

# Cosmo Compress™ for Indigo® Installation Guide

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# Introduction

Congratulations on purchasing the Cosmo Compress™ board for the IRIS Indigo® workstation. The Cosmo Compress board is an optional video compression product that works in conjunction with the Galileo Video™ board.

This guide shows you how to install the Cosmo Compress board into your IRIS Indigo workstation.

Read this guide once all the way through before you start to work. Then you'll be familiar with the Indigo 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.





## Installing the Cosmo Compress Board

This guide tells you how to install the Cosmo Compress board into slot 0 of your IRIS Indigo R4000 workstation. The Cosmo Compress board works in conjunction with the Galileo Video board, which should already be installed in your system. Note that the Cosmo Compress board and the Galileo Video board are not supported on an IRIS Indigo R3000 workstation.

To install the Cosmo Compress board, you must complete these steps:

- Shut down the system
- Remove the covers and CPU board
- Remove option slot 0 filler
- Install the Cosmo Compress board on the CPU board
- Replace the CPU board and covers
- Restart the system
- Install the software from the CD

### **The Cosmo Compress Package**

Your Cosmo Compress package should contain all of the items listed below. If anything is missing, contact your sales representative.

- Cosmo Compress board, inside an antistatic bag
- SGI Digital Video Interface cable
- Phillips screwdriver
- antistatic wrist strap
- CD-ROM disk containing the software
- this manual (*Cosmo Compress for IRIS Indigo Installation Guide*)

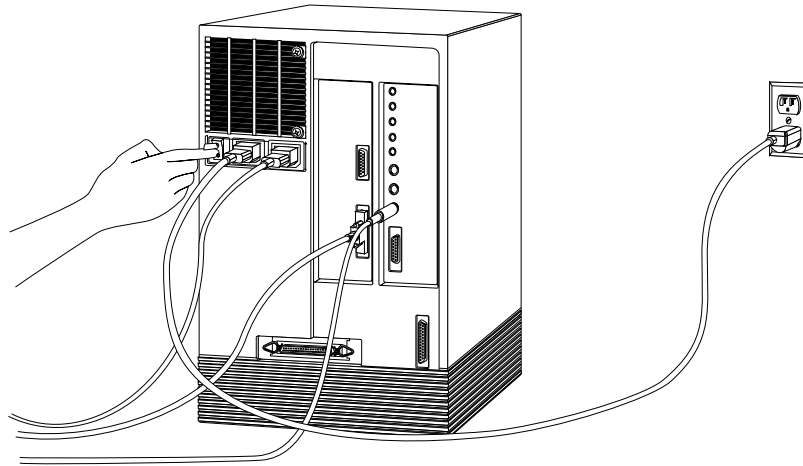
## Shutting Down the System

To shut down your Indigo, follow these steps:

1. Shut down and turn off the Indigo:
  - Choose “System Shutdown” from the System Toolchest.
  - When you are informed that it is safe to do so, turn off the power switch on the back of the Indigo chassis, as shown in Figure 1.
2. Disconnect all cables from the back of the Indigo. You may wish to label the cables so they can be reconnected properly.



**Warning:** Make sure to disconnect the black power cable.  
*Electric shock can be hazardous!*

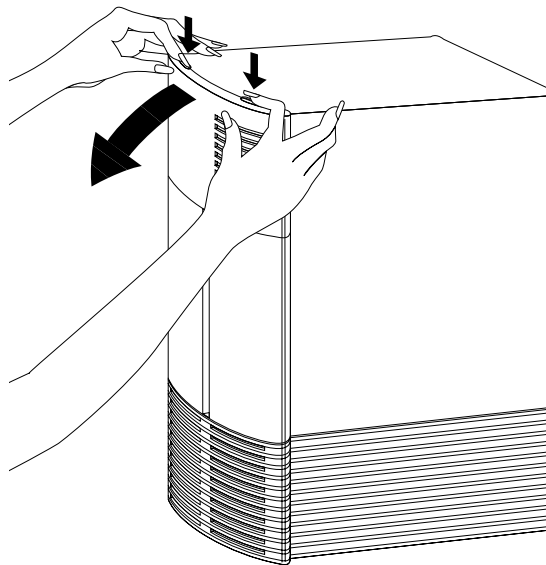


**Figure 1** Turning Off the Power

## Removing the Covers and CPU Board

Once you have shut down the system and disconnected all cables, follow these steps:

1. Remove the Indigo's plastic front cover. (See Figure 2).
  - Face the front of the Indigo chassis. Two tabs on top of the front cover hold it in place.
  - Press down on the tabs and pull the panel away from the chassis, as shown in Figure 2.



