

**P-98221F-1A
P-98222F-1A
SERVICE NOTE**

SUPERSEDES
P-98221F-1
P-98222F-1

HP 9825A AND 9831A DESKTOP COMPUTERS


(P/N 09825-90033)

EXTENDED MEMORY INSTALLATION

This service note contains the necessary information to install the 98221F and 98222F option memory kits in a 9825A or 9831A Desktop Computer. The procedure is the same for both computers.

These field installable kits are available to increase the memory size of the standard, Option 001, and Option 002 computers.

98221F Part List

<u>Description</u>	<u>Qty</u>		<u>Part Number</u>
Memory Assembly (8K-bytes)	1		09825-66522
Half Hinge	2		5040-7787
Full Hinge	2		5040-7721
Board Support	1		0380-0630
Screw	1		2360-0332
Label, 9825 Opt. 001	1		7120-4927
Label, 9825 Opt. 002	1		7120-5162
Label, 9831 Opt. 001	1		7120-5770
Label, 9831 Opt. 002	1		7120-5771

5/77-40

For more information, call your local HP Sales Office or East (201) 265-5000 • Midwest (312) 677-0400 • South (404) 436-6181 West (213) 877-1282. Or, write: Hewlett-Packard, 1501 Page Mill Road, Palo Alto, California 94304. In Europe, 1217 Meyrin-Geneva

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98222F Part List

<u>Description</u>	<u>Qty</u>	<u>Part Number</u>
Memory Assembly (16K-byte)	1	09825-66523
Half Hinge	2	5040-7787
Full Hinge	2	5040-7721
Board Support	1	0380-0630
Screw	1	2360-0332
Label, 9825 Opt. 001	1	7120-4927
Label, 9825 Opt. 002	1	7120-5162
Label, 9825 Opt. 003	1	7120-5163
Label, 9831 Opt. 001	1	7120-5770
Label, 9831 Opt. 002	1	7120-5771
Label, 9831 Opt. 003	1	7120-5772

Tools Required

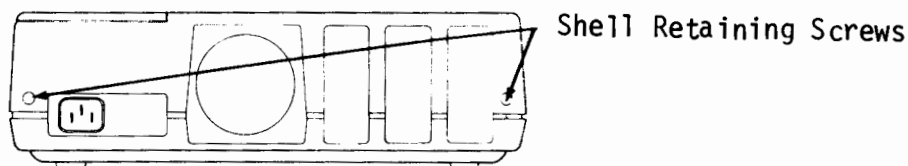
1. Small Pozidrive (or No. 2 Phillips) screwdriver.
2. Paper Spindle (supplied with the 9825A Computer) you can use your fingers with the 9831A Computer.

Installation Procedure

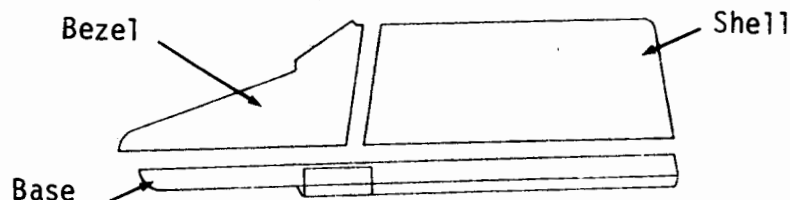
The following information describes how to disassemble, make the memory change, and then reassemble the computer.

Disassembly Procedure

1. Turn the computer OFF and disconnect the AC power cord.
2. Remove the Plug-in ROMs and interfaces that are installed.
3. Remove two screws from the back panel as shown below.



4. Remove the shell from the computer.



5. Refer to Table 1. Find the section that outlines the requirements to change your computer to one of the options. For example: If you have a standard computer and you want to change it to an option 002, refer to the second section (std. to opt. 002).

