	Y N	End. Go to No. 8.
8	Can you print after replacing the Combo board?	Y N	End. Go to No. 9.
9	Can you print after replacing the motherboard?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.6 Impossible to input data from keyboard and/or abnormal input

No	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to No.2. Connect the cable correctly.
2	Is the keyboard set correctly? If the keyboard is a 133UQ keyboard the mode must be set to USB only or PS2 only depending upon the configuration.	Y N	Go to No.3. Set the keyboard mode to match the configuration of the keyboard – End.. To set to USB mode only hold down the left “Ctrl” key and the “Tab” key while powering up the terminal until the keyboard beeps. To set PS2 mode only hold down the left “Ctrl” key and “Caps Lock” key while powering up the terminal until the keyboard beeps.
3	Is keying enabled using the test program?	Y N	Check the software. Go to No.4.
4	After replacing keyboard, can you key input?	Y N	End. Go to No.5.
5	Can you input the key correctly after replacing docking back plane?	Y N	End. Go to No. 6.
6	Can you key input correctly after replacing the motherboard?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.7 Keyboard MSR reading error

No	Check item	Judgment	Action
1	Is the keyboard cable connected correctly?	Y N	Go to No.2. Connect the cable correctly.
2	Does the magnetic card meet ISO standards?	Y N	Go to No.3. Try a known good card and go to No. 3 if good card still fails.
3	Was the card swiped in the correct direction?	Y N	Go to No.4. Change the position.
4	Can it read correctly after cleaning the MSR with a cleaning card?	Y N	End. Go to No.5.
5	Does the MSR operate properly using the test program?	Y N	Check OPOS/JavaPOS drivers. Go to No. 6.
6	Is data read normally after replacing the MSR	Y N	End. Go to No. 7.
7	Can the system be activated after replacing the device the MSR is attached to?	Y N	End. Change the keyboard.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.8 Cash Drawer Operation errors

No	Check item	Judgment	Action
1	Is the cash drawer cable connected correctly?	Y N	Go to No.2. Connect the cable correctly.
2	Can the cash drawer be activated by WINCLD diagnostics?	Y N	Check the OPOS/JavaPOS drivers for the cash drawer. Go to No. 3.
3	Can the cash drawer be activated after replacing the drawer cable?	Y N	End. Go to No. 4.
4	Can the cash drawer be activated after replacing the drawer?	Y N	End. Go to No. 5.
5	Can the cash drawer be activated after replacing the docking backplane?	Y N	End. Go to No. 6.
6	Can the cash drawer be activated after replacing the motherboard?	Y N	End. Change the controller.

8.9 Customer display errors

No	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to No.2. Connect the cable correctly.
2	When you turn on the power, is the VFD version displayed? EX:[V01.00.05 FJ i] *	Y N	Go to No. 3. Go to No. 4.
3	Will WINCLD run normally using the VFD test program?	Y N	Possible software problem, check OPOS/JAVAPOS. Go to No. 4.
4	Will the display show properly after replacing the display cable?	Y N	End. Go to 5.
5	Does the VFD run properly after replacing the Combo board or USB board?	Y N	End. Go to No. 6.
6	Does the VFD run properly after replacing the power supply?	Y N	End. Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

8.10 Deletion of Date, time and disk setup data when turning off power

No	Check item	Judgment	Action
1	Is the voltage of the lithium battery on the motherboard normal?	Y N	Go to No.2. Change the motherboard.
2	Is the “Clear CMOS”jumper on the motherboard set to “normal” (jumper between pins 2-3)	Y N	Go to No. 3. Set jumper correctly.
2	Is operation executed normally after replacing the motherboard?	Y N	End. Change the controller.

8.11 The system fails to switch to battery backup when power failure occurs

No	Check item	Judgment	Action
1	Is the lead-acid battery connected?	Y N	Go to No.2. Connect the battery.
2	Is the lead-acid battery fuse blown?	Y N	Change battery fuse. Go to No.3.
3	Is the lead-acid battery voltage normal?	Y N	Go to No.4. Recharge or replace the lead battery.
4	Are the cables connected correctly inside the controller?	Y N	Go to No.5. Connect the cable correctly.
5	Does the battery backup test function normally?	Y N	Check OPOS/JAVAPOS is loaded properly. Go to No.5.
6	Can the battery backup be activated after replacing the docking board?	Y N	End No.7.
7	Can the battery backup be activated after replacing the power supply?	Y N	End Go to No.8.
8	Can the battery backup be activated after replacing the motherboard?	Y N	End Change the controller.

8.12 Operation errors of other peripheral devices

No	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to No. 2. Connect the cable correctly.
2	Does WINCLD operate properly with this peripheral?	Y N	Check the program. Go to No. 3.
3	Can the system be activated after replacing the associated I/O board?	Y N	End. Go to No. 4.
4	Can the system be activated after replacing the motherboard ?	Y N	End. Go to No. 5.
5	Can the system be activated after replacing the power supply?	Y N	End Change the controller.



Caution: Before replacing any boards, unplug the power cable and make sure the motherboard standby power LED light is out.

Chapter 9. BIOS Setup Procedures –

If a motherboard is replaced in the field, it may be necessary to change the date and time and setup the BIOS for the customer's configuration. The following information shows the default screens from the factory.

9.1 Opening CMOS Setup Screen

Turn ON power and press the "F2" key while the terminal goes through the power on self test.(POST).

