Cisco 2517 and Cisco 2519 Router/Hub Maintenance

This appendix describes maintenance procedures you may need to perform on the 12- and 24-port hub port cards and management card. Router card maintenance procedures are described in the appendix "Router Card Maintenance."

Maintenance procedures for the router/hub include the following:

- Changing the following router/hub port options:

  — Ring speed

  — Port 1 to Lobe or Ext mode (Cisco 2517)

  — Hub card isolation modes

  — Ring In and Ring Out port mode to MAU or repeater (Cisco 2519 only)

  — Port impedance jumper

- Replacing the management card ROM chips

To change the hub port card options, you must remove the front cover of the router/hub as well as the hub port card, then set the switches. To change the management card ROM chips, you must remove the front cover, slide the management tray out of the chassis, then change the ROMs.

Warning Before working on the Cisco 2517 or Cisco 2519, turn OFF the power and unplug the power cord. Do not touch the power supply when the power cord is connected. Line voltages are present within the power supply even when the power switch is OFF and the power cord is connected. Do not work on the system or connect or disconnect cables during periods of lightning activity. Translated versions of this warning are in the appendix "Translated Safety Warnings."

Removing the Front Cover

Before you can remove the hub port card or management tray, you must remove the front cover of the chassis. Perform the following steps to remove the front cover:

Step 1   Disconnect any cables attached to the hub port card, management card, or router card.

Step 2   Loosen the two captive screws that secure the plastic cover to the front of the chassis. (See Figure B-1.)

Figure B-1   Removing the Front Cover from the Chassis

Loosen these screws
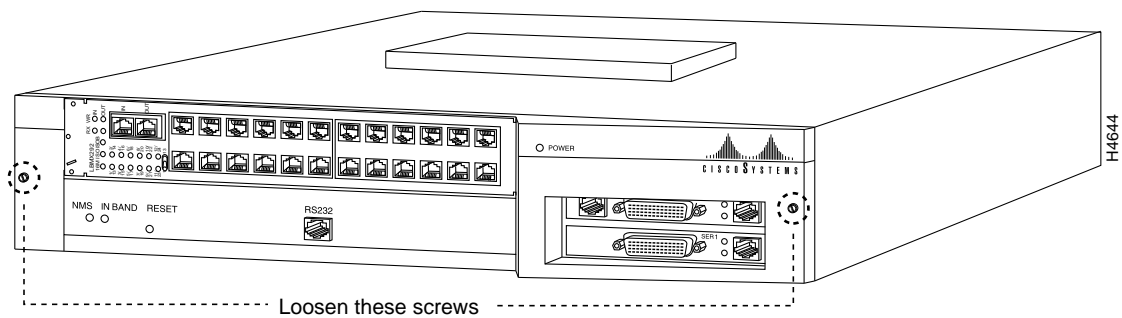
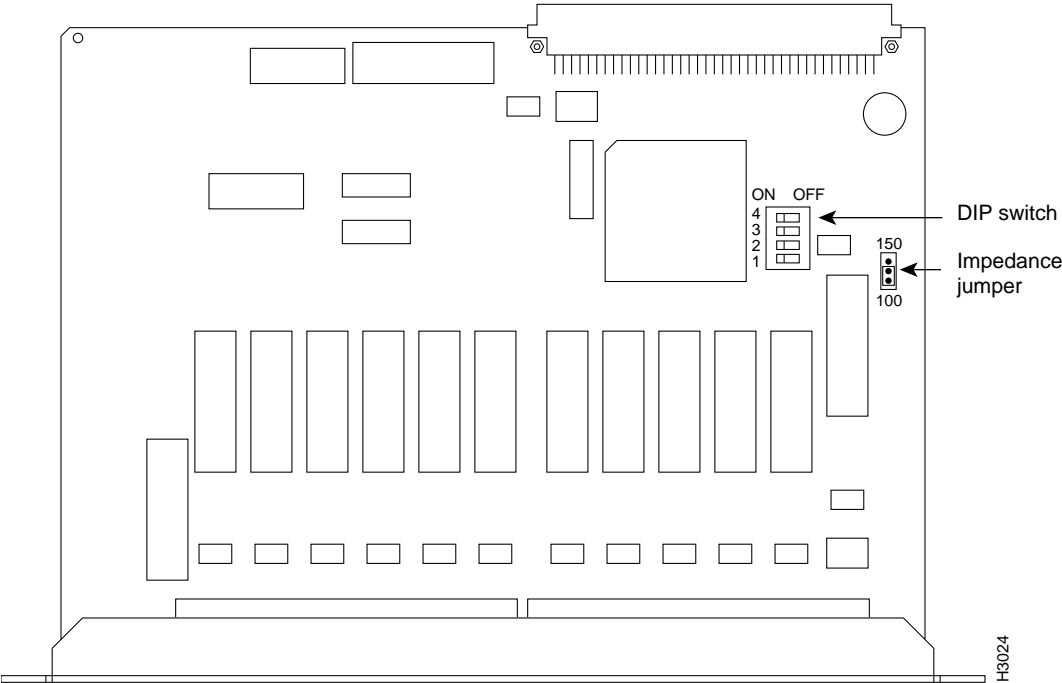**Step 3**   Remove the front cover.

