

Replacing or Installing ServerNet Adapter Plug-In Cards (PICs)

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Supported Configurations of PICs

The 6760 ServerNet device adapter (ServerNet/DA) and the 6763 Common Communication ServerNet adapter (CCSA) can contain plug-in cards (PICs) in the following supported configurations. Each PIC contains a ServerNet addressable controller (SAC).

6760 ServerNet/DA:

PIC	Interfaces	Supported Configurations
F-PIC	Fiber-optic	Up to four F-PICs can be installed on each adapter.
S-PIC	SCSI	Up to four S-PICs can be installed on each adapter.

(F-PICs and S-PICs cannot be mixed on the same adapter.)

6763 CCSA:

PICs	Interfaces	Supported Configurations
SS7TE	EIA-449, V.35, X.21, and EIA-232	Either: <ul style="list-style-type: none">● Up to four SS7TEs or SS7TE2s in any combination
SS7TE2	T1, E1, and J1	<ul style="list-style-type: none">● Up to three SS7TEs or SS7TE2s in any combination with one SS7TE3 operating at 10 Mbps

SS7TE3 10Base-T (10 Mbps)
and 100Base-T
(100 Mbps) LANs

Either:

- One SS7TE3 operating at 10 Mbps with up to three SS7TEs or SS7TE2s
- Two SS7TE3s operating at 10 Mbps with no other PICs
- One or two SS7TE3s operating at 100 Mbps with no other PICs

Replacing or Installing a PIC

The replacement and installation instructions are the same for all types of ServerNet/DA and CCSA PICs, although the cabling is different. For more information, see the 6760 ServerNet/DA Manual and the 6763 Common Communication ServerNet Adapter Installation and Support Guide.



Caution: Replace PICs on one ServerNet/DA or CCSA at a time. Replacing PICs on more than one adapter at a time might cause connectivity problems, processor halts, or a system outage.

Preparing to Replace or Install a PIC

- 1 Unpack and inspect the PIC you will install. Examine the connectors and pins in the connectors. If any damage is found, obtain a good PIC before continuing.
- 2 You need the following tools:
 - Electrostatic discharge (ESD) protection kit
 - #9 Torx screwdriver
 - Labels or removable sticky notes (to label the ServerNet cables)
 - Flashlight (to check the backplane connectors for bent or broken pins)



Caution:

- Use appropriate ESD precautions and follow standard operating practices. (See [ESD Guidelines](#) and [Standard Operating Practices](#)).
- Minimize the time the enclosure door is open to avoid overheating. See [Safe Operating Times With Enclosure Door Open](#).

Removing the Adapter From Its Enclosure

- 3 Open the appearance-side enclosure door. See [Unlocking and Opening a System Enclosure Door](#).
- 4 Locate the adapter that contains the PIC you will remove.
- 5 Prepare and remove the adapter from its enclosure.
 - For ServerNet/DAs:
 - For G06.08 and later RVUs, use the appropriate OSM action or guided procedure. See Guided Procedures for more information.
 - For earlier RVUs, use the instructions in the 6760 ServerNet/DA Manual.
 - For CCSAs:
 - Use the instructions in the 6763 Common Communication ServerNet Adapter Installation and Support Guide.

Removing the PIC From the Adapter

- 6 Place the adapter on an antistatic mat with the cover panel side up. See [Cover Panel on a ServerNet/DA or CCSA](#).
- 7 Remove the four T-9 Torx screws that secure the cover panel to the adapter and set them aside.
- 8 Slide the cover panel toward the rear of the adapter and lift it off.
- 9 Verify the location of the PIC you are removing. See [PICs Inside a ServerNet/DA or CCSA](#).
- 10 Turn over the adapter (open side down) on the antistatic mat.
- 11 Locate the four T-9 Torx screws on the bottom that secure the PIC to the adapter. See [PIC Mounting Screws on a ServerNet/DA or CCSA](#).
- 12 Remove these four screws and set them aside.
- 13 Turn over the adapter (open side up) on the antistatic mat.
- 14 Carefully lift the rear of the PIC (the end farthest from the faceplate) away from the common base board (CBB) to disengage the three connectors. Remove the PIC. See [PIC Connectors in ServerNet/DA or CCSA](#).