9.1.1 CMOS Settings

If this is a new motherboard it will be necessary to set the date and time before releasing the terminal to the customer. To change the date and time select STANDARD CMOS FEATURES and manually make changes by inserting the current date and time. Run "LOAD OPTIMIZED DEFAULTS" then "SAVE & EXIT SETUP." Changing other default settings may be done at this time if the customer has settings other than the default settings listed here. **Changing settings that are not the default or not set for specific customer needs may adversely effect the operation of the unit.**

In most cases, the CMOS default settings are adequate and do not require changing. Follow the instructions on the screen to select STANDARD CMOS SETUP.

9.1.2 Main Menu – Motherboard

Note: An arrow [▸] indicates additional screens. Use [Enter] to advance to the next screen. Text shown in blue is dynamic meaning it either changes as the unit operates, or it is set for automatic mode and is not selectable in that mode.

Instructions or information on how to change settings appears in the right column under "Item Help." Information appropriate to the item selected appears under "Menu Level."

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility	
▸ Standard CMOS Features	▸ Hardware Monitoring
▸ Advanced BIOS Features	▸ Event Log
▸ Advanced Chipset Features	▸ Others
▸ Integrated Peripherals	Load Optimized Defaults
▸ Power Management Setup	▸ Set Supervisor/User Password
▸ PnP/PCI Configurations	Save & Exit Setup
▸ Frequency/Voltage Control	Exit Without Saving
Esc : Quit F10 : Save & Exit Setup	↑ ↓ → ← : Select Item
Time, Date, Hard Disk Type…	

9.1.3 Standard CMOS Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Standard CMOS Features	
Date (mm:dd:yy) Fri. Feb 10 2006 Time (hh:mm:ss) 8 : 51 : 38 Video [EGA/VGA] Halt On [All , But Keyboard] Base Memory 648K Extended Memory 220352K Total Memory 220376K	Item Help Menu Level ▸ ***Information or instructions will appear here for each selection.***
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults	

9.1.4 BIOS Features Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Advanced BIOS Features			
▸	CPU Feature	[Press Enter]	Item Help
▸	Hard Disk Booth Priority	[Press Enter]	
	Quick Boot	[Enabled]	Menu Level ▸
	Quiet Booth	[Disabled]	
	Wait for F1 if error	[Enabled]	***Information or instructions will appear here for each selection***
	Hit F2 Message Display	[Enabled]	
	CPU L1 & L2 Cache	[Enabled]	
	First Boot Device	[USB-FDD]	
	Second Boot Device	[CDROM]	
	Third Boot Device	[USB-CDROM]	
	Fourth Boot Device	[Hard Disk]	
	Boot Up NumLock Status	[On]	
	Gate A20 Option	[Fast]	
	Typematic Rate Setting	[Disabled]	
x	**Typematic Rate (Chars/Sec) 6**		
x	**Typematic Delay (Msec) 250**		
	PS/2 Mouse Support	[Enabled]	
	Small Logo(EPA) Show	[Enabled]	
	Summary Screen Show	[Disabled]	
	IOAPIC	[Disabled]	
	Extended IOAPIC	[Disabled]	
x	ACPI APIC Support	Disabled	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults			

9.1.5 CPU Feature Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility CPU Feature		
Manufacturer	**Intel**	Item Help
CPU Type	**Celeron M Mobile CPU**	
Frequency	**1300 MHz**	
FSB Speed	**400 MHz**	Menu Level ▸
Cache L1	**32KB**	***Information or instructions will appear here for each selection***.
Cache L2	**512 KB**	
Cache L3	**0 KB**	
Ratio Status	**Locked**	
Ratio Actual Value	**13x**	
L2 Cache ECC	**Enabled**	
Intel SpeedStep(tm) Tech	[Disabled]	
Geyservile Transition Model	**Native**	
Geyservile Type	**Geyservile III**	
Thermal Management	**Thermal Monitor I**	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.6 Hard Disk Boot Priority - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Hard Disk Boot Priority	
1. SCSI-0 : FT 579 D1 2. Bootable Add-in Cards	Item Help Menu Level ▸▸ ***Information or instructions will appear here for each selection***
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F6: Fail-safe Defaults F7: Optimized Defaults	

