
Step 2B: Install Rails (for System/E Racks)

If you are installing the disk system in an HP Rack System/E, use rail kit HP A5251A and complete this step. For other HP racks, see Step 2A.

- 1. Unpack the rail kit and verify the following contents (Table 9 and Figure 17).

Table 9 Rail Kit A5251A Contents

Figure	
Label	Part
A	2 rails
B	2 rail clamps
C	14 M5 16mm screws
D	10 sheet metal nuts
E	Rack Mount Guide and Template

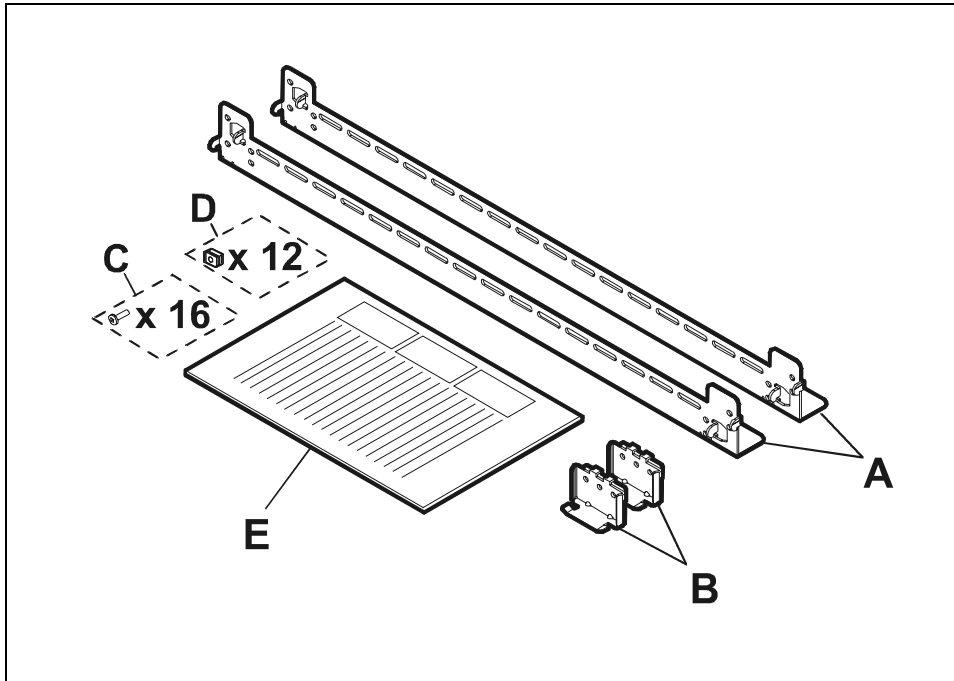


Figure 17 Rail Kit A5251A Contents

If a part is missing, contact an HP sales representative.

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2. Select racking location(s) and set rail(s) on the right front and back columns.

In a Rack System/E, the rails do not add height and each disk system consumes only 3.5 EIA Units (U). (EIA Units are numbered on the column.) Select an empty 3.5 U in the rack and set the rail at the bottom as follows:

- To set rails at the EIA Unit number, insert the lower rail tabs (C in Figure 18) in the bottom EIA slot (B).
- To set rails between EIA Units, use the upper rail tabs (C in Figure 19) in the next EIA slot (B).

