

HP 250 COMPUTER SYSTEM

EXTERNAL INP CONNECTION PANEL
INSTALLATION MANUAL



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LIST OF EFFECTIVE PAGES

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All pages are original issue.

PRINTING HISTORY

New editions are complete revisions of the manual. Update packages, which are issued between editions, contain additional and replacement pages to be merged into the manual by the customer. The date of the title page of the manual changes only when a new edition is published. When an edition is reprinted, all the prior updates to the edition are incorporated.

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1 INTRODUCTION

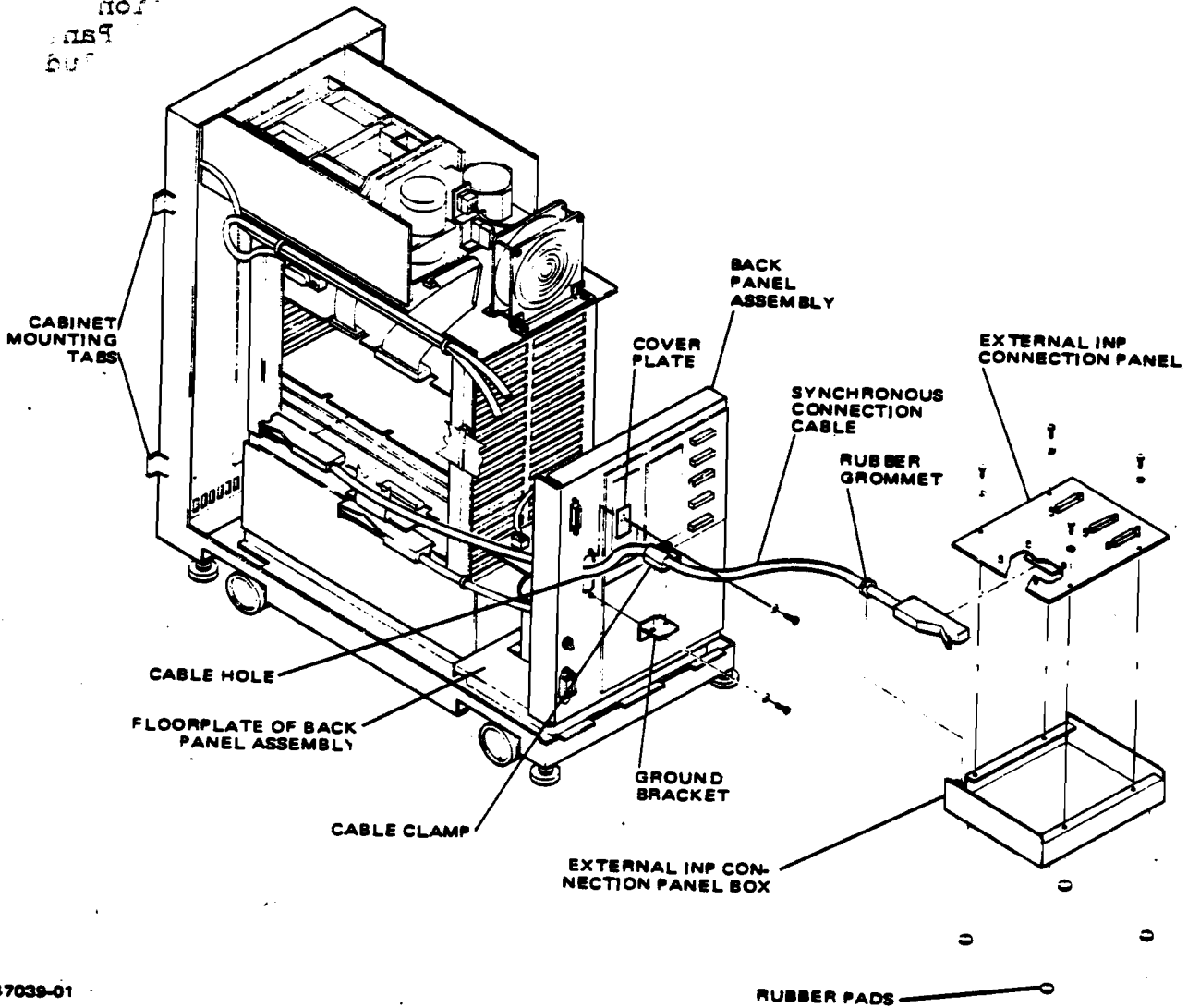
This manual provides the procedure for adding an External Intelligent Network Processor (INP) Connection Panel to an HP 250 Computer System. Four options are available, depending on the configuration of the computer system and when it was shipped from the factory. These options and their product numbers are:

