



## **Portable PLUS**

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# HP Software Module Installation Instructions

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These instructions explain how to install HP software modules in a Portable PLUS software drawer.

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## Caution



This product is sensitive to electrostatic discharge (ESD) damage. Follow these instructions carefully to avoid damage.

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## Unpacking and Inspection

Software modules consist of one or more integrated circuits (ICs). Each software module is shipped in a tube containing individual IC carriers which are used both to insert the ICs and to protect them against electrostatic discharge (ESD) damage.

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## Note



Do not break the seal on the tube until you have read the software license agreement packed with this product.

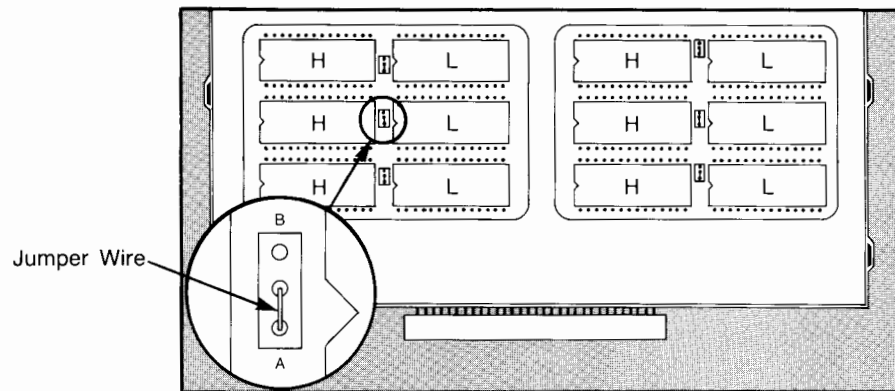
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Make sure a full set of the correct ICs have been shipped in the tube. Inspect the ICs carefully for any sign of shipping damage. Notify your dealer immediately if any of the ICs are damaged or if anything is missing.

## Installing the Software Modules

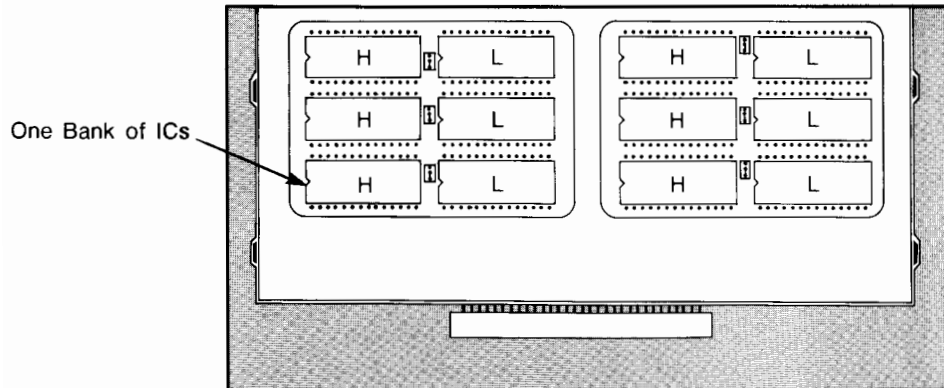
To install a software module:

1. Remove the software drawer from your Portable PLUS, if it is installed. Refer to the *Drawer Installation Instructions* for more information on how to remove the drawer.
2. Make sure that all the jumper wires in the software drawer are set to the "A" position. If the jumpers are not set as shown below, contact your authorized Hewlett-Packard dealer for assistance.