Preparing to Install the PIC

- 15 If you are installing a replacement PIC, continue with Step 16.

If you are adding a PIC to an existing adapter, prepare the adapter using Steps 1 through 8.

- PICs must be installed in numerical order, beginning with SAC 1.
- Remove the blank panel from the opening in the faceplate for the PIC you are installing (See SAC 4 in [Opening in Faceplate of a ServerNet/DA or CCSA.](#))

Installing the PIC on the Adapter

- 16 From the inside of the adapter, insert the front panel of the PIC into the opening in the faceplate. Align the front panel of the PIC in the opening.
- 17 Align the connectors on the PIC with the connectors on the common base board (CBB) and seat the connectors by pressing on the PIC directly above the connectors. Do not flex the CBB. Be careful not to damage any of the components on the PIC or CBB.
- 18 Turn over the adapter so the open side is down on the antistatic mat.
- 19 Install the four T-9 Torx screws that secure the PIC to the adapter.
 - Install two 3/16-inch screws toward the front of the adapter.
 - Install two 1/2-inch screws toward the middle of the adapter.

See [PIC Mounting Screws on a ServerNet/DA or CCSA.](#)

- 20 Turn over the adapter over so the open side is up.
- 21 Slide on the cover panel from the rear of the adapter, and install the four T-9 Torx screws that secure the cover panel to the adapter. See [Cover Panel on a ServerNet/DA or CCSA.](#)

Installing the Adapter in Its Enclosure

22 For ServerNet/DAs:

- For G06.08 and later RVUs, continue with the appropriate OSM action or guided procedure. See Guided Procedures for more information.
- For earlier RVUs, continue with the instructions in the 6760 ServerNet/DA Manual.

For CCSAs:

- Use the instructions in the 6763 Common Communication ServerNet Adapter Installation and Support Guide.

ESD Guidelines



Figure: [Working in an ESD-Protected Environment](#)

Observe the following electrostatic discharge (ESD) guidelines whenever servicing electronic components:

- Obtain an ESD protection kit and follow the directions that come with the kit. You can purchase an ESD kit from HP (T99247-A00) or from a local electronics store. Ensure that your ESD wriststrap has a built-in series resistor and that the kit includes an antistatic table mat.
- Before you unpack a replacement CRU or FRU, place the CRU or FRU package on the antistatic table mat and attach the grounding clip on your wriststrap to the mat.
- When you unpack the CRU or FRU, do not cut into the ESD protective bag surrounding the CRU or FRU. The protective bag protects the CRU or FRU and can be reused for storing the CRU or FRU that has been replaced.
- Before you move the CRU or FRU from the antistatic table mat, attach the grounding clip from your ESD wriststrap to any unpainted metal surface on the CRU or FRU frame.
- Before you bring a CRU or FRU in contact with a system enclosure, attach the grounding clip on your ESD wriststrap to any unpainted metal surface on the enclosure frame.
- When you remove a CRU or FRU from a system enclosure, first pull the CRU or FRU partway out of the slot and then attach the grounding clip on your ESD wriststrap to any unpainted metal surface on the CRU or FRU frame.
- Store CRUs or FRUs that require ESD protection in ESD protective bags.
- The figure [Working in an ESD-Protected Environment](#) illustrates how to use an ESD kit when servicing CRUs or FRUs.

i Note: An ESD protection kit can be purchased from HP using the following order number and part number:

Order Number: ESD-kit

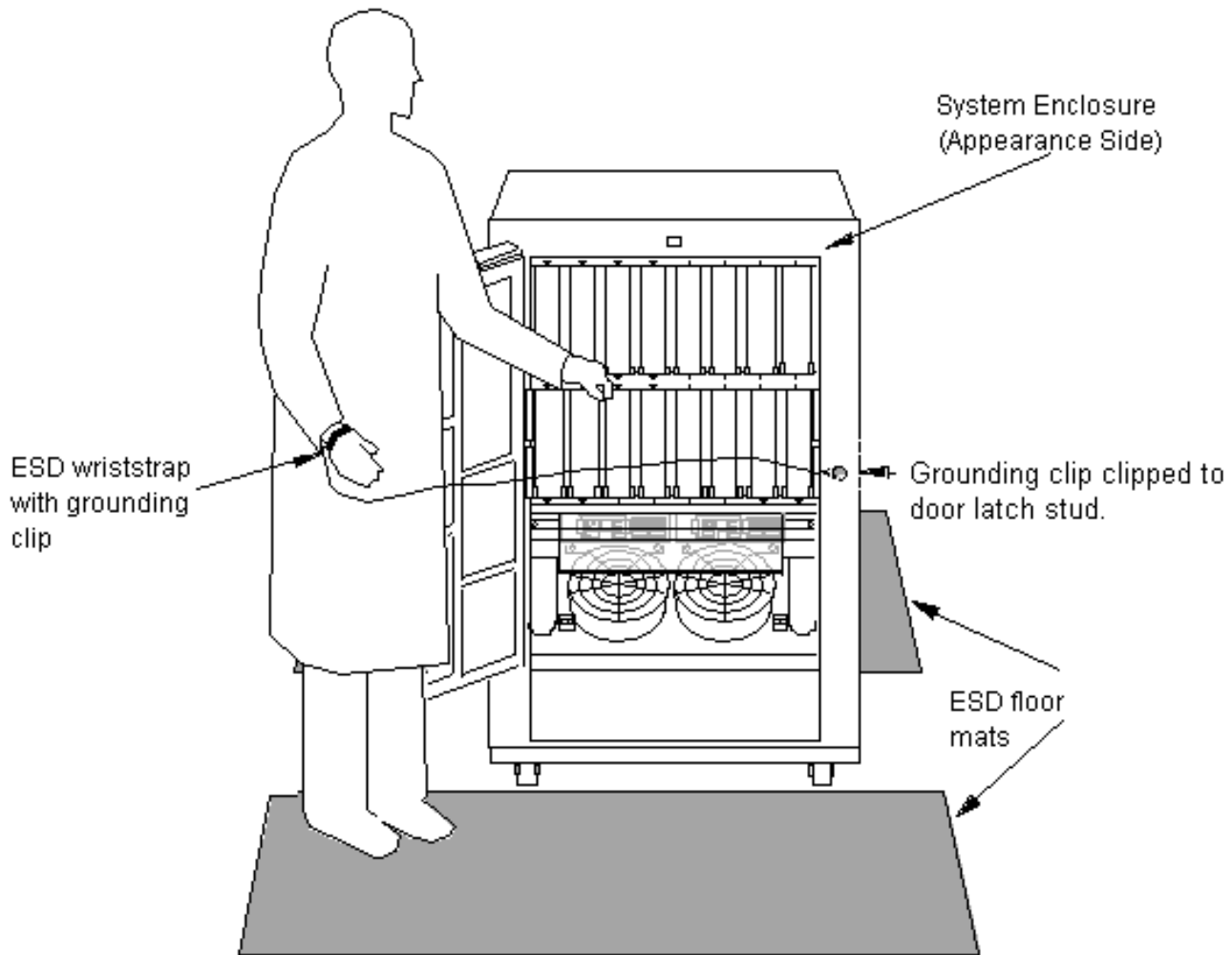
Part Number: T99247-A00

Related Topic

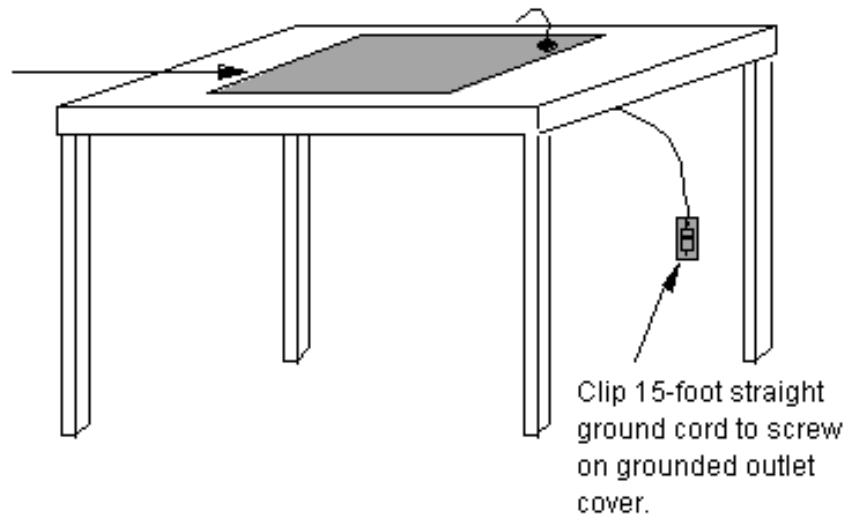
[Standard Operating Practices](#)

Figure: Working in an ESD-Protected Environment

This figure illustrates how to use an ESD kit when servicing customer-replaceable units (CRUs) and field-replaceable units (FRUs).



ESD antistatic table mat.
Mat should be connected
to a soft ground (1 megohm min.
to 10 megohm max.)



Standard Operating Practices



Caution. Replace only one CRU or FRU at a time. Attempting to replace more than one hardware component at a time might cause serious system outages, processor halts, and connectivity problems.

Whenever you replace a CRU or a FRU, use the following standard operating practices to minimize any potential damage to the equipment:

- Complete HP training courses on system support for NonStop S-series servers.
- Inspect the replacement CRU or FRU for any physical damage before installing it. Check the connectors on the CRU, FRU, or backplane for bent or broken pins and for any other obvious damage. If there is damage to the CRU or FRU, you need to order another one.
- Remove all jewelry and metal accessories, such as rings, watches, and necklaces, before working with the equipment. These items can damage electrical equipment or result in personal injury.
- Restrain any dangling items that can get caught in electromechanical equipment, such as long hair and sleeves, before working with the equipment.
- Follow the [ESD Guidelines](#) for working in an electrostatic discharge (ESD)-protected environment and for handling CRUs and FRUs.
- Avoid permanent damage to components from overheating by observing the time limits for an enclosure door to be open with only one fan running.

The following table indicates the amount of time that components in a fully loaded NonStop S-series system enclosure, with the appearance-side door open and only one fan operating, can operate before overheating.

Safe Operating Times With Enclosure Door Open

Altitude	Ambient Room Temperature			
	25°C (77°F)	30°C (86°F)	35°C (95°F)	38°C (100°F)
Sea level	>45 minutes	36 minutes	21 minutes	13 minutes
1,524 meters (5,000 feet)	38 minutes	22 minutes	13 minutes	8 minutes
3,048 meters (10,000 feet)	25 minutes	14 minutes	10 minutes	5 minutes

