Origin200™ GIGAchannel Upgrade Installation Instructions

Document Number 108-0187-001

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Attention

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VDE 0871/6.78

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Origin200™ GIGAchannel Upgrade Installation Instructions
Document Number 108-0187-001

Silicon Graphics, Inc.
Mountain View, California

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About This Guide

Installation of certain hardware components converts a Silicon Graphics Origin200 server to a Silicon Graphics Origin200 Giga server, enabling it to communicate with the GIGAchannel storage expansion unit. This guide explains all procedures required for upgrading the Origin200 server to an Origin200 Giga server.

Note: The procedure for setting up the GIGAchannel expansion unit is covered in the *Origin200, Origin200 GIGAchannel, and Origin Vault Installation Instructions* and the *Origin200 and Origin200 GIGAchannel Maintenance Guide*.

Audience

The instructions in this guide are intended for Silicon Graphics System Support Engineers only.

Structure of This Document

This guide contains the following chapters:

- Chapter 1, “Upgrade Kit Contents,” summarizes the items included in the Origin200 Giga upgrade kit.
- Chapter 2, “Installing the Upgrade Hardware in the Origin200 Server,” describes how to prepare the chassis and install the upgrade hardware.
- Chapter 3, “Cabling the Origin200 Giga Server and Finishing the Installation,” explains all cabling for the upgrade and tells how to power on the units and install upgrade software.

Other Required Documentation

If possible, you should also bring the *Origin200, Origin200 GIGAchannel, and Origin Vault Installation Instructions* (108-0153-003) to the installation site. If this manual is not available, use the *Origin200 and Origin200 GIGAchannel Maintenance Guide* (007-3708-001). The procedure for setting up the GIGAchannel expansion unit is covered in those guides.

Customer manuals included with the Origin200 and Origin200 Giga servers are

- *Origin200 GIGAchannel Owner's Guide* (document number 007-3708-001 or later)
- *Origin200 GIGAchannel Maintenance Guide* (document number 007-3709-001 or later)

Note: The last three digits of the part number indicate the version of the manual. These numbers might not be the latest versions.

Many current installation guides are available in PostScript form from *guest@comrade.engr:/usr/people/guest/docdist*. On the Web, you can access the Technical Publications library:

- inside the firewall: http://techpubs.engr.sgi.com/library/
- outside the firewall: http://techpubs.sgi.com/library/

Conventions

These type conventions and symbols are used in this guide:

Italics IRIX commands and manual titles

`Fixed-width type`
Error messages, prompts, and onscreen text

`Bold fixed-width type`
Literals supplied by the user in examples, code, and syntax statements

“” (Double quotation marks) References in text to document section titles

Chapter 1

Upgrade Kit Contents

This chapter describes the components in the kit for upgrading an Origin200 server into an Origin200 Giga server. Two marketing codes make up the upgrade:

- “HU-CONNECT-XBOX” on page 1-1
- “561-CHAS-XBOX” on page 1-2

Both kits must be present for the upgrade.

1.1 HU-CONNECT-XBOX

HU-CONNECT-XBOX contains upgrade hardware for the Origin200 server. Figure 1-1 shows the hardware in the kit.

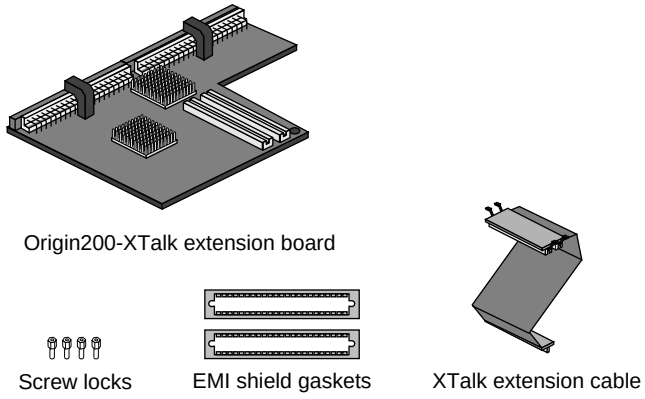

Figure 1-1 Kit Contents (Hardware): Marketing Code HU-CONNECT-XBOX

Table 1-1 summarizes HU-CONNECT-XBOX kit contents.

Table 1-1 HU-CONNECT-XBOX Kit Contents

Description	Quantity	Part Number
XTalk extension cable assembly (PCA IP29 XTALK FLEX CABLE)	1	030-1273-001
EMI shield gasket (EMI SHIELD GASKET 100POS CONNECTOR)	2	040-1807-001
Origin200-Xtalk extension board (PCA XBOX EXTENSION BOARD O200)	1	030-1264-001
Screw lock, 4-40 hex (SCREW LOCK .090 PANEL F SHORT HD)	4	7510101
Installation instructions package: envelope, label, this guide	1	013-2400-001
Warning note for XIO connectors	1	007-3775-001

1.2 561-CHAS-XBOX

561-CHAS-XBOX contains the cables; Figure 1-2 shows the kit contents.

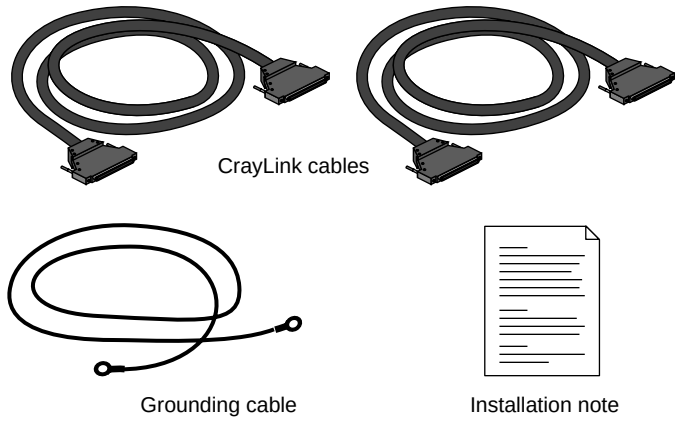

Figure 1-2 Kit Contents: Marketing Code HU-CONNECT-XBOX

Table 1-2 summarizes 561-CHAS-XBOX kit contents.

Table 1-2 561-CHAS-XBOX Kit Contents

Description	Quantity	Part Number
CrayLink cable (CABLE ASSY DIFF PROTECTED 58)	2	018-0575-001
Grounding cable (CABLE ASSY SYSTEM TO SYSTEM GROUND)	1	018-0649-001
Installation note for ground cable (MNL ORIGIN GND CABLE INSTALL NOTE)	1	007-3615-001

Chapter 2

Installing the Upgrade Hardware in the Origin200 Server

This chapter describes how to install components of the Origin200 Giga kits into an Origin200 server to transform it into an Origin200 Giga server. It consists of these sections:

These procedures require the following tools:

- 3/16-inch nut driver
- #2 Phillips screwdriver
- #1 Phillips screwdriver
- grounding (wrist) strap

2.1 Preparing the Origin200 Server

Follow these steps to prepare the Origin200 server for the upgrade:

1. To establish baseline data for when you test the upgrade hardware after installing it, get a PROM output and run *hinv -v* and *hinv -m*; save the output in a file.
2. Working with the customer, make sure no file access is in progress and all users are off the Origin200 system(s) you are upgrading. Shut down the system.
3. Turn off the main power switch at the rear of the Origin200 server in which you are installing the upgrade hardware. In a two-module system, turn off both servers.
4. Disconnect all cables attached to the rear of the system (power, CrayLink Interconnect, Ethernet, and so on).