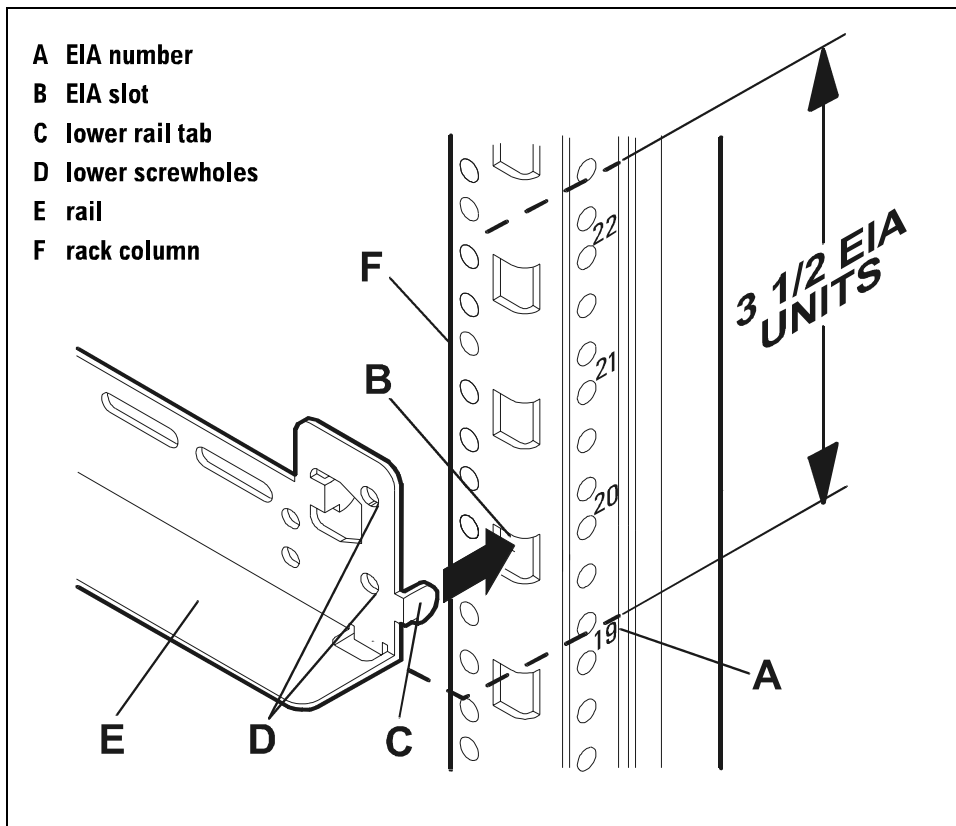


Figure 18 EIA Unit Rail Position

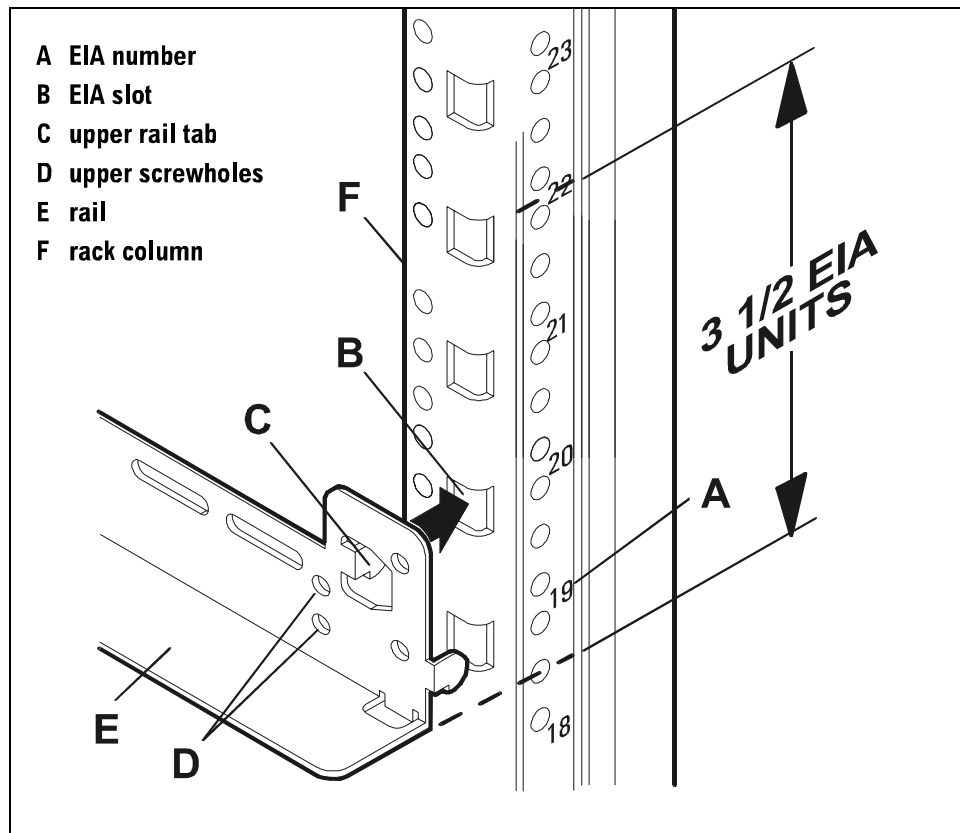


Figure 19 Mid-EIA Unit Rail Position

Note Properly installed rails sit at different depths on the right and left sides of the rack.

