SCSI Cable Option Kit Installation Guide for Intel<sup>®</sup> ISP1100 Internet Server



The most current version of this document and other documents relating to the Intel<sup>®</sup> ISP1100 Internet Server can be found at **http://www.intel.com/isp**.

Copyright © 2000 Intel Corporation. All rights reserved. No part of this document may be copied, or reproduced in any form, or by any means without prior written consent of Intel.

Intel Corporation (Intel) makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Intel assumes no responsibility for any errors that may appear in this document. Intel makes no commitment to update nor to keep current the information contained in this document.

† Third-party brands and trademarks are the property of their respective owners.

February 29, 2000 Revision 1.0 Document Number: A16589-001

#### Introduction

This document explains how to install the SCSI cable kit, which is used with thirdparty SCSI adapters in the Intel ISP1100 Internet Server. It assumes the system is configured for IDE and contains either a 3.5" floppy drive or a slimline CD-ROM/ floppy drive assembly. Please ignore steps that do not apply to your system.

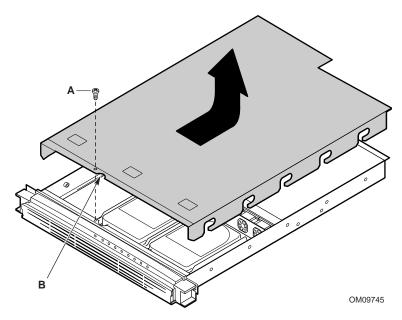
Note: You cannot mix IDE and SCSI hard drives inside the server. The hard drives must be the same type.

Before you begin:

- 1. Make sure you have one (1) pre-folded SCSI cable.
- 2. Make sure you have the following tools:
  - A phillips (cross-head) screwdriver, number 2 bit
  - An antistatic wrist strap and conductive foam pad (recommended)
- 3. Read the safety and warnings information in the *Intel® ISP1100 Internet Server Quick Start Guide*.
- 4. Make sure the server is turned off and is not plugged in to an electrical outlet.

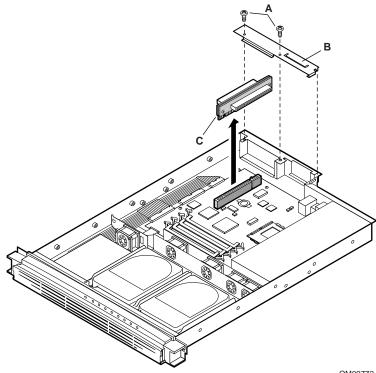
## **Open the Server Cover**

- 1. Remove the screw (A) from the cover.
- 2. Slide the cover back and out from under the edge of the server's front panel.
- 3. When the cover is free of the front panel, use the notch (B) in the cover to lift the cover off the chassis.



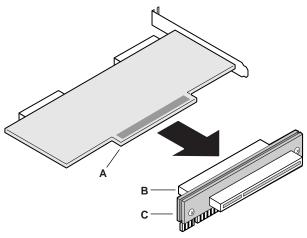
## Remove the Riser Card and Add-in Card(s)

- Remove the two screws (A) from the retention bracket (B), and remove 1. the retention bracket.
- 2. Grasp the riser card at each end (C) and gently rock and lift until the riser releases from the server board connector.



## Install the SCSI Card

1. Plug the SCSI card (A) in the left slot (B) of the riser card (C).



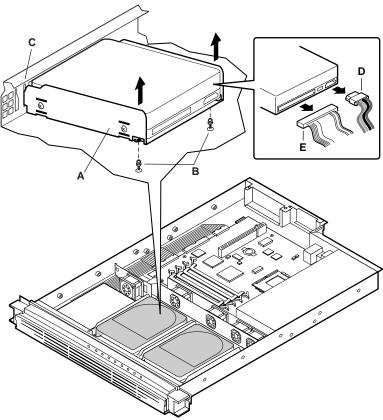
OMO9778

2. Set the riser assembly aside for now.

## Remove the IDE Hard Drive(s) from the Server

For each hard drive:

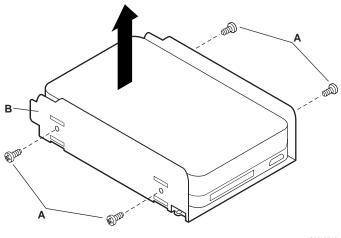
- 1. Lift the back of the drive until the drive mounting bracket (A) releases from the two snaptop standoffs (B).
- 2. Slide the drive back until the mounting bracket tabs are free of the slots (C) in the server front panel, then lift the drive above the chassis.
- 3. When the drive is clear of the chassis, disconnect the power (D) and data cables (E) from the back of the drive.