5. If the system is mounted in an equipment rack, follow these additional steps:
   - Lock the server's front door with they key to prevent the door from being pulled open accidentally while you are installing the server.
   - If desired, remove drives from the system (number the 3.5-inch drives) to make the chassis lighter and easier to carry.
   - Remove the plastic end caps. Remove the screws that secure the mounting ears to the rack.
6. With another person, place the system on its side on a flat work surface that is capable of supporting at least 40 pounds (18 kg), or up to 75 pounds (34 kg) for a fully configured module with a one-piece power supply.

Warning: **Two people are required to lift and move the Origin200 server.**

If the system is in a tower configuration, you may wish to place a thin, soft pad (such as a cloth or piece of cardboard) under the top edge of the system to keep the top cap from becoming marred or scratched.

7. Remove the Origin200 chassis access cover, as shown in Figure 2-1.

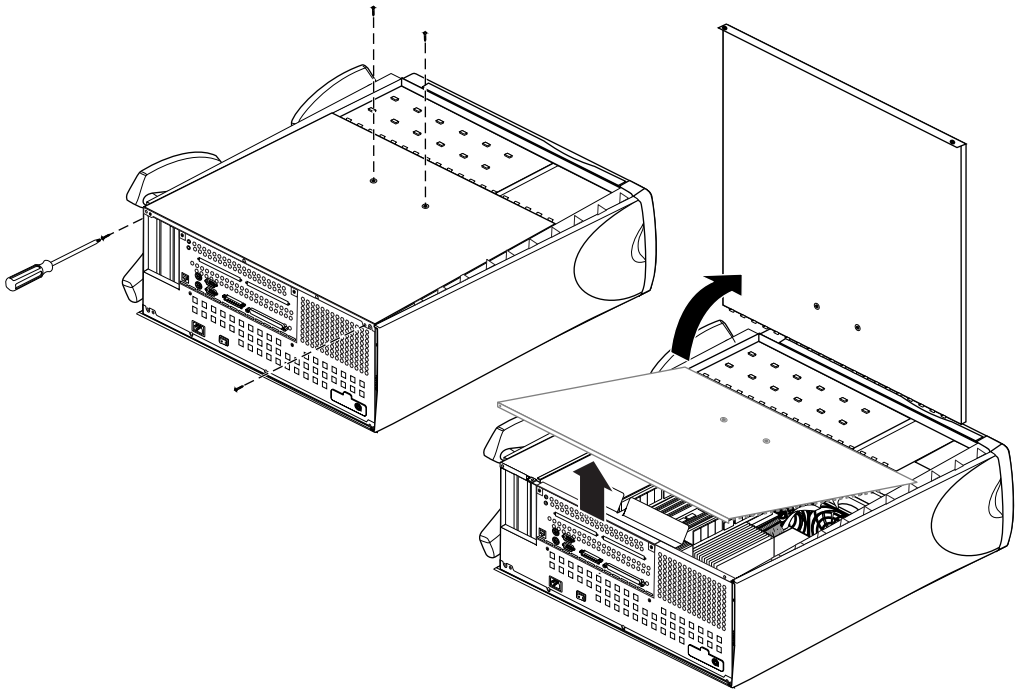

Figure 2-1 Removing the Orgin200 Chassis Access Cover

8. Attach one end of a grounding strap to your wrist and the other to a metal portion of the Origin200 chassis.

Warning: **Whenever you work on internal components, always use a grounding (wrist) strap to prevent the flow of potentially damaging static electricity.**

9. Remove the five screws that secure the blanking plate and lift it out of the system. This sheet metal covers the openings for the XTalk connectors and directs airflow in the chassis.

   - Use a #2 Phillips screwdriver to remove the screw that attaches the plate to a spacing post inside the chassis;
   - Use a #1 Phillips screwdriver to remove the four screws that anchor the plate to the rear of the chassis.

   See Figure 2-2.

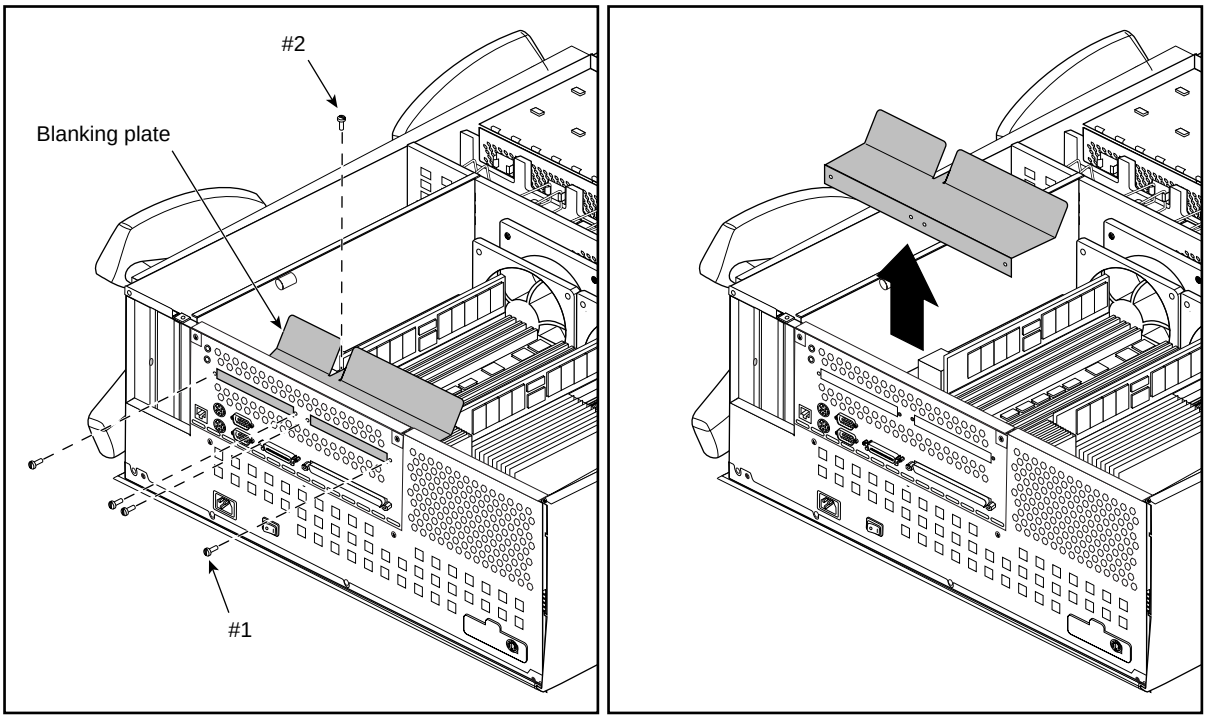

Figure 2-2 Removing the Blanking Plate

When you have removed the blanking plate, reserve the larger screw (#2 Phillips) for installing the upgrade.

Screw the four smaller screws into the plate as a way of keeping them with the plate. Give the plate to the customer to store; if the XIO upgrade hardware must be removed for any reason, the blanking plate must be replaced in the chassis.