- a. If the system was shipped before July, 1982 (see NOTE below), and includes one Asynchronous Interface (ASI) PCA and one Intelligent Network Processor (INP) PCA, and the customer is adding a second ASI PCA, install product number HP 45120B Option 002.
- b. If the system includes one ASI PCA and one INP PCA, and the customer is adding a second ASI PCA, but the system was shipped DURING OR AFTER July, 1982, install product number HP 45120B Option 001.
- c. If the system was shipped before July, 1982, and includes two ASI PCAs, and the customer is adding an INP PCA, install product number HP 45122B Option 002.
- d. If the system includes two ASI PCAs and the customer is adding an INP PCA, but the system was shipped DURING OR AFTER July, 1982, install product number HP 45122B Option 001.

As shown in figure 1, the External INP Connection Panel connects to the computer via a Synchronous Connection Cable, which must pass through a hole in the computer Back Panel Assembly. THAT HOLE DOES NOT EXIST IN THE BACK PANEL ASSEMBLIES OF COMPUTERS SHIPPED FROM THE FACTORY BEFORE JULY, 1982; in those cases, the assembly must be replaced.

NOTE

The July, 1982, date used throughout this manual is APPROXIMATE. The Back Panel Assemblies of the computers shipped BEFORE the change-over date DO NOT have the cable hole shown in figure 1. Those shipped AFTER the change-over date have the hole.



47039-01

Figure 1. HP 250 Computer and External INP Connection Panel

Before starting the installation, the Hewlett-Packard Customer Engineer (CE) should ensure that the shipment includes the correct parts. In ALL cases, the shipment should include an INP External Box (see figure 1), a Synchronous Connection Cable and ground bracket, a package of adhesive-backed rubber pads, and a small rectangular metal cover plate. In addition, if the customer ordered product number HP 45120B (with either Option 001 or 002), the shipment should include an ASI PCA and an ASI Panel Kit. If Option 002 was ordered, the shipment should also include a new Back Panel Assembly and a package of Warning and Power Labels.

If the customer ordered product number HP 45122B (with either Option 001 or 002), the shipment should include an INP PCA and an external INP Connection Panel. If Option 002 was ordered, the shipment should also include a new Back Panel Assembly and a package of Warning and Power labels.

These parts are shown next in table form. The following abbreviations are used in the table: Prod. No.=Product Number; Extrnl=External; Synch=Synchronous; Conn=Connection; Grnd=Ground; Brckt=Bracket; Rubr=Rubber; Assy=Assembly.

| Prod. No. Option | 45120B 002 | 45120B 001 | 45122B 002 | 45122B 001 |
|---------------------|---|---|--|--|
| Parts | INP Extrnl Box Synch Conn Cable Grnd Brckt Rubr Pads Cover Plate ASI PCA ASI Panel Kit Back Panel Assy Labels | INP Extrnl Box Synch Conn Cable Grnd Brckt Rubr Pads Cover Plate ASI PCA ASI Panel Kit | INP Extrnl Box Synch Conn Cable Grnd Brckt Rubr Pads Cover Plate INP PCA INP Conn Panel Back Panel Assy Labels | INP Extrnl Box Synch Conn Cable Grnd Brckt Rubr Pads Cover Plate INP PCA INP Conn Panel |

Once the shipment is inspected, the CE can proceed with the installation.

