FUJITSU

Installation & Maintenance Manual

TeamPoS 3000 XE

INTOUCH WITH RETAILING™

*Team***PoS** *3000 XE*®
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

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

Attention: Il y a danger d'explosion s'il y a remplacement incorrect de la batterie, remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux insturctions du fabricant.

Hazardous Voltage

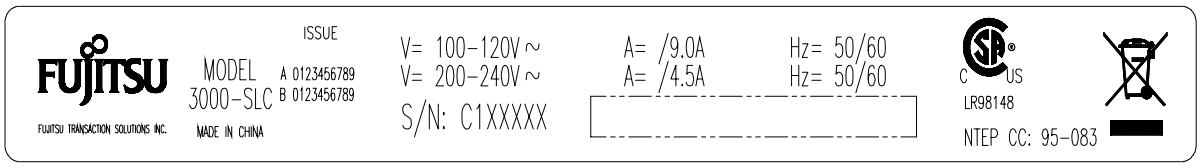
Warning: Disconnect supply before servicing.

Advertissement: Couper le courant avant l'entretien.

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

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.



Recycling

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

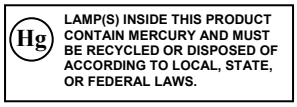


Table of Contents

Table of Contents (continued)

Table of Contents (continued)

Figures

Figures (continued)

Figures (continued)

Tables

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Chapter 1 Overview

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

The following sections provide a brief overview of the TeamPoS 3000 XE control units and peripherals.

with 12.1" LCD **with 15" LCD**

Figure 1-1. TeamPoS 3000 XE

The TeamPoS 3000 XE is a state-of-the-art Point-of-Sale (PoS) terminal. Built on an industry standard platform, the TeamPoS 3000 XE leverages Intel embedded components and standard operating systems, software applications and peripherals. It supports standard PC components such as a high-performance CPU, 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 includes a 3.5" hard disk drive, and on board LAN, USB, Combo board and a choice of operating systems. Memory capacity, the number of powered RS232 and USB ports are also user-selectable. LCDs of 12.1 or 15" are optional.

The TeamPoS 3000 XE also contains functionality required by retail application software and is "retail hardened" to support the harsh environments found in most retail stores. A variety of possible configurations supports your application requirements.

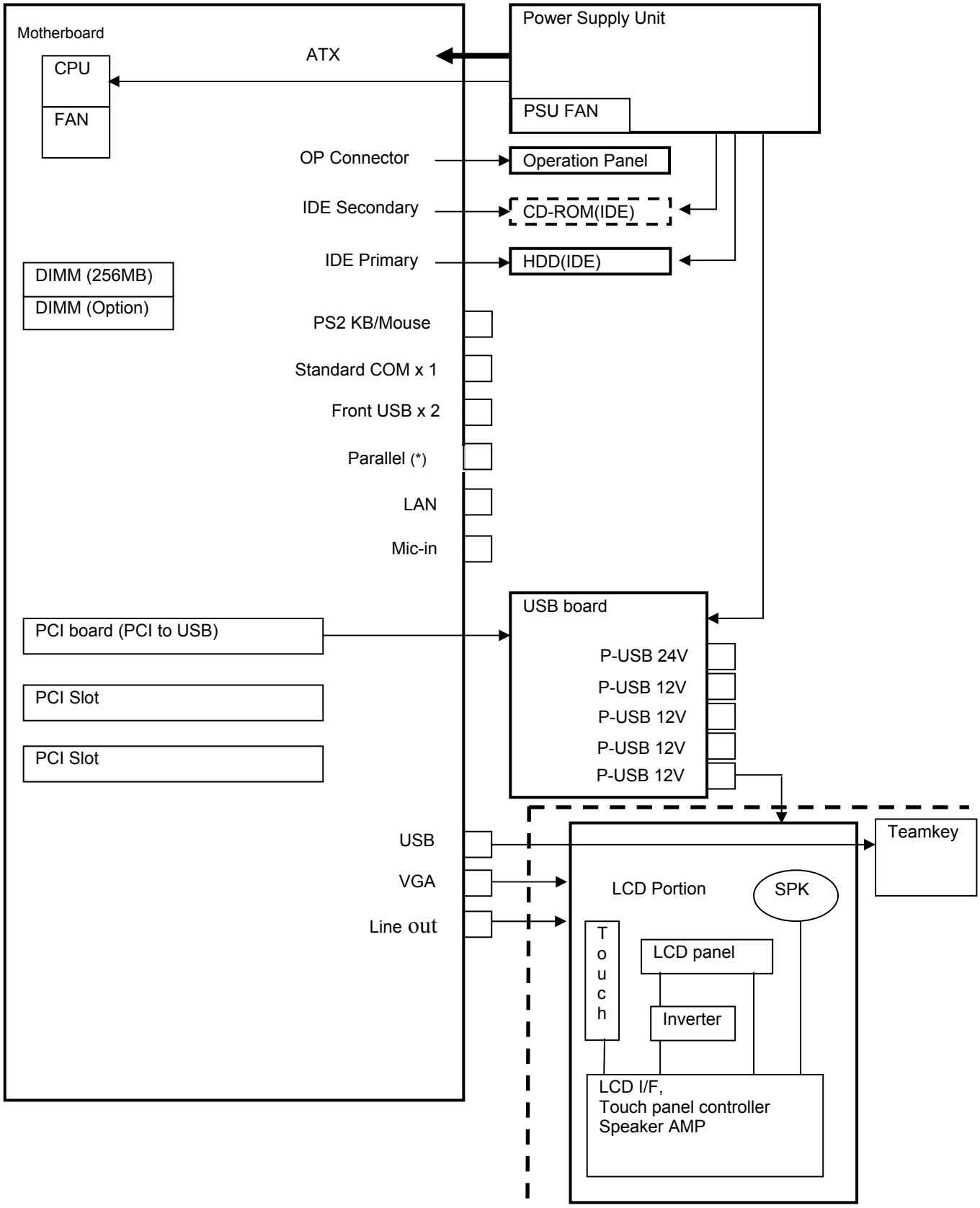

Figure 1-2. TeamPoS 3000 XE Control Unit with USB Flow Diagram

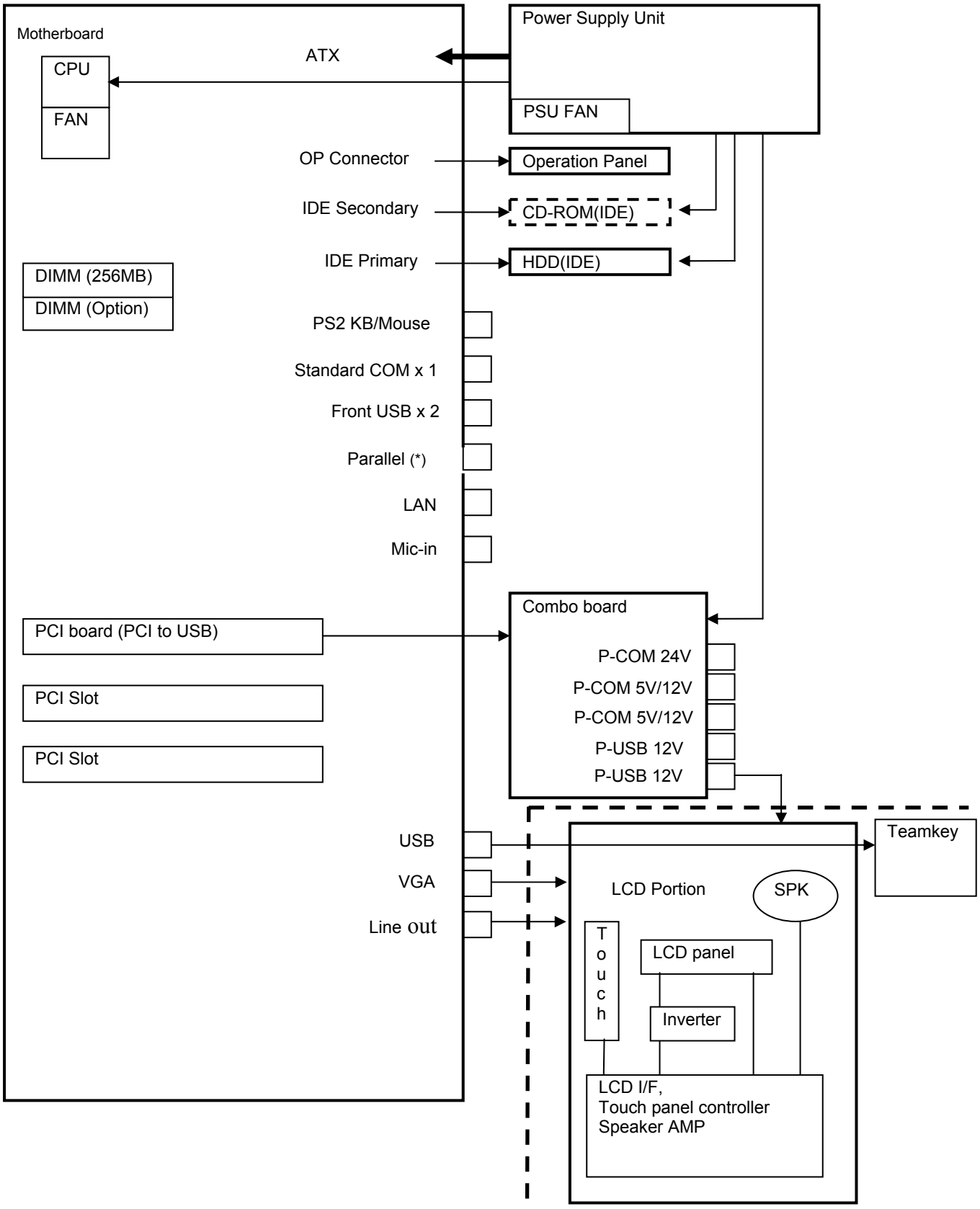

Figure 1-3. TeamPoS 3000 XE Control Unit with Combo Board Flow Diagram

1.1. Front Panel LEDs and Switches

Figure 1-4 and Table 1-1 show the TeamPoS 3000 XE unit LEDs and switches.

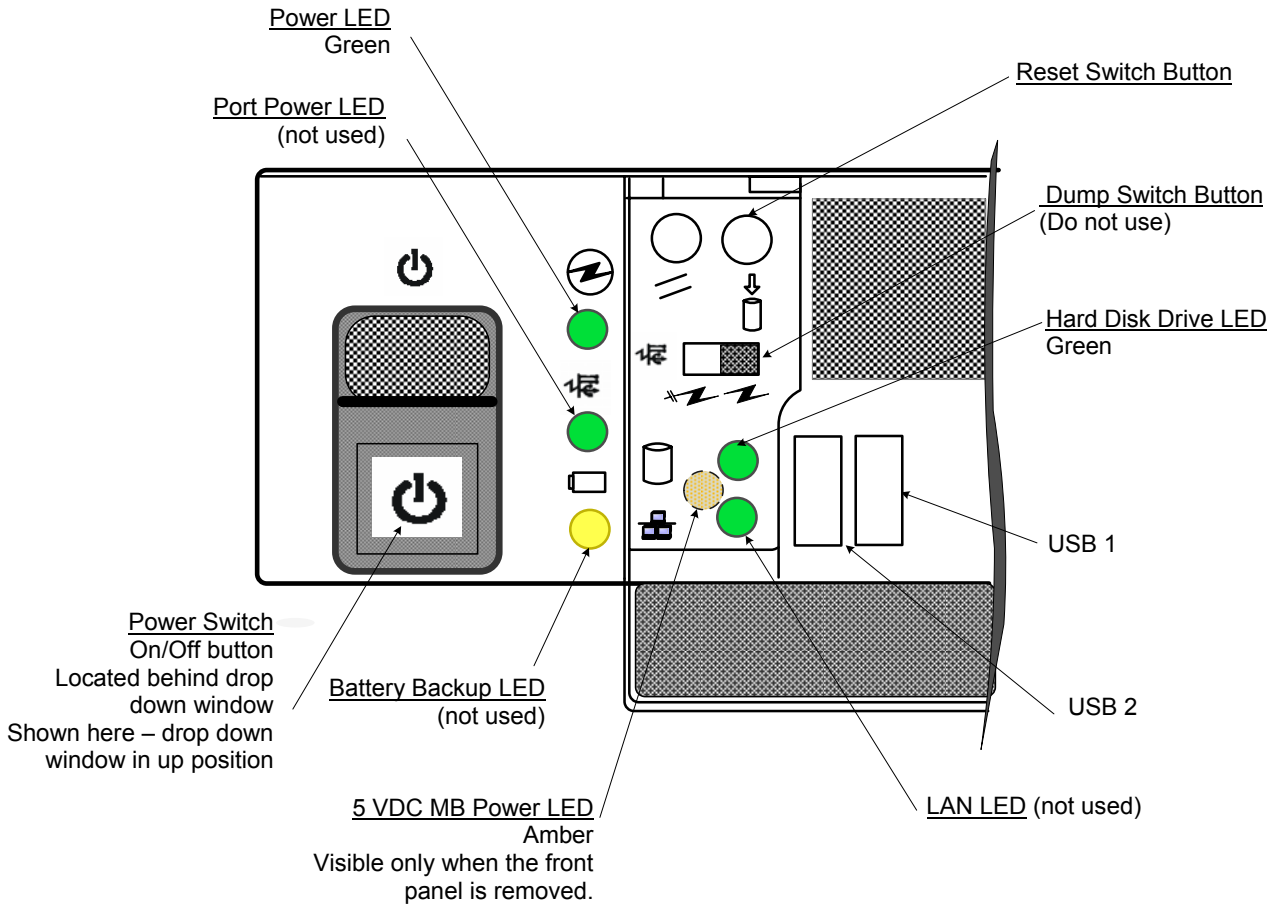

Figure 1-4. Front Panel LEDs and Switches

Table 1-1. TeamPoS 3000 XE Front Panel Switch and LCD Matrix

Symbol	Name Switch/LED	Mounting Position	LED Color	Remark
	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.
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.
	Power Switch	Under drop down window on front panel	n/a	Depending on the BIOS setup, the power switch can be instant off or delayed off.
	Reset Switch	Inside front panel door	n/a	Resets terminal, all data in memory will be lost.
	USB-IF2 & IF	Inside front panel door	n/a	USB ports with +5V power supplied when AC power light is "ON".

Note: the following switches and LEDs are not supported: dump switch, COM port off switch, HDD select switch, COM port power LED, battery backup LED, LAN activity LED, and USB interface LED.

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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Chapter 2 - Specifications

Figure 2-1 shows a typical integrated configuration for the TeamPoS 3000 XE. Depending on the store environment, the configuration and components may differ. The tables in the remainder of this section list the environmental specifications.

Figure 2-1. Typical TeamPoS 3000 XE Configuration

Table 2-1. Specifications

Specifications		Unit		
		TP3000 XE With Covers	DT50III	CT10 Printer
External dimensions mm (inches)	Width	450 (17.7)	188 (7.4)	128 (5.0”)
	Depth	498 (19.6)	300 (11.8)	222 (8.7)
	Height	110 (4.3)	184 (7.2)	134 (5.3)
Weight kg (lbs)		17 (37.4)	5.8 (12.8)	2.0 (4.3)
Maintenance area mm (inches)	Front	1000	---	---
	Rear	1000	---	---
	Right	1000	---	---
	Left	1000	---	---
Power requirements	Voltage	AC100-120 AC 200-240	Supplied from the main unit	Supplied from the main unit
	Frequency	50/60Hz		
Temperature ℃ (°F)	Operating	0~35C 32~95F	5~45 41-113	0～40 32~104
	Not operating	0~40 32-104	-10~50 14-122	-5～50 23-122
Humidity (% RH) (Non-condensing)	Operating	10～90	10~90	10～95
	Not operating	8～90	10~90	8～95
（G）		0.2	0.2	0.2
Noise （maximum dB）		< 40 dB		

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

Table 2-1. Specifications (continued)

Specifications		Unit
		Cash drawer (Standard type)
External dimensions in mm (inches)	Width	450 (17.7)
	Depth	501 (19.7)
	Height	115 (4.5)
Power requirements	Voltage	Supplied from the main unit

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Chapter 3 Dimensions

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

The TeamPoS 3000 XE control unit is available in black only.

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 to 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.

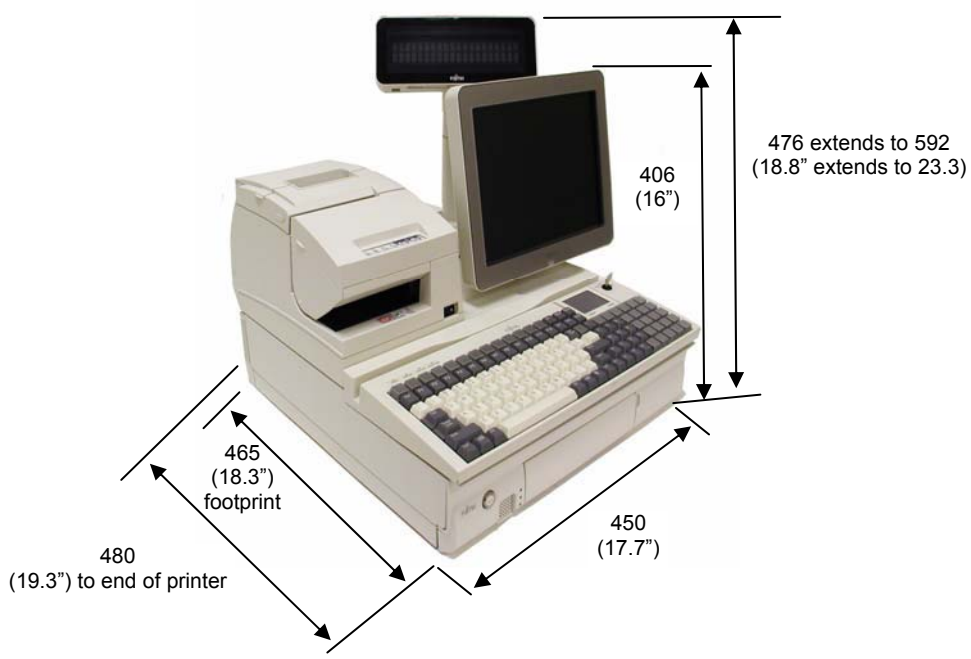

Figure 3-1. TeamPoS 3000 XE Stacked Configuration Dimensions

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”. When the 15” LCD is installed, the widest point is 22.5”. 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”.

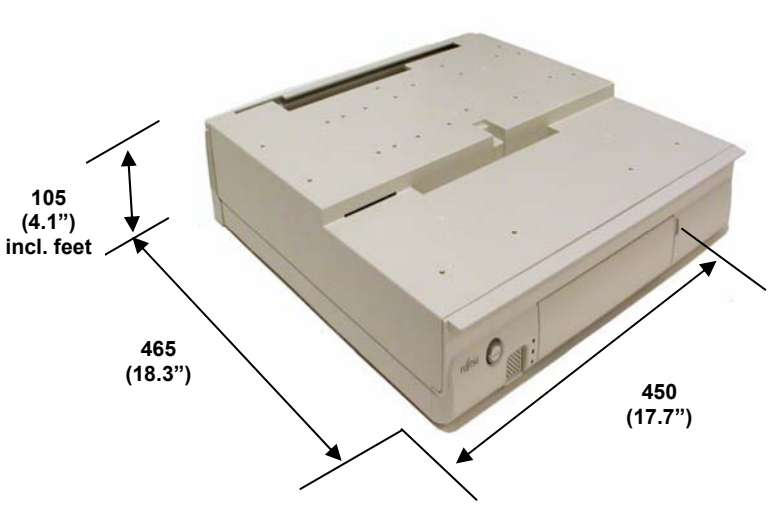

Figure 3-2. TeamPoS 3000 XE Control Unit without Brackets Installed

3.1. Keyboards (Option)

Two optional keyboards are offered: the 133 UQ, and 92U. Dimensions are shown in the following figures.

