

MICRO/ PDP-11 SYSTEM

UNPACKING AND INSTALLATION GUIDE

Prepared by Educational Services
of
Digital Equipment Corporation

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DECUS	PDP	VAX
DECwriter	P/OS	VMS
DIBOL	Professional	VT
LA	QBus	Work Processor

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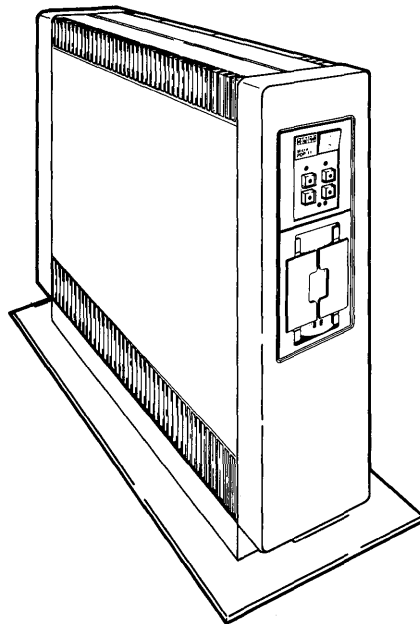
PREFACE

This manual provides the procedures to unpack, install, and test your MICRO/PDP-11™ system.

NOTES

It is important that you follow the instructions in the sequence presented here.

Refer to the *MICRO/PDP-11 System Site Preparation and Verification Guide* located in the Installation Accessories box for detailed site planning information.



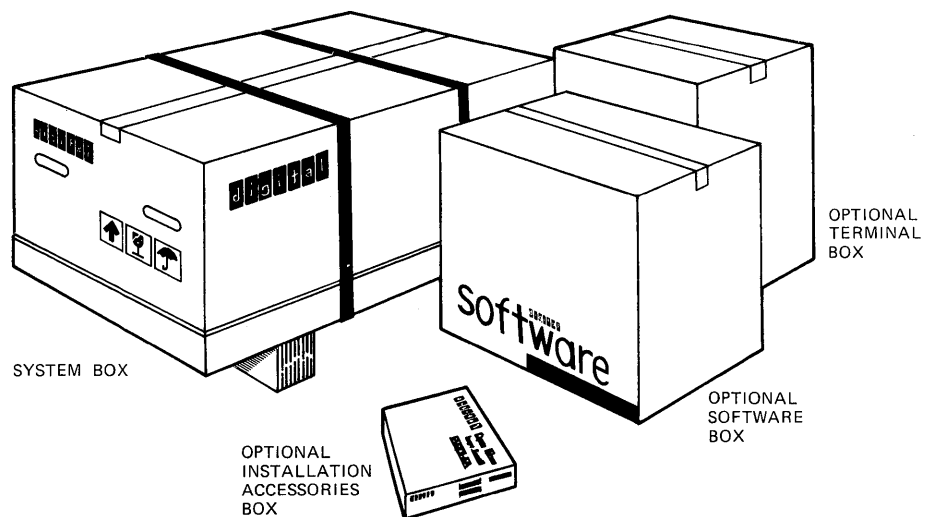
UNPACKING

Identify boxes.

Check the items shipped with your MICRO/PDP-11 system against the packing list attached to the outside of one of the boxes.

If you need help at any time, call the appropriate Digital hotline number.

- For hardware-related questions, call 800-258-1123 toll-free in continental United States and Canada. From New Hampshire, Alaska, and Hawaii, call collect 603-884-6867.
- For software-related questions, contact your Digital sales representative and ask for an access code number for the Phone Support Center (PSC).



NOTE

You may have additional boxes than those shown here.

UNPACKING

If any boxes or items inside the boxes are missing. . .

- Identify the missing items from the packing list, and
- Contact your salesperson or the retail store.

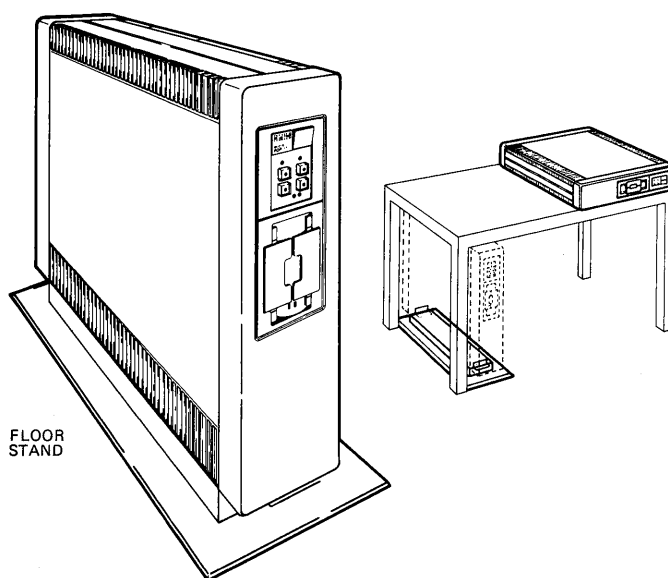
If any boxes or items are damaged. . .

- Stop unpacking,
- Contact your salesperson or the retail store, and
- Contact the delivery agent.

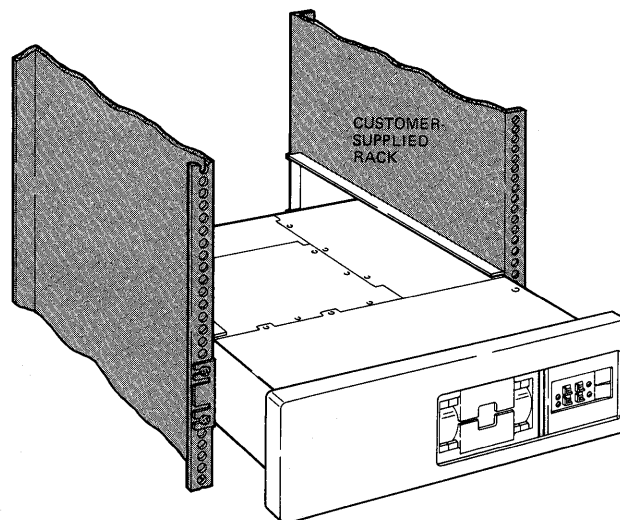
Determine which model you have.