To install additional disk systems without gaps, alternate rails between the full and mid-EIA positions, 3 and 4 EIA Units apart, respectively. For example,

starting at the bottom of a 2-meter rack, install rails at the following EIA locations:

Table 10 Rail Positions for Sequential Disk Systems

Disk Systems	EIA Unit	Using
One	0	lower tab in slot 0
Two	between 3 and 4	upper tab in slot 4
Three	7	lower tab in slot 7
Four	between 10 and 11	upper tab in slot 11
Five	14	lower tab in slot 14
Six	between 17 and 18	upper tab in slot 18
Seven	21	lower tab in slot 21
Eight	between 24 and 25	upper tab in slot 25
Nine	28	lower tab in slot 28
Ten	between 31 and 32	upper tab in slot 32
Eleven	35	lower tab in slot 35

3. Set corresponding rail(s) on the left columns at the same height(s) selected on the right columns.

Note Be sure to use the same—upper or lower—tab on opposite rails.

Consecutive sets of rails have alternating tab positions and alternating left and right depths in the rack.

4. Install sheet metal nuts (C in Figure 20) at the rail location(s) on all four columns.

Using the rail (B) to identify matching holes in the rack column, slide two sheet metal nuts (C) on each column (D). Lift the rail away from the column, if needed, to insert the nuts.

Note Holes vary for upper and lower positions at opposite ends of the rail.

5. Insert two screws (A in Figure 20) through each rail end and prepared rack column. Use a Torx T25 screwdriver to tighten the screws securely.

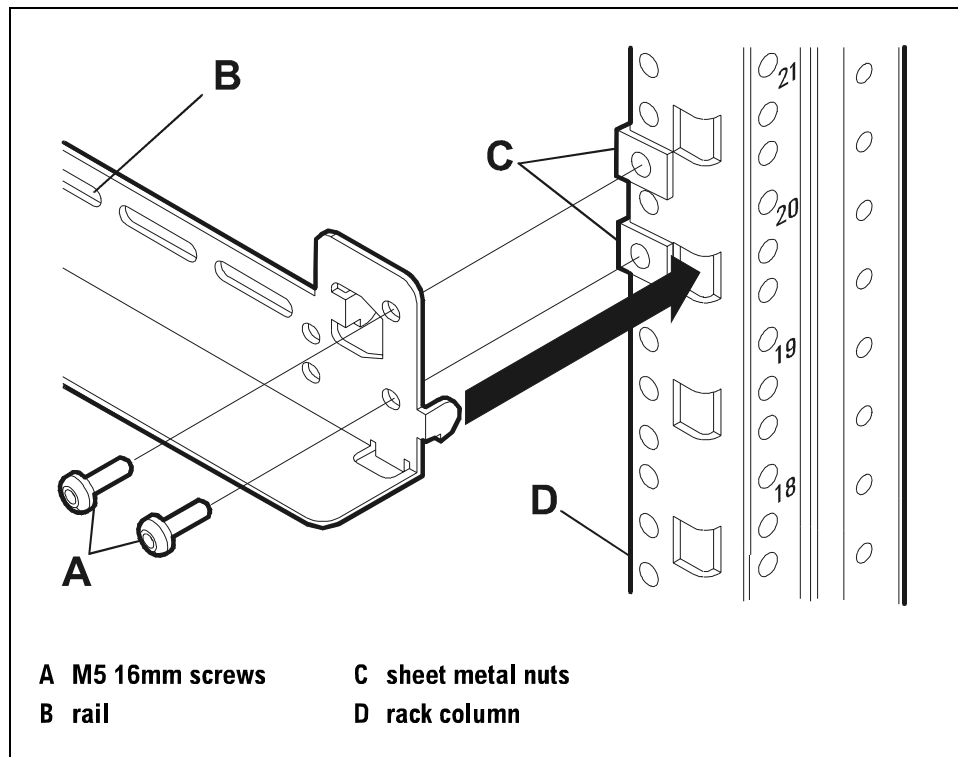


Figure 20 Rail Assembly – Rack Systems/E

Step 3: Prepare Rack Front

Install one sheet metal nut each on the right and left front columns as follows:

- In legacy HP racks, count six holes (4 inches) up from the bottom of the installed rails.
- In HP Rack Systems/E:
 - If the bottom of the rail (A in Figure 21) is at the EIA Unit number, count six holes up and install the sheet metal nut.