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

Figure 3-3. Model 133 UQ Keyboard Dimensions

(PIN # 90000630)

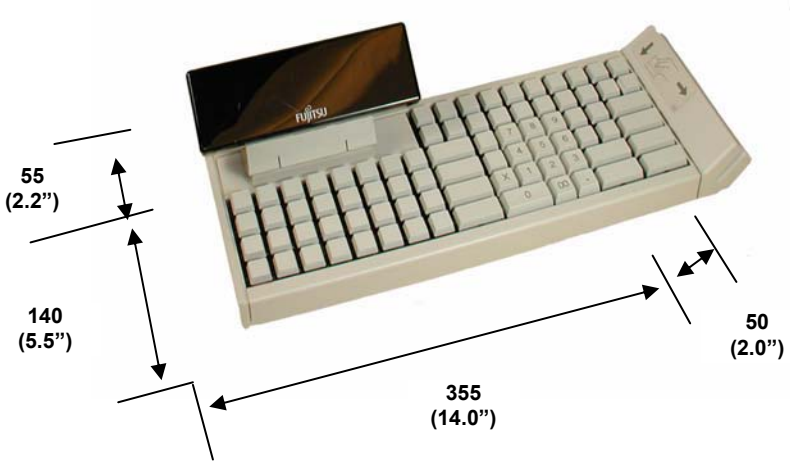

Figure 3-4. Model 92 U Keyboard Dimensions

3.2. Cash Drawers (Option)

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

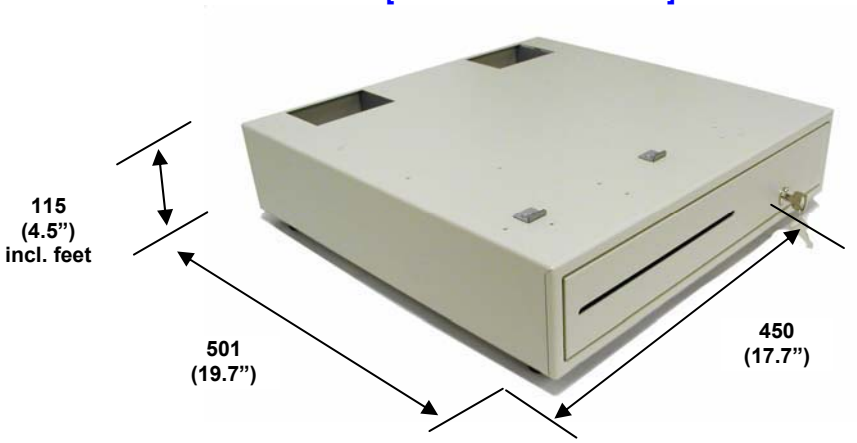

Figure 3-5. Model TP10 Cash Drawer

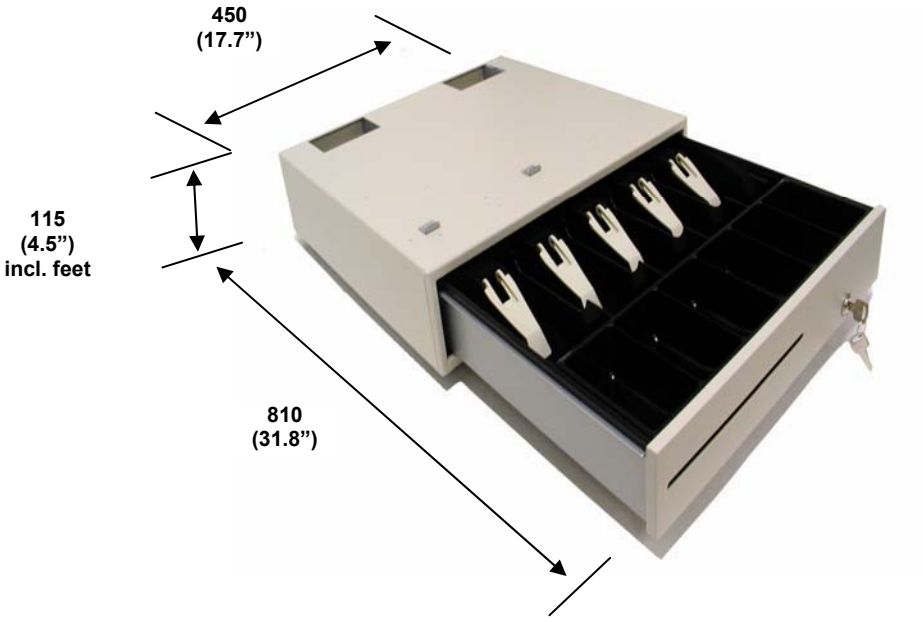

Figure 3-6. Model TP10 Cash Drawer in Open Position

3.3. Display Options

Two LCDs are offered for use with the controller. The D22 LCD is a 12.1" LCD and the Model D25 LCD is a 15" LCD. Both LCDs support analog and digital interfaces in the same unit. To use either of the LCDs as an analog device, simply connect to the controller 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 as non-touch, 5-wire resistive. The D25 comes with infrared touch. Speakers are standard. 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]

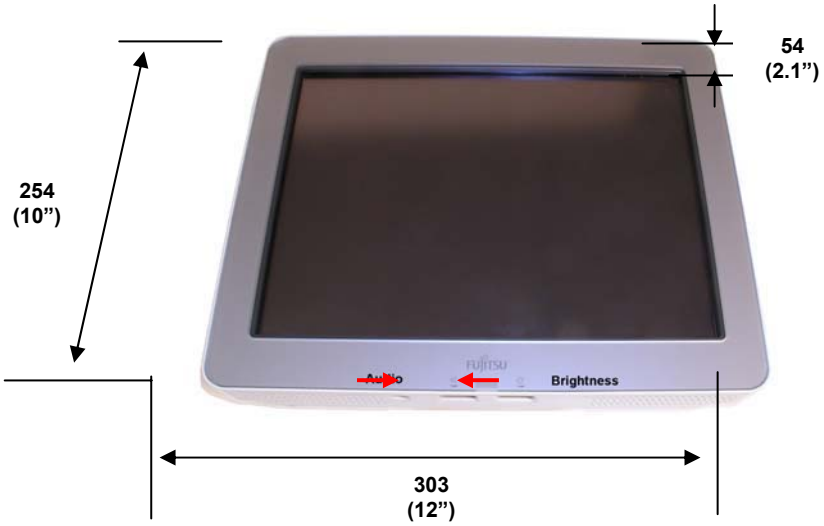

Figure 3-7. Model D22 LCD

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

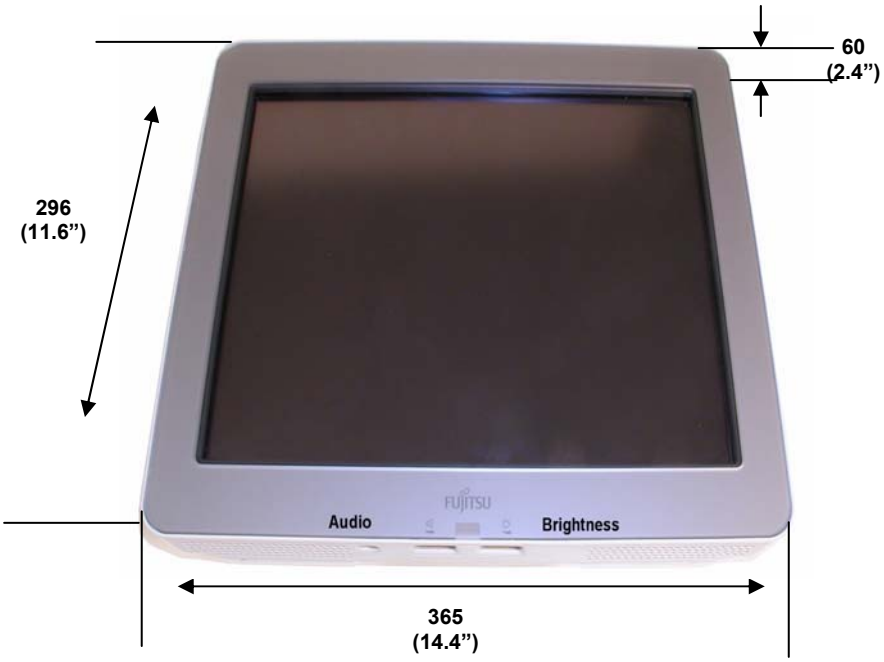

Figure 3-8. Model D25 LCD

3.4. LCD VESA Bracket Mounting

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

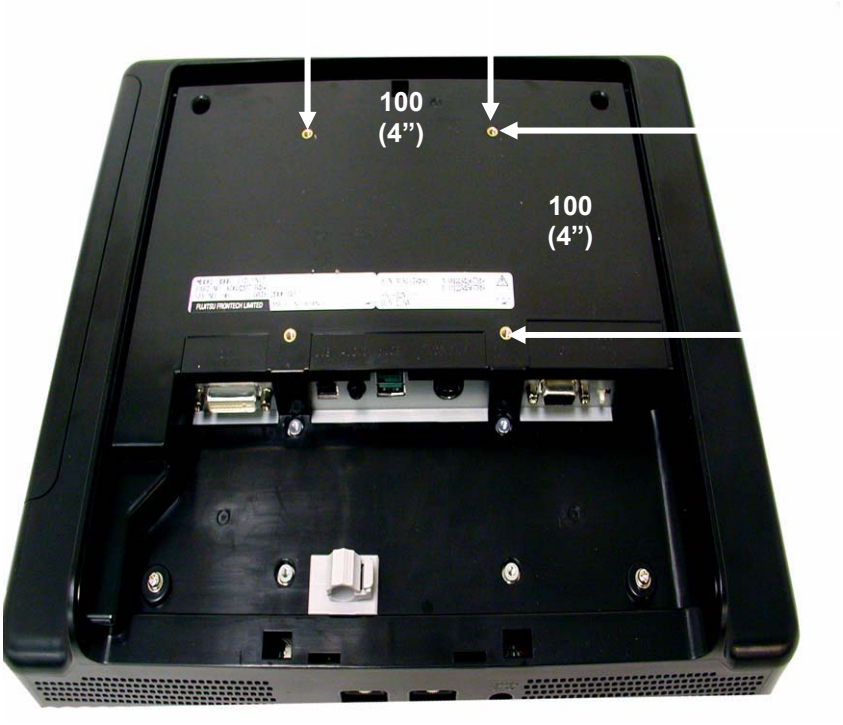

Figure 3-9. VESA Bracket Mounting

3.4.1. Model D22 & D25 LCDs on Stacked Stand

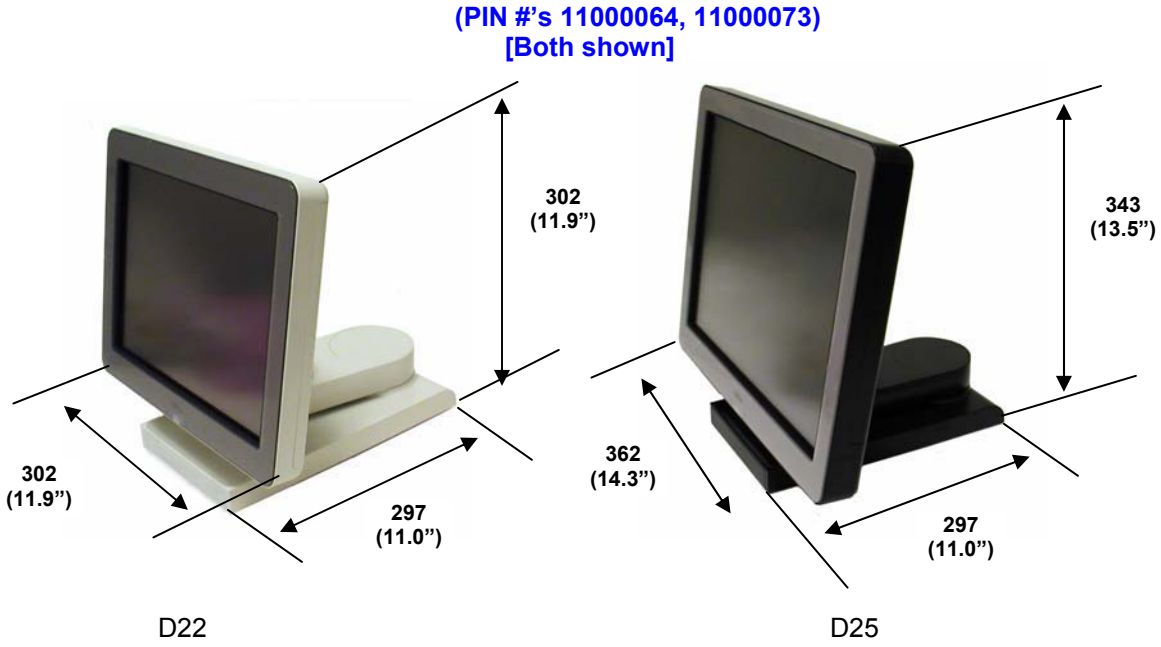

Figure 3-10. Model D22 & D25 LCDs on Stacked Stand

3.4.2. Model D22 & D25 LCDs with MSR

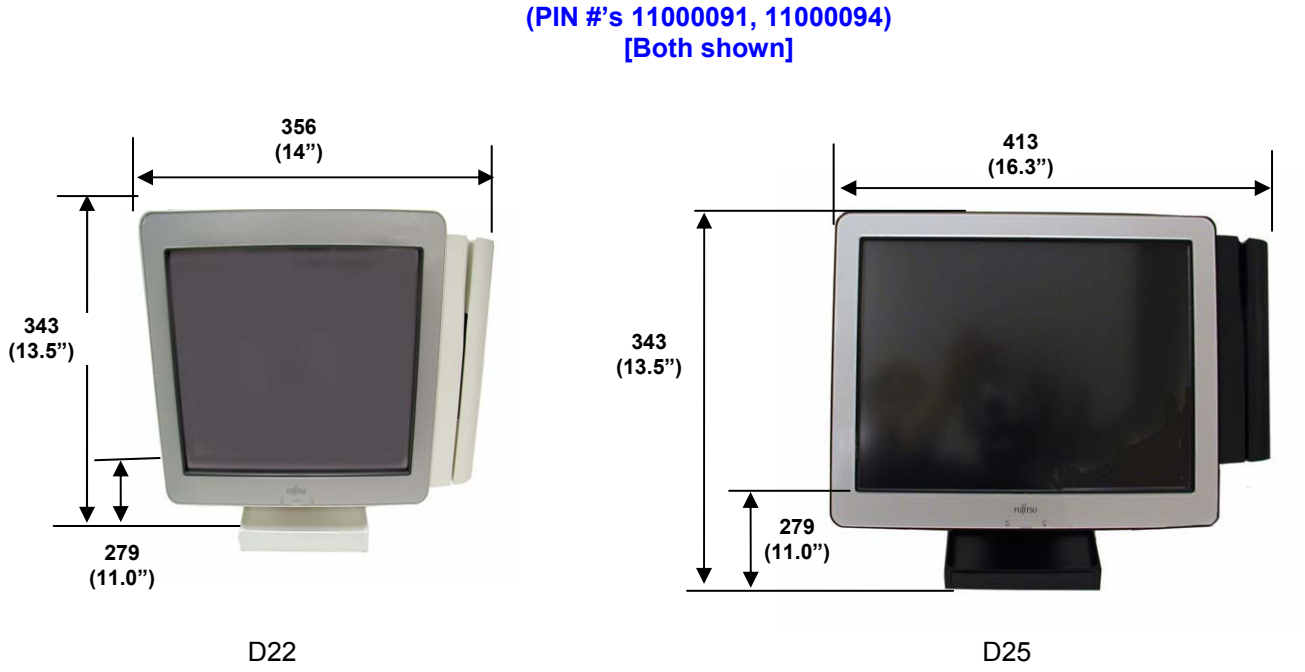

Figure 3-11. Model D22 & D25 LCDs with MSR

3.4.3. Model D22 & D25 LCDs on Single Stacked Stand w/MSR & VF60 Display

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

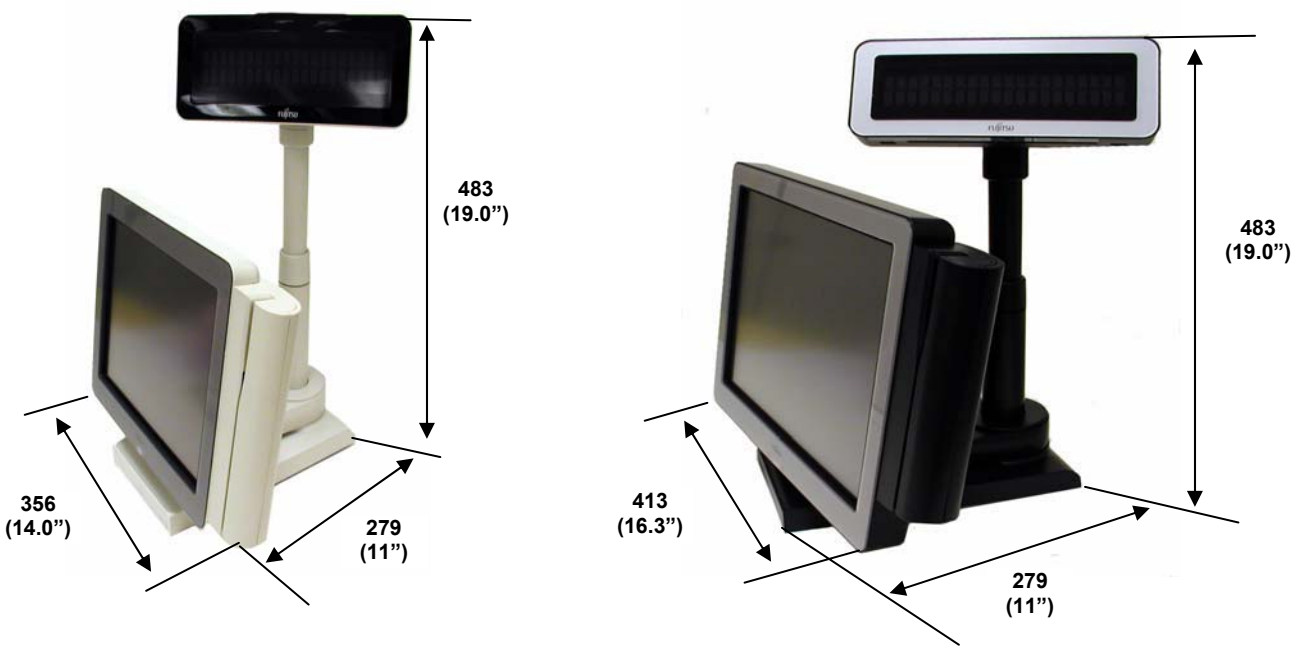

Figure 3-12. Model D22 & D25 LCDs on a Single Stacked Stand w/MSR & VF60 Display

3.4.4. 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]

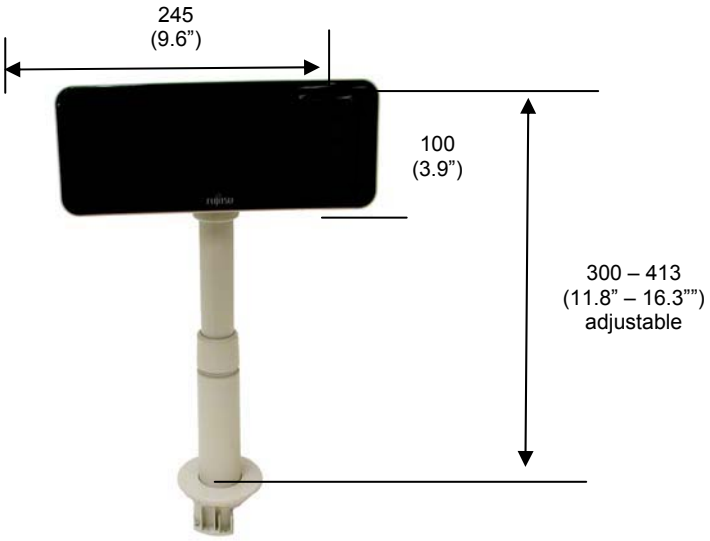

Figure 3-13. VF60 Customer Display Dimensions

3.5. Printers (Option)

Two printers are available for the TeamPoS 3000 XE: the DT50III and the CT10. Their dimensions are shown in the figures that follow.

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

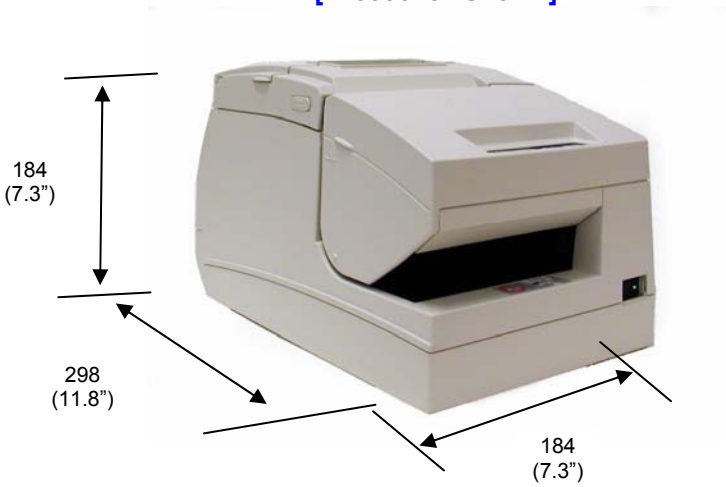

Figure 3-14. Model DT50III Printer

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

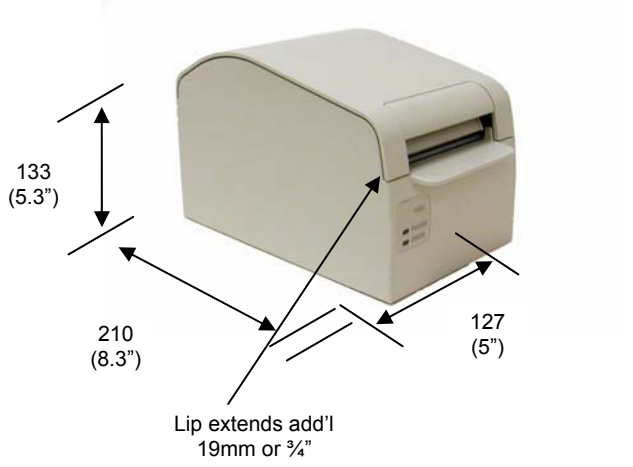

Figure 3-15. Model CT10 Printer

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Chapter 4 Site Preparation

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

- 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 and 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 and do the following:

- Verify that all the accessories listed on the packing list have been included in the shipment. 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.
- Please note that all components are packaged separately. Keep the packaging in case it is necessary to return any of the components.

4.2. 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.

- Damaged equipment received from a source other than Fujitsu Transaction Solutions Inc.’s Foothill Ranch facility should be reported to the sender.
- Report shortages and damage to CustomerCare. You will need to provide the sales order number and a description of the piece of equipment damaged. Call 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.

4.3. 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.

4.4. 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.

4.5. 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.

4.6. 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 XE Series controller. This product is also designed for IT power systems with phase-to-phase voltage of 100-120 Vac or 200-240 Vac.

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.

4.7. 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. 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 100-120 or 200-240V 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), 120 or 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 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.

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 edges.
- 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. No user serviceable parts are under the covers unless expressly indicated in this manual. Always remove the power supply plug from the power source before removing any covers, and ensure ALL covers are replaced and correctly secured before re-connecting the power 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 equipment life.

- DO NOT expose the equipment to spilled liquids.

- DO NOT replace the power supply cable with a different type than called for in the this manual or supplied with the equipment.

4.8. Installation with Other Equipment

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

Terminals at 100-120 or 200-240 Volts

Table 4-1 details the power requirements for the TeamPoS series control unit. Provide 100-120 or 200-240 volts AC, 50/60 Hz, single phase, with the following amperage requirements.

Table 4-1. Power Requirements

Property	Value or Description
Grounding	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	100-120 or 200-240 volts, 50/60 Hz
Rated current	9A @ 115 Vac & 4.5A @ 230Vac
Operational frequency limits	47 – 63 Hz
Earth leakage current	< 1.0 mA
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.)

4.9. Mains Power Cables

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

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

4.10. 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.