- If you have the floor stand/tabletop model, go to page 4 for unpacking information.
- If you have the rack mount model, go to page 53 for unpacking information.

FLOOR STAND/TABLETOP MODEL



RACK MOUNT MODEL



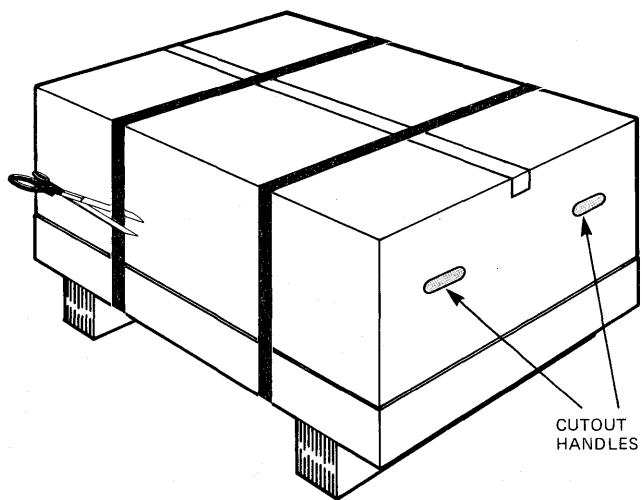
UNPACKING

Unpack the MICRO/PDP-11 system unit.

WARNING

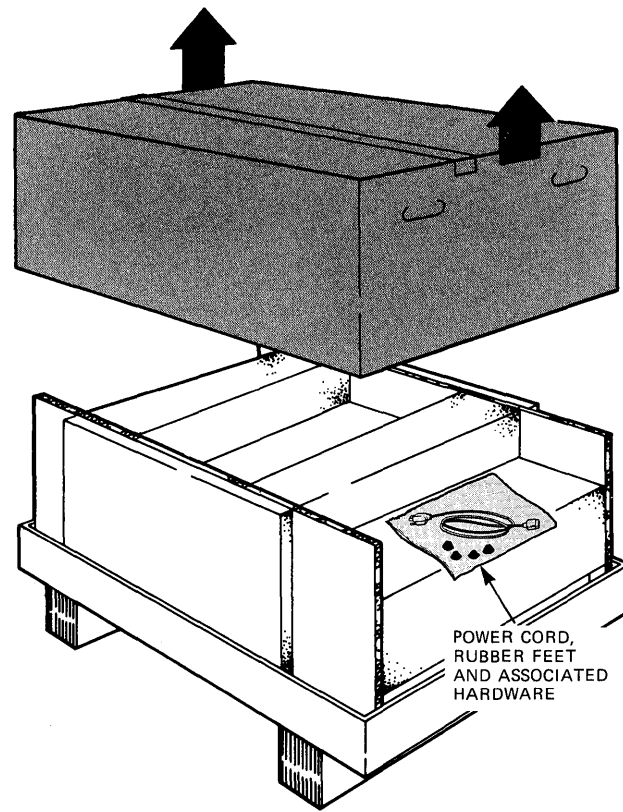
You will need two people to unpack the MICRO/PDP-11 system unit. It weighs 31.75 kg (70 lb).

First, lift the packed system unit by its cutout handles and move it close to its final installation site. Then, cut and remove the shipping straps.



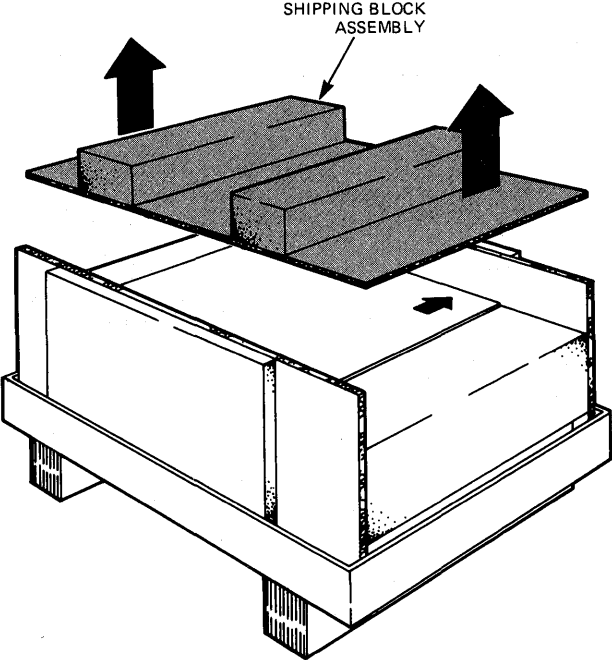
Remove the large tube (with cutout handles).

Locate the plastic bag containing the power cord and four rubber feet (for tabletop conversion) and put it aside.



UNPACKING

Remove the shipping block assembly.