**Figure 2** Removing the Plastic Cover of the Indigo Chassis

2. Ground yourself to a metal part on the Indigo.

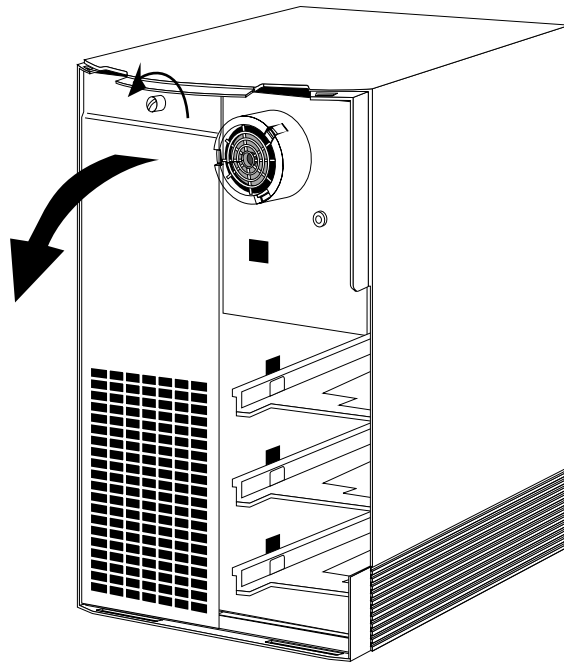
Put the wrist strap over your wrist, making sure it's tight against your arm. Then attach its alligator clip to a metal part of the Indigo. The notch above the top drive slot works well.

**Caution:** The CPU board is extremely sensitive to static electricity; you must wear the wrist strap while touching it. A properly used wrist strap prevents the damaging flow of static electricity.

3. Open the front metal panel (See Figure 3).

A thumbscrew holds the metal panel in place.

- Loosen the panel by unscrewing the thumbscrew, as shown in Figure 3.
- Tilt the panel down until it rests on the flat surface.



**Figure 3** Opening the Front Metal Panel

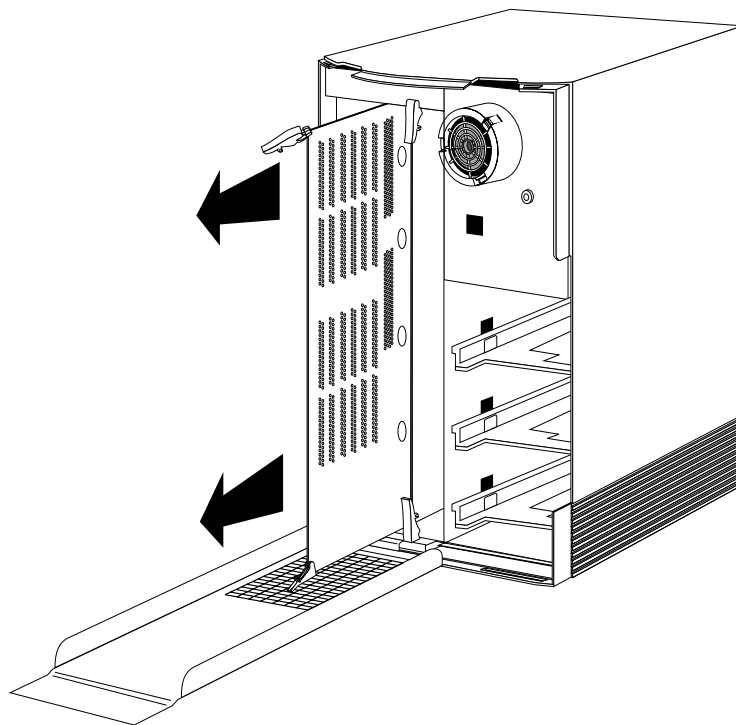
4. Remove the CPU board (See Figure 4).

