Digital AlphaServer 1000 Series

Upgrade Information

Order Number: EK–ALPSV–UP. B01

Digital Equipment Corporation
Maynard, Massachusetts

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Options You Can Upgrade

Purpose of Guide

The purpose of this guide is to tell customers and Digital Services which options can be removed from their current system and used, internally or externally, in their Digital AlphaServer 1000 Series system. Step-by-step instructions are provided for removing the options.

Options You Can Upgrade

The following options can be used with the Digital AlphaServer 1000 Series system:

Option	Description	Comments
RZ26L	1.05 GB SCSI	Requires SWXBA-BA
RZ28	2.1 GB 3.5" SCSI	Requires SWXBA-BA
Internal or External Tape Drives/CD–ROM Drives		
TLZ06	4 GB 4 MM DAT drive	
TLZ07	8 GB 4mm DAT tape	
TZK10	525 MB QIC tape	
TZK11	2.0 GB QIC tape	
RRD43	600 MB CD–ROM	
RRD44	600 MB HI-PERF CD–ROM	

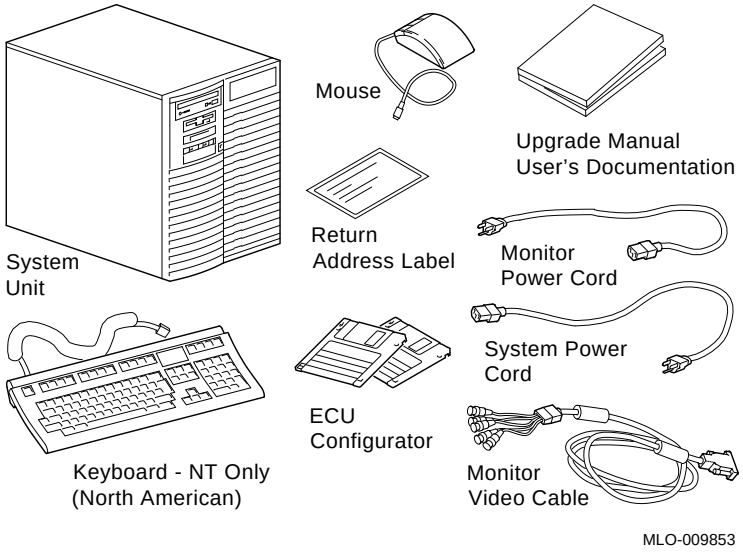
Option	Description	Comments
	Graphics Option	
PB2GA-AA	COMPAQ Qvision	
	Monitors	
VRC21-HA/H4	21" color	
VRT17-HA/HB	17" color	
	Keyboard	
LK411		
	Expansion Boxes	
BA350	Deskside	

Warning

Attach an antistatic wrist strap before you begin this upgrade. As you remove options from your system, place them on an antistatic mat.

Static discharge can cause irreparable damage to options modules.

Figure 1–1 Kit Contents



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Upgrading a DEC 2000 Model 500 AXP

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Removing modules
- Completing the upgrade

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To determine the SCSI ID settings on your drives:

1. Shut down your software following the instructions in your software documentation.
2. Enter the *show device* command at the console prompt (>>>) to display the SCSI address for each drive. A display similar to the following appears:

```
>>> show device Return

BOOTDEV   ADDR   DEVTYPE  RM/FX  DEVNAM     REV  NUMBYTES
-------   ----   -------  ------ ------     ---  --------
ESA0      08-00-2B-2E-2E-C3
DVA0      PC Floppy DISK
SCSI Devices..
DKA0      A/0/0  DISK     FX     RZ25       007   426.25MB
MKA200    A/0/0  TAPE     RM     TZK10      03B8  ....
DKA200    A/4/0  RODISK   RM     RRD42      4.5D  ....
HOST      A/5/0  PROC            AHA1742A   G

>>>
```

The SCSI address for each drive is indicated in the ADDR column, as shown above. The drive model is shown in the DEVNAM column. In this example, A/0/0 indicates an address of 0 on the SCSI A (internal device) bus for an RZ25, A/4/0 indicates an address of 4 on the SCSI-A bus for an RRD42, and so on.

Write down the drive names and SCSI addresses here for later reference.

Step 2: Shut Down System

Turn off the system unit by pressing 0 on the On/Off switch on the front of the system unit.

Caution: After you turn off the system, wait 15 seconds before unplugging the power cord.

Step 3: Disconnect Cables

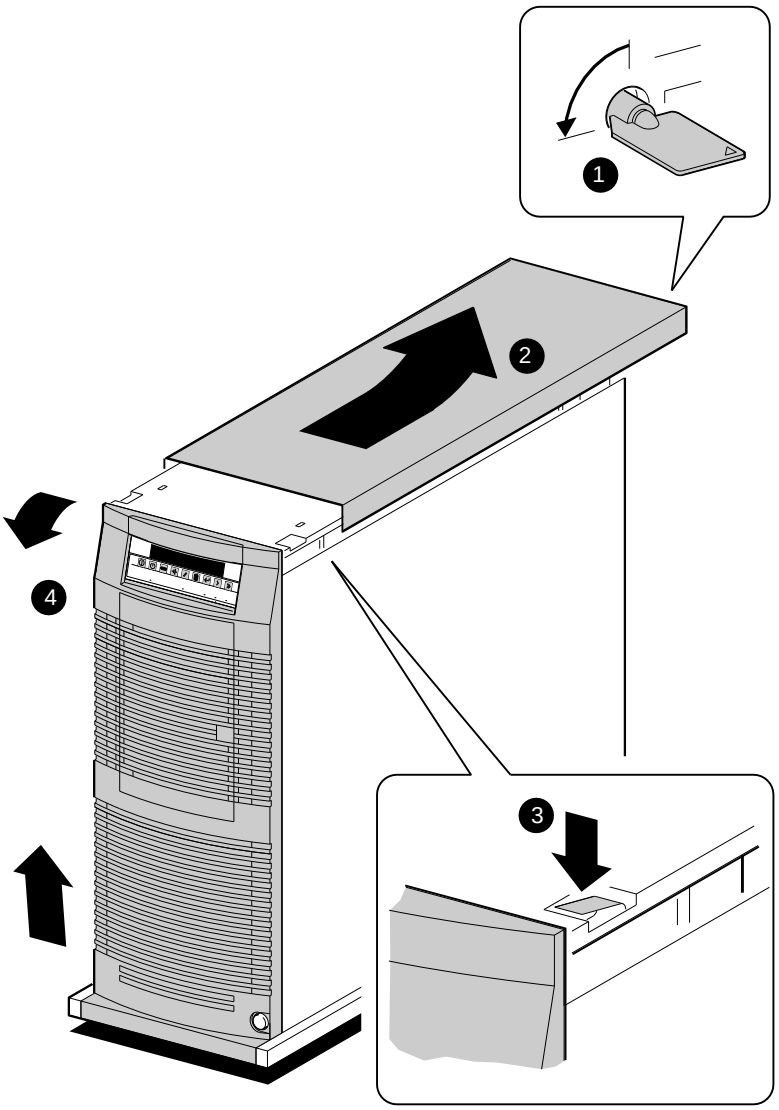
Disconnect all the cables from the back of the system unit. Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Removing the Front Bezel

The following table lists the steps that you must follow to remove the front bezel:

Step	Action
1	Unlock the system unit using the chassis key (❶).
2	Remove the top cover (❷) by sliding it to the rear of the system unit and lifting it.
3	Press the two locking tabs (❸) on the front bezel (❹), then tilt it forward, and remove it.

Figure 2–1 Removing the Front Bezel

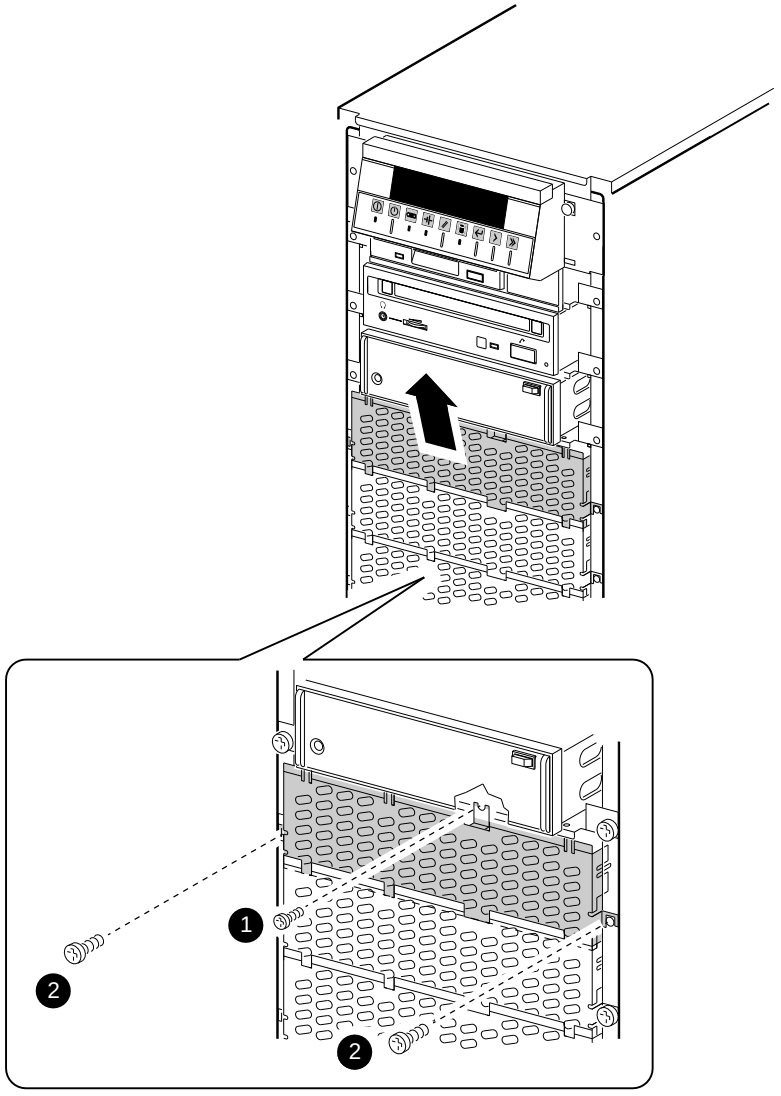


Step 5: Removing the EMC Shields

The following table describes how to remove the EMC shields:

Step	Action
1	Remove the screw (❶) securing the top EMC shield to the removable media device shelf above it.
2	Remove the screws (❷) at both sides of the EMC shield securing it to the chassis and lift the EMC shield off the one below it.
3	Repeat step 2 for each small EMC shield that you want to remove.
4	Remove the screws at both sides of the large EMC shield and lift it off the lip at the bottom of the system unit.

Figure 2–2 Removing the EMC Shields



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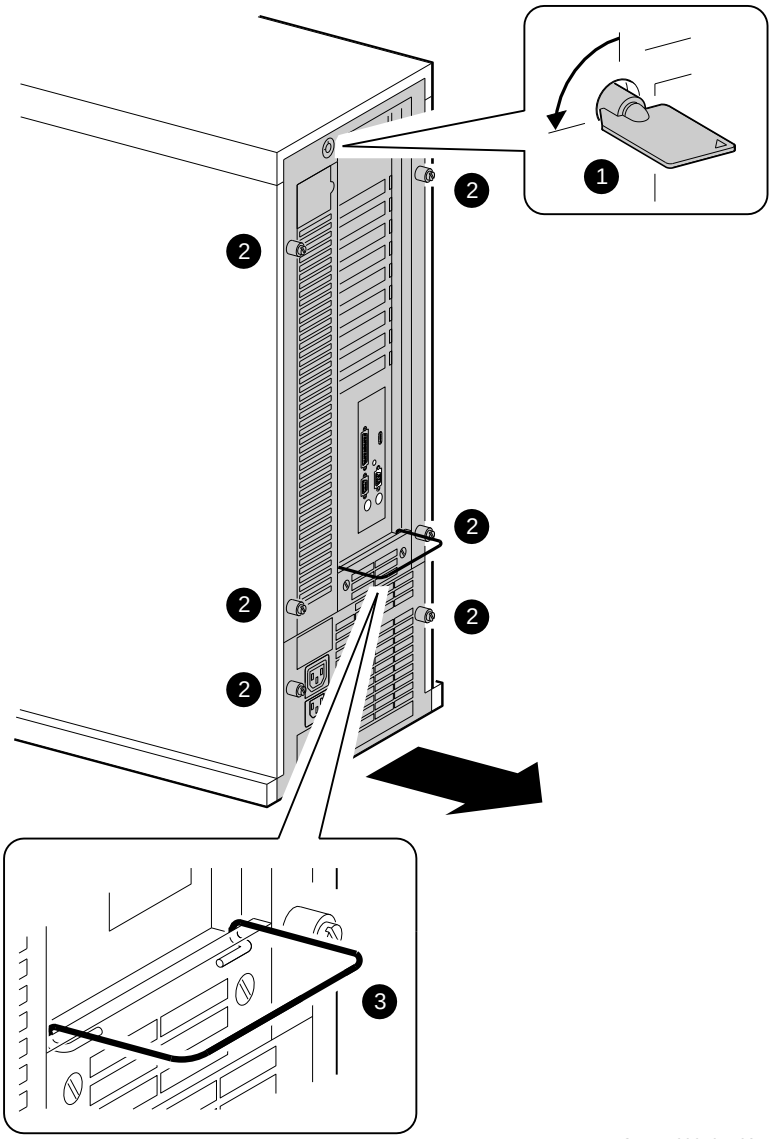
Step 6: Opening the Rear Sliding Compartment

This step is necessary only if you are migrating an option module to your new system.

The following table lists the steps that you must follow to open the rear sliding compartment:

Step	Action
1	Unlock the system unit using the chassis key (❶).
2	Loosen the six captive screws (❷).
3	Hook the handle (❸) onto the rear sliding compartment as shown.
4	Pull the sliding compartment out until the locking clip clicks into place.

Figure 2–3 Opening the Rear Sliding Compartment

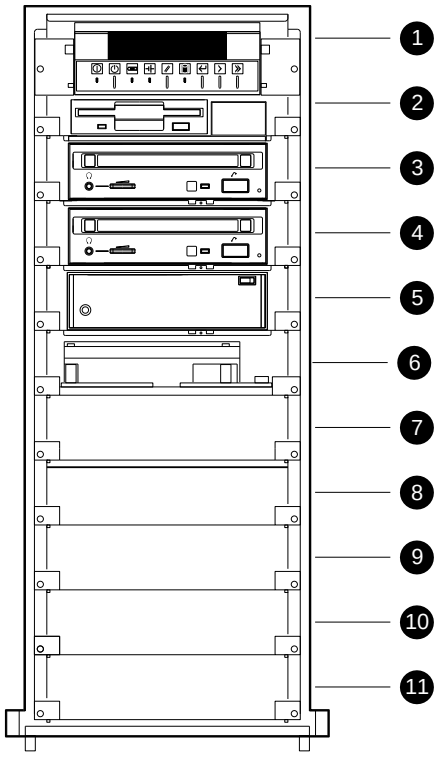


Step 7: Identifying Device Slots

The following table lists the device slots and indicates the types of devices that could be present in each slot:

Slot	Cable	Supported Devices
❶	IFP cable	IFP
❷	PC/AT cable	3.5-inch diskette drive
❸	SCSI cable 1	5.25-inch removable media device
❹	SCSI cable 1	5.25-inch removable media device
❺	SCSI cable 1	5.25-inch removable media device or 3.5-inch disk drives (2)
❻	SCSI cable 1	3.5-inch disk drives (2)
❼		Must be vacant
❽	SCSI cable 2	3.5-inch disk drives (2)
❾	SCSI cable 2	3.5-inch disk drives (2)
❿	SCSI cable 2	3.5-inch disk drives (2)
⓫	SCSI cable 2	3.5-inch disk drives (2)

Figure 2–4 Device Slots in the System Unit



Step 8: Removing a 3.5-Inch Disk Drive

The following table describes how to remove a 3.5-inch disk drive:

Step	Action
1	Disconnect the SCSI ribbon cables (❶) from both connectors on the disk drive shelf.
2	Remove the shelf (❷) from the slot.
3	Remove the four screws that secure the appropriate disk drive to the drive shelf and disconnect the shelf SCSI and power cables.