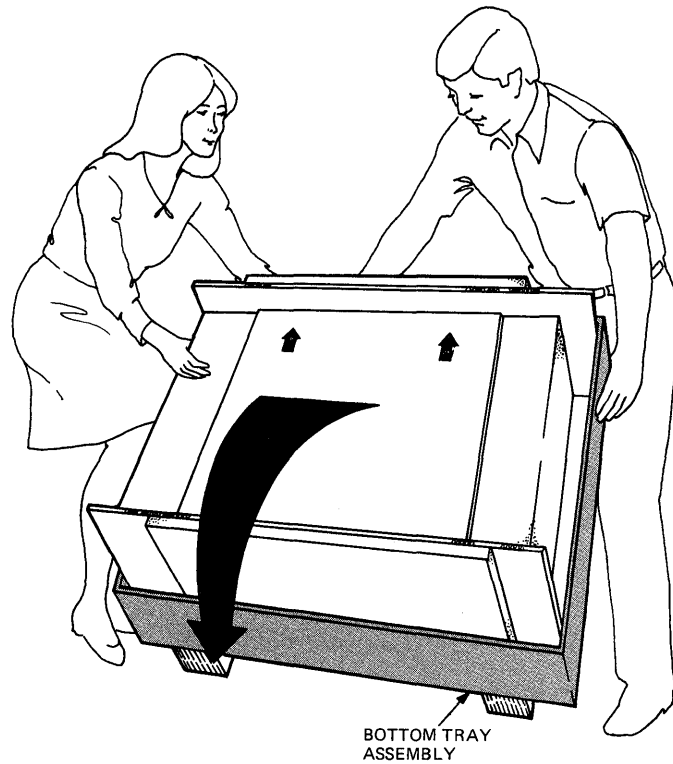


Tilt the bottom tray (with the system unit inside) to a vertical position.

Ensure the base of the system unit is at the bottom.

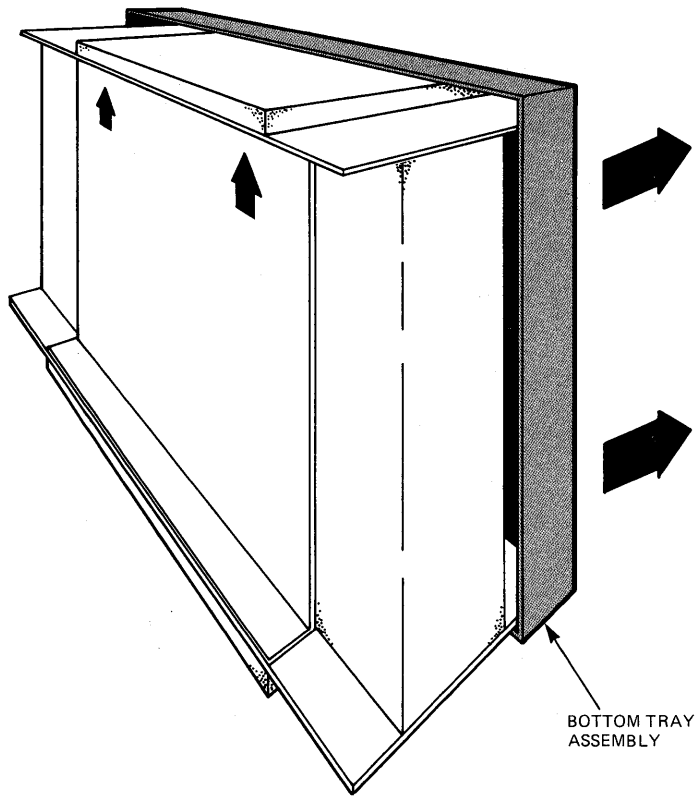
NOTE

Arrows on the packing tube indicate the top of the system unit.



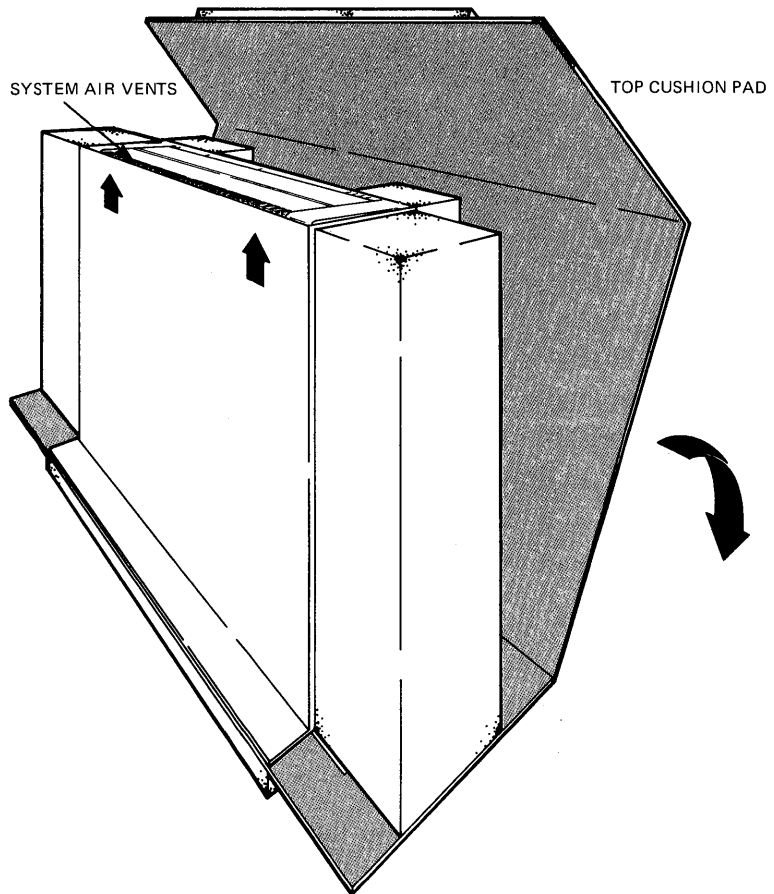
UNPACKING

Remove the bottom tray assembly.