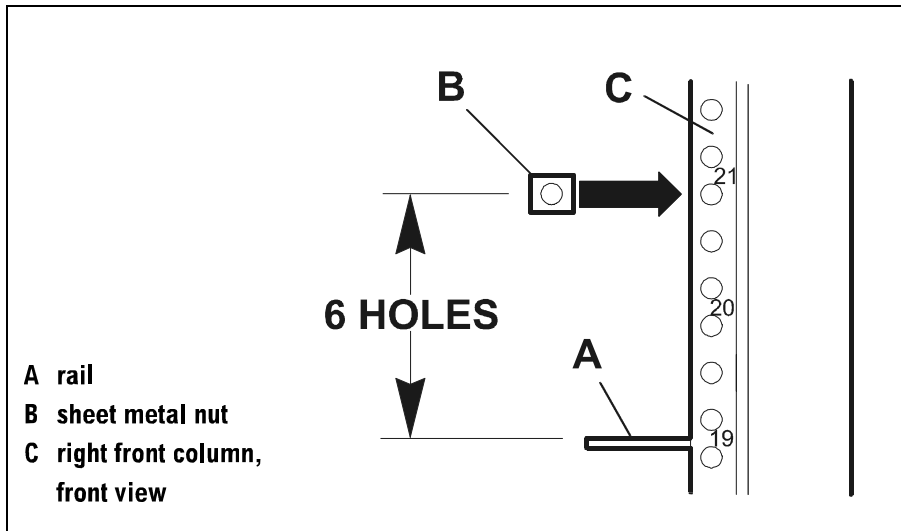


Figure 21 Rack Front Preparation: EIA Unit Rail Position

- If the rail (A in Figure 22) falls in the middle of an EIA Unit, count seven holes up from the bottom of the rail and install the sheet metal nut.

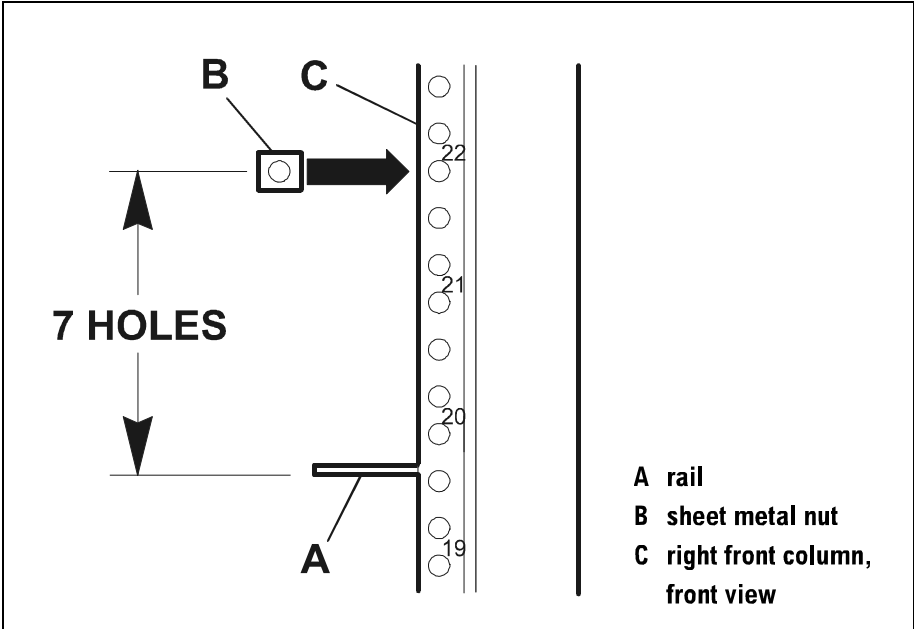


Figure 22 Rack Front Preparation: Mid-EIA Unit Rail Position

Note If you do not install these nuts correctly now, you will have to remove the disk system to install them later.

Step 4: Mount the Disk System

Caution Do not try to lift the disk system using the handles on the power supplies.

1. (Optional) Remove the power supplies to prepare the disk system for lifting:
 - a. With the chassis still in the box, loosen the screw in the handle of each power supply.
 - b. Pull the cam handle down to disengage the power supply from the backplane and pull each power supply out of the chassis. Support the far end of the supply with your free hand as it clears the chassis.
 - c. Set the power supplies aside to be reinstalled later.

