

**HP 9000 D Class Enterprise Servers**  
**A3766A Rail Kit Installation Guide**  
**for HP A3764A and HP A3765A Cabinets**



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## Preface

This edition of the A3766A Rail Kit Installation guide contains procedures for installing a lower rail and shelf assembly into an A 3764A or A3765A cabinet. The procedures in this guide are intended for trained and experienced HP field service personnel.



# 1 Introduction

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The A3766A Rail Kit is used to convert an existing one or two computer cabinet to a three to four computer cabinet. In order to install the A3766A Kit the 19 inch lower section must be removed. The HP 9000/D2xx and D3xx Class of servers can be mounted into a cabinet to consolidate the pieces of the core system. The cabinet is available in a 1.6 meter (63.8 inches) size. The cabinet is offered as a factory integrated cabinet (A3764A) with one to four D Class computers mounted, or a field integrated (A3765A) cabinet with no computers mounted by the factory. The cabinets have mounting columns that comply with EIA standard 23 inch mounting flanges.

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## A3766A Kit Contents

The A3766A kit contains the items in the following list. If the shipment is incomplete or if the equipment is damaged or fails to meet specifications, notify the nearest Hewlett-Packard Sales and Support Office. If damage occurred in transit, notify the carrier as well. Hewlett-Packard will arrange for replacement or repair without waiting for settlement of claims against the carrier. If the shipment was damaged in transit, keep the shipping containers and packaging material for inspection.

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<b>NOTE</b>	Do not discard or destroy the shipping container or the packaging material. If it becomes necessary to repackage the kit, these items will be needed. HP also suggests that you keep this manual.
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- 23 inch shelf assembly (A3764-62013)
- Right side rail assembly (A3764-62002)
- Left side rail assembly (A3764-62011)
- Lower Cosmetic frame assembly (A3764-62004)
- Safety Rod (A3764-00026)
- 10-32 Stop nut (0590-0364, 2 each)
- Nylon washer (2190-0313, 4 each)
- 10-32 x 0.5" Torx #25 screws (2680-0278, 14 each)
- Retainer Bracket assembly (A3764-62010)

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<b>NOTE</b>	If there are three or four computers mounted in the cabinet, you will need a second PDU. The second PDU must be ordered separately, and must match the existing PDU.
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## Required Tools

Before beginning the installation process, make sure you have the necessary tools.

- Standard HP CE hand tools.
- T10, T15, and T25 Torx driver.
- 9/16-inch and 3/8-inch wrench or nut driver.

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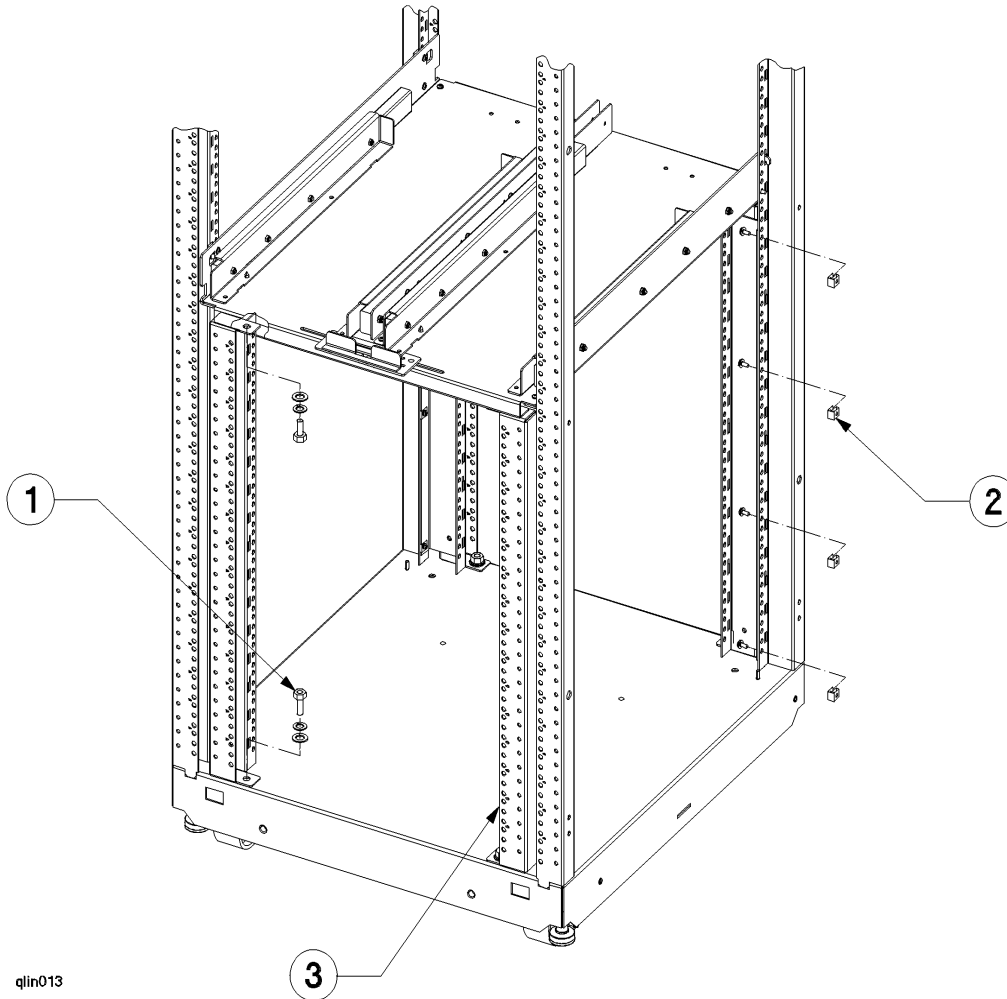
## A3766A Kit Installation Procedures