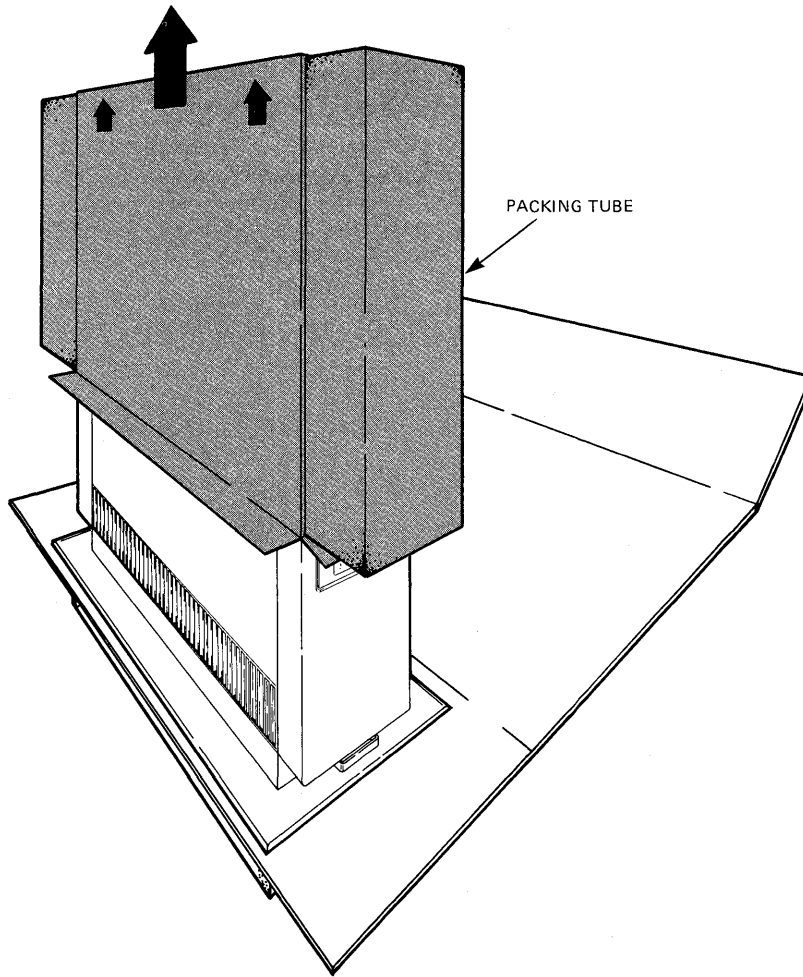
Fold the top cushion pad down.

You should now be able to see the air vents located on top of the system unit.



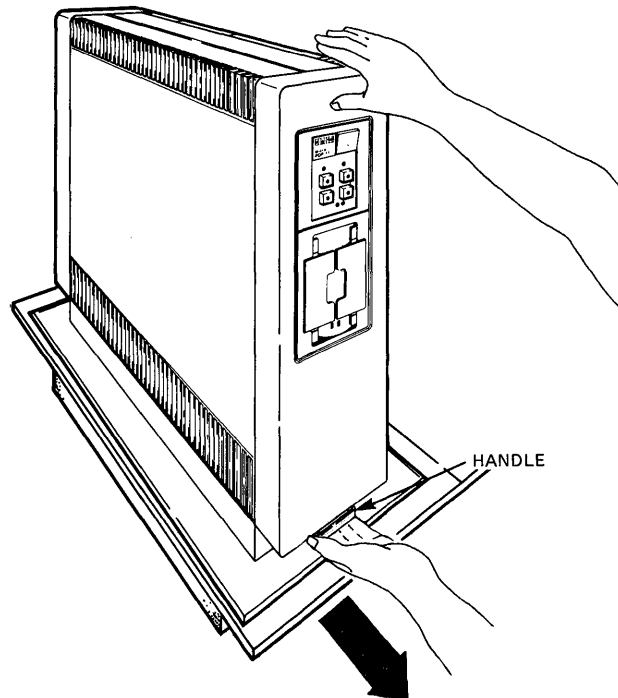
UNPACKING

Remove the packing tube from around the system unit by sliding it upward.



Slide the system unit off the bottom cushion pad using the handle at the base of the unit.

Locate the system unit close to its final installation site, allowing enough space at the rear of the unit to attach power and option cables.



NOTE

To convert a floor stand system to a tabletop system, follow the instructions starting on page 47.

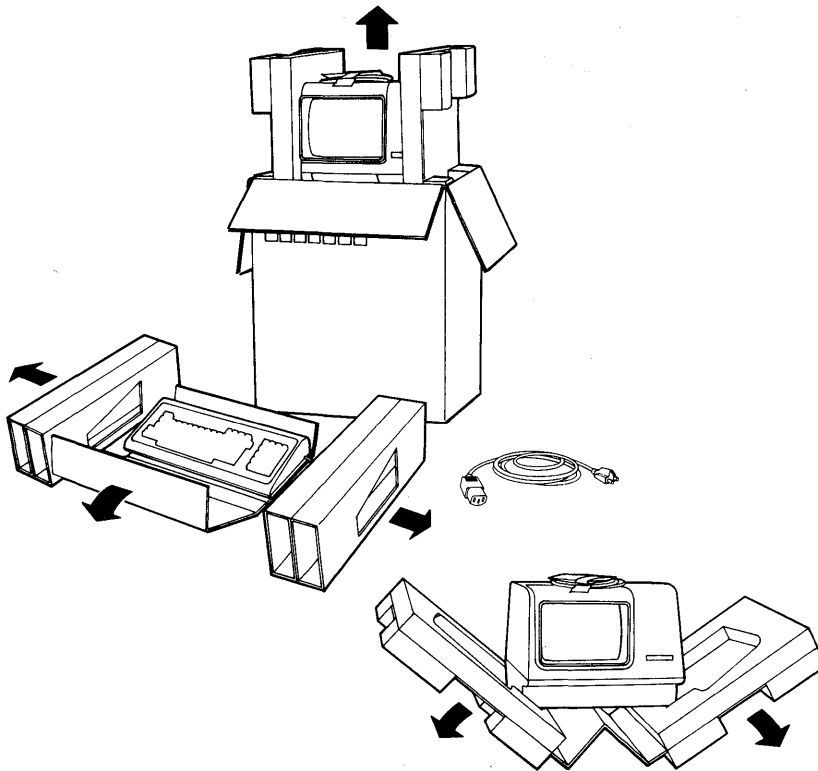
Unpack the optional video terminal(s).

