

Silicon Graphics® Presenter 1280™ Board
Installation Guide
for the Indy Workstation

Document Number 007-3056-001

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Silicon Graphics® Presenter 1280™ Board Installation
Guide for the Indy Workstation
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Introduction

This guide explains how to install the Silicon Graphics® Presenter 1280™ board in an Indy™ workstation with Indy graphics and how to install the Presenter 1280 XZ board in an Indy workstation with XZ graphics.

Note: The Indy Presenter XZ adapter board for the Indy Presenter flat panel monitor (1024 x 768 resolution) does not support 1280 pixel resolution. To use the Presenter 1280 on an Indy with XZ graphics, you must install the Presenter 1280 XZ adapter board.

Follow the steps in Chapter 1 to identify which graphics board your Indy has so that you know which instructions to follow in the manual.

Chapter 1 tells you how to prepare your workstation before you install the hardware for the Presenter 1280 board.

Chapter 2 explains how to replace the PROM chip on the system board.

Chapter 3 provides instructions for installing the board in the workstation.

Chapter 4 contains troubleshooting and product support information.

Read this guide once all the way through before you start to work. Then you'll be familiar with the Indy system and the parts you'll be working with. If you find a term you haven't seen before, refer to your system owner's guide. The glossary in the owner's guide contains definitions of many of the terms used in this manual.

Preparing Your Indy Workstation

Before you install the Presenter 1280 board in the Indy workstation, you must complete the steps in this chapter.

Preparing your workstation consists of these steps:

- Identifying which graphics board is installed in your Indy workstation. (This determines which instructions to follow in this manual.)
- Shutting down the system and checking the date of your PROM chip from the Command Monitor. (This date determines whether or not you must replace the PROM chip.)
- Removing the cover.
- Attaching the wrist strap.
- Removing existing GIO option boards from slot 0 (for workstations with Indy graphics only).

Presenter 1280 Board Package

Your Presenter 1280 package includes all of the following items. If anything is missing, contact your sales representative.

- Indy Presenter 1280 board or the Presenter 1280 XZ board in an antistatic bag
- Bag of screws for installing the board
- Black audio cable (for the Presenter 1280 board)
- Metal bracket with audio cable attached (for the Presenter 1280 XZ board)
- Label to identify audio ports on the Indy

- PROM chip
- PROM chip removal tool
- Open-ended wrench to remove standoffs and hexnuts
- Reversible Phillips/flathead screwdriver
- Antistatic wrist strap
- Cleaning kit
- *Presenter 1280™ Board Installation Guide for the Indy Workstation* (this manual)
- Compact disc (CD-ROM)

Identifying Your Indy Workstation's Graphics Board

It's important that you know which graphics board is installed in your Indy workstation. This determines which instructions you follow in this manual.

To determine your Indy's graphics board, follow these steps.

1. Log in to your account.
2. From the Desktop toolchest, select "Unix Shell."
3. At the shell prompt, enter:

```
hinv
```

If you see:	Then:
"Graphics board: Indy 24-bit" or "Graphics board: Indy 8-bit"	Your system has Indy graphics.
"Graphics board: GR3-XZ"	Your system has Indy XZ graphics.

You may want to write down your graphics board type. Later in the installation, you'll follow a different path in the manual, depending on which graphics board is installed in your Indy. Now go to the next section to check the date of the PROM chip.

Checking the PROM Chip Date

You may or may not need to replace your system's PROM chip, depending what PROM version you have. You check the date of the PROM chip from the Command Monitor while shutting down your system.

Follow these steps to check your system's PROM date:

1. Shut down the system.

- From the System toolchest, select "System Shutdown."

If you have set a root password, you are prompted to enter it.

You then see a cautionary message asking you to confirm the shutdown of the system. Click *OK* to shut down without powering off the system.

Next you see the message shown in Figure 1-1.

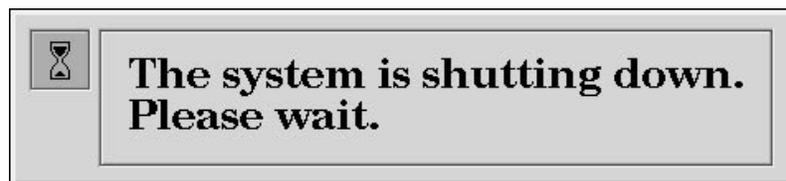


Figure 1-1 "System is Shutting Down" Notifier

Then you see the notifier shown in Figure 1-2.

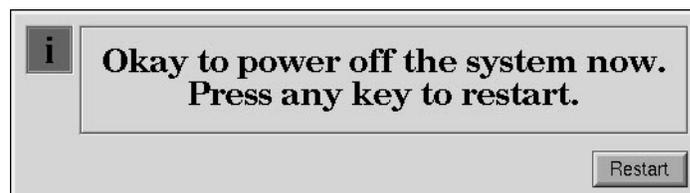


Figure 1-2 "Okay to Power Off" Notifier

- Click the *Restart* button. You then see the message shown in Figure 1-3.

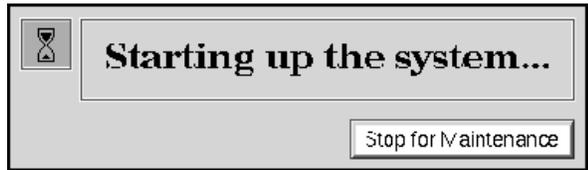


Figure 1-3 "Starting Up the System" Notifier

- Click on the *Stop for Maintenance* button. The System Maintenance menu appears.
- 2. Press **5** on the keyboard, or click on the *Enter Command Monitor* icon on the System Maintenance menu.
- 3. See what version of the PROM you have. At the **>>** prompt, enter:

version

You see a line similar to this:

```
PROM Monitor SGI Version 5.3 Rev B10 R4X00 IP24 Jan 22, 1996 (BE)
```

The date "Jan 22, 1996" tells you the date of the PROM.

If the PROM date is:	Then:
Before January 22, 1996	You must replace the PROM chip. Continue with these instructions, and complete all the installation tasks in the manual.
January 22, 1996 or later	You do not need to replace the PROM chip. Continue with these instructions and complete all the installation tasks <i>except for</i> Chapter 2, "Replacing the PROM Chip."

- 4. After you have checked your PROM version, type **exit** to exit the PROM monitor.
- 5. You see the System Maintenance menu again. It is safe to turn off your Indy.

6. Turn off the power by pressing and releasing the power button on the front of the Indy, as shown in Figure 1-4. The system powers off automatically.

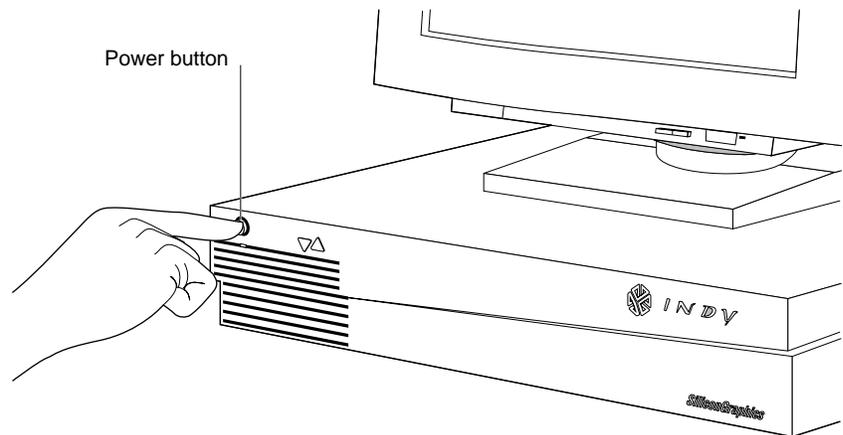


Figure 1-4 Turning Off the Indy Workstation

Removing the Top Cover

Follow these steps to remove the top cover of your Indy workstation:

Before removing any exterior cables, familiarize yourself with their location so that you'll find it easier when reconnecting them later.

Caution: Your monitor is very heavy. Have someone help you move it.

1. If the monitor is on top of the workstation, move it to one side.
2. Disconnect the black power cable and the monitor cable from the back of the Indy workstation.

Several other cables are connected to the rear of the Indy chassis. Disconnecting them is optional. However, if you do, you'll have more room to work with when removing the screws from the back panel.

3. Facing the front of the Indy workstation, place your right thumb against the lip at the back of the cover, and your second and third fingers under the finger ledge, as shown in Figure 1-5.
4. Snap the cover loose by bracing your thumb against the lip and pushing up the finger ledge with the second and third fingers, followed by a firm push toward the front.
5. Slide the cover forward about one inch, tilt it up, and remove it.

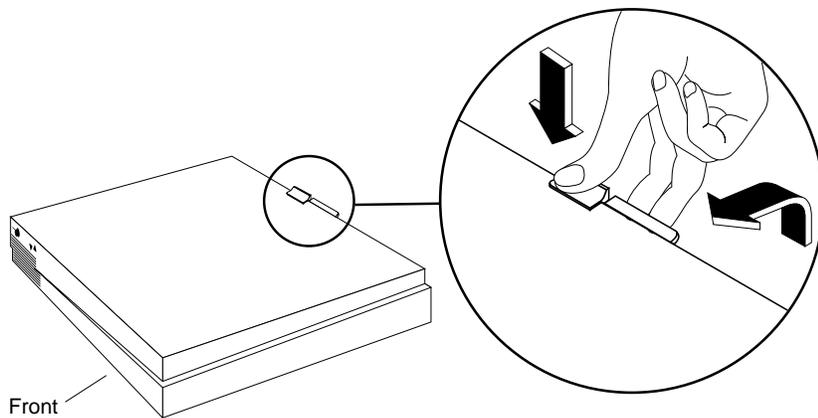


Figure 1-5 Removing the Top Cover From the Indy Workstation

Attaching the Wrist Strap

Wear the wrist strap to prevent the flow of static electricity, which can damage the components in the Indy workstation.

Caution: The components inside the Indy are extremely sensitive to static electricity. Handle all chips and modules carefully, and wear the wrist strap shipped with the upgrade package while replacing parts inside the system.

To attach the wrist strap, follow these steps:

1. Unwrap the first two folds of the band and wrap the exposed adhesive side firmly around your wrist.
2. Unroll the rest of the band and peel the liner from the copper foil at the opposite end.
3. Attach the copper foil to a convenient location on the metal part of the Indy chassis.

Removing a GIO Option Board: Indy Graphics

If your Indy has XZ graphics, skip this section and go to “Where to Go Next” on page 11.

GIO option boards are located on top of the graphics board and can be single-width, covering half of the graphics board, or double-width, covering the entire graphics board. There could be two single-width boards installed.

To install the Presenter 1280 board on an Indy with Indy graphics, you must first remove any installed GIO option boards from slot 0.

If you are removing a double-width GIO board or an Indy video board from slot 0, you cannot reinstall these, because they must be installed in slot 0, which is the same slot that the Presenter 1280 board will occupy. However, other single-width boards installed in slot 0 (for example the InPerson option board or the GIO Sync board) can be removed and reinstalled in slot 1.

If a GIO board or boards are installed, your system will have three levels of boards: the system board on the bottom, the graphics board in the middle, and the GIO board or boards on top.

To determine if you have a GIO option board installed in slot 0, compare your system to the one shown in Figure 1-6, which shows a single-width GIO board installed in slot 0. Then follow the instructions below.