Before starting these procedures, be sure all computer data bases have been backed up. The shelf assembly is large and weights approximately 18 kg (40 lbs), allow plenty of room around the cabinet for this kit and the installation procedures.

1. Shut down and turn off all components mounted in the cabinet.
2. Put the cabinet power switch in the off position and unplug the PDU power cord(s).
3. Remove the four mounting screws and nylon washers holding the lower 19 inch cosmetic frame in place. Then remove the lower 19 inch cosmetic frame.
4. Remove the peripherals mounted in the lower section of the cabinet and any filler panels. Also remove all slides and rails used to mount the peripherals.

5. Remove the 19 inch vertical rails by removing the two (one lower and one upper (1)) 9/16 inch bolts. Then remove the four vertical post mounting screws and their tinnerman clip nuts (2) (from the cabinet vertical frame). Pull the vertical rail (3) out of the cabinet. Repeat this procedure for the left and right, front and back.

**Figure 1-1 Vertical Rail Removal**



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6. From the back, install the lower retainer bracket to the under side of the top shelf assembly. Align the retainer bracket along the back of the lower support beam, with the mounting flange toward the rear of the cabinet, and insert the two mounting screws and tighten. (reference the upper retainer bracket for installation orientation.)

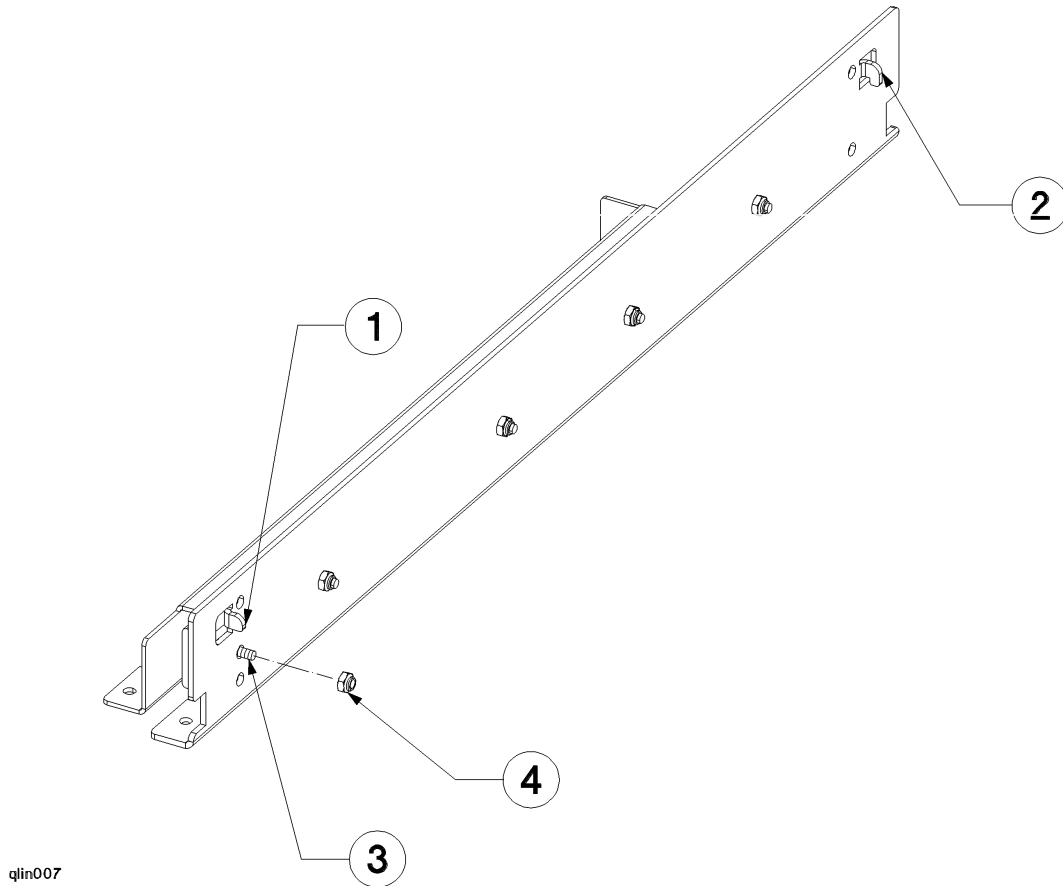
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**NOTE** When the computer is fully pushed back into the cabinet, it may be necessary to adjust the retainer bracket inside the cabinet. This can be done by loosening the retainer bracket mounting screws and repositioning the bracket in respect to the computers installed.