TABLE 1

Change		Replace		Use Hinge Part Number	Set Address Jumpers To:		Set Memory Size Switches To:
From:	To:	This:	With This:		Outer Memory Board	Inner Memory Board	
STD	Opt. 001	Filler Board or 09825-66522	09825-66522 or 09825-66523	5040-7787 or 5040-7721	60 -	70 60 70	8-16-24 8-16-16 32 24-32 *
STD	Opt. 002	Filler Board	09825-66523	5040-7787	60 70	50	8-16-24 8-16-16 32 24-32
STD	Opt. 003	{ Filler Board 09825-66522	09825-66523 09825-66523	5040-7787 5040-7721	40 50	60 70	8-16-24 8-16-16 32 24-32
Opt. 001	Opt. 002	Filler Board	09825-66522	5040-7787	50	60 70	8-16-24 8-16-16 32 24-32
Opt. 001	Opt. 003	Filler Board	09825-66523	5040-7787	40 50	60 70	8-16-24 8-16-16 32 24-32
Opt. 002	Opt. 003	09825-66522	09825-66523	5040-7721	40 50	60 70	8-16-24 8-16-16 32 24-32

* Changing from standard to Opt. 001 does not require the Memory Size Switch to be changed, it is shown for reference only.

On later versions of the processor board the memory size switch is labeled in K bytes as shown in the above table. On the early versions of the processor boards the switch was labeled in K words as shown to the right. The required switch positions for each option was not changed, only the labeling from words to bytes was changed.