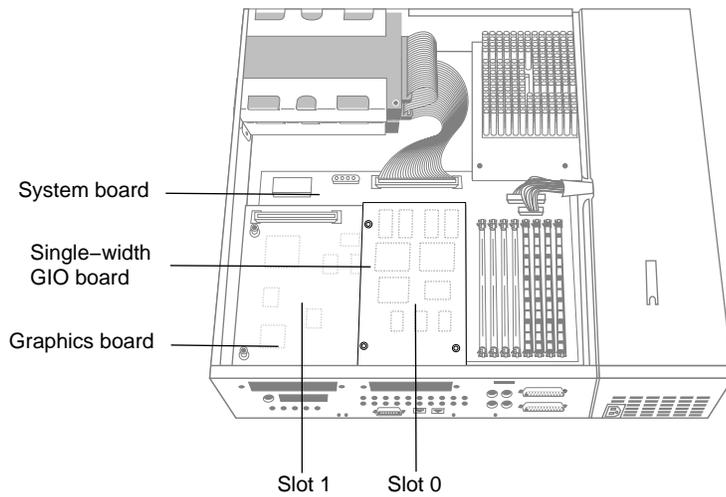


Figure 1-6 Indy Workstation With Single-Width GIO Option Board

If your Indy workstation has:	Then:
One or more GIO option boards installed	Go to step 1.
No GIO option boards installed	“Where to Go Next” on page 11.

1. Locate the GIO option board in slot 0, as shown in Figure 1-7.

Note: These instructions are for a single-width GIO option board. Use the same steps to remove a double-width GIO option board. The only difference is that there are more screws to remove on a double-width board.

2. If there are external cables connected to the GIO option board's I/O connector on the rear of the workstation, disconnect them.
3. Using the reversible Phillips screwdriver provided with this package, remove the two screws from the GIO board connector on the rear of the workstation, as shown in Figure 1-7. If the flat end of the screwdriver is in position, pull it out and reverse it to the Phillips end.

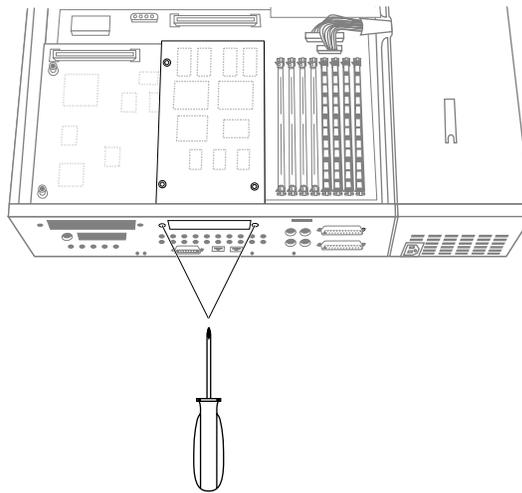


Figure 1-7 Removing the Screws From the GIO Board Connector

- Using a Phillips screwdriver, remove the three screws that connect the GIO option board to the graphics board, as shown in Figure 1-8.

Note: A double-width GIO option board has more than three screws to remove.

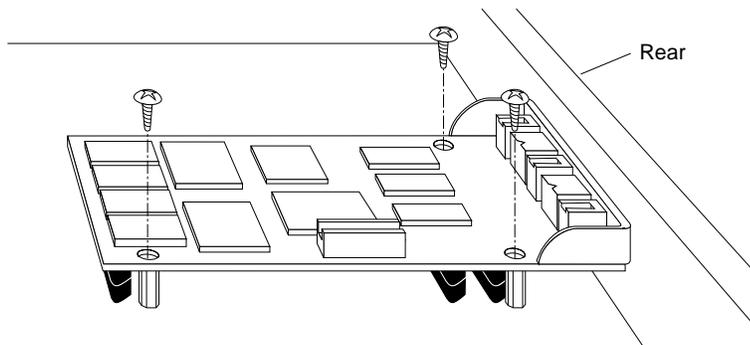


Figure 1-8 Removing the Screws From the GIO option Board

- Disconnect the GIO board by grasping it firmly on the sides and pulling it up to disconnect the three connectors, as shown in Figure 1-9.

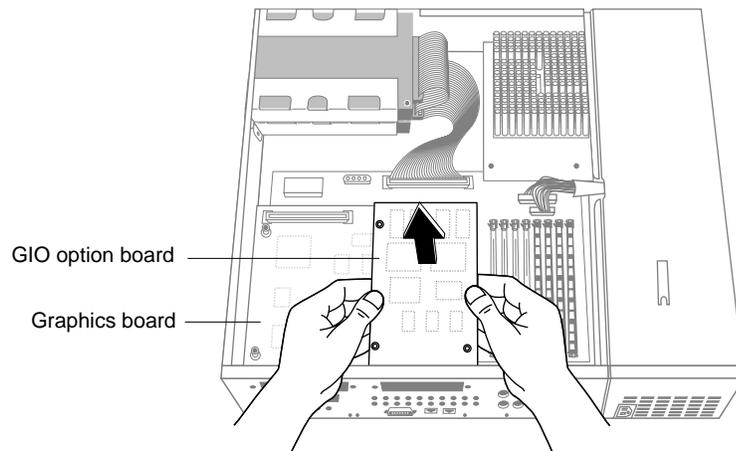


Figure 1-9 Disconnecting the GIO Option Board

You have now removed the GIO option board. If you are removing an Indy Video board, you will not reinstall it, since the Presenter 1280 board occupies the same slot.

Where to Go Next

The path you follow in this manual depends upon whether you need to replace the PROM chip. You should already have determined whether you need to replace the PROM chip (see "Checking the PROM Chip Date" on page 3.)

Use the table below to determine which path to follow.

If the PROM date is:	Then:
Before January 22, 1996	Go to Chapter 2, "Replacing the PROM Chip."
January 22, 1996 or later	Go to Chapter 3, "Installing the Presenter 1280 Board."

Replacing the PROM Chip

If you determined earlier that you need to replace the PROM chip, follow these instructions. (See “Checking the PROM Chip Date” on page 3 if necessary.)

Replacing the PROM chip consists of:

- Removing the graphics board or board set
- Replacing the PROM chip on the system board
- Reinstalling the graphics board or board set

Removing the Graphics Board or Board Set

Follow the instructions for your graphics configuration in the table below. (You should have already determined your Indy’s graphics configuration before shutting down and opening up the system. See “Identifying Your Indy Workstation’s Graphics Board” on page 2.)

If your Indy workstation has:	Then:
Indy graphics	Go to “Removing the Indy Graphics Board” on page 13.
Indy XZ graphics board set	Go to “Removing the XZ Graphics Board Set” on page 16.

Removing the Indy Graphics Board

Follow these steps to remove the Indy graphics board.

1. Use the open-ended wrench to unscrew the two hexnuts screws on either side of the graphics board's I/O connector on the rear of the workstation. (See Figure 2-1.) The wrench is provided with this kit.

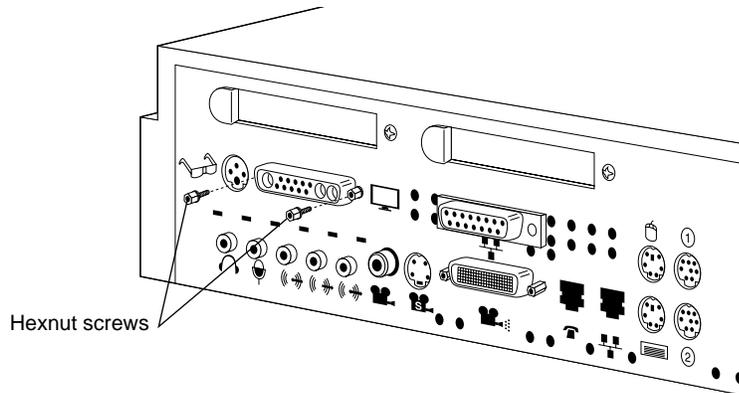


Figure 2-1 Removing the Hexnut Screws From the Rear Panel

2. Remove the following screws from the graphics board:
 - Use the open-ended wrench to unscrew two standoff screws (tall, hexagonal posts) from the graphics board. (See Figure 2-2.)
 - Use a Phillips screwdriver to remove the Phillips screw from the graphics board.

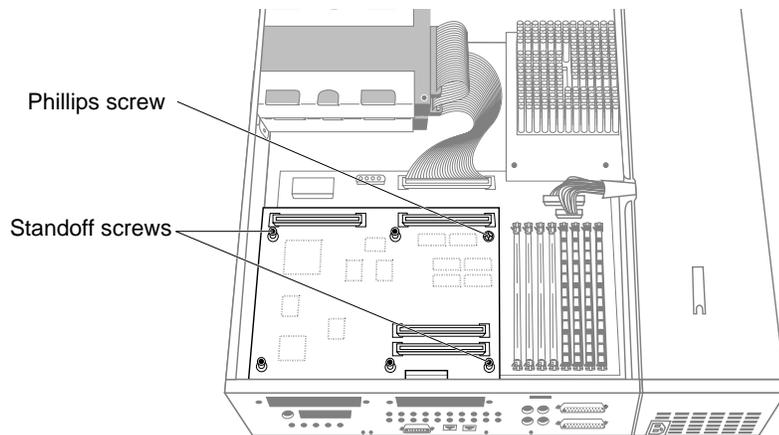


Figure 2-2 Removing the Screws From the Graphics Board

3. Disconnect the graphics board from the system board, as shown in Figure 2-3.
 - Grasp the board firmly on the side close to the system disk drive.
 - Pull up to disconnect the two connectors under the graphics board from the sockets on the system board.
 - Lift the graphics board up and remove it.

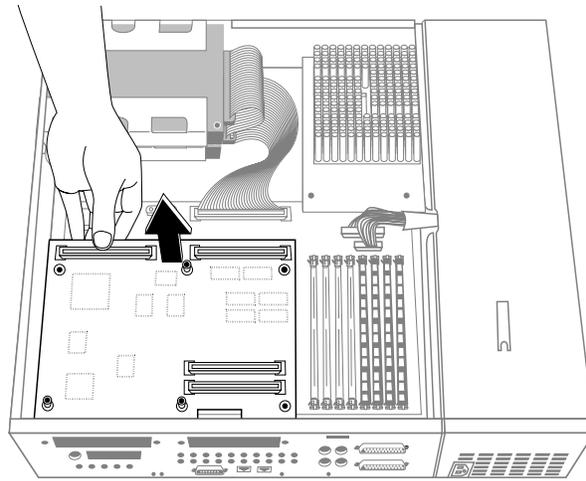


Figure 2-3 Disconnecting the Graphics Board From the System Board

You are now ready to replace the PROM chip. Go to “Replacing the PROM Chip” on page 19.

Removing the XZ Graphics Board Set

The XZ graphics board set consists of two boards, the X board and the Z board. First you remove the X board, then the Z board.

Follow these steps to remove the boards:

1. Using a Phillips screwdriver, remove the screws securing the X board to the Z board, as shown in Figure 2-4.

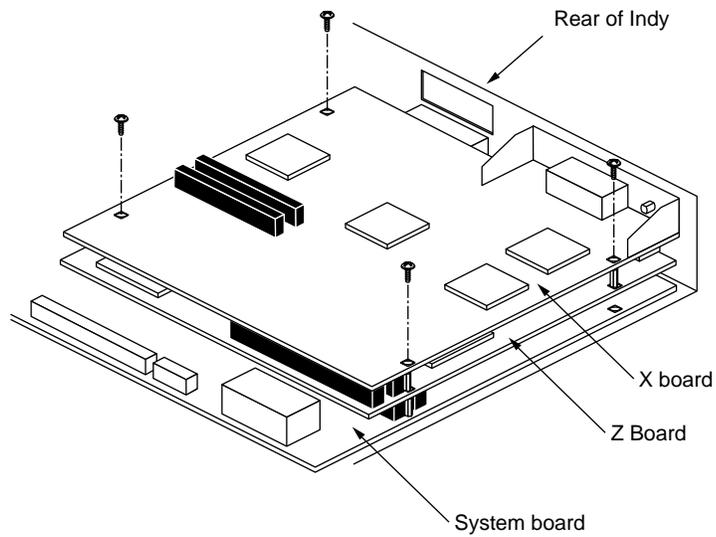


Figure 2-4 Removing the Screws From the X Board

- 2. On the rear of the workstation, remove the two screws that secure the X board to the chassis as shown in Figure 2-5.