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7. Refer to Figure 1-2 while installing the side rail assemblies by:

**Figure 1-2 Right Side Rail Diagram**

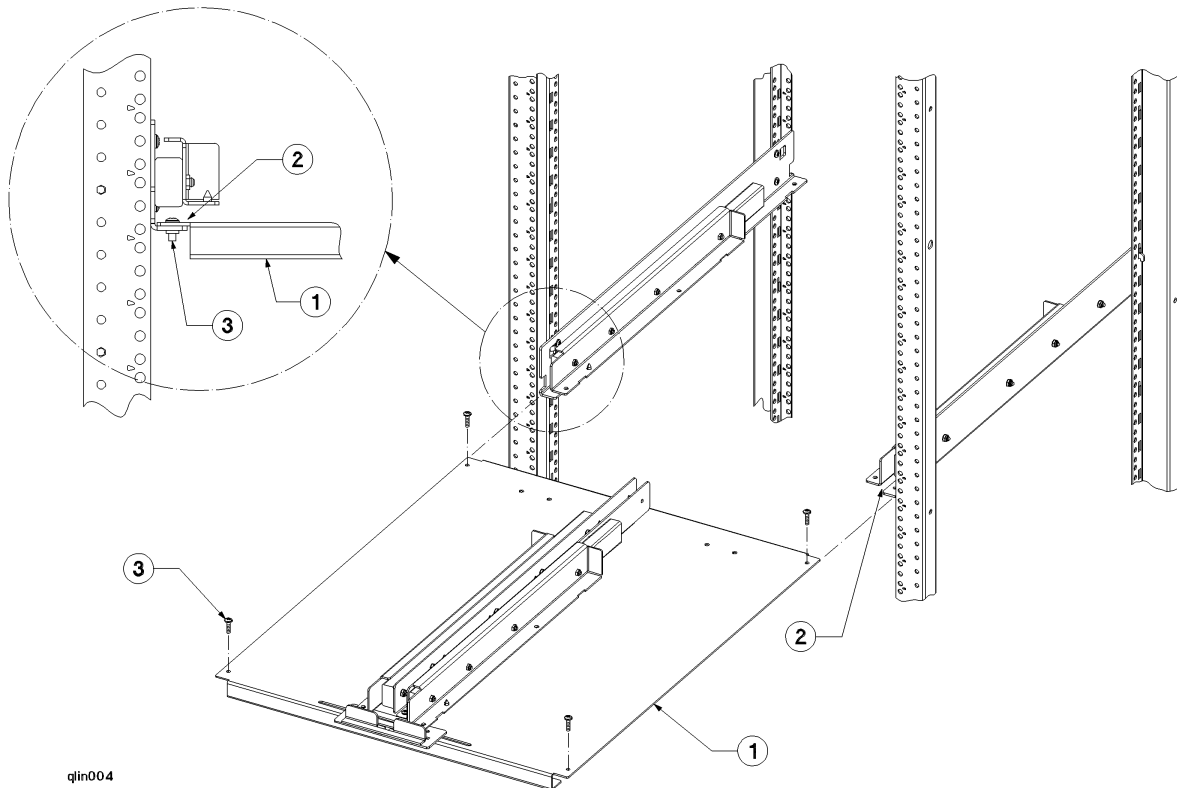


- a. Insert the side rail assembly alignment tabs ((1) straight on front and (2) hooked on back) into the second, from the bottom, rectangular hole on the cabinet frame. The bolt on the side rail assembly ((3) without the elastic stop nut installed) will protrude through the cabinet frame. The mounting holes (1 front and 2 back) should align with the press-nuts in the cabinet frame (at hole 5 from the bottom on front; holes 2 and 5 from the bottom on back).
- b. Place the 10-32 elastic 3/8 inch stop nut (4) on the front bolt of the rail assembly, do not tighten yet.
