

Dell™ Inspiron™ 7500

REMOVING AND REPLACING PARTS

Notes, Notices, and Cautions

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, notices, cautions, and warnings, and they are used as follows:



NOTE: A NOTE indicates important information that helps you make better use of your computer system.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



CAUTION: A CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

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Removing and Replacing Parts

NOTICE: Only a certified service technician should perform the procedures for removing and replacing parts. The warranty on the computer becomes void if anyone other than a certified technician performs these procedures.

Unless otherwise noted, each procedure assumes the following:

- You have the recommended tools.
- You have performed the steps in Precautionary Measures.
- The computer and any attached peripherals are turned off and the peripherals are disconnected from the computer's input/output (I/O) panel.
- You can replace or reinstall a part by performing the removal procedure in reverse order unless additional information is provided.

Precautionary Measures

NOTICE: Only a certified service technician should perform the procedures for removing and replacing parts. The warranty on the computer becomes void if anyone other than a certified technician performs these procedures.

WARNING FOR YOUR PERSONAL SAFETY AND PROTECTION OF THE EQUIPMENT

Before you start to work on the computer, perform the following steps in the sequence indicated:

1. **Ground yourself by attaching an antistatic grounding strap to your wrist and to an unpainted metal surface on the computer's I/O panel. If an anti-static grounding strap is not available, periodically discharge static electricity from your body by touching one of the connectors on the I/O panel.**
2. **Turn off the computer and any attached peripherals.**
3. **Disconnect the computer and any attached peripherals from electrical outlets to reduce the potential for personal injury or shock.**

Precautionary measures include disconnecting the computer from the AC adapter and port replicator and removing the main battery, PC Cards, hard-disk drive, memory module cover, memory modules, and devices in the media bay.

To take these precautionary measures, perform the following steps:

1. Determine the power state of the computer.

If the system is on, go to step 2. If you are unsure whether the system is on, shut down and restart the system, and then go to step 2.

2. Turn off any attached peripherals, and then shut down the computer.
3. Disconnect the computer and any attached peripherals from electrical outlets to reduce the potential for personal injury or shock.

If the computer has an AC adapter, disconnect the AC power cable (see Figure 1) from the electrical outlet and then from the AC adapter; then disconnect the AC adapter from the computer or from the Inspiron Port Replicator.

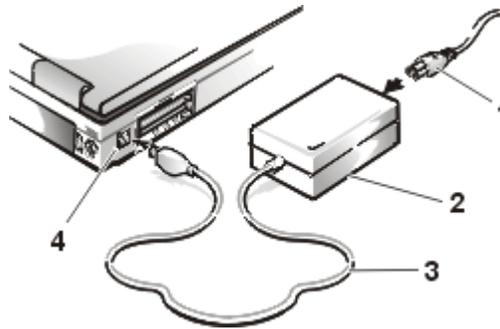


Figure 1. AC Adapter

-
- | | |
|---|----------------------|
| 1 | AC power cable |
| 2 | AC adapter |
| 3 | AC adapter cable |
| 4 | AC adapter connector |
-

4. If the computer is connected to a port replicator (see Figure 2), pull both release handles on the sides of the replicator to undock the computer.

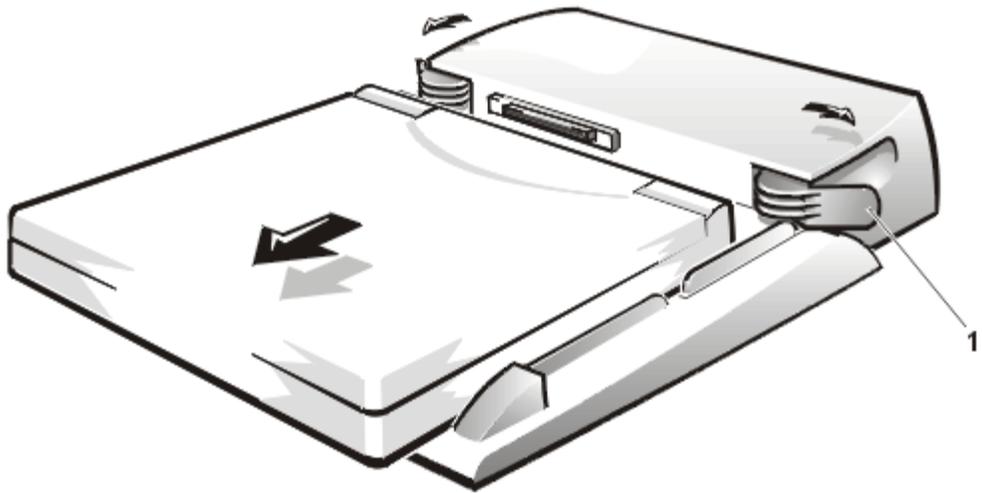


Figure 2. Port Replicator

1 Release handles

5. Remove the main battery from the battery compartment (see Figure 3).

Unlock the latch lock on the bottom of the computer by flipping it toward the back of the computer. Slide the latch release in the direction of the arrow. Keep holding the latch release with one hand while pulling the battery out of the compartment with the other.

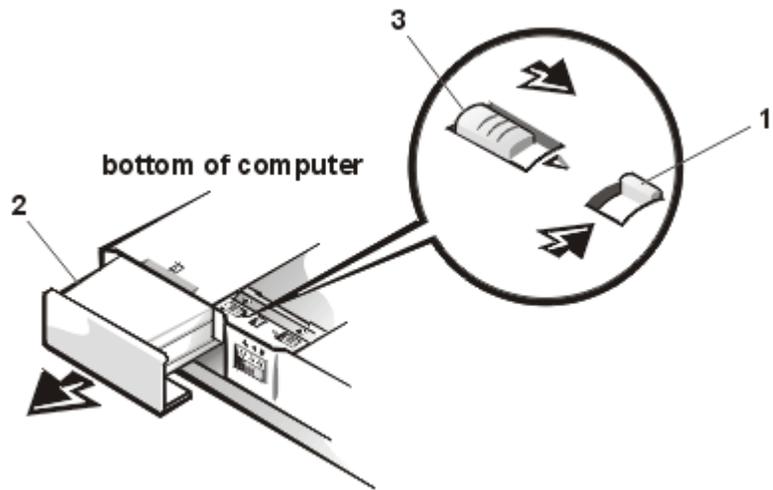


Figure 3. Battery Compartment

-
- | | |
|---|--------------------------------|
| 1 | Latch lock (unlocked position) |
| 2 | Battery |
| 3 | Latch release |
-

6. Remove PC Cards (see Figure 4).

NOTICE: Use the PC Card configuration utility on the taskbar to select and stop a card before removing it from the computer. If you do not remove the card in the configuration utility, you could lose data from open application programs.

To remove PC Cards from the top connector, press the top eject button. When the button slides out, press it again to release the card. Gently remove the card. Press the eject button again until it is flush with the computer casing. Grasp the end of the card, and pull it completely from the slot.

To remove PC Cards from the bottom connector, follow the same procedure.

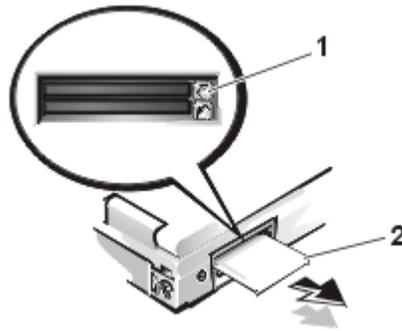


Figure 4. PC Card Removal

7. Remove the hard-disk drive assembly (see Figure 5).

Loosen the two captive screws that secure the hard-disk drive into the bottom of the computer. The front edge of the cover pops up slightly. Slide the hard-disk drive toward the front of the computer and then lift the drive out of the computer.

NOTICE: When the hard-disk drive is not in the computer, store it in a hard-disk drive case to protect it from exposure to static electricity.

NOTICE: Handle the hard-disk drive gently and don't bump or drop the drive. Rough handling of the drive could induce failure or loss of data.

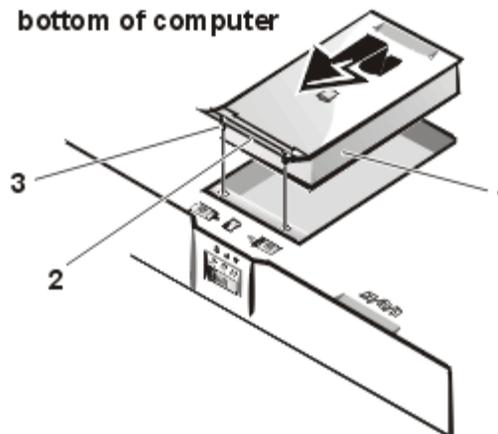


Figure 5. Hard-Disk Drive Assembly Removal

-
- | | |
|---|--------------------|
| 1 | Hard-disk drive |
| 2 | Hinge |
| 3 | Captive screws (2) |
-

8. Remove the memory module covers (see Figure 6).

Slide the memory module cover as far as it will go in the direction of the arrow, and then remove the cover.

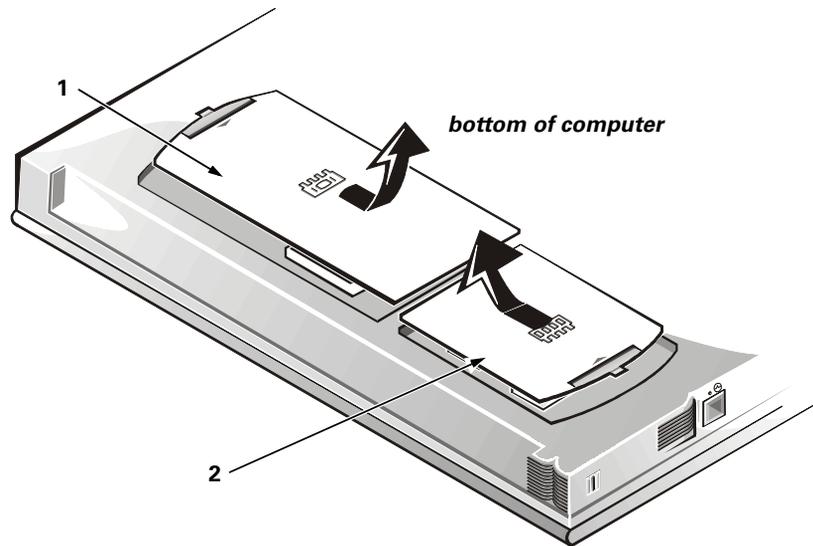


Figure 6. Memory Module Covers

-
- | | |
|----------|---------------------|
| 1 | Video card cover |
| 2 | Memory module cover |
-

To replace a cover, place it over the opening, leaving a small gap along the rounded edge, and then slide the cover toward the outside of the computer until it snaps into place.

9. Remove the memory modules (see Figure 7).

Carefully spread apart the inner metal tabs of the memory module socket to disengage the module from the socket. The module should pop up slightly. Then pull the memory module out of the socket.

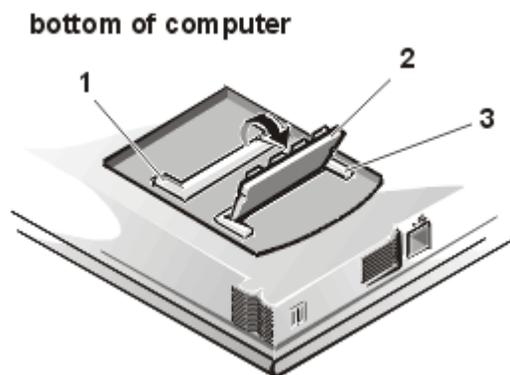


Figure 7. Memory Modules

-
- 1** Slot 1
 - 2** Memory module
 - 3** Slot 2
-

10. Remove the video card (see Figure 8).

Remove the two 3-mm screws securing the video card. Gently pull the video card off of the connectors on the bottom of the system board by lifting it at the notches located between the screws. Do not rock the card to remove it because this may damage the connectors.

Inspect the two thermal pads on the bottom of the system board and replace them if necessary.