10. Pull the XTalk jumper board straight up and out of the system, as shown in Figure 2-3.

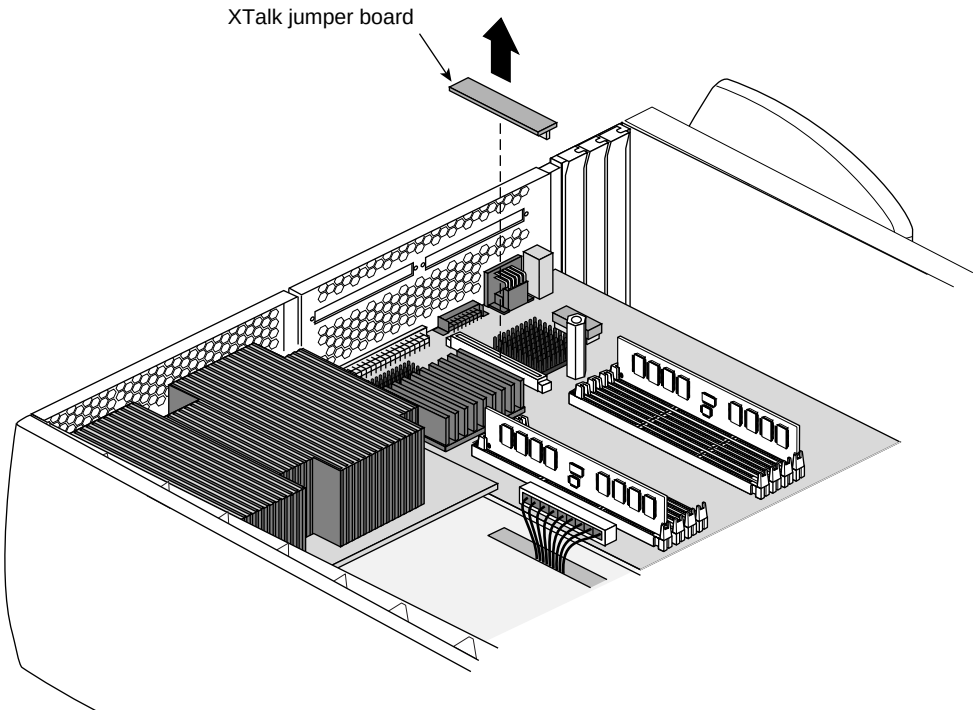

Figure 2-3 Removing the XTalk Jumper Board

Be careful not to bend the pins as you extract the jumper board. Set the board on a nonstatic surface.

Note the microstrip socket that is exposed when you remove the XTalk jumper board.

2.2 Installing the Origin200 Giga Server Upgrade Hardware

Follow these steps to install the Origin200 Giga server upgrade hardware.

1. Place the XTalk extension cable assembly (flex cable) and the Origin200-XTalk extension board on a nearby antistatic surface.
2. Insert the XTalk extension cable assembly straight down onto the XTalk socket as shown in Figure 2-4. Note the orientation of the cable. The connector is keyed.

   Note: Exercise care in handling the XTalk extension cable assembly; the microstrip is delicate.

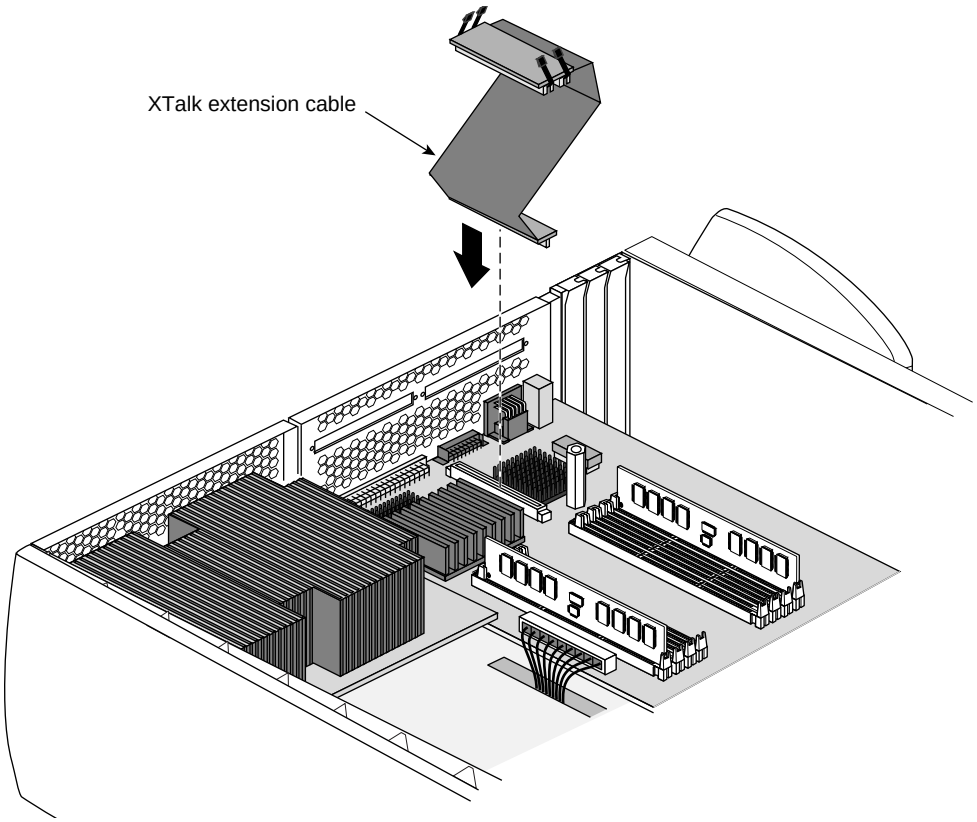

Figure 2-4 Attaching the XTalk Extension Cable Assembly (Flex Cable)

3. Place an EMI gasket over each connector on the interface board, as shown in Figure 2-5.
4. Keeping the EMI gaskets in place and carefully holding the free end of flex cable out and away, insert the Origin200-XTalk extension board's XIO connectors through the slots on the back of the Origin200 chassis; Figure 2-5 points out the slots.

   The EMI gaskets go between the connectors and the Origin200 I/O panel; make sure they are correctly aligned.

   The hole at the upper left corner of the board aligns with the spacing post.

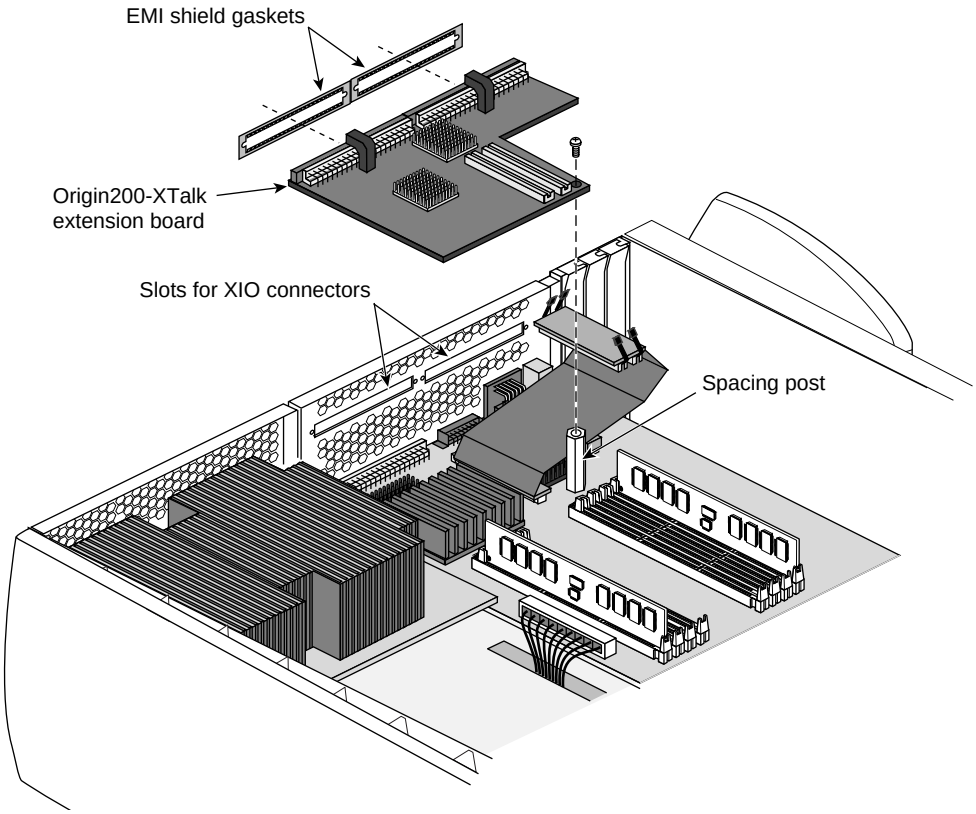

Figure 2-5 Installing the Origin200-XTalk Extension Board

5. Using the #2 Phillips screw you reserved when you removed the blanking plate, secure the board to the spacing post, as shown in Figure 2-5.