9.1.7 Advance Chipset Features Setup- Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Advanced Chipset Features		
		Item Help
	DRAM Timing Selectable [By SPD]	
x	**CAS Latency Time 2.5**	Menu Level ▸
x	**Active to Precharge Delay 7**	
x	**DRAM RAS# to CAS# Delay 3**	***Information or instructions will appear here for each selection.***
x	**DRAM RAS# Precharge 3**	
	DRAM Data Integrity Mode [ECC]	
	MGM Core Frequency [Auto Max 400/333MHz]	
	System BIOS Cacheable [Enabled]	
	Video BIOS Cacheable [Enabled]	
	Memory Hole At 15M-16M [Disabled]	
	AGP Aperture Size (MB) [64]	
	**** On-Chip VGA Setting ****	
	On-Chip VGA [Enabled]	
	On-Chip Frame Buffer Size [32MB]	
	Boot Display [CRT+EFP]	
	IGD-Device 2. Function 1 [Enabled]	
	Panel Scaling [Auto]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.8 Integrated Peripherals Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Integrated Peripherals		
▸ USB Configuration	[Press Enter]	Item Help
▸ OnChip IDE Device	[Press Enter]	
▸ Onboard Device	[Press Enter]	Menu Level ▸
▸ Super10 Device	[Press Enter]	***Information or instructions will appear here for each selection.***
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.9 USB Configuration Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility USB Configuration		
NEC USB Configuration:		Item Help
None		
ICH4 USB Configuration:		Menu Level ▸
USB Beep Message	[Disabled]	
Emulation Type	**[Auto]**	***Information or instructions will appear here for each selection.***
Device List Ex:		
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.10 OnChip IDE Device Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility OnChip IDE Device		
▸ IDE Channel Master	[CD-224E-N]	Item Help
▸ IDE Channel Slave	[None]	
On-Chip Channel PCI IDE	[Enabled]	Menu Level ▸
IDE Channel Master PIO	[Auto]	
IDE Channel Slave PIO	[Auto]	***Information or instructions will appear here for each selection.***
IDE Channel Master UDMA	[Auto]	
IDE Channel Slave UDMA	[Auto]	
IDE DMA transfer access	[Enabled]	
IDE HDD Block Mode	[Enabled]	
HDD S.M.A.R.T. Capability	[Disabled]	
Hard Disk Write Protect	[Disabled]	
ATA(P1) 88 Pin Cable	**None**	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.11 Onboard Device Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Onboard Device		
		Item Help
USB Controller	[Enabled]	
USB 2.0 Controller	[Enabled]	
Legacy USB Support	**Enabled**	Menu Level ▸
AC97 Audio	[Auto]	
Init Display First	[Onboard/AGP]	***Information or instructions will appear here for each selection.***
Onboard LAN Controller	[Enabled]	
SATA RAID Controller	[Enabled]	
NEC USB Controller	[Enabled]	
OXFord Com Controller	[Enabled]	
ICH4 Dev31 Func1. IDE	[Enabled]	
ICH4 Dev31 Func3. SMBUS	[Enabled]	
ICH4 Dev29 Func1. USB#1	[Enabled]	
ICH4 Dev29 Func2. USB#2	[Enabled]	
ICH4 Dev29 Func3. USB#3	[Enabled]	
Sound Blaster Decode	[Disabled]	
Microsoft Sound Decode	[Disabled]	
MIDI Decode	[Disabled]	
Adlib Ranch 388h-38Bh	[Enabled]	
LPC 2Eh-4FH Decode	**Enabled**	
LPC 2Eh-2Fh Decode	**Enabled**	
LAN ROM Controller	[Disabled]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.12 SuperIO Device Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility SuperIO Device		
		Item Help
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
Onboard Serial Port 3	[3E8]	Menu Level ▸
Serial Port 3 Use IRQ	[IRQ5]	
Onboard Serial Port 4	[2E8]	***Information or instructions will appear here for each selection.***
Serial Port 4 Use IRQ	[IRQ7]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.13 Power Management Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Power Management Setup		
		Item Help
	ACPI Function	[Enabled]
	ACPI Suspend Type	[S1&S3]
	Run VGABIOS if S3 Resume	[Auto]
	Power Management	[User Define]
	Video Off Method	[DPMS]
	Video Off In Suspend	[Yes]
	Suspend Type	[Stop Grant]
	MODEM Use IRQ	[3]
	Suspend Mode	[Disabled]
	HDD Power Down	[Disabled]
	Soft-Off by PWR-BTTN	[Delay 4 Sec.]
	Wake-Up by PCI Card	[Disabled]
	Power On by Ring	[Disabled]
	USB KB Wake-Up From S3	[Disabled]
	Resume by Alarm	[Disabled]
x	**Date(of Month) Alarm**	**0**
x	**Time(hh:mm:ss) Alarm**	**0: 0: 0**
	PWRON After PWR-Fail	[Former-Sts]
		Menu Level ▸
		Information or instructions will appear here for each selection.
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.14 PnP/PCI Configurations Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility PnP/PCI Configurations		
		Item Help
	Clear NVRAM [No] PNP OS Installed [No] Reset Configuraiton Data [Disabled] Resources Controlled By [Auto(ESCD)] x **IRQ Resources** **Press Enter** x **DMA Resources** **Press Enter** x **Memory Resources** **Press Enter** PCI/VGA Palette Snoop [Disabled] Assign IRQ for VGA [Disabled] PCI Latency Timer (CLK) [64]	Menu Level ▸ ***Information or instructions will appear here for each selection.***
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.15 Frequency/Voltage Control Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Frequency/Voltage Control		
		Item Help
	Auto Detect PCI Clk [Enabled] Spread Spectrum [Enabled] CPU Clock [100MHz]	Menu Level ▸ ***Information or instructions will appear here for each selection.***
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.16 Hardware Monitoring Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Hardware Monitoring		
Hardware Monitoring	[Enabled]	Item Help
CPU Temperature	**36° C**	Menu Level ▸
CPU Temp Warning Action	[Shutdown]	***Information or instructions will appear here for each selection.***
CPU Temp for Warning	[90℃/194℉]	
PSU Temperature	**28° C**	
PSU Temp Warning Action	[Shutdown]	
PSU Temp for Warning	[70℃/158℉]	
System Temperature	**20° C**	
System Temp Warning Action	[Disabled]	
System Temp for Warning	**[65℃/149℉]**	
Low temperature	[Disabled]	
x Temperature	**5℃/41℉**	
CPU Fan Speed	**0 RPM**	
CPU Fan Control	[Disabled]	
CPU Temp to up CPU Fan	**[80℃/176℉]**	
SYS Temp to up CPU Fan	**[45℃/113℉]**	
CPU Fan Warning	[Disabled]	
x CPU Fan Warning Speed	**4000 RPM**	
PSU Fan Speed	**2934 RPM**	
PSU Fan Control	[POS]	
CPU Temp to up PSU Fan	[80℃/176℉]	
SYS Temp to up PSU Fan	[45℃/113℉]	
PSU Temp to up PSU Fan	[55℃/131℉]	
PSU Fan Warning	[Shutdown]	
PSU Fan Warning Speed	[2000RPM]	
▸ Voltage Monitoring Group	[Press Enter]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.17 Event Log Setup - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Event Log		
DMI Event Log	[Enabled]	Item Help
Clear All DMI Event Log	[Yes]	
View DMI Event Log	[Enter]	Menu Level ▸
Mark DMI Events as Read	[Enter]	
Total Size	**63**	***Information or instructions will appear here for each selection.***
Free Size	**63**	
Event Log Validity	**Valid**	
ECC Event Logging	[Enabled]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.18 Others - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Others		
▸ System Information	[Press Enter]	Item Help
Power COM1 Configuration	[Disabled]	
Power COM2 Configuration	[Disabled]	Menu Level ▸
Self cleaning function	[Disabled]	
x **Near Day Range**	**One Week**	***Information or instructions will appear here for each selection.***
x **Clear Previous Data**	**Enter**	
Previous Clean Date	**1998/01/01**	
Watch Dog Timer Select	[Disabled]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.19 System Information - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility System Information		
		Item Help
Bios Version	**6.00 PG**	
Product Name	**Aurora**	Menu Level ▸
Build Date	**2006/04/20**	
BIOS ID	**P09**	***Information or instructions will appear here for each selection.***
Processor Type	**Celeron-M Mobile CPU**	
Processor Speed	**1300 MHz**	
Processor Count	**1**	
Memory DIMM 1	**None**	
Memory DIMM 2	**DDR333 256MB**	
MAC Address	**xxxxxxxxxxxx**	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