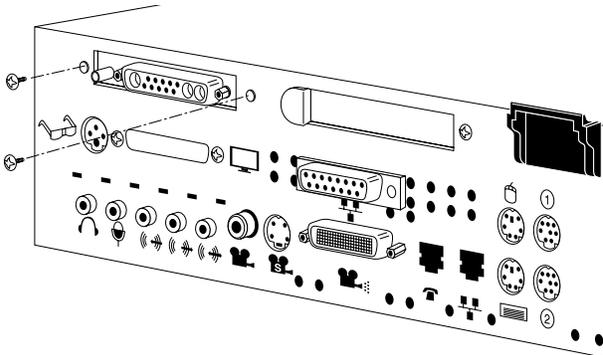


Figure 2-5 Removing the Exterior Screws for the X Board

- 3. Disconnect the X board from the Z board, by grasping the board firmly on the side close to the system disk drive and pulling up to disconnect the two connectors underneath the board. See Figure 2-6.

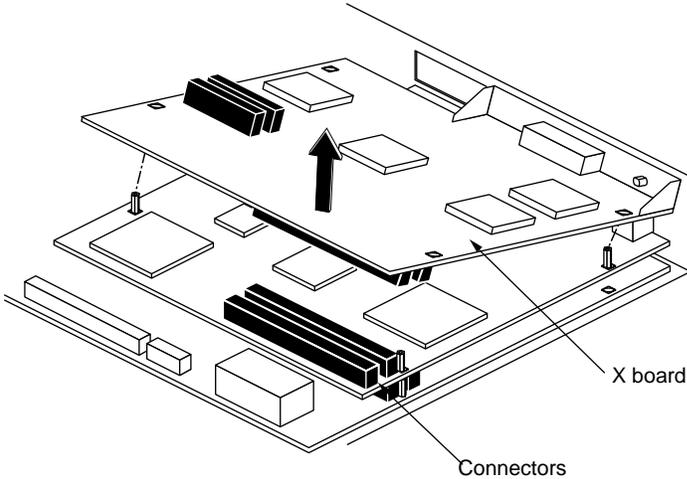


Figure 2-6 Disconnecting the X Board From the Z Board

4. Using an open-ended wrench, remove the standoff screws from the Z board, as shown in Figure 2-7.

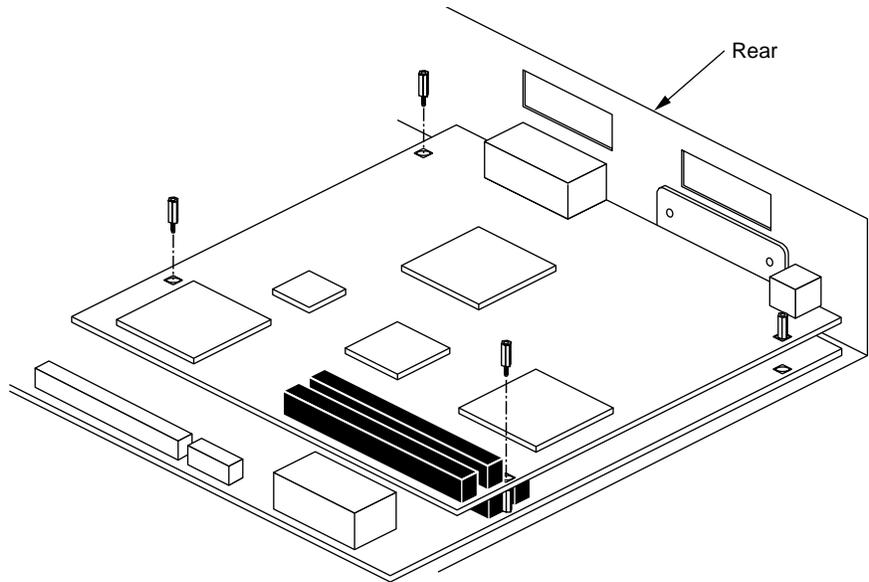


Figure 2-7 Removing the Standoff Screws From the Z Board

5. On the rear of the workstation, remove the two screws that secure the Z board to the chassis, as shown in Figure 2-8.

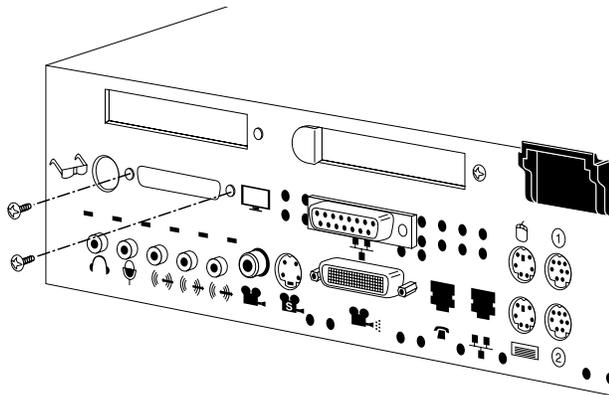


Figure 2-8 Removing the Exterior Screws For the Z Board

6. Disconnect the Z board from the system board, by grasping the board firmly on the side close to the system disk drive and pulling up to disconnect the two connectors underneath the board. See Figure 2-9.

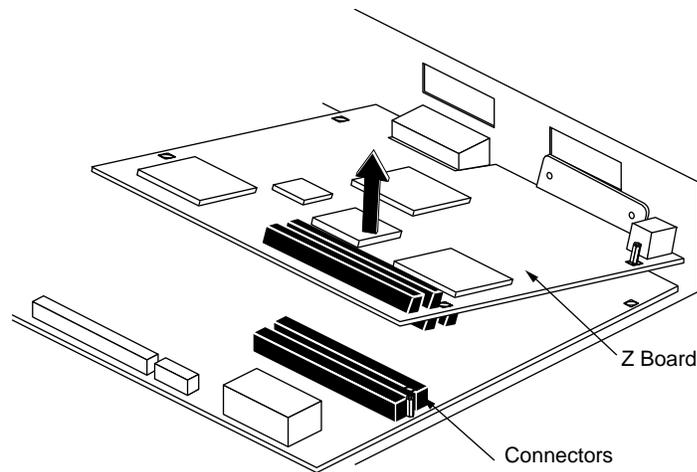


Figure 2-9 Disconnecting the Z Board From the System Board

You have now removed the XZ graphics board set and are ready to replace the PROM chip.

Replacing the PROM Chip

If your PROM chip is dated before January 22, 1996, follow the steps below to replace it. (You should have already checked the version of your PROM chip before shutting down and opening up the system. See "Checking the PROM Chip Date" on page 3.)

Follow these steps to remove and replace the PROM chip.

1. Locate the PROM chip on the system board, as shown in Figure 2-10.

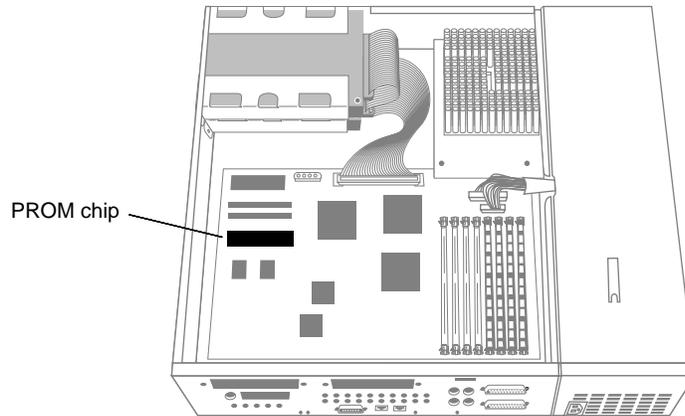


Figure 2-10 Locating the PROM Chip on the System Board

Before removing the PROM chip, familiarize yourself with it. Note that it has either a semicircular notch or a small, indented circle at the end facing the memory SIMMs. You'll use this notch or circle to orient the upgrade PROM when you install it.

2. Remove the PROM chip from the system board.

The PROM chip is seated in a socket that is permanently attached to the system board. You remove the chip with a chip removal tool, included in this package. The tool looks like a pair of huge tweezers. When you use the tool, be sure to insert it under the PROM chip itself, and not under the socket.

- Insert the chip removal tool between the PROM chip and the socket on the board, as shown in Figure 2-11. Work the chip away from the socket in a rocking motion, pulling up on one side of the chip and then on the other side. It may be difficult to loosen.
- Continue the rocking motion until the PROM chip is all the way out of the socket.

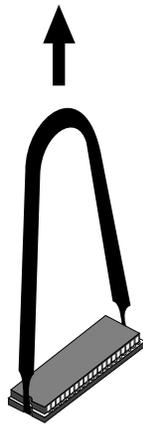


Figure 2-11 Removing the PROM Chip

3. Install the new PROM chip.
 - Orient the PROM chip above the socket on the system board so the end with the semicircular notch or small, indented circle lines up with the notch in the socket. (See Figure 2-12.)

Caution: Make sure you line up the notch or the small circle on the PROM chip with the notch in the socket. If you install the PROM chip backwards, the system will not power on and you will damage the PROM chip.
 - Line up all of the pins on the PROM with the corresponding holes in the socket.

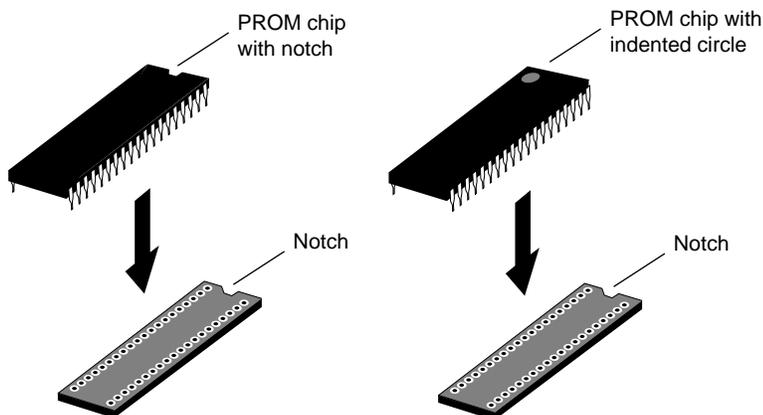


Figure 2-12 Lining Up the PROM Chip

- 4. Once the pins are lined up, press down firmly on the top of the PROM chip until it is seated in the socket, as shown in Figure 2-13.

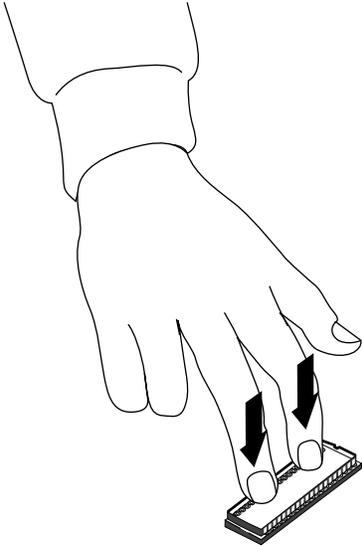


Figure 2-13 Pressing the PROM Chip Into the Socket

- 5. Visually check to make sure that all the pins on the PROM are inserted correctly in the holes on the socket and that the PROM is seated all the way.

You are now ready to reinstall the graphics board.

If your Indy workstation has:	Then:
Indy graphics	Go to "Reinstalling the Indy Graphics Board" on page 24.
Indy XZ graphics board set	Go to "Reinstalling the XZ Graphics Board Set" on page 28.

Reinstalling the Indy Graphics Board

Follow these steps to reinstall the graphics board.

1. Lower the graphics board over the system board, tilting it to insert the I/O connector through the open slot on the rear of the chassis.
2. Align the screw holes on the graphics board over the vacant standoffs on the system board.
3. Connect the graphics board to the system board, as shown in Figure 2-14.
 - Seat the connectors under the graphics board over the sockets on the system board. Make sure they are positioned correctly before going on to the next step.

Caution: The pins in the male connector are delicate. Gently wiggle or reposition the graphics board to fit the pins of the male connectors into their slots in the female connectors. Do not apply any pressure until the pins fit properly.

