



EK-MS300-IN. F01

## MS3n0 MEMORY OPTION INSTALLATION CARD

Use this card as a quick reference to install the MS3n0 memory option in an AlphaServer 4000/4100 system.

*WARNING: Memory modules and CPU modules have parts that operate at high temperatures. Wait 2 minutes after power is removed before touching any module.*

*CAUTION: Wear an antistatic wrist strap when working on this system.*

### Overview

- Before you begin
- Expose the system drawer in the pedestal or cabinet.
- Install the memory option.
- Verify the installation.

## Before You Begin

Keep these points in mind when installing a memory option or replacing a memory module:

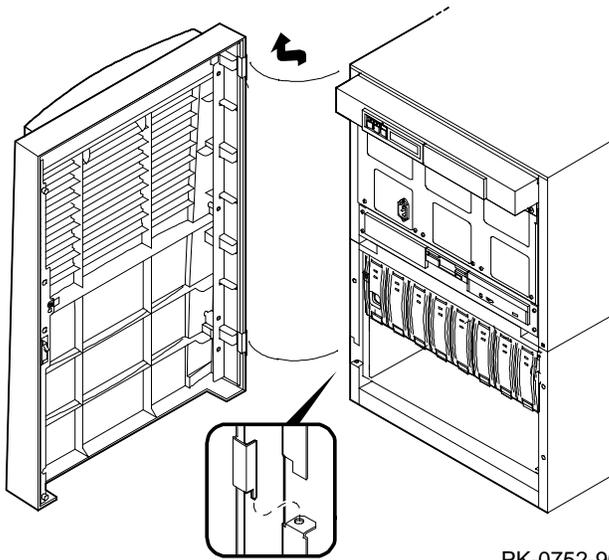
- The two modules in a memory pair must be identical. That is, both must be the same type, size, and speed. However, the pairs within a system box can be a mix of types, sizes, and speeds.
  - The type is synchronous or EDO. B3020 modules are synchronous; B3030 and B3032 modules are EDO.
  - The size is indicated by the first letter of the two-letter variant at the end of the module number. The module number and first letter of the variant must be identical on the two modules in a memory pair.
  - The speed is 50 ns or 60 ns. A B3032 module is 50 ns and has a label on the handle indicating that speed. A B3030 module is 60 ns and has no label on the handle.
- The system motherboard must be at a minimum revision for synchronous (B3020) and 50 ns (B3032) memory modules to work properly: AlphaServer 4000 motherboard (54–23808–02) — revision A02 or higher; AlphaServer 4100 motherboard (54–23803–01) — revision B07 or higher.

*NOTE: Memory modules do not have a minimum revision requirement for the AlphaServer 4000 54–23805–01 motherboard.*

- The SRM console code must be at version 3.0 or higher for 1 GB modules to work correctly. Issue the SRM command **show version** to determine the version currently running. Update the console with the QZ–00VAA–TC patch kit or the file at URL <http://ftp.digital.com/pub/DEC/Alpha/firmware/>.

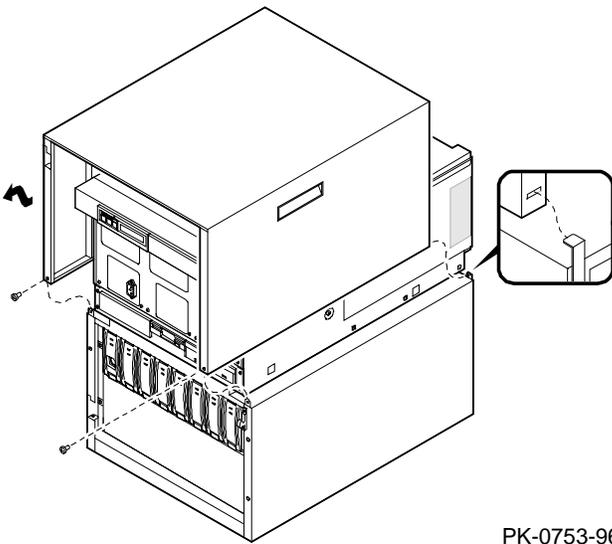
### Expose the System Drawer in the Pedestal

1. Shut down the operating system and power down the system.
2. Open the front door of the pedestal and remove it by lifting and pulling it away from the system, as shown in the illustration below.



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3. Remove the top cover from the pedestal. Remove the two Phillips head retaining screws midway up each side of the pedestal, tilt the cover up, and lift it away from the frame.