Figure 2–5 Removing a 3.5-Inch Disk Drive

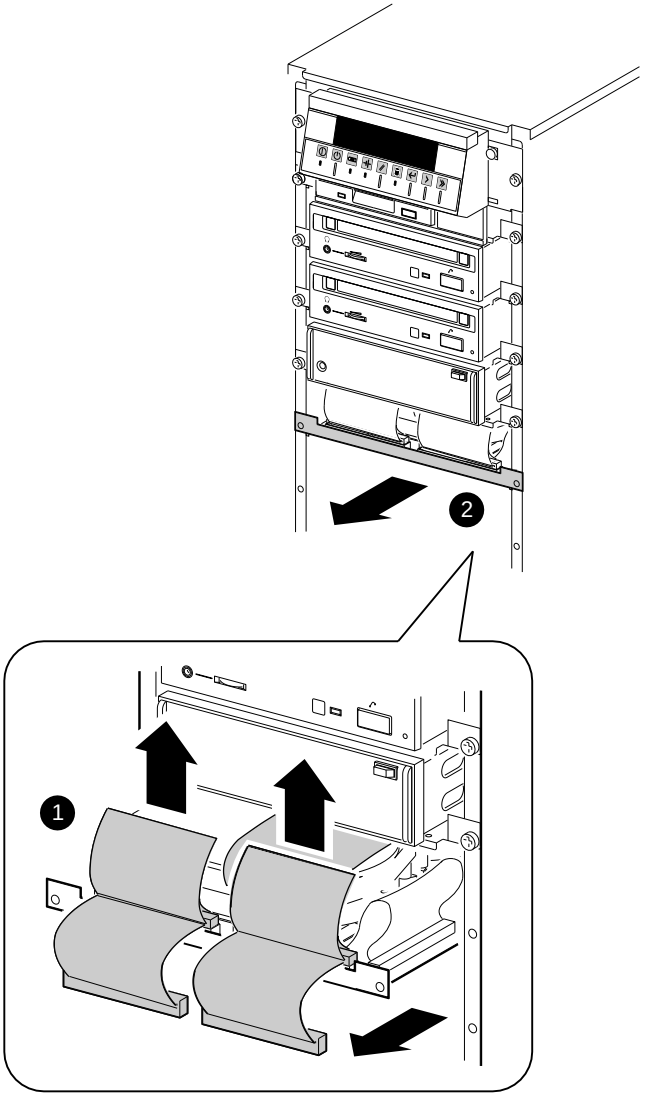
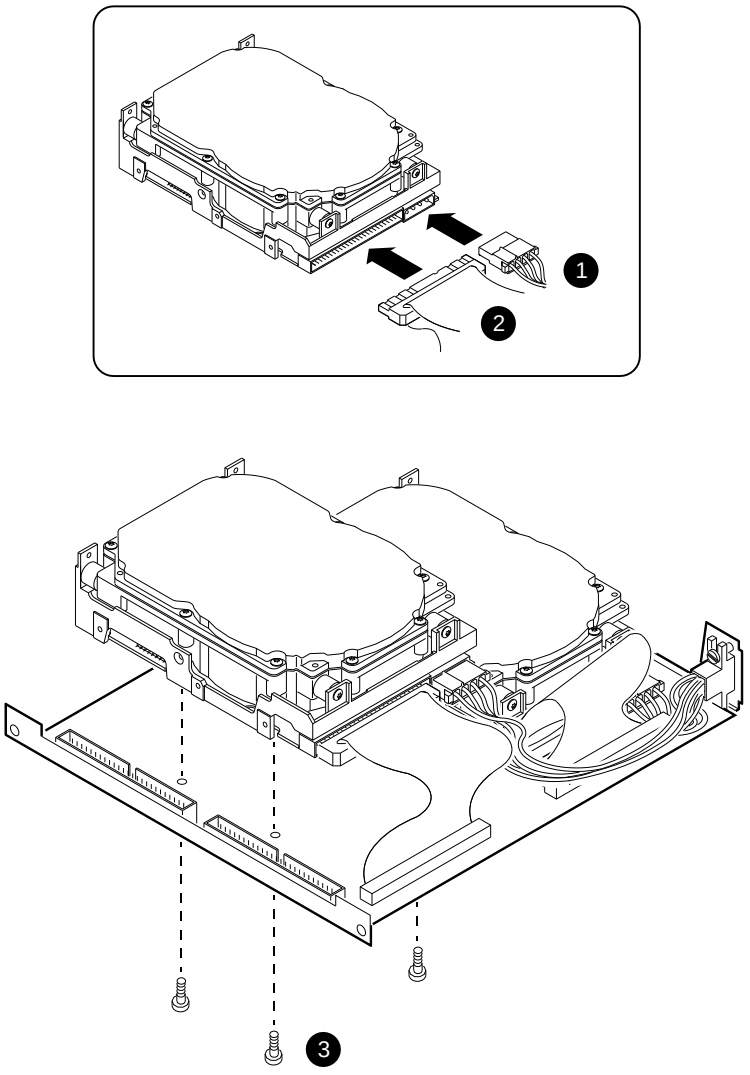


Figure 2–6 Removing a Disk Drive from a Disk Drive Shelf



Step 9: Removing a 5.25-Inch Removable Media Device

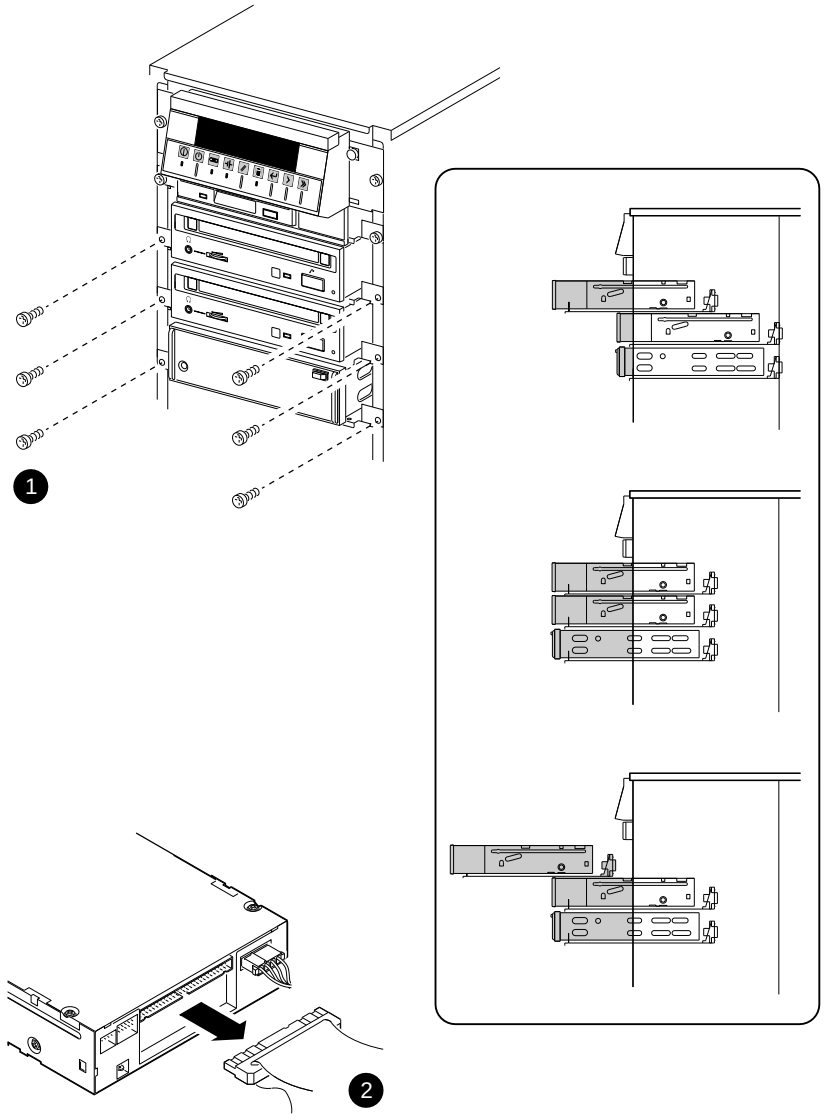
Note

To remove a removable media device shelf, you must remove the shelf below it. Therefore, to remove the top removable media device shelf, you may first have to remove up to three other shelves below it. Follow this procedure until you remove the correct shelf.

The following table lists the steps that you must follow to remove a 5.25-inch removable media device:

Step	Action
1	Remove the disk drive shelf from device slot 6 (following the previous instructions).
2	Remove the screws (❶) securing all the removable media devices to the chassis.
3	Starting with the top removable media shelf, pull each removable media shelf towards the front of the system until it extends about half way. If a shelf stops moving before it extends half way, pull the shelf below it forward. Repeat this step until all the removable media shelves extend half way.
4	Pull the top shelf out fully and disconnect the SCSI cable (❷) from the drive.
5	Repeat step 4 until you remove the correct shelf.
6	Disconnect the shelf power cable from the removable media device and unscrew it from the removable media shelf.

Figure 2–7 Removing a 5.25-Inch Removable Media Device

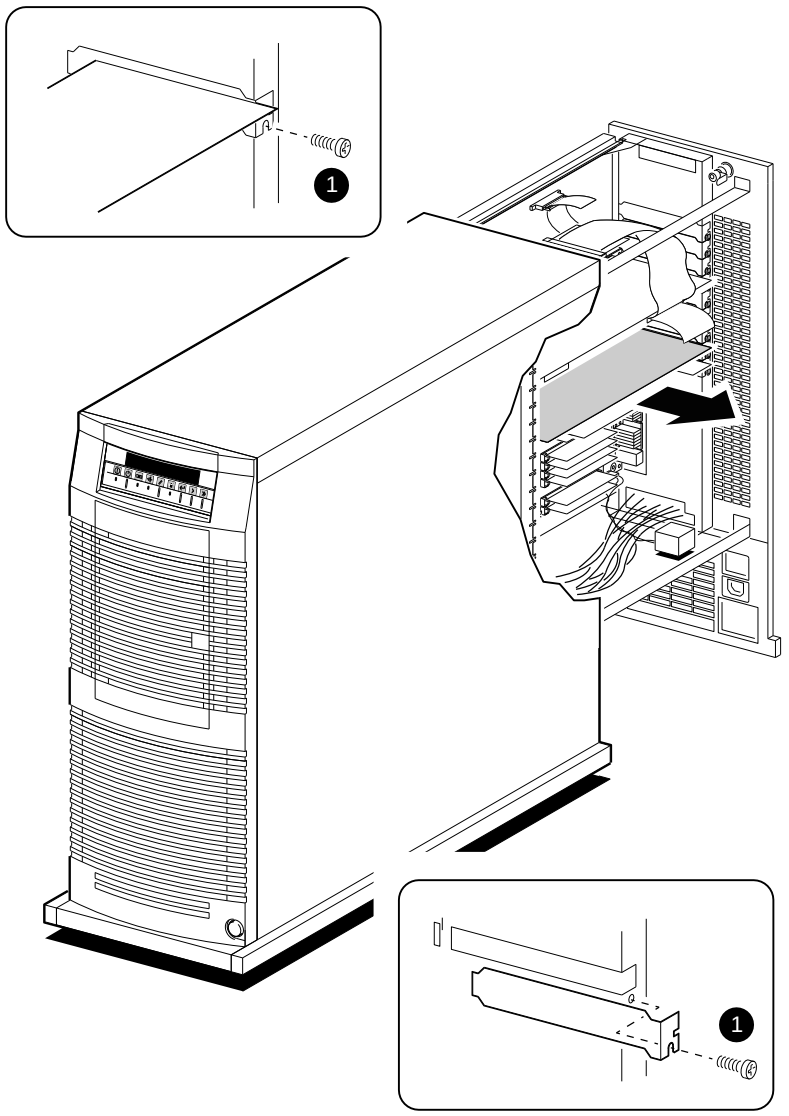


Step 10: Removing an Option Board

The following table lists the steps you must follow to remove an option board:

Step	Action
1	If necessary, disconnect any cables connected to other option boards that prevent you from accessing the option board that you want to remove.
2	Disconnect any cables connected to the external or internal ports on the option board.
3	Remove the screw (❶) securing the option board to the chassis.
4	Carefully disconnect the option board from the connector on the system module and remove it from the system.

Figure 2–8 Removing an Option Board



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Step 11: Set SCSI IDs on Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

See Appendix A for the SCSI ID drive settings.

Step 12: Complete the Upgrade

1. Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* to install the options you have removed from your system and to complete the upgrade.
2. Contact your Digital service representative to upgrade your hardware service contract.

Step 13: Return Your System to Digital

Return your system as follows:

1. Pack the system unit securely in packing material.
2. Attach the return-address label that came in the upgrade accessory kit.

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Upgrading a DEC 3000 Model 600S AXP

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To determine the SCSI ID settings on your drives:

1. Shut down your software following the instructions in your software documentation.
2. Enter the *show device* command at the console prompt (>>>) to display the SCSI address for each drive. A display similar to the following appears:

```
>>> show device Return

BOOTDEV   ADDR   DEVTYPE  NUMBYTES  RM/FX  WP  DEVNAM REV
-------   ----   -------  --------  -----  --  ------ ---
ESA0      08-00  12-00-9C
DKA0      A/0/0  DISK     426.25MB  FX         RZ25   0700
DKA100    A/1/0  DISK     426.25MB  FX         RZ25   0700
DKA400    A/4/0  RODISK   ......    RM     WP  RRD42  4.3D
..HOSTID..A/7    INITR
..HOSTID..B/7    INITR

>>>
```

The SCSI address for each drive is indicated in the ADDR column, as shown above. The drive model is shown in the DEVNAM column. In this example, A/0/0 indicates an address of 0 on the SCSI A (internal device) bus for an RZ25, A/4/0 indicates an address of 4 on the SCSI-A bus for an RRD42, and so on.

Write down the drive names and SCSI addresses here for later reference.

Step 2: Shut Down System

Turn off the system unit by pressing 0 on the On/Off switch on the rear of the system unit.

Caution: After you turn off the system, wait 15 seconds before unplugging the power cord.

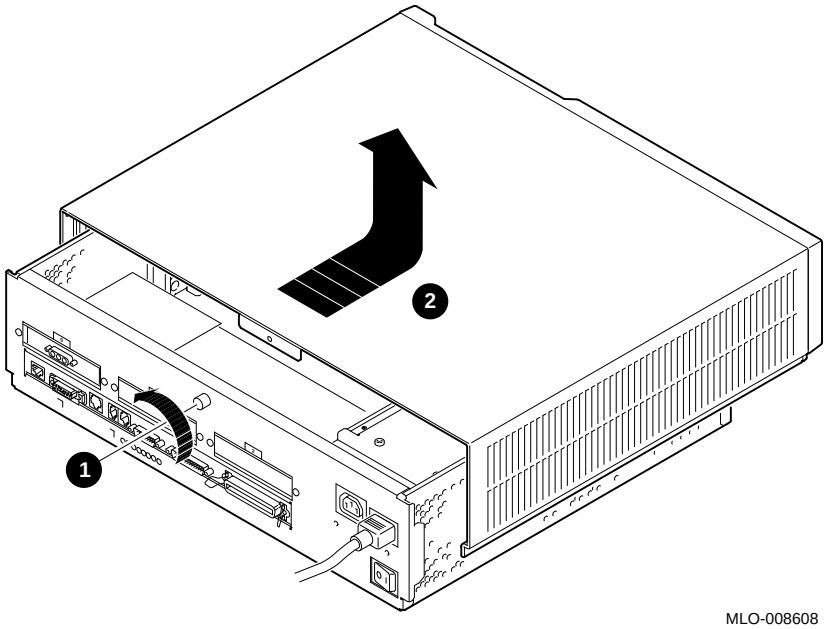
Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit. Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Remove System Cover

Loosen the captive screw ❶ on the back of the system unit. With one hand on each side, pull firmly on the cover to pull it towards the front of the system unit and lift it off ❷.