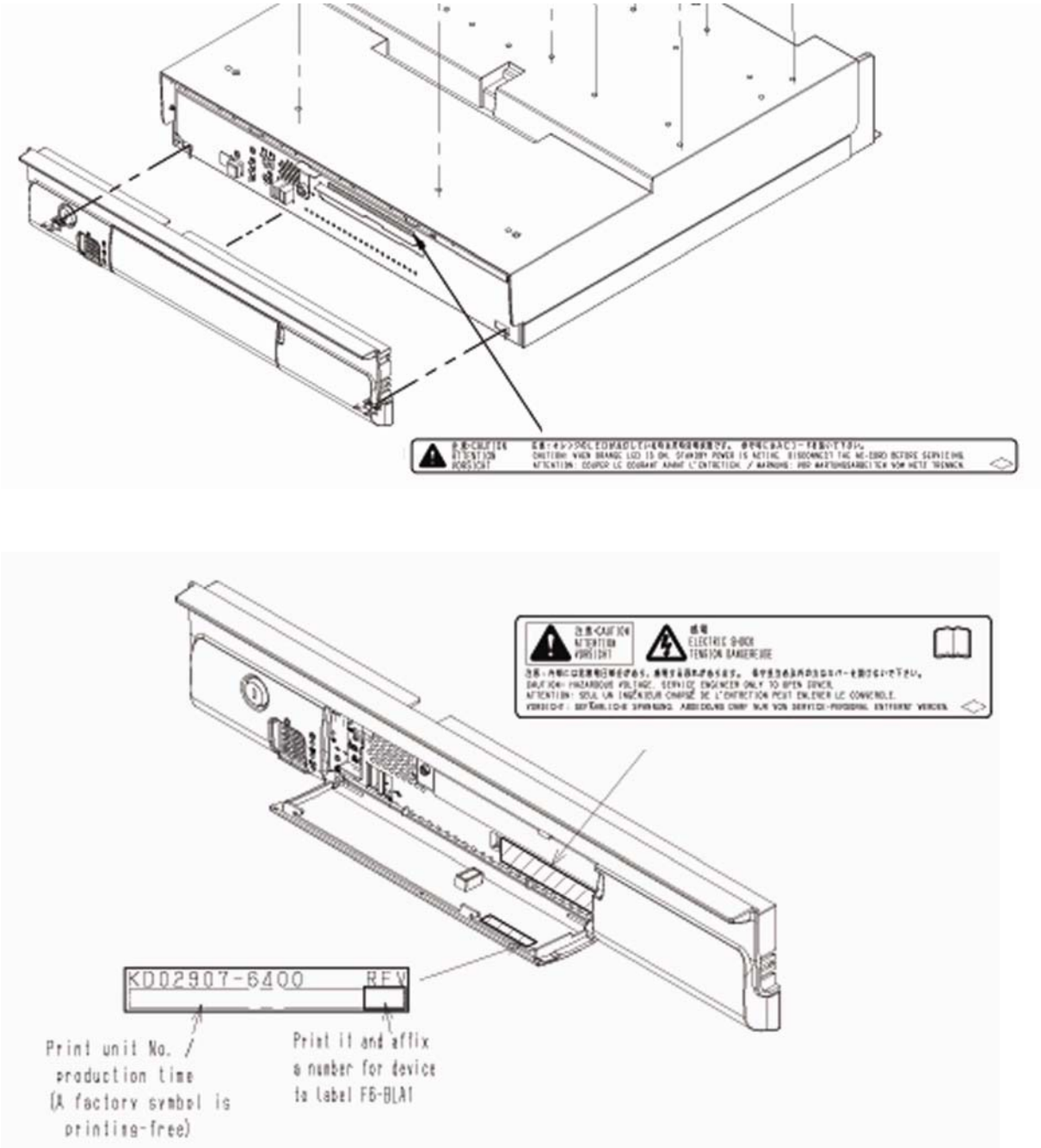

Figure 4-1. Labels on Control Unit Front Panel - Inside

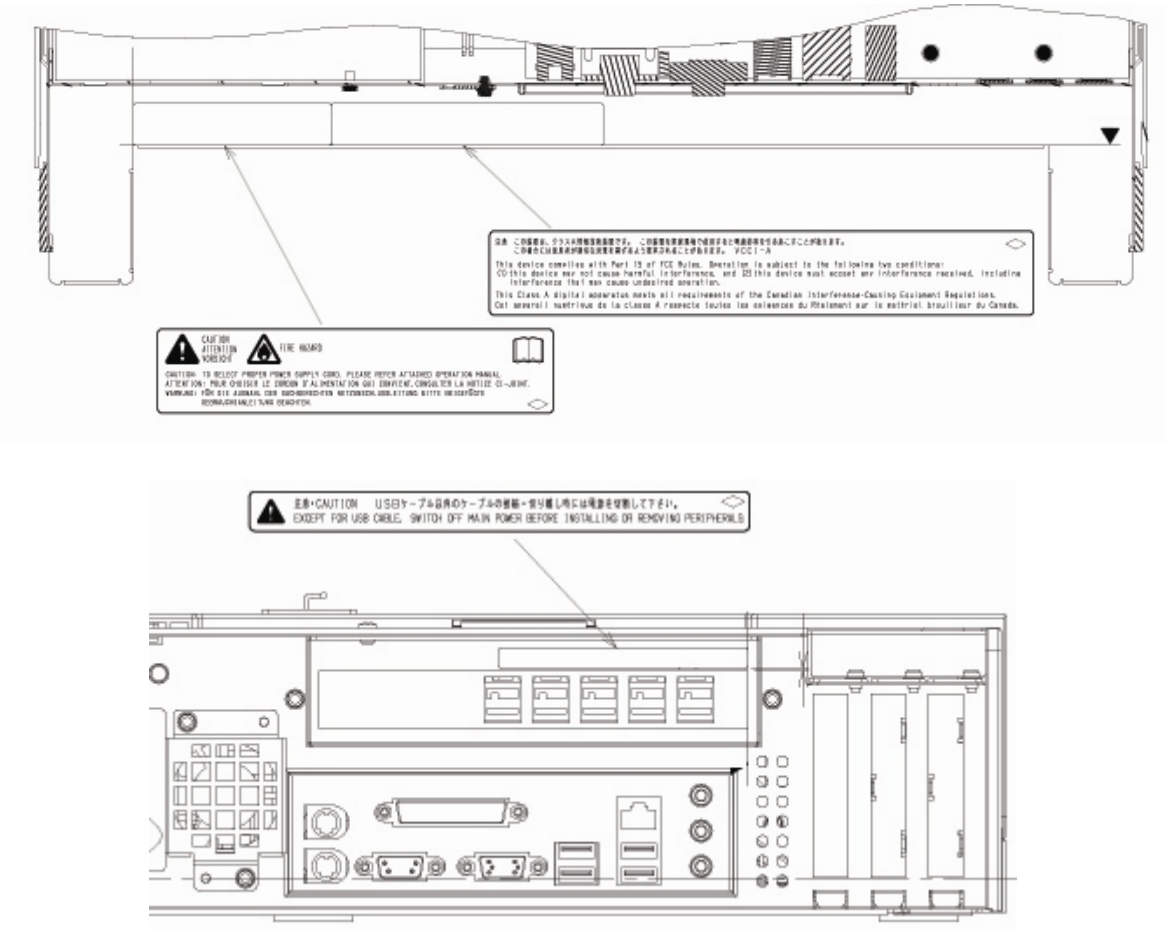

Figure 4-2. Back View of the Control Unit

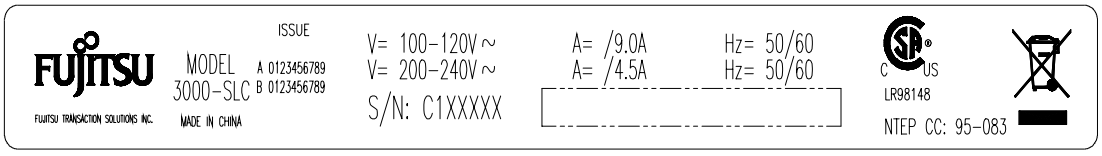

Figure 4-3. Bottom of the Control Unit

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Chapter 5 Installation

This chapter covers the procedures for assembling the controller once it is received on site. This is done by a Fujitsu-authorized technician. Instructions for replacing the unit's components are included in Chapter 7.

Caution: Confirm that the external power source is 100-120 or 200-240 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.

The TeamPoS 3000 XE ships completely assembled (with the exception of LCDs and optional peripherals). The following tasks are required for installing the unit:

- Install brackets if needed for stacked configurations.
- Install the LCD
- Install options such as displays, cash drawers, printers, and keyboards
- Connect peripherals
- Connect power.

Caution: With the exception of USB peripherals, never disconnect or connect a peripheral while power is on to its port. To avoid damage to the control unit and peripherals, when connecting and disconnecting RS232 peripherals, turn power OFF with the Port switch, the TeamPoS 3000 XE power switch on the front of the unit or by disconnecting AC power.

Note: when installing the unit vertically, the power supply must be on the bottom.

5.1. Installing Brackets

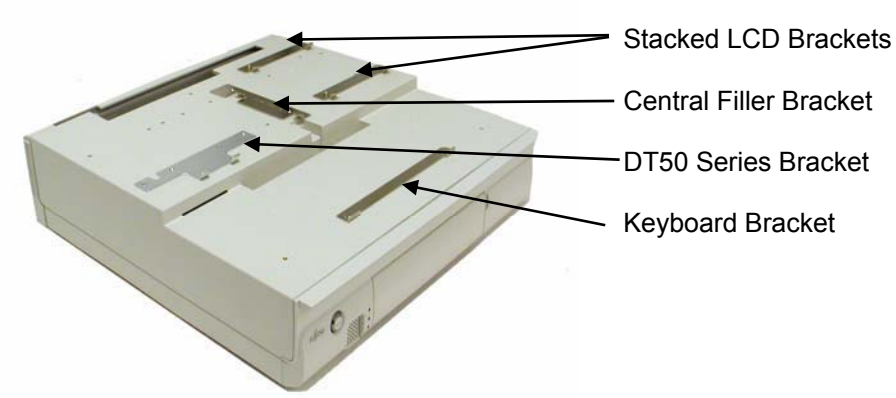
For stacked configurations, keyboard, printer filler and operator display brackets are available. The brackets attach to the top of the control unit and restrain the peripherals from sliding. When installing peripheral brackets, install each bracket using the two screws that have been provided with the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

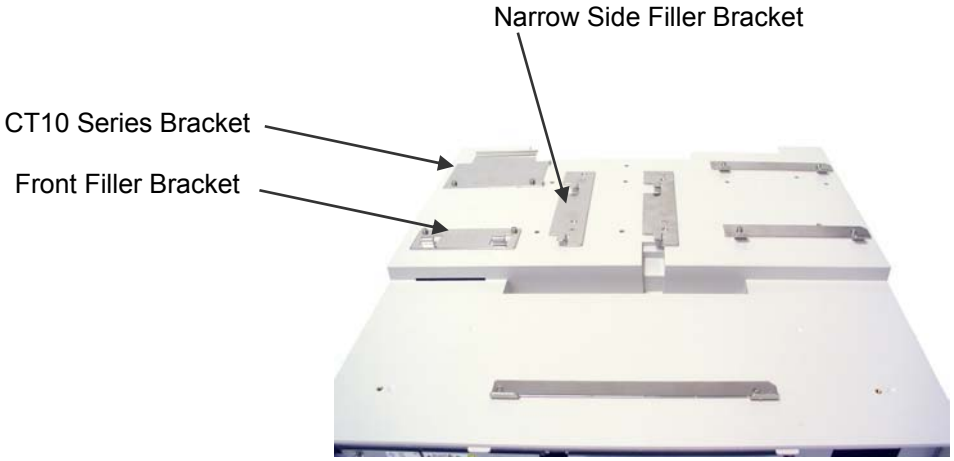
Installing the brackets requires aligning the bracket with the appropriate screw holes on the top of the chassis and securing with the two screws provided for each bracket. To prevent dust and

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.

Figure 5-1 shows peripheral bracket locations for the control unit. If an LCD is installed on a control 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.



Basic Brackets and DT50 Printer Bracket



Additional Brackets for CT10 Printer

Figure 5-1. Bracket Locations

5.2. Installing the LCD

5.2.1. Assembling the LCD and Stacked Stand

This procedure is the same for both the 12 and 15 inch LCDs.

To assemble the LCD and stacked stand:

1. Remove cosmetic covers from the stacked stand. These include the hinge cap, top and bottom hinge covers, and cable access cover.

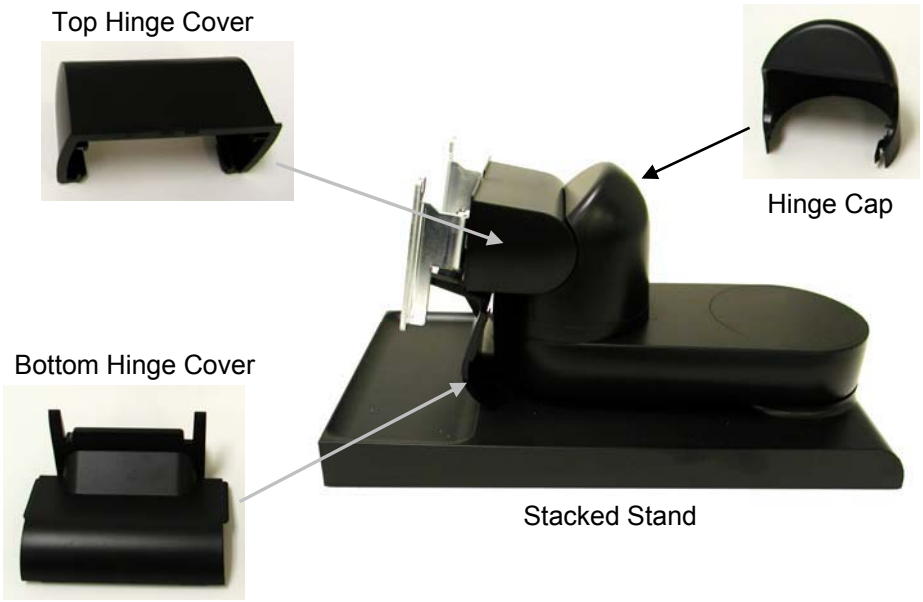


Figure 5-2. Stacked Stand Components

2. Remove the cable access cover by pressing it from the underside.

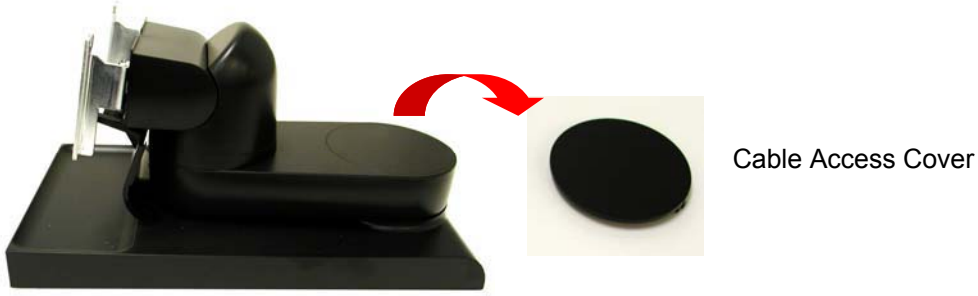


Figure 5-3. Removing the Cable Access Cover

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

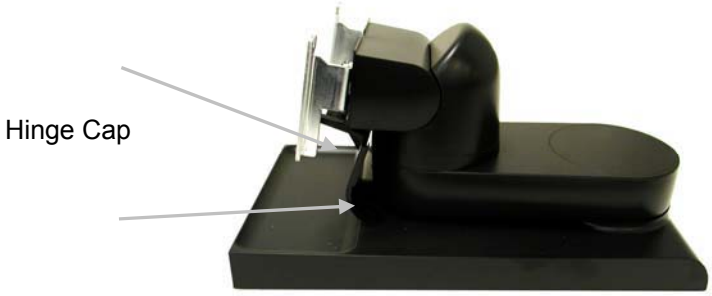


Figure 5-4. Removing the Hinge Cap

4. Firmly pull out on end of top hinge cover while easing the cover toward the back of the stand.

Figure 5-5. Removing the Top Hinge Cover

5. Squeeze in on the sides of the bottom hinge cover and ease it outward.

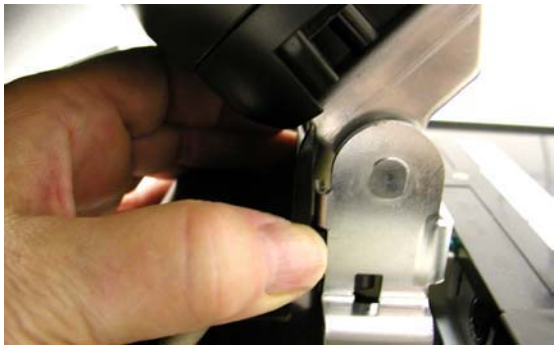


Figure 5-6. Removing the Bottom Hinge Cover

6. Thread cables through the cable access hole in the stacked stand beginning with the larger cables first. Video cable (VGA) and powered USB are required. Audio cable is optional. Rotate the stacked stand as needed so that you can reach the cables as they are threaded through the stand.

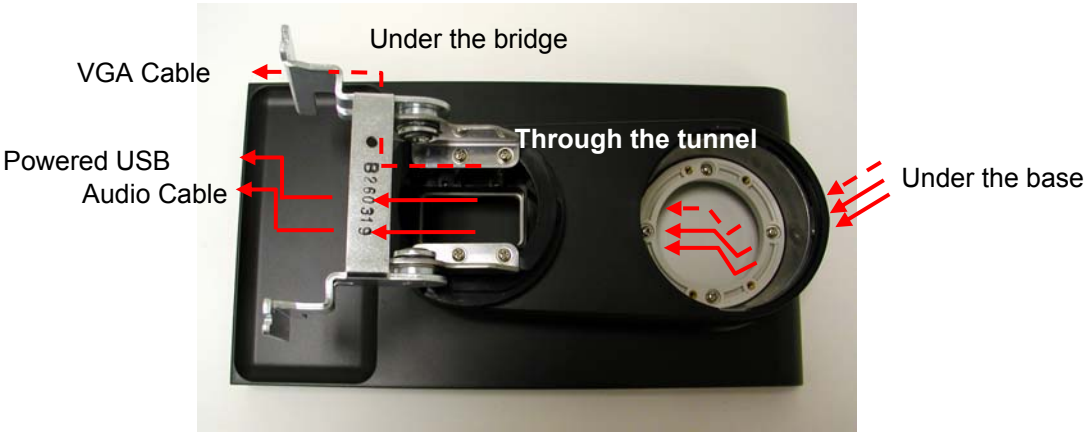


Figure 5-7. Stacked Stand in Forward Position

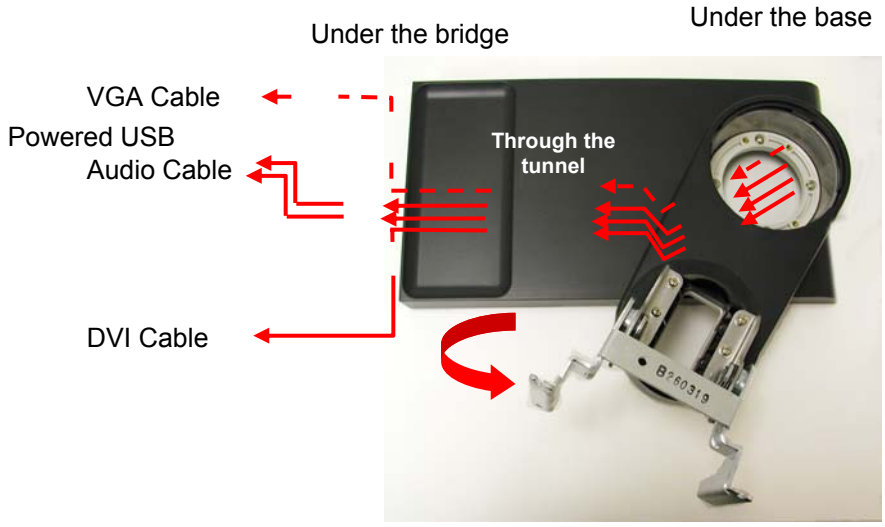


Figure 5-8. Stacked Stand w/Arm Rotated to Side

Figure 5-9. VGA Cable Configuration with Optional Audio Cable

7. Bend VGA cable 90° at the bridge towards the outside of the bracket and then 90° again towards the LCD.

8. Place the LCD face down on a clean, dry surface.

9. Remove the back cover by pressing in where indicated by symbol. Screws for attaching the LCD are taped to the inside of the back cover.

Figure 5-10. Removing the LCD Back Cover

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

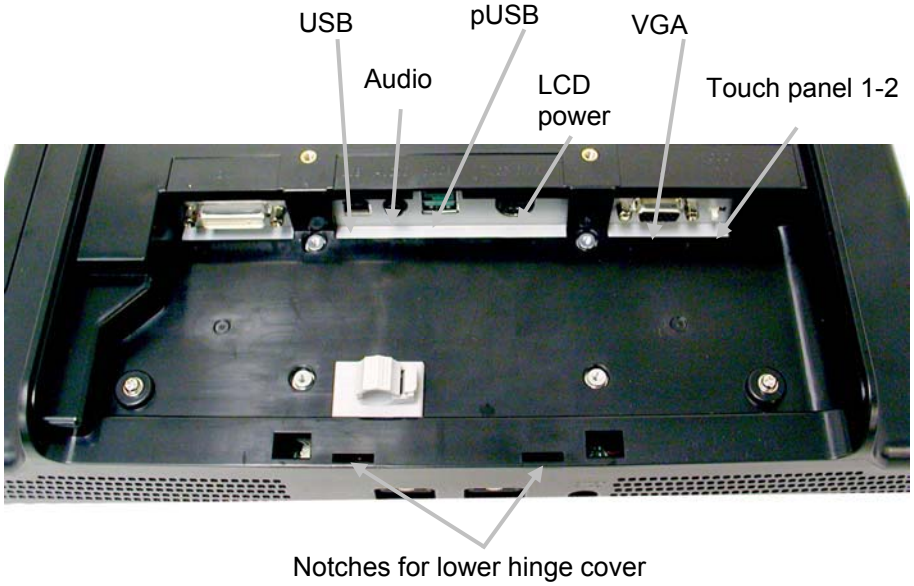


Figure 5-11. LCD Connectors

Note: USB, LCD power connectors are not currently used. Touch Panel 1-2 is a switch used to determine the primary LCD in a two-LCD configuration. When 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 together, set the 12" LCD as #1.