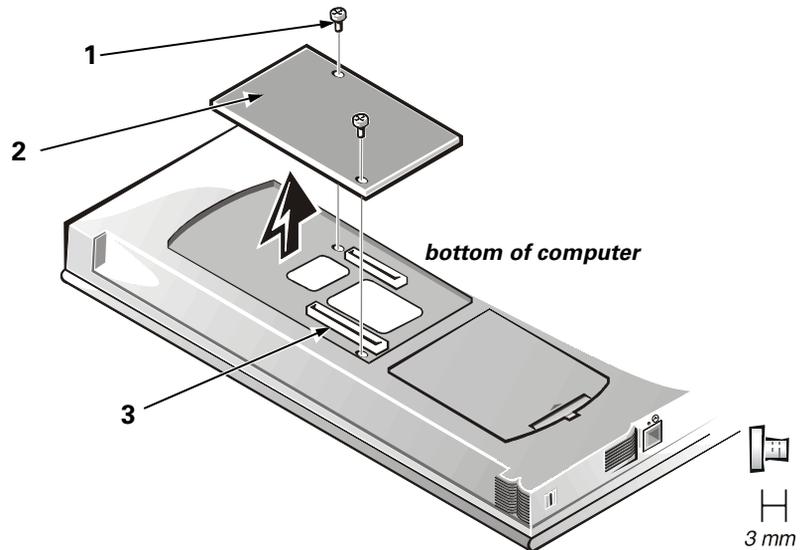


Figure 8. Video Card Removal

-
- | | |
|----------|---------------------------|
| 1 | 3-mm screws (2) |
| 2 | Video card |
| 3 | Video card connectors (2) |
-

11. If present, remove the module from the MegaBay™ (see Figure 9).

Unlock the latch lock by flipping it toward the back of the computer. Slide the latch release in the direction of the arrow. Keep holding the latch release with one hand while pulling the combo module or second battery straight out of the MegaBay with the other.

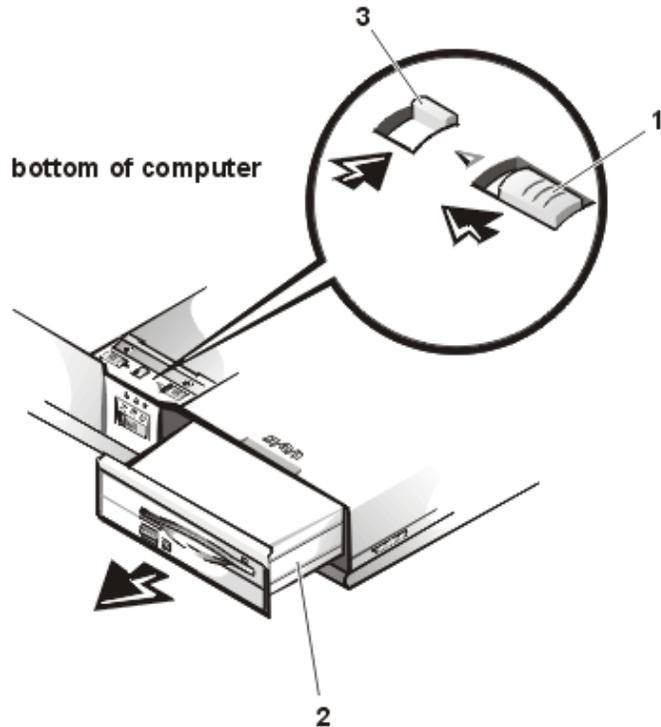


Figure 9. Media Bay Module Removal

-
- | | |
|---|--------------------------------|
| 1 | Latch release |
| 2 | Media bay module |
| 3 | Latch lock (unlocked position) |
-

Recommended Tools

NOTICE: Only a certified service technician should perform the following procedures for removing and replacing parts. The warranty on the computer becomes void if anyone other than a certified technician performs these procedures.

Most of the procedures require the use of one or more of the following tools:

- Small flat-blade screwdriver
- Number 1 Phillips-head screwdriver
- Antistatic grounding strap
- Dental pick
- Small scribe or nylon flat blade
- Nut drivers (5 mm and 5.5 mm)

Screw Identification and Tightening

NOTICE: The correct-length screw must be used when reinstalling a screw. Otherwise, hardware damage could result. Make sure that the screw is properly aligned with its corresponding hole, and avoid overtightening.

NOTICE: During the removal and replacement procedures, you will see Kapton tape in many places on the computer. When reinstalling or replacing parts, be sure to replace the Kapton tape correctly to retain the electrical protection and noise reduction the tape provides.

Be careful not to scratch the computer plastic case by allowing screws to get between the disassembly surface and the plastic case. Dell suggests a soft padded work surface.

The Inspiron 7500 contains many screws of various sizes. To help keep track of the screws, use a tackle or pill box as a storage device. Use Table 1 as a location template to store the screws during disassembly.

Table 1. Screw Identification and Location

<p>Hard-disk drive</p> <p>4X K-head M3x3L</p>	<p>Combo module</p> <p>2X K-head, M2x2.5L 3X K-head, M2.5x3L 8X K-head M2x3L</p>	<p>Keyboard</p> <p>4X pan head, M2.5x20L</p>	<p>LCD panel (15-inch) XGA</p> <p>1X 0143E SCR, M2.5x.45P+3FP-ZK 2X 7043E SCR, M2.5x.45+10FP-ZK-NL 6X 8043E SCR, 2.5x.45+6P-ZK-NL</p>
<p>LCD panel (15-inch) SXGA+</p> <p>8X 3319U SCR, M2x3, KSH, MSCR, CPS, LKG 2X 7043E SCR, M2.5x.45+10FP-ZK, NL</p>	<p>LCD panel (15.4-inch) SXGA</p> <p>2X 0300U SCR, 2.5x8, KSH, MSCR, CPS 8X 9200U SCR, M2x4, KSH, MSCR, CPS</p>	<p>Thermal shield</p> <p>1X K-head, M2.5x4L 4X flat head, M2x4L</p>	<p>Display assembly</p> <p>4X binding head, M2.5x6L</p>
<p>Front bezel</p> <p>4X binding head, M2.5x6L</p>	<p>Palmrest assembly</p> <p>4X binding head, M2.5x6L 6X K-head, M2.5x4L 1X K-head, M2.5x4L</p>	<p>IR board</p> <p>2X K-head M2.5x4L</p>	<p>Hard-disk drive heat shield</p> <p>5X K-head M2.5x4L</p>
<p>Touch pad assembly</p> <p>4X K-head M2.5x4L 3X K-head M2.5x4L</p>	<p>Speakers</p> <p>5X K-head M2.5x4L</p>	<p>PC Card heat sink</p> <p>2X K-head, M2.5x4L</p>	<p>Heat exchanger/fan</p> <p>2X binding head, M2x5L</p>
<p>Processor board</p> <p>3X binding head, M2x5L</p>	<p>Hinge saddles</p> <p>1X binding head, M2.5x6L</p>	<p>Left hinge saddle</p> <p>4X K-head, M2.5x4L 1X binding head, M2.5x10L 1X pan head, M2.5x20L</p>	<p>Right hinge saddle</p> <p>4X K-head, M2.5x4L 1X pan head, M2.5x20L 1X binding head M2.5x10L</p>
<p>RJ-11 card</p> <p>1X K-head, M2.5x4L</p>	<p>System board</p> <p>3X K-head, M2.5x4L</p>	<p>PC Card cage</p> <p>1X K-head, M2.5x4L 4X pan head, M2x18L</p>	<p>Audio thermal shield</p> <p>1X binding head, M2.5x10L</p>
<p>Latch assembly</p> <p>1X K-head, M2.5x4L 2X K-head, M2.5x4L</p>			

Exploded View of Computer

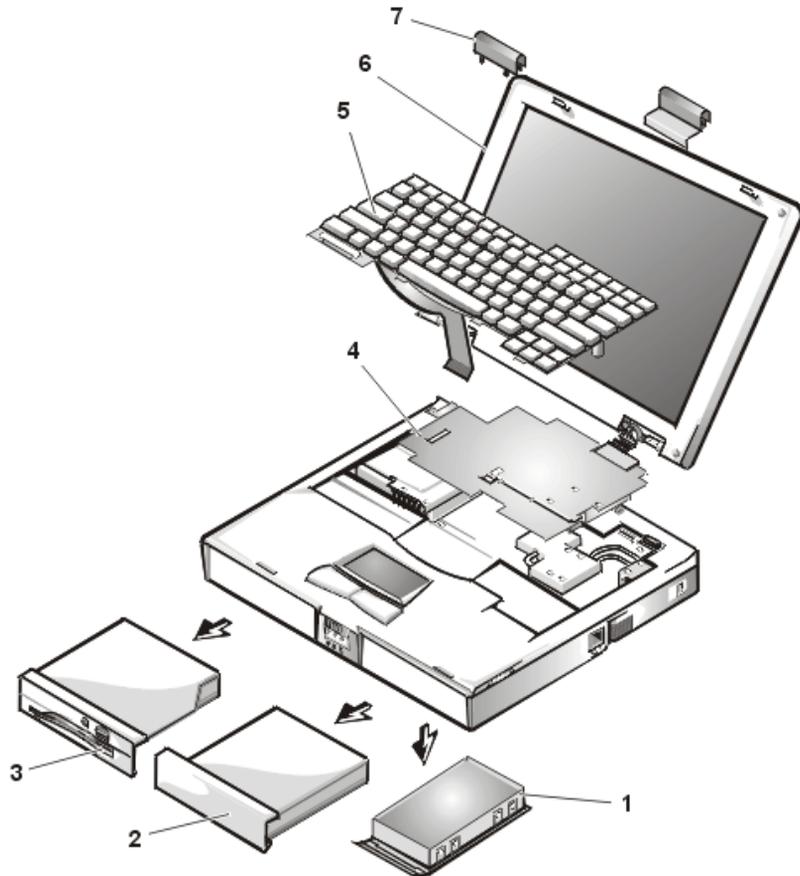


Figure 10. Computer Components

-
- 1 Hard-disk drive
 - 2 Battery
 - 3 Combo module
 - 4 Thermal shield
 - 5 Keyboard
 - 6 Display assembly
 - 7 Hinge covers
-