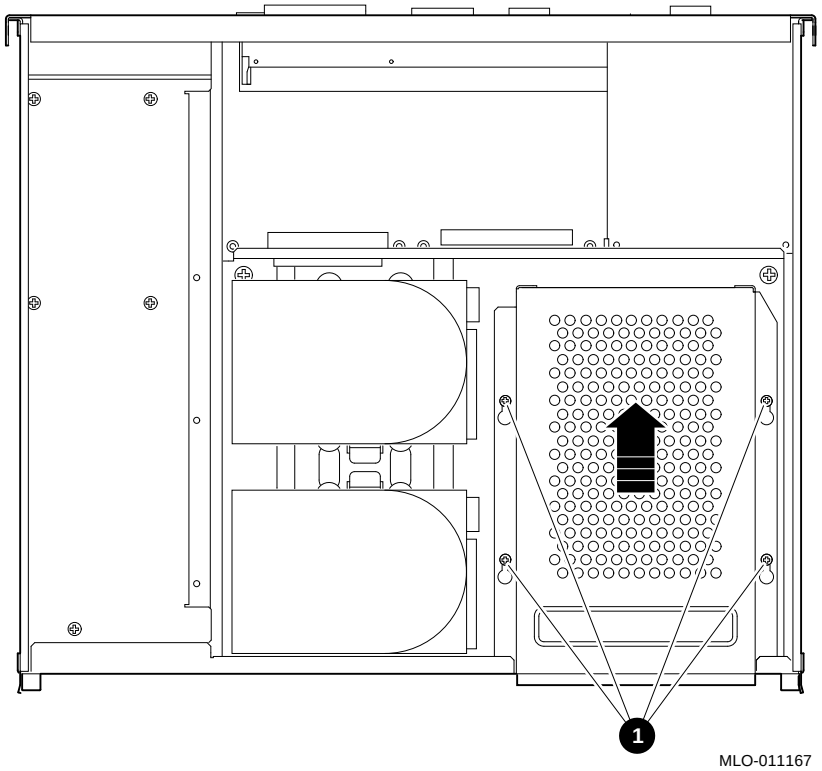
Figure 3–1 Removing the System Cover



Step 5: Remove Removable Media Drive

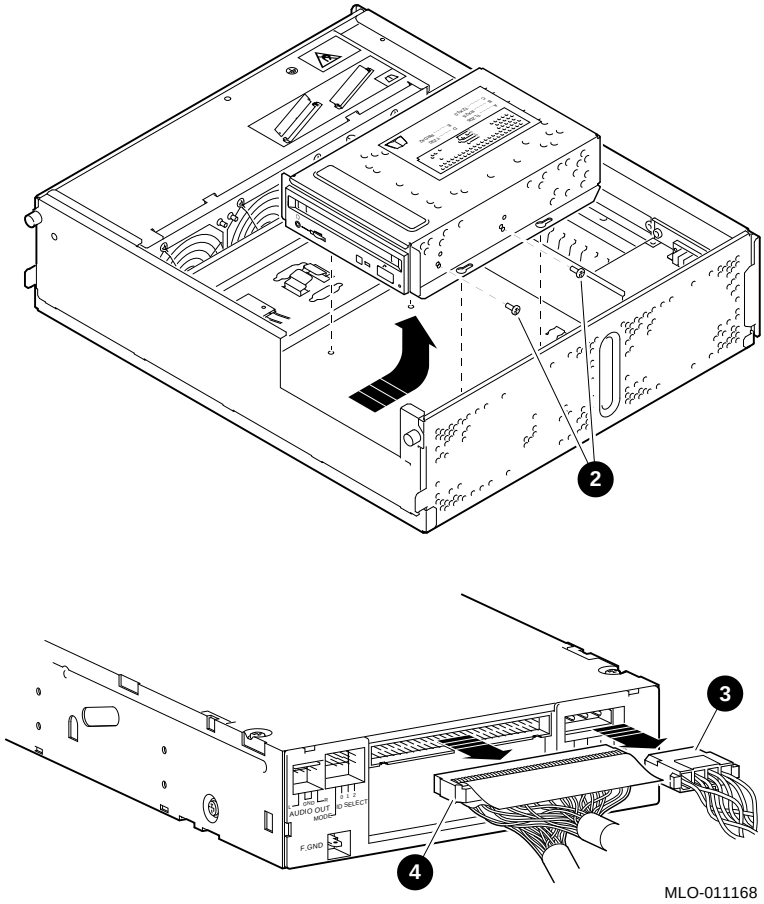
1. Loosen the four screws holding the bracket in place and slide the bracket toward the back of the enclosure ❶.

Figure 3–2 Loosening the Screws on the Bracket



2. Position the drive bracket on its side to remove the four screws that mount the drive to the bracket. Remove the drive from the bracket ❷.
3. Remove the power cable connector attached to the drive ❸.
4. Remove the SCSI signal cable connector from the drive ❹.

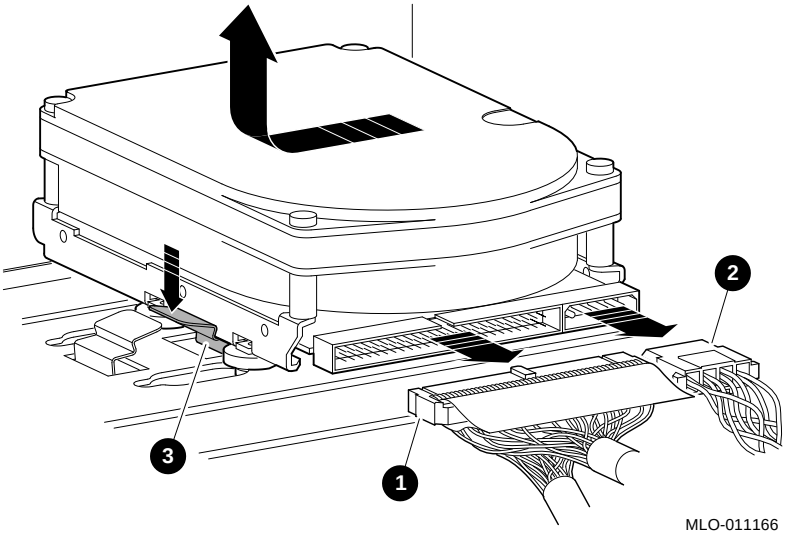
Figure 3–3 Removing a Removable Media Device



Step 6: Remove a Disk Drive

1. Remove the SCSI signal cable from the drive ❶.
2. Disconnect the power cable connector from the drive ❷.
3. Press the retaining spring. Slide the drive toward the retaining spring and lift the drive out ❸.

Figure 3–4 Removing a Fixed Media Device

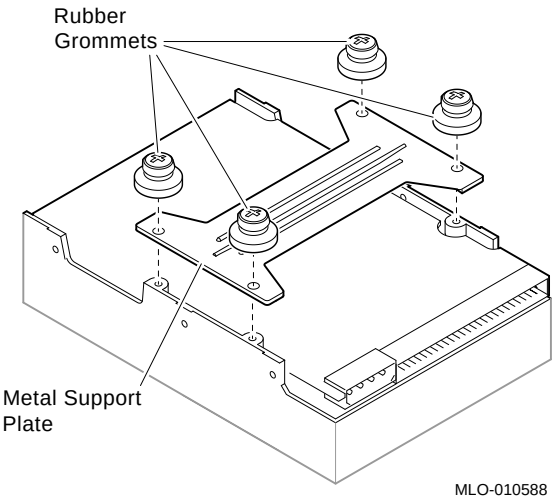


Step 7: Remove Mounting Brackets

Remove the mounting bracket and rubber grommets from the fixed disk drive.

Set the drive aside on an antistatic mat.

Figure 3–5 Removing a Mounting Bracket



Step 8: Set SCSI IDs on Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

See Appendix A for the SCSI ID drive settings.

Step 9: Complete the Upgrade

1. Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* to install the options you have removed from your system and to complete the upgrade.
2. Contact your Digital service representative to upgrade your hardware service contract.

Step 10: Return Your System to Digital

Return your system as follows:

1. Pack the system unit securely in packing material.
2. Attach the return-address label that came in the upgrade accessory kit.

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Upgrading a DEC 3000 Model 800S AXP

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To determine the SCSI ID settings on your drives:

1. Shut down your software following the instructions in your software documentation.
2. Enter the *show device* command at the console prompt (>>>) to display the SCSI address for each drive. A display similar to the following appears:

```
>>> show device Return

BOOTDEV   ADDR   DEVTYPE  NUMBYTES  RM/FX  WP  DEVNAM REV
-------   ----   -------  --------  -----  --  ------ ---
ESA0      08-00-2B-1D-1E-EF,THICK
DKA0      A/0/0  DISK       1.05MB  FX         RZ26   T368
DKA100    A/1/0  DISK     426.25MB  FX         RZ25   0700
DKA200    A/2/0  DISK     426.25MB  FX         RZ25   0700
DKA400    A/4/0  RODISK   .......   RM     WP  RRD42  4.3d
DKA500    A/5/0  DISK     .......   RM         RX26   0068

..HostID..A/7    INITR
..HostID..B/7    INITR

>>>
```

The SCSI address for each drive is indicated in the ADDR column, as shown above. The drive model is shown in the DEVNAM column. In this example, A/1/0 indicates an address of 1 on the SCSI A (internal device) bus for an RZ25. A/4/0 indicates an address of 4 on the SCSI-A bus for an RRD42, and so on.

Write down the drive names and the SCSI addresses here for later reference.

Step 2: Shut Down System

Turn off the system unit by pressing 0 on the On/Off switch on the front of the system unit.

Caution: After you turn off the system, wait 15 seconds before unplugging the power cord.

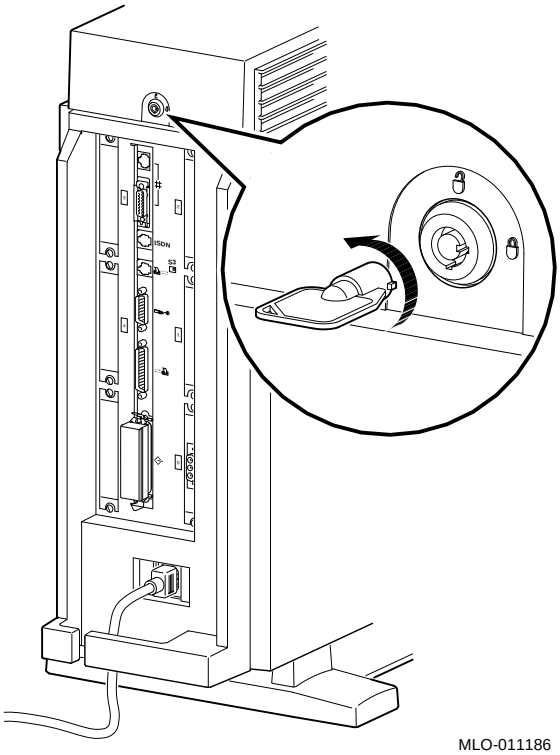
Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit. Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Unlock Cover

Unlock the system cover, as shown.

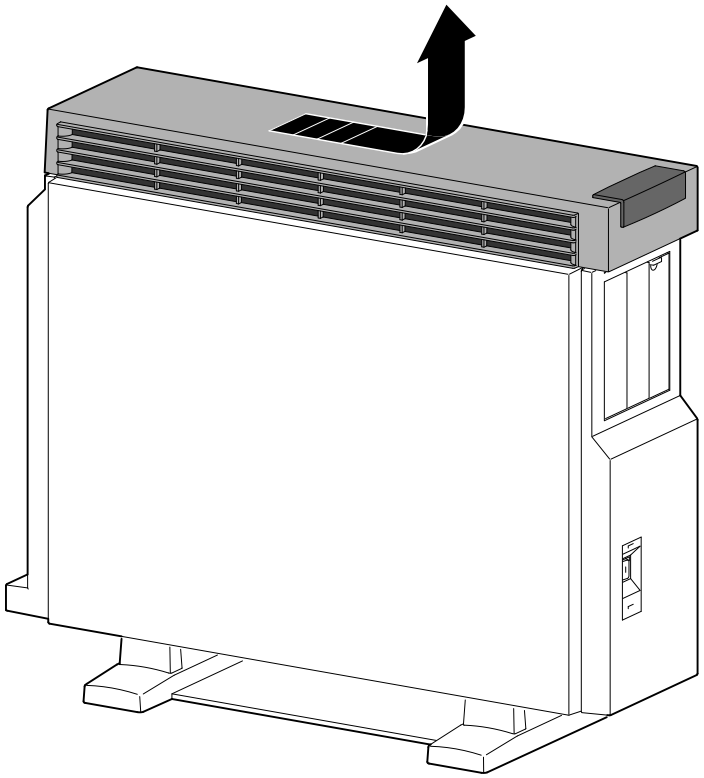
Figure 4–1 Unlocking the System Cover



Step 5: Remove Cover

Remove the system cover by sliding it forward and lifting if off, as shown. Note that the cover must be removed before you can remove the front panel or either side panel.

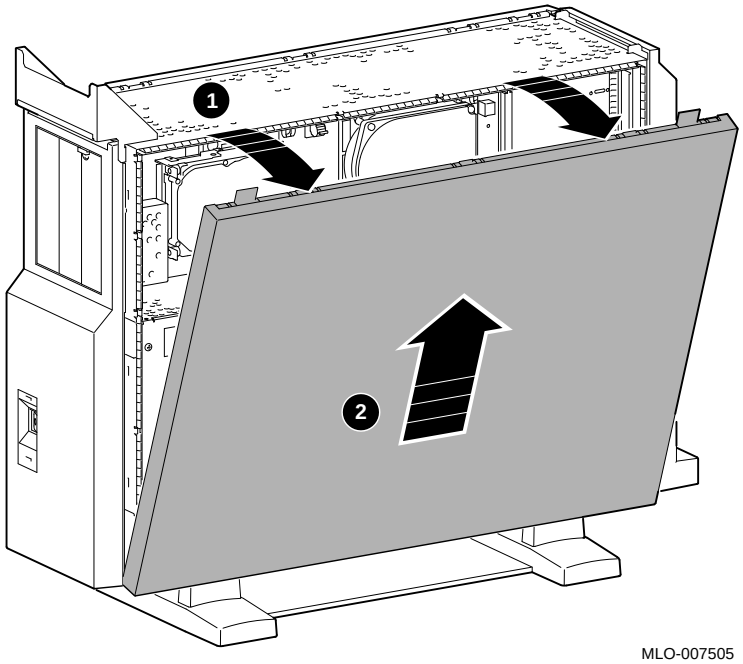
Figure 4–2 Removing the System Cover



Step 6: Remove Right Panel

Remove the right side panel by pulling the tabs on the top edge away ❶ and lifting the bottom edge out of the track ❷. Do *not* pull on the plastic part of the panel.

Figure 4–3 Removing the Right Side of the Panel



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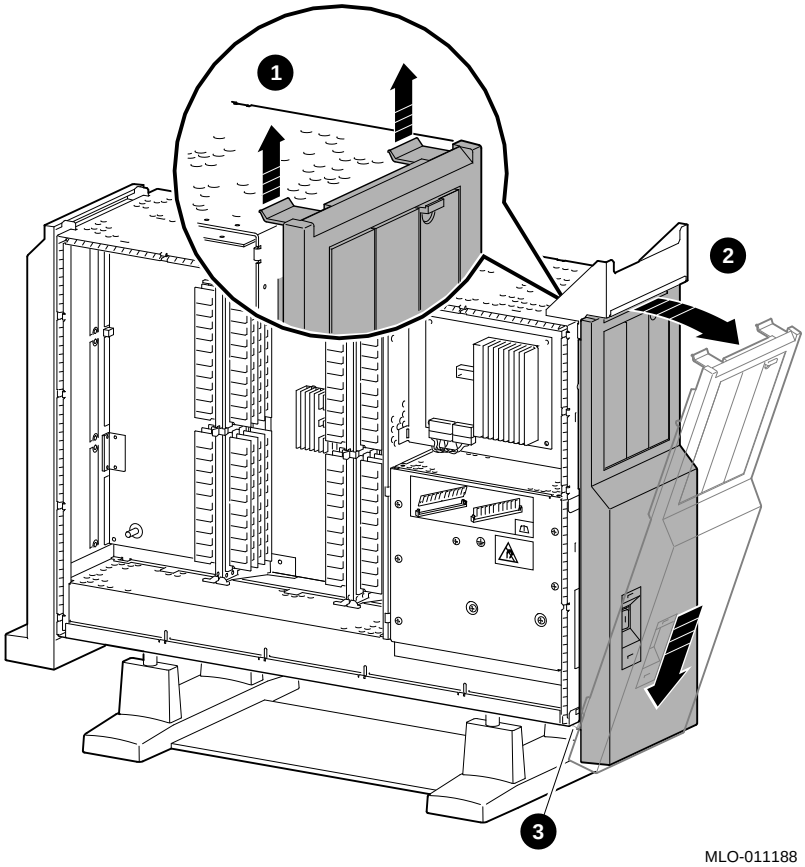
Step 7: Remove Front Panel

Remove the front panel by releasing the catches at the top ❶. Pull the panel away ❷ and unhook the panel bottom.