9.1.20 Set Supervisor/User Passwords - Motherboard

Factory Default Settings

Phoenix – AwardBIOS CMOS Setup Utility Set Supervisor/User Password		
		Item Help
Set Supervisor Password	[PRESS ENTER]	Menu Level ▸
Set User Password	[PRESS ENTER]	***Information or instructions will appear here for each selection.***
Super Password Status	**NO INSTALLED**	
User Password Status	**NO INSTALLED**	
User Access Level	[LIMITED]	
Security Option	[SET UP]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F7: Optimized Defaults		

NOTE: Security Option [SYSTEM} only on system boot.

Note: Security Option {SYSTEM] only on system boot.

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Chapter 10 SPARE AND UPGRADE PARTS LIST

Parts labeled “Reference only” are not orderable and are listed for reference only.

Part numbers with the extension "K" are Field Upgrade Kits.

DESCRIPTION	SUPPLIER #	PART #	COMMENTS
TeamPoS 3000 XL Controller Parts			
Chassis, TP3K Compact, WHT	N/A	11000283	
ASSY TP3K Common Unit/No Plastics	KD02907-310X	11000167	
CVR TP3K Compact Top Cover/WHT	KD30277-Y005	11000015	
CVR TP3K Compact Right Side/WHT	KD30277-Y006	11000269	
CVR TP3K Compact Left Side/WHT	KD30277-Y007	11000270	
CVR TP3K Compact Side Fill/WHT	KD30277-Y010	11000273	
PNL TP3K Front/Keylock/Compact/WHT		11000019	
PNL TP3K Back/Compact/WHT		11000035	
Chassis, TP3K Compact, BLK	**N/A**	**11000284**	
ASSY TP3K Common Unit/No Plastics	KD02907-310X	11000167	
CVR TP3K Compact Top Cover/BLK	**KD30277-Z005**	**11000016**	
CVR TP3K Compact Right Side/BLK	**KD30277-Z006**	**11000271**	
CVR TP3K Compact Left Side/BLK	**KD30277-Z007**	**11000272**	
CVR TP3K Compact Side Fill/BLK	**KD30277-Z010**	**11000274**	
PNL TP3K Front/Keylock/Compact/BLK		**11000020**	
PNL TP3K Back/Compact/BLK		**11000036**	
Chassis, TP3K STD/WHT	N/A	11000285	
ASSY TP3K Common Unit/No Plastics	KD02907-310X	11000167	
ASSY Standard Chassis Extension	N/A	11000275	
CVR TP3K Standard Cover/WHT	KD30277-Y075	11000017	
PNL TP3K Front/Keylock/Standard/WHT		11000176	
PNL TP3K Back/Standard/WHT		11000037	
Chassis, TP3K STD/BLK	**N/A**	**11000286**	
ASSY TP3K Common Unit/No Plastics	KD02907-310X	11000167	
ASSY Standard Chassis Extension	N/A	11000275	
CVR TP3K Standard Cover/BLK	**KD30277-Z075**	**11000018**	
PNL TP3K Front/Keylock/Standard/BLK		**11000177**	
PNL TP3K Back/Standard/BLK		**11000038**	
Base Chassis Breakdown			
ASSY TP3K Common Unit/No Plastics, With Control Panel		11000647	
ASSY TP3K Common Unit/No Plastics, No Control Panel	KD02907-310X	11000167	
Battery Cable	KD02906-1701	11000351	
Feet	KD30277-Y090	11000327	
Power Supply	KD02906-1100	11000168	
PSU Fan	3110RL	11000369	
BackPlane PWA	KD02906-1041	11000178	
Control Panel PWA	KD20053-B90X	11000179	
Control Panel Cable	KD02906-1711	11000092	
TP3 I/O Blanking Plate/Short	KD30277-Y039	11000293	
TP3 I/O Blanking Plate/Long	KD30277-Y041	11000294	
Screw (see Agile for full description)	F6-SW2N3-06121	11000050	
Front Panel Breakdown			
Front Panel Thumb Screw	KD30277-Y098	11000326	
Front Panel Metal Locking Bracket	KD30277-Y051	11000331	