Setting Hub Port Card DIP Switches and Jumper

The hub port card DIP switches are used to set the Token Ring speed and other features. The jumper is used to set the port impedance, determined by the impedance of the cable you are using.

Figure B-2 shows the location of the switches on the 12-port hub card and Table B-1 describes the switches.

Figure B-3 shows the location of the switches on the 24-port hub card and Table B-2 describes the switches.

Figure B-2   Cisco 2517 12-port Hub Port Card DIP Switch and Jumper Locations
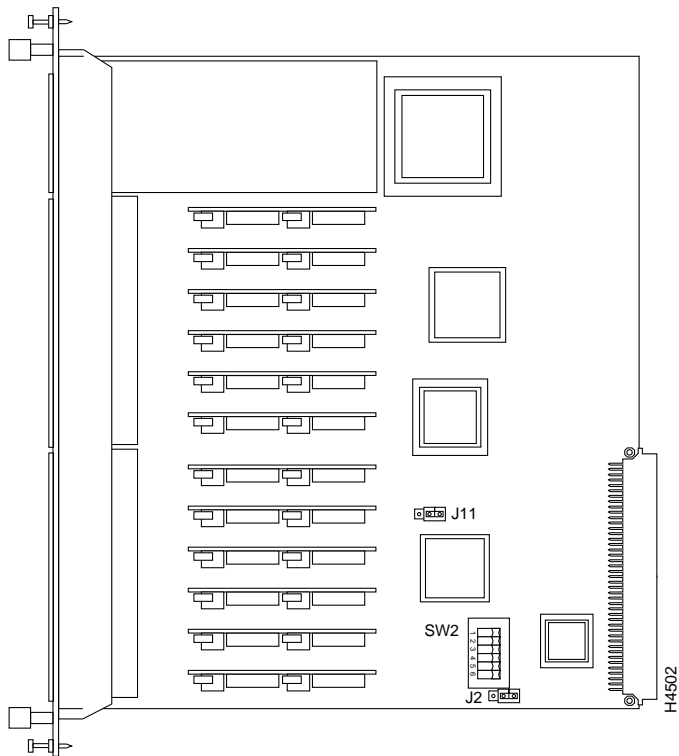
Table B-1   Cisco 2517 12-port Hub Port Card DIP Switch Settings

Switch Number	Meaning	Default Setting
1	Sets the ring speed for the hub module: On—16 Mbps Off—4 Mbps	On
2	Port 1 mode: Off—Extension mode On—Lobe mode	On
3	Isolated or normal mode: Off—Isolated mode On—Normal mode	On
4	Not used	Not used