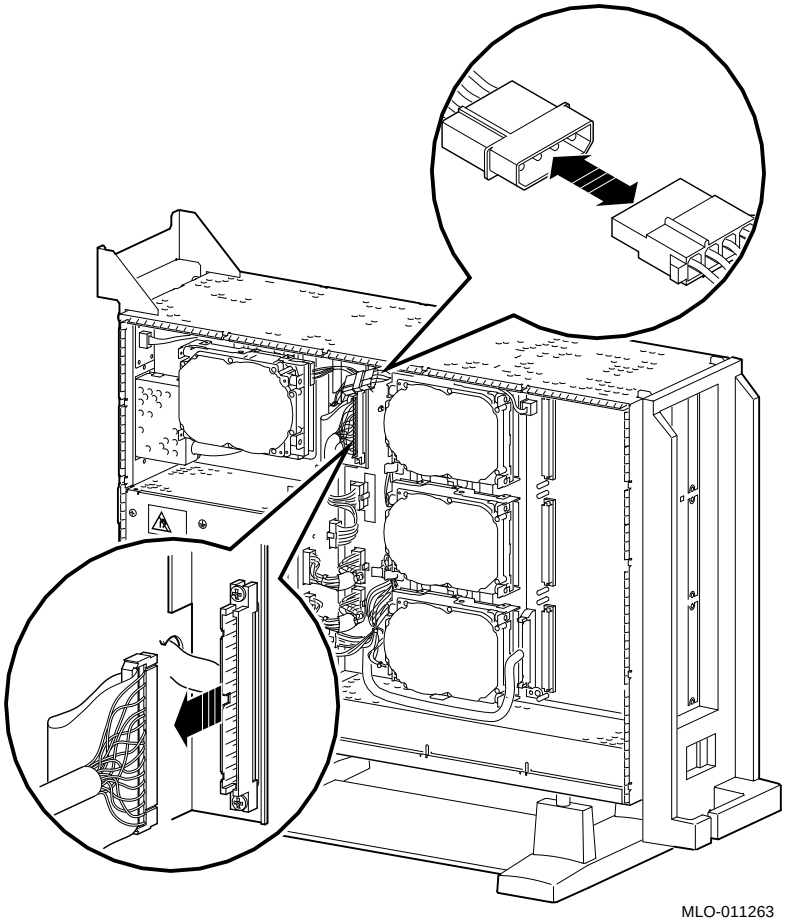
Figure 4–4 Removing the Front Panel



Step 8: Remove Removable Media Drive

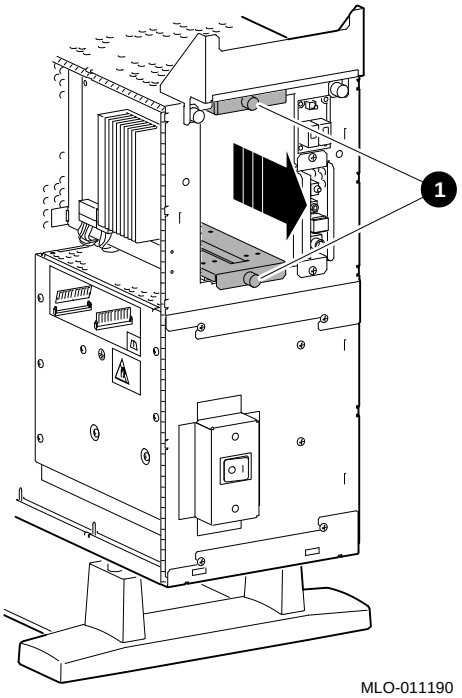
1. Disconnect the SCSI and power cables from the system.

Figure 4–5 Disconnecting the System SCSI and Power Cables



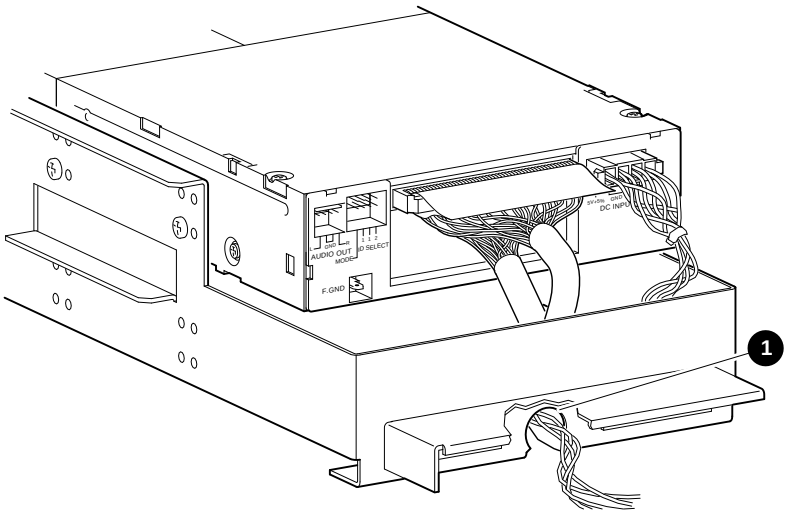
2. Release the two thumbscrews and remove the drive bracket from the system.

Figure 4–6 Removing the Drive Bracket



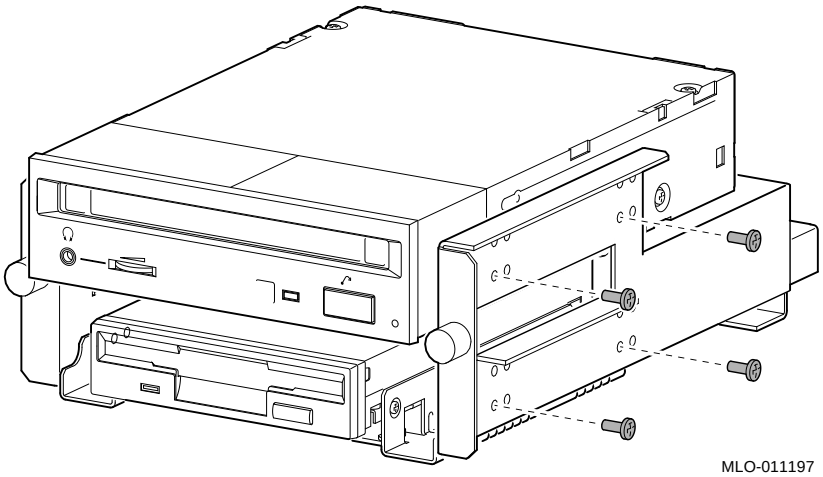
3. Disconnect the SCSI and power cables from the drive and remove them from the bracket.

Figure 4–7 Location of Drive SCSI and Power Cables



4. Remove the two screws on each side of the drive bracket that secure the drive.

Figure 4–8 Removing the Drive Bracket

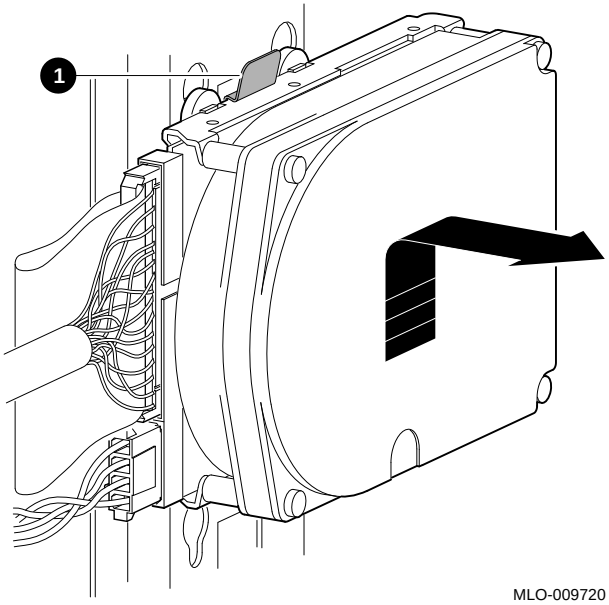


5. Lift the drive out of the bracket.

Step 9: Remove Fixed Disk Drive

1. To remove a fixed disk drive, press the release latch ❶ at the top of the drive, and slide the drive up and away from the system unit.

Figure 4–9 Removing a Fixed Disk Drive



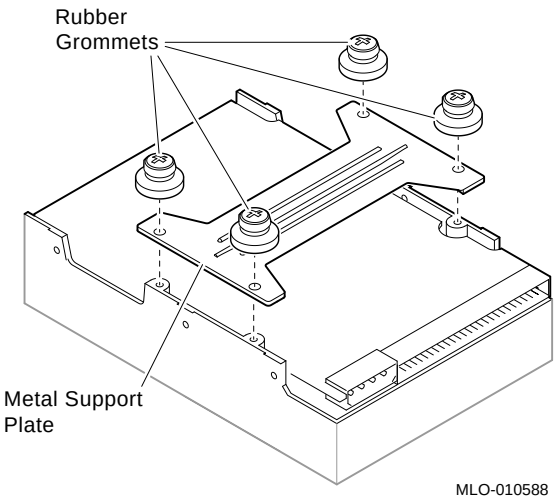
2. Remove the power and SCSI cables from the drive.

Step 10: Remove Mounting Brackets

Remove the mounting bracket and rubber grommets from the fixed disk drive.

Set the drive aside on an antistatic mat.

Figure 4–10 Removing a Mounting Bracket



Step 11: Set SCSI IDs on Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

See Appendix A for the SCSI ID drive settings.

Step 12: Complete the Upgrade

1. Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* to install the options you have removed from your system and to complete the upgrade.
2. Contact your Digital service representative to upgrade your hardware service contract.

Step 13: Return Your System to Digital

Return your system as follows:

1. Pack the system unit securely in packing material.
2. Attach the return-address label that came in the upgrade accessory kit.

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Upgrading a DECsystem 5000 Model 25/50

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your DECsystem:

1. Enter the command to shut down the software and put the system in console mode: `shutdown -h now`

2. Enter `cnfg 3` at the console prompt (>>>). A screen similar to the following appears:

```
>>> cnfg 3
3:      KN02   DEC   Vn.n    TCF0              (12 MB)
-----------------------------------------------------
        DEV    PID       VID    REV     SCSI ID
-----------------------------------------------------
        rz2    RZ24  (C) DEC    0700   DIR
        rz5    RX26  (C) DEC    0700   SEQ
```

This sample display shows an RZ24 drive set to SCSI ID 2 and an RX26 drive set to SCSI ID 5.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the back of the system unit.

Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

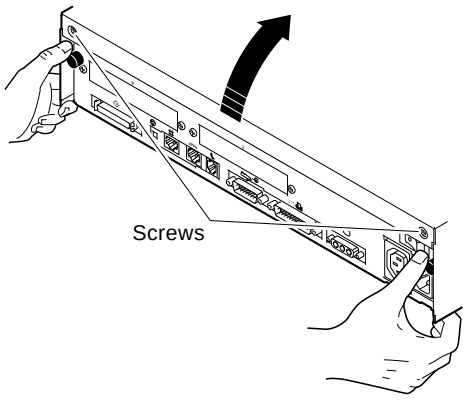
Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit.

Disconnect the power cord from the wall outlet and then from the system unit.

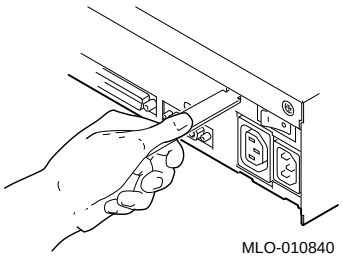
Step 4: Remove Cover

1. Remove the two Phillips screws on the right and left top corners of the system unit cover.
2. Place the system unit so that the back of the unit extends over the edge of a table or desk.
3. Place your thumbs on top of the two black rubber caps on the back of the system unit, and place your fingers under the cover's bottom edge. Press with your thumbs, and, at the same time, pull up with your fingers to lift the cover.



MLO-010720

Hint: If you have difficulty opening the enclosure, you can use a tool to pry up the cover as shown here.

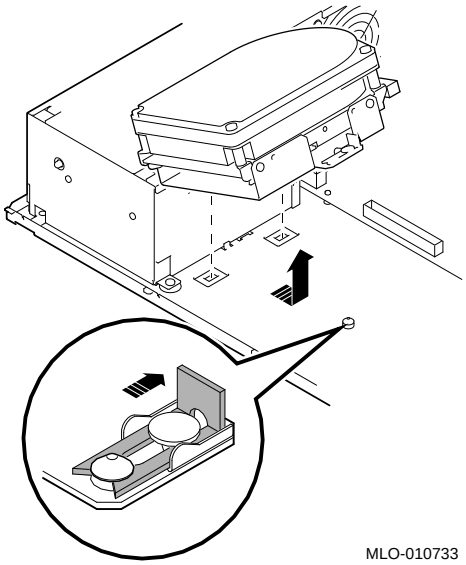


MLO-010840

4. Pivot the cover on the tabs that run along the system unit's front edge.
5. Push the system unit cover forward and away until it releases from the tabs.
6. Place the cover aside.

Step 5: Remove Fixed Disk Drives

1. Disconnect the drive SCSI and power cables from the system module.
2. Press down on the disk drive and unlock the sliding latch from the locking post.
3. Lift the drive off the locking post and out of the chassis cutouts.



MLO-010733

4. Disconnect the power and SCSI cables from the drive.
5. Remove the drive mounting bracket by removing the four screws that secure the mounting bracket to the drive.
6. Set the drives aside on an antistatic mat.
7. Put all the disconnected cables back into the system unit.

Step 6: Set the SCSI IDs on the Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

SCSI ID settings for drives can be found in Appendix A.

Step 7: Complete the Upgrade

1. Instructions for installing options that you have removed from your DECsystem and completing the upgrade can be found in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide.*
2. Update the customer service contract to the Digital AlphaSystem 1000 Series system.

Step 8: Return Your DECsystem to Digital

To return your DECsystem and any options that are not upgradeable to Digital:

1. Pack the DECsystem and options securely in packing material.
2. Attach the return-address label that was in your upgrade kit, and ship the package to Digital.

6

Upgrading a DECsystem 5000 Model 133/150

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your system:

1. Enter the command to shut down the software and put the system in console mode: `shutdown -h now`

2. Enter `cnfg 3` at the console prompt (>>>). A screen similar to the following appears:

```
>>> cnfg 3

3: KNO2   DEC   Vn.n    TCF0  (8 MB)
                            (enet:  08-00-2b-30-14-df)
                                                (SCSI = 7)

-----------------------------------------------------
        DEV    PID       VID    REV     SCSI ID
-----------------------------------------------------
 rz2    RZ24  (C) DEC DEC 0700   DIR
 rz5    Rrd42 (C) DEC DEC 0700   CD-ROM
```

This sample display shows an RZ24 drive set to SCSI ID 2 and an RRD42 drive set to SCSI ID 5.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the back of the system unit.

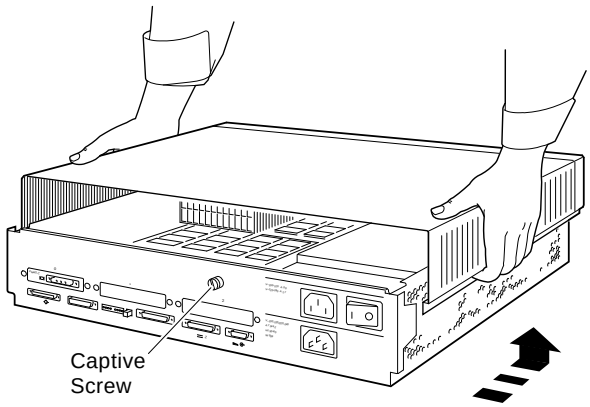
Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit. Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Remove System Cover

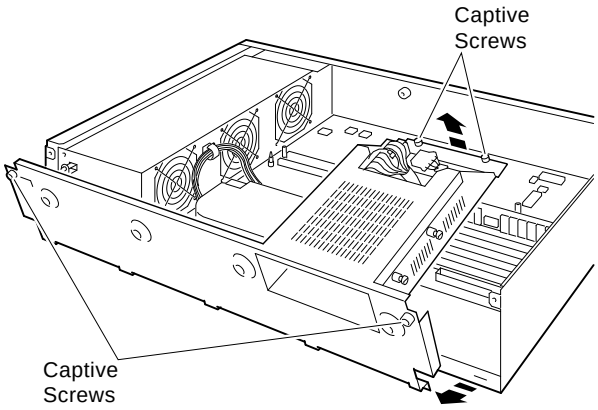
1. Loosen the captive screw on the back of the system unit. This captive screw can be loosened but not removed.
2. Grasp each side of the cover with your hands, and pull the cover straight toward the front about 5.5 cm (2 inches). Pull the cover up and set it aside.



MLO-010006

Step 5: Remove Front Drive Panel

1. Loosen the two captive screws that hold the front drive panel in place.
2. Loosen the two captive screws on the back of the drive bracket.
3. If there is a drive inside the bracket, disconnect the SCSI and power cables from the drive.



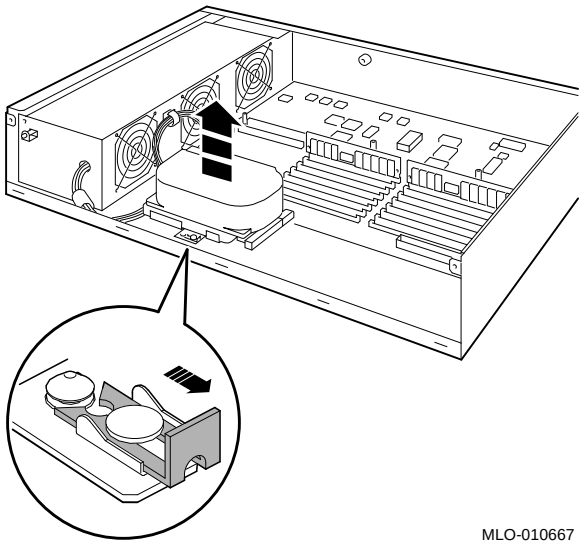
4. Pull up carefully from the back of the drive bracket. As you raise the end of the bracket, you can pull the disconnected ends of the cables through the cutout in the bracket.
5. Release the cables from the cable clamps on the inside of the front panel.
6. Set the front panel aside. Handle it carefully if it contains a drive.