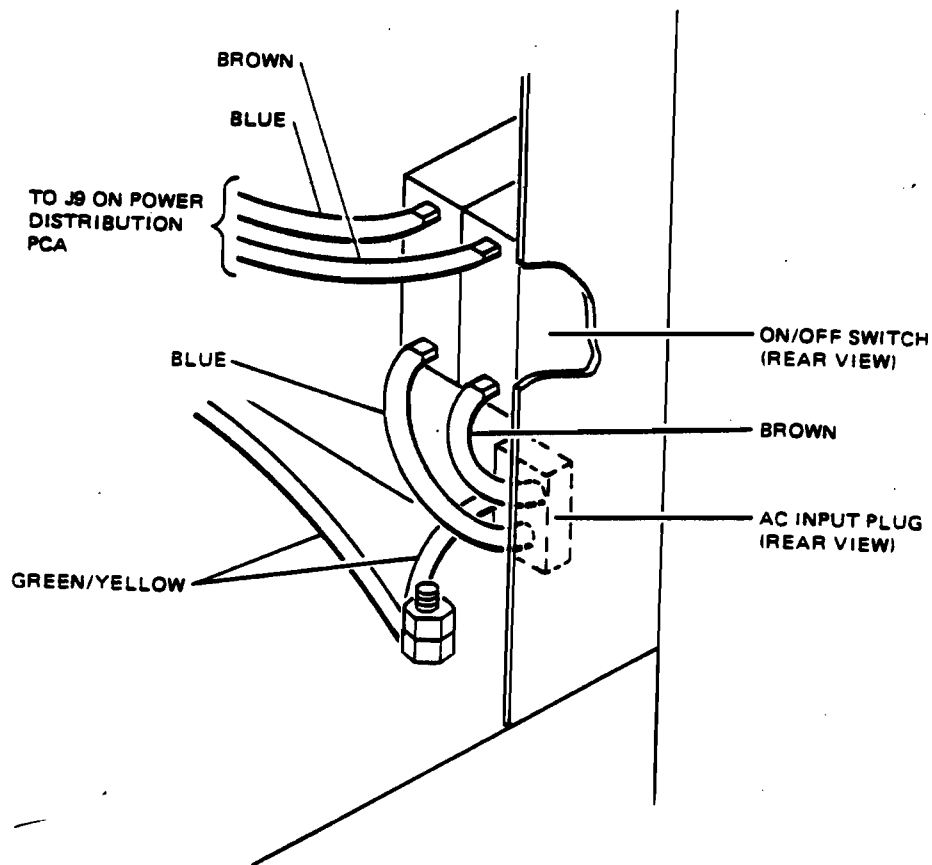
2. INSTALLING HP 45120B OPTION 002 OR HP 45122B OPTION 002



In either case where Option 002 was ordered, the computer system was shipped from the factory before July, 1982. Thus a new Back Panel Assembly must be installed before the External INP Connection Panel can be connected. The procedure is:

- a. Ensure all power to computer is off. Pull AC power cord from wall socket.

- b. Facing front of computer, remove front cabinet covers. (Pull bottom cover off first; top cover has two screws on tabs which are exposed when bottom cover is removed.) Unscrew cabinet from four mounting tabs (see figure 1). Tip cabinet up, back, and lift it off the chassis. Set cabinet aside.
- c. Disconnect all components attached to computer Back Panel Assembly. Before disconnecting ON/OFF Switch, note which wires are connected to which lugs. (See figure 2.)