- c. Insert the three (one front, two back) mounting screws through the rail assembly into the cabinet frame press-nuts and tighten. (Note that the rail needs to be fully extended to insert the rail mounting screw in the front cabinet frame.)
- d. Then tighten the elastic stop nut.
- e. Repeat steps **a** and **d** for the other side rail assembly.
- f. Retract the extended rails by pressing the green button on the outside of the rail while pushing the front of the rail back into the cabinet.



8. Install the Shelf assembly (1) by inserting the shelf assembly from the front, into the slot of the side rail formed by the lower rail of the side rail and slide assemblies (2). Refer to Figure 1-3.

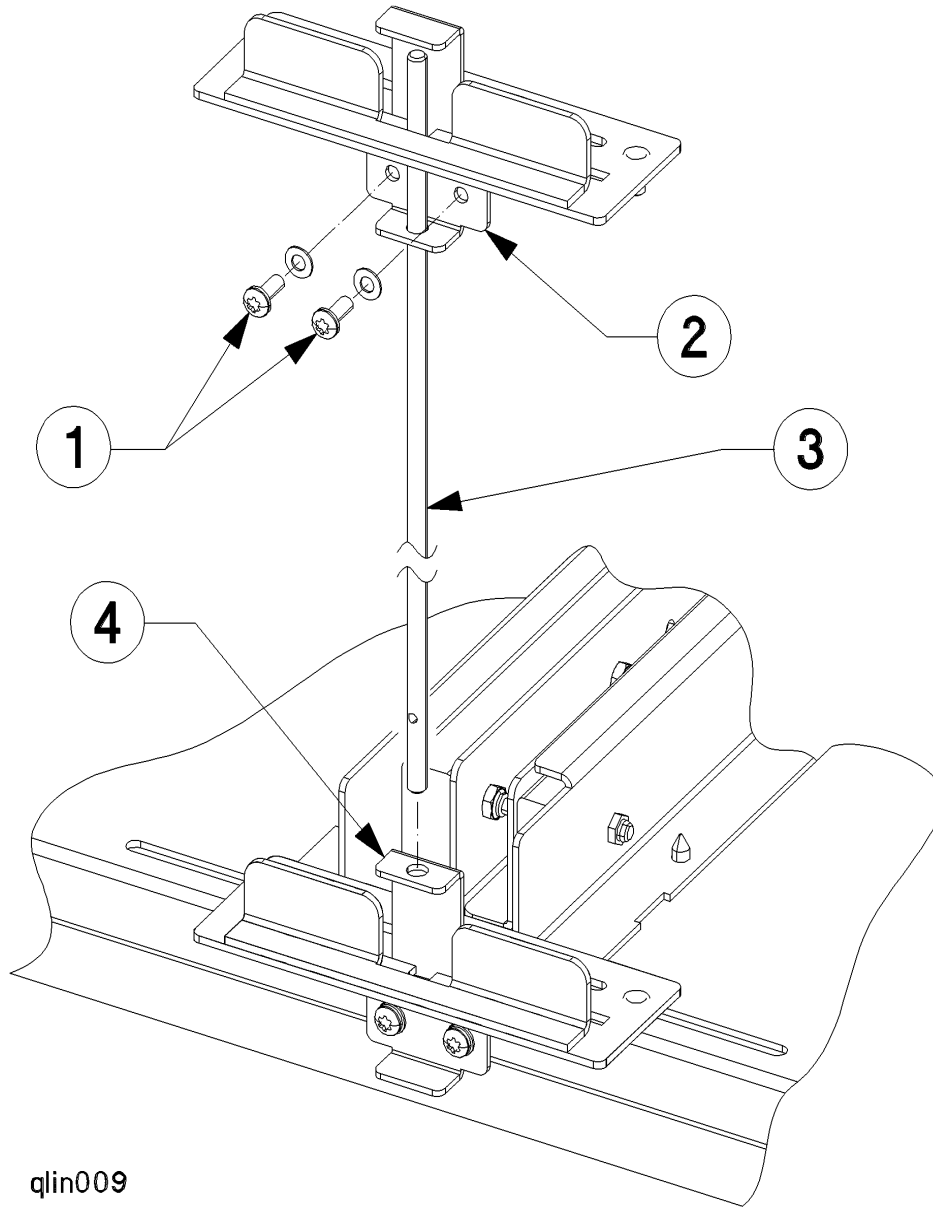
**Figure 1-3 Shelf Assembly Installation Diagram**