Step 6: Remove Removable Media Drives

1. Loosen the captive screws on either side of the drive bracket.
2. Slide the drive out of the bracket and through the opening in the front panel.
3. Set the drive aside on an antistatic mat.

Step 7: Remove Fixed Disk Drives

1. Press down on the disk drive and unlock the sliding latch.
2. Lift the drive off the mounting post and out of the chassis cutouts.



MLO-010667

3. Disconnect the power and SCSI cables from the drive. Pull on the SCSI cable connector flap to remove the connector.
4. Remove the drive mounting bracket by removing the four screws that secure the mounting bracket to the drive.
5. Set the drive aside on an antistatic mat.
6. Put all the disconnected ends of the cables back into the system unit.

Step 8: Set the SCSI IDs on the Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

SCSI ID settings for drives can be found in Appendix A.

Step 9: Complete the Upgrade

1. Instructions for installing options that you have removed from your DECsystem and completing the upgrade can be found in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide*.
2. Update the customer service contract to the Digital AlphaServer 1000 Series system.

Step 10: Return Your DECsystem to Digital

To return your DECsystem and any options that are not upgradeable to Digital:

1. Pack the DECsystem and options securely in packing material.
2. Attach the return-address label that was in your upgrade kit, and ship the package to Digital.

7

Upgrading a DEC 2000 Model 300 AXP

Topics Covered in this Chapter

- Upgrading your system
- Removing drives
- Removing modules
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaSystem 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your DEC 2000 Model 300 AXP system:

1. Enter the command to shut down the software and put the system in console mode following the instructions in your software documentation.

2. Enter SHOW DEVICE at the console prompt (>>>). A screen similar to the following appears:

```
>>>  SHOW DEVICE

BOOTDEV   ADDR   DEVTYPE  RM/FX  DEVNAM     REV  NUMBYTES
-------   ----   -------  ------ ------     ---  --------
ESA0      08-00-2B-2E-2E-C3
DVA0      PC Floppy DISK
SCSI Devices..
DKA0      A/0/0  DISK     FX     RZ25       007   426.25MB
MKA200    A/0/0  TAPE     RM     TZK10      03B8  ....
DKA200    A/4/0  RODISK   RM     RRD42      4.5D  ....
HOST      A/5/0  PROC            AHA1742A   G

>>>
```

This sample display shows an RZ25 drive set to SCSI ID 0, a TZK10 drive set to SCSI ID 2, and an RRD42 drive set to SCSI ID 4.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the front of the system unit.

Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

Step 3: Disconnect Cables

To disconnect the cables:

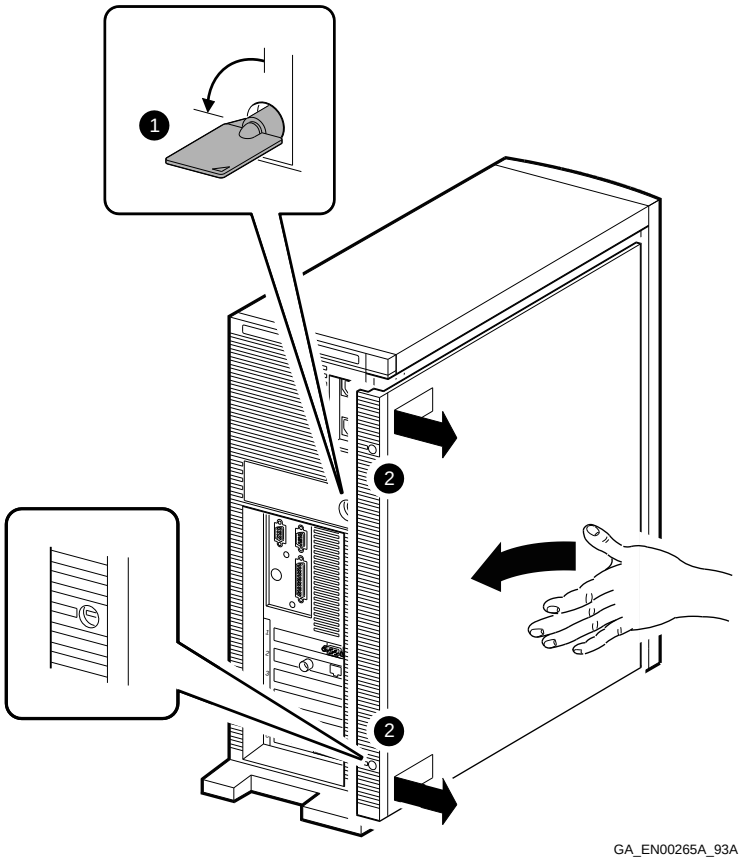
1. Disconnect all the cables from the back of the system unit.
2. Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Remove Outside Cover

To remove the outside cover:

1. Unlock the outside cover using the chassis key ❶
2. Loosen the two captive screws ❷.
3. Slide the outside cover towards the rear of the system unit and remove it.

Figure 7–1 Removing the Outside Cover



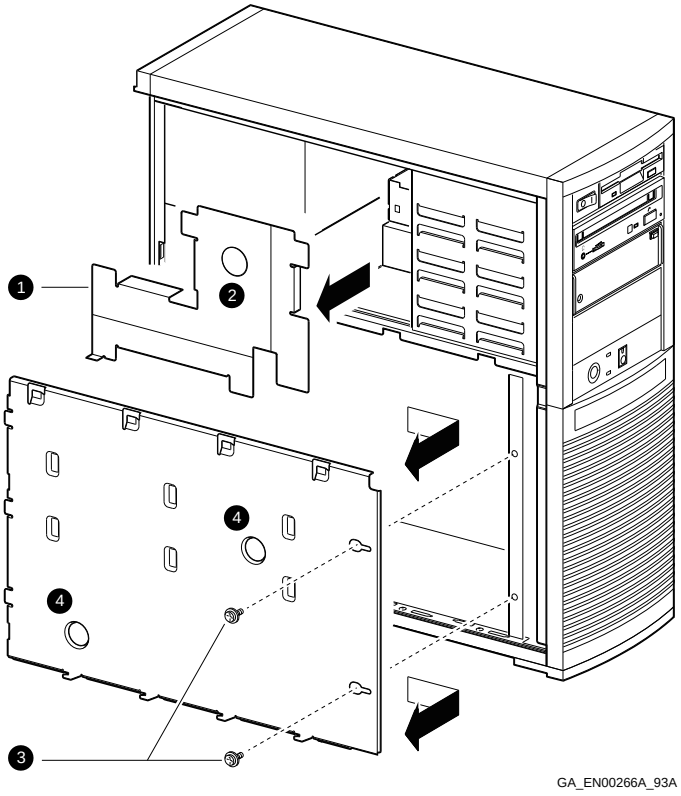
Step 5: Remove Inside Cover

Note that the peripheral bay cover ❶ may not be installed in your system. It is installed only in older systems.

To remove the inside cover:

1. Remove the inside peripheral bay cover by inserting your finger into the circular hole ❷ and lifting the cover out.
2. Remove the two screws ❸ securing the large inside cover to the chassis. Keep the screws in a safe place.
3. Insert your finger into the circular holes ❹ on the larger inside cover, then slide it towards the front of the system unit and remove it.

Figure 7–2 Removing the Inside Covers

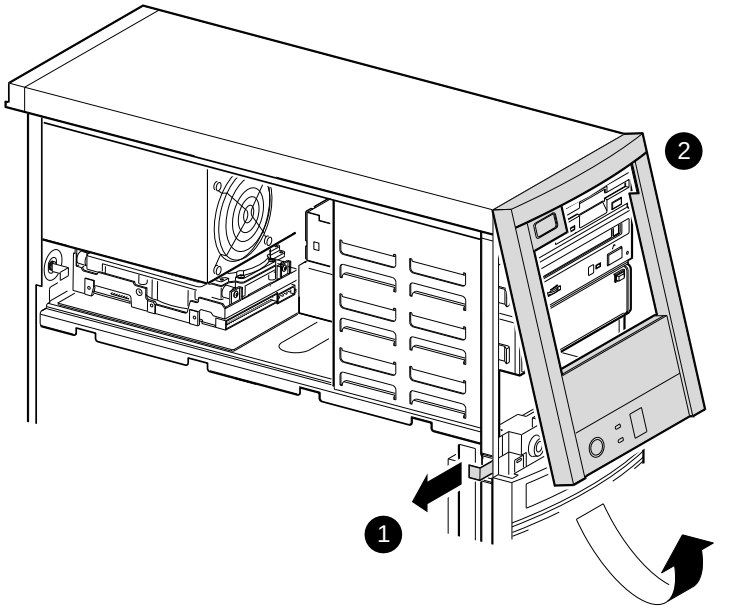


Step 6: Remove Front Peripheral Bay Bezel

To remove the front peripheral bay bezel:

1. Pull the bezel locking-latch ❶ out until it stops.
2. Lift the front peripheral bay bezel from the bottom and then lift it out and off its hinges ❷.

Figure 7–3 Removing the Front Peripheral Bay Bezel

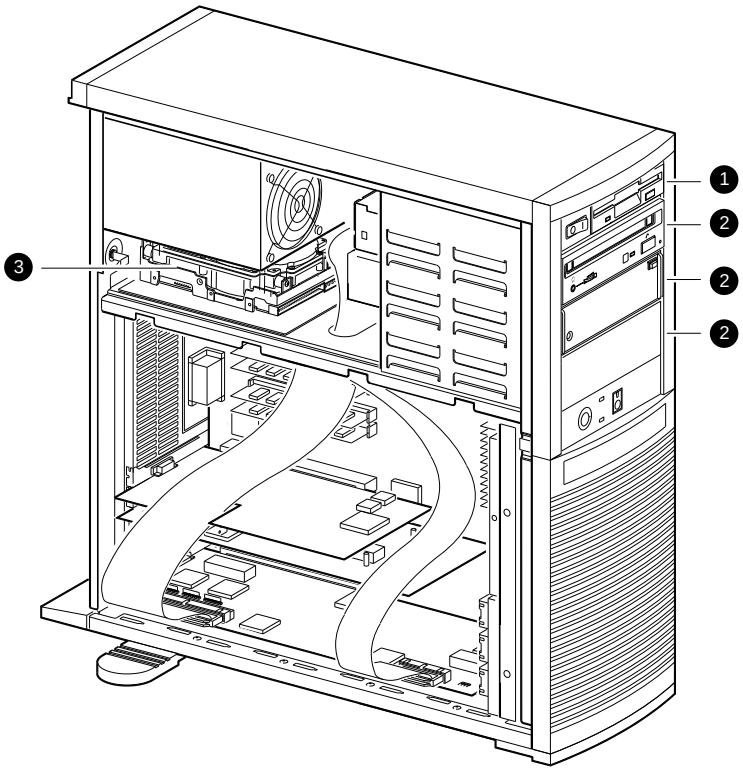


Step 7: Identifying the Drive Bays

The following section describes how to identify the drive bays inside the system unit.

Item	Description
❶	Front diskette drive bay–Accepts 3.5-inch diskette drives
❷	Front 5.25-inch drive bays–Accepts 5.25-inch removable media devices or 3.5-inch disk drive devices
❸	Rear disk drive bay–Accepts 3.5-inch disk drives

Figure 7–4 System Drive Bays



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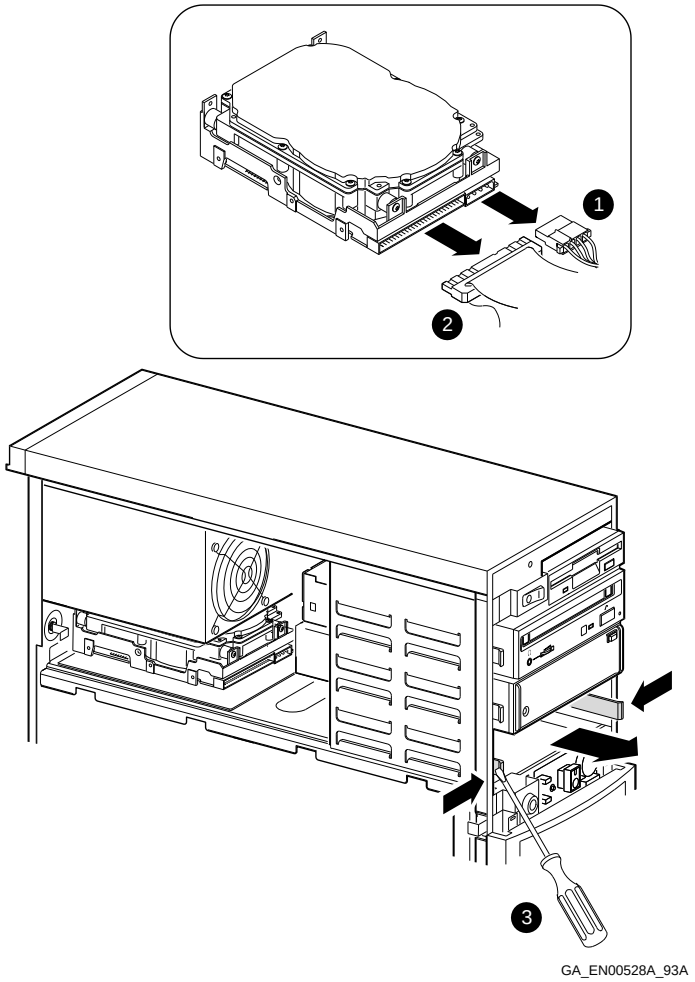
Step 8: Remove SCSI Drive from Front Drive Bay

To remove the SCSI drive from the front drive bay:

1. Disconnect the power cable ❶ and the data cable ❷ from the back of the drive.
2. Use a flat-head screwdriver ❸ to free the locking clips from the slots on the side of the drive bay.
3. Slide the drive forward and remove it from the drive bay.
4. Unscrew the extension brackets (3.5-inch drives only), slide rails, and grounding clips from the drive.

Figure 7–5 Removing a SCSI Drive from a Front Drive Bay

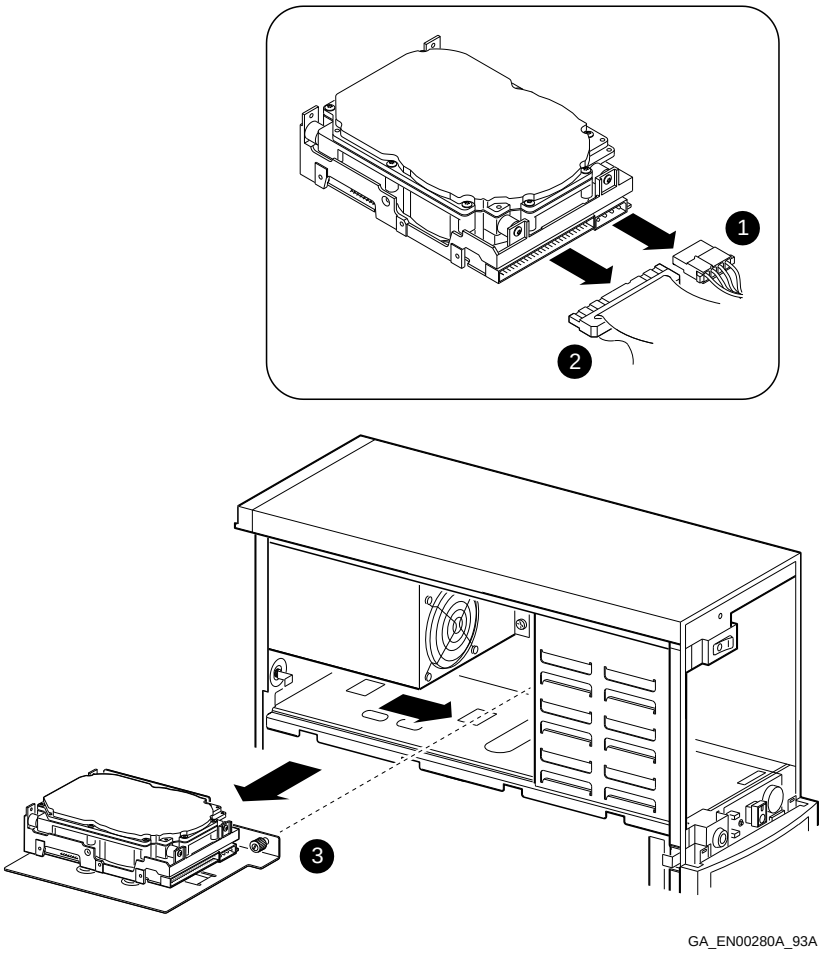


Step 9: Remove Disk Drive from Rear Drive Bay

To remove a disk drive from the rear drive bay:

1. Disconnect the power cable ❶ and the data cable ❷ from the back of the drive.
2. Use a flat-head screwdriver to unscrew the captive screw ❸ securing the drive mounting bracket, if present, to the chassis.
3. Slide the drive forward to free the mounting bracket clips, if present, from their slots, then lift it and remove it from the drive bay.
4. Remove the disk drive from the mounting bracket or the chassis, by unscrewing the screws.