Exploded View of 15-Inch XGA Display Assembly

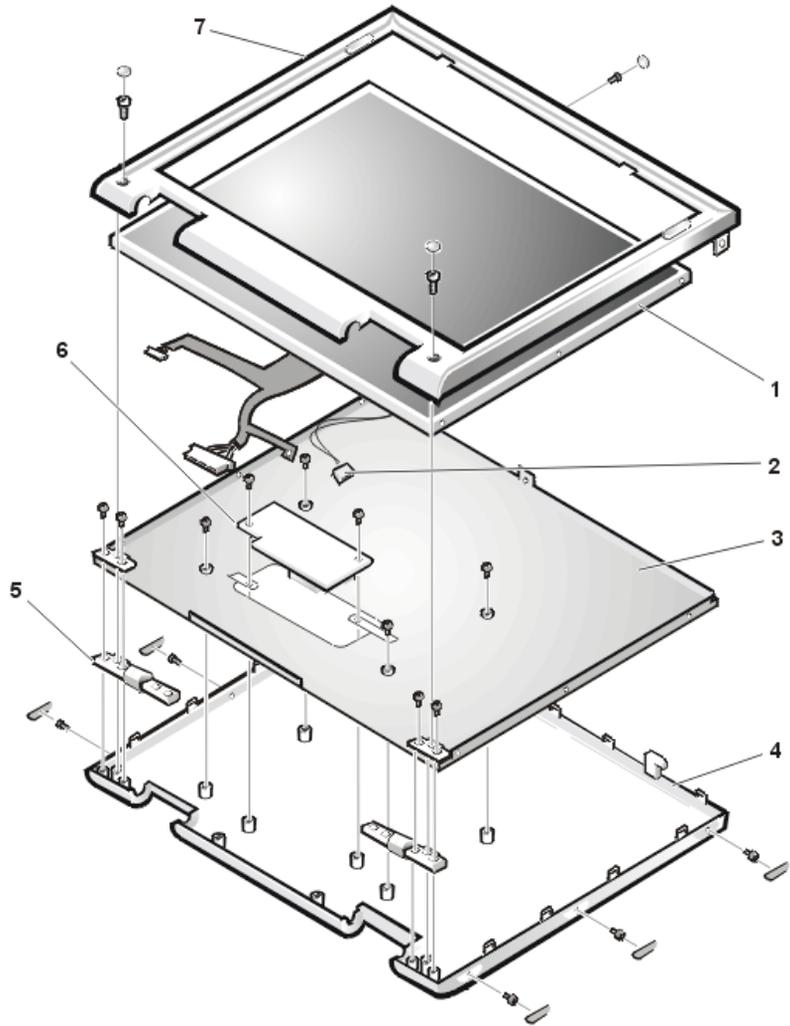


Figure 11. 15-Inch XGA Display Components

1	LCD panel	5	Hinges (2)
2	CCFL cable	6	Inverter board
3	Carrier tray	7	Front bezel
4	Back cover		

Exploded View of 15-Inch SXGA+ Display Assembly

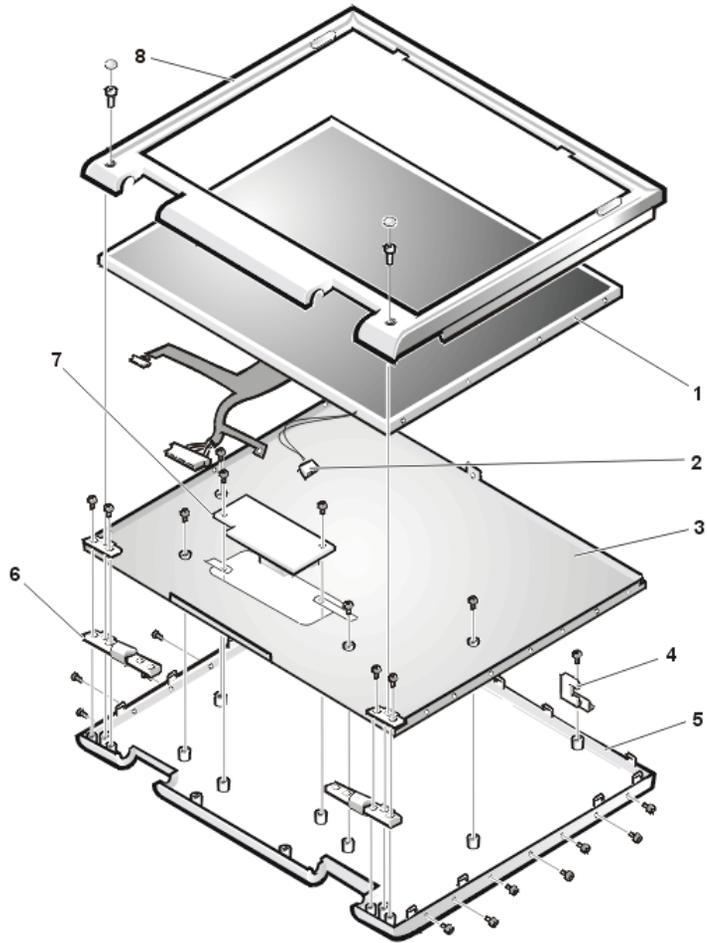


Figure 12. 15-Inch SXGA+ Display Components

1	LCD panel	5	Back cover
2	CCFL cable	6	Hinges (2)
3	Carrier tray	7	Inverter board
4	Display locking tab	8	Front bezel

Exploded View of 15.4-Inch SXGA Display Assembly

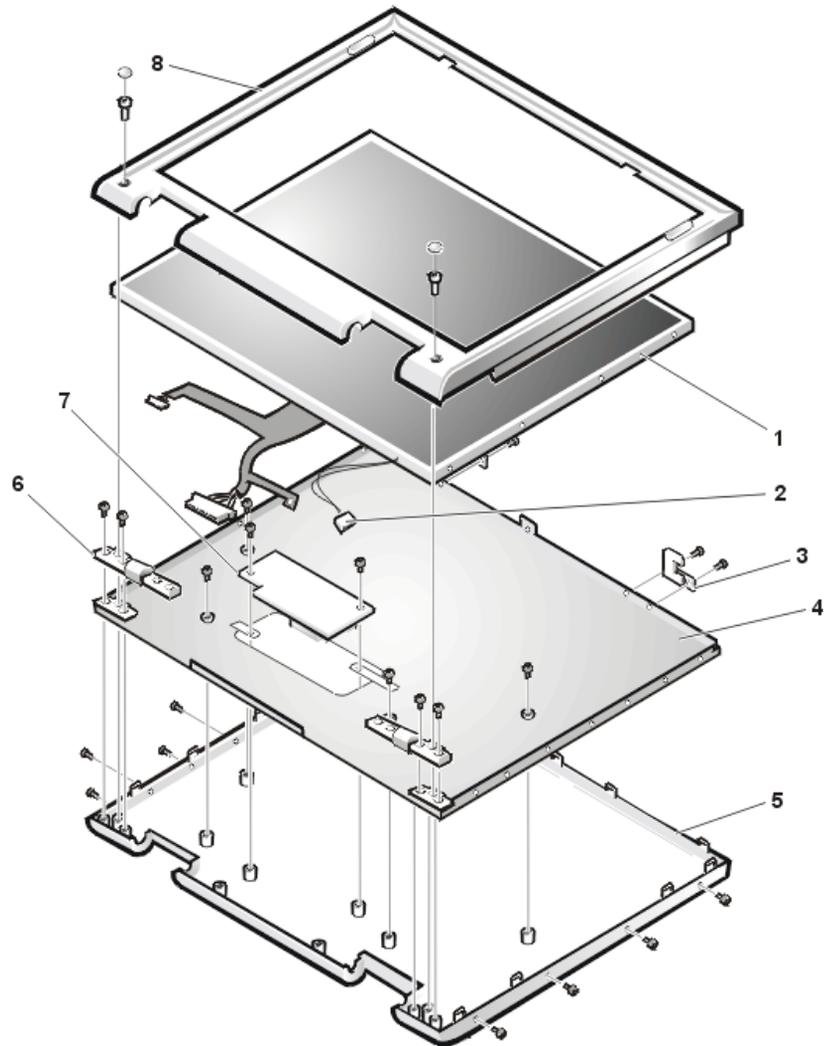


Figure 13. 15.4-Inch SXGA Display Components

-
- 1 LCD panel
 - 2 CCFL cable
 - 3 Display locking tab
-

-
- 4 Carrier tray
 - 5 Back cover
 - 6 Hinges (2)
 - 7 Inverter board
 - 8 Front bezel
-

Hard-Disk Drive Disassembly

The hard-disk drive (see Figure 13) resides in a carrier that mounts in the hard-disk drive compartment in the bottom of the computer. Four screws secure the drive inside the carrier.

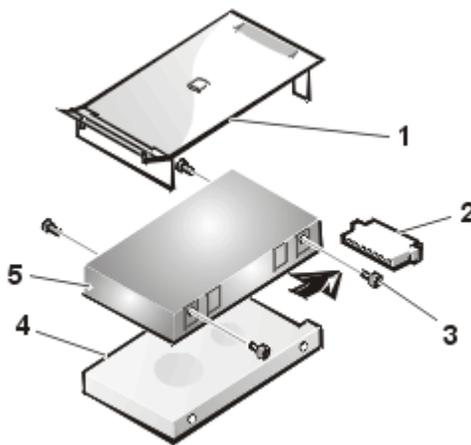


Figure 14. Hard-Disk Drive Components

-
- 1 Plastic cover
 - 2 Hard-disk drive connector
 - 3 3-mm screws (4)
 - 4 Hard-disk drive
 - 5 Carrier
-

To remove the hard-disk drive from the carrier, perform the following steps:

1. Remove the hard-disk drive assembly.
See step 7 of Precautionary Measures.

2. Remove the four 3-mm screws securing the hard-disk drive inside the carrier.

3. Remove the hard-disk drive from the carrier.

Turn the carrier over with one hand and let the drive fall out of the carrier into your other hand.

4. Remove the metal carrier from the plastic cover.

The metal carrier is held in the plastic cover by two tabs on each end. Carefully pry the carrier away from the tabs.

Pull the hard-disk drive connector off of the hard-disk drive.

Combo Module Disassembly

The combo module (see Figure 14) contains either a CD-ROM drive, a DVD-ROM drive on top of a diskette drive, or DVD-ROM drive with a SuperDisk LS-120 module. The combo module resides in a carrier that slides into the media bay on the left side of the computer.

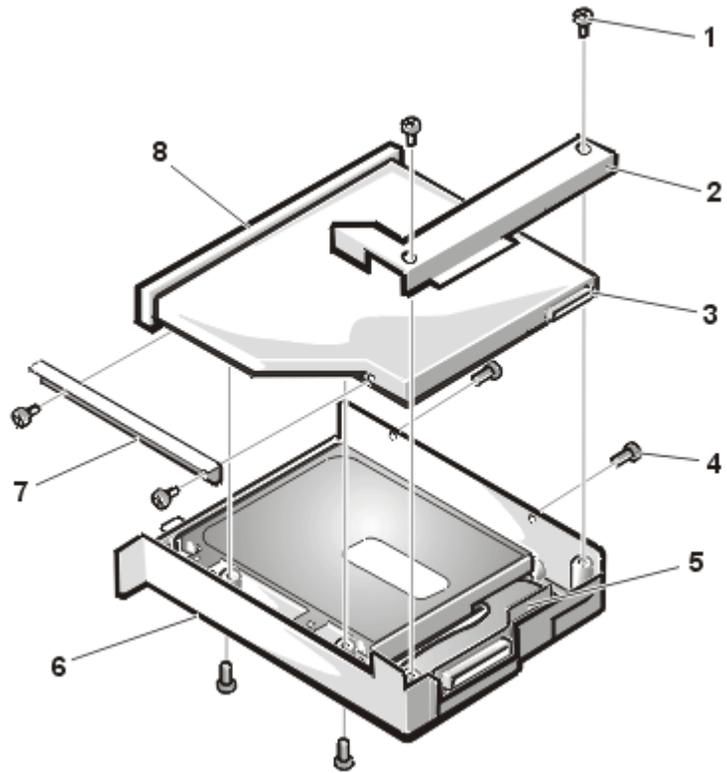


Figure 15. Combo Module Components

-
- 1 3-mm screws (6)
 - 2 Bracket
 - 3 Flex cable connector
 - 4 2.5-mm screws (2)
 - 5 Flex cable
 - 6 Plastic carrier
 - 7 Side mounting bracket
 - 8 CD-ROM or DVD-ROM drive
-

To remove the CD-ROM drive or DVD-ROM drive (see Figure 14) from the plastic carrier, perform the following steps:

1. Remove the combo module.
2. Remove the two 3-mm screws from the L-shaped bracket.

3. Remove the bracket.
4. Remove the two 3-mm screws from the side of the plastic carrier.
5. Remove the two 3-mm screws from the bottom of the plastic carrier.
6. Disconnect the flex cable from the CD-ROM/DVD-ROM drive connector.
7. Remove the CD-ROM/DVD-ROM drive from the plastic carrier.

Turn the carrier over with one hand and let the drive fall out of the carrier into your other hand.