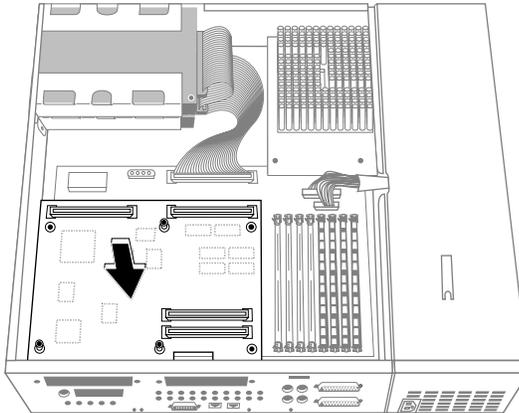


Figure 2-14 Positioning the Graphics Board Over the System Board

- Place your fingers or thumbs on the board above where the connectors are located, and press firmly until the two connectors fit snugly. The connectors must be touching along the entire shared surface. See Figure 2-15. If the board is not seated all the way, the screws will not tighten correctly.

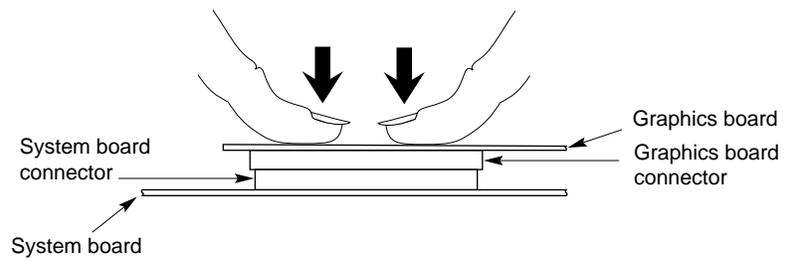


Figure 2-15 Seating the Connectors

4. Check that each screw hole on the graphics board is sitting above a matching standoff (tall, hexagonal post) on the system board. If they are not, the board may not be seated all the way. Go back to step 3.
5. Insert two hexnut screws through the rear of the workstation, as shown in Figure 2-16.

- Insert the two hexnut screws you removed earlier on either side of the I/O connector.

If the screw holes do not line up, go back to step 3. Make sure that you have completed each step and that the connectors are fully seated.

- Use the open-ended wrench provided with this package to tighten the two screws.

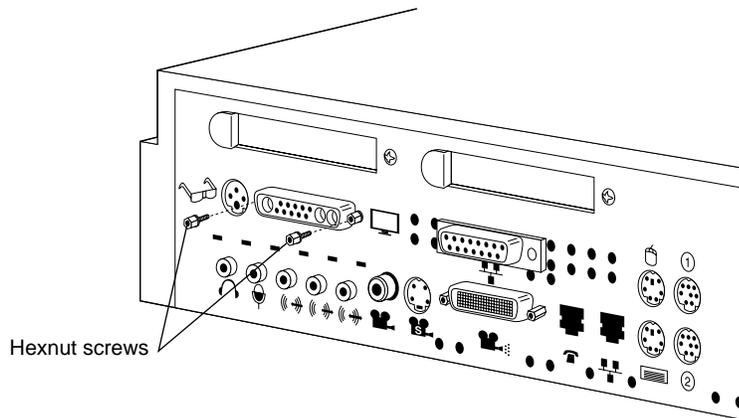


Figure 2-16 Replacing the Screws on the Backplane

6. Secure the graphics board with the following screws:
 - Using the open-ended wrench, insert and tighten the two standoff screws that you removed earlier, in the locations shown in Figure 2-17. As you tighten the screws, alternate among them so that the board is fastened evenly.
 - Using the Phillips screwdriver, insert and tighten the screw on the graphics board, in the location shown in Figure 2-17.

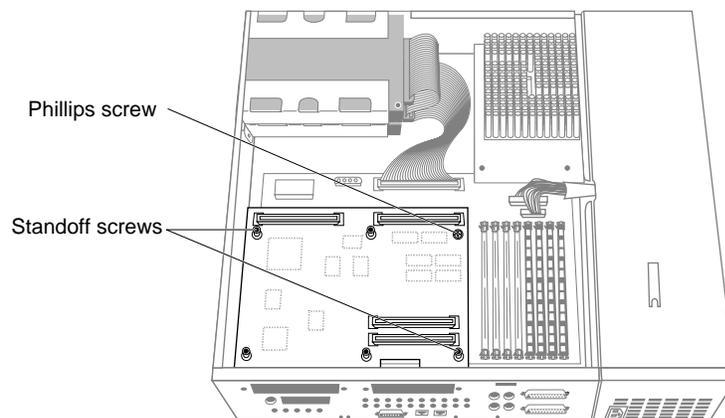


Figure 2-17 Inserting the Screws on the Graphics Board

You are now finished reinstalling the Indy graphics board and are ready to install the Presenter 1280 board. Go to Chapter 3, "Installing the Presenter 1280 Board."

Reinstalling the XZ Graphics Board Set

Follow these steps to reinstall the Z board.

1. Position the Z board over the system board.
 - Grasp the Z board by the sides, with the two male connectors on the underside, as shown in Figure 2-18.
 - Loosely place the Z board on top of the system board so that the two male connectors on the underside of the Z board align with the two female connectors on the system board.

Caution: The pins in the male connectors are delicate. Gently wiggle or reposition the Z board to fit the pins of the male connectors into their slots in the female connectors. Do not apply any pressure until the pins fit properly.

- Check that each screw hole on the Z board is sitting directly above a matching standoff (tall, hexagonal post) on the system board.

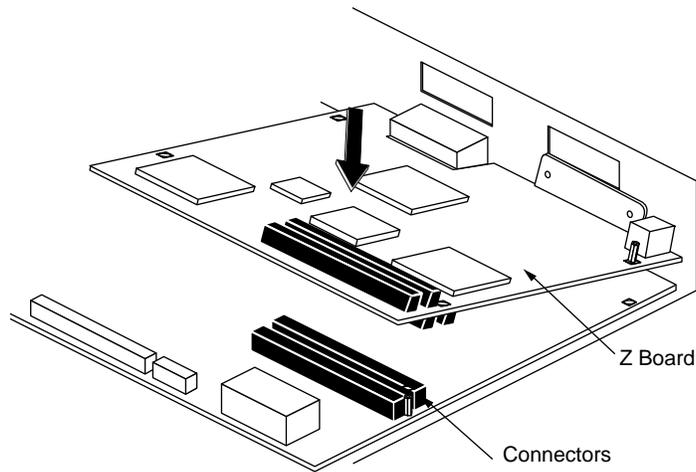


Figure 2-18 Positioning the Z Board Over the System Board

2. Press to seat the Z board's connectors into the system board's connectors, as shown in Figure 2-19.
 - Place your fingers or thumbs on the Z board above where the connectors are located.
 - Press down gently but firmly until the two connectors fit snugly. The male and female connectors must be touching along the entire shared surface. If the board is not seated all the way, the screws will not tighten correctly.

Caution: Do not press hard enough to bend the system board.

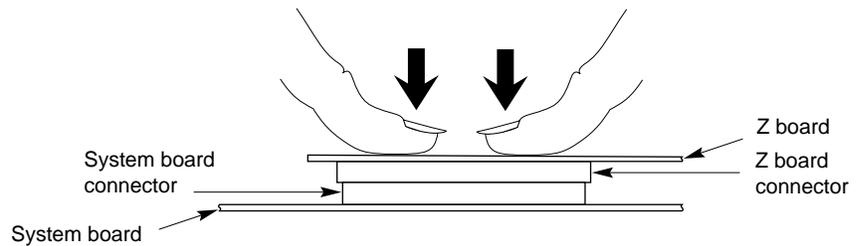


Figure 2-19 Seating the Z Board's Connectors

3. Insert the two screws that secure the Z board to the chassis through the rear of the workstation, as shown in Figure 2-20.
 - Remove two Phillips screws from the plastic bag that comes with this package.
 - Insert and tighten the screws, using the Phillips screwdriver.If the screw holes are not aligned, press the board lightly until the screwholes are aligned.

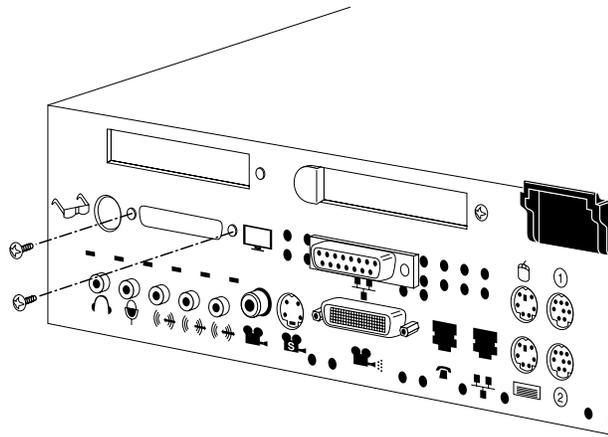


Figure 2-20 Securing the Z Board to the Rear of the Workstation

4. Secure the Z board with the three standoff screws you removed earlier.
 - Using the open-ended wrench, insert and tighten the three standoff screws in the locations shown in Figure 2-21. As you tighten the screws, alternate among them so that the board is fastened evenly.

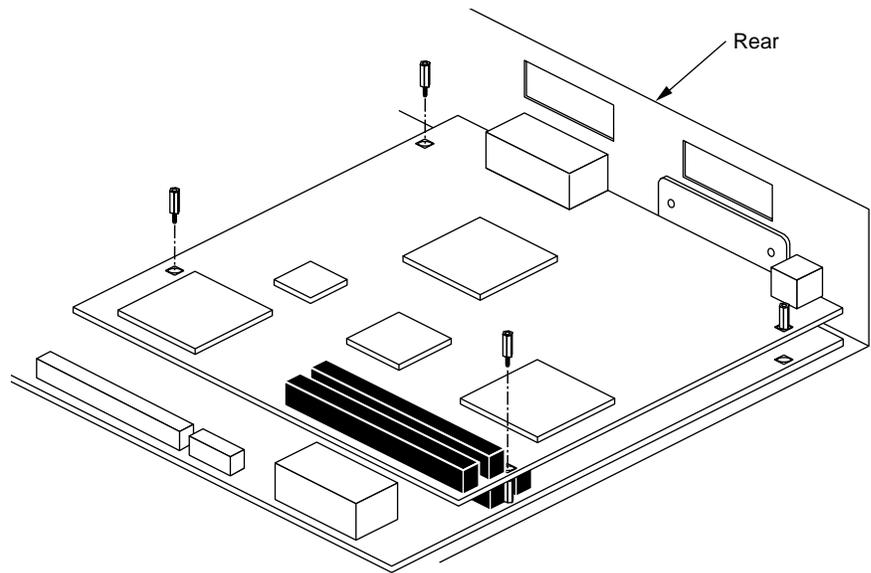


Figure 2-21 Inserting the Standoff Screws on the Z Board

You are now ready to install the X board.

5. Reinstall the X board.
 - Grasp the X board by the sides, with the two male connectors on the underside, as shown in Figure 2-22.
 - Lower the X board over the Z board, inserting the board's external I/O connector through the open slot on the rear of the workstation.
 - Loosely place the X board on top of the Z board so that the two male connectors on the underside of the X board align with the two female connectors on the Z board, as shown in Figure 2-22.

Caution: The pins in the male connectors are delicate. Gently wiggle or reposition the X board to fit the pins of the male connectors into their slots in the female connectors. Do not apply any pressure until the pins fit properly.

 - Check that each screw hole on the X board is sitting directly above a matching standoff (tall, hexagonal post) on the Z board.