WARNING Do not attempt to lift the disk system without the help of another person or a lift device. Even without power supplies, it weighs 50 pounds.

2. With another person or using a lift device, lift the disk system and slide it, back-end first, into the front of the rack and onto the previously installed rails (Figure 23). Push the disk system as far into the rack as it will go.

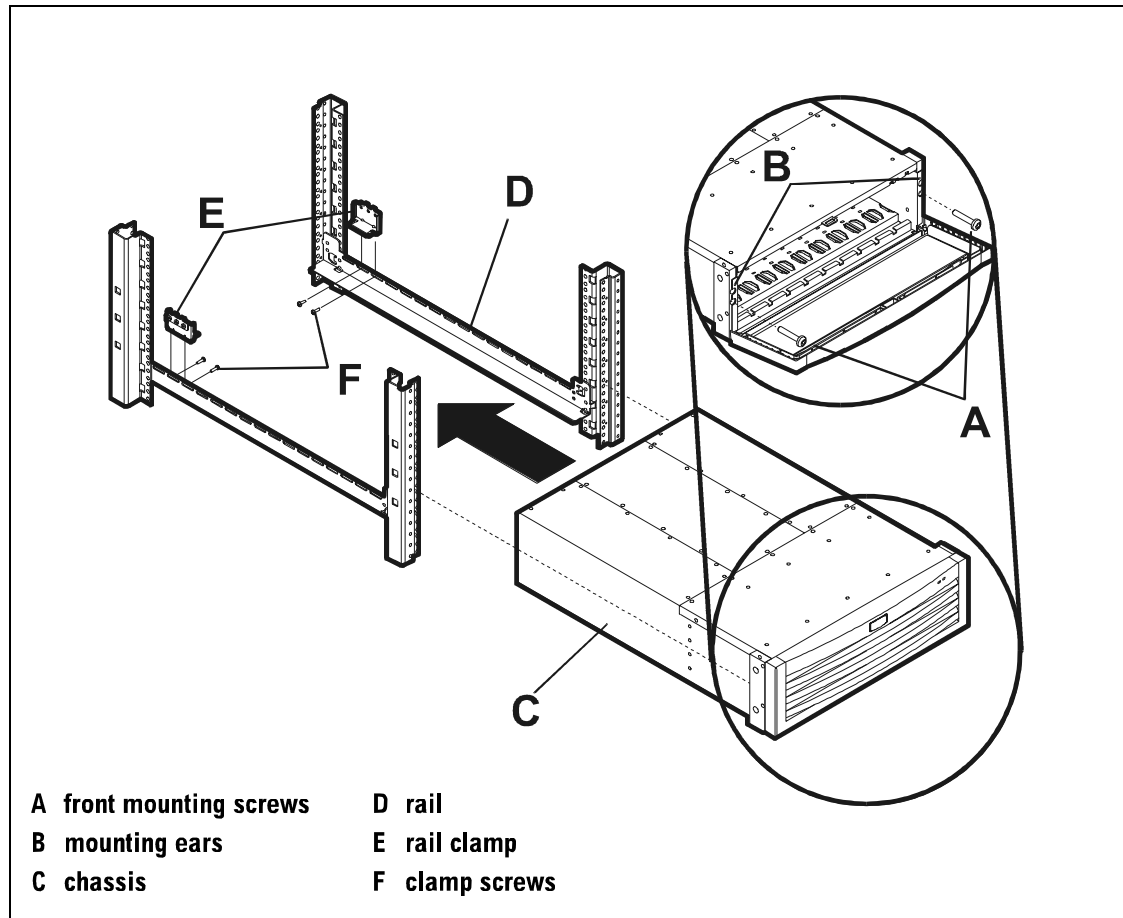


Figure 23 Mounting the Disk System

Caution To protect the door, do not lift or move the disk system with the door open.

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3. Unlock and open the disk system door, using a thin flat-blade screwdriver to turn the lock (Figure 24).

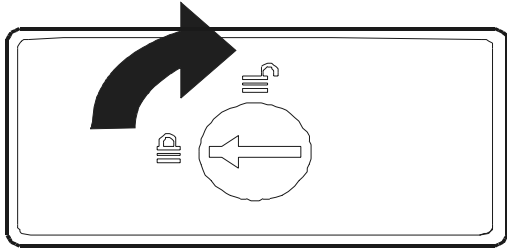


Figure 24 Door Lock

4. Verify that one hole in each mounting ear (B in Figure 23) aligns with the sheet metal nuts previously installed on the rack front columns. Depending on the rail position, the lower or upper set of holes will align with the rack front holes.