In an unaltered Indigo chassis, you see two boards; the left board is the CPU board and is labeled **CPU**.

Two vertical levers hold the board in place.

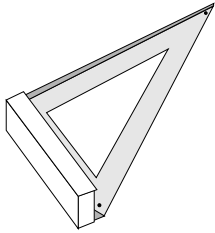
**Caution:** Do not remove your wrist strap.

- Pull the levers outward and toward you to release the board. The board slides out of the chassis as you continue pulling the levers, as shown in Figure 4.



**Figure 4** Removing the CPU Board From the Indigo Chassis

- Slide the board out of the slot and set it down on a flat, antistatic surface so the side with the chips faces up. It is important that the surface be flat.



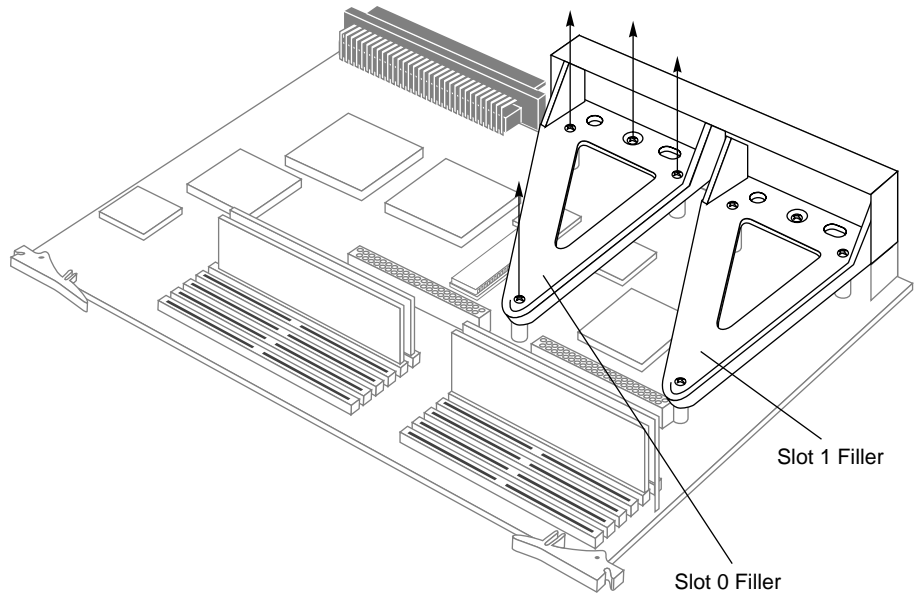
**Figure 5**  
Option Slot Filler

5. With the Phillips screwdriver, remove the option slot 0 filler. (Figure 5 illustrates an option slot filler.)

**Note:** You must install the Cosmo Compress board in slot 0.

- Between the I/O panel (where the cable connections are) and the board's memory chips are two triangular, bracket-like structures referred to as option slot fillers, as shown in Figure 6.
- Remove the four screws from the option slot 0 filler that hold the filler to the CPU board, as shown in Figure 6.
- Remove and set aside the option slot filler.

**Note:** Store the option slot filler and screws. You will need them if you remove and do not replace the Cosmo Compress board.