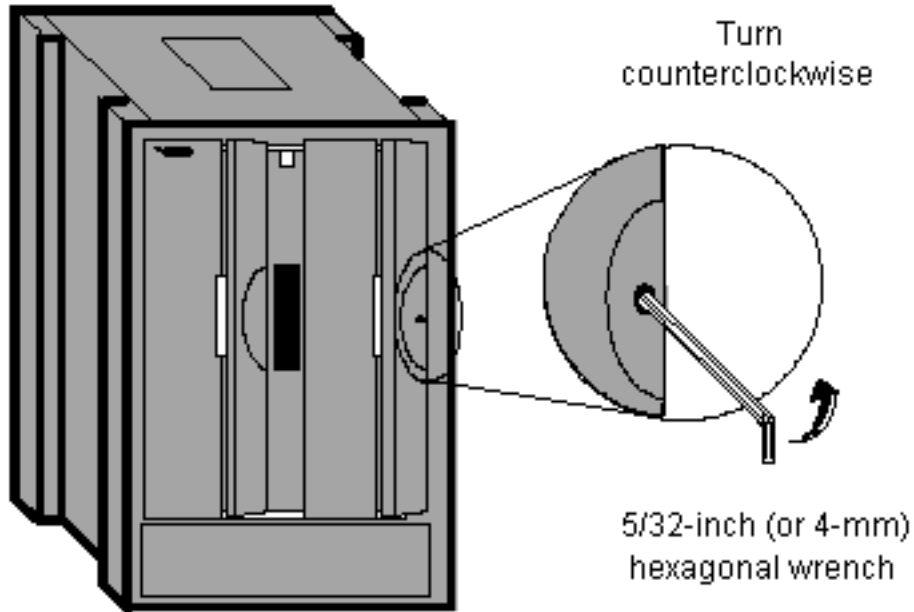
For example, if your computer room has an ambient room temperature of 25°C (77°F) and is at an altitude of 1,524 meters (5,000 feet), you have approximately 38 minutes to replace or reinstall the second fan before components inside a system enclosure overheat.

Related Topic

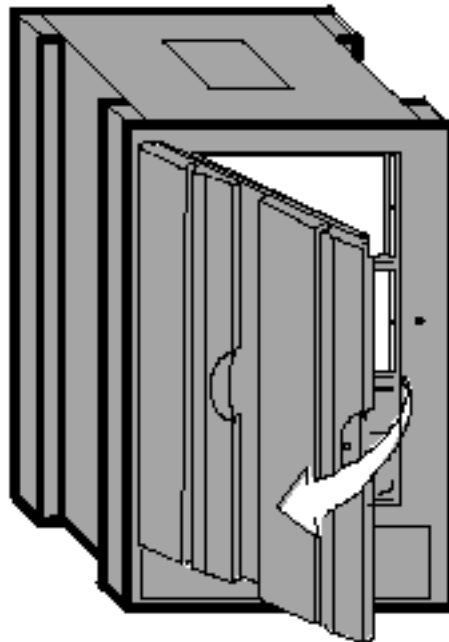
[ESD Guidelines](#)