Figure B-3   Cisco 2519 24-port Hub Port Card

Table B-2   Cisco 2519 24-port Hub Port Card DIP Switch Settings

Switch Number	Meaning	Default Setting
1	Sets the ring speed for the hub module: On—16 Mbps Off—4 Mbps	On
2	Isolation mode: Off—Entire module is isolated from the backplane ring On—Normal mode	On
3	Ports 1-12 isolated or normal mode: Off—Ports 1-12 are isolated On—Ports 1-12 normal mode	On
4	Ports 13-24 isolated or normal mode: Off—Ports 13-24 are isolated On—Ports 13-24 normal mode	On
5	Sets the Ring In port to repeater or MAU mode Off—MAU mode On—Repeater mode	Off
6	Sets the Ring Out port to repeater or MAU mode Off—MAU mode On—Repeater mode	Off

Perform the following steps to remove the hub port card and change the DIP switch settings or port impedance jumper:

Step 1 Remove the plastic cover as described in the section "Removing the Front Cover" earlier in this appendix.

Step 2 Remove the two screws that secure the hub port module to the chassis. (See Figure B-4.)

Figure B-4   Removing the Hub Port Card
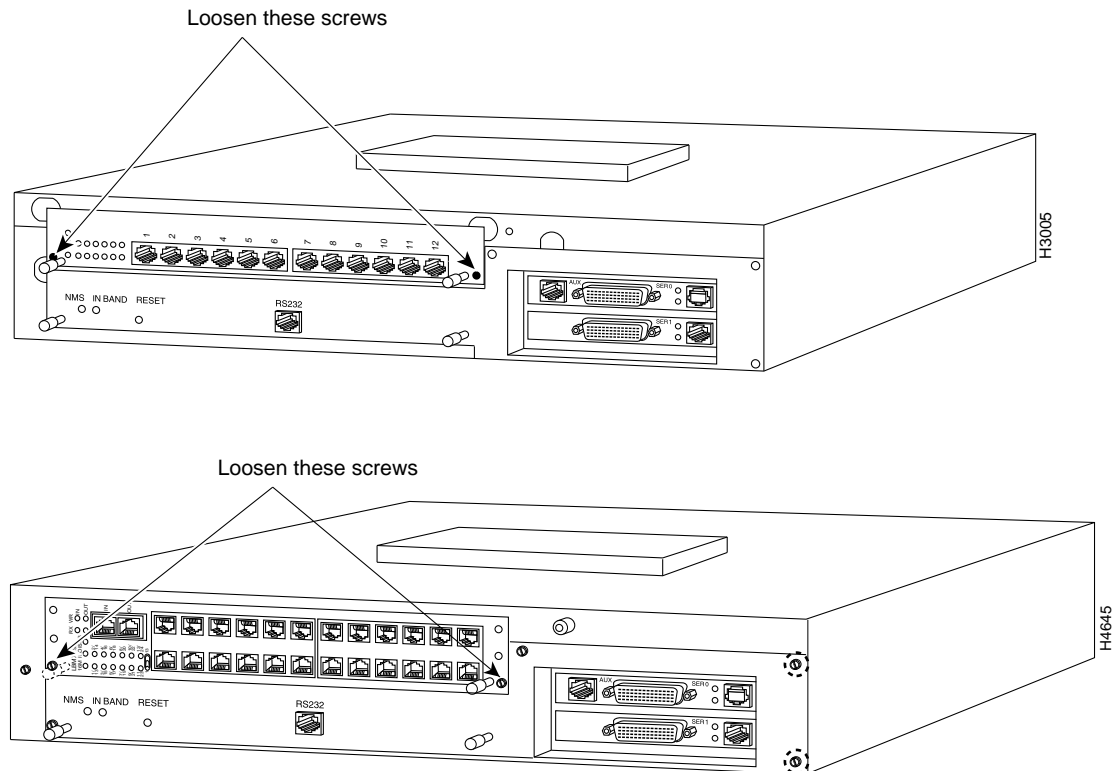
Loosen these screws

Loosen these screws

Step 3   Grasp the extraction posts located on the card and pull forward until the card releases.