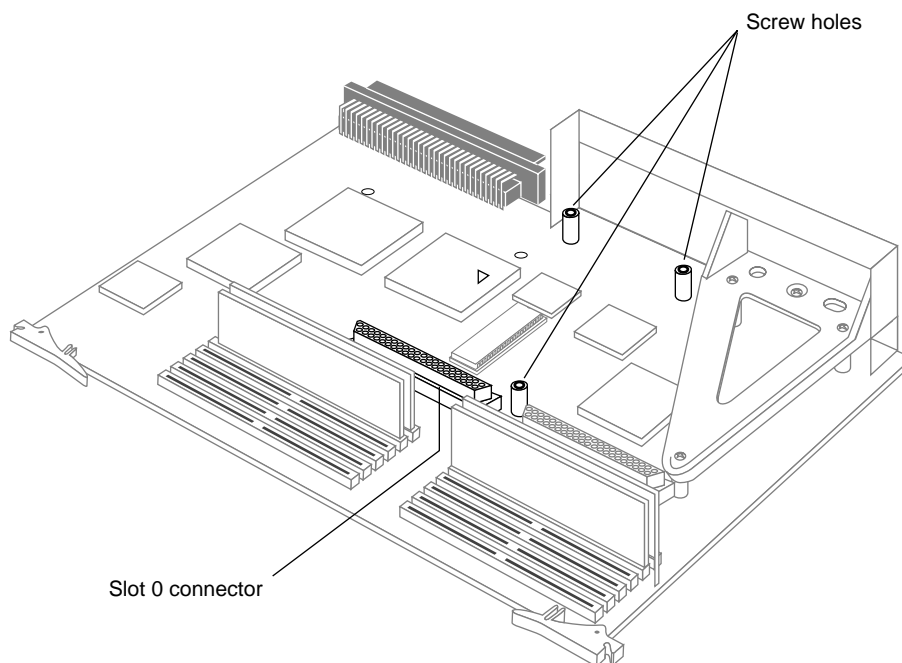
**Figure 6** CPU Board with Option Slot Fillers

You are now ready to install the Cosmo Compress board.

## Installing the Board

To install the Cosmo Compress board, follow the steps below.

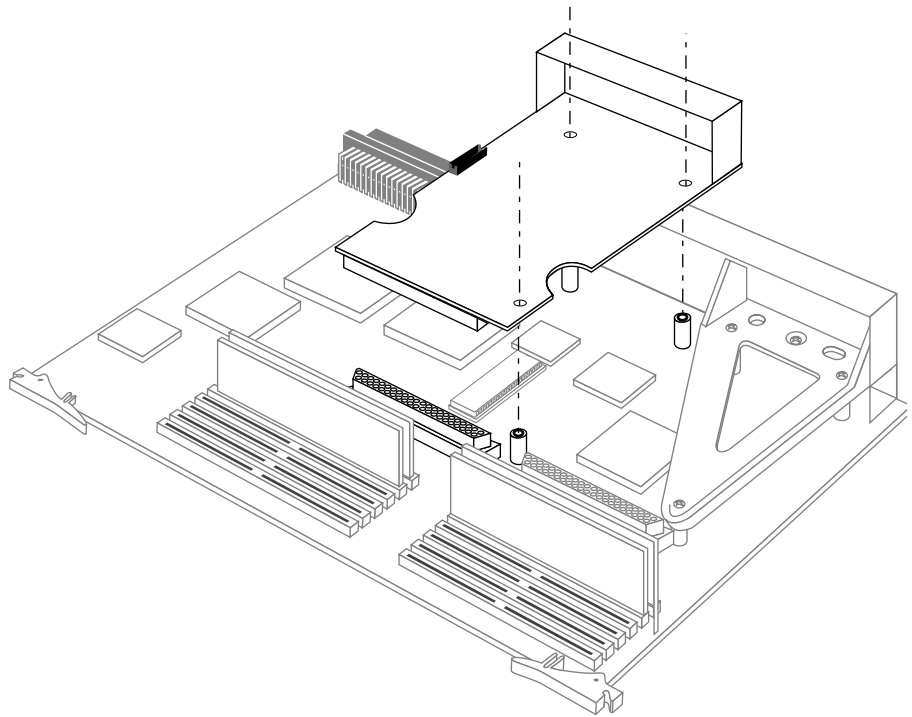
1. Orient yourself to the CPU board, as shown in Figure 7, so that the I/O connector panel faces away from you and the levers face toward you.
2. Locate the 96-pin, female option slot connector labeled "Slot 0 Connector" in Figure 7.



**Figure 7** CPU Board With Option Slot 0 Filler Removed

**Caution:** The components on the Cosmo Compress board are sensitive to static electricity. Handle the board carefully, and use the wrist strap to avoid any flow of static electricity.

3. Position the Cosmo Compress board (See Figure 8).
  - Remove the Cosmo Compress board from its antistatic bag. Hold the board so that its I/O panel faces away from you and the 96-pin male connector is on the underside.
  - Place the Cosmo Compress board loosely on top of the CPU board so that the male connector on the bottom matches the female slot connector on the CPU board, as shown in Figure 8.
  - Check that the Cosmo Compress board's screw holes shown in Figure 8 are sitting directly above a matching hole in the CPU board.