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4-8-12
4-8
16
12-16

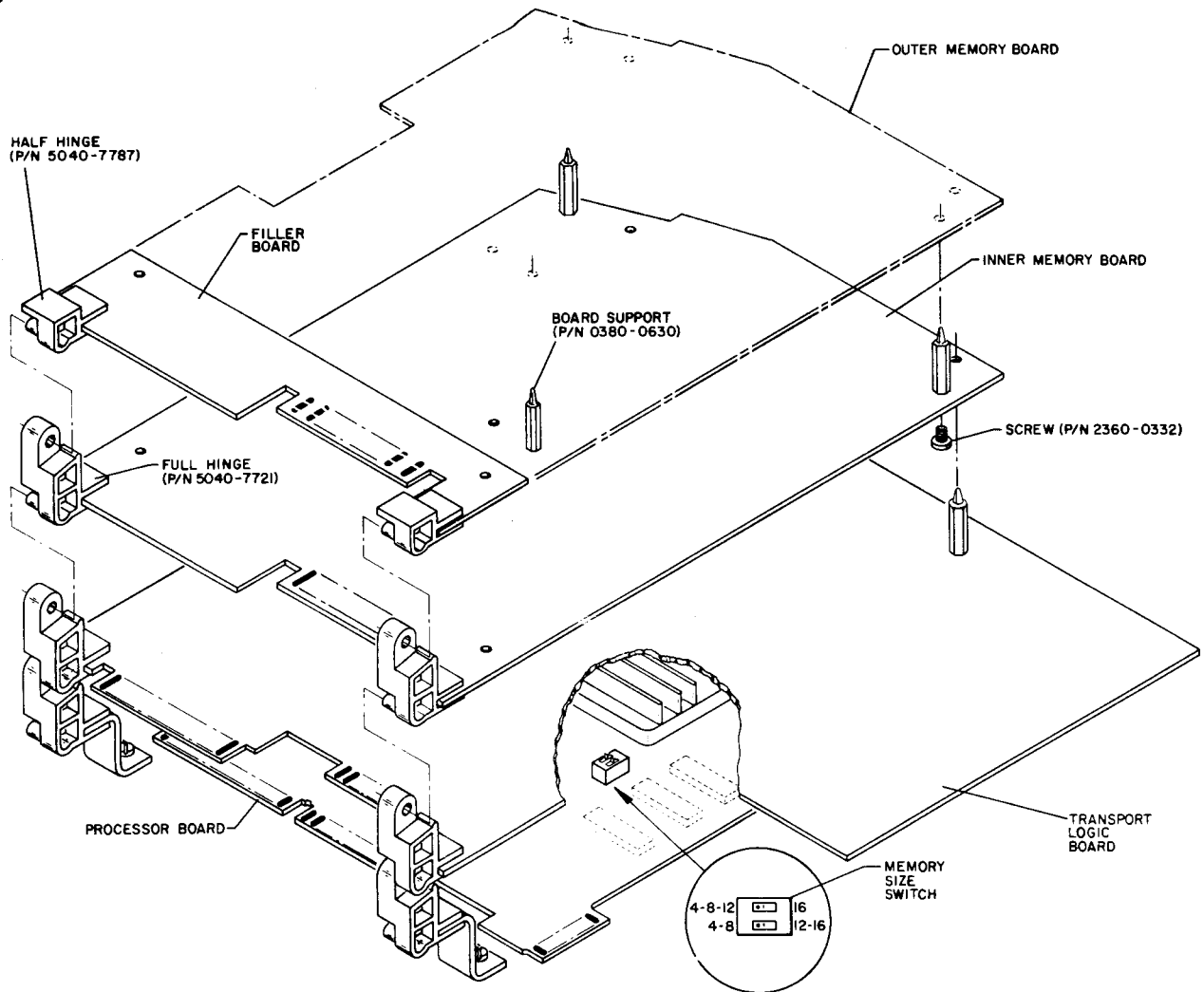


Figure 1.

Board Removal

1. Release the pc boards (refer to Figures 1 and 3) by pressing the hole end of the paper spindle down over the top of the board supports, one at a time, while lifting that section of the pc board. If the paper spindle is not available use your fingers to release the pc boards supports.
2. Unplug the ribbon cable from the pc board.
3. Pivot the pc board to a vertical position and then slide it forward to disengage the hinge.

NOTE: Each of the pc boards in the hinged stack can be removed in a similar manner.

Board Supports

1. The board supports on the inner memory board should be as shown in Figure 1.
2. If the filler board is to be reinstalled the board supports should be located in the holes, next to the hinges, in the inner memory board.

Hinges

1. Refer to Table 1 for the part number of the hinges to be installed.
2. Lightly press, (do not seat) the hinges into place and then recheck for proper installation (see Figure 1).

NOTE



Once the hinges are firmly pressed into place, they are very difficult to remove. Ensure that the correct hinges are being installed properly before pressing them all the way on.

3. Firmly press or tap the hinges into place.

Address Jumpers

Place the address jumpers in the positions indicated in Table 1. Refer to Figure 2 for the address jumper locations.