To remove the side mounting bracket from the CD-ROM/DVD-ROM drive (see Figure 15), perform the following steps:

1. Remove the two 2.5-mm screws from the side of the CD-ROM/DVD-ROM drive.
2. Remove the side mounting bracket.

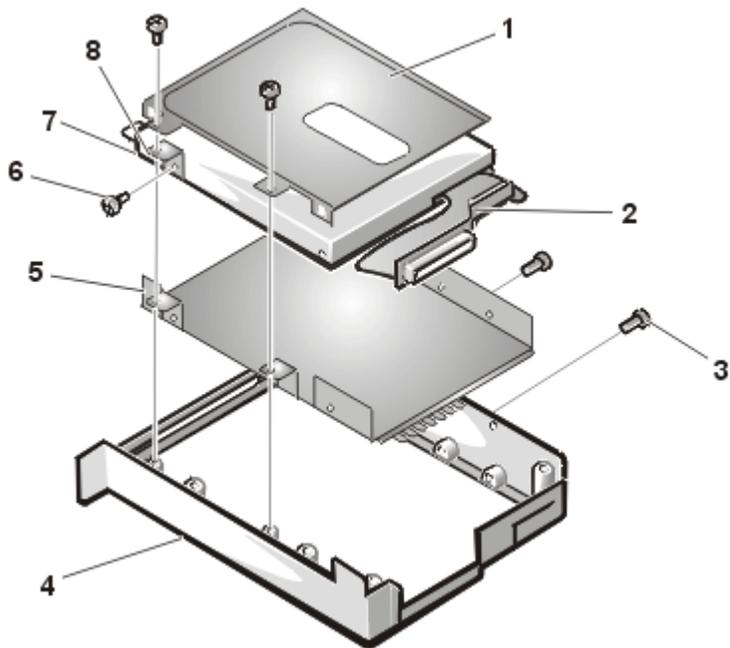


Figure 16. Side Mounting Bracket Removal

-
- | | |
|---|-------------------------------|
| 1 | Metal shielding carrier (top) |
| 2 | Flex cable |
| 3 | 3-mm screws (4) |
| 4 | Plastic carrier |
-

-
- 5 Metal shielding carrier (bottom)
 - 6 2.5-mm screws (2)
 - 7 Diskette drive
 - 8 Mounting ear
-

To remove the diskette drive from the plastic carrier, perform the following steps:

1. Remove the two 3-mm screws from the top of the metal shielding carrier.
2. Remove the two 3-mm screws from the side of the plastic carrier.

NOTICE: The metal on the shielding carrier is sharp. Be careful not to cut yourself.

3. Lift the metal shielding carrier out of the plastic carrier.
Lift the back of the metal shielding carrier first and then slide it out.
4. Unsnap the metal latches along the top of the metal shielding carrier from the metal tabs on the bottom of the metal shielding carrier, and then remove the top.
5. Remove the diskette drive from the metal shielding carrier.
6. Remove the flex cable from the diskette drive.
7. Remove the 3-mm screw securing the mounting ear from the diskette drive, and remove the mounting ear.

When reassembling the diskette drive, be sure that the bottom of the metal shielding carrier sits inside the groove at the front of the plastic carrier.

Keyboard Removal

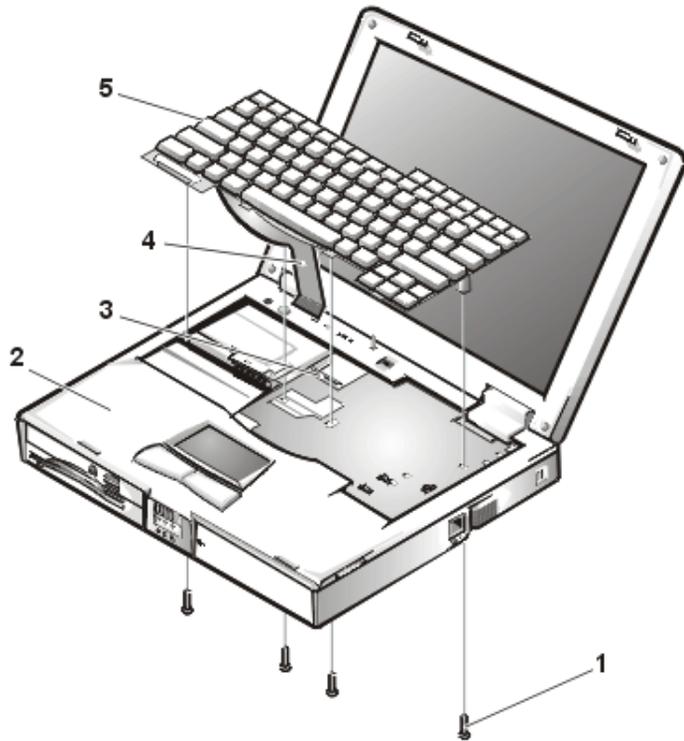


Figure 17. Keyboard Components

-
- | | |
|---|-------------------|
| 1 | 20-mm screws (4) |
| 2 | Palmrest assembly |
| 3 | ZIF connector |
| 4 | Keyboard cable |
| 5 | Keyboard |
-

To remove the keyboard (see Figure 16), perform the following steps:

1. Turn the computer over and remove the four 20-mm screws from the bottom of the computer.
2. Turn the computer back over and open the display.

3. Insert a small flat-blade screwdriver or scribe along the right top of the keyboard, just above the row of function keys.

Working from right to left, free the keyboard by prying it toward the front of the unit. When free, lift the top of the keyboard slightly to clear the palmrest assembly.

4. Slide the keyboard toward the display assembly to release the front edge of the keyboard from the palmrest assembly.
5. Rotate the bottom of the keyboard up toward the display assembly to expose the keyboard cable.

NOTICE: Lift the cable away only after you open the ZIF connector. Pulling the cable from the connector damages the conductive coating on the end of the cable.

6. Disconnect the keyboard cable from zero insertion force (ZIF) connector JP14 on the system board. Use the pick to pry up the latches on each side of the connector.
7. Remove the keyboard from the palmrest assembly.

ZIF Connectors

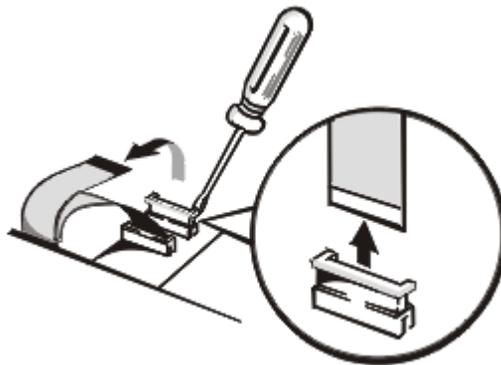


Figure 18. ZIF Connector Release

NOTICE: ZIF connectors are fragile. To avoid breaking the connectors, touch them carefully. Do not apply too much pressure to the movable part of the connector when opening or closing it.

Some of the computer's interface connectors are ZIF connectors. These connectors are not removable; they must be released (see Figure 17) to disconnect a cable from them.

To disconnect a cable from a ZIF connector, perform the following steps:

1. Insert a small flat-blade screwdriver or dental pick under the movable part of the connector.

For most ZIFs, carefully pry up one end of the movable part of the connector and then the other end. Some ZIFs may need to be lifted in the center.

2. Pull up gently on the movable part of the connector until the cable is released.
3. Grasp the cable and pull it out of the connector.

To reconnect an interface cable to a ZIF connector, perform the following steps:

1. Use the flat-blade screwdriver or dental pick to open the movable part of the ZIF connector.
2. Orient the end of the cable with the ZIF connector, and insert the end of the cable into the connector.
3. While holding the cable in place, close the ZIF connector.

To ensure a firm connection, make sure the ZIF connector is completely closed.

Thermal Shield and Internal Modem Removal

The thermal shield (see Figure 18) serves as a heat shield for the system board, as well as an electromagnetic interference (EMI) fence for the processor board.

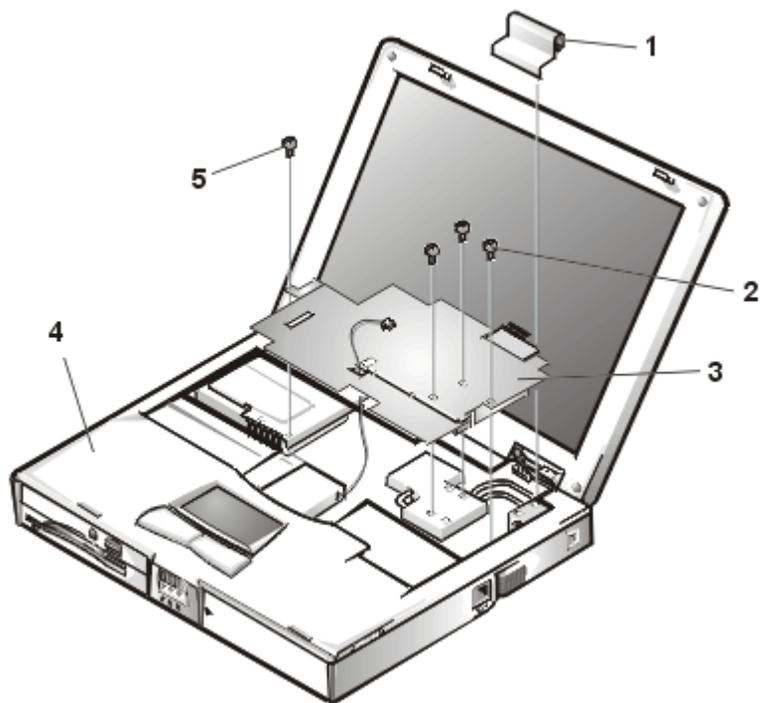


Figure 19. Thermal Shield/Internal Modem Components

-
- | | |
|---|-----------------------|
| 1 | Right hinge cover |
| 2 | 4-mm screws (4) |
| 3 | Thermal shield |
| 4 | Palmrest assembly |
| 5 | K-head 4-mm screw (1) |
-

This procedure assumes that you have removed the keyboard. To remove the thermal shield, perform the following steps:

1. Remove the right hinge cover.

15-Inch XGA and 15-Inch SXGA+ LCD Panels

- a. Open the computer to 170 degrees, supporting the display assembly.
- b. From the outside edge of the unit, carefully insert a flat-blade screwdriver or scribe into the space on the inside of the hinge cover.
- c. Bring the tool against the front wall of the hinge cover and pull toward the keyboard to loosen the plastic snaps at the back of the hinge cover.

- d. Move the tool to the inside top of the hinge cover and lift the hinge cover off. If the hinge covers are tight, use a plastic wedge or scribe to loosen and pop them off.

15.4-Inch SXGA LCD Panel

Remove the screw cover and the screw. Lift the hinge cover off.

2. If your computer has an internal modem, disconnect the twisted wire pair from connector JP2 on the RJ-11 card.
3. Remove the twisted wire pair from under the tabs in the thermal shield.
4. Bend the cables back over the palmrest assembly to move them out of the way of the thermal shield.
5. Remove the three flat-head 4-mm screws and the one K-head 4-mm screw securing the thermal shield.

Note that the K-head screw is leftmost and is thicker than the other three.

6. Remove the thermal shield from the palmrest assembly.

Note that the bottom of the shield has an EMI fence that surrounds the processor board.

To remove the internal modem card, perform the following steps:

1. Gently pull the modem card off of connector JP19 on the system board. Do not rock the card to remove it, because this may damage the connectors.
2. Remove the carrier tray by sliding it toward the back of the computer.
3. Remove the modem card from the carrier tray.

Heat Exchanger/Fan Removal

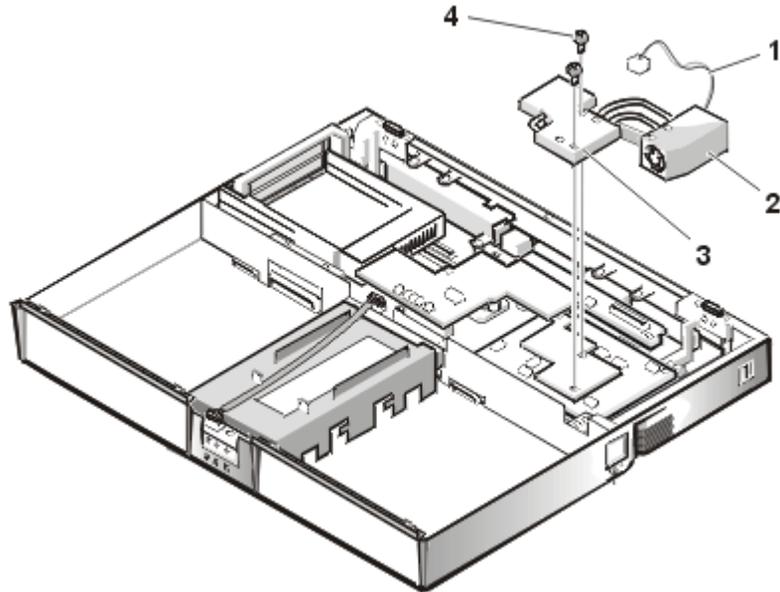


Figure 20. Heat Exchanger/Fan Components

-
- | | |
|---|-----------------|
| 1 | Cable |
| 2 | Fan |
| 3 | Heat exchanger |
| 4 | 5-mm screws (2) |
-

To remove the heat exchanger/fan (see Figure 19), perform the following steps:

1. Remove the two 5-mm screws securing the heat exchanger.
2. Disconnect the fan cable from connector JP17 on the system board.
3. Remove the heat exchanger/fan.
4. Inspect the two thermal pads on the bottom of the heat exchanger and replace them if necessary.