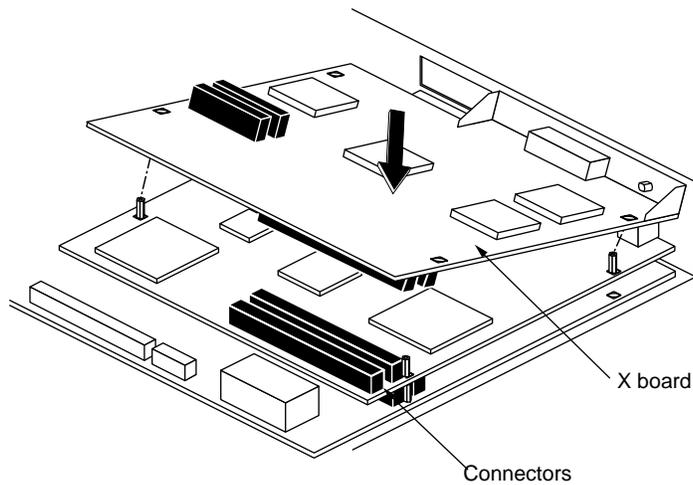


Figure 2-22 Positioning the X Board Over the Z Board

6. Press to seat the X board's connectors into the Z board's connectors, as shown in Figure 2-23.
 - Place your fingers or thumbs on the X board above where the connectors are located.
 - Press down gently but firmly until the two connectors fit snugly. The male and female connectors must be touching along the entire shared surface. If the board is not seated all the way, the screws will not tighten correctly.

Caution: Do not press hard enough to bend the lower two boards.

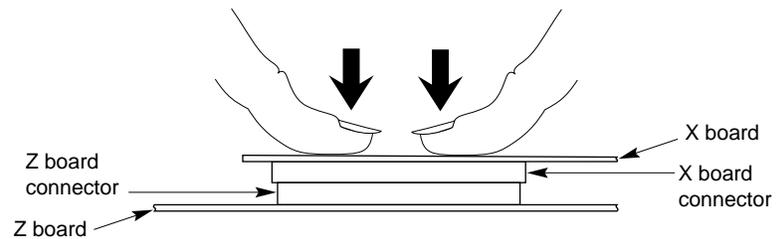


Figure 2-23 Seating the X Board's Connectors

7. Secure the X board to the rear of the workstation with the two screws you removed earlier.
 - Before attaching the screws to the rear of the workstation, check that the screwholes on *top* of the board are lined up directly above a matching standoff screw on the board below. (See Figure 2-23.)
 - Using the Phillips screwdriver, insert and tighten the two screws in the locations shown in Figure 2-24.

If the screw holes do not line up, the board may not be seated completely. Go back to 6.

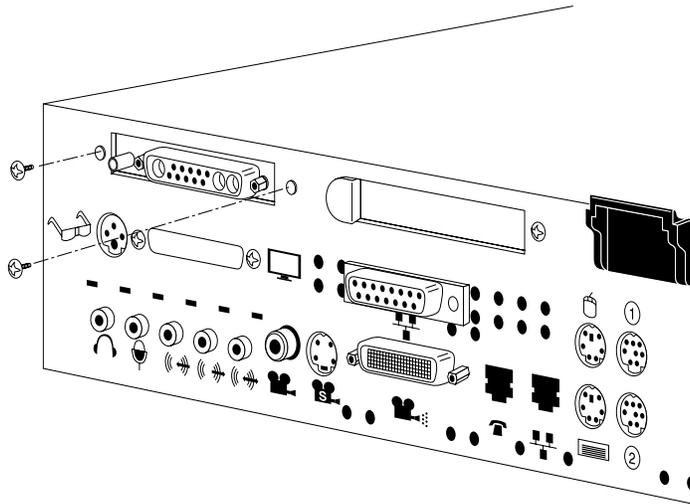


Figure 2-24 Securing the X Board to the Rear of the Workstation

8. Secure the X board to the Z board with the four screws you removed earlier.
 - Using the Phillips screwdriver, insert and tighten the four screws in the locations shown in Figure 2-25. As you tighten the screws, alternate among them so that the board is fastened evenly.

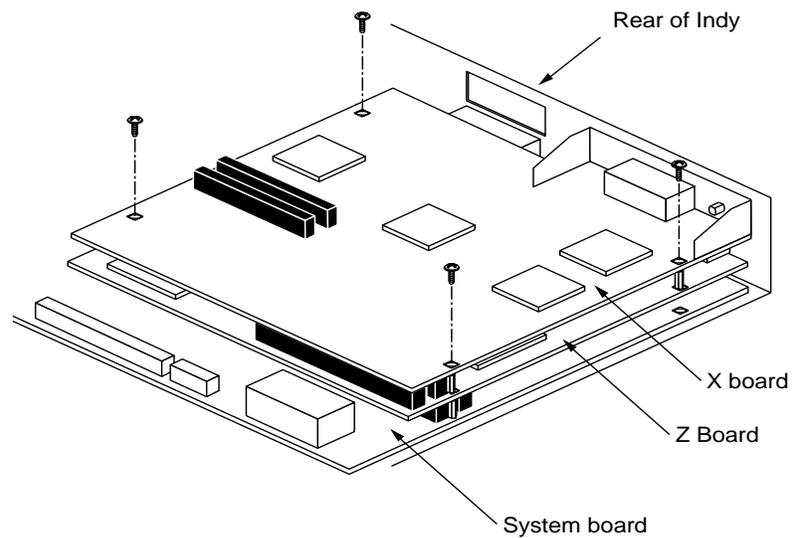


Figure 2-25 Inserting the Screws on the X Board

You are finished reinstalling the XZ graphics board set, and are ready to install the XZ Presenter 1280 board. Go to Chapter 3, "Installing the Presenter 1280 Board."

Installing the Presenter 1280 Board

This chapter covers installing the Presenter 1280 board on an Indy workstation with Indy graphics, and installing the Presenter 1280 XZ board on an Indy workstation with XZ graphics. (You should already have determined your graphics configuration. See “Identifying Your Indy Workstation’s Graphics Board.”) Follow the instructions in the table below.

If your Indy workstation has:	Then:
Indy graphics	Go to “Installing the Presenter 1280 Board on an Indy Graphics Workstation”.
Indy XZ graphics board set	Go to “Installing the Presenter 1280 Board on an Indy Graphics Workstation” on page 37.

Installing the Presenter 1280 Board on an Indy Graphics Workstation

If your Indy workstation has Indy graphics, follow these instructions to install the Presenter 1280 board.

The Presenter 1280 board is a single-width GIO option board that you install on the Indy graphics board in the expansion slot closest to the SIMMs (slot 0).

Follow these steps to install the Presenter 1280 board.

1. If you have not already done so, turn off the power by pressing and releasing the power button on the front of the Indy workstation.
2. Attach the wrist strap. See “Attaching the Wrist Strap” on page 6 if necessary.

3. If there is a faceplate covering the GIO option port closest to the SIMMs, use the Phillips screwdriver to remove the screw and washer. (See Figure 3-1.) (If you removed a GIO option board earlier in this installation, there will be no faceplate to remove.)

Save the faceplate. If you remove the Presenter 1280 board in the future and do not replace it, you should reinstall the faceplate.

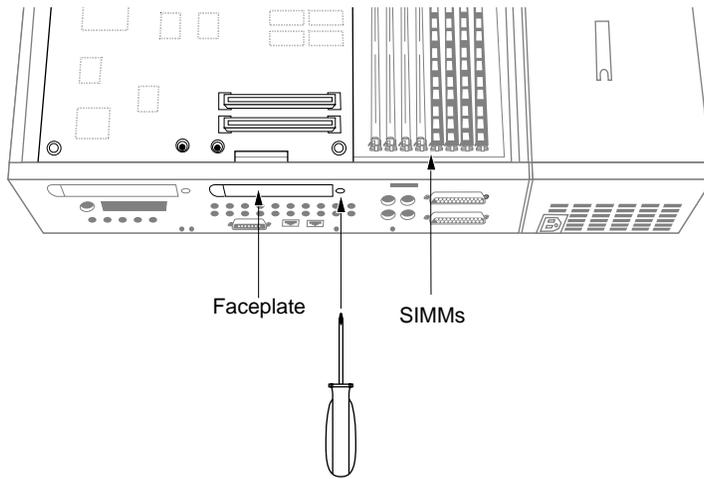


Figure 3-1 Removing the Faceplate From the GIO Option Port

4. Identify the Presenter 1280 board that came with this package. See Figure 3-2.

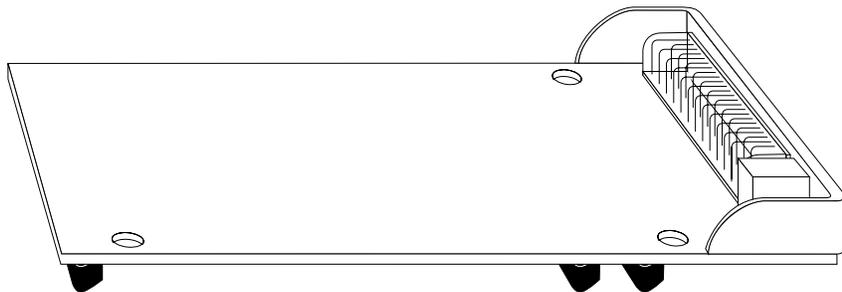


Figure 3-2 Presenter 1280 Board

5. Connect the Presenter 1280 board to the graphics board.
 - Grasp the board by the sides, with the three male connectors on the underside, as shown in Figure 3-3.
 - Lower the board over the graphics board, inserting the board's external I/O connector through the open slot on the rear of the chassis.
 - Loosely place the board on top of the graphics board so that the three male connectors on the underside of the board align with the three female connectors on the graphics board.

Caution: It may be difficult to align the connectors on the boards and to align the screwholes exactly over the standoffs. You may need to flex the back panel of the chassis while pushing the board gently toward the rear. Note also that the pins in the male connectors are delicate. Gently wiggle or reposition the board to fit the pins of the male connectors into their slots in the female connectors. Do not apply any pressure until the pins fit properly.

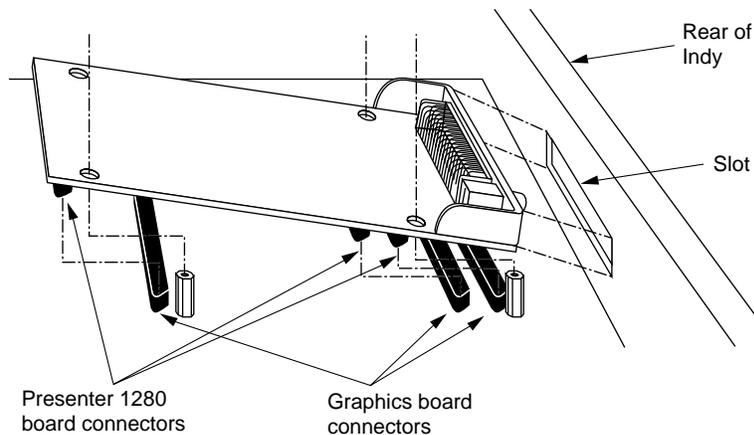


Figure 3-3 Positioning the Presenter 1280 Board Over the Graphics Board

6. Press to seat the Presenter 1280 board's connectors into the graphics board's connectors, as shown in Figure 3-4.
 - Place your fingers or thumbs on the Presenter 1280 board above where the connectors are located.
 - Press down gently but firmly until the three connectors fit snugly. The male and female connectors must be touching along the entire shared surface. If the board is not seated all the way, the screws will not tighten correctly.

Caution: Do not press hard enough to bend the boards.

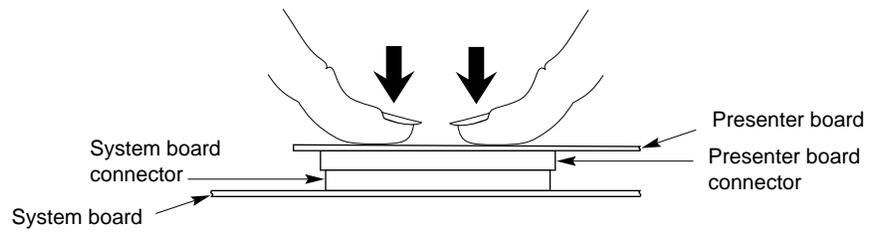


Figure 3-4 Seating the Presenter 1280 Board's Connectors

7. Secure the Presenter 1280 board to the backplane.
 - Remove two of the screws from the plastic bag that comes with this package.
 - Using the Phillips screwdriver, insert and tighten the two screws in the locations shown in Figure 3-5.