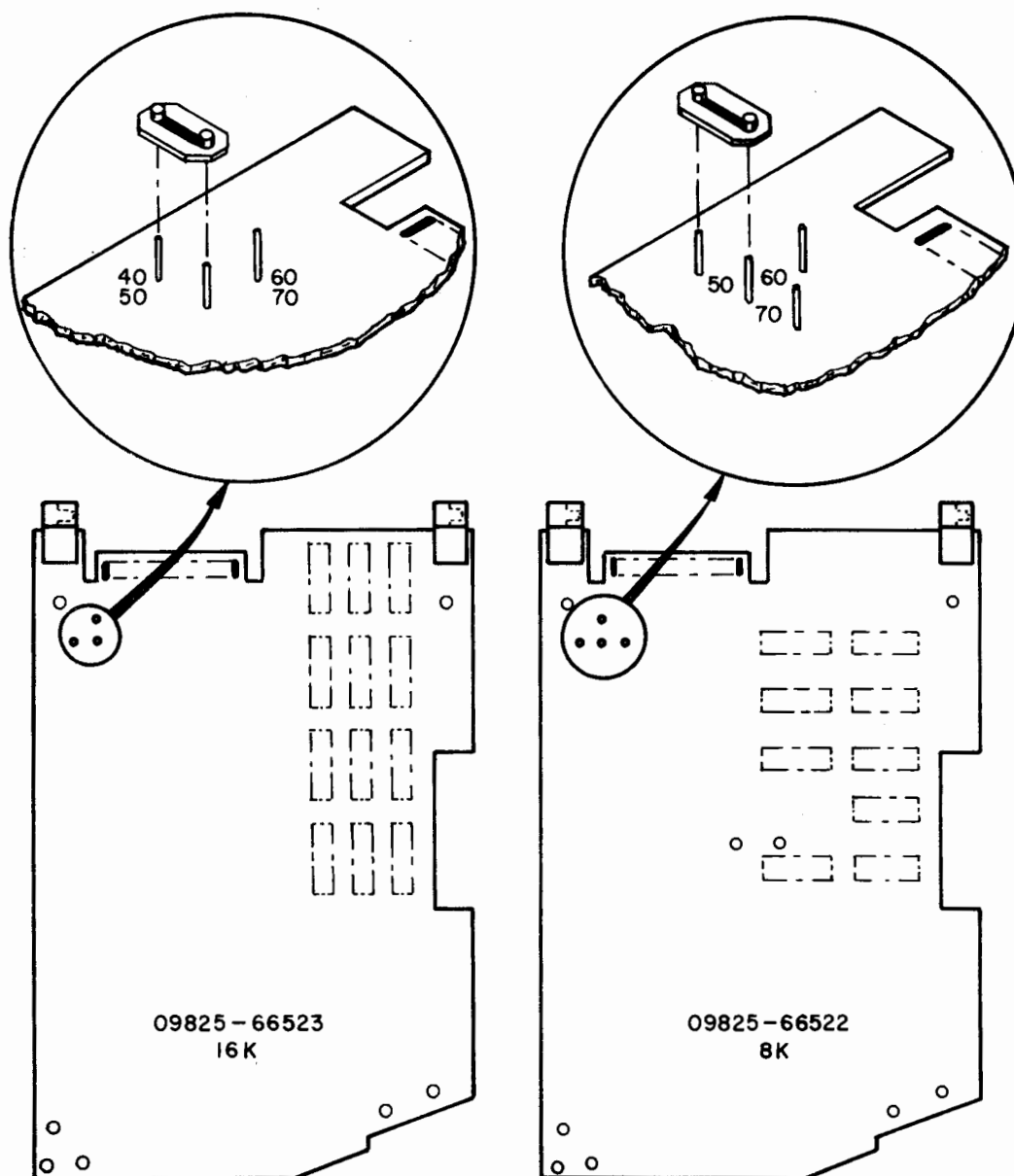


Figure 2.

Memory Size Switches

The memory size switches do not need to be changed if you are changing a standard computer to option 001, all other memory changes will require that these switches be set as indicated in Table 1.

Procedure:

1. Ensure that all plug-in ROMs are removed from the front of the computer.
2. Loosen the two bezel retaining screws and about 4 turns (see the figure below).
3. Slide the bezel forward (1 cm) and then lift the bezel while moving it forward again about 10 cm. Reset the bezel on the base in this position.
4. Raise each of the pc boards located above the processor board as described in Board Removal.