To remove the heat exchanger/fan without removing the palmrest assembly, perform the following steps.

1. Remove the two 5-mm screws securing the heat exchanger.
2. Disconnect the fan cable from connector JP17 on the system board.

3. Lift the heat exchanger and rotate it upward.
4. Slide the heat exchanger/fan toward the front of the computer until the fan is completely clear of the overhanging palmrest plastic.
5. Lift the heat exchanger/fan out at an angle.
6. Inspect the two thermal pads on the bottom of the heat exchanger and replace them if necessary.

When reinstalling the heat exchanger/fan, be sure to reconnect the fan cable to connector JP17 on the system board; if you have an internal modem, there is an identical connector (JP2) next to JP17. The modem connector is color-coded red.

Processor Board Removal

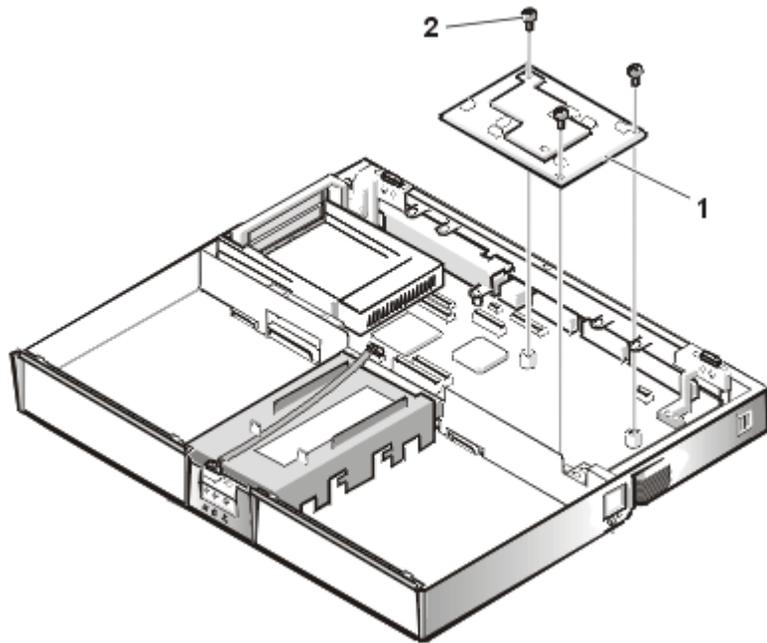


Figure 21. Processor Board Components

-
- | | |
|---|-----------------|
| 1 | Processor board |
| 2 | 5-mm screws (3) |
-

This procedure assumes that you have removed the heat exchanger/fan. To remove the processor board (see Figure 20), perform the following steps:

1. Remove the three 5-mm screws securing the processor board to the system board.
2. Gently pull the processor board off of connector JP15 on the system board. Do not rock the board to remove it, because this may damage the connectors.

When reinstalling the processor board, align the board with the notch on the system board connector. Press down on the left side of the board over the system board connector. This is the best spot to apply pressure to seat the processor correctly on connector JP15.

LCD Removal

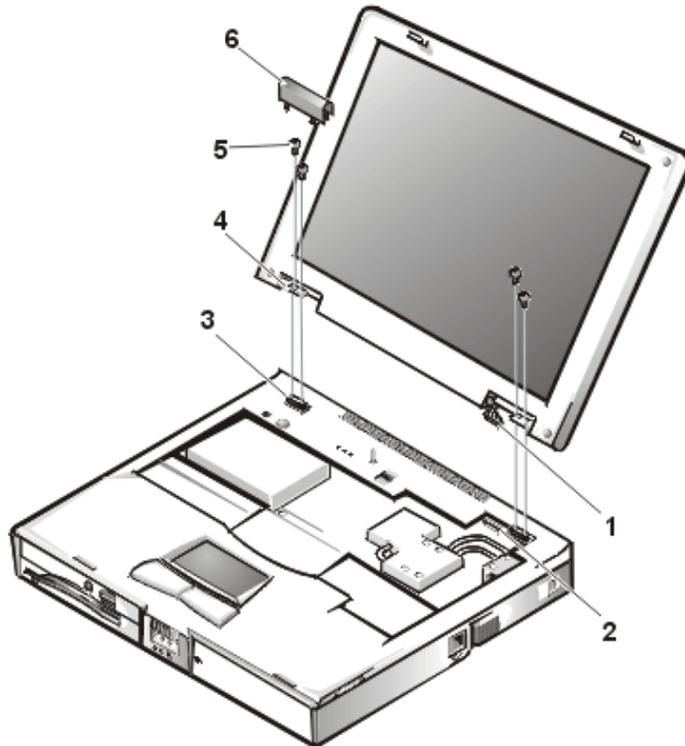


Figure 22. LCD Components

-
- | | |
|---|------------------|
| 1 | LCD wire harness |
| 2 | Connector JP3 |
-

-
- 3** Hinge saddles (2)
 - 4** Hinges (2)
 - 5** 6-mm screws
 - 6** Left hinge saddle
-

To remove the liquid crystal display (LCD) panel (see Figure 21), perform the following steps:

1. Remove the left hinge cover.
2. Disconnect the LCD wire harness from connector JP3 on the system board.

Remove the two Phillips screws on the LCD wire harness on the JP3 connector. Use a dental pick or flat-blade screwdriver to pry up each end of the connector to release it.
3. Close the display.
4. Remove the four 6-mm screws that secure the two hinges to the hinge saddle extensions.
5. Unlatch the display and lift the assembly off the computer base.

Palmrest Component Assembly

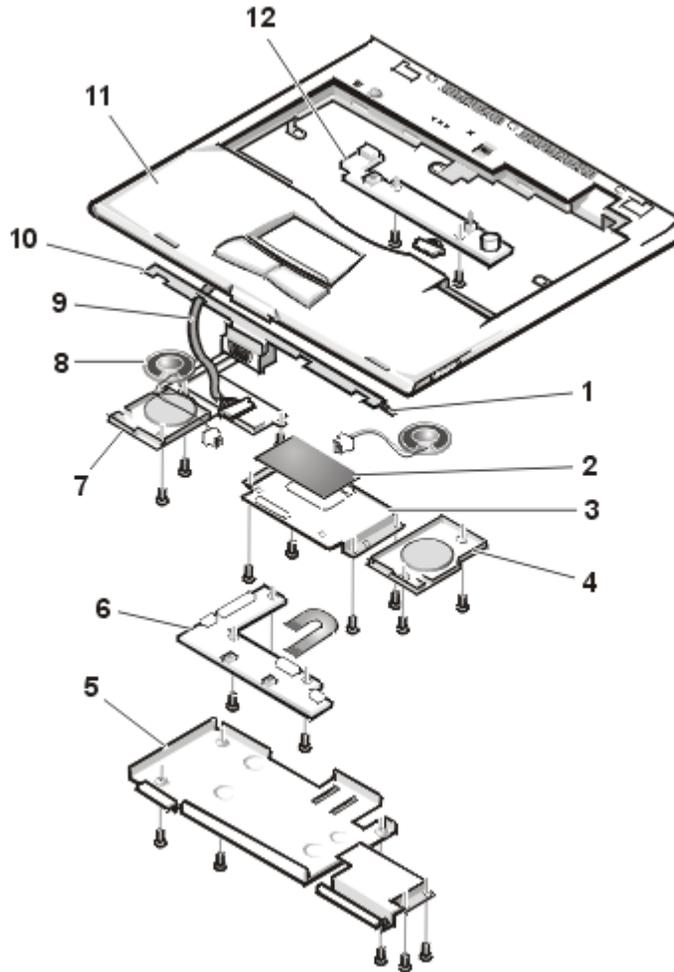


Figure 23. Exploded View of Palmrest Assembly

-
- 1 Display latch
 - 2 Touch pad
 - 3 Touch pad bracket
 - 4 Right speaker
 - 5 Hard-disk drive heat shield
 - 6 Touch pad button board
-

-
- 7** Left speaker cover
 - 8** Speakers (2)
 - 9** Speaker wiring harness
 - 10** Display latch
 - 11** Palmrest
 - 12** IR board
-

Palmrest Assembly Removal

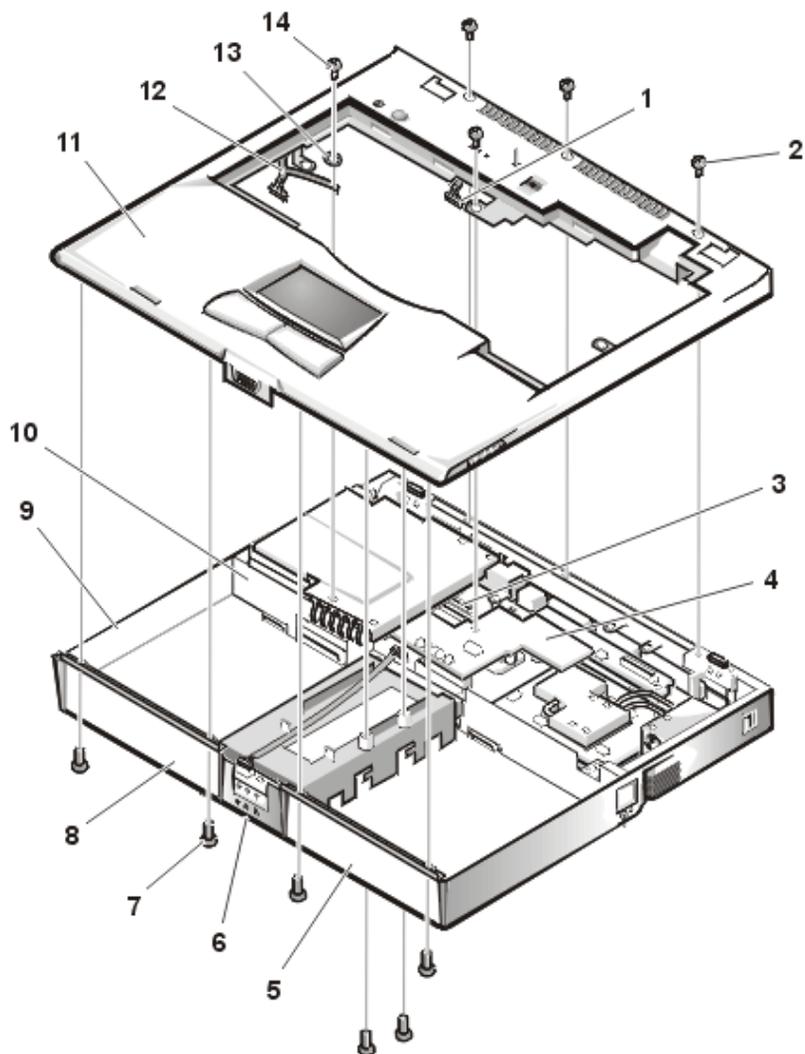


Figure 24. Palmrest Assembly Components

-
- 1 LED cable
 - 2 6-mm screws (4)
 - 3 LED connector
 - 4 DC-DC board
 - 5 Battery bay
-

-
- 6** Hard-disk drive bay
 - 7** 4-mm screws (6)
 - 8** Combo bay
 - 9** Base assembly
 - 10** Connector for speaker wiring harness
 - 11** Palmrest assembly
 - 12** Speaker wiring harness and grounding strap
 - 13** Washer
 - 14** 4-mm screw
-

This procedure assumes that you have removed the keyboard, thermal shield, and display assembly. To remove the palmrest assembly (see Figures 22 and 23), perform the following steps:

1. Remove the left and right hinge saddle extensions.
2. Remove the two 4-mm screws from the top inside of the combo bay.
3. Remove the two 4-mm screws from the top inside of the MegaBay.
4. Remove the two 4-mm screws from the top inside of the hard-disk drive bay.
5. Turn the unit back over.
6. Remove the three 6-mm screws from the top of the base assembly, along the back edge.
7. Remove the 6-mm screw from the DC-DC board.
8. Remove the 4-mm screw and the washer securing the grounding strap to the PC Card heat shield.
9. Disconnect the speaker wire harness from connector JP18 on the left side of the system board.