9. Align the four mounting holes in the shelf assembly with the holes in the side rail and slide assemblies. Insert the four shelf assembly mounting screws (3) and tighten. Refer to Figure 1-3.
10. Install the safety rod by (refer to Figure 1-4 while performing the procedures):
  - a. Remove the upper cosmetic frame. Make sure the slide lockout bracket is centered.
  - b. Remove the two screws (1) holding the top safety rod guide bracket (2) to the cabinet frame.
  - c. Lift the top safety rod guide bracket (2) up and insert the safety rod (3) through the hole in the bottom of the safety bracket (2). Slide the safety rod up as high as it will go.
  - d. Insert the lower end of the safety rod (3) into the lower safety rod guide bracket (4) and slide lockout assembly.

- e. Position the safety rod (3) and upper safety rod bracket (2) into alignment with the two mounting holes in the upper shelf. Insert the two mounting screws (1) through the safety rod bracket and tighten. The safety rod should now be installed through both upper and lower guide brackets and slide lockout assemblies.

**Figure 1-4 Safety Rod and Slide Lock Assemblies**



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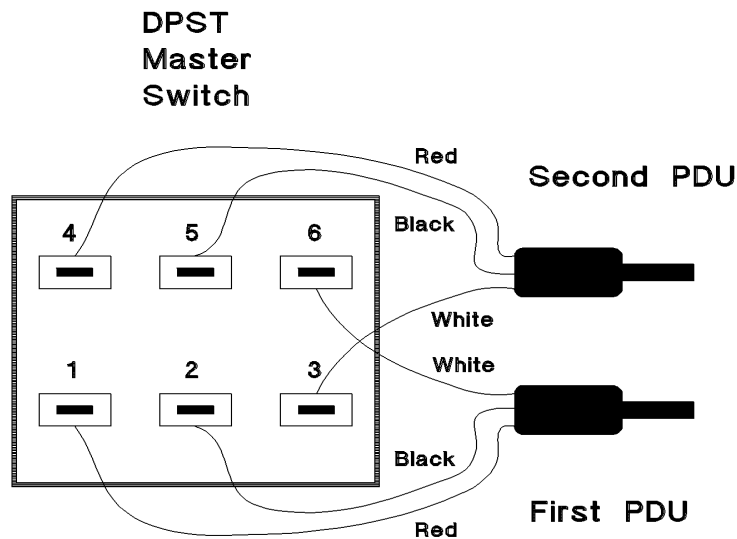
11. Install the second PDU. Refer to the instructions that come with the PDU.

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**NOTE** The second PDU is required if there are three or four computers mounted in the cabinet. The second PDU is also ordered separately from the A3766A Rail Kit and the A4838A Mounting Kit. Be sure to adhere to the cabinet switch wiring diagram (Figure 1-5) to properly connect the second PDU pigtail wiring harness to the cabinet switch.

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**Figure 1-5 Two PDU Switch Wiring Diagram**



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12. Install the D Class computer into either slot in the lower section of the cabinet. Refer to the *D Class Mounting Kit Installation Guide* that comes with the A4838A mounting kit.

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**CAUTION** If the D Class computer installed into the cabinet has a power select switch (located on the back of the computer), be sure it is set to the 220V setting.

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This completes the procedures for installing the lower shelf assembly into the A3764A or A3765A cabinet. The installation of another D Class computer into the cabinet is covered in the *A4838A Mounting Kit Installation Guide*. Locate the A4838A D Class mounting kit, and proceed with those procedures.

When all the procedures in the *A4838A Mounting Kit Installation Guide* are finished, the cabinet and the computers will be ready for use.