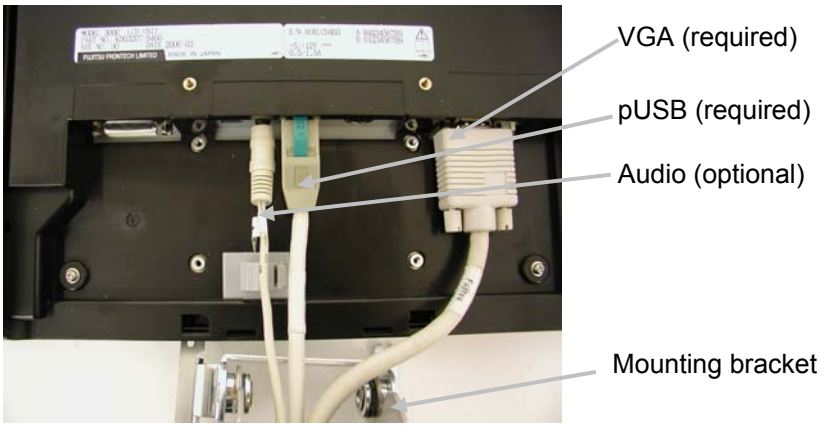


Figure 5-12. Typical VGA Cabling

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

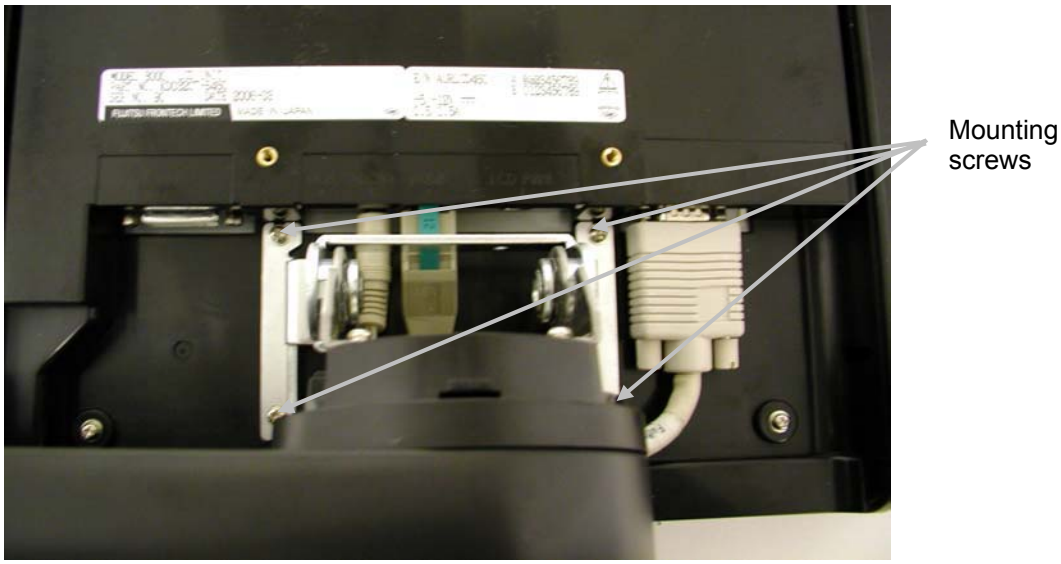


Figure 5-13. VGA Configuration with Attached Stand

12. Route the Video (VGA) cable so it comes out the ***right*** side of the bracket rather than at the top.

13. Be sure the stand is perpendicular to the LCD. Replace the back of the LCD before replacing any of the other cosmetic covers.

14. Replace the cable access cover, rotating it until it is flush with the stand.

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

Figure 5-14. Replacing the Top Hinge Cover

16. 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.

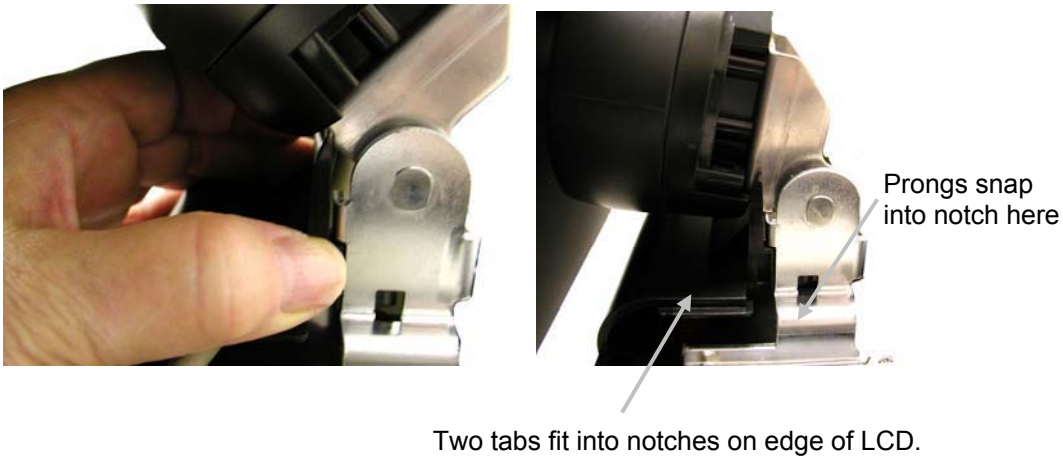


Figure 5-15. Replacing the Bottom Hinge Cover

17. 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.

Figure 5-16. Attaching the Hinge Cap

5.2.2. Stacking the LCD

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

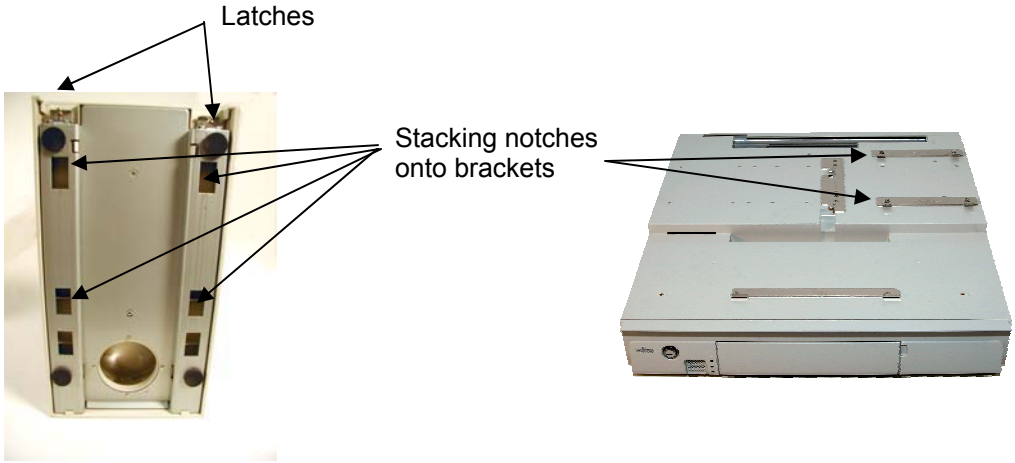


Figure 5-17. Stacking the LCD

To stack the LCD:

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 approximately 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.

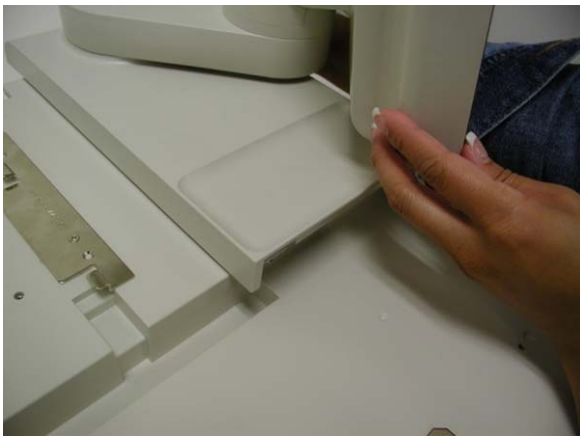


Figure 5-18. Aligning the Stand

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

Figure 5-19. Securing the Stand with Screws

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

Figure 5-20. Installing the Face Plate

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

5.3. Installing Options

The remaining sections describe the procedures for installing optional equipment, including MSR, Keypad/MSR, displays, cash drawers, printers, and keyboard.

5.3.1. 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 LCDs. 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.

To install the MSR or Keypad/MSR:

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

Figure 5-21. Removing the LCD Side Panel

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.

Figure 5-22. Accessing the Connector Cable

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 latch.)

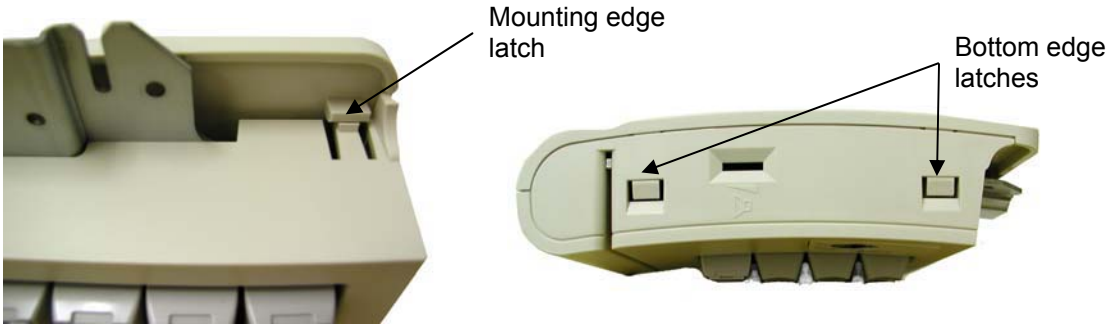


Figure 5-23. Removing the MSR Back Cover

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.

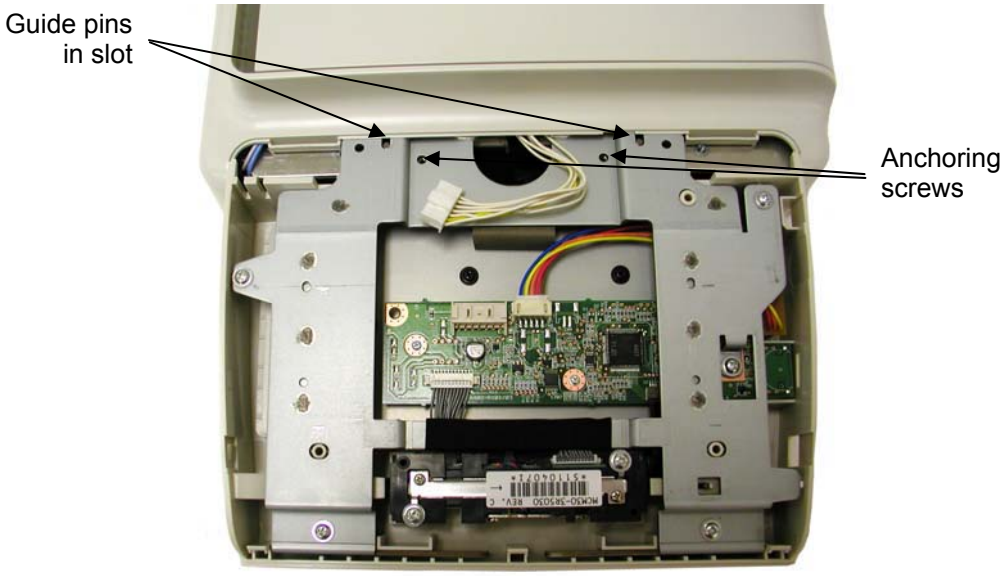


Figure 5-24. Attaching the MSR to the LCD

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

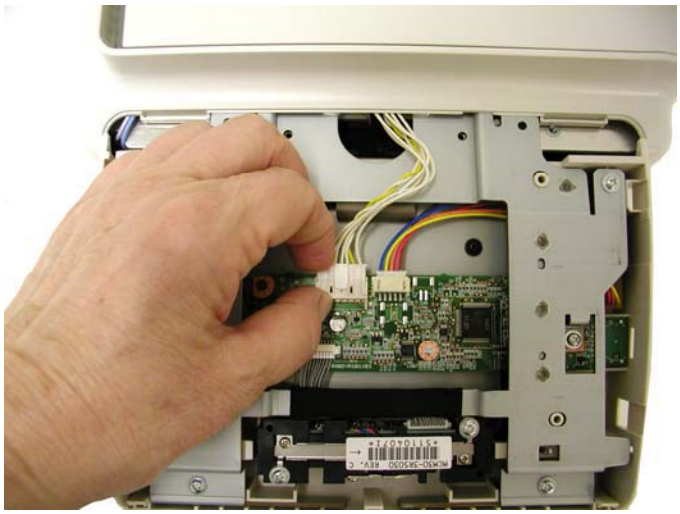


Figure 5-25. Attaching the MSR Connector

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.

Figure 5-26. Keypad/MSR and LCD

5.3.2. Installing the VF60 Display in Stacked Stand

The following parts are required for attaching the VF60 customer display to the stacked stand:

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

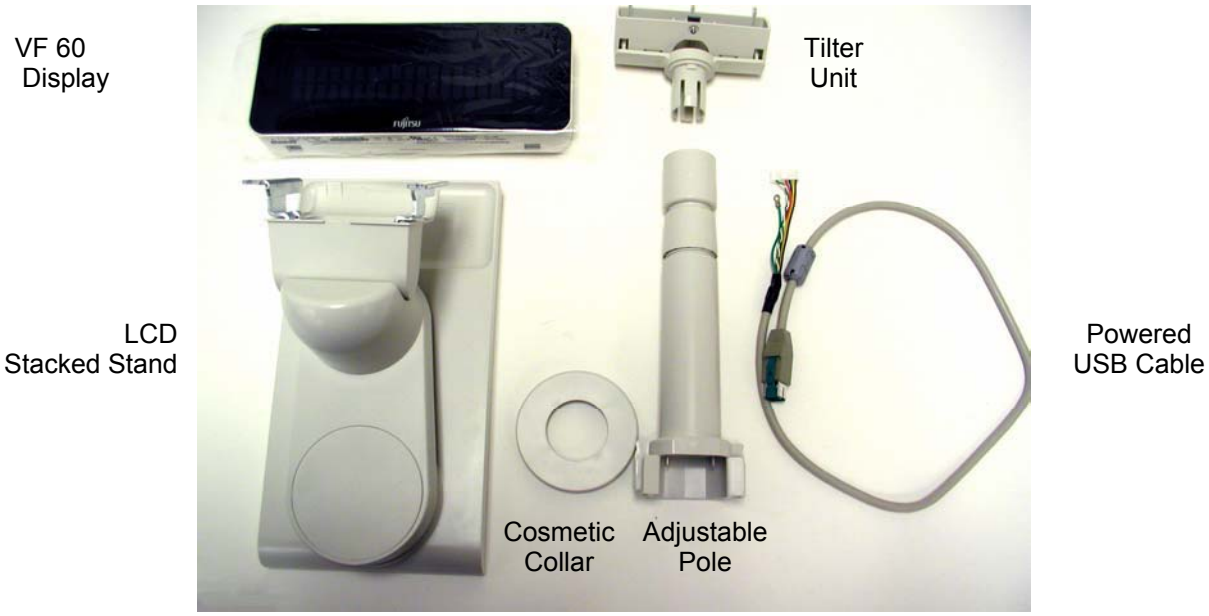


Figure 5-27. Items Needed to Install the VF60 on a Stacked Stand

To install the VF60 display on a stacked stand:

1. Place the parts shown in Figure 5-27 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.

Figure 5-28. Threading the Cable through the Pole and Tilter Unit

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

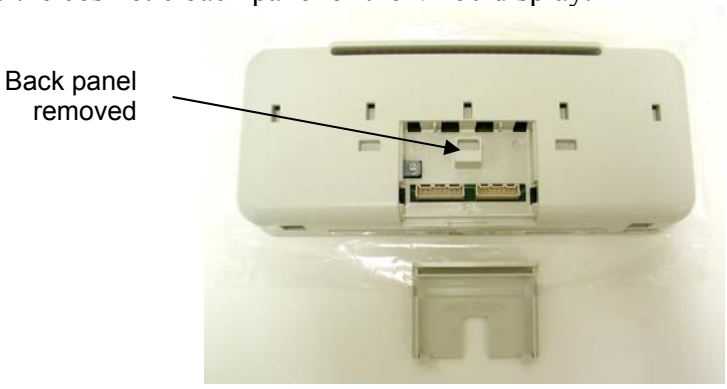


Figure 5-29. Removing the Back Panel

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

Figure 5-30. Connecting the USB Connector

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.

Figure 5-31. Reattaching the Back Panel

7. Fit the hooks of the tilter 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.

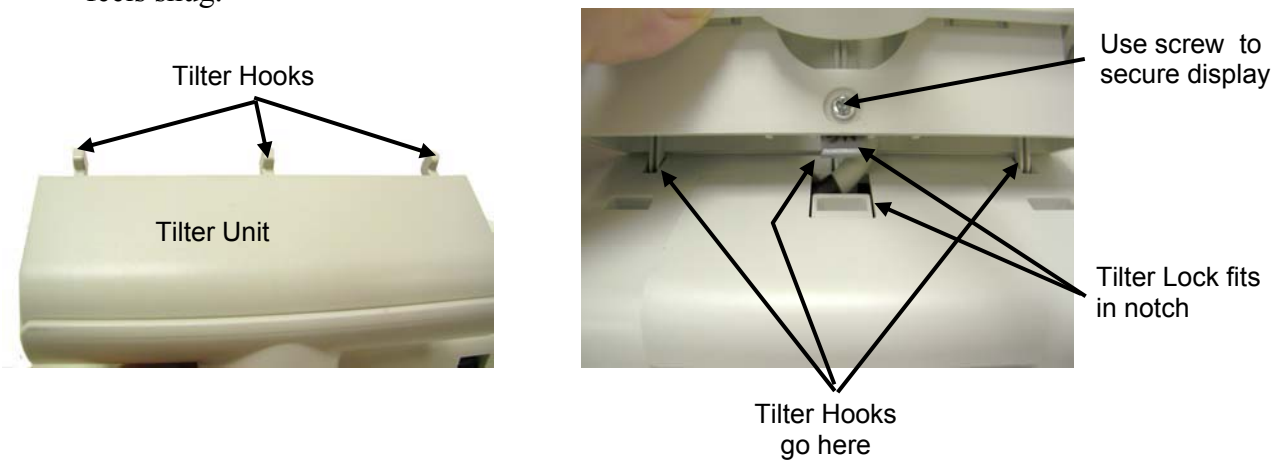


Figure 5-32. Attaching the Tilter

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

Figure 5-33. Attaching the Tilter onto the Pole

9. Adjust the pole to the desired height. Turn the locking collar in a counter-clockwise direction to loosen, adjust the length of the pole and tighten the locking collar again by turning it in a clockwise direction.

Figure 5-34. Adjusting the Pole

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

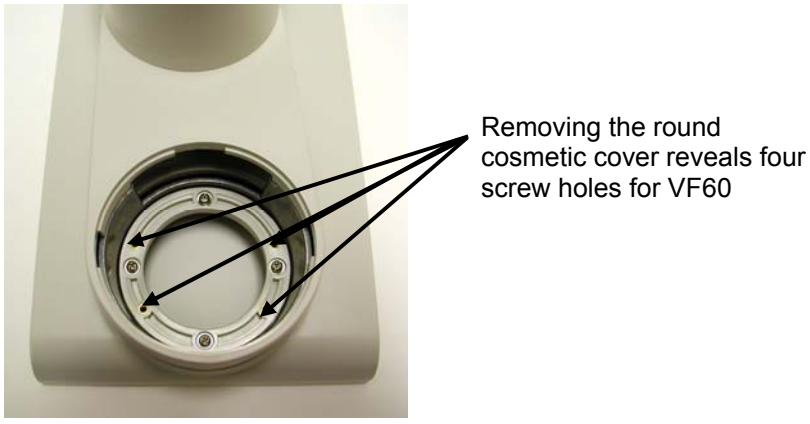


Figure 5-35. Removing the Filler Plate

11. Thread the cable through the opening in the stand and attach the pole 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.

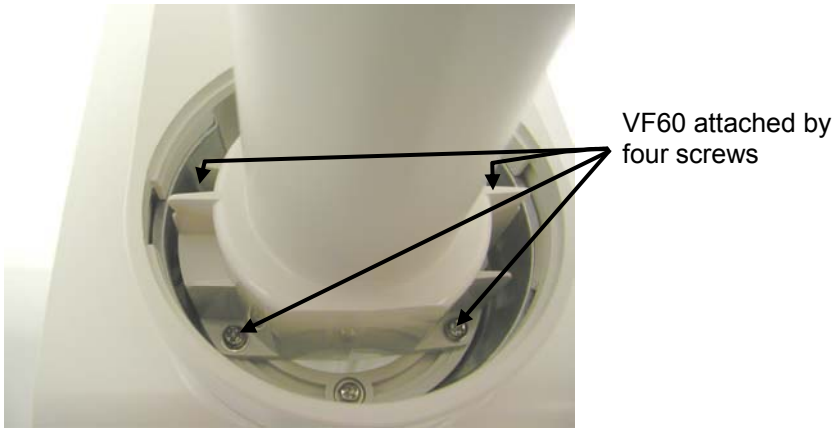


Figure 5-36. Attaching VF60 to the Stand

12. Fit the collar into place.

Figure 5-37. Fitting the Collar into Place

13. Install on controller.

5.3.3. Installing the Keyboard and the Central Filler

Several keyboards are available for the TeamPoS 3000 XE. The following installation procedure applies to all of them. The figures below show the 133 UQ keyboard.

5.3.3.1. Installing the Keyboard

To install 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.

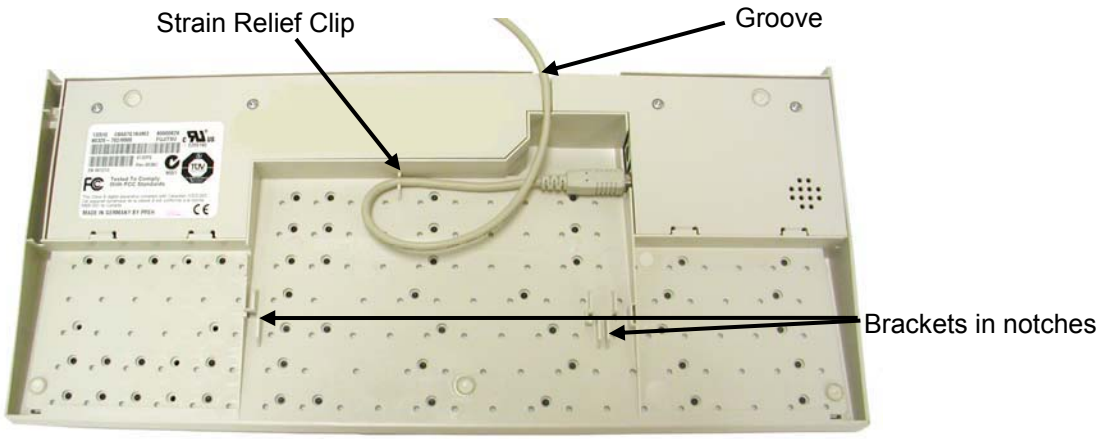


Figure 5-38. Attaching the USB Connector to the Keyboard

2. Place the keyboard on the controller on the ledge for the keyboard.

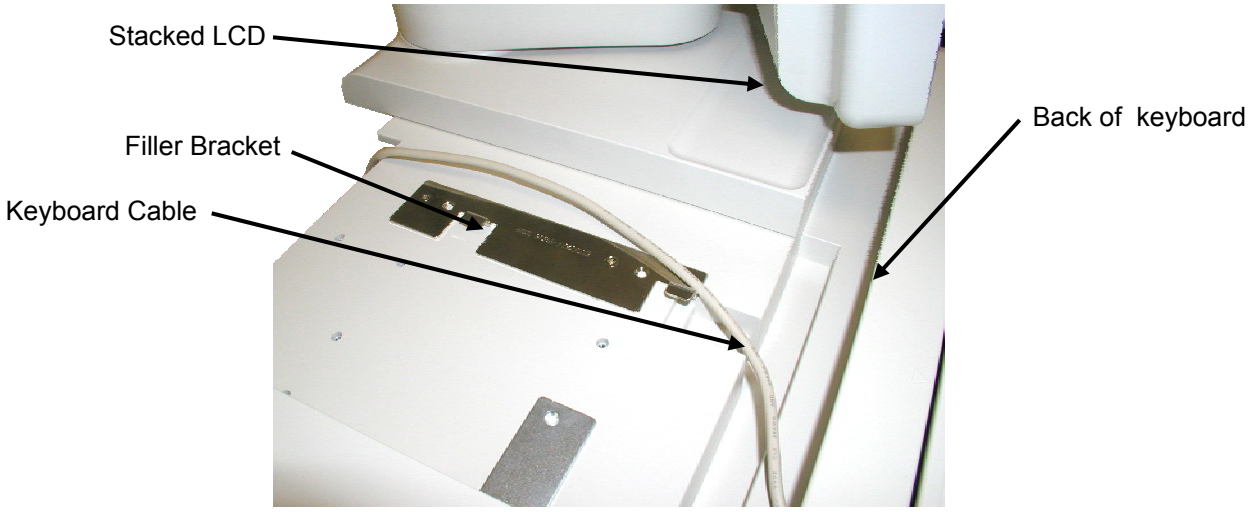


Figure 5-39. Putting the Keyboard on the Controller

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*

5.3.3.2. Installing the Central Filler

The central filler occupies the free space on a controller 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.