6. Secure the connectors to the chassis by using a 3/16 nut driver to screw in the four 3/16 nut screws included in the upgrade kit, as shown in Figure 2-6.

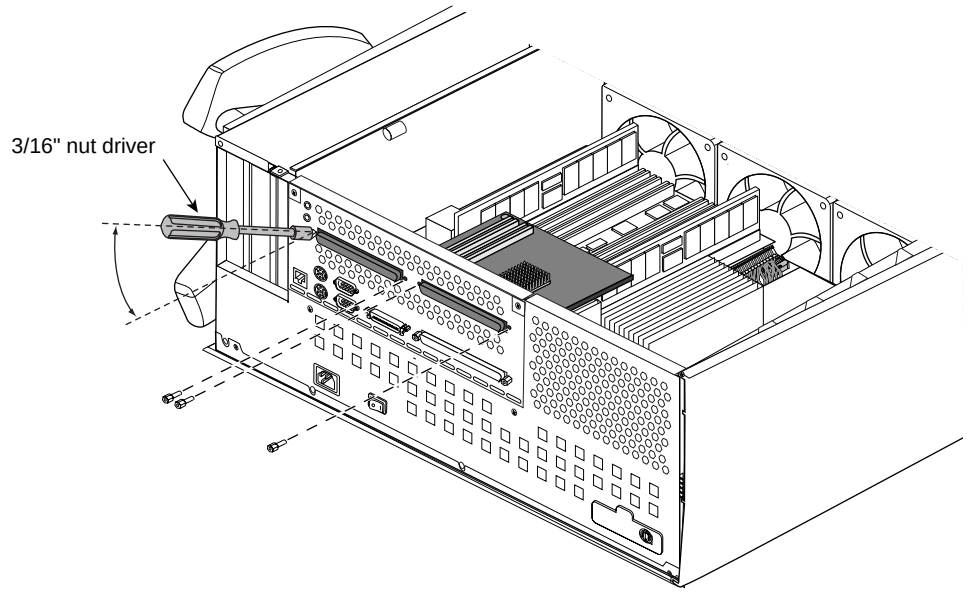

Figure 2-6 Securing the XIO Connectors

The space for these screws is tight, so tilt the nut screwdriver, as shown.

7. Align the connectors on the XTalk extension cable assembly with the sockets on the extension board, as shown in Figure 2-7.

Note: Exercise care in handling the XTalk extension cable assembly; the microstrip and ejector ears are delicate. Do not push the ejector ears.

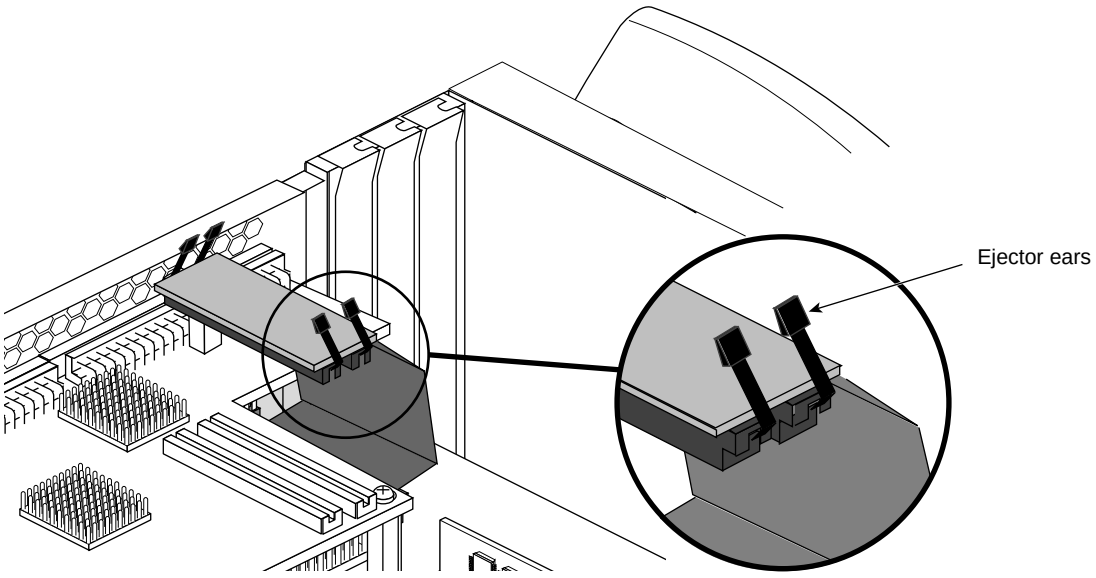

Figure 2-7 Aligning the XTalk Extension Cable Assembly

8. Push the XTalk extension cable assembly connectors onto the sockets on the Origin200-XTalk extension board as shown in Figure 2-8.

   When the connectors are seated, the ejector ears move outward as shown in Figure 2-8.

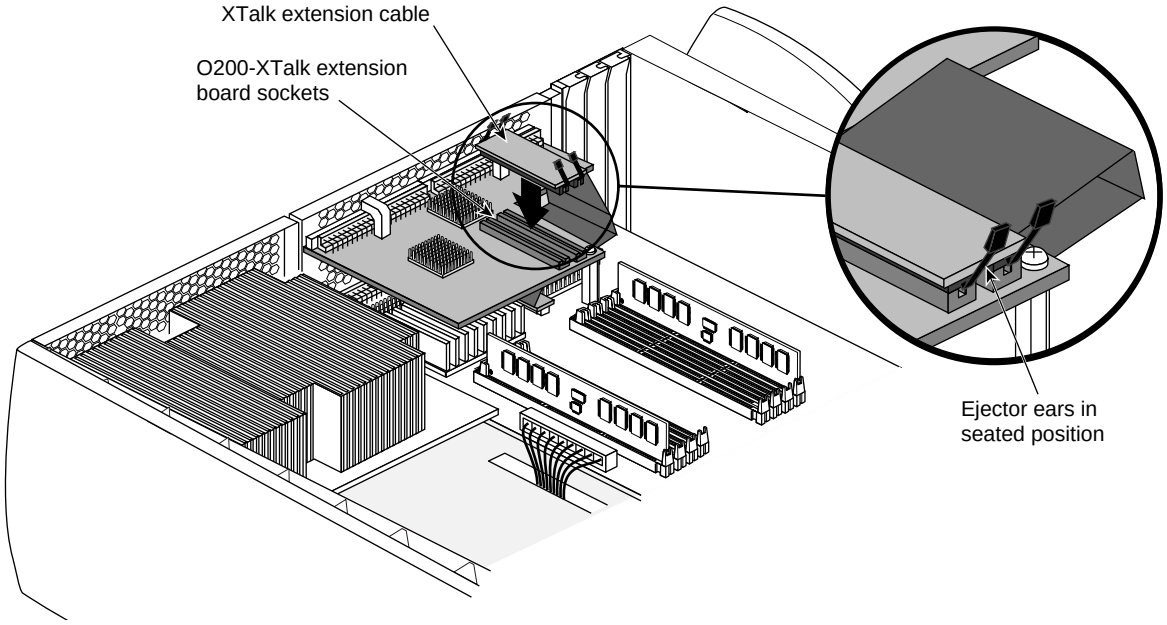

Figure 2-8 Attaching the XTalk Extension Cable Assembly to the Origin200-XTalk Extension Board

If the XTalk extension cable assembly must be disconnected from the XTalk extension board, the ejector ears are gently pinched inward (the position shown in Figure 2-7) to disengage the connectors.