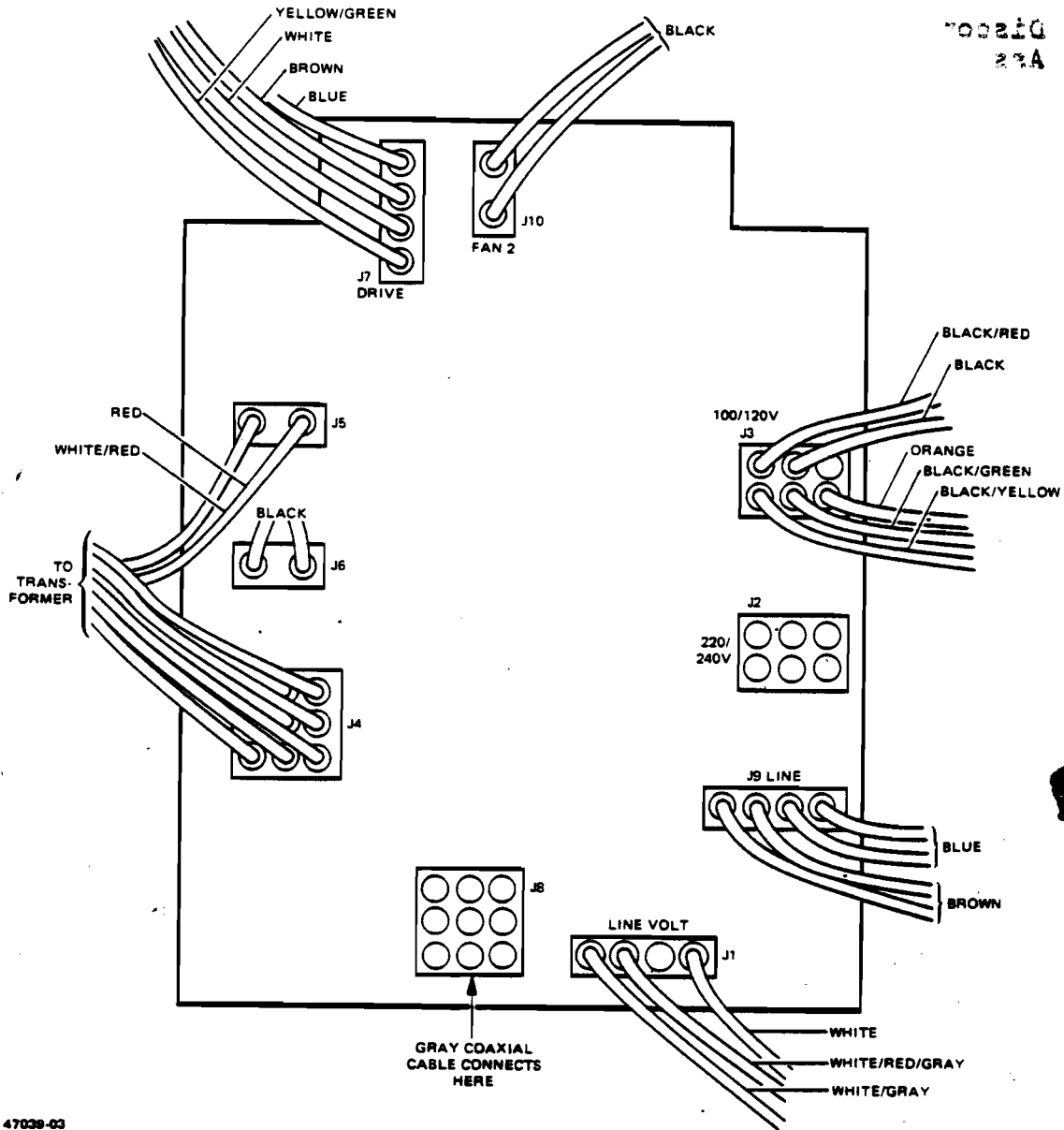


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Figure 2. ON/OFF Switch

- d. Pull all connectors from Power Distribution PCA, located on top of transformer. (See figure 3.) Unscrew PCA from transformer. Set PCA aside.

FROM THE BOTTOM COVER
 EXPOSED WHEN BOTTOM COVER
 IS REMOVED



47039-03

Figure 3. Power Distribution PCA

WARNING

In step e which follows, use both hands and grasp firmly when lifting the Back Panel Assembly from the chassis; it is heavy.