To install 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).

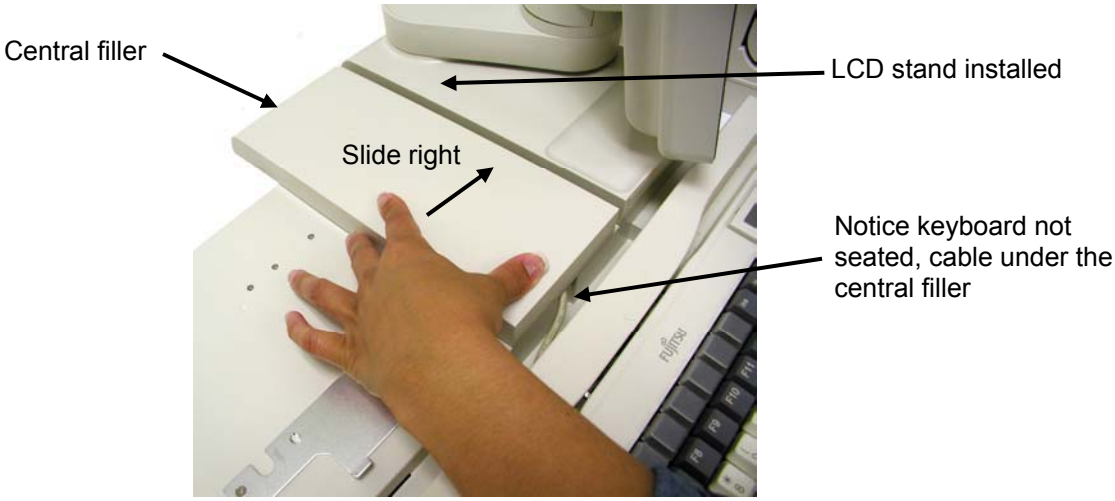


Figure 5-40. Installing the Central Filler

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.

5.3.4. Installing Printers

The DT 50 and CT10 printers are options for the unit. Both printers stack on the controller and are restrained from shifting by brackets attached to the controller. See Figure 5-1 for bracket locations. A filler occupies the free space on the control unit with a stacked LCD (either D22 or D25) and a DT50 series printer. The cable for the printer is threaded through the underside of the central filler and therefore the printer is installed at the same time as the central filler.

5.3.4.1. Stacking the DT50 Series Printer

To stack the printer:

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

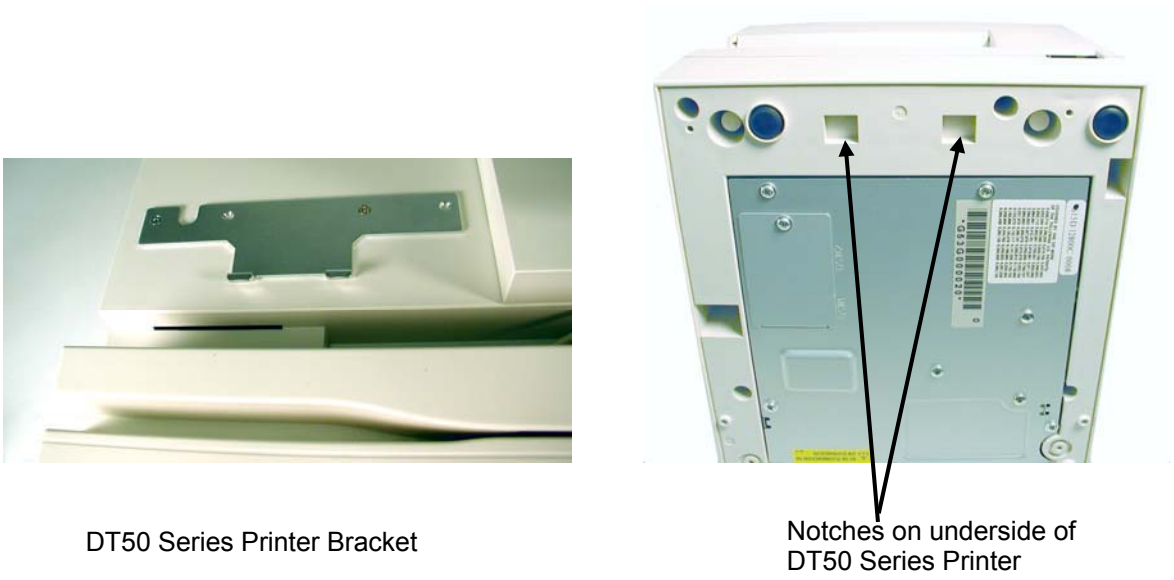


Figure 5-41. Stacking the DT50 Series Printer

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.

Figure 5-42. Stacking the DT50 Series Printer

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

5.3.4.2. Stacking the CT10 Printer

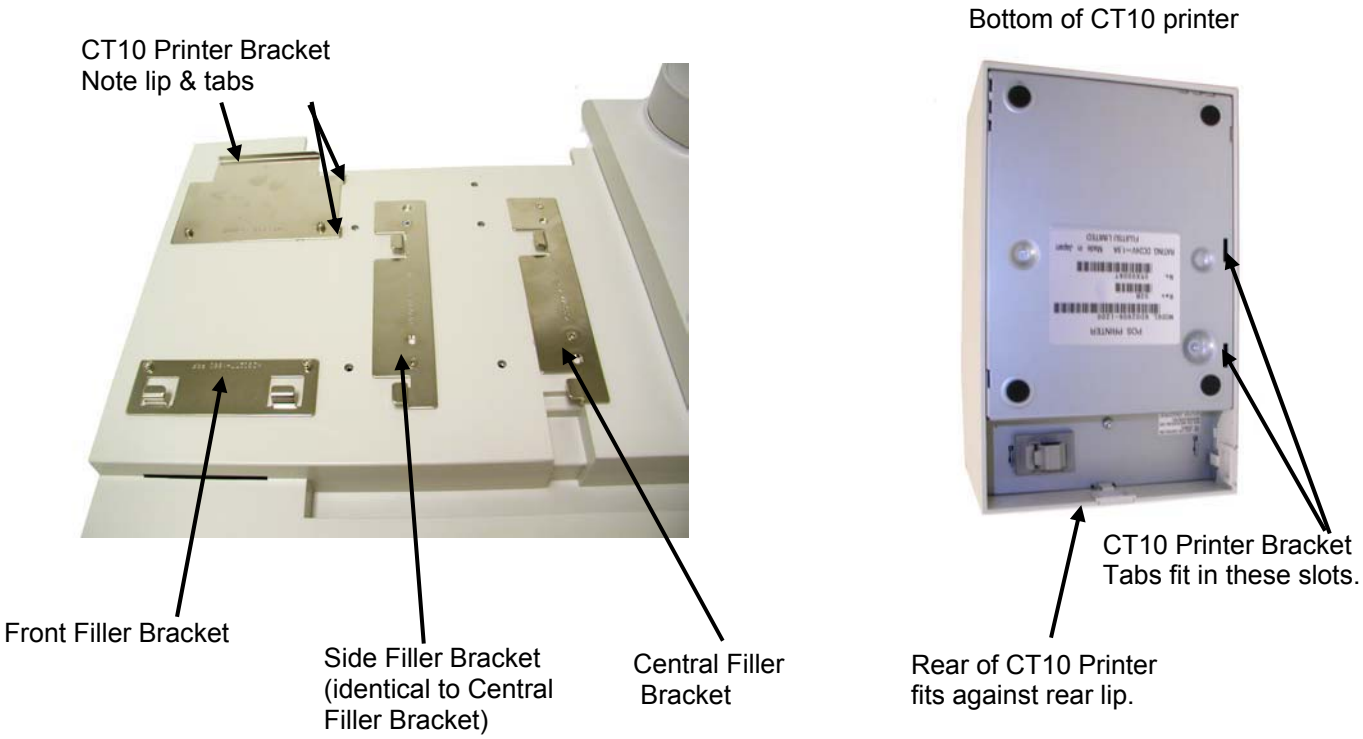


Figure 5-43. Stacking the CT10 Printer

To stack the CT10 printer:

1. Install central filler.
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.

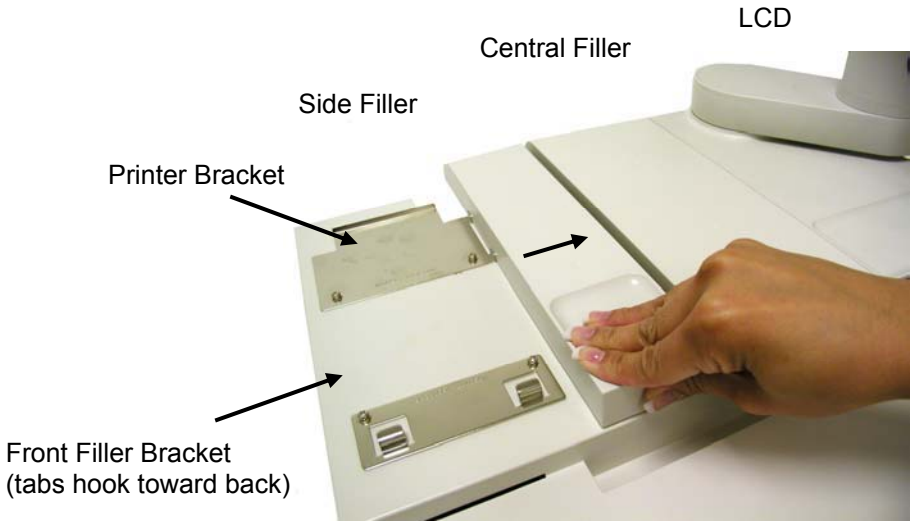


Figure 5-44. Filler Panels

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.

Figure 5-45. Installing the Front Filler Panel

5. Set the CT10 printer in place.

Figure 5-46. Setting the Printer in Place

5.4. Installing Cash Drawers

Cash drawers are placed under the controller and connected to the appropriate I/O port on the back panel.

5.5. Connecting Peripherals

The TeamPoS 3000 XE features one standard and two optional interface panels where peripherals may be connected. They include the following connectors:

Standard I/O Ports:

- Two PS2
- Audio (MIC and Audio Out)
- LAN
- VGA
- Six USB
- COM
- Parallel

Optional I/O – Powered USB I/O Board

- One 24V USB 2.0
- Four 12 VDC powered USB 2.0

Optional I/O – Combo I/O Board

- Two 12 VDC powered USB
- One 24 VDC powered RS232
- Two 5 VDC powered RS232

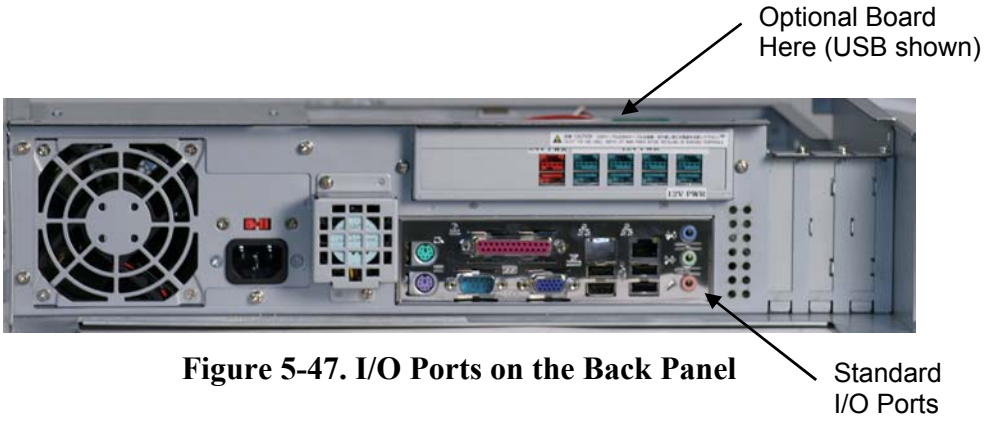


Figure 5-47. I/O Ports on the Back Panel

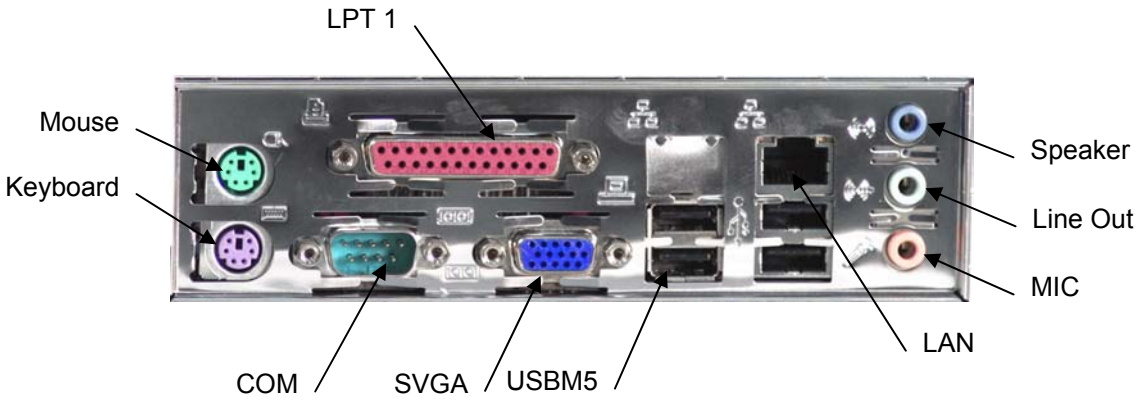


Figure 5-48. I/O Ports

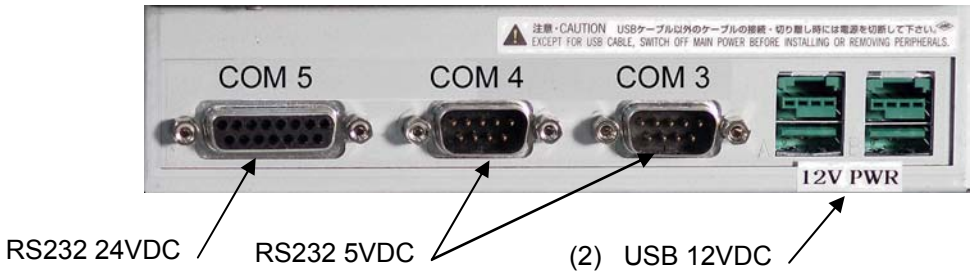


Figure 5-49. Optional Combo I/O Board

Figure 5-50. Optional Powered USB I/O Board

5.6. Connecting Power

Connect AC power to the back panel.

Figure 5-51. Connecting AC Power

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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.

6.2. 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 below.

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. 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.

8. 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.

6.3. Power ON and OFF Sequence

This section presents the general procedures for powering the TeamPoS 3000 XE control unit ON and OFF. The instructions 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, the TeamPoS 3000 XE power switch (in the front of the unit) or by disconnecting AC power.

6.3.1. 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 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. Note that the Model VF60 two-line alphanumeric display does not display error messages.

6.3.2. 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

This chapter provides a list of periodic maintenance items and also provides instructions for replacing (or installing) some of the controller components.

Caution: To prevent electric shock, be sure the power cord is disconnected from the controller before any covers are removed. Be sure to observe all ESD precautions and power OFF procedures.

7.1. Periodic Maintenance

The following tasks should be performed periodically by trained personnel only:

- 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 in Chapter 9 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.
- If the model DT50III printer has the MICR option, check its function and clean the MICR after every 6000 checks.

7.2. Field-Replaceable Items

The following items in the controller are field-replaceable: Motherboard, memory, PCI Card, Combo I/O board, Powered USB I/O board, hard drive, CD/DVD, power supply, and fan. The only tool you will need is a screwdriver. Location of these components is shown in Figure 7-1.

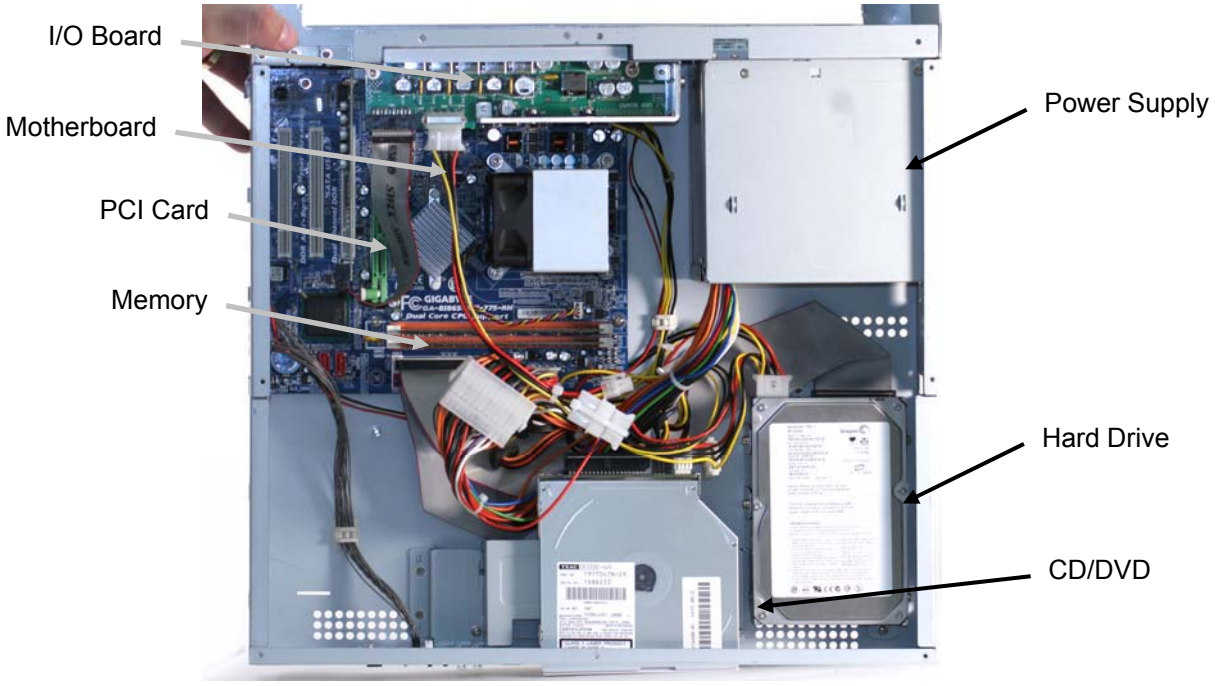


Figure 7-1. Field-Replaceable Items

7.3. Removing the Top Cover

Replacing components requires that the controller top cover be removed.

To remove the top cover:

1. Unplug the power cord from the controller.
2. Unplug and remove any stacked peripherals from the controller.
3. Remove screws securing the cover to the chassis.
4. Slide the cover forward to remove it.

7.4. Removing the Front Panel

Removing the front panel gives access to the CD/DVD.

To remove the front panel:

1. Unplug the power cord from the controller.
2. Open front door by pulling forward from the notch.

Figure 7-2. Opening the Controller Front Door

3. Loosen thumbscrew.

4. 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.

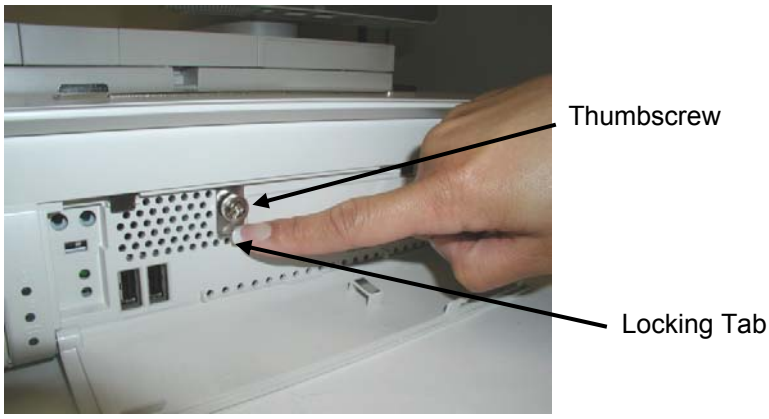


Figure 7-3. Thumbscrew and Locking Tab

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

Figure 7-4. Removing the Front Panel

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

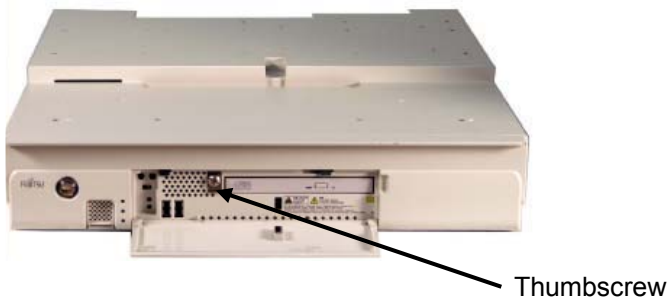


Figure 7-5. Replacing the Front Panel

7.5. Replacing the Motherboard

Motherboard components such as the CPU are not field-replaceable.

To replace the motherboard:

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

When handling the motherboard, avoid touching any metal leads or connectors.

Please do not remove the stickers on the motherboard. They are required for warranty validation.

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see in section 7.3).
4. Remove the optional I/O USB or Combo board from the back of the chassis by removing the two screws that hold it in place. Both boards are removed the same way.