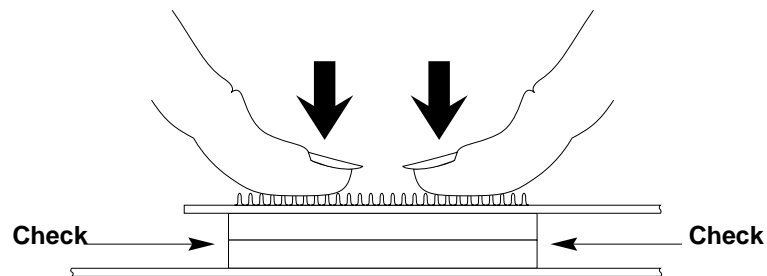
**Figure 8** Positioning the Cosmo Compress Board



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

4. Press to seat the Cosmo Compress board's connector into the CPU board's connector (Figure 9).
  - Place your fingers or thumbs on the Cosmo Compress board, above where the connector is located, as shown in Figure 9.
  - Press down, gently but firmly, until the two connectors fit snugly.

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

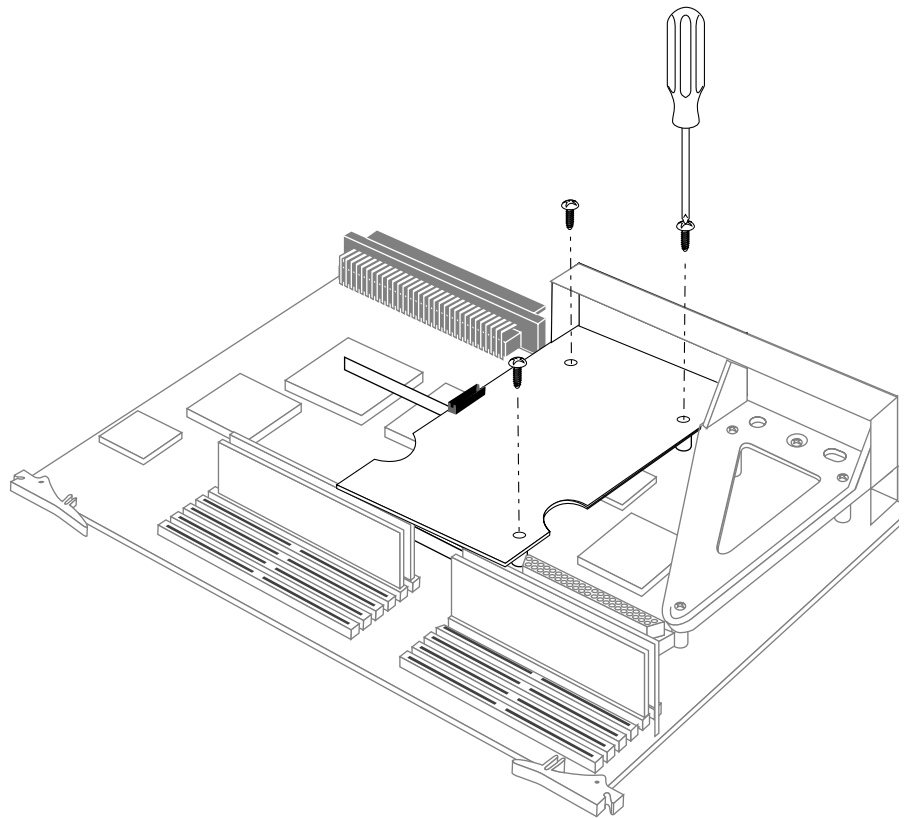


**Figure 9** Pressing the Cosmo Compress Board Into the Slot Connector on the CPU Board

5. Verify that the Cosmo Compress board is properly seated.
  - Look underneath the Cosmo Compress board to see the 96-pin connectors. Due to the other components on the CPU board, it is difficult to see the connectors. The male and female connectors must be touching along the entire shared surface, as shown in Figure 9. Check each end of the connection.

6. Use three of the screws removed previously to secure the Cosmo Compress board to the CPU board in the locations indicated in Figure 8.