If the screw holes do not line up, repeat step 5. Make sure that the connectors on the board are fully seated.

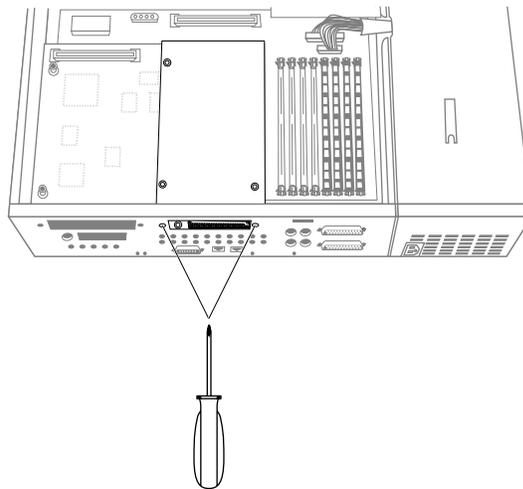


Figure 3-5 Inserting the Screws on the Rear Panel

8. Secure the board to the graphics board as follows.
 - Remove three Phillips screws from the plastic bag that comes with this package.
 - Using the Phillips screwdriver, insert and tighten the three screws in the locations shown in Figure 3-6. As you tighten the screws, alternate among them so that the board is fastened evenly.

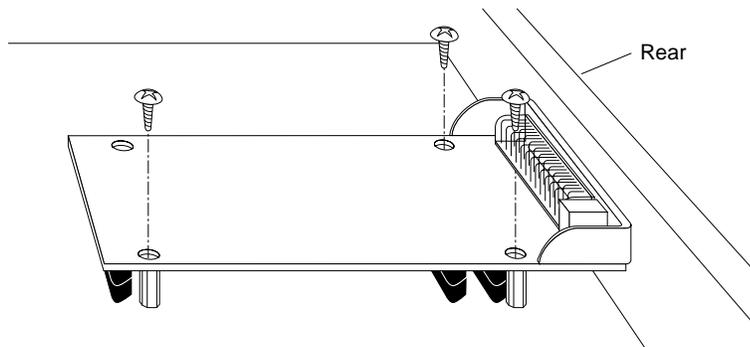


Figure 3-6 Securing the Presenter 1280 Board

9. Attach the small audio label that comes with this package over the ports shown in Figure 3-7 on the rear of the chassis. The icons on the label will help you identify where to connect the audio cable in the next step.

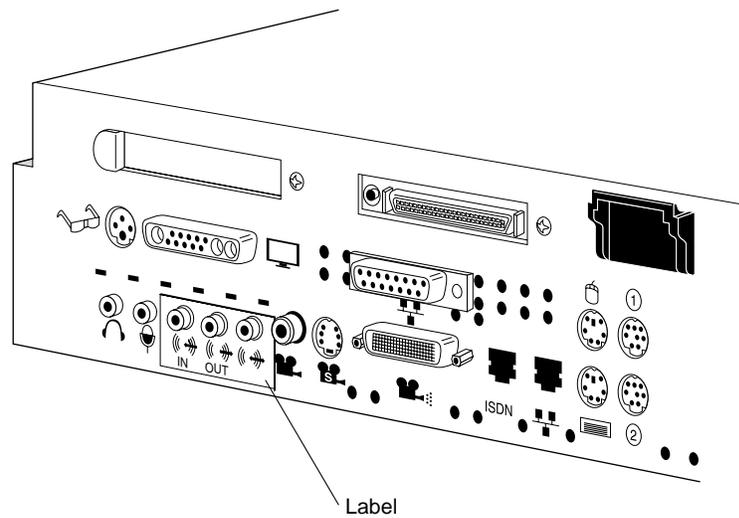


Figure 3-7 Attaching the Label Over the Audio Ports

10. Connect the small, black, audio cable that comes with this package as follows:
 - Connect one end to the Audio Out port on the rear of the Indy chassis. (You can connect either end.)
 - Connect the other end to the board's audio port, as shown in Figure 3-8.

Tip: It's important that you connect the audio cable to the correct port. If it's not correctly installed, the sound on the Presenter 1280 will be distorted.

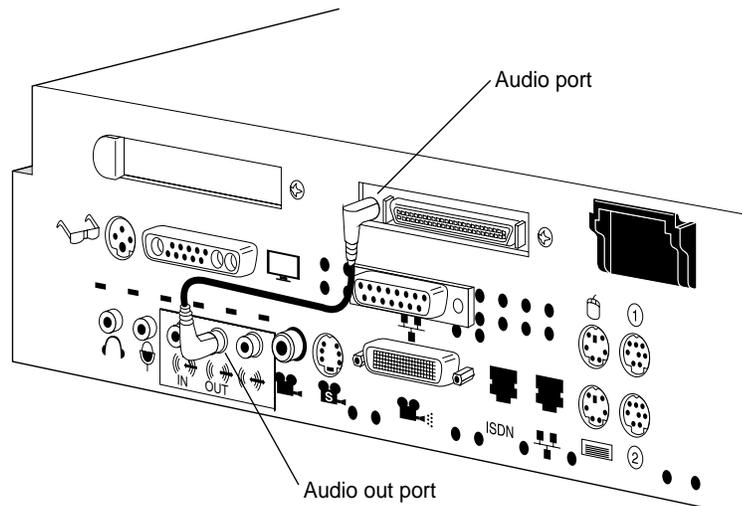


Figure 3-8 Connecting the Audio Cable

You are finished installing the Presenter 1280 board. Go to “Replacing the Top Cover and Connecting the Cables” on page 53.

Installing the Presenter 1280 XZ Board on an Indy XZ Graphics Workstation

If your Indy workstation has the XZ graphics board set, follow these instructions to install the Presenter 1280 XZ board.

Note: The Indy Presenter XZ adapter board for the Indy Presenter flat panel monitor (1024 x 768 resolution) does not support 1280 pixel resolution. To use the Presenter 1280 on an Indy with XZ graphics, you must install the Presenter XZ adapter board.

1. Using the Phillips screwdriver, remove the screw from the faceplate covering the GIO option port, as shown in Figure 3-9.

Save the faceplate. If you remove the Presenter 1280 XZ board in the future and do not replace it, you should reinstall the faceplate.

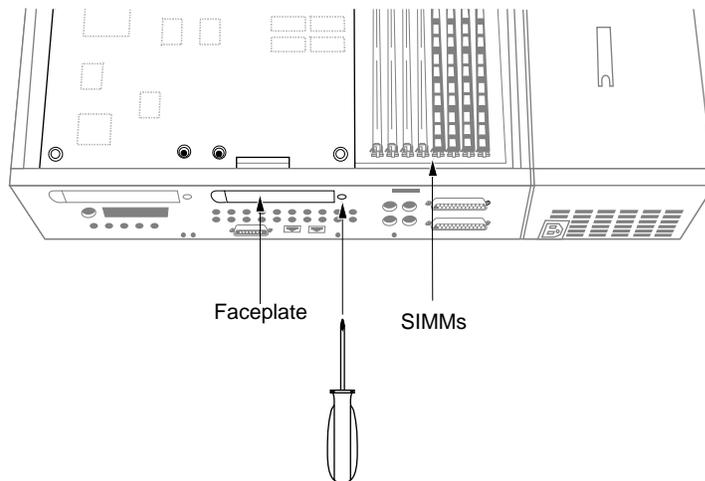


Figure 3-9 Removing the Faceplate From the GIO Option Port

2. Position the metal bracket over the I/O opening.
 - Locate the metal bracket with a small, audio cable attached to it, included in this package.
 - Look for two dimples on the bracket. These will help you align the bracket over the GIO option slot.
 - On the inside of the chassis, position the bracket against the open slot, aligning the dimples, and pulling one end of the cable through the open slot. (See Figure 3-10.)
 - Make sure that the audio cable is *under* the metal extrusion on the bracket.

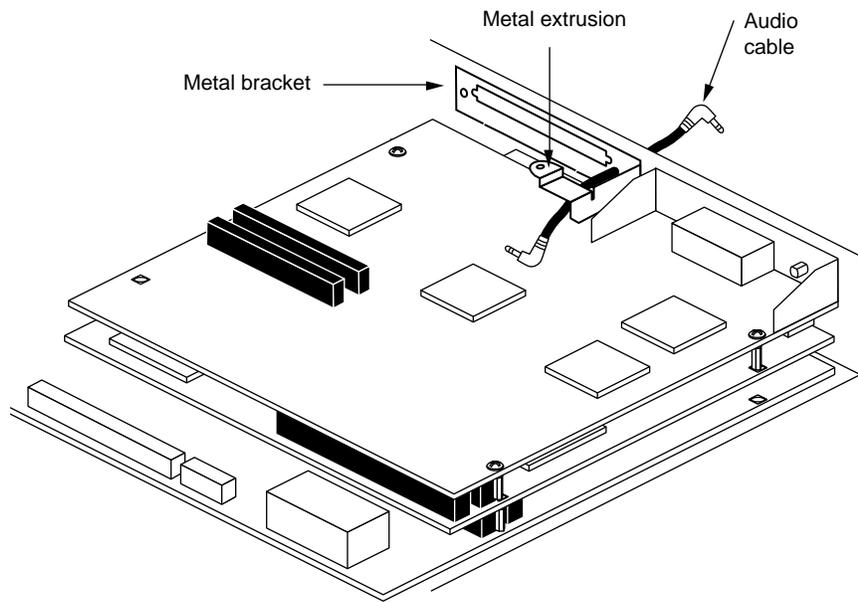


Figure 3-10 Installing the Metal Bracket

- Secure the metal bracket to the chassis.

Caution: Choosing the correct screws for the next step may be confusing. In the plastic bag provided with the kit you'll find two types of Phillips screw— long, thin ones with small diameters, and short ones with larger diameters. Use the short ones for the next step.

- Remove two of the short Phillips screws from the plastic bag.
- Insert and tighten the two Phillips screws on the exterior of the bracket to hold it to the chassis. (See Figure 3-11.)

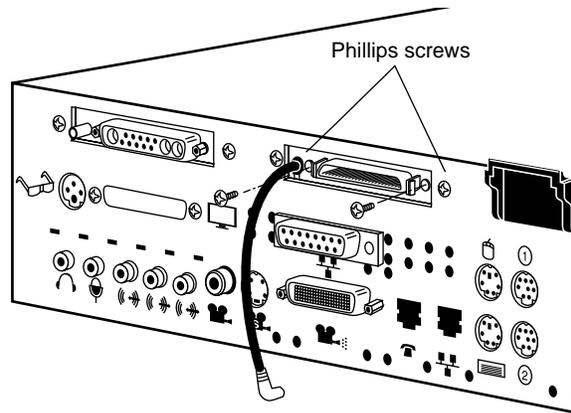


Figure 3-11 Inserting the Screws on the Exterior of the Bracket

- Identify the Presenter 1280 XZ board. (See Figure 3-12.)

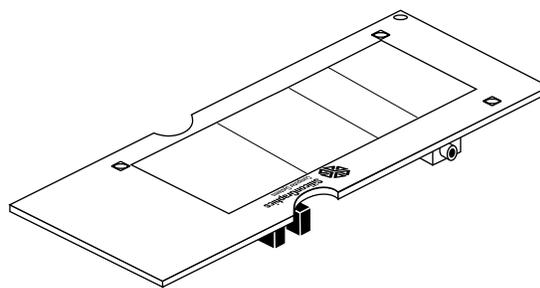


Figure 3-12 The Presenter 1280 XZ Board

5. Position the Presenter 1280 XZ board over the graphics board.
 - Grasp the Presenter 1280 board by the sides, with the two male connectors on the underside, as shown in Figure 3-13.
 - Push the black audio cable aside so that it doesn't get caught under the board.
 - Loosely place the board on top of the graphics board so that the two male connectors on the underside align with the two female connectors on the graphics board, as shown in Figure 3-13.