This wire harness also contains wiring for the touch pad and the touch pad buttons.
10. Disconnect the light-emitting diode (LED) cable from connector JP10 on the system board.
11. Remove the palmrest assembly from the base assembly.

Start at the back right of the computer and move forward around the computer. Carefully lift the palmrest assembly up and pull it forward to unsnap the hidden tabs spaced around the sides and along the top of the MegaBay and media bay.

When replacing the palmrest assembly, orient the assembly in its original position on the base assembly and press firmly near each tab until the palmrest assembly snaps into place. Start at the front to align those tabs first. Make sure that all the tabs are aligned.

Palmrest Assembly Component Removal

IR Board Removal

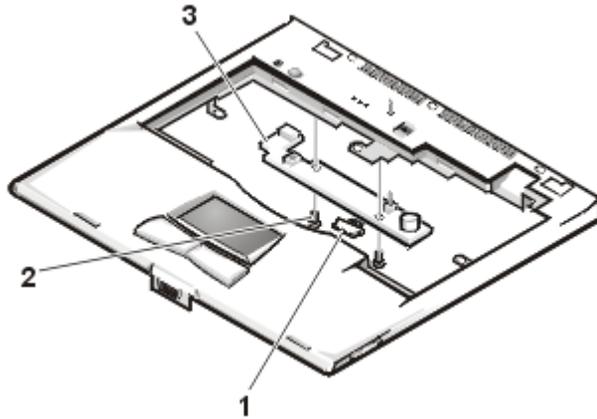


Figure 25. IR Board Components

-
- | | |
|----------|-----------------|
| 1 | IR cable |
| 2 | 4-mm screws (2) |
| 3 | IR board |
-

This procedure assumes that you have removed the palmrest assembly from the base assembly. To remove the IR board (see Figure 24), perform the following steps:

1. Remove the two 4-mm screws securing the IR board.
2. Disconnect the IR cable from connector JP2 on the IR board.
3. Remove the IR board.

Touch Pad Assembly Removal

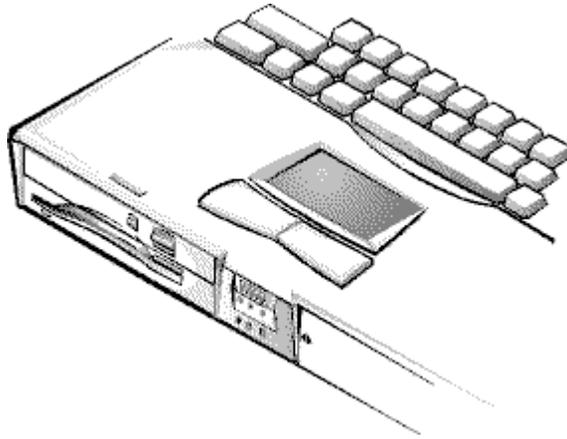


Figure 26. Touch Pad

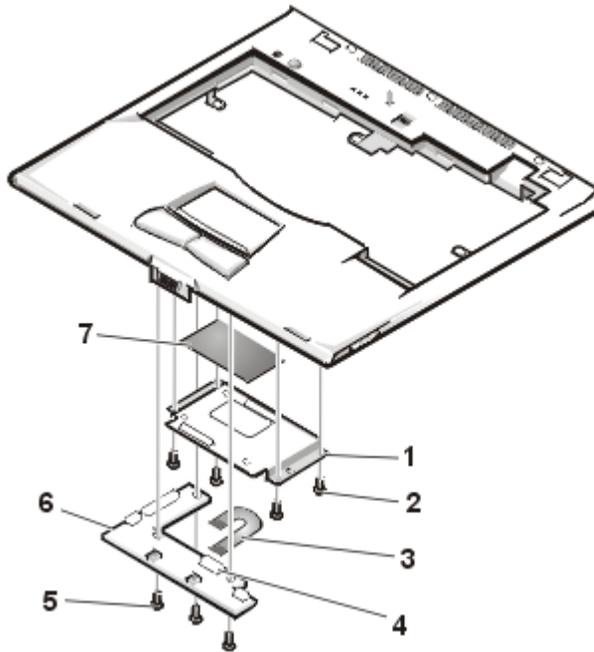


Figure 27. Touch Pad Assembly Components

-
- 1 Touch pad bracket
 - 2 4-mm screws (4)
-

-
- 3 Touch pad flex cable
 - 4 ZIF connector
 - 5 4-mm screws (3)
 - 6 Touch pad button board
 - 7 Touch pad
-

This procedure assumes that you have removed the palmrest assembly from the base assembly and that you have removed the hard-disk drive heat shield. To remove the touch pad assembly (see Figures 25 and 26), perform the following steps:

1. Remove the three 4-mm screws securing the touch pad button board.
2. Disconnect the two speaker cables from connectors JP5 and JP3 on the touch pad button board.
3. Disconnect the speaker wire harness from connector JP1 on the touch pad button board.

NOTICE: Lift away the cable only after you open the ZIF connector. Pulling the cable from the connector damages the conductive coating on the end of the cable.

4. Disconnect the touch pad flex cable from ZIF connector JP4 on the touch pad button board. Use the pick to pry up the latches on each side of the connector.

NOTICE: Lift away the cable only after you open the ZIF connector. Pulling the cable from the connector damages the conductive coating on the end of the cable.

5. Disconnect the touch pad flex cable from ZIF connector J1 on the touch pad. Use the pick to pry up the brown center piece on the connector.
6. Remove the touch pad button board.
7. Remove the four 4-mm screws securing the touch pad bracket.
8. Remove the touch pad bracket.
9. Remove the touch pad.

The touch pad buttons are heat-staked into the palmrest assembly and are not removable.

Hard-Disk Drive Heat Shield Removal

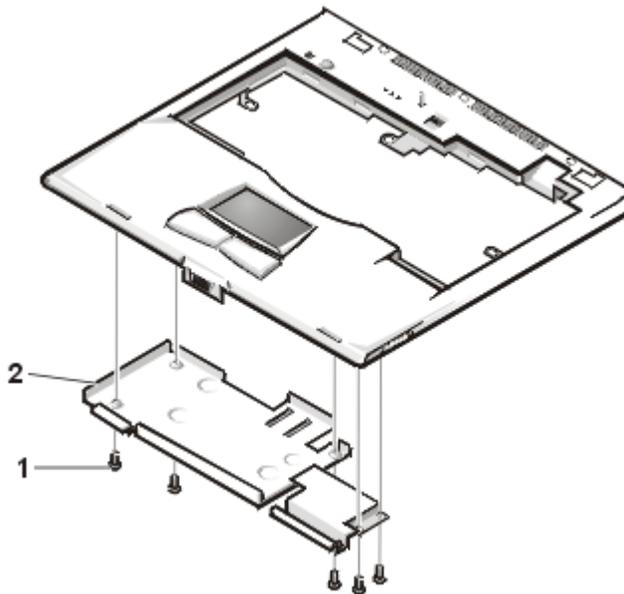


Figure 28. Hard-Disk Drive Heat Shield Components

-
- | | |
|----------|-----------------------------|
| 1 | 4-mm screws (5) |
| 2 | Hard-disk drive heat shield |
-

This procedure assumes that you have removed the palmrest assembly from the base assembly. To remove the hard-disk drive heat shield (see Figure 27), perform the following steps:

1. Place the palmrest assembly face down.
2. Remove the five 4-mm screws securing the hard-disk drive heat shield.
3. Remove the hard-disk drive heat shield.

Speaker Removal

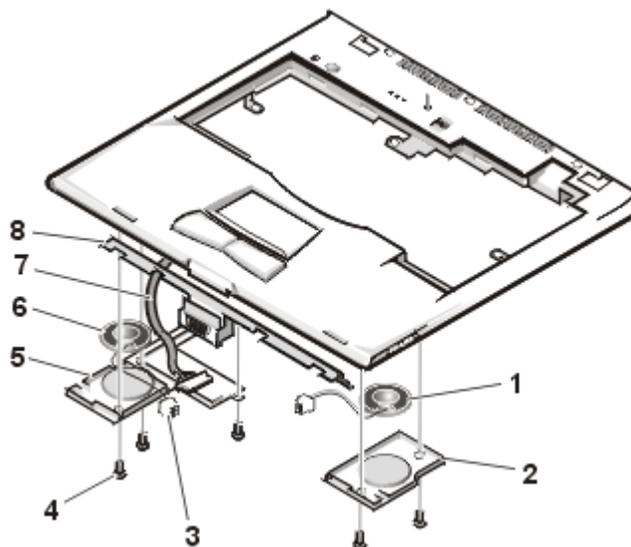


Figure 29. Speaker Components

-
- 1 Right speaker
 - 2 Right speaker cover
 - 3 Speaker cables (2)
 - 4 4-mm screws (5)
 - 5 Left speaker cover
 - 6 Left speaker
 - 7 Speaker wiring harness
 - 8 Display latch
-

This procedure assumes that you have removed the palmrest assembly from the base assembly and that you have removed the hard-disk drive heat shield and touch pad assembly. To remove the speakers (see Figure 28), perform the following steps:

1. Remove any tape securing the speaker cables.
2. Remove the three 4-mm screws securing the left speaker cover.



NOTE: Before removing the speaker cables and wire harness, be sure to note their routing through the slots and pins so you can correctly reinstall the components.

3. Remove the left speaker cover, speaker, and speaker cable.

4. Remove the speaker wire harness.
5. Remove the two 4-mm screws securing the right speaker cover.
6. Remove the right speaker cover, speaker, and speaker cable.

The display latch is no longer secured by the speaker covers. Be careful not to lose the spring.

7. Remove the display latch and spring.

To replace the speaker, resolder the speaker cable to the new speaker.

When reinstalling the speakers, be especially careful to route the speaker cables and speaker wire harness through the appropriate slots and pins.

PC Card Heat Sink Removal

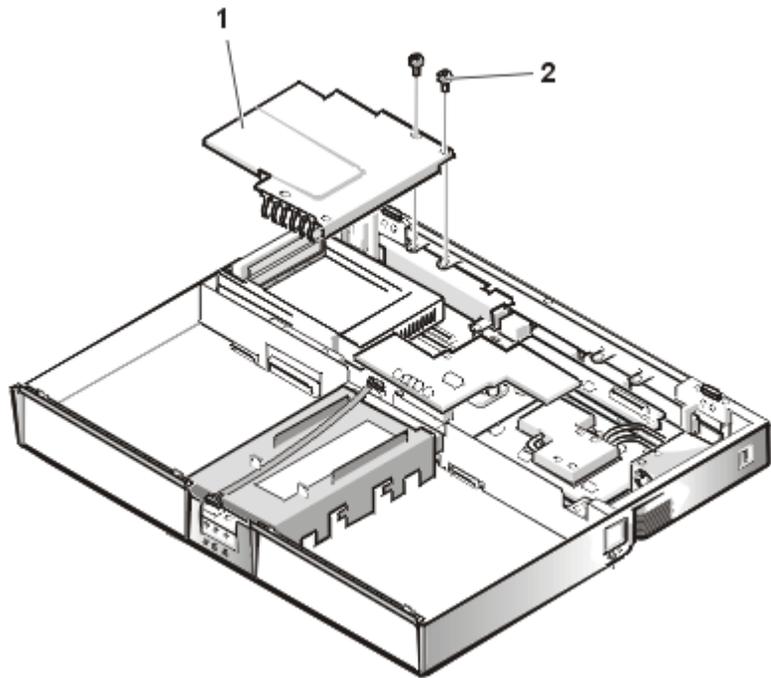


Figure 30. PC Card Heat Sink Components

-
- | | |
|----------|-------------------|
| 1 | PC card heat sink |
| 2 | 4-mm screws (2) |
-

To remove the PC Card heat sink (see Figure 29), perform the following steps:

1. Remove the two 4-mm screws securing the PC Card heat sink.
2. Remove the heat sink.

DC-DC Board Removal

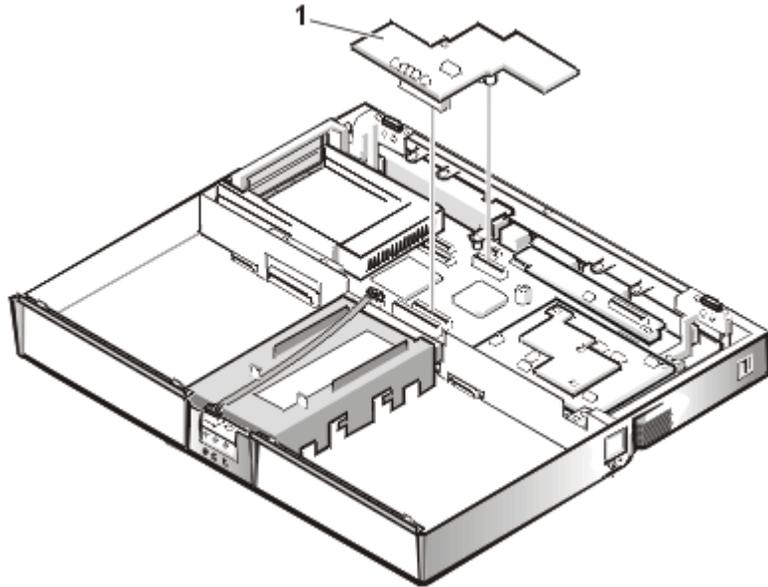


Figure 31. DC-DC Board

1 DC-DC board

To remove the DC-DC board (see Figure 30), gently pull the DC-DC board off of connectors JP11 and JP16 on the system board. Do not rock the board to remove it, because this may damage the connectors.