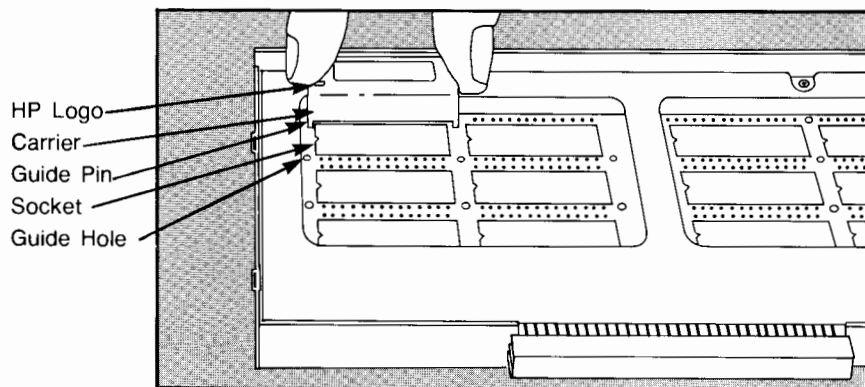




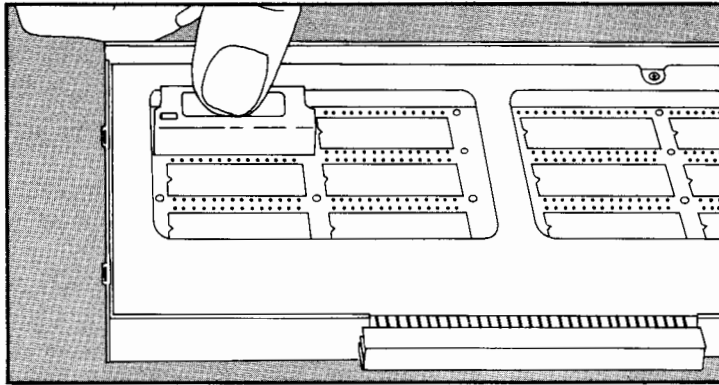
3. The software drawer is organized in sets (called banks) of "H" and "L" sockets. If an IC is marked with an "H" or "L" it must be inserted in a socket with the same marking. Pairs of "H" and "L" ICs must be placed in the same bank (adjacent sockets). If an IC is unmarked, it may be placed in either an "H" or "L" socket (but it may only be paired in the same bank with another unmarked IC). Pairs of ICs may be placed in any available bank.



Position the first IC carrier over an appropriate socket. Orient the carrier so that the two guide pins on the carrier align with the guide holes on the printed circuit board. Lower the carrier until the guide pins are inserted into the guide holes.



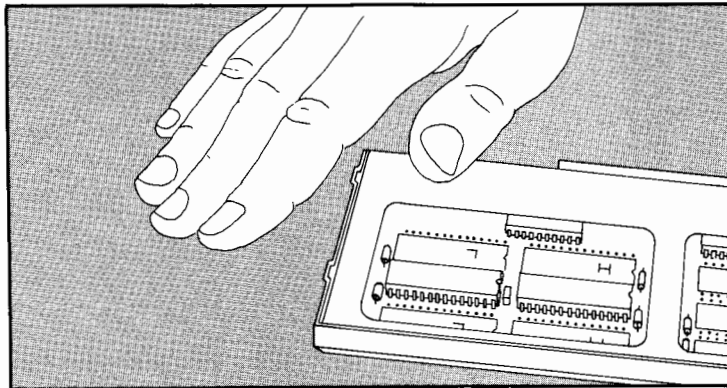
4. Press down evenly through the opening on the back of the carrier to seat the IC in the socket.



5. Remove the carrier from the IC by lifting it straight up. Be careful not to lift up the IC along with the carrier.
6. Check for bent pins on the IC after you have removed the carrier. Each of the 28 small metal pins along the sides of the IC should be in a hole in the socket on the printed circuit board.

**If you have accidentally bent a pin, do the following (otherwise go on to step 7):**

- a. Momentarily touch the metal case.

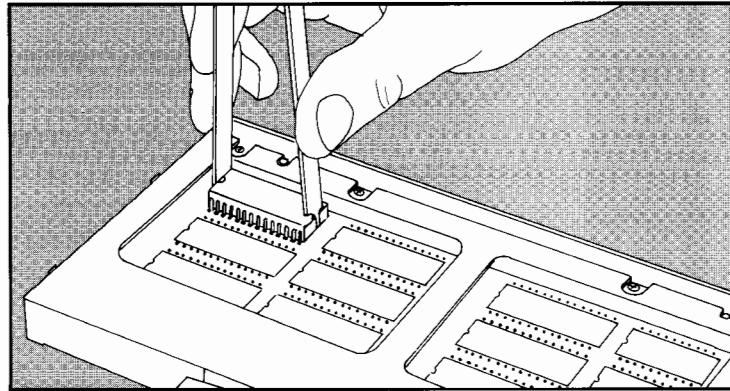


**Caution**

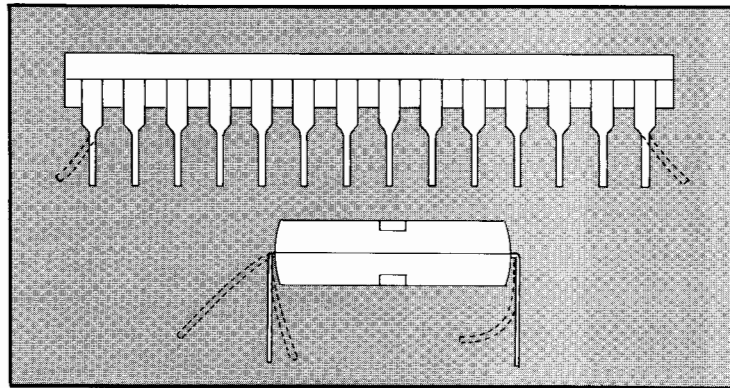
To avoid electrostatic discharge damage (ESD) to your ICs, do the following:

