

70206A-04A

S E R V I C E N O T E

SUPERSEDES: 70206A-04

HP 70206A System Graphics Display

Serial Numbers: 0000A00000 / 2620A00563

Duplicate Service Notes: 70205A-01A

ROM Replacement Kit

Situation:

Display Firmware Revision 5.0 has been superseded by Revision 6.0. Troubleshooting displays with Revision 5.0 should begin by updating the firmware to Revision 6.0.

Solution:

This service note contains instructions for installing read-only memory (ROM) in the HP 70206A Graphics Display.

To avoid electrostatic discharge damage to electronic components, perform the installation at a static-free work station.

Parts List:

The following is a list of parts included in the HP 70206 ROM Replacement Kit (HP Part No. 5062-0796).

Continued

DATE: 04 January 04 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:		☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ☒ AGREEABLE TIME	STANDARDS:		LABOR: 0.5 Hours
LOCATION CATEGORY:		☒ CUSTOMER INSTALLABLE ☐ ON-SITE ☐ HP LOCATION	SERVICE INVENTORY:	☒ RETURN ☐ SCRAP ☒ SEE TEXT	USED PARTS: ☒ RETURN ☐ SCRAP ☒ SEE TEXT
AVAILABILITY:		PRODUCT'S SUPPORT LIFE		RESPONSIBLE UNTIL : 01 February 1994	
AUTHOR: RDS		ENTITY: 4500		ADDITIONAL INFORMATION: PCO 4076	

HP Part No.	Description	CD	Qty.
70205-80037	ROM U39	1	1
70205-80038	ROM U40	2	1
70205-80039	ROM U47	3	1
70205-80040	ROM U48	6	1
4208-0495	Foam Pad	3	1
9320-5455	Reply Label	8	1
9211-4917	Reply Carton	4	1
8710-1392	Hex Wrench(not used)	0	1
70205A-1A	Service Note		1
70206A-4A	Service Note		1

Removing the top and inner covers:

1. Remove the two feet at the top of the rear panel.
2. Loosen the top-cover screw located at the center of the rear edge. Slide the cover off the back of the instrument.
3. Remove the inner cover after twisting each of 14 cover screws one-quarter turn counterclockwise.

Removing the microprocessor board:

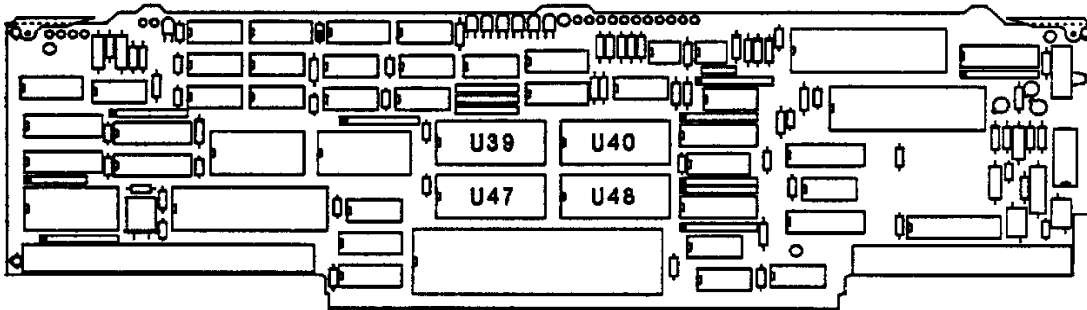
4. Remove the board-retainer cover (right side). The four hex screws require a 3 mm hex wrench (HP Part No. 8710-1392).
5. Use the dark blue tabs to remove the A6 Microprocessor Board Assembly from the display module.

CAUTION

Before touching the ROMs, ground yourself with a resistor-isolated wrist strap. In addition, line power to all instruments must be properly earth-grounded to prevent buildup of static charge.

Replacing the ROMs:

6. Locate (do not remove) the ROMs on the microprocessor board (U39, U40, U47, U48), and note their notch orientation. The original ROMs currently in the board should have HP Part Numbers 70205-80004 through 70205-80007. The new ROMs have HP Part Numbers 70205-80037 through 70205-80040 respectively. See Figure 1.

**Figure 1****NOTE**

In the next step, when removing ROMs, pry them up gradually to avoid bending pins AND to avoid prying up the socket itself. When inserting the new ROMs, double check that the notch orientation is correct and that all pins are in their sockets.

7. Remove original ROM U39, 70205-80004, and replace it with new ROM 70205-80037. Place the original ROM in the anti-static foam block, then repeat the sequence for U40, U47, and U48 so that the following list is satisfied.

U39 70205-80037
U40 70205-80038
U47 70205-80039
U48 70205-80040

Package the original ROMs for return to Hewlett-Packard. (Place the foam block into the anti-static pouch and the pouch into the original box, then affix the business reply label to the box.)

Reassembling the HP 70206A Graphics Display:

8. Slide the A6 Microprocessor Board Assembly through the blue guides and press firmly into the motherboard connectors.
9. Position the board-retainer cover and start the four hex screws by hand, but do not tighten them.
10. Use a small screwdriver to carefully line up the board assemblies with the board slot in the board-retainer cover. Tighten the four hex retainer-cover screws with the 3 mm hex wrench.
11. Position the inner cover and secure by twisting the 14 inner-cover screws one-quarter turn clockwise.
12. Position the top cover to provide rear overhang of about 1 cm (1/2 inch) then push the cover forward until contact is made with the frame.
13. Tighten the top-cover screw located at the center of the rear edge. The cover will be pulled forward as the screw tightens.
14. Replace the two rear feet.

Operation verification:

15. Verify that the display's rear-panel TEST switch is OFF (0 position).
16. Set the mainframe line switch to ON, wait at least 30 seconds, set the switch to OFF, then again set the switch to ON. Normal power-up has occurred if the display is other than large block letters on an otherwise blank screen (display disruptive error).

NOTE

If converting from Display ROM Version 5.0 to Version 6.0, refer to the Operating Manual Update for a note concerning CY command compatibility. The note, titled "Compatibility with ROM Version 5.0" is under the DISPLAY OPERATION tab, CHAPTER 3, Section 4, Copy: CY (parameter option).