You may have to rock the board from side to side horizontally to align the connectors.

Caution: The pins in the male connectors are delicate. Gently wiggle or reposition the board to fit the pins of the male connectors into their slots in the female connectors. Do not apply any pressure until the pins fit properly.

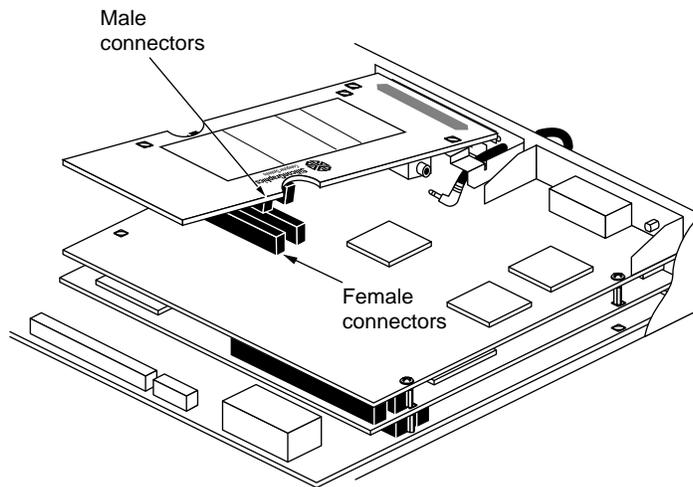


Figure 3-13 Positioning the Presenter 1280 XZ Board

6. Press to seat the Presenter 1280 board's connectors into the XZ graphics board's connectors, as shown in Figure 3-14.
 - Place your fingers or thumbs on the board above where the connectors are located.
 - Press down gently but firmly until the three connectors fit snugly. The male and female connectors must be touching along the entire shared surface. If the board is not seated all the way, the screws will not tighten correctly.

Do not press hard enough to bend the boards.

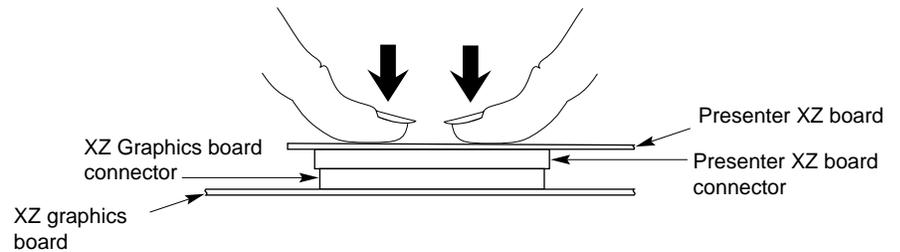


Figure 3-14 Seating the Presenter 1280 XZ Board's Connectors

7. Secure the Presenter 1280 XZ board to the XZ graphics board, as shown in Figure 3-15.
 - Remove one short, large-diameter, Phillips screw from the plastic bag.
 - Insert and tighten the screw in the location shown in Figure 3-15.

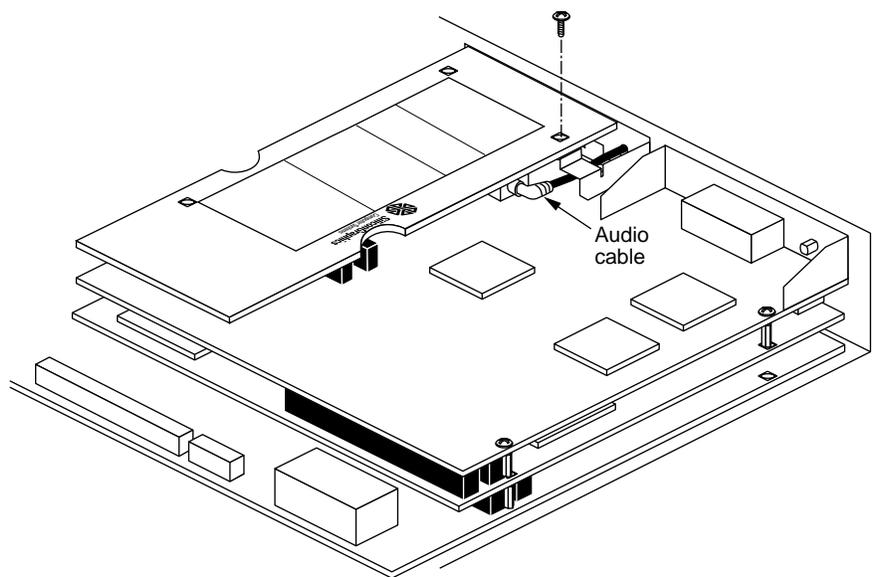


Figure 3-15 Inserting the Screw on the Presenter 1280 XZ Board

9. Connect the external end of the audio cable to the audio out port on the rear of the Indy chassis, as shown in Figure 3-17.

Tip: It's important that you connect the audio cable to the correct port. If it's installed in the wrong port, the sound on the Presenter 1280 monitor will be distorted. The correct port is the one labeled "OUT."

10. Secure the Presenter 1280 XZ board to the backplane.
 - Look in the plastic bag that comes with this package for two of the long, small-diameter, Phillips screws.
 - Using the Phillips screwdriver, insert and tighten one screw on either side of the connector, as shown in Figure 3-17.

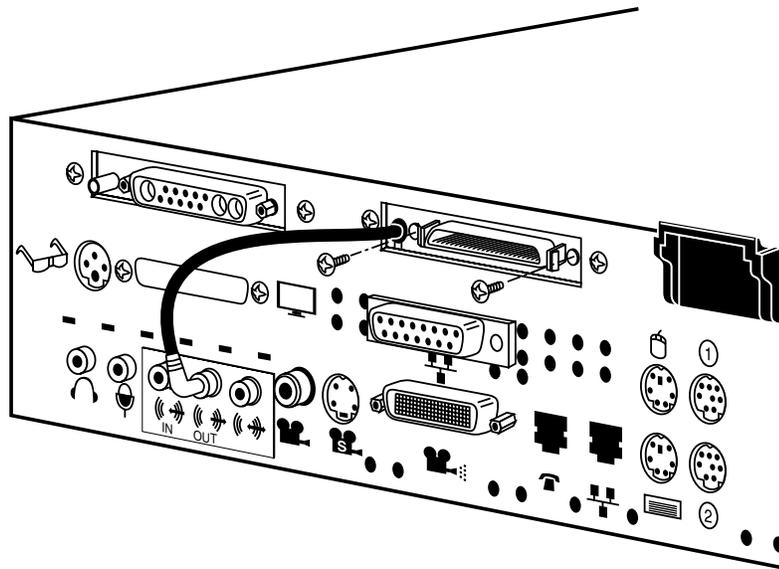


Figure 3-17 Attaching the External Screws

You are finished installing the Presenter 1280 XZ board and are ready to replace the cover and connect the exterior cables.

Replacing the Top Cover and Connecting the Cables

To replace the cover of your Indy workstation, follow these steps:

1. Facing the front of the system, lower the cover a few inches from its fully closed position, as shown in Figure 3-18.
2. Tilt the cover and insert the tab through the slot in the rear of the chassis.
3. Lower the cover and slide it toward the back of the chassis until it snaps into place.

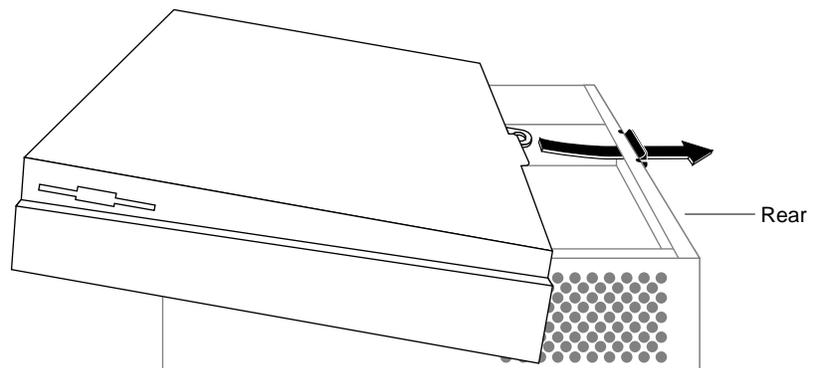


Figure 3-18 Replacing the Top Cover on the Indy Workstation

4. Reconnect the external cables you removed earlier. Be sure to connect the power cable. If you cannot remember where to reconnect the cables, refer to the *Indy Workstation Owner's Guide*.

You are now ready to install the software.

Installing the Software

Read the software release notes on the CD.

After installing the software, go to the next section for information on connecting the Presenter 1280 cables.

The Presenter 1280 Interface Cable

After you have set up the Presenter 1280 monitor as described in its manual, connect the Presenter 1280 interface cable as described below.

You do not need to turn off the workstation before connecting the cable.

Caution: The connectors have an elongated D shape. Make sure the D shapes match each other. If the cable is not installed correctly, the image on Presenter 1280 will be distorted.

1. If you received an interface cable with a large connector at one end and a small connector at the other end, connect the smaller end to the base of Presenter 1280. Connect the larger end to Presenter 1280. See Figure 3-19 (Indy graphics) and Figure 3-20 (Indy XZ graphics).
2. If you received an interface cable with identical connectors at each end, connect either end to the base of Presenter 1280. Connect the other end to the Presenter 1280 connector on your workstation. See Figure 3-19 (Indy graphics) and Figure 3-20 (Indy XZ graphics).

Tip: You hear a click as the cable connects. Tug lightly on the cable. It should not disconnect from Presenter 1280.

3. Connect the power cable to the Presenter 1280 monitor and to a working electrical outlet.

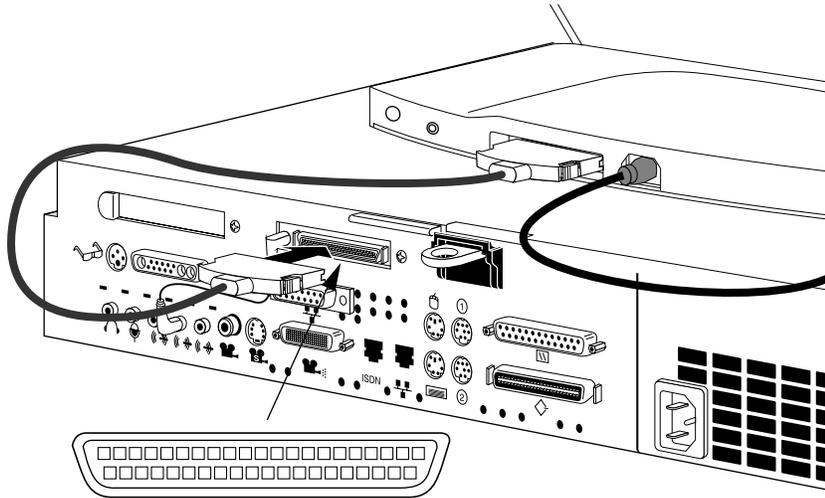


Figure 3-19 Connecting the Presenter 1280 Interface Cable: Indy Graphics

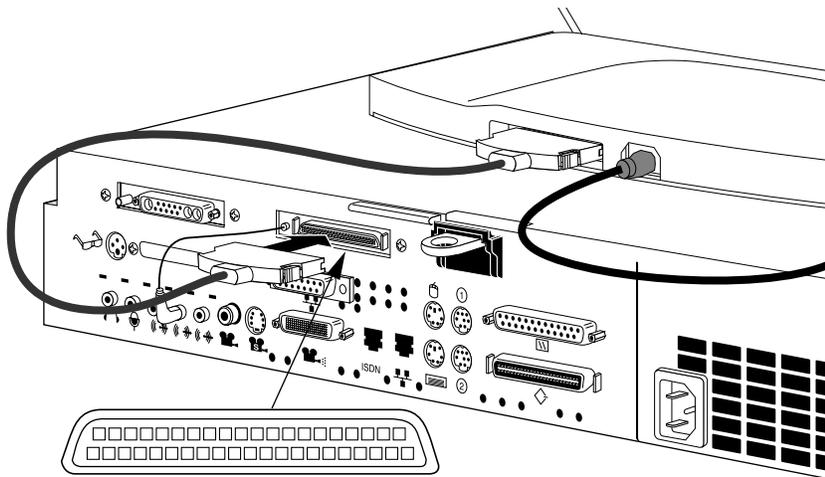


Figure 3-20 Connecting the Presenter 1280 Interface Cable: Indy XZ Graphics

You are finished installing the hardware and are ready to use the Presenter 1280.