2.3 Testing the Hardware (Loopback Test)

To test the newly installed hardware, follow the steps below. These steps test only the hardware you just installed in the Origin200 Giga chassis, not the GIGAchannel expansion unit.

1. Attach one end of one XIO cable included with the upgrade kit to the XIO A port (top or rightmost connector); attach the other end to the XIO B port (bottom or leftmost connector), as shown in Figure 2-9. The ports have silkscreen labels.

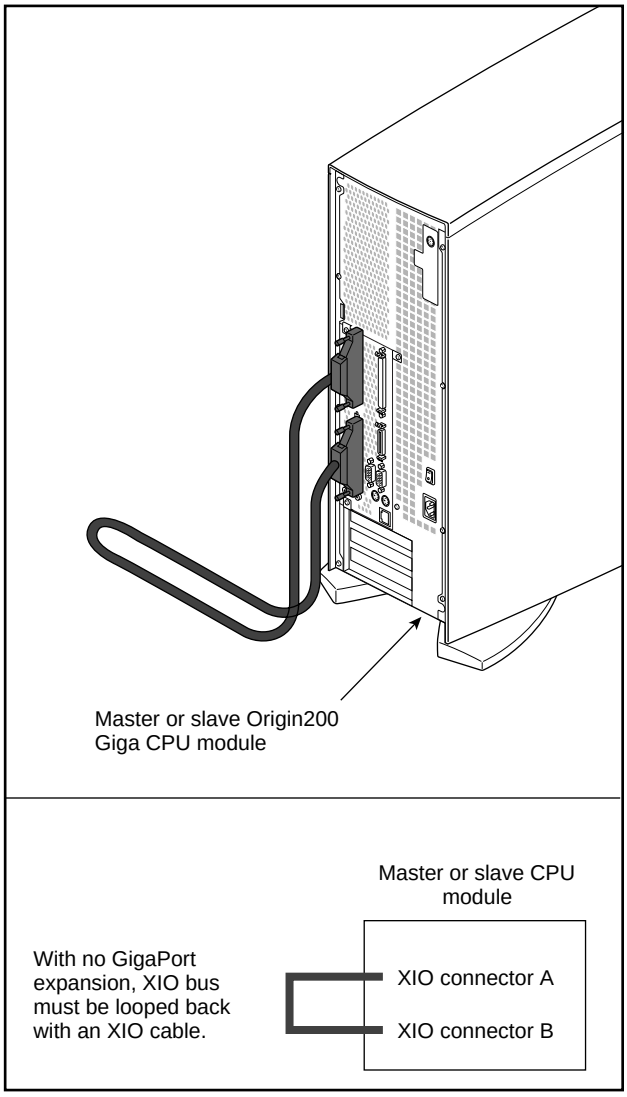

Figure 2-9 Loopback Cabling

2. Turn on the Origin200 Giga chassis.

3. Bring up the system in System Maintenance mode. Get a PROM output and compare it with the output you saved before installing the hardware; they should be identical. The example below is for a two-module Origin200 Giga system.

```
# hinv -m
location: /hw/module/1/slot/MotherBoard
         PIMM_2MB_2P     Board: barcode DPD041  part
030-1278-002       rev A
location: /hw/module/1/slot/MotherBoard
         2G_MPLN         Board: barcode CMC331  part
030-1264-001       rev B
           IP29    Board: barcode dga717  part 030-1244-001      rev D

location: /hw/module/2/slot/MotherBoard
         PIMM_2MB_2P     Board: barcode DPD040  part
030-1278-002       rev A
location: /hw/module/2/slot/MotherBoard
         IP29    Board: barcode dga741  part 030-1244-001       rev D
```

This example is with verbose mode enabled.

```
# hinv -v
IP27 Node Board, Module 1, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 0)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 0)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 1)
      R10000FPC  Rev 0
    Memory on board, 128 MBytes (Standard)
      Bank 0, 128 MBytes <-- (Physical Bank 0)
IP27 Node Board, Module 2, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 1)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 2)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 3)
      R10000FPC  Rev 0
    Memory on board, 64 MBytes (Standard)
      Bank 0, 64 MBytes <-- (Physical Bank 0)
BASEIO IO Board, Module 1, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
        peripheral SCSI DISK, ID 1, SGI IBM  DCHS04Y
    adapter PCI-SCSI Rev 5, (pci id 1)
        peripheral SCSI TAPE, ID 1, ARCHIVE Python 01931-XXX
        peripheral SCSI CDROM, ID 6, TOSHIBA CD-ROM XM-5401TA
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
BASEIO IO Board, Module 2, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
    adapter PCI-SCSI Rev 5, (pci id 1)
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
    adapter ID (Vendor 1112 Device 2200), (pci id 6)
```

The following example is at the IRIX level.

```
# hinv -v
FPU: MIPS R10010 Floating Point Chip Revision: 0.0
CPU: MIPS R10000 Processor Chip Revision: 3.1
4 195 MHZ IP27 Processors
CPU 0 at Module 1/Slot 1/Slice A: 195 Mhz MIPS R10000 Processor Chip
(enabled)
  Processor revision: 3.1. Secondary cache size: 2 MB
CPU 1 at Module 1/Slot 1/Slice B: 195 Mhz MIPS R10000 Processor Chip
(enabled)
  Processor revision: 3.1. Secondary cache size: 2 MB
CPU 2 at Module 2/Slot 2/Slice A: 195 Mhz MIPS R10000 Processor Chip
(enabled)
  Processor revision: 3.1. Secondary cache size: 2 MB
CPU 3 at Module 2/Slot 2/Slice B: 195 Mhz MIPS R10000 Processor Chip
(enabled)
  Processor revision: 3.1. Secondary cache size: 2 MB
Main memory size: 192 Mbytes
Instruction cache size: 32 Kbytes
Data cache size: 32 Kbytes
Secondary unified instruction/data cache size: 2 Mbytes
Memory at Module 1/Slot 1: 128 MB (enabled)
  Bank 0 contains 128 MB (Standard) DIMMS (enabled)
Memory at Module 2/Slot 2: 64 MB (enabled)
  Bank 0 contains 64 MB (Standard) DIMMS (enabled)
Integral SCSI controller 9: Version QL1040B (rev. 2)
Integral SCSI controller 0: Version QL1040B (rev. 2)
  Disk drive: unit 1 on SCSI controller 0
Integral SCSI controller 1: Version QL1040B (rev. 2)
  Tape drive: unit 1 on SCSI controller 1: DAT
  CDROM: unit 6 on SCSI controller 1
Integral SCSI controller 10: Version QL1040B (rev. 2)
IOC3 serial port: tty1
IOC3 serial port: tty2
IOC3 serial port: tty15
IOC3 serial port: tty16
IOC3 parallel port: plp3
IOC3 parallel port: plp2
Integral Fast Ethernet: ef0, version 1
Integral Fast Ethernet: ef9, version 1
RNS 2200 PCI/FDDI controller: rns2, version 48
Origin 200 base I/O, module 2 slot 2
Origin 200 base I/O, module 1 slot 1
IOC3 external interrupts: 1
IOC3 external interrupts: 2
HUB in Module 1/Slot 1: Revision 3 (enabled)
HUB in Module 2/Slot 2: Revision 3 (enabled)
```

4. Turn off the Origin200 Giga chassis. Detach the XIO cable from the XIO B port; leave it attached to the XIO A port.
5. Install any other boards or other options the customer has ordered in the Origin200 Giga or the GIGAchannel expansion chassis.
6. Remove the wrist strap. For an Origin200 tower unit, replace the chassis access cover and restore it to its upright position. For an Origin200 rackmounted unit, replace the unit in the rack, reattach the mounting hardware, and replace the end caps. Replace any drives you removed to make the unit lighter, and unlock the door if necessary.