Hinge Saddle Removal

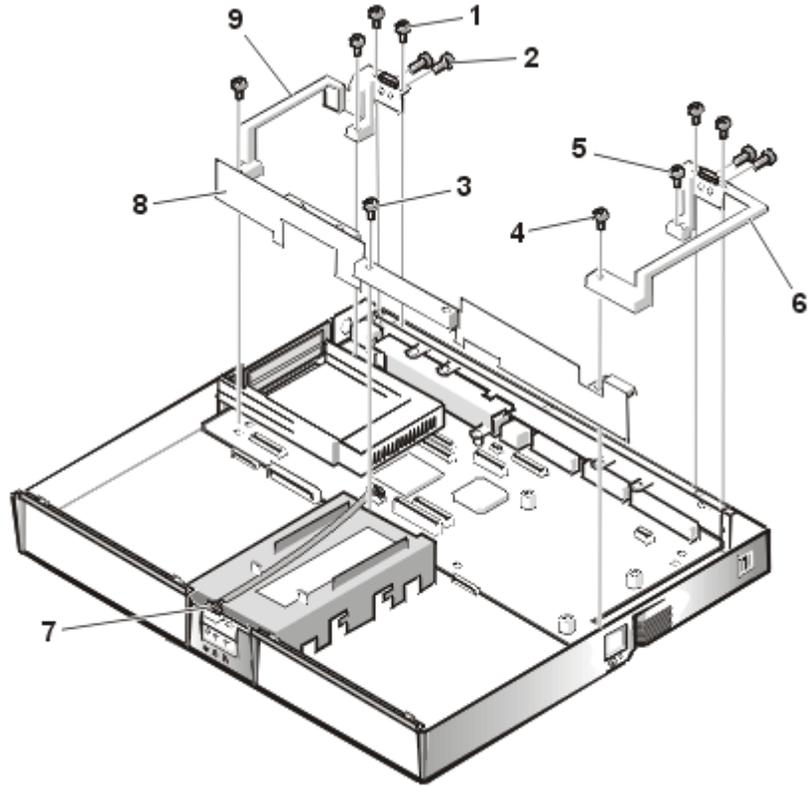


Figure 32. Hinge Saddle Components

-
- 1 4-mm screws
 - 2 4-mm screws
 - 3 6-mm screw (1)
 - 4 20-mm screws (2)
 - 5 10-mm screws
 - 6 Right hinge saddle
 - 7 LED cable
 - 8 Plastic frame
 - 9 Left hinge saddle
-

This procedure assumes that you have removed the PC Card heat sink. To remove the hinge saddles (see Figure 31), perform the following steps:

1. Remove the four 4-mm screws from the top of the left and right hinge saddles.
2. Remove the four 4-mm screws from the back of the computer above the ports.
3. Remove the 10-mm screw and 20-mm screw from the right hinge saddle and remove the saddle.
4. Remove the 10-mm screw and 20-mm screw from the left hinge saddle and remove the saddle.
5. Disconnect the LED cable from connector J6 on the system board.
6. Remove the 6-mm screw from the plastic frame, remove any tape, and remove the plastic frame.

RJ-11 Card Removal

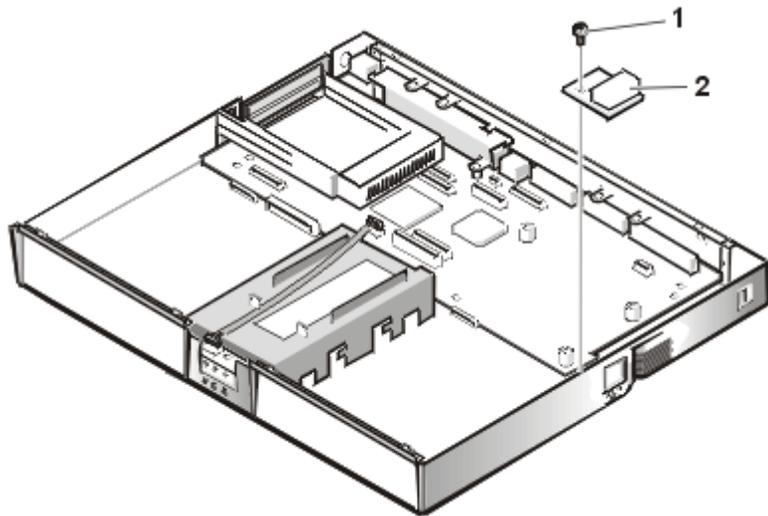


Figure 33. RJ-11 Card Components

1 4-mm screw

2 RJ-11 card

To remove the RJ-11 card (see Figure 32), perform the following these steps:

1. Remove the 4-mm screw securing the RJ-11 card to the system board.
2. Lift the card off the system board.

System Board Removal

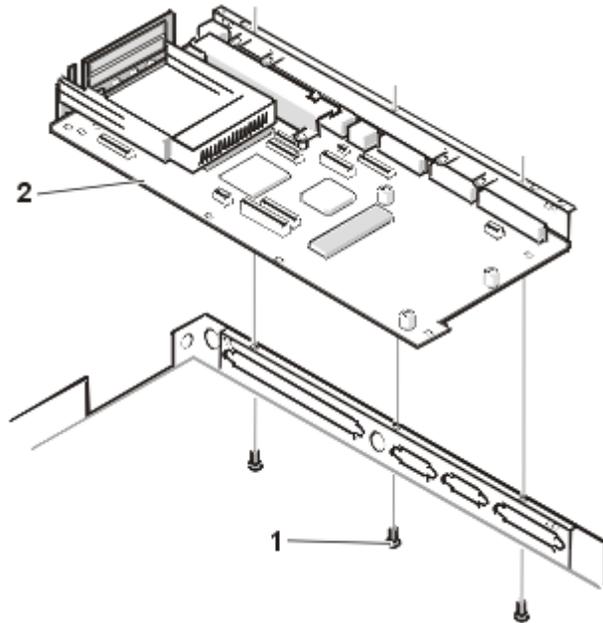


Figure 34. System Board Components

-
- | | |
|----------|-----------------|
| 1 | 4-mm screws (3) |
| 2 | System board |
-

This procedure assumes that you have removed the PC Card heat sink and hinge saddles. To remove the system board (see Figure 33), perform the following steps:

1. Remove the three 4-mm screws from the bottom of the computer.
2. Remove the system board from the bottom case.

PC Card Cage Removal

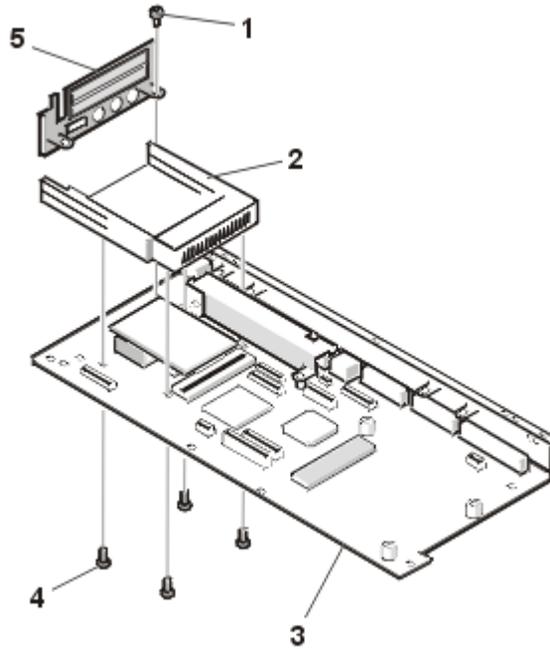


Figure 35. PC Card Cage Components

-
- | | |
|---|------------------|
| 1 | 4-mm screw |
| 2 | PC card cage |
| 3 | System board |
| 4 | 18-mm screws (4) |
| 5 | Audio bezel |
-

This procedure assumes that you have removed the system board from the plastic case. To remove the PC Card cage (see Figure 34), perform the following steps:

1. Remove the 4-mm screw securing the audio bezel.
2. Remove the audio bezel.
3. Remove the four 18-mm screws securing the PC Card cage to the system board.

Use a support for the system board to prevent the board from flexing when the card cage screws are removed.

4. Gently pull the card cage off of connector UP9 on the system board. Do not rock the cage to remove it, because this may damage the connectors.

Replace the PC Card cage if it is damaged.

Audio Card and Audio Thermal Shield Removal

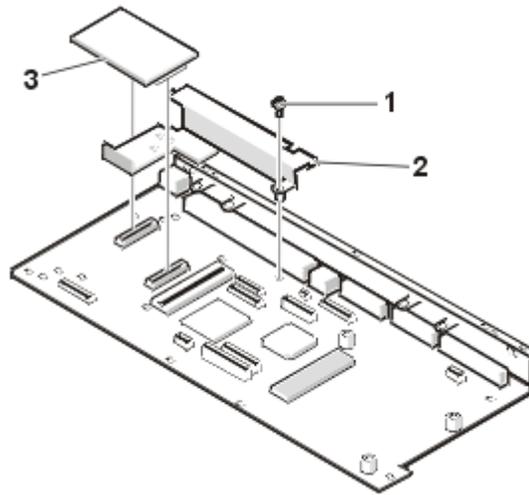


Figure 36. Audio Card/Thermal Shield Components

-
- | | |
|----------|----------------------|
| 1 | 10-mm screw |
| 2 | Audio thermal shield |
| 3 | Audio card |
-

This procedure assumes that you have removed the system board from the plastic case and have removed the PC Card cage from the system board. To remove the audio card and audio thermal shield (see Figure 35), perform the following these steps:

1. Gently pull the audio card off of connectors JP12 and JP13 on the system board. Do not rock the card to remove it, because this may damage the connectors.
2. Remove the 10-mm screw securing the audio thermal shield, and then remove the shield.