Figure 7–6 Removing a 3.5-Inch Drive from the Rear Drive Bay

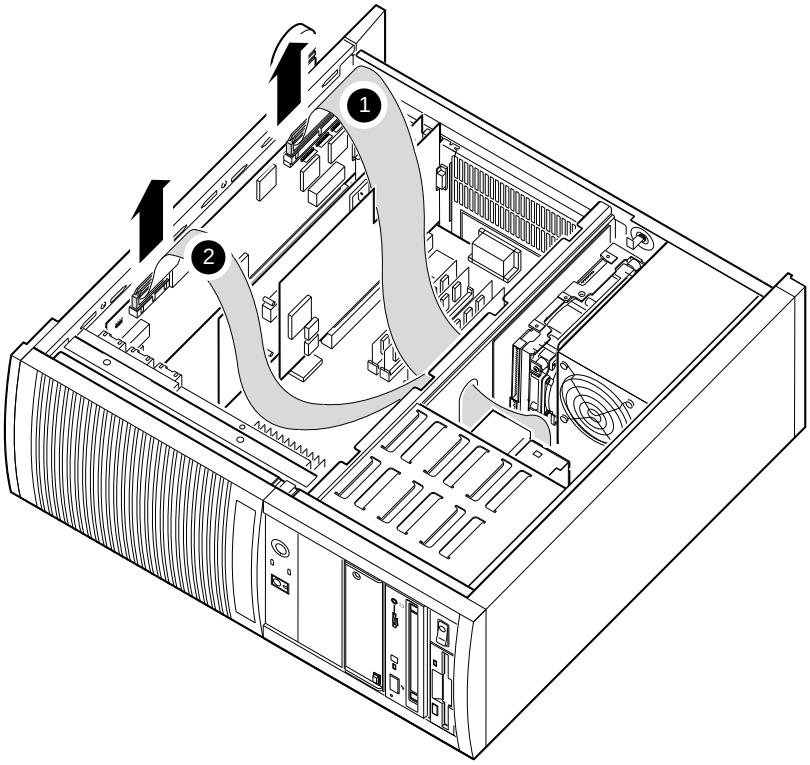


Step 10: Disconnect SCSI Option Board Ribbon Cables

To remove the SCSI option board ribbon cables:

1. Disconnect the larger ribbon cable ❶ and place it aside.
2. Disconnect the smaller ribbon cable ❷ and place it aside.

Figure 7–7 Disconnecting the SCSI Option Board Ribbon Cables



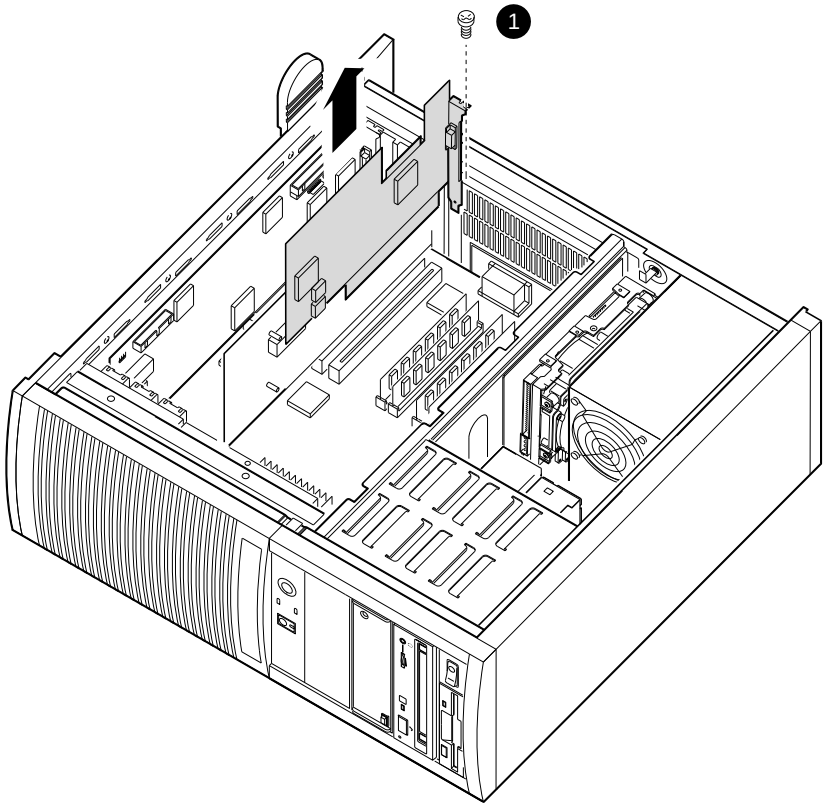
GA_EN00267A_93A

Step 11: Remove Option Board

To remove an option board:

1. Remove the screw ❶ securing the option board to the chassis.
2. Carefully disconnect the option board from the connectors on the system module and remove it from the system.

Figure 7–8 Removing an Option Board



GA_EN00268A_93A

Step 12: Set the SCSI IDs on the Drives

If your Digital AlphaSystem 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

SCSI ID settings can be found in Appendix A.

Step 13: Complete the Upgrade

To complete the upgrade:

1. Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* manual to install the options you have removed from your system and to complete the upgrade.
2. Update the customer service contract to the Digital AlphaSystem 1000 Series system.

Step 14: Return Your System to Digital

To return your system and any options that are not upgradeable to Digital:

1. Pack the system and options securely in packing material.
2. Attach the return-address label that was in your upgrade kit, and ship the package to Digital.

8

Upgrading a MicroVAX 3100 Model 30

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To determine the SCSI ID settings on your drives:

1. Shut down your software following the instructions in your software documentation.
2. Enter the `SHOW CONFIG` command.

A screen similar to the following appears:

```
>>> show config

DEVNBR  DEVNAM     INFO
-------------------------------------
1       NVR        OK
3        DZ        OK
4     CACHE        OK
5       MEM        OK
                   16MB = SY=8MB, S0/1=8MB, S2/3=0MB, S4/5= 0MB
6       FPU        OK
7        IT        OK
8       SYS        OK
9        NI        OK
10     SCSI        OK
                   3-RZ24    6-INITR
```

This display shows an RZ24 drive set to SCSI ID 3.

Write down your the names of system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the back of the system unit.

Caution: After you turn off the system, wait 15 seconds before unplugging the power cord.

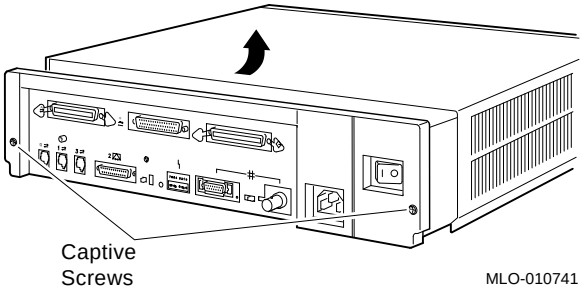
Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit.

Disconnect the power cord from the wall outlet and then from the system unit.

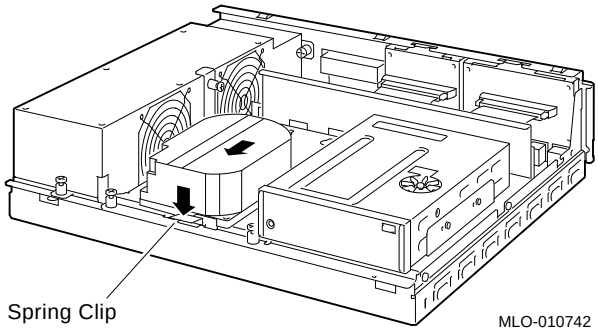
Step 4: Remove System Cover

1. Loosen the two captive screws on the back of the system unit. These screws can be loosened but not removed.
2. Slide the cover forward and lift it up from the system unit. Set the cover aside.



Step 5: Remove Fixed Disk Drives

1. Press and hold the spring clip that locks the disk drive in position.
2. Refer to the figure, and push the disk drive toward the spring clip until the rubber grommets on the bottom of the disk drive release from the cutouts in the drive mounting shelf.



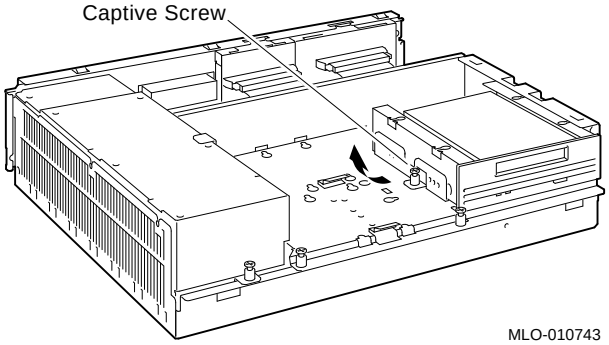
3. Lift the disk drive up from the drive mounting shelf and release the spring clip.
4. Disconnect the SCSI and power cables from the back of the drive.

5. Remove all drive mounting brackets by removing the screws that secure the mounting bracket to the drive.
6. Set the drive aside on an antistatic mat.

Step 6: Remove Removable-Media Drive

Follow these steps to remove a removable-media drive from the lower drive shelf:

1. Loosen the captive screw that secures the drive mounting bracket to the drive shelf.



2. Lift the left side of the drive until the tabs on the right side clear the cutouts in the lower drive shelf.
3. Disconnect the SCSI and power cables from the back of the drive.
4. Remove all drive mounting brackets by removing the screws that secure the mounting bracket to the drive.
5. Set the drive aside on an antistatic mat.

Step 7: Set the SCSI IDs on the Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

Settings for drives can be found in Appendix A.

Step 8: Complete the Upgrade

1. Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* to install options you have removed from your current system and to complete the upgrade.
2. Update the customer service contract to the Digital AlphaServer 1000 Series system.

Step 9: Return Your MicroVAX System to Digital

Return your MicroVAX system and any devices that are not upgradeable to Digital.

1. Pack the MicroVAX system and devices securely in packing material.
2. Attach the return-address label that was in your upgrade kit.

9

Upgrading a MicroVAX 3100 Model 40/80/90/90A

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your system:

1. Shut down your software following the instructions in your software documentation.
2. Enter `SHOW CONFIG` at the console prompt (>>>). A screen similar to the following appears:

```
>>> SHOW CONFIG
DEVNBR  DEVNAM     INFO
-------------------------------------
1       NVR        OK
3        DZ        OK
4     CACHE        OK
5       MEM        OK
                   16MB = SY=8MB, S0/1=8MB, SE/3=0MB, S4/5= 0MB
6       FPU        OK
7        IT        OK
8       SYS        OK
9        NI        OK
10     SCSI        OK
                   3-RZ24    6-INITR
```

This display shows an RZ24 drive set to SCSI ID 3.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the system unit.

Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

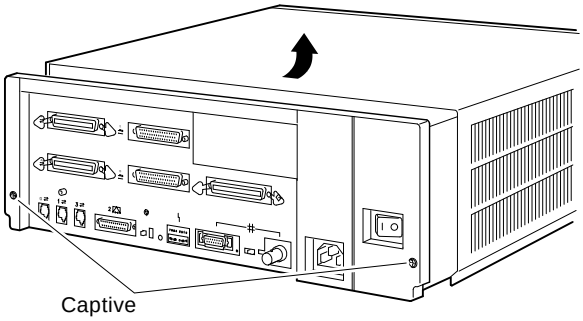
Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit.

Disconnect the power cord from the wall outlet and then from the system unit.

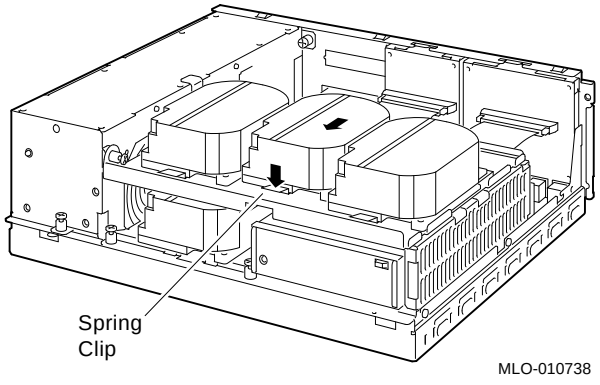
Step 4: Remove System Cover

1. Loosen the two captive screws on the back of the system unit. These screws can be loosened but not removed.
2. Slide the cover forward and lift it up from the system unit. Set the cover aside.



Step 5: Remove Fixed Disk Drives

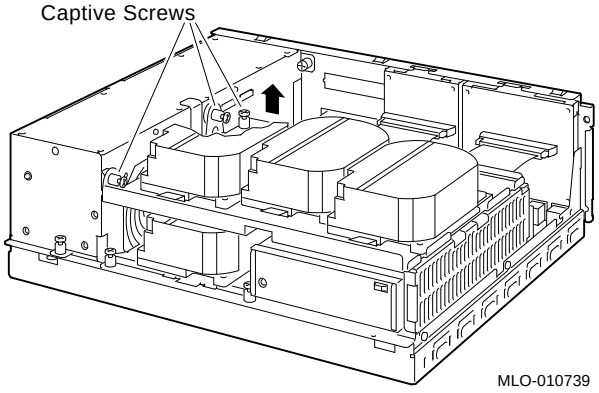
1. Press and hold the spring clip that locks the disk drive in position.
2. Refer to the figure. Push the disk drive toward the spring clip until the rubber grommets on the bottom of the disk drive release from the cutouts in the drive mounting shelf.



3. Lift the disk drive up from the drive mounting shelf and release the spring clip.
4. Disconnect the SCSI and power cables from the back of the drive.
5. Remove all drive mounting brackets by removing the screws that secure the mounting bracket to the drive.
6. Set the drive aside on an antistatic mat.

Step 6: Remove the Upper Drive Shelf

1. Disconnect the power cable from the power supply. Remove the power cable from the enclosure.
2. Refer to the figure. Loosen the three captive screws that hold the drive shelf in place.

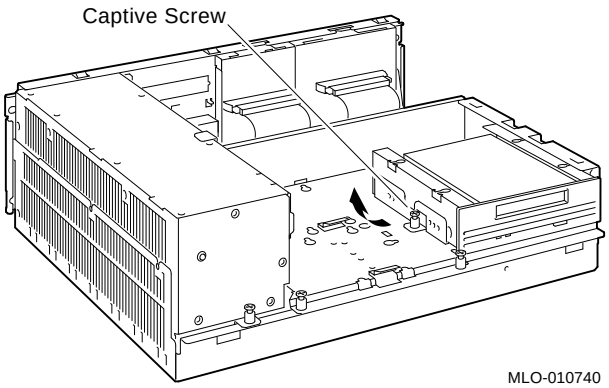


3. Lift the left side of the shelf and pull the shelf to the left until the tabs on the right clear the cutouts in the lower drive shelf.
4. Set the drive shelf aside.

Step 7: Remove Removable-media Drive

Follow these steps to remove a removable-media drive from the lower drive shelf:

1. Loosen the captive screw that secures the drive mounting bracket to the drive shelf.



2. Lift the left side of the drive until the tabs on the right side clear the cutouts in the drive shelf.
3. Disconnect the SCSI and power cables from the back of the drive.
4. Remove all drive mounting brackets by removing the screws that secure the mounting bracket to the drive.
5. Set the drive aside on an antistatic mat.

Step 8: Set the SCSI IDs on the Drives

If your Digital AlphaServer 1000 Series system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting.

Settings for drives can be found in *Appendix A*.

Step 9: Complete the Upgrade

1. Instructions for installing options that you have removed from your current system can be found in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide*.
2. Update the customer service contract to the Digital AlphaServer 1000 Series system.

Step 10: Return Your Current System to Digital

Return your current system and any devices that are not upgradeable to Digital.

1. Pack the MicroVAX system and devices securely in packing material.
2. Attach the return-address label that was in your upgrade kit.

10

Upgrading a DECsystem 5000 Model 200/240/260

Topics Covered in this Chapter

- Upgrading your system
- Completing the upgrade

External Options Only

You can only upgrade expansion boxes from your DECsystem 5000 Model 200/240/260 to the Digital AlphaServer 1000 Series system.