Front Panel Keylock & Key	C327-2	11000332	
Front Panel CD Hole Cover, WHT	KD30277-Y012	11000333	
Front Panel CD Hole Cover, BLK	**KD30277-Z012**	**11000334**	
Front Panel Switch Cover, WHT	KD30277-Y004	11000335	
Front Panel Switch Cover, BLK	**KD30277-Z004**	**11000336**	
Chassis Extension Breakdown			
ASSY Standard Chassis Extension	N/A	11000275	
Extension, Standard Chassis	KD30277-E060	11000169	
LBL TP3K Peel Label	KD91313-0519	11000276	
TP3K Rubber Foot	KD30277-Y090	11000277	
Screw	F6-SSA3-06121	11000378	
Motherboard			
OPN TP3K Motherboard/SHE	KD02906-1011	11000021	Includes plate
CPU Options			
OPN TP3K CPU/1.3 Celeron M		11000027	
CPU, Intel, Celeron M, 1.3 GHz		11000240	Same as 90000962
OPN TP3K CPU/1.5 Celeron M		11000028	
CPU, Intel, Celeron M, 1.5 GHz		11000234	
OPN TP3K CPU/1.6 Pentium M		11000029	
CPU, Intel, Pentium M, 1.6 GHz		11000239	Same as 90000833
OPN TP3K CPU/2.0 Pentium M		11000241	
CPU, Intel, Pentium M, 2.0 GHz		11000242	
HEATSINK - Socket 479	CA49007-7057	11000235	
Memory Options			
OPN TP3K Memory/DDR/256MB		11000022	Same as 90000784
OPN TP3K Memory/DDR/512MB		11000023	Same as 90000785
OPN TP3K Memory/DDR/1GB		11000024	Same as 90000786
OPN TP3K Memory/DDR/2G		11000095	1G x 2
Hard Disk Options			
OPN TP3K HDD ASSY/2.5"/40GB	N/A	11000030	
HDD/2.5"/40GB	KD02906-5700	11000243	
TP3K 2.5" HDD Bracket	KD30277-Y048	11000278	
Screw	F6-SW2N3-05121	11000594	
Plastic Pull Tab	KD30277-Y096	11000732	
Battery Backup Options			
OPN TP3K Battery Backup, 3Year	KD02906-1140	11000039	
OPN TP3K Battery Backup, 6Year	KD02906-1141	11000040	
Battery Fuse, Red, 10A	297010	11000361	
OPN TP3K Full BBU	KD03207-C310	11000041	
Battery Assy	KD02906-1145	11000354	
Battery Tray	KD30277-Y062	11000355	
Battery Cover	KD30277-Y064	11000356	
Converter PWA	KD02906-1101	11000357	
Rear Panel	KD30277-Y063	11000358	
Cable, Converter to PSU	KD02906-0911	11000359	
Cable, Converter to Battery	KD02906-0921	11000360	
Battery Fuse, Blue, 15A	297015	11000362	
Screw (see Agile for full description)	F6-SW2N3-06121	11000050	
I/O Board Options			
OPN TP3K I/O BRD/ 3 12VDC PUSB	KD03207-E110	11000042	
P-USB I/O Board with Panel	KD03207-F003	11000342	
USB I/O Data Cable	KD02906-1741	11000343	
OPN TP3K I/O BRD/COMBO	KD03207-E100	11000043	
Combo I/O Controller with Panel	KD03207-F001	11000345	
Combo I/O Data Cable	KD02906-1751	11000346	