Step 4   Pull the card out and away from the chassis.

Step 5   Locate the DIP switches on the hub card. See Figure B-2 for the 12-port card, or Figure B-3 for the 24-port card.

Step 6   Set the switches for the desired options. See Table B-1 or Table B-2.

Step 7   Set the port impedance jumper. See Figure B-2 for the 12-port card, or Figure B-3 for the 24-port card.

> **Note**   If you are using an IBM Type 1 cabling system, set the port impedance jumper to 150 ohms. Otherwise, set the jumper to 100 ohms.

Step 8   Slide the hub card back into the chassis.

Step 9   Secure the card with the screws you loosened in Step 2.

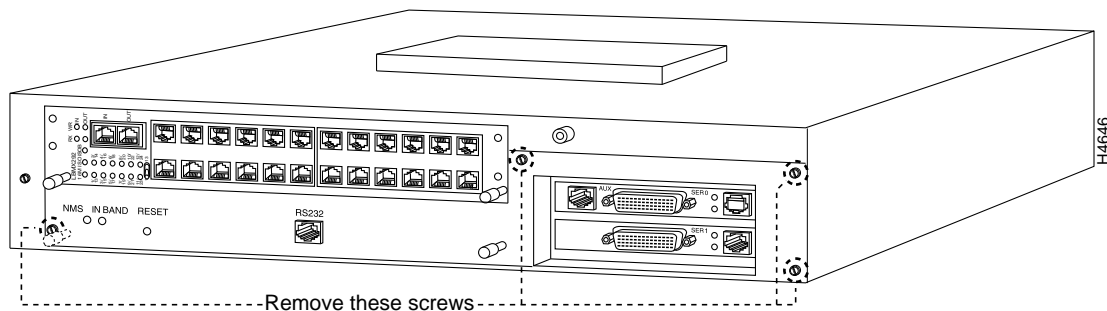**Step 10**   Reinstall the front cover.

Upgrading Management Card ROMs

Perform the following steps to remove the management card tray and upgrade the management card ROMs:

Step 1   Remove the front cover of the chassis as described in the section "Removing the Front Cover" earlier in this chapter.

Step 2   Remove the four screws that secure the management card tray to the chassis. (See Figure B-5.)
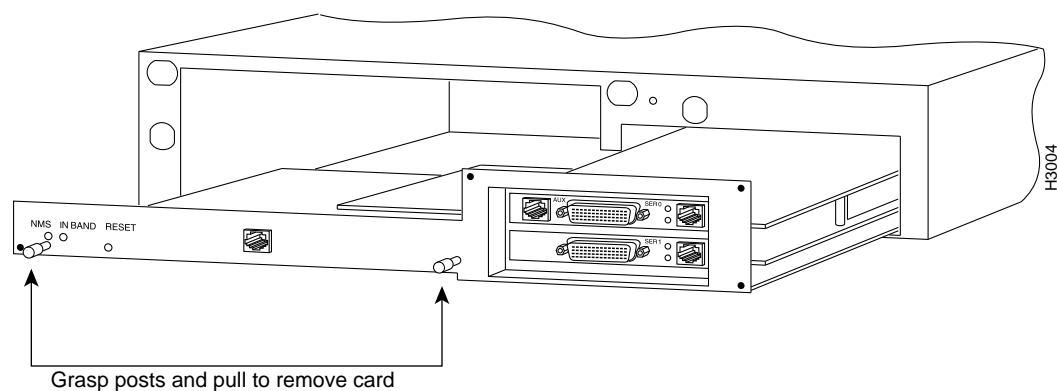
Figure B-5   Screw Locations

—Remove these screws—

Step 3   Grasp the extraction posts located on the card and pull forward until the card releases.