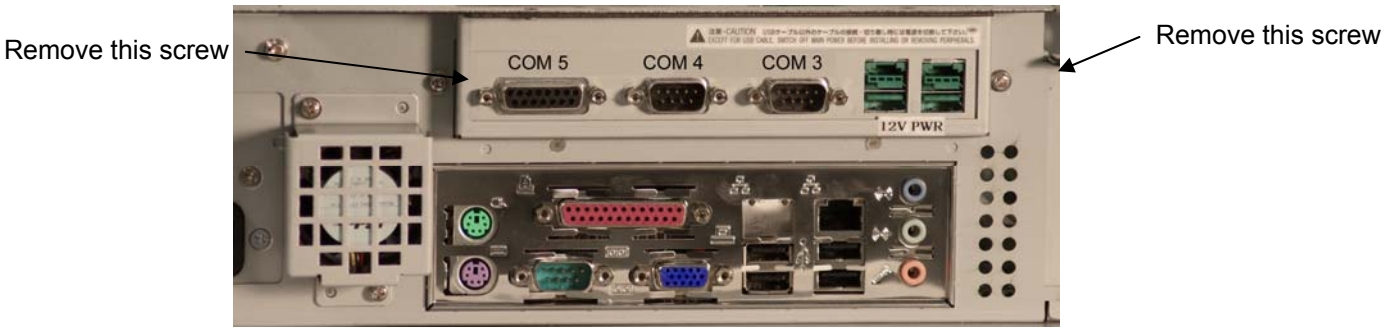


Figure 7-6. Removing the I/O Board

5. Disconnect the two connectors that plug into the motherboard. Remove the I/O board from the chassis.

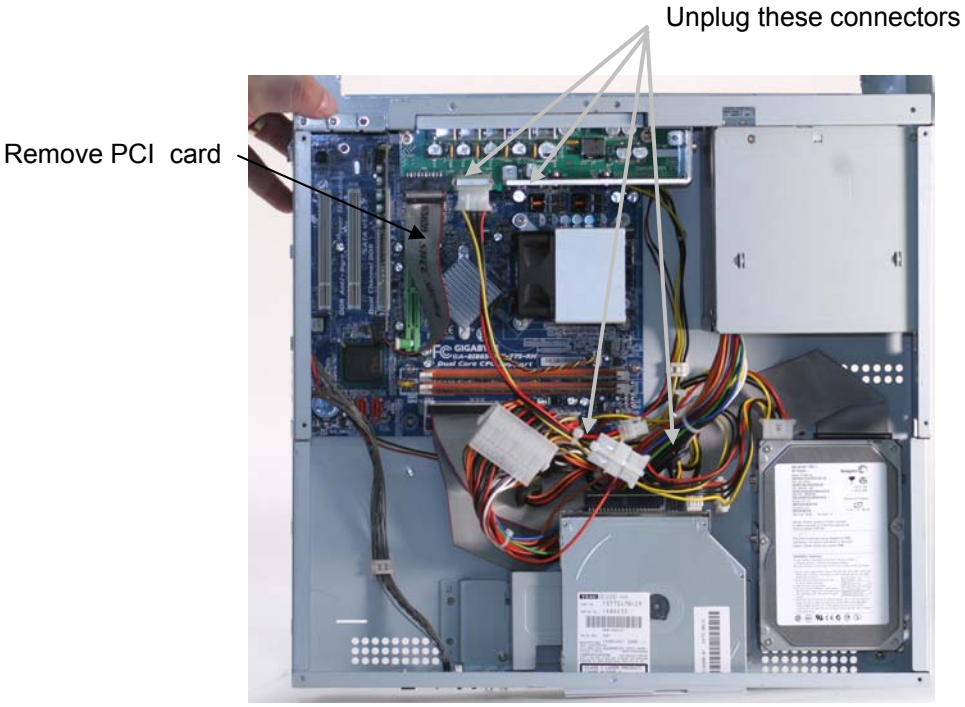


Figure 7-7. Removing the I/O Board Connectors

6. Disconnect other connectors from the motherboard.
7. Remove the PCI card from the motherboard.
8. Remove the six screws that attach the motherboard to the chassis.

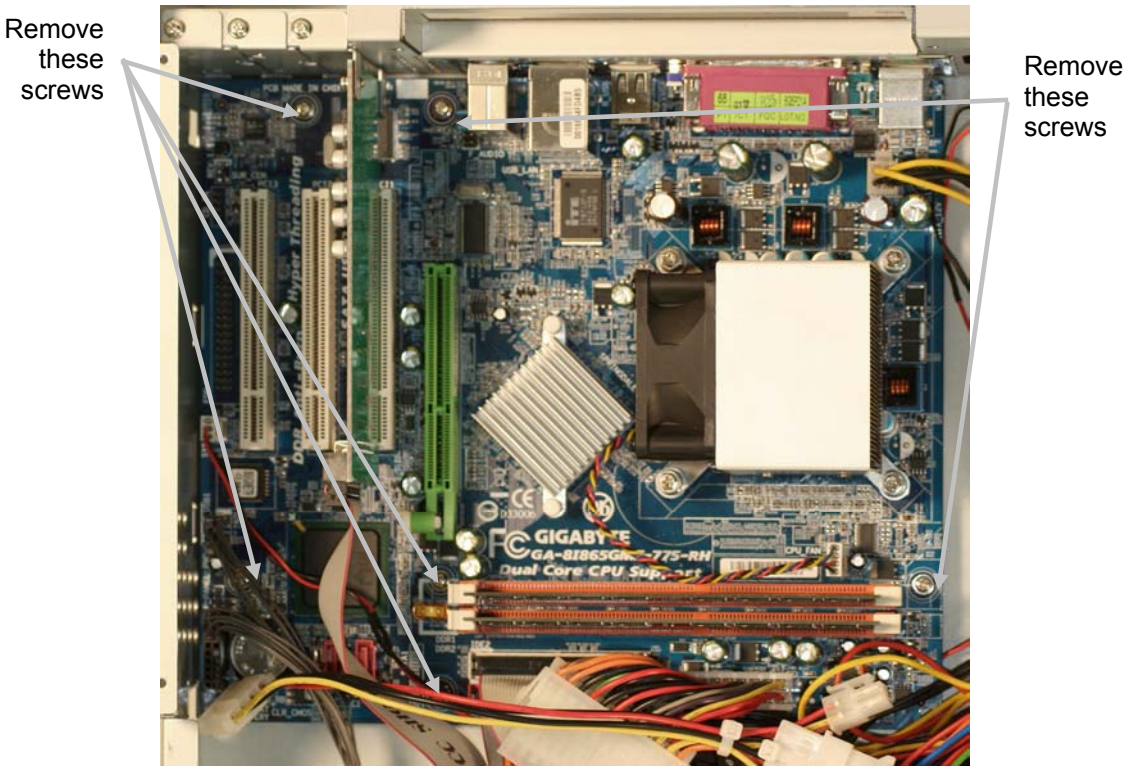


Figure 7-8. Removing Screws from the Motherboard

9. Lift the motherboard out of the chassis.
10. To replace the motherboard, attach it to the chassis with the six screws.
11. Connect all connectors.
12. Replace the I/O or Combo board; connect it to the motherboard and attach it to the chassis with two screws.
13. Replace the top cover and front panel.
14. Connect AC power to the controller.

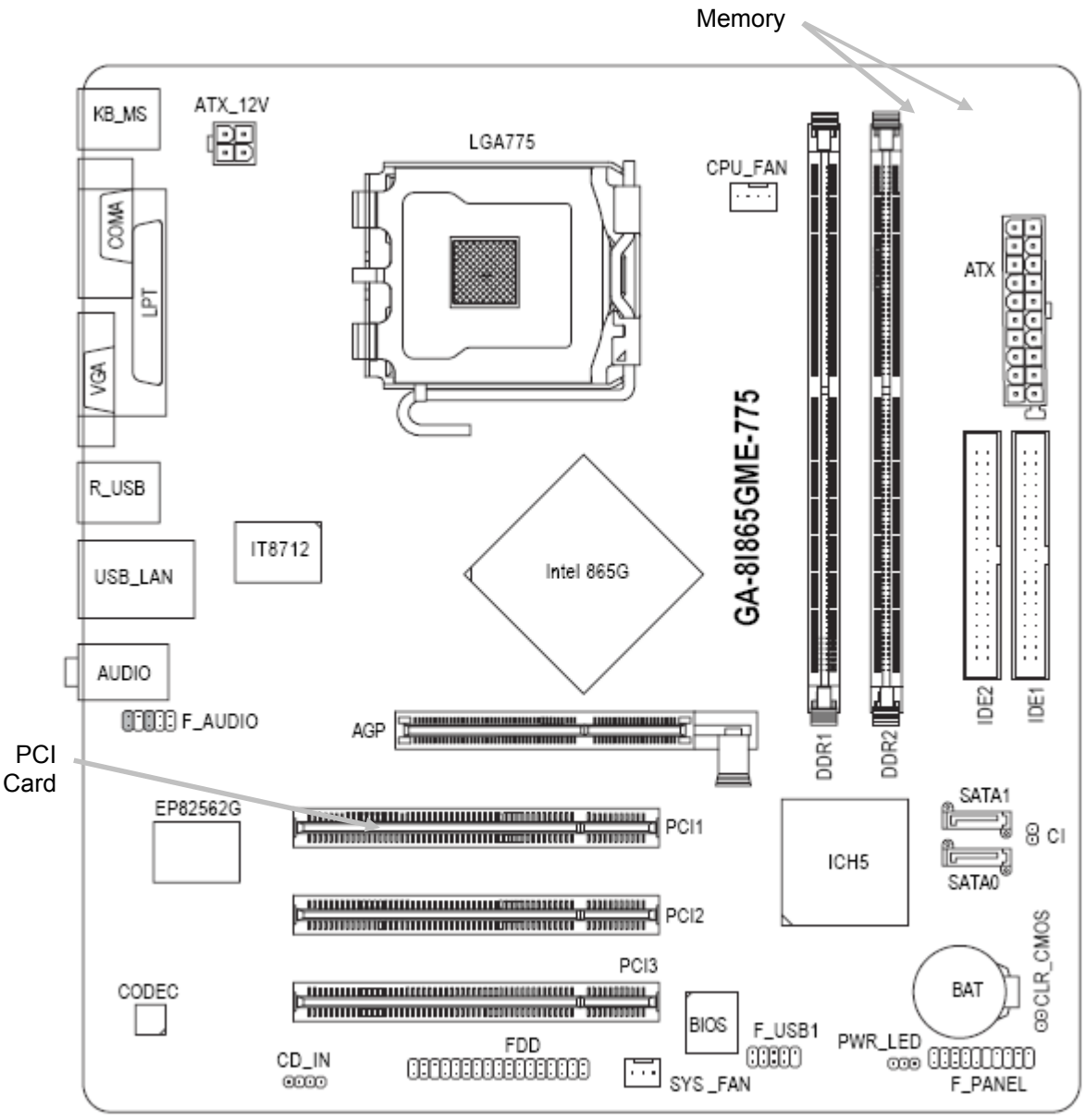
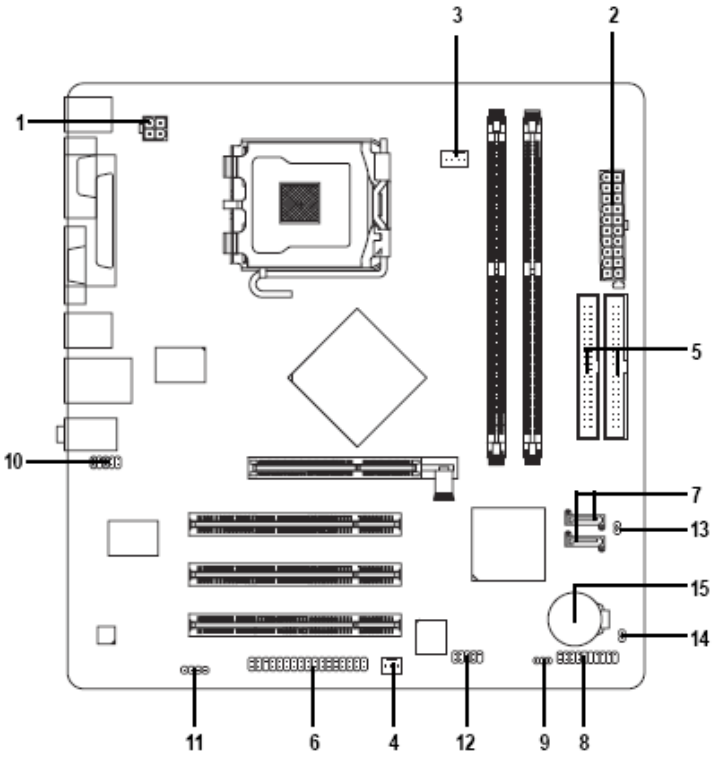


Figure 7-9. TeamPoS 3000 XE Motherboard

7.5.1. Motherboard Connectors

Motherboard connectors and their function are shown in Figure 7-10. The following connectors are not used: front panel audio, battery, FDD and SATA connectors. Details on the connectors are presented in the following sections.

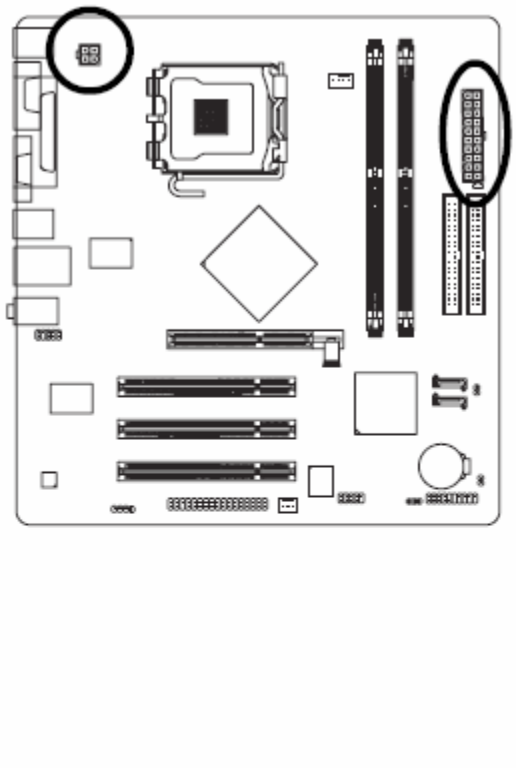


1)	ATX_12V	9)	PWR_LED
2)	ATX (Power Connector)	10)	F_AUDIO
3)	CPU_FAN	11)	CD_IN
4)	SYS_FAN	12)	F_USB1
5)	IDE1 / IDE2	13)	CI
6)	FDD	14)	CLR_CMOS
7)	SATA0 / SATA1	15)	BAT
8)	F_PANEL		

Figure 7-10. Motherboard Connectors

7.5.1.1. Power Connectors on the Motherboard

The ATX_12V power connector mainly supplies power to the CPU. If the ATX_12V power connector is not connected, the system will not start up.



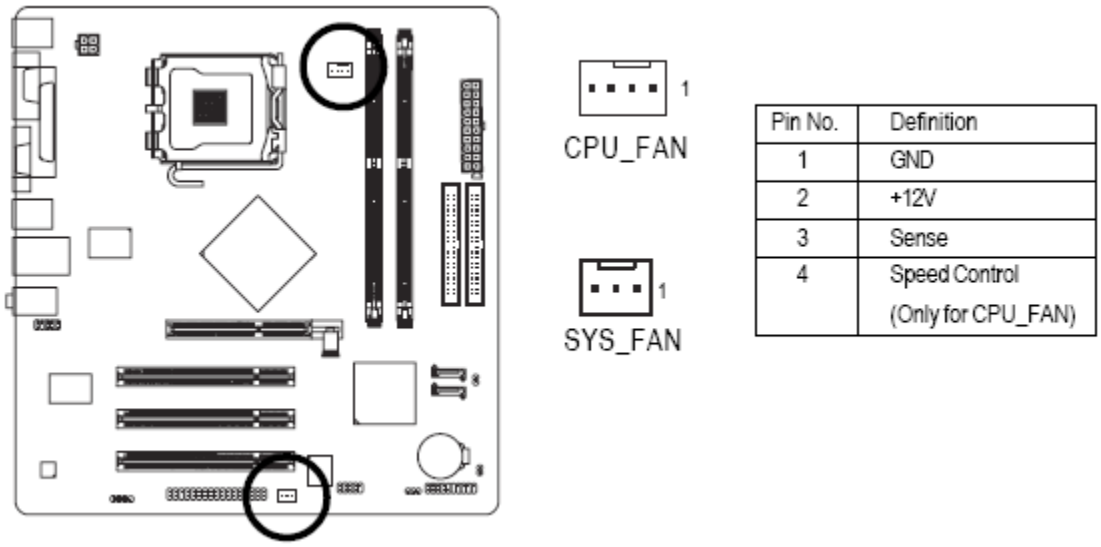
Pin No.	Definition
1	GND
2	GND
3	+12V
4	+12V

Pin No.	Definition
1	3.3V
2	3.3V
3	GND
4	+5V
5	GND
6	+5V
7	GND
8	Power Good
9	5V SB (stand by +5V)
10	+12V
11	3.3V
12	-12V
13	GND
14	PS_ON(soft on/off)
15	GND
16	GND
17	GND
18	-5V
19	+5V
20	+5V

Figure 7-11. Motherboard Power Connectors

7.5.1.2. Fan Power Connector

The fan power connector supplies +12V power via a 3-pin/4-pin connector. Remember to connect power to the fan to prevent system overheating and failure.



Pin No.	Definition
1	GND
2	+12V
3	Sense
4	Speed Control (Only for CPU_FAN)

Figure 7-12. Motherboard Fan Connectors

7.5.1.3. IDE Connectors

One IDE connector can connect to one IDE cable, and the single IDE cable can then connect to two IDE devices (hard drive or optical drive). If you wish to connect two IDE devices, set the jumper on one IDE device as Master and the other as Slave.

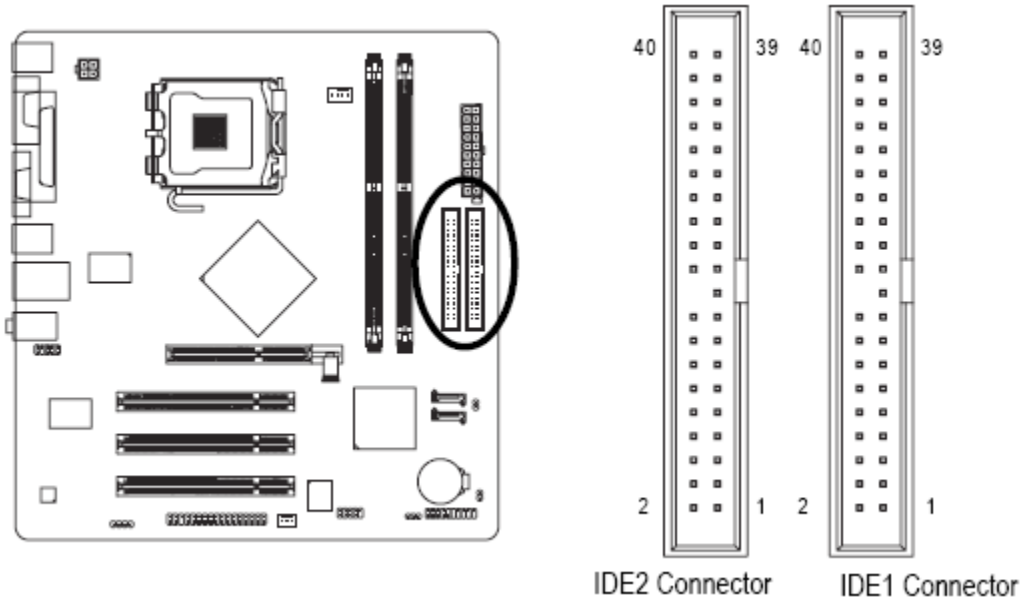
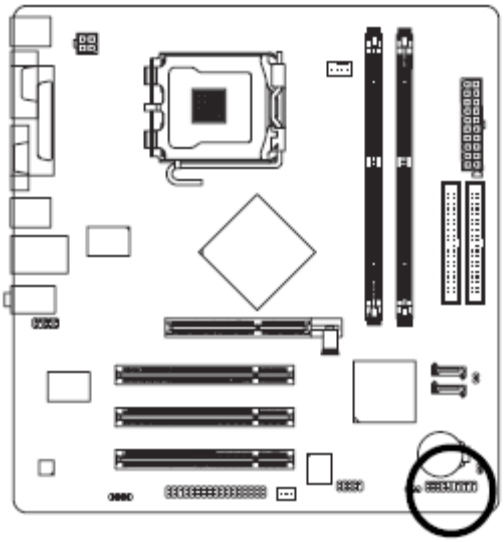
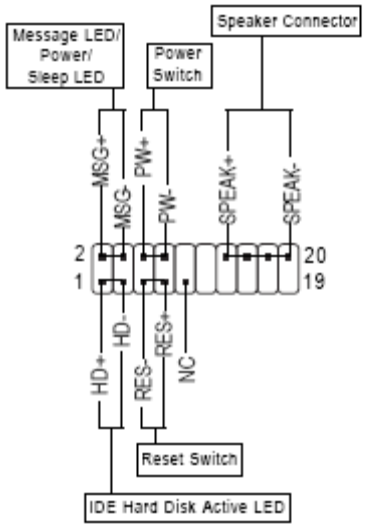


Figure 7-13. Motherboard IDE Connectors

7.5.1.4. Front Panel Connector

The front panel connector connects with the power LED, speaker, reset switch, power switch, etc. on the front panel.



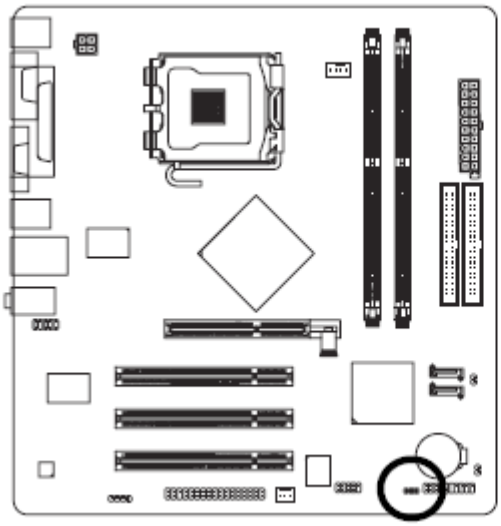


HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
SPEAK (Speaker Connector)	Pin 1: Power Pin 2- Pin 3: NC Pin 4: Data(-)
RES (Reset Switch)	Open: Normal Close: Reset Hardware System
PW (Power Switch)	Open: Normal Close: Power On/Off
MSG(Message LED/Power/Sleep LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
NC	NC

Figure 7-14. Motherboard Front Panel Connectors

7.5.1.5. Power LED Connector

The PWR_LED connector is connected with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode.