Warning: Two people are required to lift and move the Origin200 server.

You are finished installing the upgrade hardware. For instructions on cabling and finishing up, see Chapter 3.

2.4 Setting Up the Origin200 GIGAchannel Expansion Unit

To set up the GIGAchannel expansion unit, follow instructions in the *Origin200, Origin200 GIGAchannel, and Origin Vault Installation Instructions*. If this manual is not available, see the *Origin200 and Origin200 GIGAchannel Maintenance Guide*.

See especially the sections that explain choosing a location, planning the server configuration, safety considerations, setting up tower units, and installing the system in a rack.

Do not attach the GIGAchannel expansion unit power cable at this time.

Chapter 3

Cabling the Origin200 Giga Server and Finishing the Installation

This chapter explains cabling for the Origin200 Giga server:

Note: Set up the GIGAchannel expansion unit according to instructions in the *Origin200 GIGAchannel Owner's Guide*.

3.1 Attaching a Grounding Cable

Each chassis in configurations that include an Origin200 server and one other unit, such as a second Origin200 server or a GIGAchannel expansion unit, must have a grounding cable. A grounding cable is included in the Origin200 Giga shipment.

Warning: **When installing a two-module Origin200 system, or attaching a GIGAchannel or Origin Vault expansion unit, all chassis must be connected to the same power supply. If the chassis are not all connected to the same power supply, resulting differences in ground potential (current) can damage components on the Origin200 main system board.**

Figure 3-1 shows the grounding cable between Origin200 Giga and GIGAchannel expansion chassis.

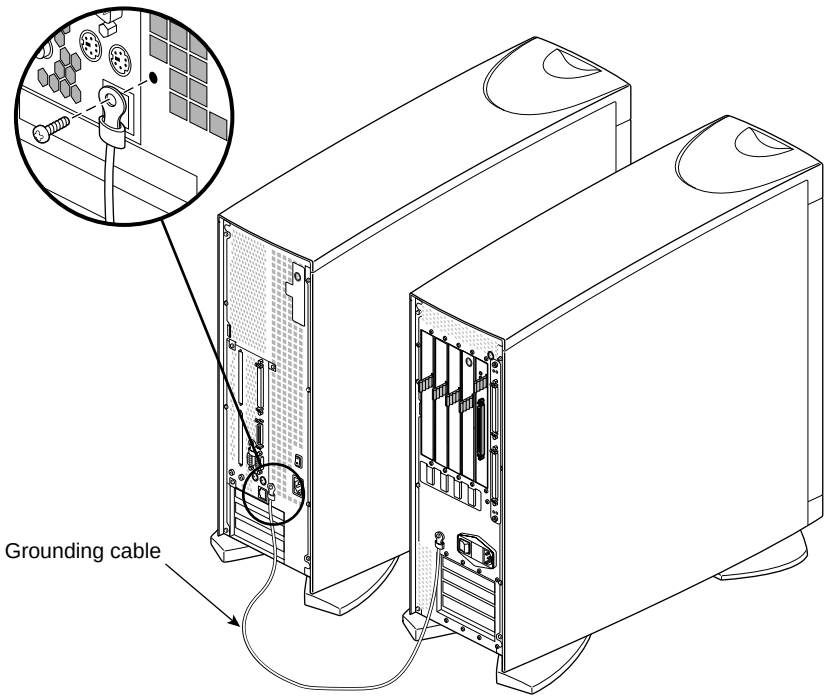

Figure 3-1 Attaching the Grounding Strap: Deskside Chassis

Figure 3-2 shows the grounding cable between rackmounted Origin200 Giga and GIGAchannel expansion chassis.

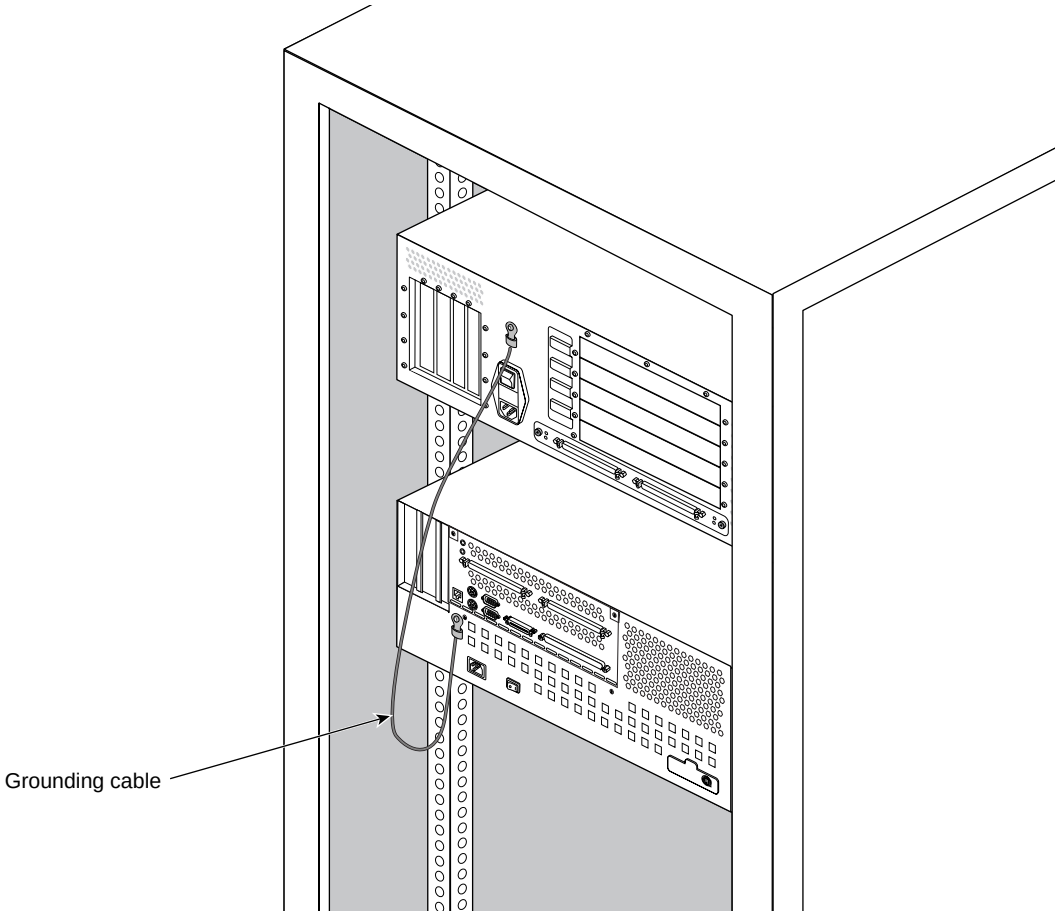

Figure 3-2 Attaching the Grounding Strap: Rackmounted Chassis

3.2 Connecting XIO Cables

After the grounding cable is attached, follow the steps below to connect XIO cables. The Origin200 Giga server does not boot unless an XIO cable is attached, either in loopback fashion as described in“Testing the Hardware (Loopback Test)” on page 2-9 in Chapter 2, or between systems as explained in this section.