WARNING

You will need two people to unpack the video terminal. It weighs 18 kg (39 lb).

CAUTION

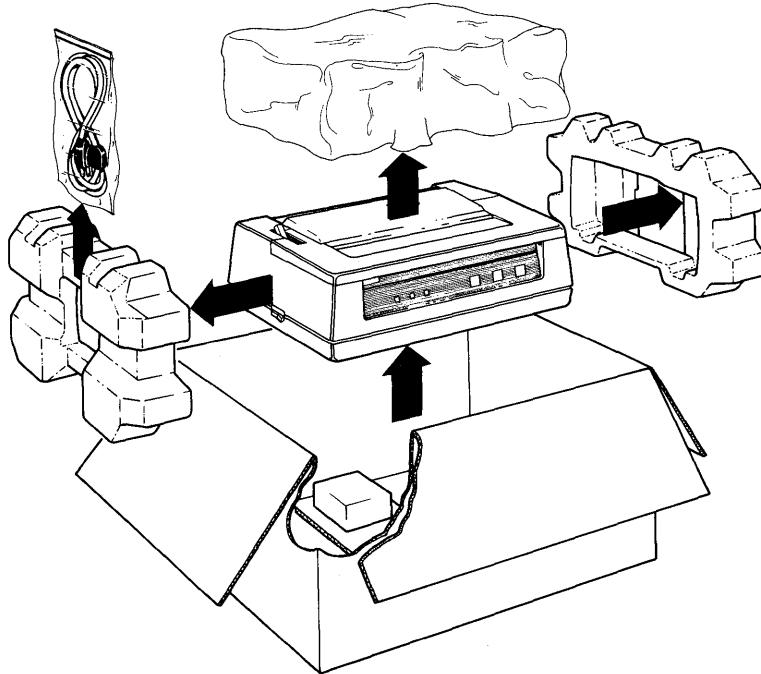
When removing the video terminal from its shipping box, be sure to lift it by its base only. Do not lift the video terminal by its top cover or you may damage it. The video terminal is wedged tightly in the box and may come out suddenly if you lift it with too much force.



Unpack the optional printer.

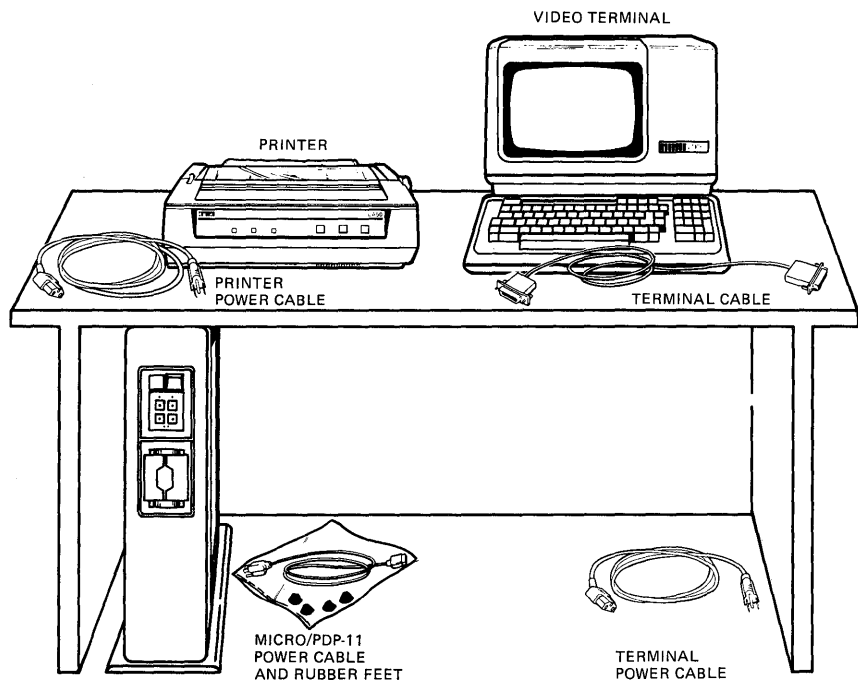
NOTE

Refer to the unpacking and installation information supplied with your printer.



INSTALLATION 2

This chapter describes optional video terminal installation (page 16) and system unit installation (page 24).



If you need help at any time, call the appropriate Digital hotline number listed on page 1.

CAUTION

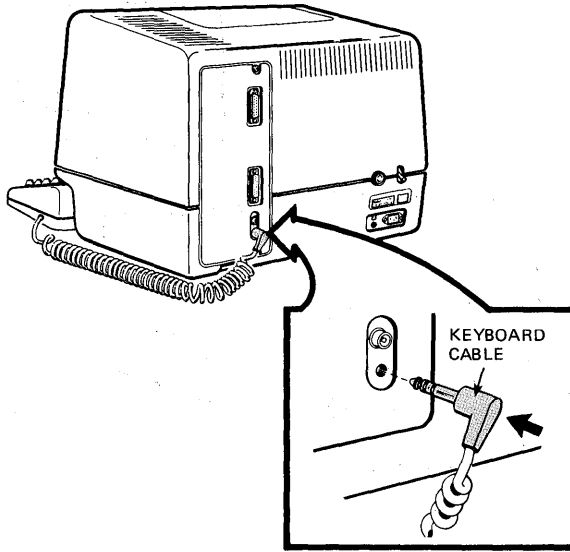
DO NOT plug in the power cord until you are directed to do so.