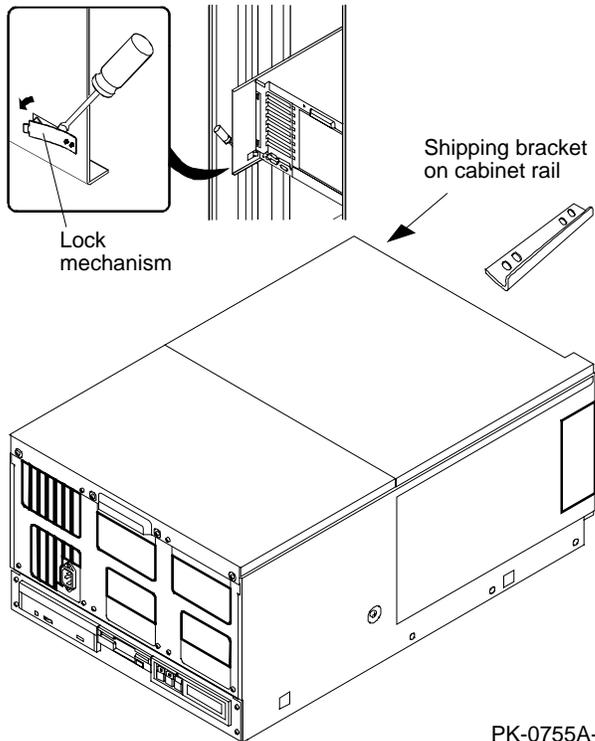


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### Expose the System Drawer in the H9A10-EB/EC Cabinet

1. Shut down the operating system and power down the system.
2. Open the front and rear doors of the cabinet.
3. At the front of the cabinet, unplug the power supplies in the drawer.
4. At the rear, remove the two Phillips screws holding the shipping bracket on the mounting rail at the right.
5. Use a flathead screwdriver to disengage the lock mechanism at the lower left and upper right corners of the drawer. Slide the drawer out part way and release the lock mechanism by removing the screwdriver.

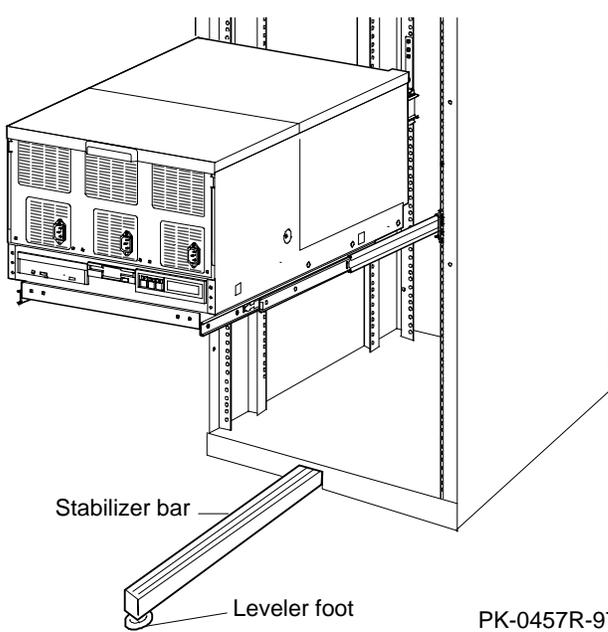
6. Slide the drawer out until it locks.



### Expose the System Drawer in the H9A10-EL/EM Cabinet

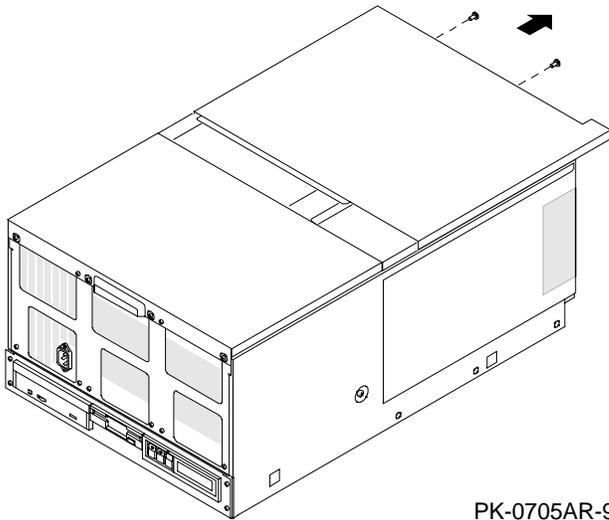
**WARNING:** Only *DIGITAL* Customer Service representatives or customer maintenance personnel who are familiar with computer hardware should slide system drawers out of the cabinet. Personnel should be experienced and trained in installing computers and related equipment. Before pulling a system drawer out, make sure the stabilizer bar is fully extended; then adjust the foot at the end of the bar so it touches the floor.