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 Series system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your expansion box:

1. Enter the command to shut down the software and put the system in console mode: `shutdown -h now`

2. Enter `cnfg 3` at the console prompt (>>>). A screen similar to the following appears:

```
>>> cnfg 3
3:      KN02   DEC   Vn.n    TCF0              (12 MB)
-------------------------------------------------
        DEV    PID       VID    REV     SCSI ID
-------------------------------------------------
        rz2    RZ24  (C) DEC    0700   DIR
        rz5    RX26  (C) DEC    0700   SEQ
```

This display shows an RZ24 drive set to SCSI ID 2 and an RX26 drive set to SCSI ID 5.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Turn off the system unit by pressing O on the On/Off switch on the back of the system unit.

Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

Step 3: Disconnect Cables

Disconnect all the cables from the back of the system unit.

Disconnect the power cord from the wall outlet and then from the system unit.

Step 4: Complete the Upgrade

1. Instructions for installing options that you have removed from your current system can be found in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide.*
2. Update the customer service contract to the Digital AlphaServer 1000 Series system.

Step 5: Return Your DECsystem to Digital

Return your DECsystem and any devices that are not upgradeable to Digital.

1. Pack the DECsystem and devices securely in packing material.
2. Attach the return-address label that was in your upgrade kit.

11

Upgrading a DECsystem 5100

Topics Covered in This Chapter

- Upgrading your system
- Removing drives
- Completing the upgrade

Upgrade Procedure

Step 1: If Your System Has Factory-Installed Drives

If your Digital AlphaServer 1000 system has factory-installed drives, you may need to change the SCSI IDs on the drives you are upgrading.

To display the SCSI ID settings of the drives in your DECsystem:

1. Enter the command to shut down the software and put the system in console mode: `shutdown -h now`
2. Enter `conf -s` at the console prompt (>>>). A screen similar to the following appears:

```
>>> conf -s
.
.
scsi peripherals
  unit  type          product        removable/fixed    capacity
    0   disk          RZ56  (C) DEC  fixed              634 MBs
    3   disk          RZ24           fixed              209 MBs
    5   tape          TZ30           removable
    7   host adapter
```

This display shows an RZ56 set to SCSI ID 0, an RZ24 set to SCSI ID 3, and a TZ30 set to SCSI ID 5.

Write down the names of your system drives and SCSI ID settings here. You will need them for future use.

Step 2: Shut Down System

Set the On/Off switch on the back of the system unit to the off (O) position.

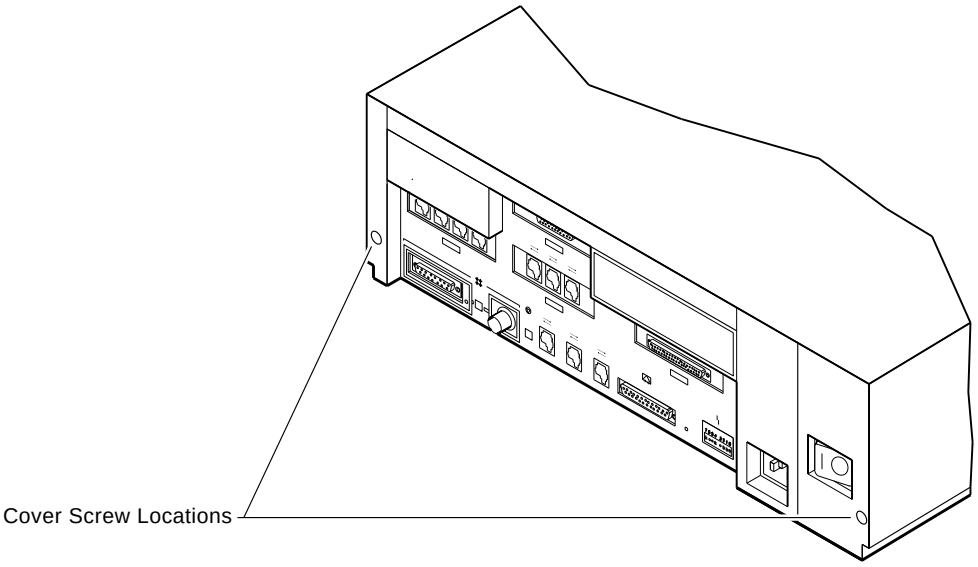
Caution: After you turn off the system, wait 15 seconds before you unplug the power cord.

Step 3: Disconnect the Cables

Disconnect all the cables connected to the system unit.

Step 4: Remove System Cover

1. Loosen the two cover screws on the back of the system unit.
2. Slide the cover forward, and up, off the system unit.



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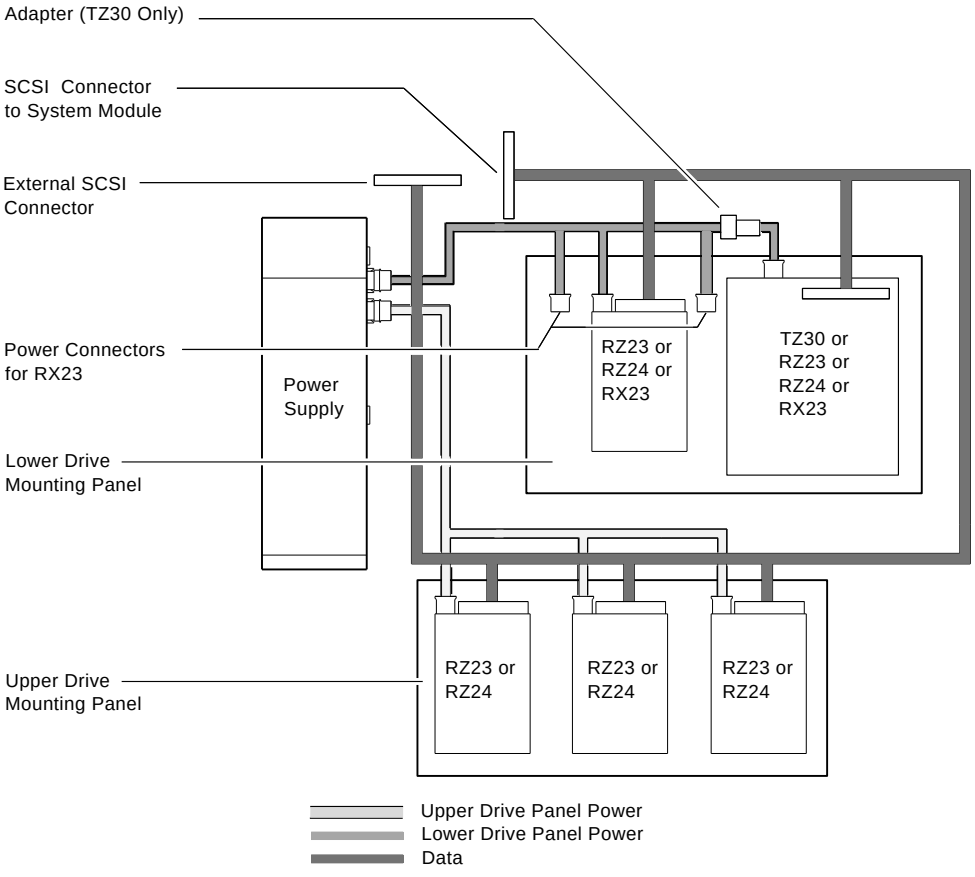
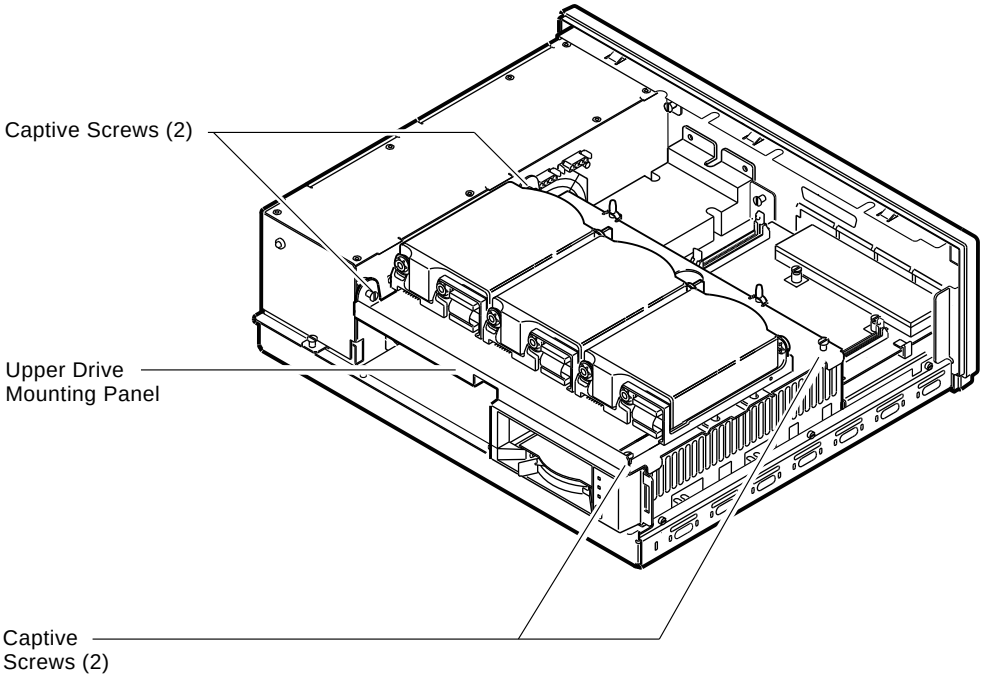
Step 5: Remove Upper Drive Mounting Panel

Depending on your system configuration, the upper drive mounting panel can contain up to three RZxx series hard disk drives.



To remove the upper drive mounting panel:

1. Disconnect the power cable and the SCSI cable from the drives on the upper mounting panel.
2. Loosen the four captive screws located on the upper drive mounting panel.



3. Lift the upper drive mounting panel from the lower drive mounting panel and gently set it aside.

   Go to Step 9, Remove Device, if there are not other devices to upgrade.

Step 6: Remove EMI Shield, If Present

Your system may have an EMI shield located between the upper and lower drive shelves. The shield has several "fingers" touching the upper shelf.

Warning

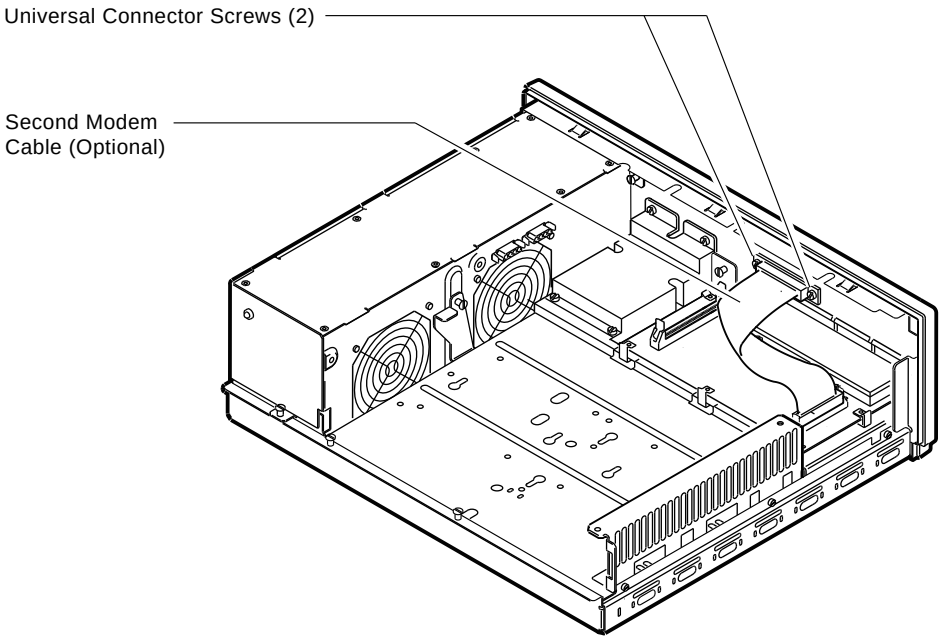
Do not pull the EMI shield directly up out of the system. This may cause injury.

To remove the shield from the lower shelf:

1. From the front of the enclosure, grasp the shield with both hands near the middle and gently pull it forward (toward the devices on the lower shelf, if present).

   Lift the shield toward the front of the enclosure, simultaneously pulling forward to release the two tabs under the shelf.

2. Remove the SCSI and power cables from the slots in the EMI shield. Set the shield aside.



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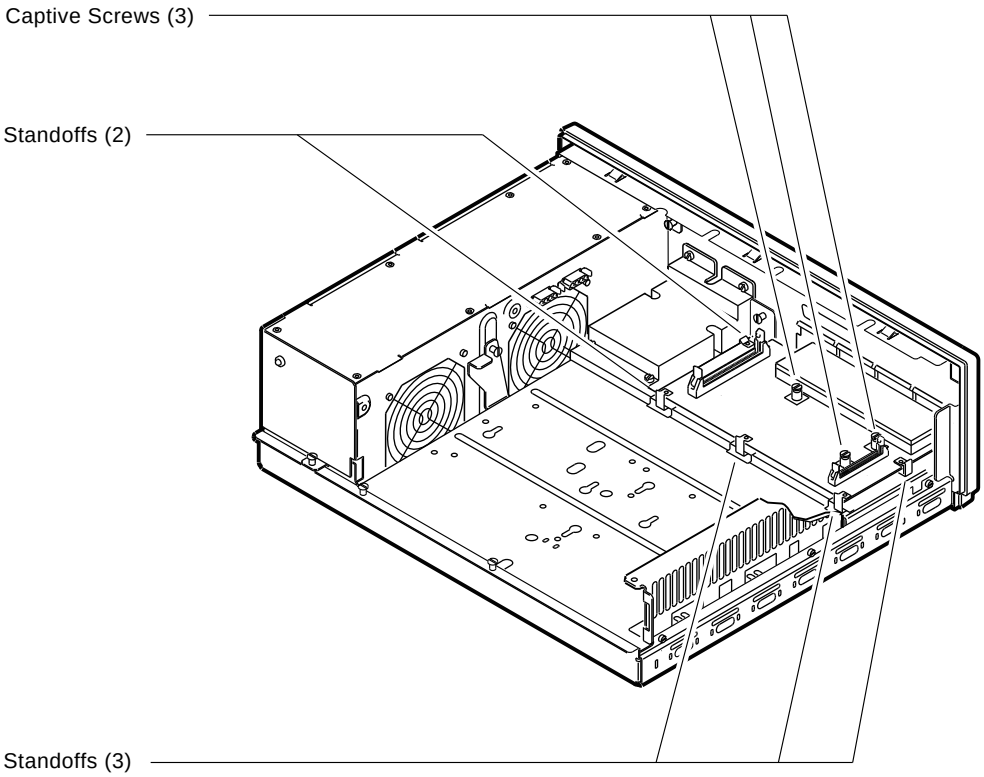
Step 7: Remove Communications Option, If Present

Your system may have a communications option installed on the lower drive shelf.

To remove this option:

1. Disconnect the cable from the second modem port connector on the option.
2. Remove the two universal connector screws, and then remove the second modem cable from the system unit.
3. Disconnect the signal cable from the system module.
4. Unscrew the three captive screws on the communications module.

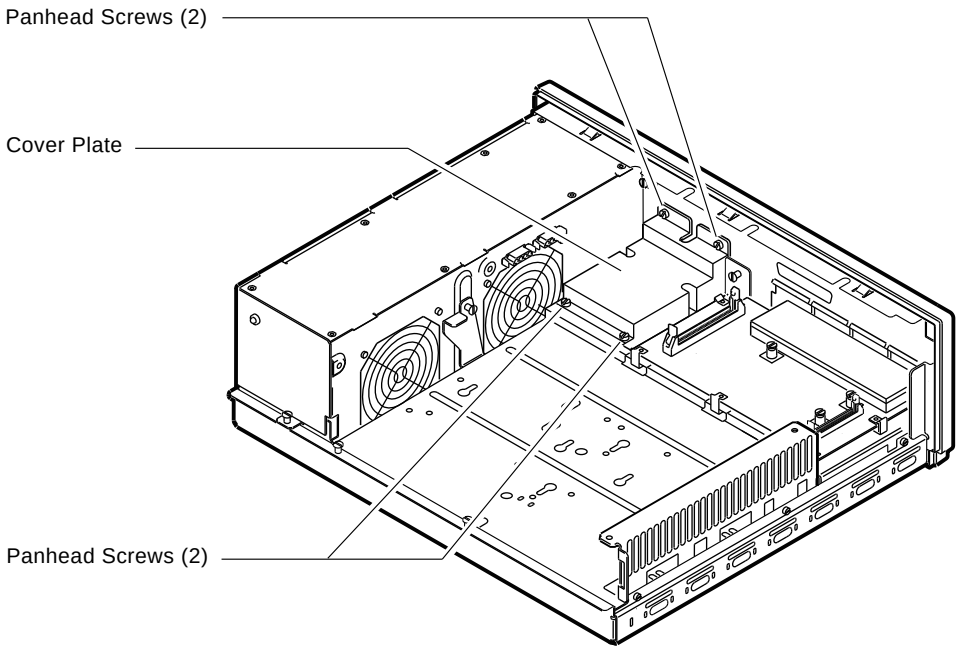
5. Release the communications module from the five standoffs and remove it from the system unit.