Unlocking and Opening a System Enclosure Door

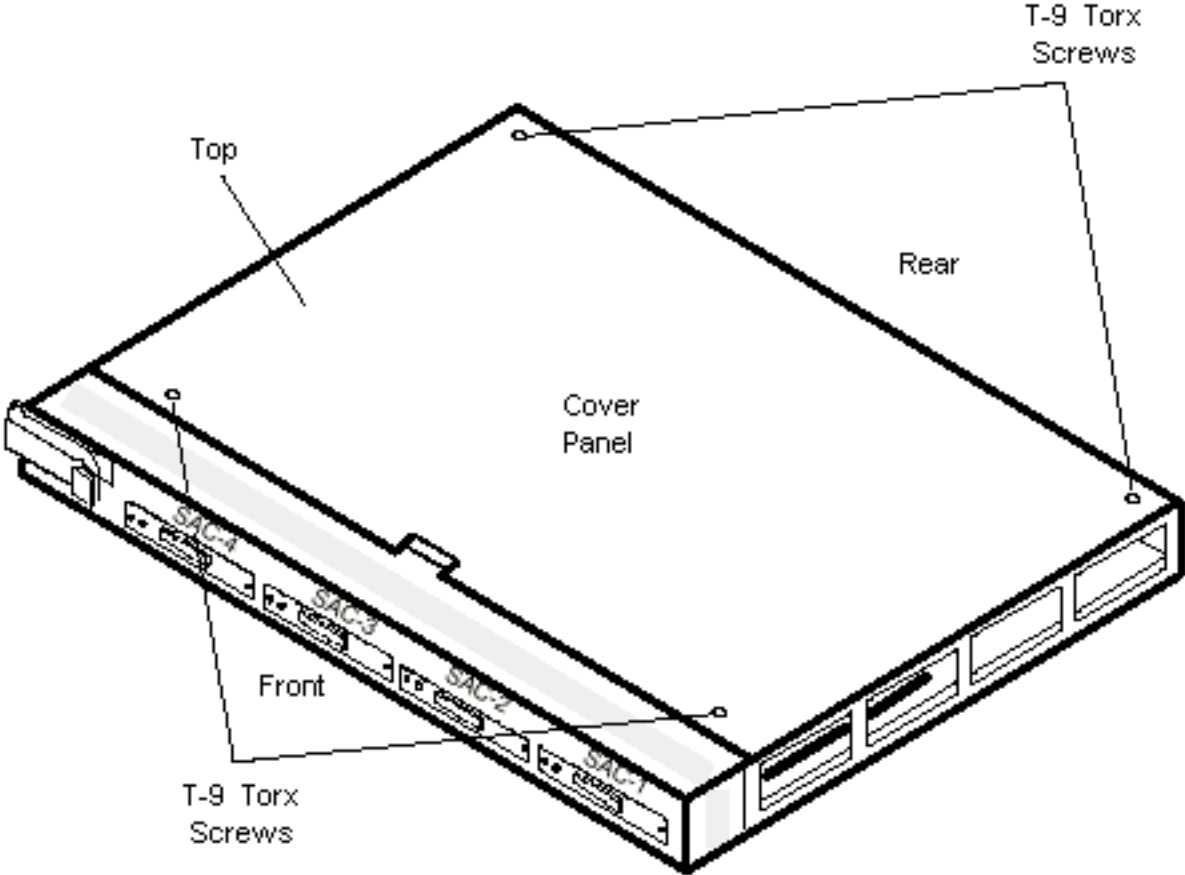
1. Unlock the door



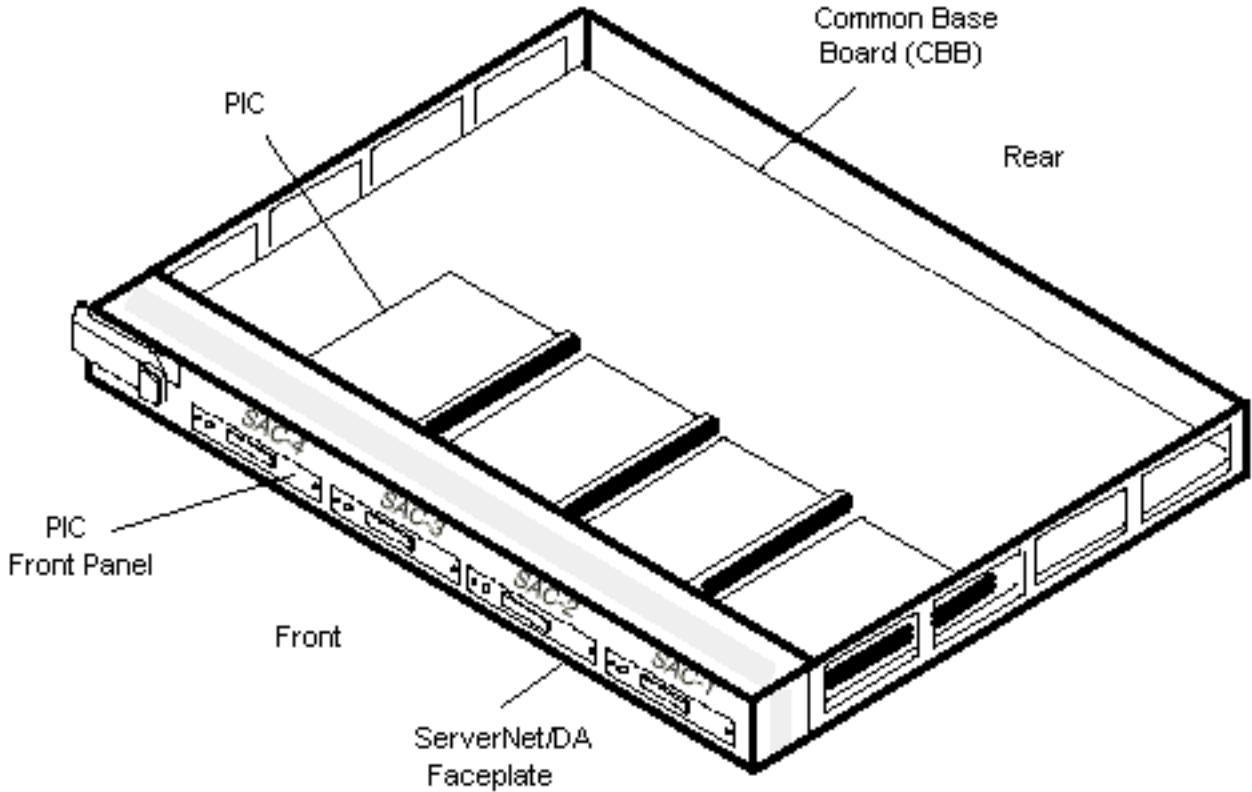