1. Attach one end of an XIO cable to XIO A port of the Origin200 Giga chassis (if it is not already connected); attach the other end to the XIO A port of the GIGAchannel expansion unit. In both cases, this is the top or rightmost port.

   Caution: Do not attach XIO cables unless grounding cables have been attached first.

2. Attach the second XIO cable to connect the XIO B port of the Origin200 Giga and the XIO B port of the GIGAchannel expansion chassis. The cable connectors are a tight fit. Figure 3-3 shows cabling for deskside Origin200 and GIGAchannel chassis.

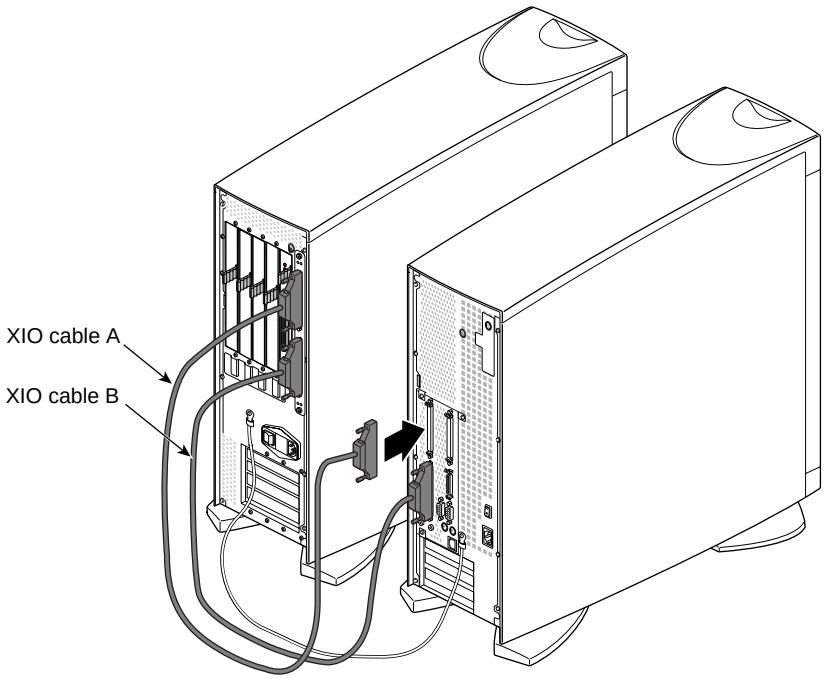

Figure 3-3 Attaching the XIO Cables: Deskside Chassis

Figure 3-4 shows the XIO cabling for rackmounted Origin200 Giga and GIGAchannel expansion chassis.

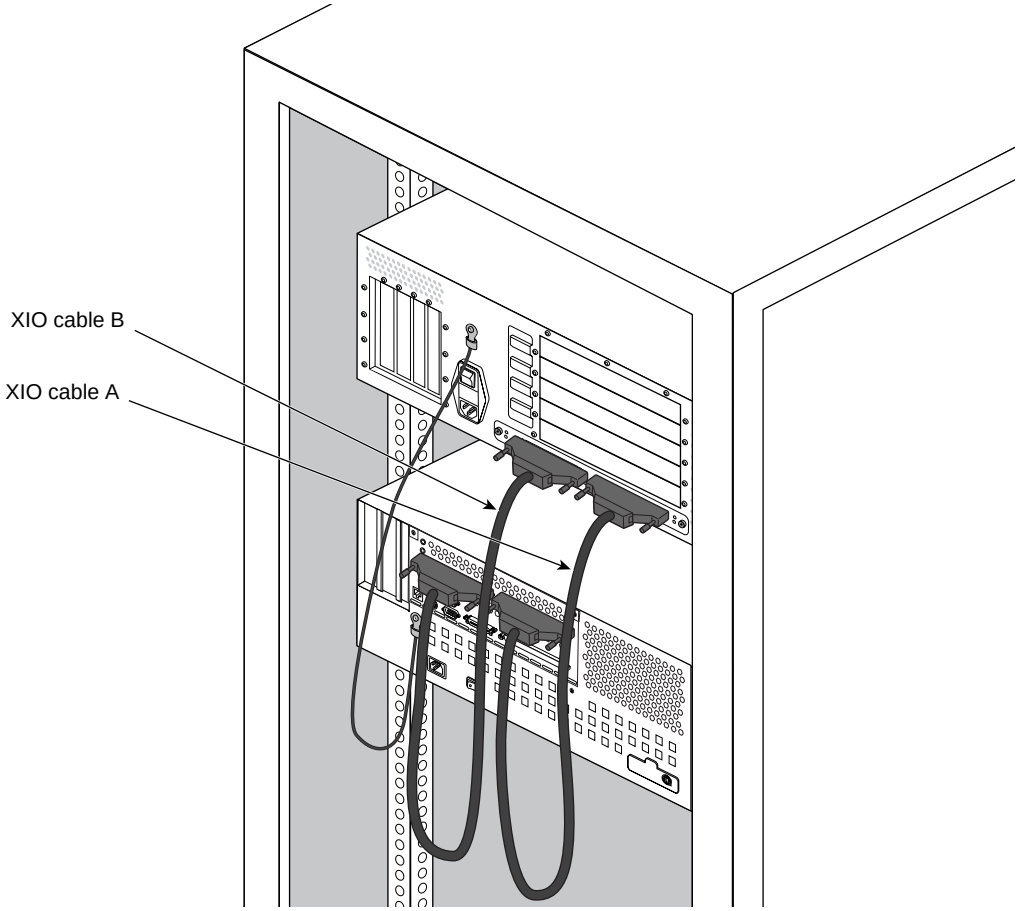

Figure 3-4 Attaching the XIO Cables: Rackmounted Chassis

3. Tighten both thumbscrews on all four connectors for proper XIO operation.

3.3 Reattaching Other System Cables and the Power Cables

At this point, reattach all cables you detached to prepare the chassis for the upgrade.

Attach the power cable to the GIGAchannel expansion unit(s) you are setting up.

Proper electrical grounding is critical. The GIGAchannel expansion unit and the Origin200 Giga server *must* be on the same grounded power supply. (In the case of a two-module system or of two expansion units, all units must be on the same grounded power supply.)

Otherwise, the Origin200 system board will be damaged. Modules may be connected to different electrical circuits, but those circuits must originate at the same power supply (electrical service entrance or breaker box).

Figure 3-5 shows four possible power and grounding configurations for a two-module Origin200 server:

- Configuration A is valid. Note that both modules are connected to the same branch circuit, and such a circuit would be required to supply 30 A.
- Configuration B is also valid. Although the modules are on separate branch circuits, both circuits are grounded at a service entrance.
- Configuration C *is not valid*. Each module is grounded in a different location, which could result in differences in ground potential and possible damage to the modules.
- Configuration D is valid. Both modules are grounded at a subpanel.