## Remove the IDE Hard Drive(s) from the Bracket(s)

For each IDE hard drive:

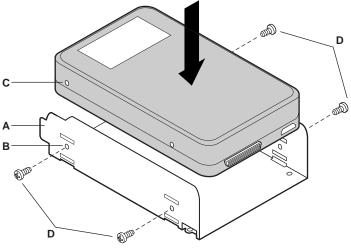
- 1. Remove the four screws (A) that attach the mounting bracket (B) to the drive. There are two screws on each side.
- 2. Lift the drive from the mounting bracket.



# Install the SCSI Hard Drive(s) in the Bracket(s)

For each SCSI hard drive:

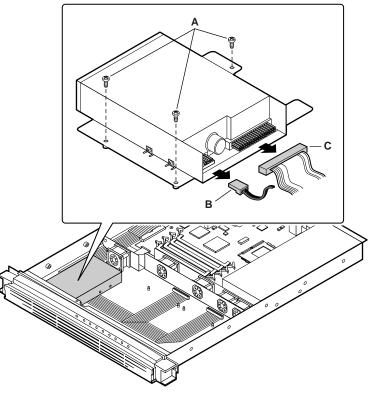
- 1. Configure the SCSI ID for the drive according to the manufacturer's guide.
- 2. Place the drive in the mounting bracket. Orient it with the component side down, and the front of the drive facing the front of the mounting bracket (A).
- 3. Align the mounting bracket screw holes (B) with the matching holes (C) in the drive housing.
- 4. Fasten the mounting bracket to the drive using the four screws (D) that were holding the IDE drive in the bracket.
  - Note: Do not overtighten the screws. The bracket sides can bend inward, which can affect the alignment of the bracket tabs with the slots in the chassis.



# Remove the 3.5" Floppy Drive

You must remove the 3.5" floppy drive so you can route the SCSI cable underneath it. You will reinstall the drive in a later step.

- 1. Remove the three screws (A) that hold the drive in the chassis.
- 2. Lift the back of the drive at an angle and disconnect the power (B) and data cables (C).
- 3. Remove the drive from the bay and set it aside.

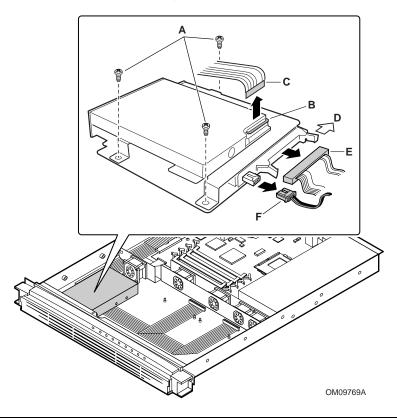


OMO9771

# Remove the Slimline CD-ROM/Floppy Drives

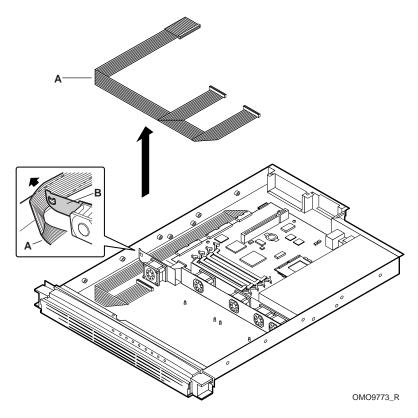
You must remove the slimline drives so you can route the SCSI cable underneath them. You will reinstall the drives in a later step.

- 1. Remove the three screws (A) that hold the drives in the chassis.
- 2. Remove the slimline floppy drive.
  - Lift the brown tab (B) on the floppy drive's connector out of the connector.
  - Gently pull the floppy drive cable (C) out of the connector.
  - Remove the drive from the bay and set it aside.
- 3. Remove the slimline CD-ROM drive.
  - Lift the back of the drive at an angle and unlock the connector tabs (D).
  - Disconnect the data cable (E) and power cable (F).
  - Remove the drive from the bay and set it aside.