- e. Unscrew floor plate of Back Panel Assembly from computer chassis. Remove Back Panel Assembly, including floor plate and transformer, from computer and place it on a work table.
- f. Unscrew and remove transformer from old Back Panel Assembly. Attach transformer to new Back Panel Assembly, then screw Power Distribution PCA to top of transformer.
- g. Screw new Back Panel Assembly (with transformer and Power Distribution PCA) to computer chassis.
- h. Connect wires to Power Distribution PCA. (See figure 3.)
- i. Connect all components and wires to Back Panel Assembly.
- j. Install ground bracket below cable hole in Back Panel Assembly, as shown in figure 1.
- k. Route Synchronous Connection Cable through panel hole as shown in figure 1, being sure to leave end of cable with black rubber grommet outside the panel. Attach cable clamp (shown in figure 1) to ground bracket. Attach small rectangular metal cover plate over top part of panel hole (the part left exposed, above cable).
- l. Get new ASI PCA or INP PCA from shipment. Install it in fourth slot from bottom of computer cardcage, and configure it according to instructions in the HP 250 Computer Systems CE Handbook, part number 45000-94000.
- m. Attach end of Synchronous Connection Cable in computer to edge connector of INP PCA.
- n. IF product number HP 45120B was ordered, get new ASI Connection Panel from shipment and install it in the Back Panel Assembly. Then remove INP Connection Panel from old Back Panel Assembly. This panel is now used as the External INP Connection Panel.

IF product number HP 45122B was ordered, get External INP Connection Panel from shipment.
- o. Attach end of Synchronous Connection Cable with rubber grommet to edge connector on External INP Connection Panel. Screw External INP Connection Panel into its box as shown in figure 1, using care to fit rubber grommet on Synchronous Connection Cable into the hole intended for it.

- p. Attach adhesive-backed rubber pads to bottom of box as shown in figure 1. Attach new Warning and Power labels to new Back Panel Assembly in same places old labels were located on old assembly.
- q. Set cabinet on chassis and screw it onto mounting tabs. Replace front cabinet covers.

3. INSTALLING PRODUCT NUMBER 45122B OPTION 001

Product Number HP 45122B Option 001 should be installed if the computer system was shipped DURING OR AFTER July, 1982, the system contains two ASI PCAs, and the customer is adding an INP PCA. In this case, the computer Back Panel Assembly already has a hole for the passage of the Synchronous Connection Cable. The CE should perform steps a and b of the procedure described in Paragraph 2, skip steps c through i, and continue at step j.

4. INSTALLING PRODUCT NUMBER HP 45120B OPTION 001

Product Number HP 45120B Option 001 should be installed if the computer system was shipped DURING OR AFTER July, 1982, the system contains one ASI PCA and one INP PCA, and the customer is adding a second ASI PCA. The procedure is:

- a. Ensure all power to computer is off. Pull AC power cord from wall socket.
- b. Facing front of computer, remove front cabinet covers. (Pull bottom cover off first; top cover has two screws on tabs which are exposed when bottom cover is removed.) Unscrew cabinet from four mounting tabs (see figure 1). Tip cabinet up, back, and lift it off chassis. Set cabinet aside.
- c. Remove old Synchronous Connection Cable. Install ground bracket below cable hole in Back Panel Assembly, as shown in figure 1.
- d. Route new Synchronous Connection Cable through Back Panel Assembly hole as shown in figure 1, being sure to leave end of cable with black rubber grommet outside the panel. Attach cable clamp to ground bracket (see figure 1). Attach small rectangular metal cover plate over top part of panel hole (the part left exposed, above cable).
- e. Install new ASI PCA in fourth slot from bottom of computer cardcage, and configure it according to instructions in the HP 250 Computer Systems CE Handbook, part number 45000-94000.
- f. Remove INP Connection Panel from computer Back Panel Assembly. This panel is now used as the External INP Connection Panel.

- g. Attach Synchronous Connection Cable to edge connector of External INP Connection Panel, as shown in figure 1.
- h. Screw External INP Connection Panel into its box as shown in figure 1, using care to fit rubber grommet on Synchronous Connection Cable into the hole intended for it.
- i. Attach adhesive-backed rubber pads to bottom of box as shown in figure 1.
- j. Set cabinet on chassis and screw it onto mounting tabs. Replace front cabinet covers.

Installation of the External INP Connection Panel is now complete. Connect the new peripheral device(s) according to the procedures in the installation manual(s) shipped with them.