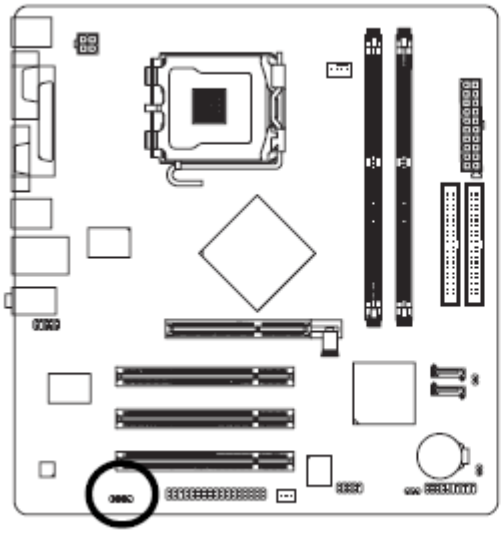


Pin No.	Definition
1	MPD+
2	MPD-
3	MPD-

Figure 7-15. Motherboard Power LED Connector

7.5.1.6. CD In Connector

The CD In connector attaches to the CD/DVD drive.

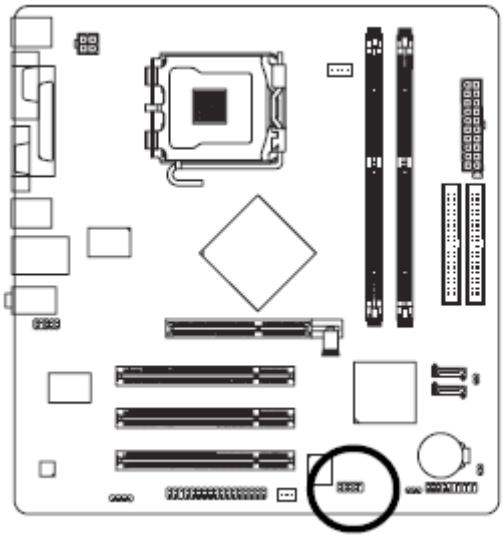


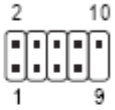
Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

Figure 7-16. Motherboard CD In Connector

7.5.1.7. Front USB Connectors

Be careful with the polarity of the front USB connector. Check the pin assignment carefully while you connect the front USB cable; incorrect connection between the cable and connector may damage the device or prevent it from working.



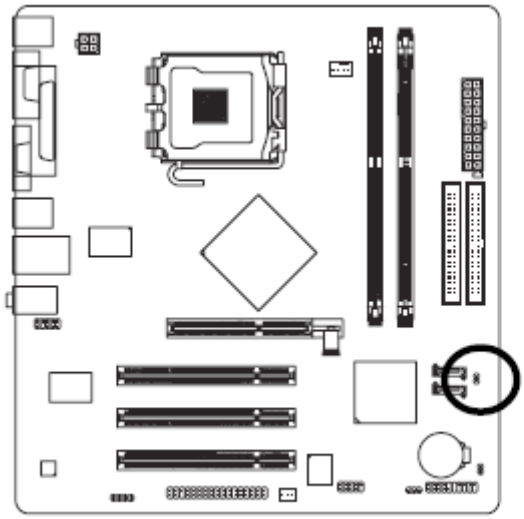


Pin No.	Definition
1	Power (5V)
2	Power (5V)
3	USB DX-
4	USB Dy-
5	USB DX+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

Figure 7-17. Motherboard Front USB Connector

7.5.1.8. Chassis Intrusion Connector

This two-pin connector allows your system to detect if the chassis cover is removed when the "Case Opened" status is set in BIOS Setup.



Pin No.	Definition
1	Signal
2	GND

Figure 7-18. Motherboard Chassis Intrusion Connector

7.5.1.9. Clear CMOS

You may clear the CMOS data to its default values by this jumper. To clear CMOS, temporarily short pins 1-2. To prevent improper use of this header, a jumper is not included on it.

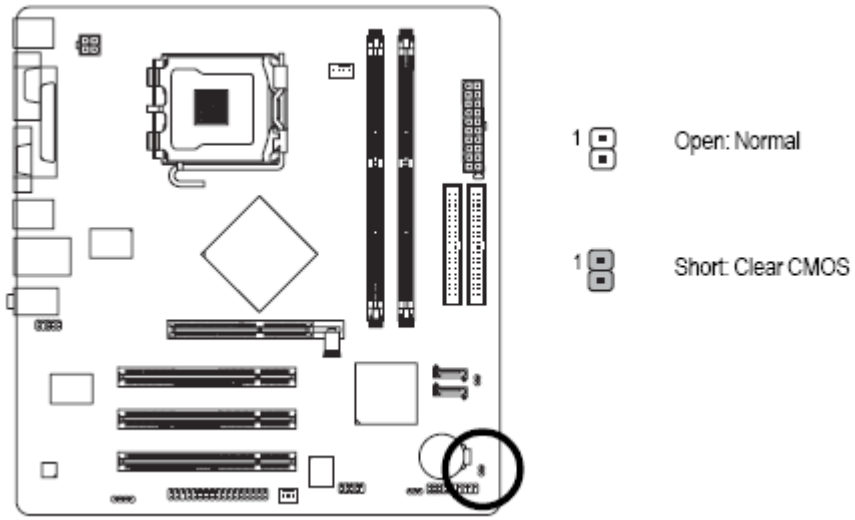


Figure 7-19. Motherboard Clear CMOS Jumper

7.6. Replacing the Hard Drive

To replace the hard drive:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. Unplug the IDE and power cables from the hard drive.
5. Remove the two screws that attach the hard drive to the chassis.
6. Lift the hard drive out of the chassis.
7. Remove the four screws that attach it to the bracket.
8. Attach the new hard drive to the bracket with four screws.
9. Attach the new hard drive (with bracket) to the chassis with two screws.
10. Connect the IDE and power cables.
11. Replace the top and front covers.

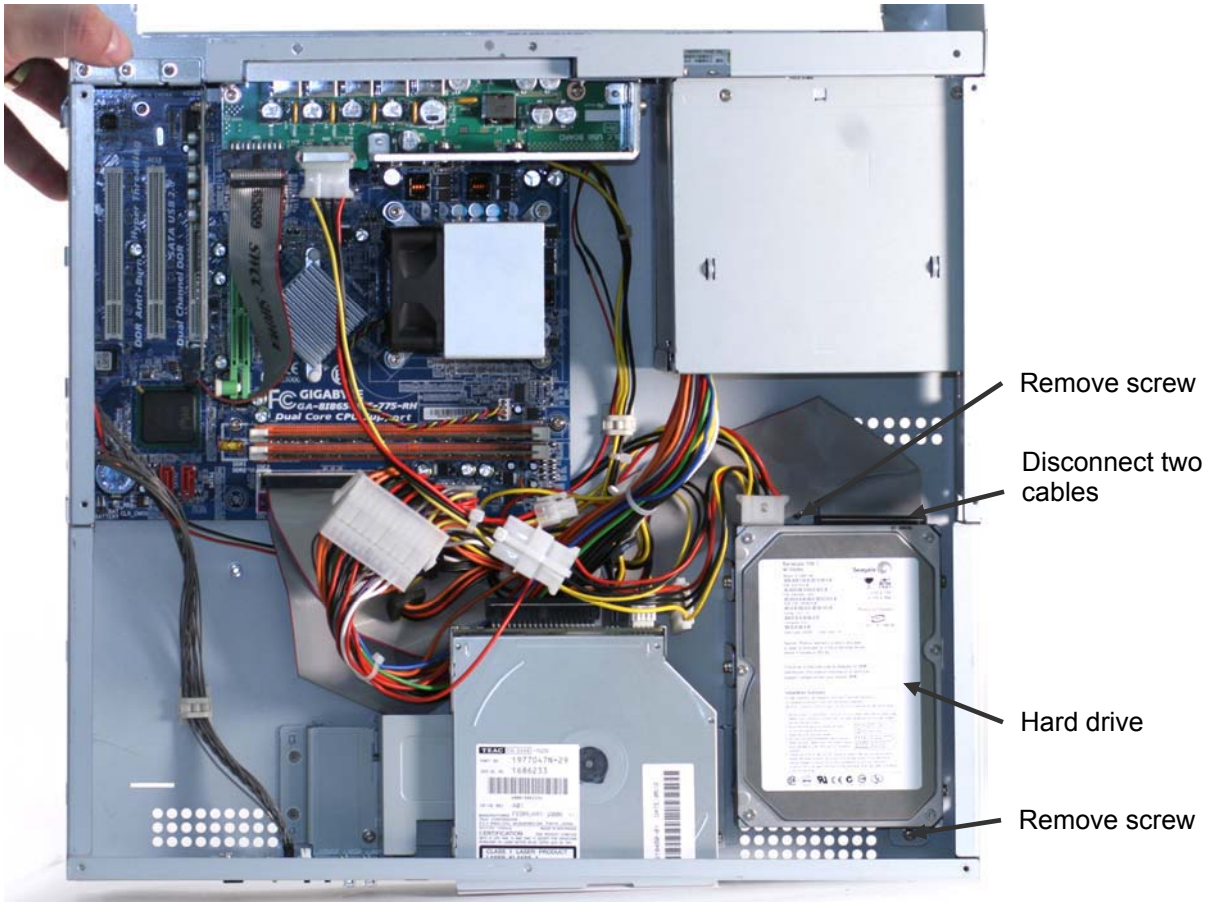


Figure 7-20. Replacing the Hard Drive

Figure 7-21. Removing the Hard Drive from the Chassis

Figure 7-22. Removing the Hard Drive from the Bracket

7.7. Adding or Replacing Memory

The motherboard supports DDR memory modules, whereby BIOS will automatically detect memory capacity and specifications. Memory modules are designed so that they can be inserted only in one direction. The memory capacity used can differ with each slot.

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

When handling the motherboard, avoid touching any metal leads or connectors.

To add or replace memory:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. On the motherboard, flip the memory socket levers to the open position.

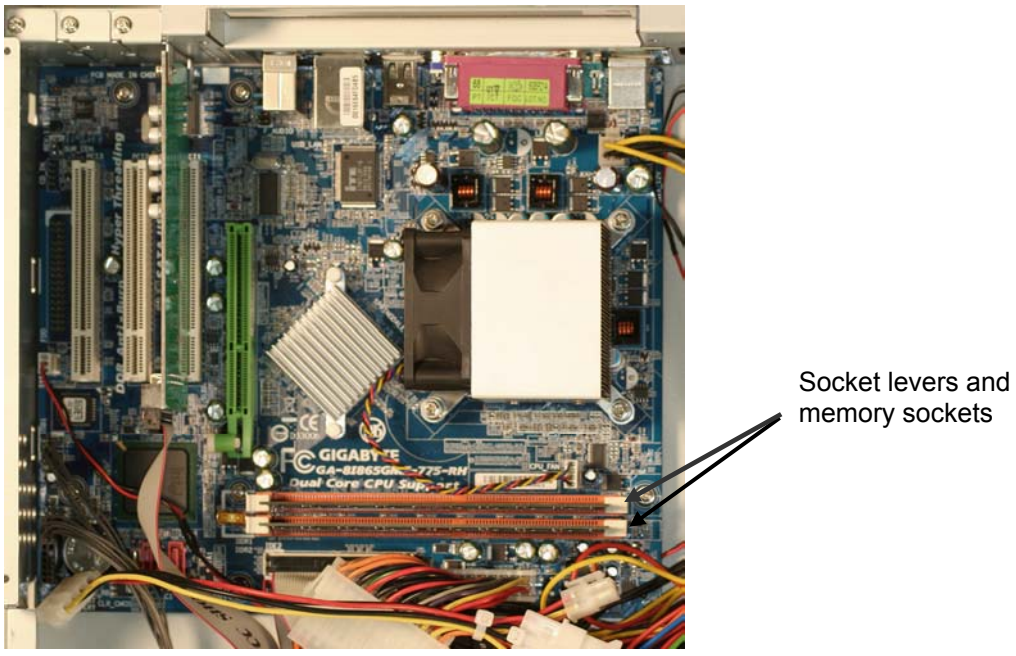


Figure 7-23. Adding or Replacing Memory

5. Insert memory vertically into an empty socket. There is only one way the memory stick will fit.
6. Lock both socket levers into place to secure the new memory. Reverse these steps to remove memory.

7. If this is an upgrade, attach the upgrade label that comes with the upgrade kit on the back of the unit near the serial number.
8. Replace the top cover and front panel.

7.8. Installing the PCI add-In Card

The PCI card requires that one of the optional I/O cards is also installed. See section 7.9.

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

When handling the motherboard, avoid touching any metal leads or connectors.

To install the PCI card:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. On the back panel, remove the filler plate corresponding to the PCI socket where the board will be installed.

Figure 7-24. Removing the Filler Plate from the Back Panel

5. Plug the PCI card into the PCI slot adjacent to the filler plate that was removed.

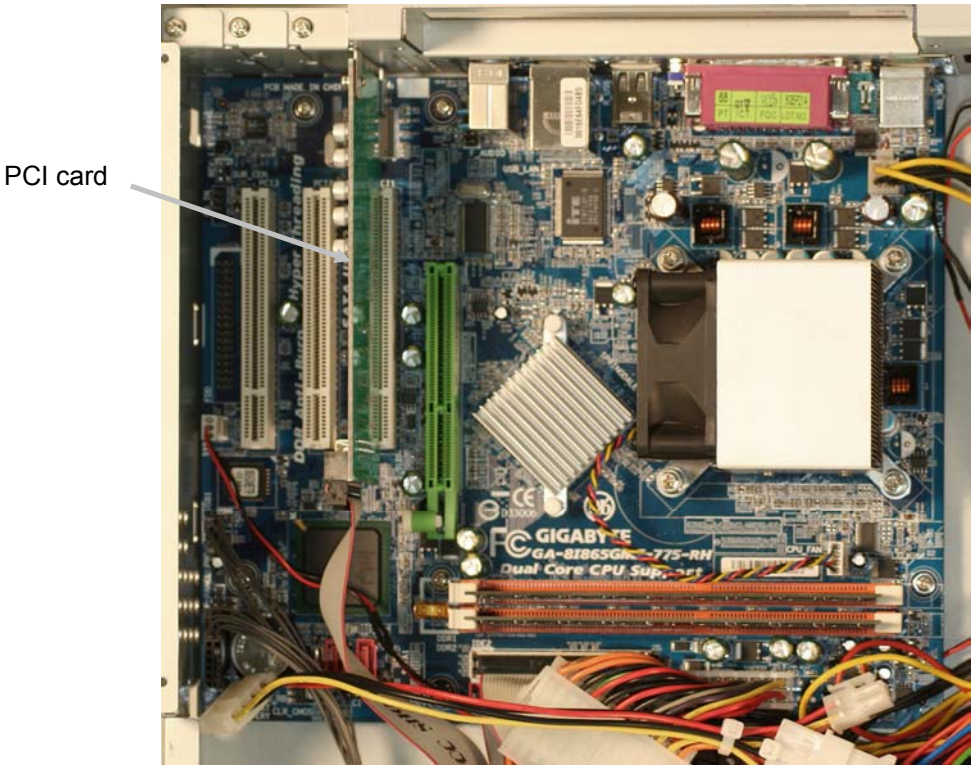


Figure 7-25. Installing the PCI Card

6. Plug the PCI card into the PCI slot adjacent to the filler plate that was removed.
7. Secure the PCI card with the screw that was used to secure the filler plate.
8. Connect the cable to the Combo board.
9. Replace the top cover and front panel.

7.9. Installing/Replacing I/O Boards

The powered USB I/O board and Combo I/O board are mutually exclusive options. Installation is the same for both boards. When using one of the optional I/O boards, the PCI card is also required. See section 7.8.

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

To install the I/O board:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).

Figure 7-26. Installing the I/O Board

4. If no I/O board is currently installed, the back of the chassis will have a filler plate.
5. If there is a filler plate in the back panel, remove it by removing the two screws.
6. If you are replacing an existing I/O board, first disconnect the cables from it, then remove the two screws that secure it to the back panel and remove it from the chassis.
7. Install the new I/O board, connect the cable from the I/O board to the PCI card, and attach the board to the chassis with the two screws.
8. Replace the top cover and front panel.

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

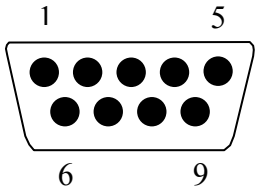


Figure 7-27. Combo Board COM Port Connector Signals

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

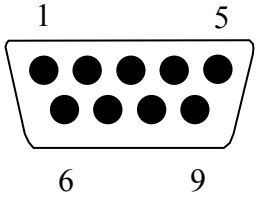


Figure 7-28. Combo Board COM Port Connector Signals

7.9.1. Combo Board Jumper Settings

Combo board jumper locations and settings are shown in Figure 7-29.

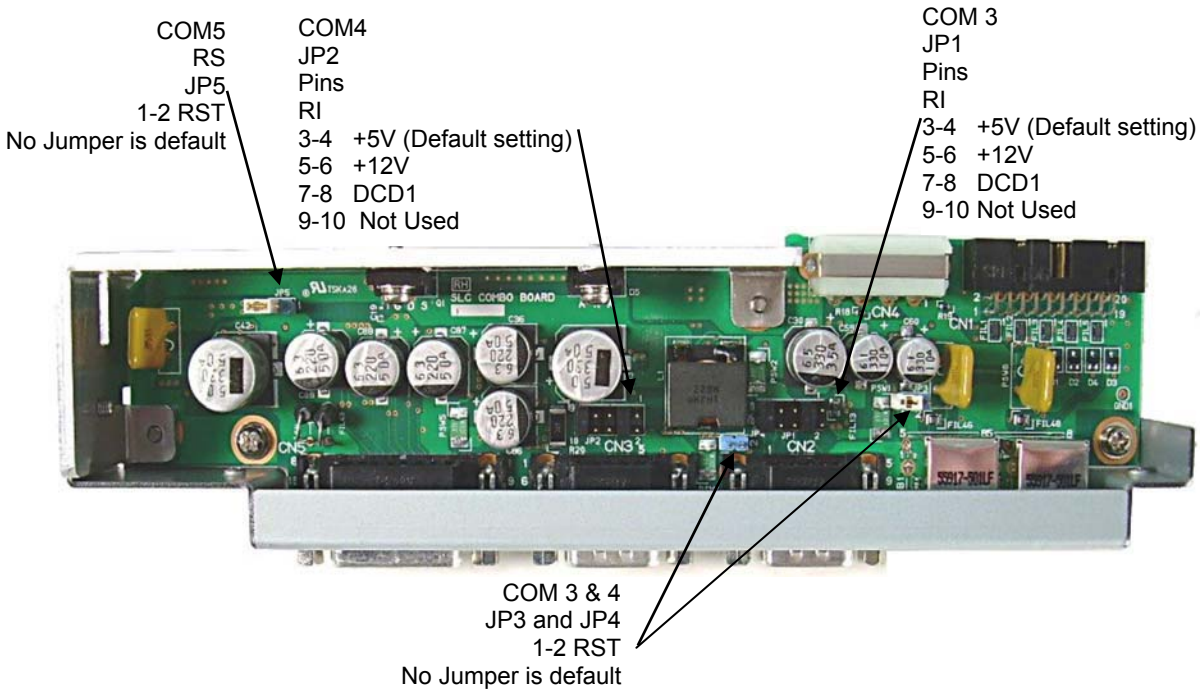


Figure 7-29. Combo Board Jumpers

7.10. Replacing the CD/DVD

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

To replace the CD/DVD:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. Disconnect the ribbon cable and white power cable (connector J7) from the CD/DVD.

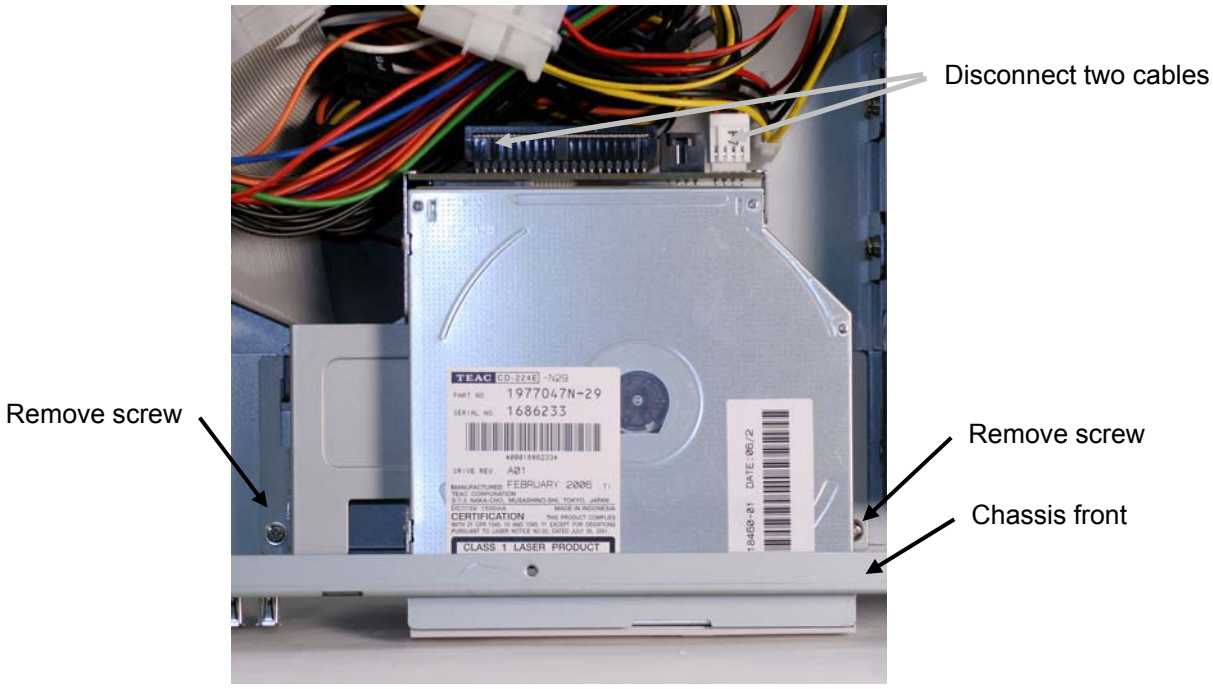


Figure 7-30. Installing the CD/DVD

5. Remove the two screws that secure the CD/DVD to the chassis.
6. Insert the new CD/DVD through the opening in the front of the chassis.
7. Secure the CD/DVD to the chassis with the two screws.
8. Connect the two cables to the motherboard. See Figure 7-16.
9. Replace the front panel and top cover.

7.11. Replacing the Power Supply

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

To replace the power supply:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. Disconnect connectors P1 and P2 the cables from the motherboard. (See Figure 7-11.)