Note	If you need to reinstall front nuts, use the extra sheet metal nuts provided.
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5. Insert two screws (A in Figure 23) through the matching holes in the disk system mounting ears and rack front columns. Tighten screws.
6. Close the door.
7. Fasten the back of the disk system to the rails using the clamps from the rail kit.

In legacy racks:

- a. Align screw holes and insert the clamp tab into the slot in the upper surface of the rail.
- b. Insert a screw through the hole in the clamp and the rail and tighten with a Torx T25 screwdriver.

In Rack Systems/E:

- a. Set the clamp (E in Figure 23) inside the rail with the holes in the clamp along the slots in the rail.
 - b. Push the clamp tight against the back of the disk system. The curved tip of the clamp should overlap the bottom edge of the power supply slot.
 - c. Insert and tighten two M5 16mm screws (F in Figure 23) through each clamp and rail.
8. Reinstall power supplies removed in Step 1.
 9. Install half-EIA Unit rack filler panel(s) as needed. A half-EIA Unit gap exists between products in original HP racks and when an odd number of disk systems are installed in the Rack System/E.

Step 5: Install GBICs and LCCs

GBICs (Giga-Bit Interface Converters) (A in Figure 25) prepare LCC ports for Fibre Channel cables. In these instructions, you install them before installing the LCC. LCCs (D) fit in reversed positions into the top and bottom slots (H) in the back of the disk system. Both LCCs fit either slot and both must be installed.

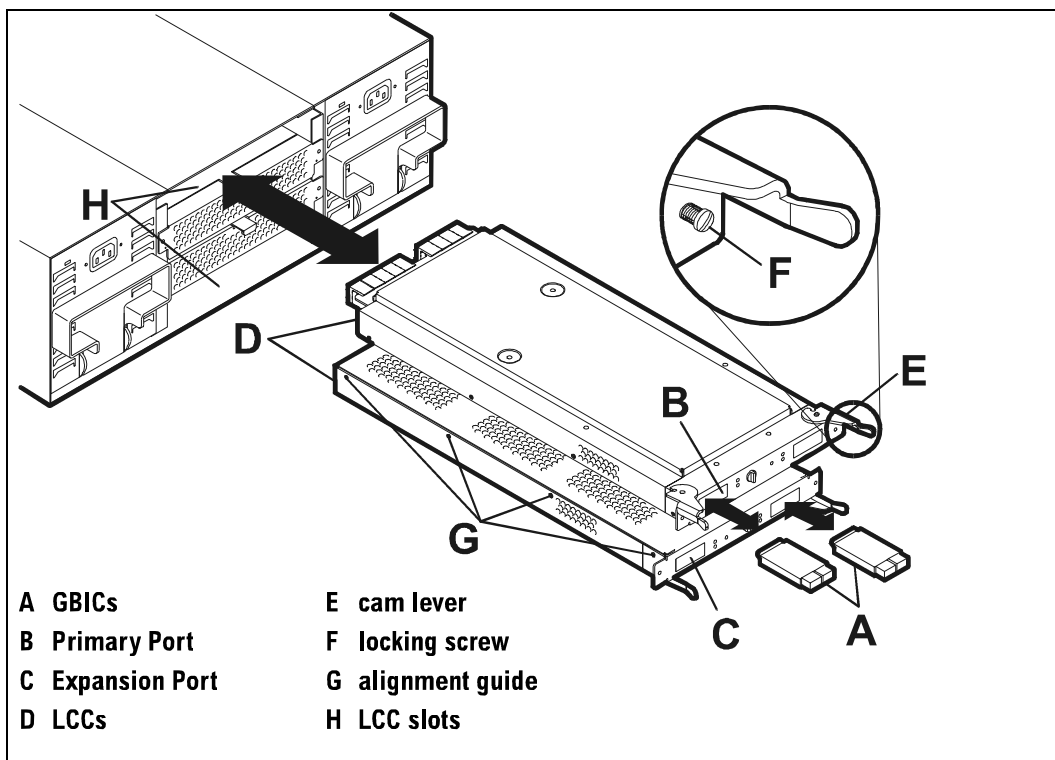


Figure 25 LCC Installation