Combo I/O Power Cable	KD02906-1761	11000347	
OPN TP3K I/O BRD/COMBO&COM	KD03207-E120	11000292	
OPN TP3K I/O BRD/COMBO (See Above)	KD03207-E100	11000043	
Comm I/O Board with Panel	KD03207-F002	11000348	
Comm I/O Data Cable	KD02906-0931	11000349	
CD Drive Options			
OPN TP3K CD-ROMWHT	KD03204-C100	11000031	
OPN TP3K CD-ROM/BLK	**KD03204-C110**	**11000032**	
CD-ROM DRIVE, Standard	CD-224E-N29	11000251	Same as 90000189
OPN TP3K CD-RW/DVD/WHT	KD03204-C200	11000033	
OPN TP3K CD-RW/DVD/BLK	**KD03204-C210**	**11000034**	
CD-RW/DVD-ROM DRIVE-24X/24X/24X	DW-224E-C29	11000252	
CD-RW/DVD-ROM DRIVE BEZEL/BLK	**KD02906-1161**	**11000136**	
CD-R Bracket	KD30277-Y046	11000280	
Interface Board	CA21258-B71X	11000291	
CD Sheet	CA32154-Y095	11000368	
CD IDE Cable	KD02906-1721	11000249	
CD Power Cable	KD02906-1731	11000281	
Screw (see Agile for full description)	CA82002-0960	11000053	
Add-In Options			
OPN TP3K WLAN/802.11B/MPCI/ANT		11000142	Same as 90000854
OPN LAN ETH 10/100 NET CARD		11000055	Same as 90001455
OPN TP3 WLAN/802.11ABG/PCI/ANT		11000054	Same as 90001373
LCD Displays			
DSP D22 12.1"LCD/No touch/WHT	KD03207-B161	11000738	
DSP D22 12.1"/Resist touch/WHT	KD03207-B171	11000739	
DSP D25 15"LCD/No touch/WHT	KD03207-B381	11000744	
DSP D25 15"/Resist touch/WHT	KD03207-B361	11000742	
DSP D25A 15"/IR Touch/WHT	KD03207-B371	11000743	
DSP D22 12.1"LCD/No touch/BLK wSilver Bezel	**KD03207-B261**	**11000741**	
DSP D22 12.1"/Resist touch/BLK wSilver Bezel	**KD03207-B271**	**11000740**	
DSP D25 15"LCD/No touch/BLK wSilver Bezel	**KD03207-B481**	**11000747**	
DSP D25 15"/Resist touch/BLK wSilver Bezel	**KD03207-B461**	**11000745**	
DSP D25A 15"/IR Touch/BLK wSilver Bezel	**KD03207-B471**	**11000746**	
LCD Display Stands			
OPN D22/25 Stand/Stacked/WHT		11000064	
D22/D25 Stand, Stacked, WHT	KD30277-D510	11000352	
LCD Mounting Bracket, Stacked	KD30277-Y525	11000316	
Screw (see Agile for full description)	F6-SW2N3-08121	11000051	
OPN D22/25 Stand/Stacked/BLK		**11000073**	
D22/D25 Stand, Stacked, BLK	**KD30277-D511**	**11000353**	
LCD Mounting Bracket, Stacked	KD30277-Y525	11000316	
Screw (see Agile for full description)	F6-SW2N3-08121	11000051	
LCD Display Options			
OPN D22/25 MSR 3-Track/WHT	KD02906-1400	11000091	
OPN KEYPAD MSR/D22&D25/WHT	KD02906-1408	11000093	
OPN D22/25 MSR 3-Track/BLK	**KD02906-1401**	**11000094**	
OPN KEYPAD MSR/D22&D25/BLK	**KD02906-1404**	**11000096**	
Customer Displays			
DSP VF60 VFD/2 x 20/WHT	KD02906-1503	11000076	
DSP VF60 VFD/2 x 20/BLK	**KD02906-1504**	**11000077**	
Customer Display Options			
OPN VF60 Pole/Integrated/WHT	KD30277-D650	11000078	Telescoping Pole

OPN VF60 Pole/Integrated/BLK	**KD30277-D651**	**11000079**	Telescoping Pole
OPN VF50/VF60 Pole Kit/0.15M/WHT	N/A	11000300	
Adapter, Display Collet, WHT		11000313	
Mount for Display Pole, WHT		11000314	
Plastic Cap, Dispersed Config, WHT		11000315	
Display Pole, 0.15M, WHT		11000289	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 Pole Kit/0.15M/BLK	**N/A**	**11000301**	
Adapter, Display Collet, BLK		**11000321**	
Mount for Display Pole, BLK		**11000322**	
Plastic Cap, Dispersed Config, BLK		**11000323**	
Display Pole, 0.15M, BLK		**11000324**	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 Pole Kit/0.3M/WHT	N/A	11000302	
Adapter, Display Collet, WHT		11000313	
Mount for Display Pole, WHT		11000314	
Plastic Cap, Dispersed Config, WHT		11000315	
Display Pole, 0.3M, WHT		11000290	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 Pole Kit/0.3M/BLK	**N/A**	**11000303**	
Adapter, Display Collet, BLK		**11000321**	
Mount for Display Pole, BLK		**11000322**	
Plastic Cap, Dispersed Config, BLK		**11000323**	
Display Pole, 0.3M, BLK		**11000325**	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 Pole Kit/0.6M/WHT	N/A	11000304	
Adapter, Display Collet, WHT		11000313	
Mount for Display Pole, WHT		11000314	
Plastic Cap, Dispersed Config, WHT		11000315	
Display Pole, 0.6M, WHT		11000320	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 Pole Kit/0.6M/BLK	**N/A**	**11000305**	
Adapter, Display Collet, BLK		**11000321**	
Mount for Display Pole, BLK		**11000322**	
Plastic Cap, Dispersed Config, BLK		**11000323**	
Display Pole, 0.6M, BLK		**11000326**	
Screw (see Agile for full description)	ZPC-M4.8X19MM-0-Z	11000045	
OPN VF50/VF60 POLE BASE/WHT	N/A	11000306	
Pole Base VF50/VF60, WHT		11000289	
Screw (see Agile for full description)	By Desc	11000046	
Rubber Feet		11000327	
OPN VF50/VF60 POLE BASE/BLK	**N/A**	**11000307**	
Pole Base VF50/VF60, BLK		**11000290**	
Screw (see Agile for full description)	By Desc	11000046	
Rubber Feet		11000327	
Printers			
PTR CT10 Therm/Dual Color/WHT	KD02906-1202	11000133	
PTR CT10 Therm/Dual Color/BLK	**KD02906-1203**	**11000134**	
PTR DT50III/WHT	C31C625128	11000187	