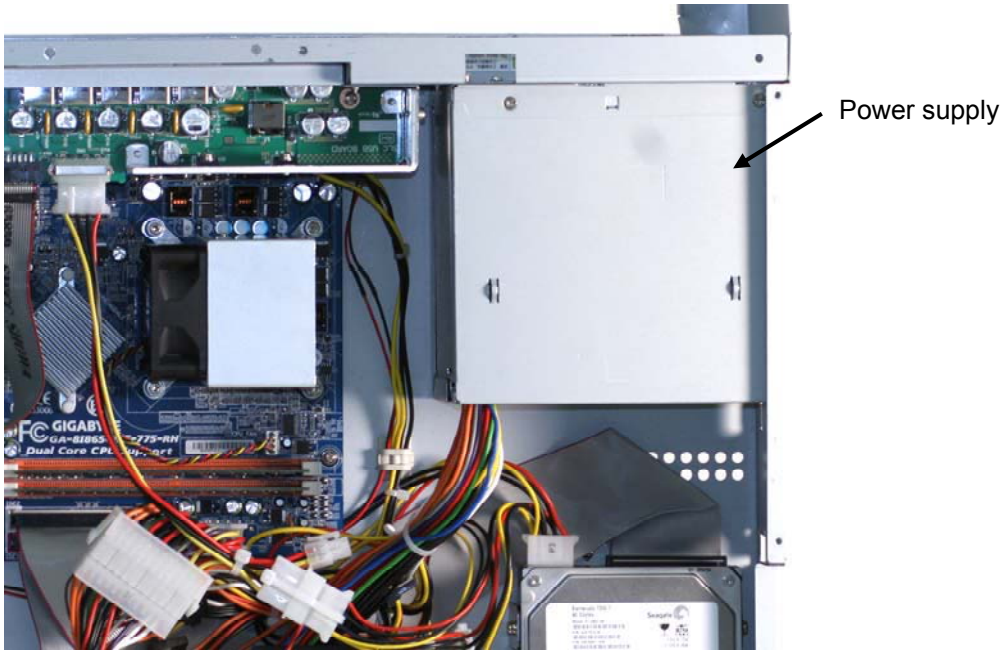


Figure 7-31. Replacing the Power Supply

5. Remove four screws from the back panel.
6. Remove the power supply from the chassis.
7. Insert the new power supply into the chassis.
8. Attach it to the back panel with the four screws.

Figure 7-32. Screws that Secure the Power Supply

9. Connect the cables to connectors P1 and P2 on the motherboard.
10. Replace the front panel and top cover.

7.12. Replacing the Fan

The power supply fan is accessible from the back of the chassis.

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

To replace the fan:

1. Unplug the power cord from the controller.
2. Remove the front panel (see section 7.4, steps 2-5).
3. Remove the top cover (see section 7.3).
4. Remove the two screws that attach the fan to the rear panel.

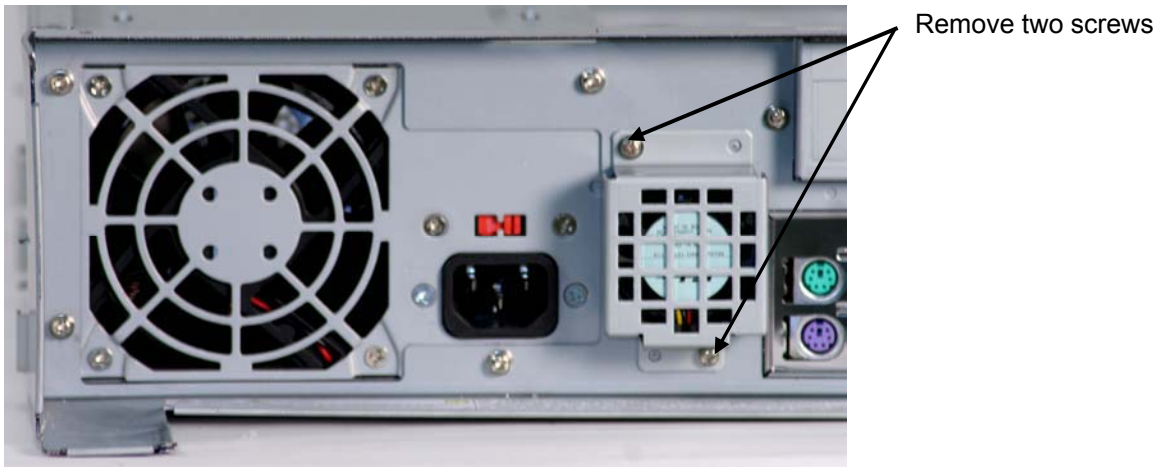


Figure 7-33. Replacing the Fan

5. Remove the two screws that attach the fan to the rear panel.
6. Disconnect the system fan connector on the motherboard. See Figure 7-12.
7. Attach the new fan to the rear panel with two screws.
8. Plug the fan connector into the motherboard.
9. Replace the front panel and top cover.

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Chapter 8 - Troubleshooting

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

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.

Step	Check item	Judgment	Action
1	Is the power cable connected?	Y N	Go to Step 2. Connect the power cable.
2	Is there power to the AC outlet? (Test with device known to work.)	Y N	Go to Step 3. Turn on power to the distribution panel.
3	Does the power shut off after a few minutes?	Y N	Go to Step 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 Step 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 Step 6.
6	Is the 5V Standby LED light on?	Y N	Go to Step 8. Go to Step 7.
7	Is the cable from the operation panel to the motherboard securely installed?	Y N	End. Verify functionality after securely installing the cable. If still no power go to No 8.
8	Can the power be turned on after replacing the power supply unit?	Y N	End. Go to Step 9.
9	Can the power be turned on after replacing the motherboard?	Y N	End. Go to Step 10.
10	Can the power be turned on after replacing the operator panel?	Y N	End. Go to Step 11.
11	Can the power be turned on after replacing the I/O boards?	Y N	End. Change the controller.

8.2 System will not boot up

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

Step	Check item	Judgment	Action
1	Is data displayed on the monitor during Power On Self Test (POST)?	Y N	Go to Step 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 Step 3.
3	Does the system get through the POST without hanging up?	Y N	Go to Step 7. Go to Step 4.
4	Replace Memory – Does system get through POST?	Y N	End. Go to Step 5.
5	Replace CPU chip – Does system get through POST?	Y N	End. Go to Step 6.
6	Replace motherboard – Does system get through POST?	Y N	End. Go to Step 13.
7	Can BIOS be accessed by hitting F2 during POST?	Y N	Load BIOS Defaults/Save & Exit/Go to #8. Go to Step 12.
8	Has the system (O/S) been installed?	Y N	Go to Step 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 Step 10.
10	Are the HDD cable/s or the CD-ROM cable connected?	Y N	Go to Step 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 Step 13. Go to Step 12.
12	Can the system be started after replacing the motherboard?	Y N	End. Go to Step 13.
13	Can the system be started after replacing the HDD and reloading the O/S?	Y N	End. Go to Step 14.
14	Can the system be started after replacing the power supply and docking backplane?	Y N	End. Change the controller.

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

Step	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 Step 2.
2	Does the display go blank at different times when the OS is running?	Y N	Go to No 5. Go to Step 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 Step 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 in digital mode (DVI)?	Y N	Check JP-1 on motherboard Go to Step 6.
6	Does the display work properly after replacing the LCD?	Y N	End Go to Step 7.
7	Does the display work properly after replacing the motherboard	Y N	End. Go to Step 8.
8	Does the display work properly after replacing the Docking Backplane?	Y N	End Go to Step 9.
9	Does the display work after replacing the Combo and/or the USB board?	Y N	End. Go to Step 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

Step	Check item	Judgment	Action
1	Is there power to the terminal and other peripherals?	Y N	Go to Step 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 Step 3. Connect the cable/s properly and retest.
3	Is display correct after adjusting brightness/contrast on the LCD?	Y N	End. Go to Step 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 Step 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 Step 6. Go to Step 7.
6	Does the display function after replacing the data cable?	Y N	End. Go to Step 7.
7	Does the display function after replacing the LCD/display?	Y N	End. Go to Step 8.
8	Does the display function after replacing the motherboard?	Y N	End. Go to Step 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

Step	Check items	Judgment	Action
1	Is receipt paper set correctly?	Y N	Go to Step 2. Set the receipt paper correctly.
2	Can you feed the paper with the paper feed key?	Y N	Go to Step 5. Go to Step 3.
3	Is the printer cable connected correctly?	Y N	Go to Step 4. Connect the cable correctly.
4	Is power applied to the printer? (Check the +24V)	Y N	Go to Step 5. Go to Step 7.
5	Can you execute test printing using the test program?	Y N	Check the software and printer cable. Go to Step 6.
6	Can you print after replacing the printer?	Y N	End. Go to Step 7.
7	Can you print after replacing the power supply?	Y N	End. Go to Step 8.
8	Can you print after replacing the Combo board?	Y N	End. Go to Step 9.
9	Can you print after replacing the motherboard?	Y N	End. Change the controller.

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

Step	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to Step 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 Step 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 Step 4.
4	After replacing keyboard, can you key input?	Y N	End. Go to Step 5.
5	Can you input the key correctly after replacing docking back plane?	Y N	End. Go to Step 6.
6	Can you key input correctly after replacing the motherboard?	Y N	End. Change the controller.

8.7 Keyboard MSR reading error

Step	Check item	Judgment	Action
1	Is the keyboard cable connected correctly?	Y N	Go to Step 2. Connect the cable correctly.
2	Does the magnetic card meet ISO standards?	Y N	Go to Step 3. Try a known good card and go to Step 3 if good card still fails.
3	Was the card swiped in the correct direction?	Y N	Go to Step 4. Change the position.
4	Can it read correctly after cleaning the MSR with a cleaning card?	Y N	End. Go to Step 5.
5	Does the MSR operate properly using the test program?	Y N	Check OPOS/JavaPOS drivers. Go to Step 6.
6	Is data read normally after replacing the MSR	Y N	End. Go to Step 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

Step	Check item	Judgment	Action
1	Is the cash drawer cable connected correctly?	Y N	Go to Step 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 Step 3.
3	Can the cash drawer be activated after replacing the drawer cable?	Y N	End. Go to Step 4.
4	Can the cash drawer be activated after replacing the drawer?	Y N	End. Go to Step 5.
5	Can the cash drawer be activated after replacing the docking backplane?	Y N	End. Go to Step 6.
6	Can the cash drawer be activated after replacing the motherboard?	Y N	End. Change the controller.

8.9 Customer display errors

Step	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to Step 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 Step 3. Go to Step 4.
3	Will WINCLD run normally using the VFD test program?	Y N	Possible software problem, check OPOS/JAVAPOS. Go to Step 4.
4	Will the display show properly after replacing the display cable?	Y N	End. Go to Step 5.
5	Does the VFD run properly after replacing the Combo board or USB board?	Y N	End. Go to Step 6.
6	Does the VFD run properly after replacing the power supply?	Y N	End. Change the controller.

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

Step	Check item	Judgment	Action
1	Is the voltage of the lithium battery on the motherboard normal?	Y N	Go to Step 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 Step 3. Set jumper correctly.
3	Is operation executed normally 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.

8.11 Operation errors of other peripheral devices

Step	Check item	Judgment	Action
1	Is the cable connected correctly?	Y N	Go to Step 2. Connect the cable correctly.
2	Does WINCLD operate properly with this peripheral?	Y N	Check the program. Go to Step 3.
3	Can the system be activated after replacing the associated I/O board?	Y N	End. Go to Step 4.
4	Can the system be activated after replacing the motherboard ?	Y N	End. Go to Step 5.
5	Can the system be activated after replacing the power supply?	Y N	End Change the controller.

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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). You can also enter the BIOS setup screen by pressing CTRL+F1.

When setting up BIOS for the first time, save the current BIOS to a disk in the event that BIOS needs to be reset to its original settings.

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 FEATURES.

9.1.2 Main Menu

Note: An arrow [▸] indicates additional screens. Press [Enter] to advance to the next screen. Text shown in gray 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

CMOS Setup Utility © 1984-2006 Award Software	
▸ Standard CMOS Features ▸ Advanced BIOS Features ▸ Integrated Peripherals ▸ Power Management Setup ▸ PnP/PCI Configurations ▸ PC Health Status	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Save & Exit Setup Exit Without Saving
Esc: Quit F8: Q-Flash	↑ ↓ → ← : Select Item F10: Save & Exit Setup
Time, Date, Hard Disk Type…	

9.1.3 Standard CMOS Features

This setup page includes all the items in a standard compatible BIOS.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software Standard CMOS Features		
Date (mm:dd:yy)	Fri. Feb 10 2006	Item Help
Time (hh:mm:ss)	8 : 51 : 38	
▸ IDE Channel 0 Master	[None]	Menu Level ▸
▸ IDE Channel 0 Slave	[None]	
▸ IDE Channel 1 Master	[None]	***Information or instructions will appear here for each selection***
▸ IDE Channel 1 Slave	[None]	
▸ IDE Channel 2 Master	[None]	
▸ IDE Channel 3 Master	[None]	
Drive A	[1.44M, 3.5"]	
Drive B	[None]	
Floppy 3 Mode Support	[Disabled]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	239M	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F6: Fail-Safe Default F7: Optimized Defaults		

9.1.4 Advanced BIOS Features Setup

This setup page includes all the items of special enhanced features.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software Advanced BIOS Features		
▸ Hard Disk Booth Priority	[Press Enter]	Item Help
First Boot Device	[Floppy]	
Second Boot Device	[Hard Disk]	Menu Level ▸
Third Boot Device	[CDROM]	
Password Check	[Setup]	***Information or instructions will appear here for each selection***
Limit CPUID Max. to 3	[Disabled]	
No-Execute Memory Protect(Note)	[Enabled]	
CPU Thermal Monitor 2(TM2) (Note)	[Enabled]	
Unit Display First	[PCI]	
On-Chip frame Buffer Size	[16MB]	
↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help F5: Previous Values F6: Fail-Safe Default F7: Optimized Defaults		

9.1.5 Integrated Peripherals Setup

This setup page includes all onboard peripherals.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software
Integrated Peripherals

			Item Help
	On-Chip Primary PCI IDE	[Enabled]	
	On-Chip Secondary PCI IDE	[Enabled]	
	On-Chip SATA	[Auto]	Menu Level ▸
x	SATA Port0 configure as	SATA Port0	
	SATA Port1 configure as	SATA Port1	***Information or instructions will appear here for each selection.***
	USB Controller	[Enabled]	
	USB 2.0 Controller	[Enabled]	
	USB Keyboard Support	[Disabled]	
	USB Mouse Support	[Disabled]	
	Legacy USB storage detect	[Enabled]	
	AC97 Audio	[Auto]	
	Onboard H/W LAN	[Enabled]	
	Onboard LAN Boot ROM	[Disabled]	
	Onboard Serial Port 1	[3F8/IRQ4]	
	Onboard Parallel Port	[378/IRQ7]	
	Parallel Port Mode	[SPP]	
x	ECP Mode Use DMA	3	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help
F5: Previous Values F6: Fail-Safe Default F7: Optimized Defaults

9.1.6 Power Management Setup

This setup page includes all the items of Green function features.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software
Power Management Setup

			Item Help
	ACPI Suspend Type	[S1(POS)]	
	Power LED in S1 state	[Blinking]	Menu Level ▸
	Off by Power button	[Instant-off]	
	PME Event Wake Up	[Enabled]	***Information or instructions will appear here for each selection.***
	ModernRingOn/WakeOnLan	[Enabled]	
	Resume by Alarm	[Disabled]	
x	Date (of Month) Alarm	Everyday	
x	Time (hh:mm:ss) Alarm	0 : 0 : 0	
	Power On By Mouse	[Disabled]	
	Power On By Keyboard	[Disabled]	
x	KB Power ON Password	Enter	
	AC BACK Function	[Memory]	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help
F5: Previous Values F6: Fail-Safe Default F7: Optimized Defaults

9.1.7 PnP/PCI Configurations Setup

This setup page includes all the configurations of PCI & PnP ISA resources.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software
PnP/PCI Configurations

		Item Help
PCII IRQ Assignment	[Auto]	
PCI2 IRQ Assignment	[Auto]	Menu Level ▸
PCI3 IRQ Assignment	[Auto]	***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

9.1.8 PC Health Status

This setup page is the system auto detect temperature, voltage, fan, speed.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software
PC Health Status

		Item Help
Reset Case Open Status	[Disabled]	
Case Opened	Yes	Menu Level ▸
Vcore	OK	
DDR25V	OK	***Information or instructions will appear here for each selection.***
+3.3V	OK	
+12V	OK	
Current CPU Temperature	45°C	
Current CPU FAN Speed	3245 RPM	
Current SYSTEM FAN Speed	0 RPM	
CPU Warning Temperature	[Disabled]	
CPU FAN Fail Warning	[Disabled]	
SYSTEM FAN Fail Warning	[Disabled]	
CPU Smart FAN Control	[Auto]	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1: General Help
F5: Previous Values F7: Optimized Defaults

9.1.9 Frequency/Voltage Control Setup

This setup page controls CPU clock and frequency ratio.

Caution: Incorrect setting of these parameters may cause damage to your system. Changes should only be made by Fujitsu-authorized personnel.

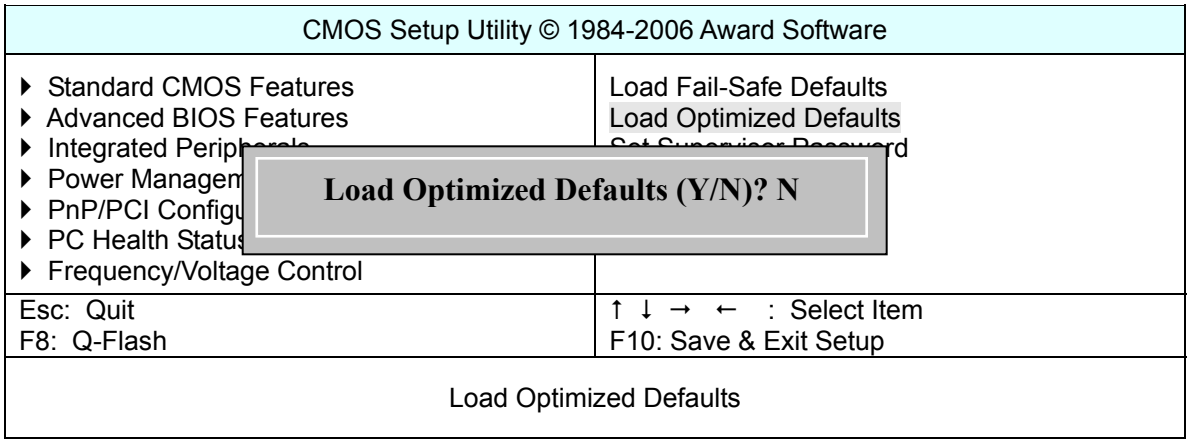
Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software Frequency/Voltage Control		
Memory Frequency For	[Auto]	Item Help
Memory Frequency (Mhz)	333	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		

9.1.10 Load Optimized Defaults

Optimized Defaults indicates the value of the system parameters which the system would have in best performance configuration.

Factory Default Settings



9.1.11 Set Supervisor Password

Change, set, or disable password. It allows you to limit access to the system and setup, or just to setup.

The BIOS Setup program allows you to specify two separate passwords: SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program functions. When enabled, the Supervisor password is required for entering the BIOS Setup program and having access to full configuration fields.

The User password is required to access only basic items.

If you select "System" at "Password Check" in Advance BIOS Features Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu.

If you select "Setup" at "Password Check" in Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software	
▸ Standard CMOS Features ▸ Advanced BIOS Features ▸ Integrated Peripherals ▸ Power Management ▸ PnP/PCI Configu ▸ PC Health Status ▸ Frequency/Voltage Control	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password **Set Password:**
Esc: Quit F8: Q-Flash	↑ ↓ → ← : Select Item F10: Save & Exit Setup
Change/Set/Disable Password	

9.1.12 Save & Exit Setup

Saves CMOS value settings to CMOS and exits setup.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software	
▸ Standard CMOS Features ▸ Advanced BIOS Features ▸ Integrated Peripherals ▸ Power Managem ▸ PnP/PCI Configu ▸ PC Health Status ▸ Frequency/Voltage Control	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password **Save to CMOS and EXIT (Y/N)? Y**
Esc: Quit F8: Q-Flash	↑ ↓ → ← : Select Item F10: Save & Exit Setup
Save Data to CMOS	

9.1.13 Exit without Saving

Abandons all CMOS value changes and exits setup.

Factory Default Settings

CMOS Setup Utility © 1984-2006 Award Software	
▸ Standard CMOS Features ▸ Advanced BIOS Features ▸ Integrated Peripherals ▸ Power Managen ▸ PnP/PCI Configu ▸ PC Health Statu ▸ Frequency/Voltage Control	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password **Quit Without Saving (Y/N)? N**
Esc: Quit F8: Q-Flash	↑ ↓ → ← : Select Item F10: Save & Exit Setup
Abandon all Data	

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Chapter 10 Spares

This spares list is provided as a reference and for planning purposes only.

DESCRIPTION	PART NUMBER	NOTES
Controller		
Controller, TeamPOS 3000 XE, 2.93 Ghz Intel Celeron D, 512MB Non ECC, COMM I/O Board, BLACK	11001157	
Controller, TeamPOS 3000 XE, 2.93 Ghz Intel Celeron D, 512MB Non ECC, Powered USBI/O Board, BLACK	11001156	
Chassis Kit, BLACK	11001063	
Chassis Kit, WHITE	11001062	
Motherboards(s)		
Motherboard	11001158	GA-81865GME-775-RH
CPU Options		
CPU	11001064	2.93 Ghz Intel Celeron D
CPU FAN KIT	11001159	Heat Sink and Fan
Memory Options		
Memory 256K	11001058	
Memory 512K	11001059	
Memory 1G	11001060	
Memory 2G	11001061	
Power Supply (PSU)		
Power Supply (PSU)	11001160	
Power Cord	11000049	
Misc Chassis Parts		
PNL Front/Keylock/Black	11000177	Front Panel
Chassis Cooling Fan	KD30341-0920	Fan 40mm 12V
Control Panel	11000179	
Control Panel Cable	KD02907-6460	MB to Control Panel
Hard Disk Options		
HDD	11001364	80Gig
HDD	11001067	40Gig
Cable	KD02907-6461	MB to HDD (SATA)
CD Drive Options		
CD-ROM/WHITE	11001068	
CD-ROM/BLACK	11001069	
CD/RW/DVD/WHITE	11001070	
CD/RW/DVD/BLACK	11001071	
I/O Board Options		
I/O POWERED USB BOARD	11001065	
COMBO I/O BOARD	11001066	
PCI Board	KD02907-6455	
Cable	KD02907-6459	PCI Board to USB I/O Board or Combo Board


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