NOTE

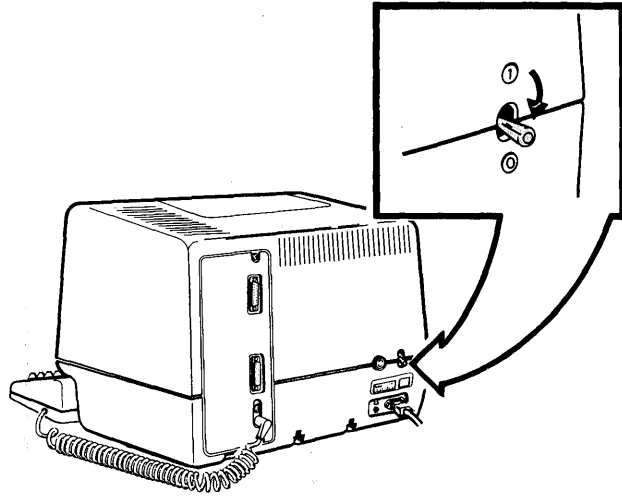
The terminal installation information presented here is specific to Digital's VT100 series. For other terminals, refer to the installation information provided with your terminal.

INSTALLATION

Connect the keyboard to the terminal.



Set the power switch to 0 (off).



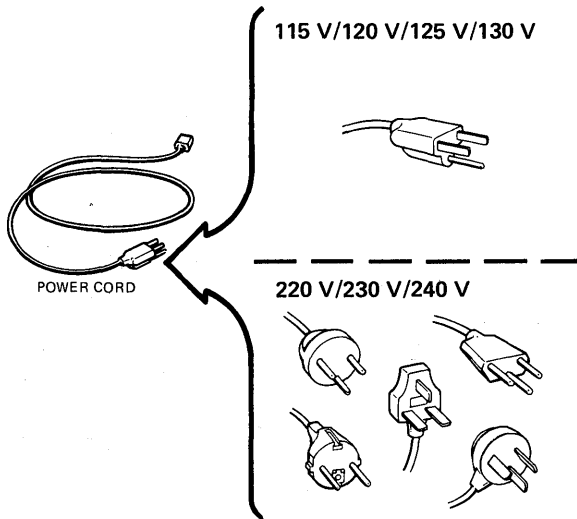
INSTALLATION

Identify the plug on the terminal power cord.

Make sure the power cord plug matches that required for your wall receptacle.

NOTE

In the United States, 115 volts is common; 230 volts is common in Europe and in other countries.



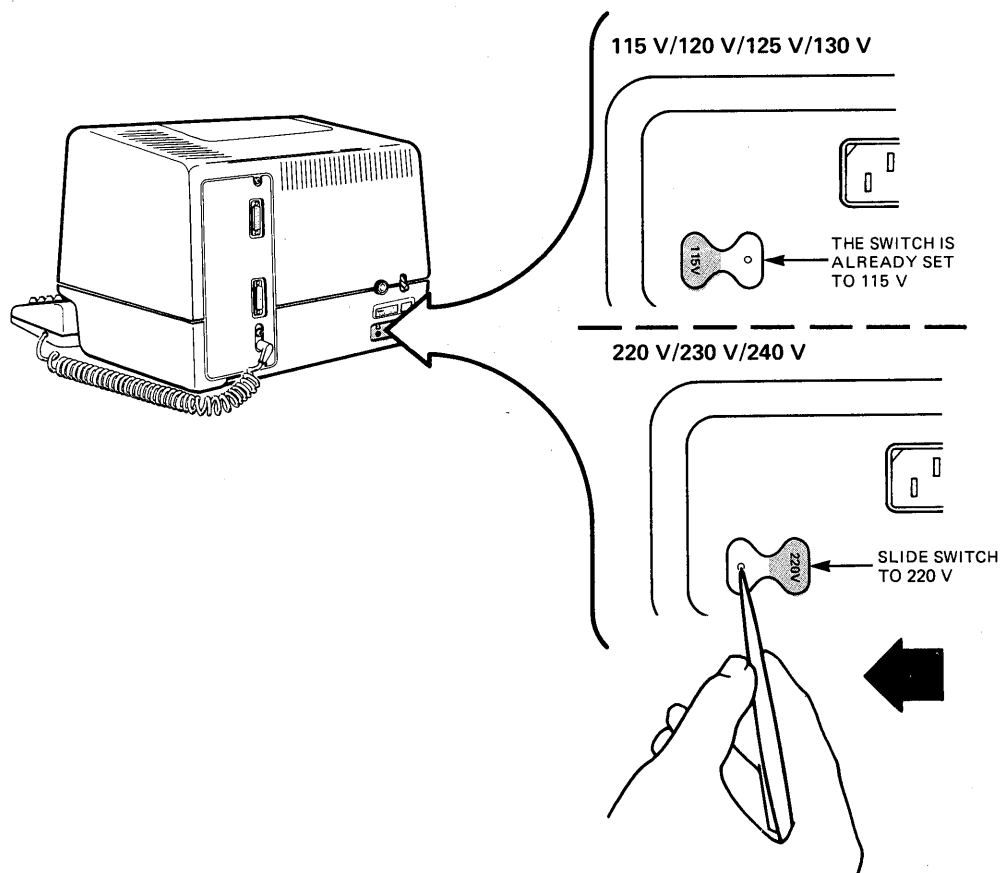
Check the voltage switch on the terminal.

CAUTION

An incorrect voltage setting can damage your terminal.