Latch Assembly Removal

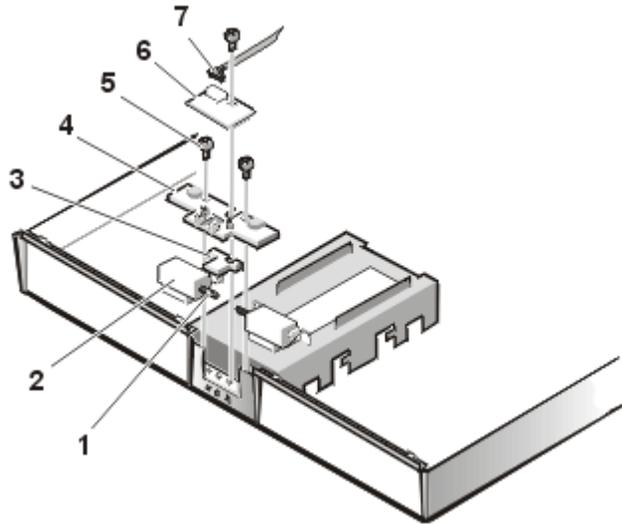


Figure 37. Latch Assembly Components

-
- | | |
|---|-----------------|
| 1 | Springs (2) |
| 2 | Latches (2) |
| 3 | Center lock |
| 4 | Latch cover |
| 5 | 4-mm screws (3) |
| 6 | LED board |
| 7 | LED cable |
-

To remove the latch assembly (see Figure 36), perform the following steps:

1. Disconnect the LED cable from connector JP2 on the LED board.
2. Remove the 4-mm screw securing the LED board to the plastic base.
3. Remove the LED board.
4. Remove the two 4-mm screws holding the latch cover for the MegaBay and media bay.
5. Remove the latch cover.
6. Remove the center lock over the two latches with springs.

7. Remove each spring and latch.
Be careful not to lose the small springs.

Display Assembly and Display Assembly Component Removal

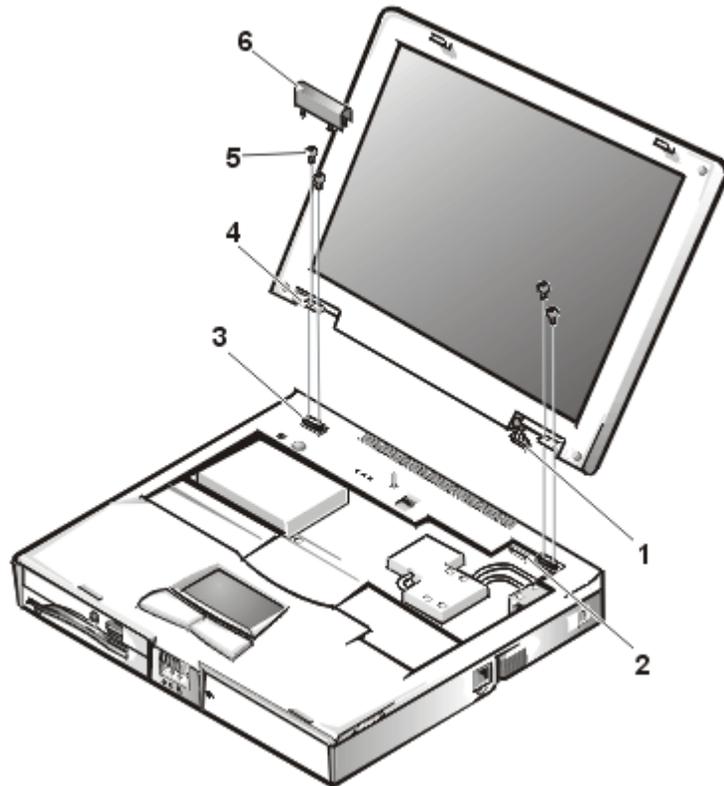


Figure 38. Display Assembly Removal

-
- 1 LCD wire harness
 - 2 Connector JP3
 - 3 Hinge saddles (2)
 - 4 Hinges (2)
 - 5 6-mm screws (4)
 - 6 Left saddle hinge
-

This procedure assumes that you have removed the keyboard and thermal shield. The following procedure applies to all LCD displays (15-inch XGA, 15-inch SXGA+, and 15.4-inch SXGA).

1. Remove the left hinge cover (see Figure 37).

Remove the two Phillips screws on the LCD wire harness on JP3. Use a dental pick or flat-blade screwdriver to pry each end of the connector to release it.

2. Close the display.
3. Remove the four 6-mm screws that secure the two hinges.
4. Unlatch the display assembly and lift the assembly off the computer base.

Display Assembly Component Removal

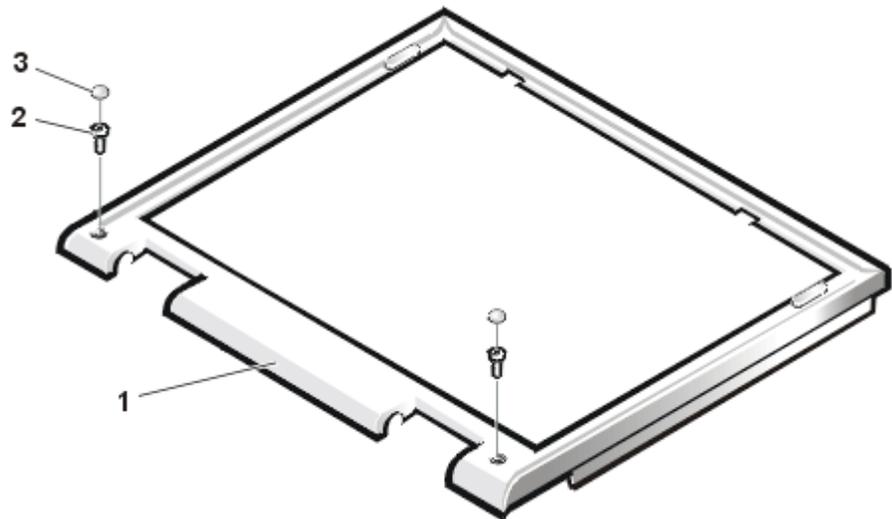


Figure 39. Front Bezel Removal

-
- | | |
|---|-------------------------|
| 1 | Front bezel |
| 2 | 6-mm screws (2) |
| 3 | Rubber screw covers (2) |
-

This procedure assumes that you have removed the display assembly from the computer base. To remove the front bezel (see Figure 38), perform the following steps:

1. Use a dental pick to pry the rubber screw covers off of the bottom two screws and the rubber bumpers off of the top two screws.

2. Remove the four 6-mm screws from the front bezel.
3. Unsnap the front bezel from the back cover and remove it from the assembly.
Carefully insert your fingers between the LCD panel and the bezel. Roll the plastic up slightly to insert your fingers further in, and then lift upward to free the snaps. Start at the middle bottom and then work around.

When replacing the bezel, ensure that the LCD wire harness is routed correctly through the openings in the back cover and is not pinched.

15-Inch LCD Panel Removal

To remove the 15-inch LCD panel, perform the following steps:

1. Turn the computer over and remove the four+ screws from the bottom of the computer.
2. Turn the computer back over and open the display.
3. Remove the plastic hinge covers.
4. Insert a small flat-blade screwdriver or a similar plastic tool along the top-right edge of the keyboard, above the row of function keys. Working from right to left, free the keyboard by prying it toward the front of the unit. When free, lift the top of the keyboard slightly to clear the palmrest assembly.
5. Remove the keyboard bracket (located in the upper-right corner of the keyboard).
6. Remove the four screws that secure the two hinges.
7. Unplug the LCD wire harness and lift the assembly off the computer base.

To remove the front bezel, follow these steps:

1. Remove the two rubber screw covers and screws on the LCD near the hinge. Remove the remaining three plastic screw covers and screws, one on either side and one in the front.
2. With all screws removed, unsnap the front bezel from the back cover and remove the bezel from the assembly.

To remove the LCD panel, hinges, and inverter board, follow these steps:

1. Remove the four remaining screw covers and screws on the sides of the LCD.
2. With all screws removed, lift the LCD panel out and disconnect the inverter wire from the inverter board.
3. Detach the LCD wire harness from connector CN2 on the right side of the inverter board.
4. Carefully remove the grounding tape between the inverter board and the LCD panel.

5. Remove the two 2.5-mm screws securing the inverter board to the back cover.
 6. Remove the inverter board from the back cover.
- To reassemble, perform the steps in reverse order.

Exploded View of Base Assembly

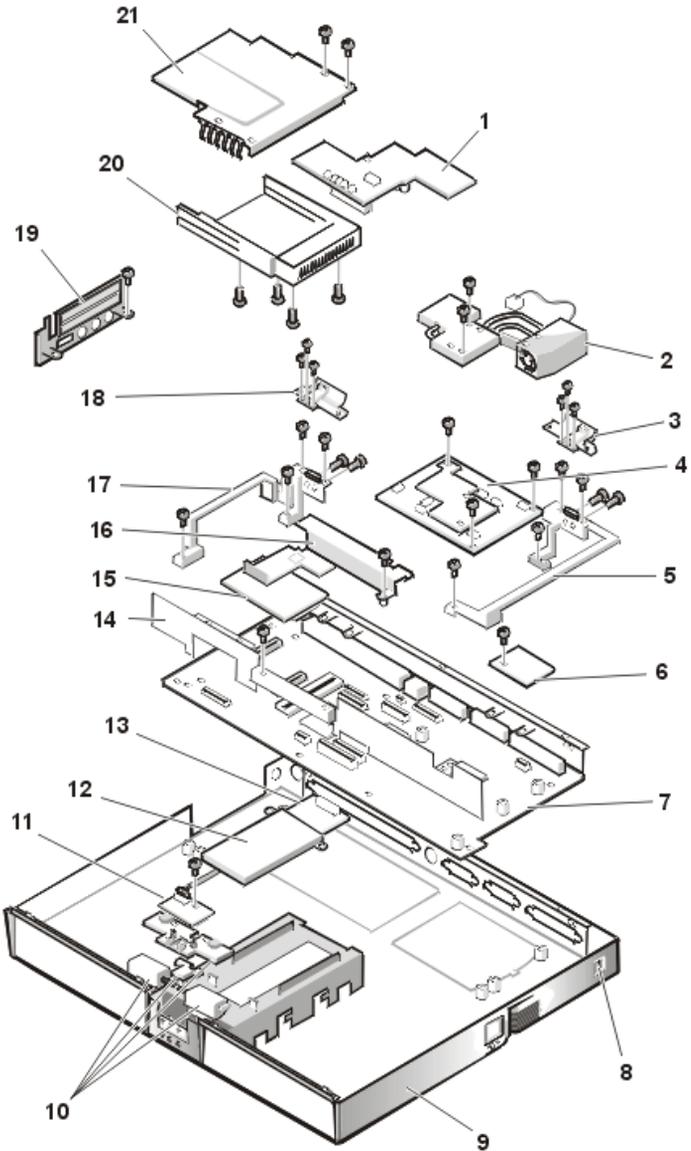


Figure 40. Base Assembly Components

-
- 1 DC-DC board
 - 2 Heat exchanger/fan
 - 3 Right hinge saddle extension
-

-
- 4** Processor board
 - 5** Right hinge saddle
 - 6** RJ-11 card
 - 7** System board
 - 8** Kensington lock
 - 9** Plastic base
 - 10** Latch assembly
 - 11** LED board
 - 12** Modem shield
 - 13** Modem card
 - 14** Bracket
 - 15** Audio card
 - 16** Audio thermal shield
 - 17** Left hinge saddle
 - 18** Left hinge saddle extension
 - 19** Audio bezel
 - 20** PC card cage
 - 21** PC card heat sink
-

Dell Information Development

Postscript Imaging Specs

JOB TITLE:	Dell Inspiron 7500 Removig and Replacig Parts s:\systems\sydney\parts
LANGUAGES:	English
PART NUMBER:	679DC Rev. A00 Checked Empact:Currently at X00
PREPARED BY:	Gloria Salinas
CONTACT:	Donna Moore 512-728-3439
EMAIL ADDRESS:	Donna_Moore@dell.com
VENDOR:	Copyright
DATE:	3/20/00

COMPUTER SOURCE:	Dell PC
APPLICATION SOFTWARE:	FrameMaker Version 5.5.2
POSTSCRIPT FILES:	Yes
POSTSCRIPT DRIVER USED:	Linotronic 330
COLOR SEPARATED FILES:	No
COMPRESSED & TESTED:	Yes
PAGE SIZE:	7.5 x 9 inches
PAGE ORIENTATION:	Portrait
LINE SCREEN:	133 lpi
TRANSPORT MEDIA:	FTP
HALFTONES/SCREENS/	No
DUOTONES:	No
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Dell Information Development

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