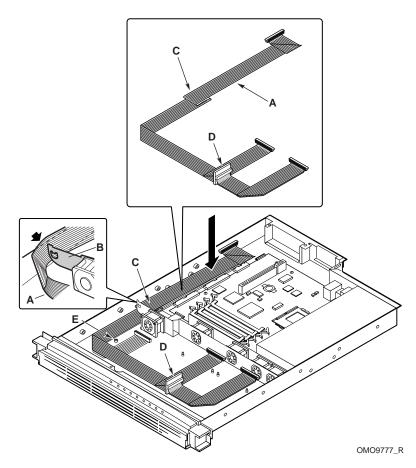
#### **Remove the IDE Cable**

- 1. Slide the cable out from under the retention bracket.
  - Turn the part of the cable that goes under the retention bracket so the cable (A) is at an angle (not perpendicular) to the head of the retention bracket (B).
  - Gently slide the cable from under the retention bracket, being careful not to scrape it against the retention bracket.
- 2. Remove the cable from the chassis.



# Install the SCSI Cable

- 1. Place the SCSI cable (A) in the chassis and slide it under the retention bracket (B). The "accordion" section (C) must be placed on the right side of the retention bracket. Note the location and orientation of the SCSI terminator (D).
  - Turn the part of the cable that goes under the retention bracket so the cable (A) is at an angle (not perpendicular) to the head of the retention bracket (B).
  - Gently slide the cable under the retention bracket, being careful not to scrape it against the retention bracket.



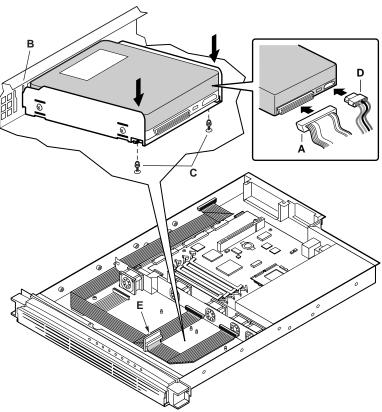
2. Make sure the cable is not on top of the PEM nut (E).

# Install the SCSI Hard Drive(s)

- 1. Install the hard drive in the left bay first.
  - Holding the drive above the bay, connect the SCSI data cable (A) to the drive.
  - Place the drive in the bay so the end of the bracket with the tabs (B) is facing the server front panel, then gently guide the bracket tabs into the mating slots in the server front panel.
  - Align the two holes in the bottom of the bracket with the two chassis snaptop standoffs (C).
  - Make sure the SCSI cable underneath the bracket isn't caught between the right bracket hole and the right snaptop standoff.
  - Press down the bracket until it snaps onto the snaptop standoffs.
  - Connect the power cable (D) to the drive.

#### 2. Repeat step 1 to install the second SCSI hard drive in the right bay.

Note: Make sure the SCSI terminator (E) is seated properly between the two hard drives and is not pinched between the lower-inner screws from each drive.



OMO9776

## Connect the SCSI Cable to Third-Party SCSI Adapter

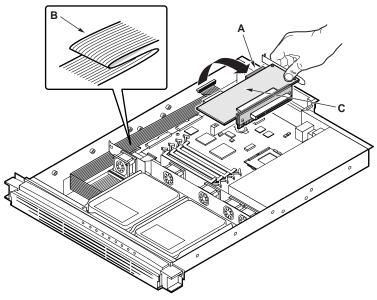
The SCSI cable was designed with an "accordion" section to accommodate many types of SCSI cards with one or more connectors in different locations.

Depending on the card and the location of the connector you want to use, you may have to "relax" the accordion in order for the cable's connector to reach the desired connector on the card.

Note: The cable must be routed under the card, not over it.

- 1. Determine which connector to use on the SCSI card. If the connector is located toward the rear of the server (A), you may have to "relax" the accordion (B).
- 2. Hold the riser with the SCSI card (C) attached above the server board's PCI connector.