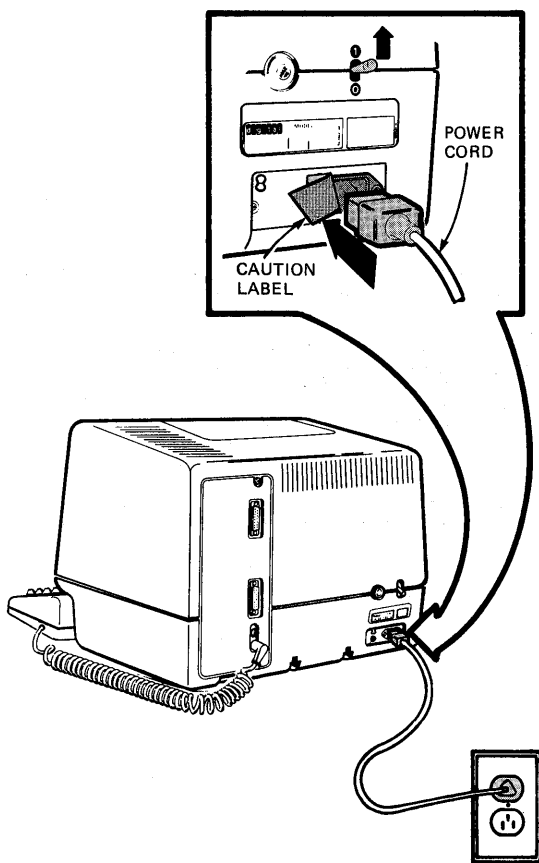
NOTE

In the United States, 115 volts is common; 230 volts is common in Europe and in other countries.



Connect the terminal power cord.

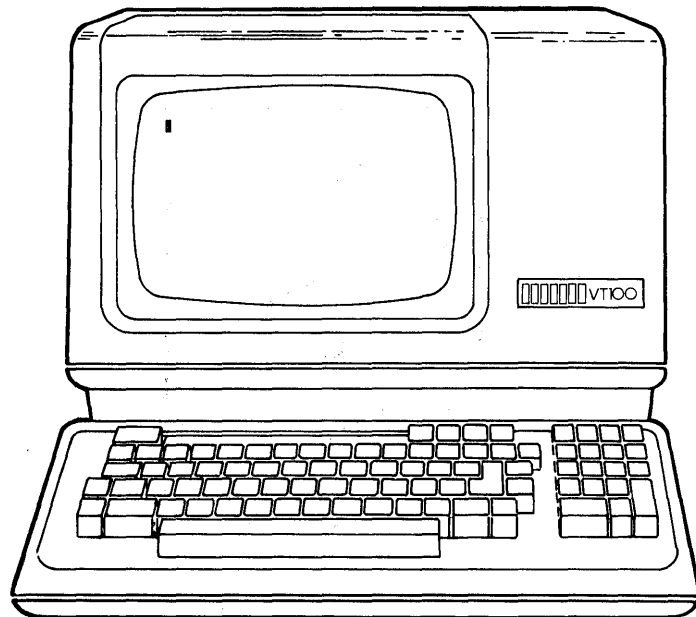
- Read and remove the caution label that covers the power connector on the rear of the terminal.
- Connect the power cord by plugging it firmly into the power connector.
- Plug the power cord into the wall receptacle.
- Set the power switch to 1 (on).



After a beep, a blinking cursor should appear at the upper left corner of the screen.

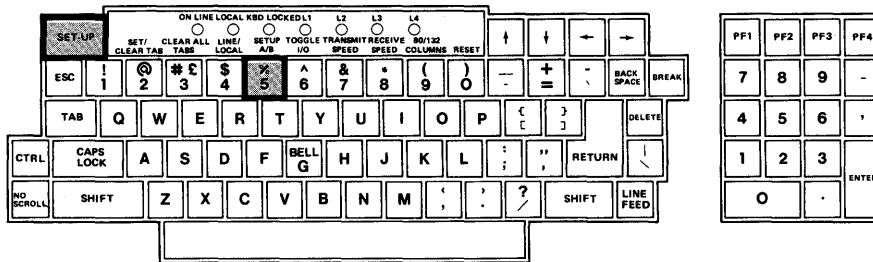
NOTE

If a flashing 4 appears on the screen, check that the keyboard cable is firmly in place.



Verify the terminal setup.

- At the keyboard, press the Set-Up key. SET-UP A will appear on the screen.
- Then press the 5 key to enter set-up B mode.



NOTE

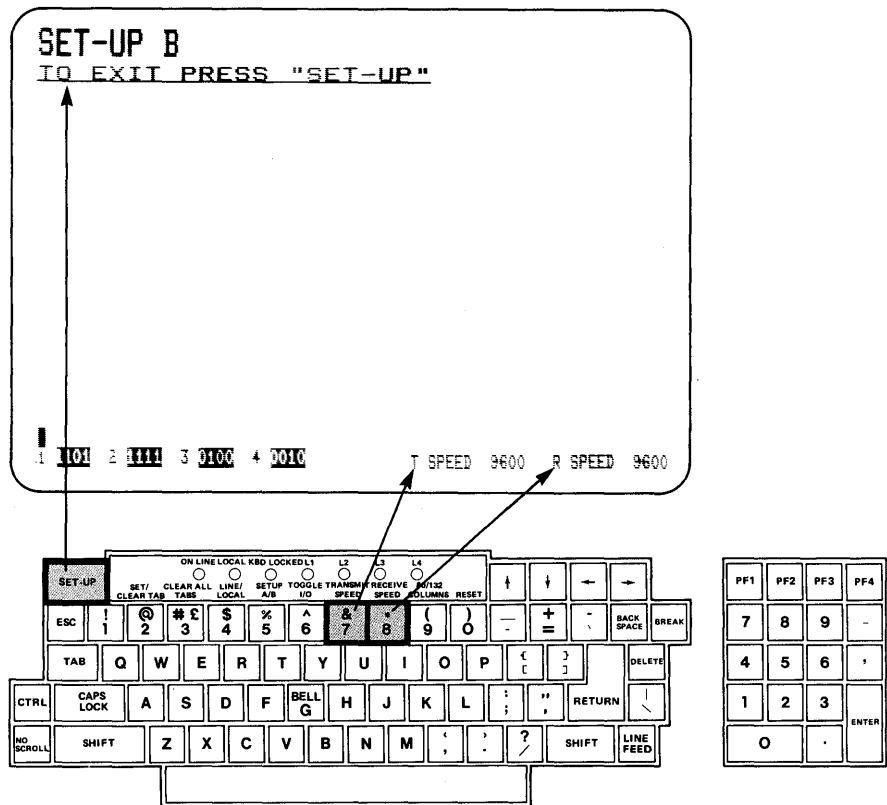
Your terminal must be in the on-line mode before it will operate with the system unit. Refer to your terminal user's guide for detailed operating instructions.