Step 8: Remove Lower Drive Mounting Panel

The lower drive mounting panel can contain RZxx disk drives, RX23 diskette drives, a TZ30 tape drive, an RRD42 CD–ROM, or a TZK10 tape drive. To remove the lower drive mounting panel:

1. Disconnect the SCSI cable and the power cable connected to the drives.
2. Remove the two screws securing the cover plate to the lower drive mounting panel. Remove the two screws securing the cover plate to the back panel of the system unit. Remove the cover plate.



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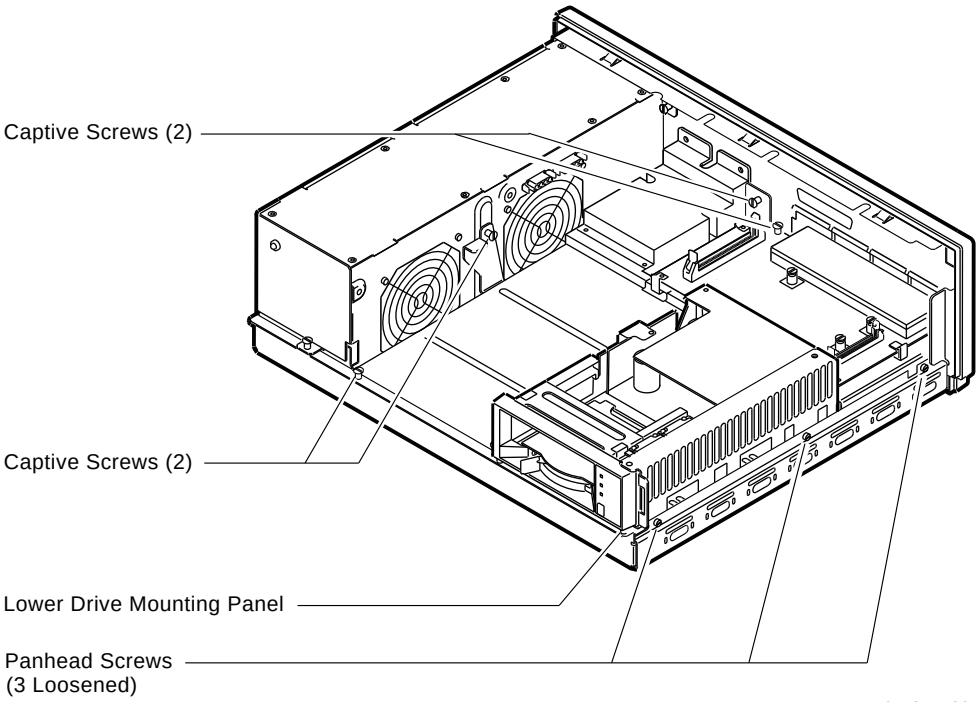
3. Loosen the four captive screws on the lower drive mounting panel. Two are located near the back panel. Two are located near the power supply. Loosen the three screws on the right side of the panel. Slide the panel forward and away from the system unit.



Step 9: Remove Device

To remove the device:

1. Turn the drive mounting panel over, and while supporting the device with one hand, loosen the two screws in the keyhold slots holding the device to the mounting panel. Remove the other two screws.
2. Slide the device to one side and remove it from the mounting panel.
3. Remove the drive mounting bracket by removing the screws that secure the drive to the mounting bracket.

Step 10: Set SCSI IDs on Drives

If your Digital AlphaServer 1000 system has a factory-installed disk drive, it is set to SCSI ID 0. Check the SCSI ID settings you noted earlier. If one of the drives you are upgrading is also set to SCSI ID 0, change that setting. Settings for drives can be found in *Appendix A*.

Step 11: Complete the Upgrade

Follow the instructions in the *Digital AlphaServer 1000 Series Owner's Guide* and the *StorageWorks Solutions Storage Device Installation Guide* to install the options you have removed from your current system and to complete the upgrade.

Update the customer service contract to the Digital AlphaServer 1000 Series system.

Step 13: Return Your DECsystem to Digital

Return your DECsystem and any devices that are not upgradeable to Digital.

1. Pack the DECsystem and devices securely in packing material.
2. Attach the return address label that was in your upgrade kit.

12

Upgrading Other Systems

No Options Can Be Upgraded

There are no options that you can remove from your DECsystem 3100/5400/5500, MicroVAX I/II/2000/3300/3400, VAX 82xx/83xx or other systems and install in your Digital AlphaServer 1000 Series system.

Upgrade Procedure

To upgrade your current system, follow the two steps listed below.

Step 1: Return Your Current System to Digital

Return your current system and devices to Digital.

1. Pack the system and devices securely in packing material.
2. Attach the return-address label that was in your upgrade kit.

Step 2: Update Service Contract

Contact your Digital service representative to upgrade your hardware service contract.

A

SCSI ID Settings for Drives

Setting a Unique SCSI Address

Each internal drive has a SCSI address that must be unique. If more than one drive is set to the same SCSI address, the system cannot communicate with the drives.

When your drive arrives from the factory, all SCSI jumpers may be attached so that they are not lost during shipment. If this is the case, the address is set to 7, and must be changed.

TURBOchannel modules and memory modules do not have SCSI addresses.

This appendix contains an illustration for each of the drives supported on the Digital AlphaServer 1000 Series system.

Selecting SCSI ADDRESS

There are six possible SCSI ID settings (SCSI ID setting 7 is reserved for the controller). The following table shows the settings that Digital recommends.

Drive Type	SCSI ID Setting
Fixed disk drive	0,1,2,3
Compact disk drive	4
Tape or diskette drive	5
Tape or diskette drive	6

Changing the Setting

Follow these steps to change a SCSI ID setting:

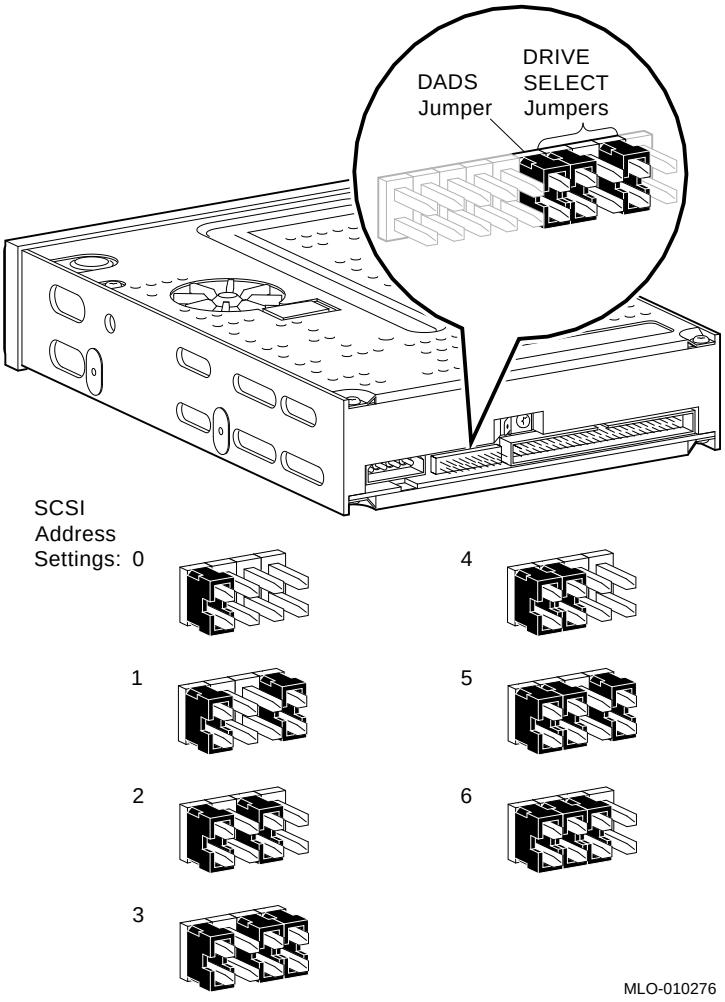
Jumpers:

Jumpers are removable electrical connectors. Carefully remove or replace jumpers using tweezers or another small tool. Save any SCSI jumpers you remove; you may need them later.

Switches:

Carefully set the switches using a small pointed instrument, such as the tip of a ball point pen. Do not use a pencil to set the SCSI switches; graphite particles can damage switches.

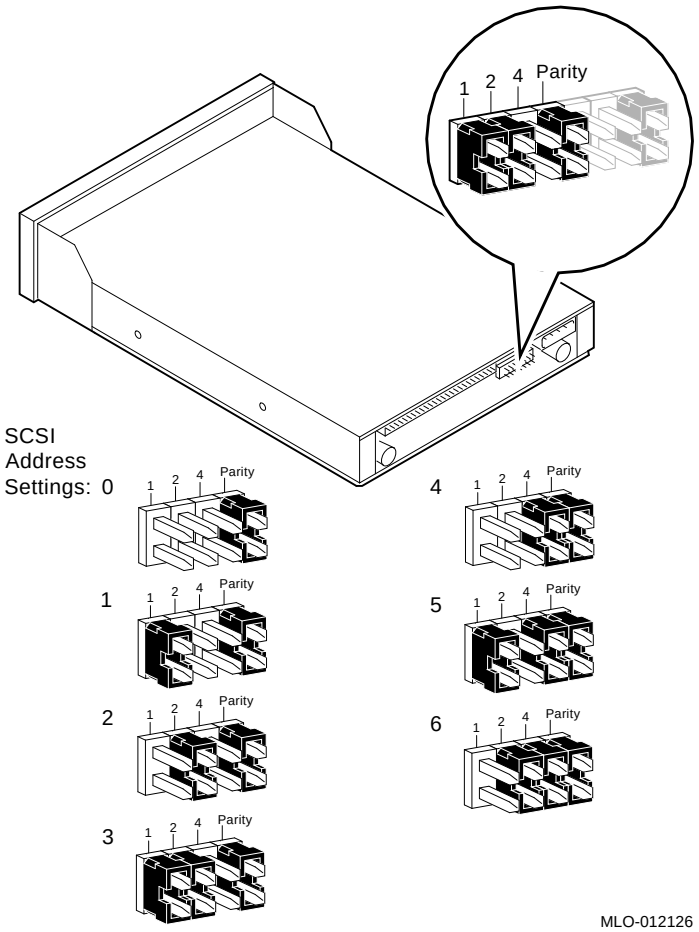
Figure A–1 TZK10/11 Tape Drive SCSI ID Settings



The DADS Jumper

Before using the drive, configure the drive; that is, check the DADS jumper to make sure it is set for the desired operating system. The DADS jumper is the fifth jumper from the right side, and must be in place for both OpenVMS AXP and DEC OSF/1 AXP operating systems.

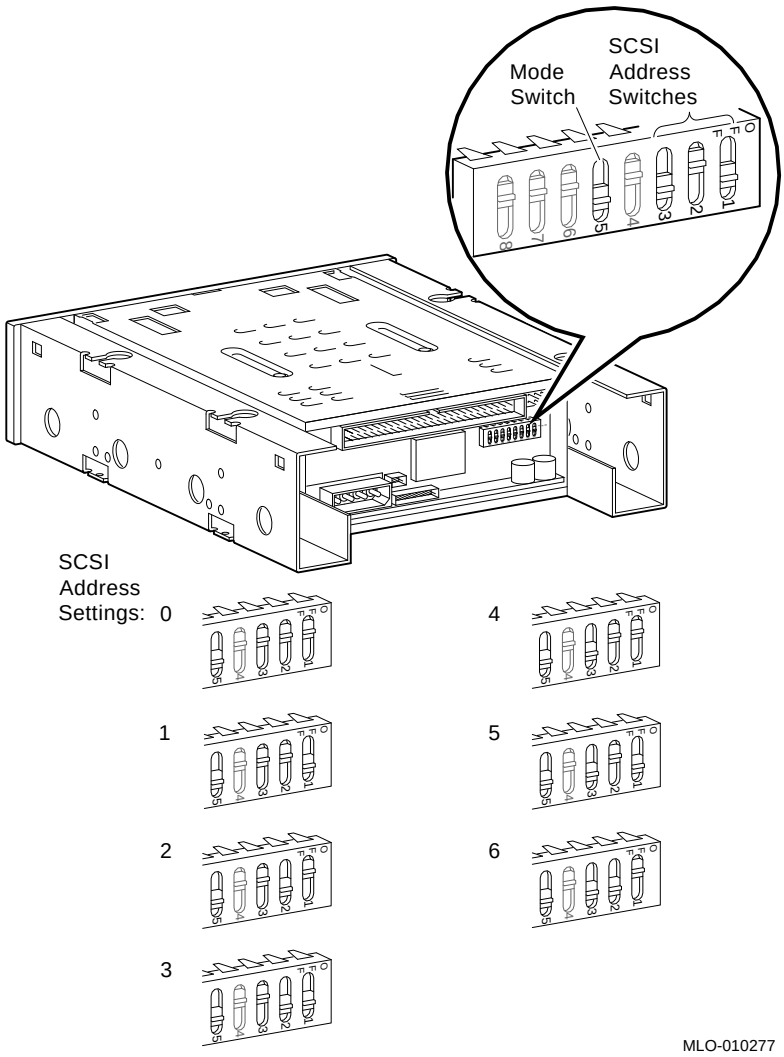
Figure A–2 RRD43/44 Compact Disk Drive SCSI ID Settings



Mode (Parity) Jumper

The mode (parity) jumper allows the drive to work with your operating system. The jumper must be in place for both Open VMS AXP and DEC OSF/1 AXP operating systems.

Figure A–3 TLZ06/07 Tape Drive SCSI ID Settings



Mode Switch

Switch 5 (mode) allows the drive to work with your operating system, and must be down for both OpenVMS AXP and DEC OSF/1 AXP operating systems.

Figure A–4 RZ26L Fixed Disk Drive SCSI Settings

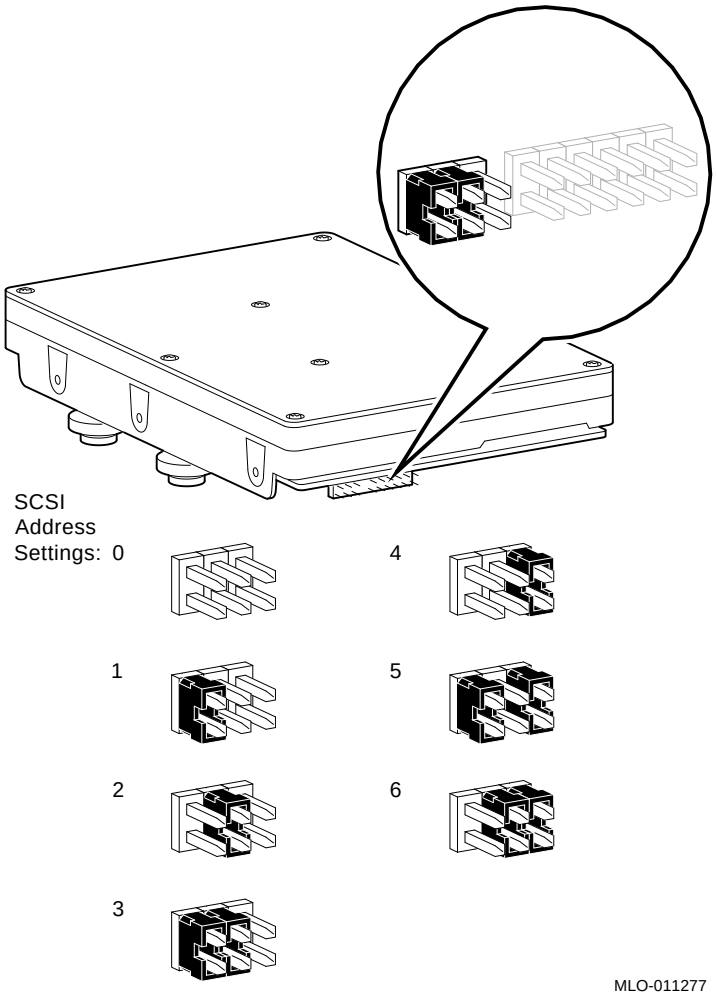


Figure A–5 RZ28 Fixed Disk Drive SCSI Settings