PTR DT50III/BLK		11000197	
DT50X USB Interface	C32C825950	11000190	
Printer Options			
OPN TP3K CT10 Spacer/CMPT/WHT	KD03207-K140	11000123	
Spacer, PRS, CT-10 Printer, WHT	KD30277-Y851	11000295	
Spacer, PRF, CT-10 Printer, WHT	KD30277-Y852	11000297	
Front of Printer Spacer Bracket	KD30277-Y860	11000380	
Printer Bracket	KD30277-Y861	11000254	
Bracket, DT50X Spacer	KD30277-Y835	11000296	Spacer Bracket, Between PTR/LCD
Screw	F6-SW2N3-10121	11000597	
Screw	F6-SSA3-08121	11000593	
OPN TP3K CT10 Spacer/CMPT/BLK	**KD03207-K150**	**11000124**	
Spacer, PRS, CT-10 Printer, BLK	**KD30277-Z851**	**11000387**	
Spacer, PRF, CT-10 Printer, BLK	**KD30277-Z852**	**11000388**	
Front of Printer Spacer Bracket	KD30277-Y860	11000380	
Printer Bracket	KD30277-Y861	11000254	
Bracket, DT50X Spacer	KD30277-Y835	11000296	Spacer Bracket, Between PTR/LCD
Screw	F6-SW2N3-10121	11000597	
Screw	F6-SSA3-08121	11000593	
OPN TP3K Bracket/DT50X		11000056	
DT50 Mounting Bracket, Stacked	CA32154-Y151	11000377	
Screw	F6-SSA3-08121	11000047	
OPN TP3K DT50 Spacer/STD/WHT		11000125	
DT50 Spacer TP3K Standard/WHT	KD30277-Y850	11000298	
Spacer Bracket	KD30277-Y835	11000296	
Screw	F6-SSA3-08121	11000047	
OPN TP3K DT50 Spacer/ STD/BLK		**11000126**	
DT50 Spacer TP3K Standard/BLK	**KD30277-Z850**	**11000299**	
Spacer Bracket	KD30277-Y835	11000296	
Screw	F6-SSA3-08121	11000047	
Keyboards			
KYB 88U 88 Key/KeyLock/USB/WHT	KD02906-1300	11000139	
KYB 88U 88 Key/KeyLock/USB/BLK	**KD02906-1301**	**11000140**	
KYB 133UQ, No Options, WHT		11000199	
KYB 133UQ, TouchPad, WHT		11000200	
KYB 133UQ, No Options, BLK		**90001515**	
KYB, 133UQ/3-Track MSR/Touch Pad/BLK		**90001493**	
Keyboard Options			
OPN 88U MSR/3-Track	KD02906-1122 or 1123	11000141	1123 = Bulk Packed
OPN TP3K 88U KYB Brackets, Stacked		11000057	
88U KYB Front Mounting Bracket, Stacked	KD30277-Y150	11000337	
88U KYB Rear Mounting Bracket, Stacked	KD30277-Y151	11000338	
Screw	F6-SSA3-08121	11000047	
OPN TP3K 133UQ KYB Bracket, Stacked STD		11000339	
133UQ Keyboard Bracket, Stacked Standard	KD30277-Y152	11000340	
Screw	F6-SSA3-08121	11000047	
	-	-	

Cash Drawers			
CDR TP15 Compact, Lock, WHT	KD30903-2203	11000149	Inc 4B/6C Till
CDR TP15 Compact, Lock, BLK	**KD30903-2213**	**11000150**	Inc 4B/6C Till
CDR TP15 Standard, No Lock, WHT	KD30903-2351	11000151	Inc 5B/6C Till
CDR TP15 Standard, No Lock, BLK	**KD30903-2361**	**11000152**	Inc 5B/6C Till
CDR TP15 Standard, Lock, WHT	KD30903-2301	11000153	Inc 5B/6C Till
CDR TP15 Standard, Lock, BLK	**KD30903-2311**	**11000154**	Inc 5B/6C Till
OPN TP15 Till, Compact, 4 Bill/6 Coin	CA82003-0311	11000364	
OPN TP15 Till Cover with Keys, Compact	CA82003-0313	11000365	
OPN TP15 Till, Standard, 5 Bill/6 Coin	CA31952-0210	11000366	
OPN TP15 Till Cover with Keys, Standard	CA31952-0217	11000367	
Keylock & 2Keys, Compact or Standard	KD30903-2223	11000058	
Cables			
CBL D22 D25 Pwrd USB/0.65M/WHT	KD02906-1611	11000097	
CBL D22 D25 Pwrd USB/2.0M/WHT	KD02906-1612	11000098	
CBL D22 D25 Pwrd USB/3.8M/WHT	11000070	11000070	
CBL D22 D25 Pwrd USB/0.65M/BLK	**KD02906-1614**	**11000100**	
CBL D22 D25 Pwrd USB/2.0M/BLK	**KD02906-1615**	**11000101**	
CBL D22 D25 Pwrd USB/3.8M/BLK	**11000102**	**11000102**	
CBL D22 D25 VGA/0.65M/WHT	KD02906-0941	11000103	
CBL D22 D25 VGA/2.0M/WHT	KD02906-0942	11000104	
CBL D22 D25 VGA/4.0M/WHT	KD02906-0943	11000105	
CBL D22 D25 VGA/0.65M/BLK	**KD02906-0944**	**11000106**	
CBL D22 D25 VGA/2.0M/BLK	**KD02906-0945**	**11000107**	
CBL D22 D25 VGA/4.0M/BLK	**KD02906-0946**	**11000108**	
CBL D22 D25 DVI/0.65M/WHT	KD02906-0961	11000109	
CBL D22 D25 DVI/2.0M/WHT	KD02906-0962	11000110	
CBL D22 D25 DVI/4.0M/WHT	KD02906-0963	11000111	
CBL D22 D25 DVI/0.65M/BLK	**KD02906-0964**	**11000112**	
CBL D22 D25 DVI/2.0M/BLK	**KD02906-0965**	**11000113**	
CBL D22 D25 DVI/4.0M/BLK	**KD02906-0966**	**11000114**	
CBL D22 D25 USB A-A/0.65M/WHT	11000117	11000117	
CBL D22 D25 USB A-A/2.0M/WHT	11000118	11000118	
CBL D22 D25 USB A-A/3.8M/WHT	11000119	11000119	
CBL D22 D25 USB A-A/0.65M/BLK	**11000120**	**11000120**	
CBL D22 D25 USB A-A/2.0M/BLK	**11000121**	**11000121**	
CBL D22 D25 USB A-A/3.8M/BLK	**11000122**	**11000122**	
CBL D22 D25 Audio/0.7M/WHT	KD02906-1641	11000127	
CBL D22 D25 Audio/2.0M/WHT	KD02906-1642	11000128	
CBL D22 D25 Audio/4.0M/WHT	KD02906-1643	11000129	
CBL D22 D25 Audio/0.7M/BLK	**KD02906-1644**	**11000130**	
CBL D22 D25 Audio/2.0M/BLK	**KD02906-1645**	**11000131**	
CBL D22 D25 Audio/4.0M/BLK	**KD02906-1646**	**11000132**	
CBL PTR USB/24V PWR/0.65M/WHT	11000071	11000071	Same as 90000698
CBL PTR USB/24V PWR/3.8M/WHT	11000072	11000072	Same as 90000850
CBL PTR USB/24V PWR/0.65M/BLK	**11000137**	**11000137**	
CBL PTR USB/24V PWR/3.8M/BLK	**11000138**	**11000138**	
CBL 133UQ/88U USB A-B/1.2M/WHT	11000143	11000143	
CBL 133UQ/88U USB A-B/1.2M/BLK	**11000144**	**11000144**	
CBL 133UQ/88U USB A-B/3.5M/WHT	11000145	11000145	
CBL 133UQ/88U USB A-B/3.5M/BLK	**11000146**	**11000146**	