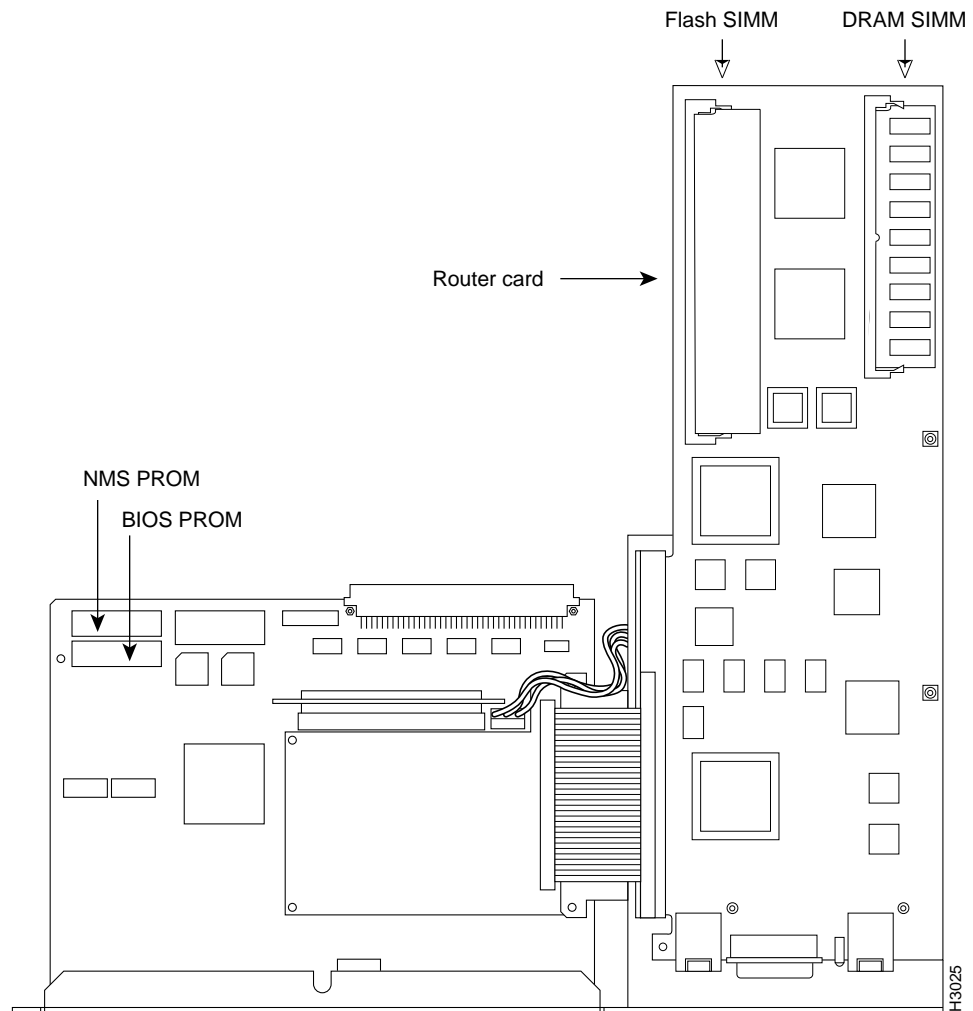**Step 4**   Gently pull the tray out along the card guides. (See Figure B-6.)

Figure B-6   **Removing the Management Card Tray**

Grasp posts and pull to remove card

Step 5 Locate the ROM chips on the management card. (See Figure B-7.)

Figure B-7   Management Card ROMs

Flash SIMM   DRAM SIMM

Router card

NMS PROM

BIOS PROM

H3025

Step 6   Use a screwdriver or chip extraction tool to remove the ROM chips.

Step 7   Carefully replace the ROM chips with the new version.

Step 8   Carefully slide the management card tray back into the chassis. Make sure the management card lines up with the card guides in the chassis.

Step 9   Secure the management card tray to the chassis with the screws you removed in Step 2.

Step 10   Replace the front cover.