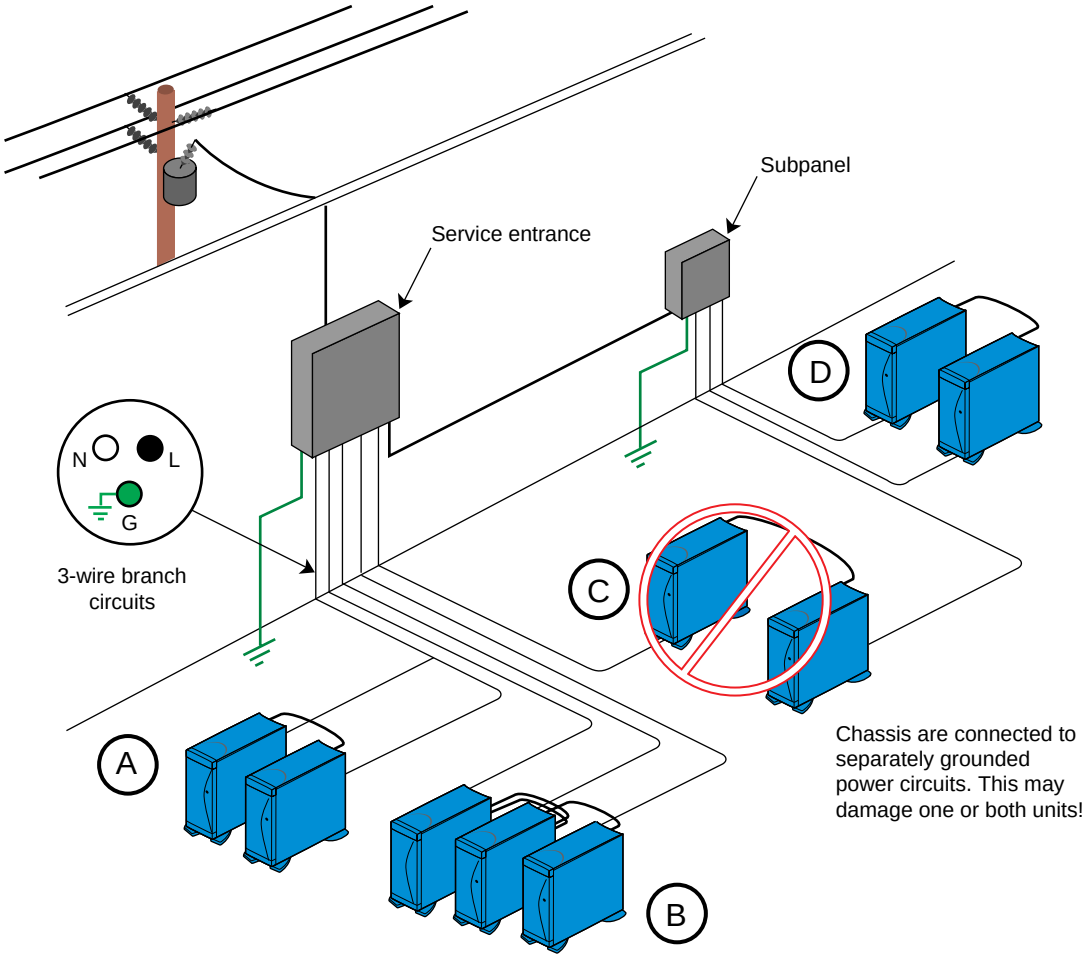

Figure 3-5 Origin200 and Origin200 Giga Power and Grounding (Earthing)

You can also use a power distribution unit (PDU) of sufficient amperage.

3.4 Starting the Systems and Upgrading the Software

Follow these steps to start the systems and upgrade the software so that the server sees the expansion unit:

1. Move the switch on the rear of the GIGAchannel expansion unit to the On position.

   The GIGAchannel expansion unit does not turn on until you turn on the Origin200 Giga server.

2. Turn on the Origin200 Giga server:

   - Press the power button on the front.
   - Turn on the master power switch on the rear of the server.

   In a two-module system, turn on both; it does not matter which you turn on first.

   You can also power on the Origin200 Giga server by entering a **`pwr u`** command through a remote serial port, or it can be turned on through auto power-on mode, which is set in the system controller. (See the description of using the module system controller for automatic power-on in the *Origin200 Owner's Guide*, *Origin200 GIGAchannel Owner's Guide*, or *Origin200 and Origin Vault Installation Instructions*.

   Turning on the Origin200 Giga server also powers on the GIGAchannel expansion unit. The yellow and green LEDs by each XIO connector on each chassis should illuminate.

3. Download PROM code and upgrade the kernel from the CD included with the upgrade. Also install any patches required for XIO boards or other hardware installed at this time.

4. Run *hinv -v*; the following example is a typical output for a two-module system. The GIGAchannel expansion unit appears halfway down as `PCI_XIO IO Board`, which is the entry for the bridge in the GIGAchannel expansion unit.

```
IP27 Node Board, Module 1, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 0)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 0)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 1)
      R10000FPC  Rev 0
    Memory on board, 128 MBytes (Standard)
      Bank 0, 128 MBytes <-- (Physical Bank 0)
IP27 Node Board, Module 2, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 1)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 2)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 3)
      R10000FPC  Rev 0
    Memory on board, 64 MBytes (Standard)
      Bank 0, 64 MBytes <-- (Physical Bank 0)
PCI_XIO IO Board, Module 1, Slot io7
    ASIC BRIDGE Rev 4, (widget 8)
BASEIO IO Board, Module 1, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
        peripheral SCSI DISK, ID 1, SGI IBM  DCHS04Y
    adapter PCI-SCSI Rev 5, (pci id 1)
        peripheral SCSI TAPE, ID 1, ARCHIVE Python 01931-XXX
        peripheral SCSI CDROM, ID 6, TOSHIBA CD-ROM XM-5401TA
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
BASEIO IO Board, Module 2, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
    adapter PCI-SCSI Rev 5, (pci id 1)
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
    adapter ID (Vendor 1112 Device 2200), (pci id 6)
```

```
IP27 Node Board, Module 1, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 0)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 0)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 1)
      R10000FPC  Rev 0
    Memory on board, 128 MBytes (Standard)
      Bank 0, 128 MBytes <-- (Physical Bank 0)
IP27 Node Board, Module 2, Slot MotherBoard
    ASIC HUB Rev 3, 97.5 MHz, (nasid 1)
    Processor A: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 2)
      R10000FPC  Rev 0
    Processor B: 195 MHz R10000, Rev 3.1, 2M secondary cache, (cpu 3)
      R10000FPC  Rev 0
    Memory on board, 64 MBytes (Standard)
      Bank 0, 64 MBytes <-- (Physical Bank 0)
PCI_XIO IO Board, Module 1, Slot io7
    ASIC BRIDGE Rev 4, (widget 8)
BASEIO IO Board, Module 1, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
        peripheral SCSI DISK, ID 1, SGI IBM  DCHS04Y
    adapter PCI-SCSI Rev 5, (pci id 1)
        peripheral SCSI TAPE, ID 1, ARCHIVE Python 01931-XXX
        peripheral SCSI CDROM, ID 6, TOSHIBA CD-ROM XM-5401TA
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
BASEIO IO Board, Module 2, Slot MotherBoard
    ASIC BRIDGE Rev 3, (widget 8)
    adapter PCI-SCSI Rev 5, (pci id 0)
    adapter PCI-SCSI Rev 5, (pci id 1)
    adapter IOC3 Rev 1, (pci id 2)
        controller multi function SuperIO
        controller Ethernet Rev 1
    adapter ID (Vendor 1112 Device 2200), (pci id 6)
```

5. Erase the file containing the PROM output you saved from before the installation.