- Avoid handling the pins of the ICs as much as possible.
- Complete the following procedure without interruption. If you are interrupted, repeat step a.

- b.** Grasp the ends of the IC using the extraction tool and lift up to remove the IC. Be careful not to bend the pins of the IC. Avoid rocking the IC back and forth, if possible.

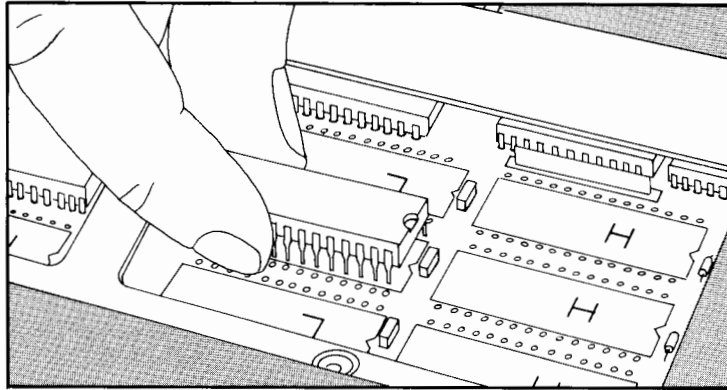


- c.** Straighten the bent pins.

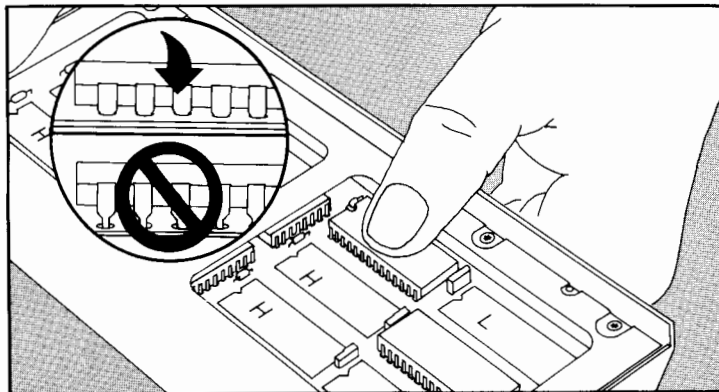




- d. Re-position the IC over the appropriate socket. Align the notch on the IC with the notch indicated on the IC socket. Be sure each pin is in a socket.



- e. Press the IC into the socket.
7. Press firmly on the IC to seat it. (You may hear a crackling sound as you push on the IC.) **Continue pushing hard until you are sure the IC is fully seated as shown in the illustration below.** If you don't fully seat the IC, an apparent operating failure can occur because the IC may work loose after several days or weeks of operation.



8. Repeat steps 3 through 7 for each IC.

9. Install the software drawer in your Portable PLUS. (Follow the *Drawer Installation Instructions* provided with the drawer.)
10. Turn the power on by pressing the contrast ((**Ⓢ**)) key. Press **Off** ((**f8**)) to turn the power off again.
11. Start the diagnostic program by pressing and holding (**Ext Char**) (**Shift**) and then (**f8**) for five seconds.

**Caution**



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The contents of RAM memory may be altered when running the `Software/Memory drawer test`. Be sure to save the contents of the Edisc on an external disc before you initiate the test.

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Run the `Software/Memory drawer test` by pressing (**Shift**) (**f2**). If you need more information, refer to appendix C, "Diagnostics," in *Using the Portable PLUS*.

If the software drawer fails the diagnostic test, refer to the *Plug-in Accessories: Warranty and Customer Support* booklet for instructions on how to obtain service.

Press **Exit** ((**Shift**) (**f8**)) to exit the diagnostic program.

12. Check to be sure that the software provided in the module appears in a directory on drive B. (Type: `DIR B:` (**Return**).) If it does not appear, contact your local Hewlett-Packard dealer listed in the *Plug-in Accessories: Warranty and Customer Support* booklet for service.