When tightening the screws, alternate among the screws so that the CPU and Cosmo Compress boards are brought together gradually and evenly.



**Figure 10** Securing the Cosmo Board

You are finished installing the Cosmo Compress board and are ready to replace the CPU board and the covers.

## Replacing the CPU Board and Covers

To replace the CPU board and all the covers, follow these steps:

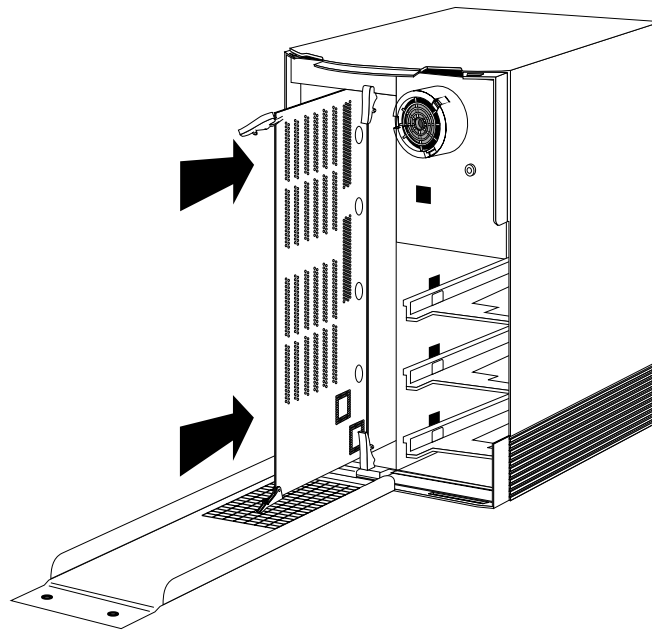
1. Position the CPU board for installation (Figure 11)

- Face the front of the Indigo chassis.

**Note:** If you moved your wrist strap's alligator clip, reattach it to a metal part of the Indigo's chassis.

- Place the board in the edge of the Indigo chassis so the lever labeled **CPU** lines up with **CPU** on the Indigo chassis. The Cosmo Compress board should be to your left.

The guides hold the board in the top and bottom of the chassis.

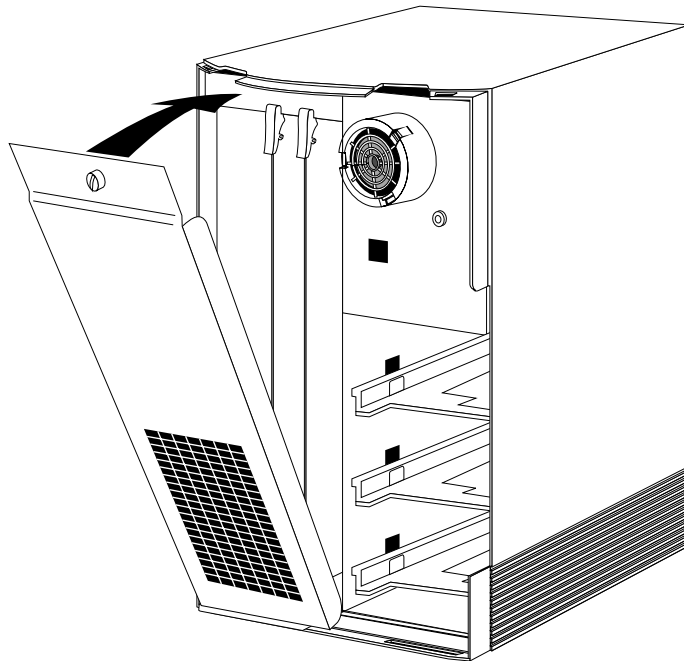


**Figure 11** Installing the CPU Board

2. Slide the board all the way into the Indigo chassis (See Figure 11).

- Make sure the notch in the top lever goes under the top edge of the chassis.