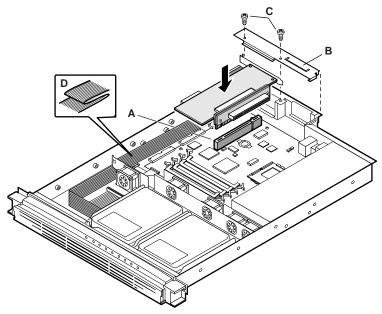
3. Connect the SCSI cable's connector to the appropriate connector on the SCSI card.



OMO9798A

## Reinstall the Riser and Add-in Card(s)

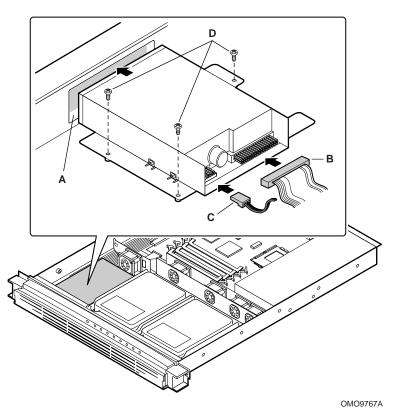
- 1. Align the riser card edge connector with the mating riser connector (A) on the server board.
- 2. Press the riser/add-in card(s) straight down into the mating connector on the server board.
- 3. Fasten the retention bracket (B) to the server back panel with two screws (C).
- Note: If there's slack left in the SCSI cable, fold the slack into an accordion (D). This prevents potential airflow problems.



OMO9799\_R

# **Reinstall the 3.5" Floppy Drive**

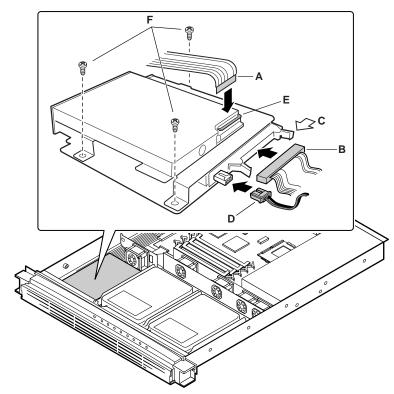
- 1. Slide the front of the drive into the front panel opening (A).
- 2. Holding the back end of the drive at an angle, connect the data cable (B).
- 3. Set the drive down and connect the power cable (C).
- 4. Fasten the drive in the chassis with three screws (D).
  - Note: Before you fasten the drive in the chassis, make sure the data cables are tucked smoothly under the drive and are not crimped.



## Reinstall the Slimline CD-ROM/Floppy Drives

- 1. Holding the slimline floppy cable (A) to the side, place the CD-ROM drive assembly in the 3.5" drive bay.
- 2. Connect the CD-ROM cables.
  - Holding the back of the drive up at an angle, connect the CD-ROM data cable (B) to the drive's backplane connector.
  - Lock the connector tabs (C) by pressing them inward.
  - Set the CD-ROM drive down and connect the CD-ROM power cable (D).
- 3. Holding the slimline floppy cable to the side, place the floppy drive assembly on top of the CD-ROM drive.
- 4. Connect the floppy cable.
  - Lift the brown tab (E) on the floppy drive's connector.
  - Place the end of the cable between the brown tab and the top of the connector, and slide it in gently. The blue side of the cable should be facing toward the back of the server.
  - Holding the cable in place, press the brown tab (E) back down into the connector.
  - Note: The slimline floppy drive uses one cable for both power and data.

5. Make sure the data cables are tucked smoothly under the drives and are not crimped.

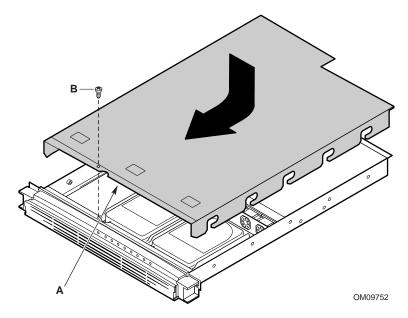


6. Fasten the slimline drives to chassis with three screws (F).

OMO9767B

#### Close the server cover

- 1. Orient the cover so the recessed edge faces the front of the chassis. The sides of the cover fit inside the chassis.
- 2. Slide the cover forward until the recessed edge (A) is all the way under the edge of the front panel.
- 3. Fasten the cover with a screw (B).



Document Number: A16589-001