1. Open the front door of the cabinet.
2. Pull out the stabilizer bar at the bottom of the cabinet until it stops.
3. Extend the leveler foot at the end of the stabilizer bar to the floor.
4. Unplug the power supplies in the drawer.
5. Slide the drawer out until it locks.



## Install the Memory Option

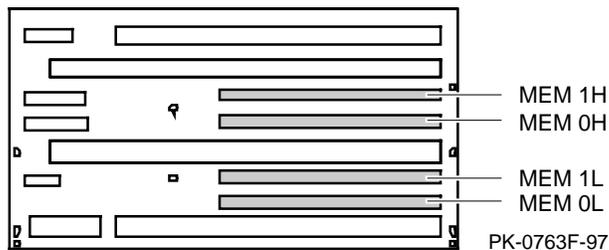
1. Remove the cover from the system card cage section of the system drawer. Remove the two Phillips head screws and slide the cover off the drawer.



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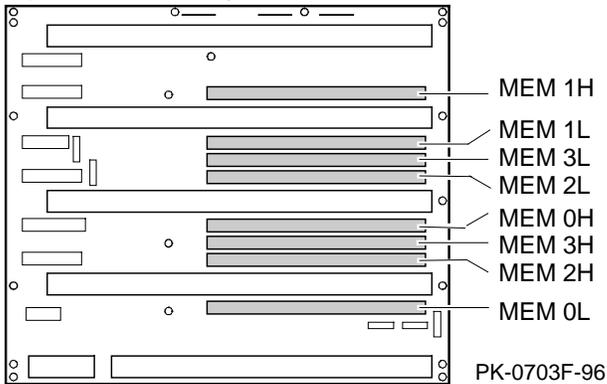
2. Insert the two modules of the memory option:
  - a. Determine the location of the option. The illustrations below identify the slots for the high and low half of each memory option. Insert the new option so that the largest memory is in slots 0 Low and 0 High, the next largest in slots 1 Low and 0 High, and 1 High, and so on.

AlphaServer 4000 System Motherboard

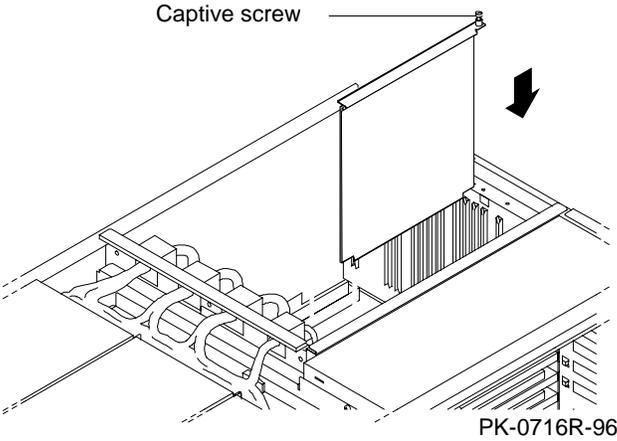


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AlphaServer 4100 System Motherboard



- b. Insert each module in its slot and tighten the flathead captive screw attached to the top brace of the module.



## Verify the Installation

DIGITAL UNIX or OpenVMS system:

1. Replace the cover on the system bus card cage. Power up the system and verify that power-up diagnostics pass.
2. From the SRM console, issue the **show memory** command to display the status of the new memory option.

```
P00>>> show memory
```

Slot	Type	MB	Base
0	EDO	256	0
1	EDO	128	10000000
Total		384	

```
P00>>>
```

Windows NT system:

1. Replace the cover on the system bus card cage. Power up the system and verify that power-up diagnostics pass.
2. Start **AlphaBIOS Setup**, select **Display System Configuration**, and press Enter.
3. Using the arrow keys, select **MC Bus Configuration** to display the status of the new memory option.

All systems:

- Issue the **test memn** command from the SRM console. For AlphaServer 4000 systems, *n* is 0, 1, or \*; for AlphaServer 4100 systems, *n* is 0, 1, 2, 3, or \*. The value indicates a specific memory pair or all of memory.

Information about supported options can be found on the World Wide Web. Follow links to the appropriate AlphaServer options list from URL:

<http://www.digital.com/alphaserver/products.html>