2. Open the door



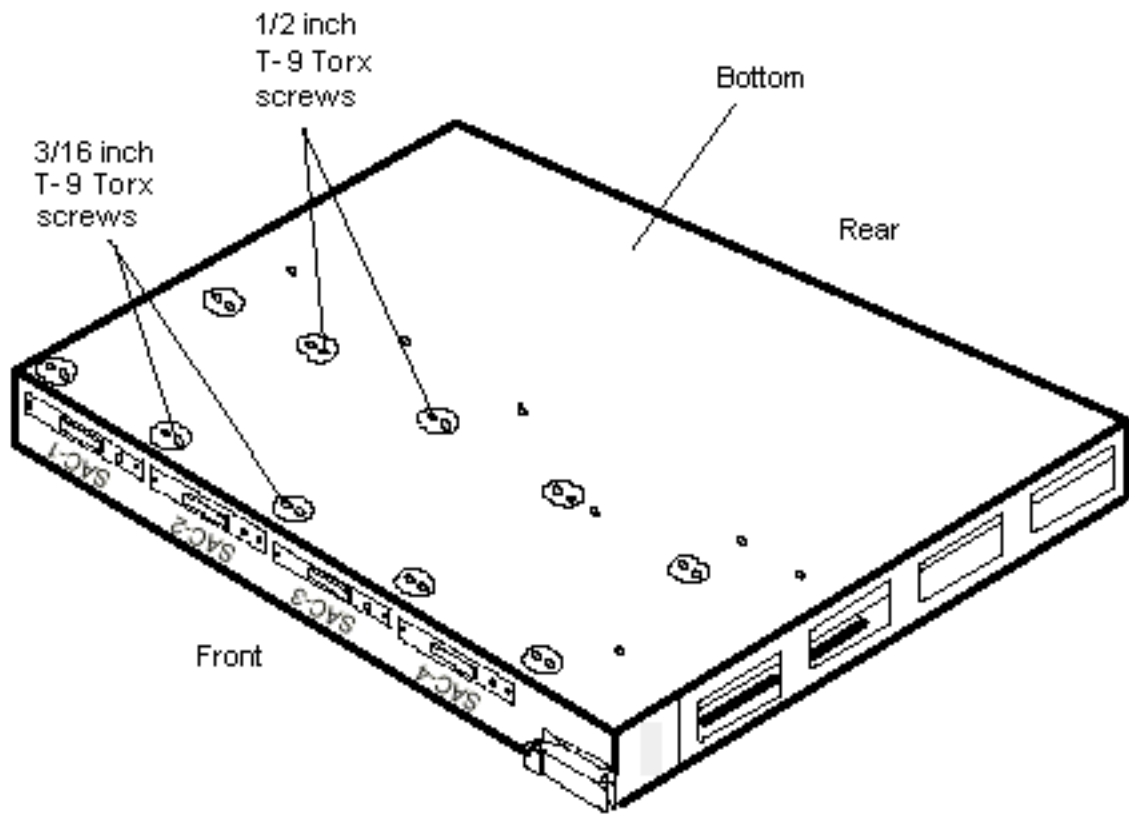
Cover Panel on a ServerNet/DA or CCSA



PICs Inside a ServerNet/DA or CCSA

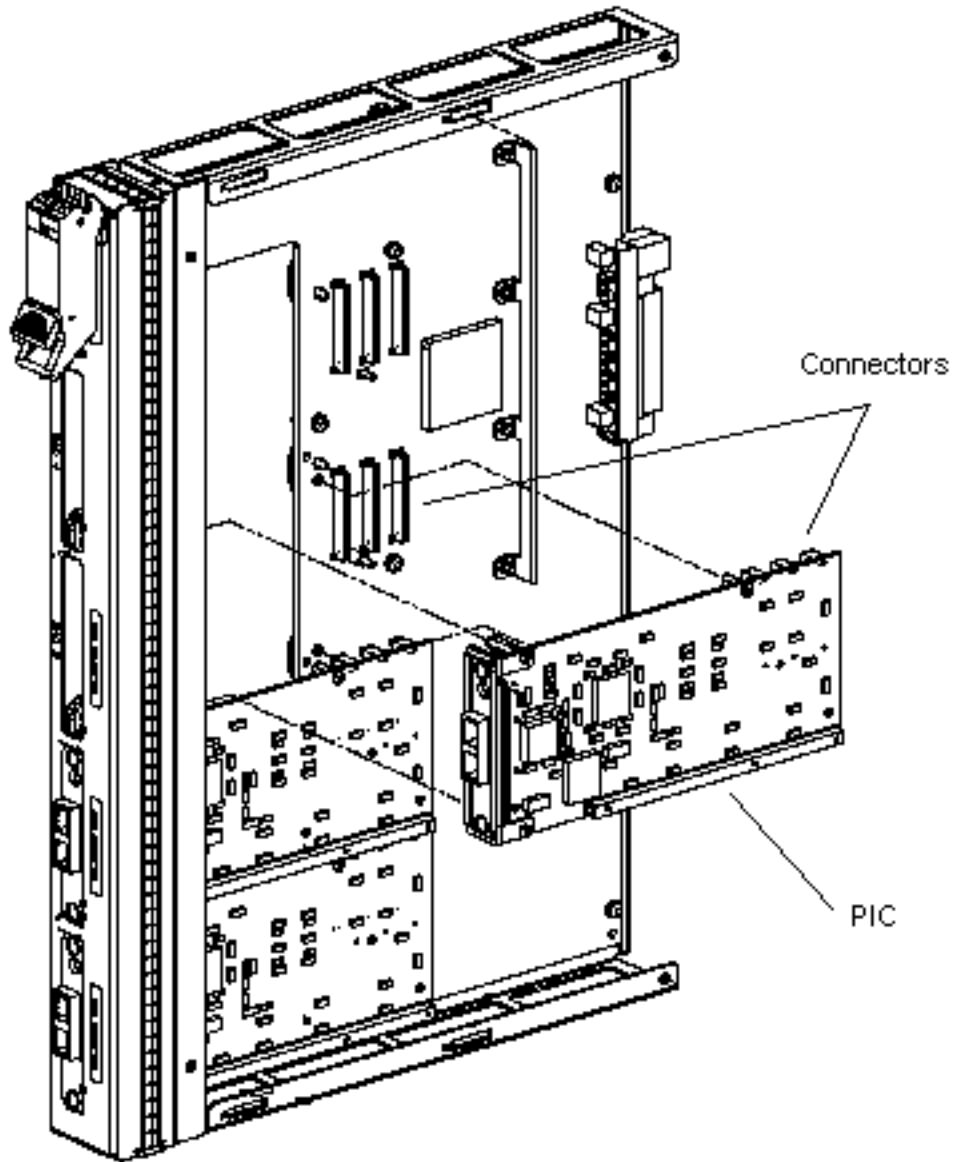


PIC Mounting Screws on a ServerNet/DA or



CCSA

PIC Connectors In a ServerNet/DA or CCSA



Opening in Faceplate of a ServerNet/DA or CCSA