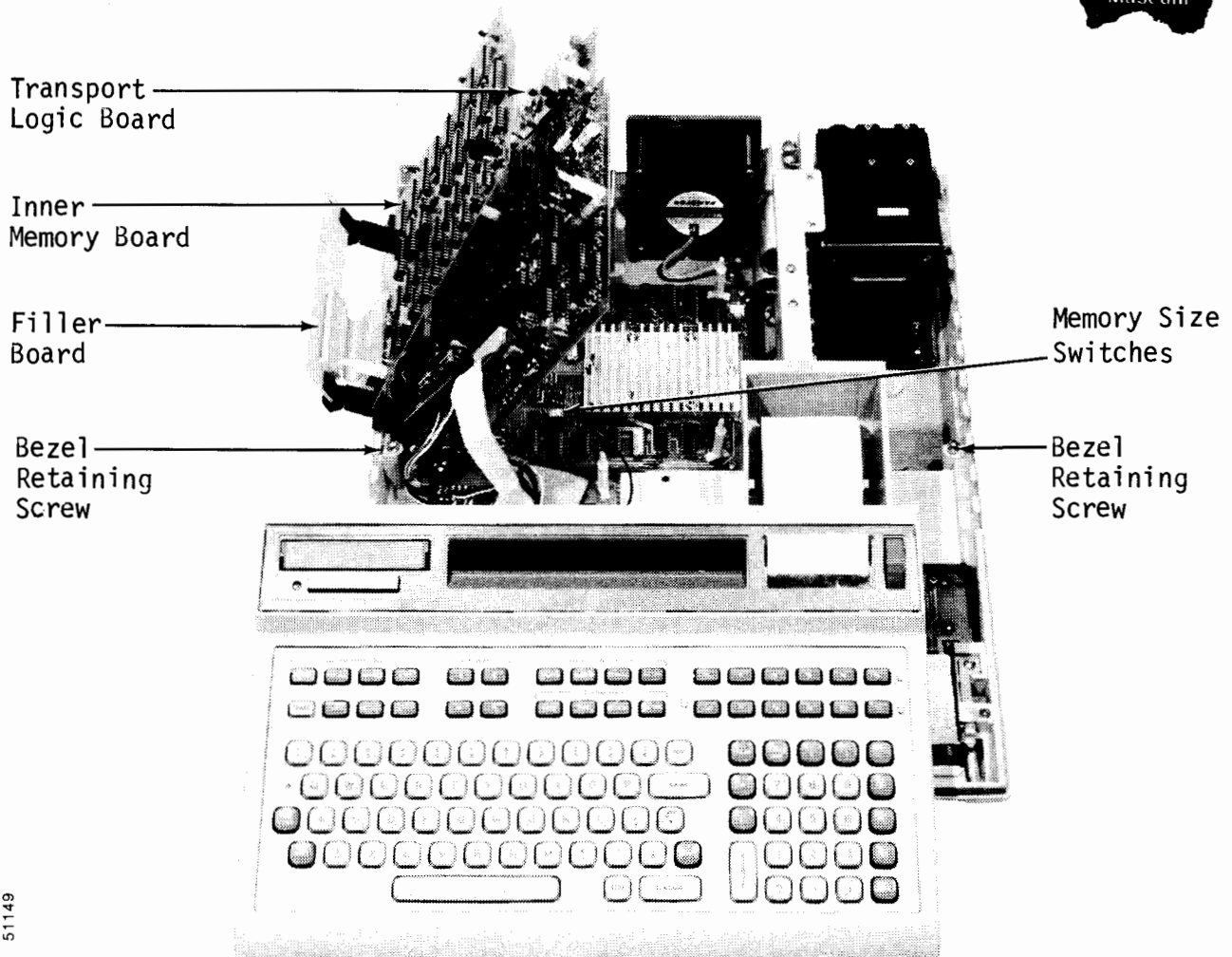


Figure 3.

5. Set the memory size switch as indicated in Table 1.
6. Recheck the position of memory size switches, proper operation of the computer depends on the position of these switches.
7. Reassemble the computer in the reverse order, make sure that the interconnecting cables and wires are not binding.

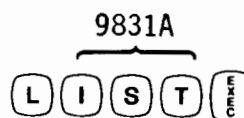
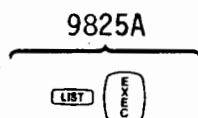
Install the Memory Boards

1. Recheck the position of the address jumper (refer to Figure 2 and Table 1).
2. Install the memory boards by engaging the hinges, pressing the board down over the tops of the board supports, and connecting the ribbon cable.

System Check

1. With the ROMs and shell still removed, plug-in and switch the computer ON.

Press:



2. The following displays should be seen for the indicated option.

	9825A	9831A
Standard	0 6844	3581
Opt. 001	0 15036	7677
Opt. 002	0 23228 /	11773
Opt. 003	0 31420	15869

3. If the proper display is not obtained unplug the computer and recheck the installation, especially the position of the address jumpers and memory size switches. Repeat the above system check.
4. Switch the computer OFF and unplug the power cord.
5. Reinstall the shell with the two screws in the back panel of the computer.

6. Run the Read/Write Memory test using the Test Cartridge. Refer to:
 - a. 9825A System Test Booklet; P/N 09825-90031
 - b. 9831A System Test Booklet; P/N 09831-90031
7. Install the appropriate option label on the blank space provided under the paper cover.
8. Reinstall the ROMs and interfaces that were removed.