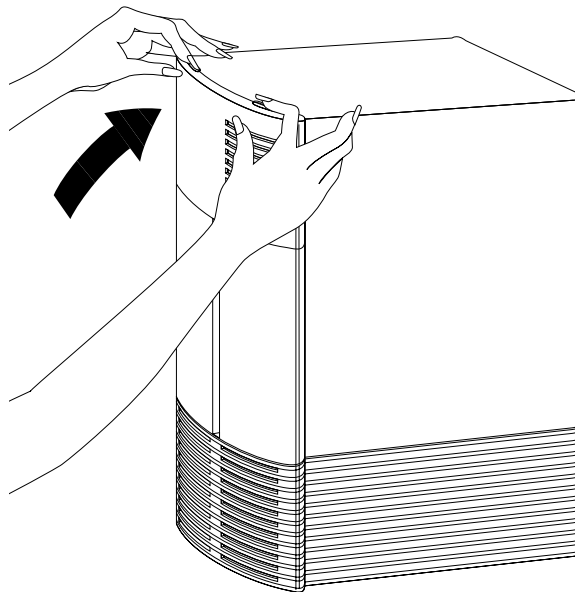
3. Return the levers to their original positions. They should snap into place.
4. Remove the wrist strap from the Indigo (and, if you want, from your wrist).
5. Close the front metal panel (Figure 12).
  - Tilt the metal panel back up to the Indigo chassis, as shown in Figure 12.



**Figure 12** Tilting the Metal Panel Up to the Indigo

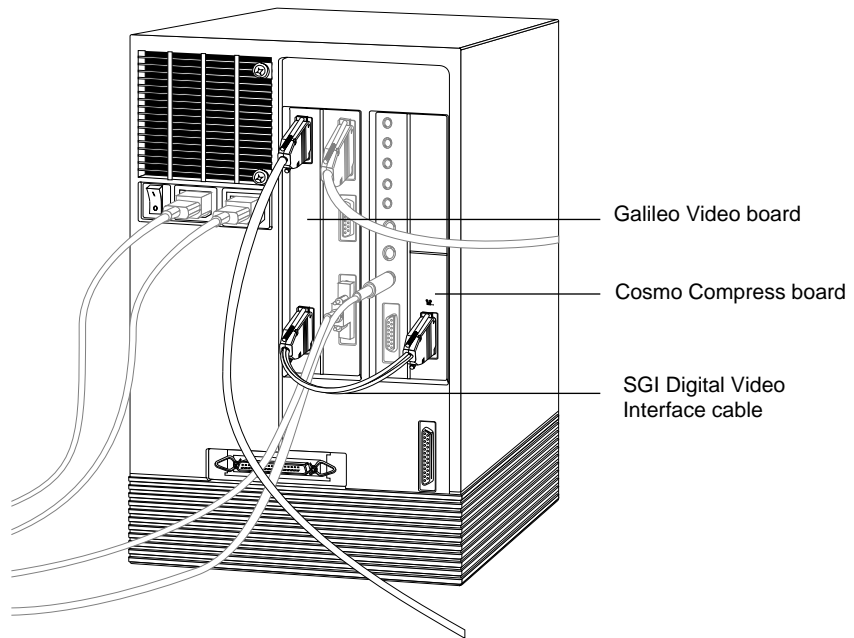
- Screw the thumbscrew back in to secure the panel. The panel should be snug against the chassis.

6. Replace the front plastic cover (See Figure 13).
  - Place the bottom of the front cover in the guides on the bottom of the Indigo chassis.
  - Tilt the panel up to the Indigo chassis, as shown in Figure 13.



**Figure 13** Replacing the Front Plastic Cover

7. Reconnect all the original cables on the back of the system.
8. Connect the SGI Digital Video Interface cable as follows:
  - Connect one end of the SGI Digital Video Interface cable to the connector on the rear of the Cosmo Compress board you just installed, as shown in Figure 14. You can connect either end of the cable.
  - Connect the other end of the SGI Digital Video Interface cable to the connector on the rear of the Galileo Video board.



**Figure 14** Connecting the SGI Digital Video Interface Cable

You are finished installing the Cosmo Compress board and are ready to install the software.

## **Installing the Software**

The Cosmo Compress Board requires IRIX 5.2 or later. Follow the instructions in the software release notes on the CD.

## **Product Support**

When you purchased your system you may have purchased a support program from either Silicon Graphics, Inc., or a vendor who supplies software. Whenever you encounter any problems that you cannot solve using the methods in this chapter, contact the organization from which you purchased the support program.

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