CBL ASSY, TP15 to TP3K, RJ11, 0.5M, WHT	KD02906-1631	11000155	
CBL ASSY, TP15 to TP3K, RJ11, 0.5M, BLK	**KD02906-1634**	**11000156**	
CBL ASSY, TP15 to TP3K, RJ11, 4.0M, WHT	KD02906-1633	11000157	
CBL ASSY, TP15 to TP3K, RJ11, 4.0M, BLK	**KD02906-1636**	**11000158**	
CBL ASSY, TP15 to TP3K, RJ11, 2.0M, WHT	KD02906-1632	11000381	
CBL ASSY, TP15 to TP3K, RJ11, 2.0M, BLK	**KD02906-1635**	**11000383**	
CBL TP15 Dual TP3K/Stacked/WHT	11000159	11000159	
CBL TP15 Dual TP3K/Stacked/BLK	**11000160**	**11000160**	
CBL TP15 Dual/4.0M/WHT	KD02906-0973	11000161	
CBL TP15 Dual/4.0M/BLK	**KD02906-0976**	**11000162**	
CBL TP15 CD to PTR/0.5/WHT	KD02906-0881	11000163	
CBL TP15 CD to PTR/0.5/BLK	**KD02906-0884**	**11000164**	
CBL TP15 CD to PTR/2.0/WHT	KD02906-0882	11000165	
CBL TP15 CD to PTR/2.0/BLK	**KD02906-0885**	**11000166**	
CBL TP15 CD to PTR/4.0/WHT	KD02906-0883	11000382	
CBL TP15 CD to PTR/4.0/BLK	**KD02906-0886**	**11000384**	
CBL TP15 Dual/2.0M/WHT	KD02906-0972	11000385	
CBL TP15 Dual/2.0M/BLK	**KD02906-0975**	**11000386**	
CBL VF60 Pwrd USB/0.85M/WHT	KD02906-1621	11000080	
CBL VF60 Pwrd USB/1.5M/WHT	11000081	11000081	
CBL VF60 Pwrd USB/4.0M/WHT	KD02906-1623	11000082	
CBL VF60 Pwrd USB/0.85M/BLK	**KD02906-1624**	**11000083**	
CBL VF60 Pwrd USB/1.5M/BLK	**11000084**	**11000084**	
CBL VF60 Pwrd USB/4.0M/BLK	**KD02906-1626**	**11000085**	
CBL 92U USB, 12V/0.65M/WHT	11000025	11000025	
CBL 92U USB, 12V/3.8M/WHT	11000026	11000026	
CBL 92U USB, 12V/0.65M/BLK	**11000328**	**11000328**	
CBL 92U USB, 12V/3.8M/BLK	**11000329**	**11000329**	
CBL Mains, US, WHT	11000044	11000044	Same as 90000255
CBL Mains, US, BLK	**11000049**	**11000049**	Same as 2500.09
DIAGNOSTIC TOOLS			
USB Loopback kit		90001547	Includes WinXPE, WinCLD
Key, 256M USB		90001542	
Loopback, 24V P-USB		90001541	
Loopback, 12V P-USB		90001540	
DOCUMENTS & MANUALS			
Intelligent PIN Description Doc		11000081	
Installation & Maintenance Manual		D900000145	


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