Where to Go Next

Use the Owner's Guide that comes with the Presenter 1280 for instructions on setting up and using it as a monitor or with the customized Dukane overhead projector.

Troubleshooting and Regulatory Information

This chapter contains troubleshooting information for the Presenter 1280 board. If you have problems with the Presenter 1280 flat panel monitor, see the manual that comes with Presenter 1280.

If, after installing the hardware, software, and connecting the interface and power cables, there is no image on the Presenter 1280, follow the steps below.

1. If the LED on Presenter 1280 is flashing red, check that the interface cable between Presenter 1280 and the Indy workstation is connected firmly.
2. If the LED on Presenter 1280 is solid red, check that its power cable is connected.
3. Reinitialize Presenter 1280 by pressing and releasing the Sleep button on the base at the rear.
4. Look in the manual that comes with Presenter 1280 for more troubleshooting and diagnostic test information.
5. Turn off Indy by pressing and releasing the power switch on the front of the chassis and remove the top cover.
6. Go through all the installation steps in this manual again to make sure you installed all the hardware correctly.
 - If you removed the graphics board or boards to replace the PROM, check that they have been reinstalled correctly and that the connectors are fitting snugly.
 - Check that the Presenter 1280 board is installed correctly and that the connectors are fitting snugly.

If you are instructed by your service provider to replace the Presenter 1280 board, follow these steps to remove the board from the Indy workstation.

- If your Indy has the Presenter 1280 board, go to “Removing the Presenter 1280 Board From an Indy Graphics Workstation” on page 58.
- If your Indy has the Presenter 1280 XZ board, go to “Removing the Presenter 1280 XZ Board” on page 60.

Removing the Presenter 1280 Board From an Indy Graphics Workstation

1. Turn off the Indy workstation.
2. Remove the small, black, audio cable from the rear of the Indy workstation. (See Figure 4-1.)

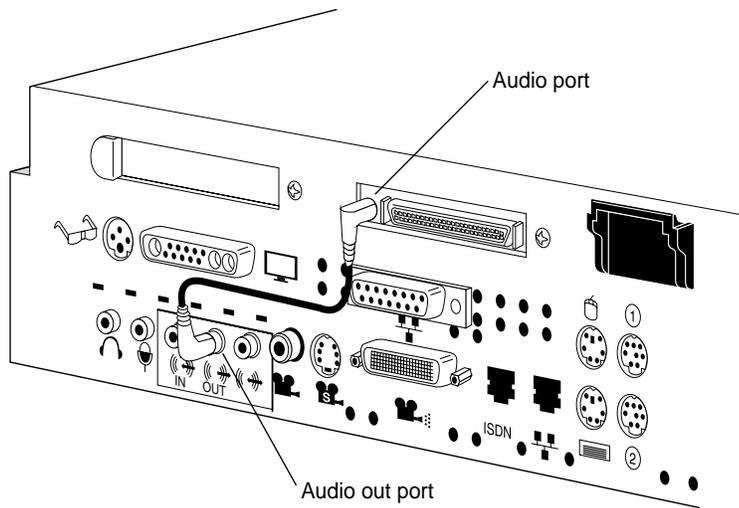


Figure 4-1 Removing the Audio Cable

- Using a Phillips screwdriver, remove the two screws from the board's external connector, as shown in Figure 4-2.

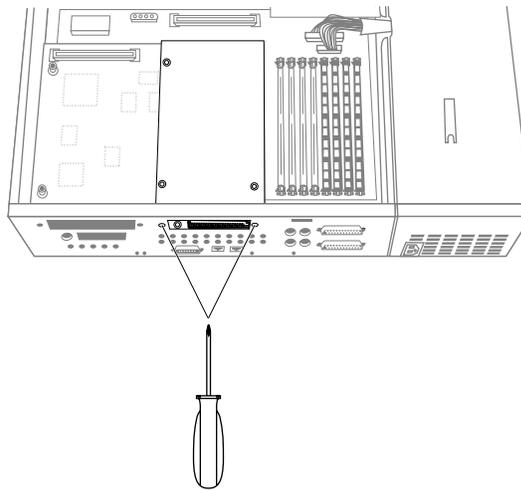


Figure 4-2 Removing the External Screws

- Using a Phillips screwdriver, remove the three Phillips screws that connect the board to the graphics board, as shown in Figure 4-3.

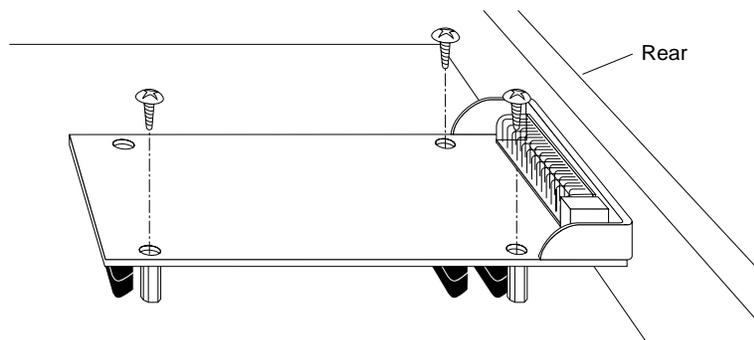


Figure 4-3 Removing the Screws from the Presenter 1280 Board

5. Disconnect the Presenter 1280 board from the graphics board by grasping it on both sides firmly and pulling it up, as shown in Figure 4-4.

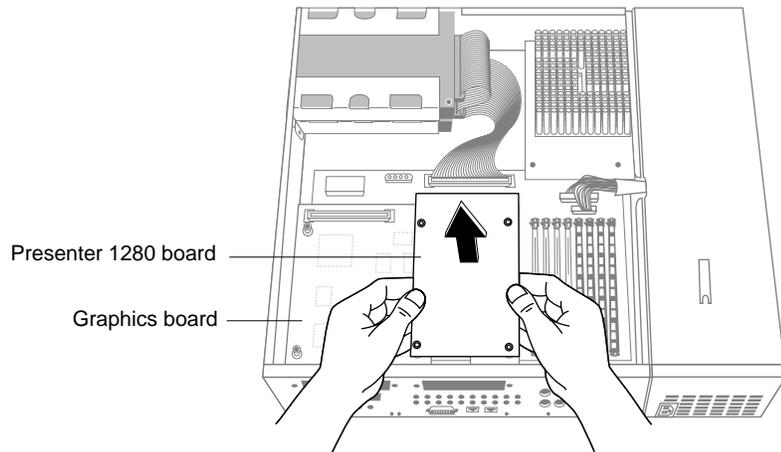


Figure 4-4 Removing the Presenter 1280 Board

6. Install the replacement board following the instructions in “Installing the Presenter 1280 Board on an Indy Graphics Workstation” on page 37.

Removing the Presenter 1280 XZ Board

Follow these steps to remove the Presenter 1280 XZ board.

1. Turn off the Indy workstation.

2. Disconnect the small, black, audio cable from the audio out port on the rear of the Indy chassis, as shown in Figure 4-5.
3. Using a Phillips screwdriver, remove the two external screws from the connector, as shown in Figure 4-5.

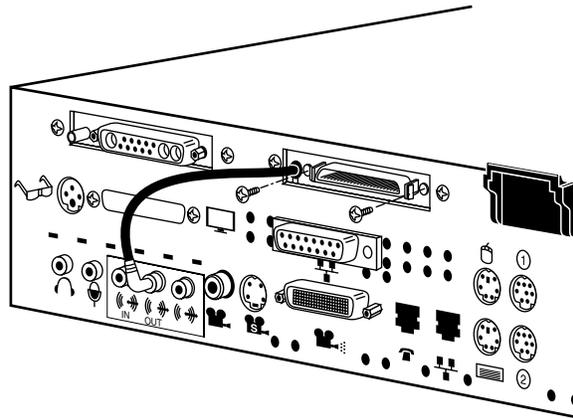


Figure 4-5 Removing the Audio Cable and the External Screws

4. Disconnect the internal end of the audio cable from the board. (See Figure 4-6.)
5. Using a Phillips screwdriver, remove the screw that secures the board to the XZ graphics board, as shown in Figure 4-6.

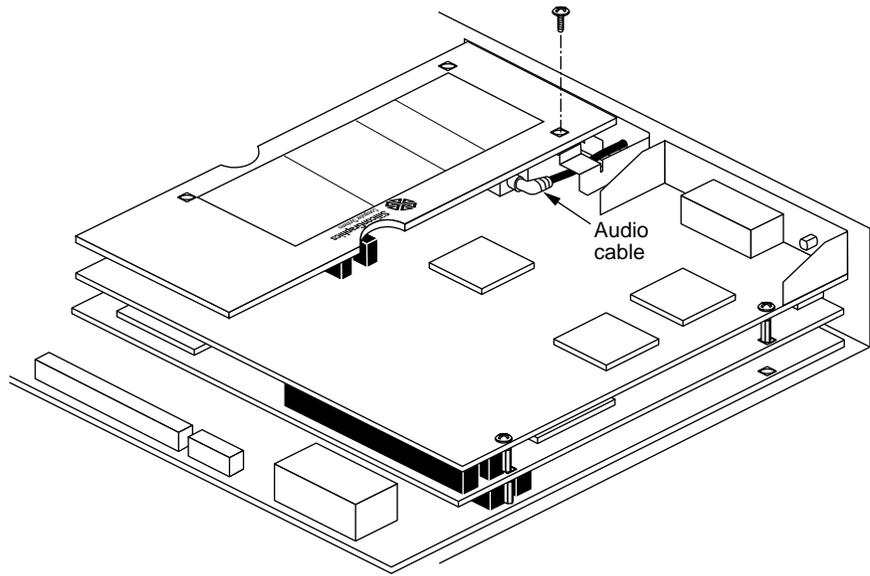


Figure 4-6 Removing the Screw From the Presenter 1280 XZ Board

6. Disconnect the Presenter 1280 XZ board from the XZ graphics board by grasping the board firmly and pulling it up, as shown in Figure 4-7.

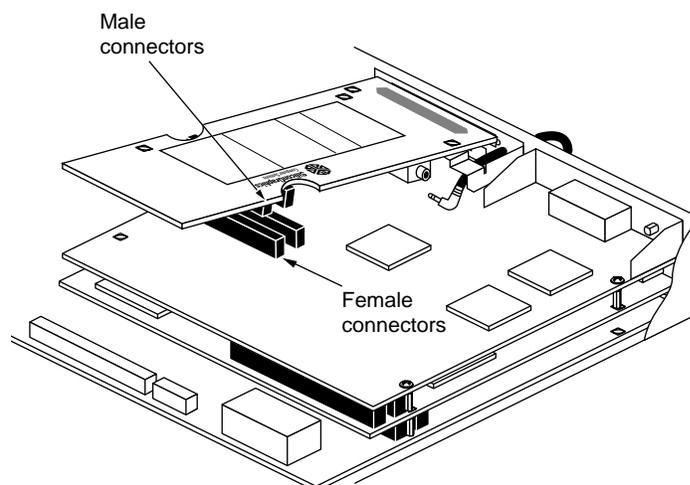


Figure 4-7 Removing the Presenter 1280 XZ 1280 Board

7. Install the replacement board, following the instructions in "Installing the Presenter 1280 Board on an Indy Graphics Workstation" on page 37.

Regulatory Information

For regulatory information on the Presenter 1280 flat panel monitor, see the manual that comes with it.

Product Support

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