Verify the transmit and receive speeds (baud rates).

The transmit speed (T) and receive speed (R) must be set to 9600.

- If T is not equal to 9600, press the 7 key repeatedly until T is 9600.
- If R is not equal to 9600, press the 8 key repeatedly until R is 9600.

Once R and T are at 9600, press the Shift and S keys simultaneously. (This will save the new setting.) The terminal will display SET-UP A. Now press the Set-Up key to exit set-up A mode.



NOTES

To unpack and install additional optional terminals, repeat the procedure presented on pages 13 through 21.

If you have other optional equipment, such as a printer, install it now, using the unpacking and installation information supplied with the option.

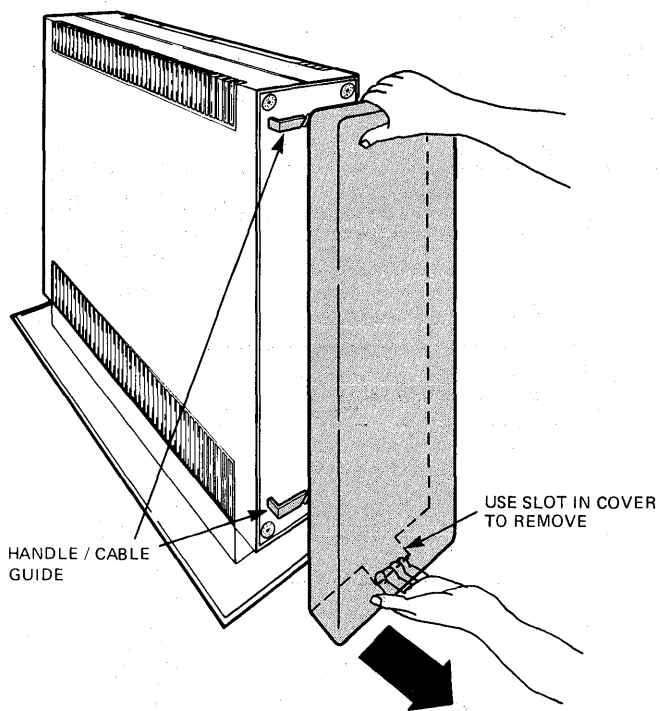
INSTALLATION

Pop off the rear cover of the floor stand or tabletop system unit.

(A rack mount system unit does not have a rear cover.)

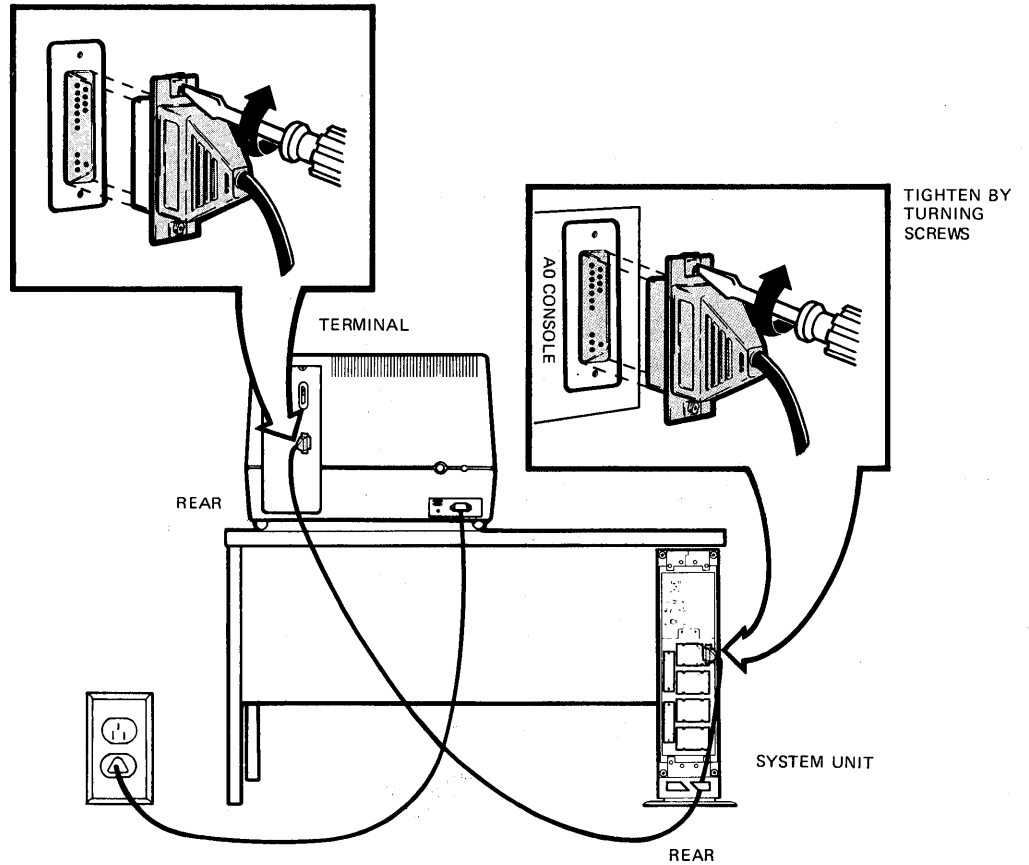
NOTE

Four handles/cable guides (two on front and two on rear) serve as handles to move the system unit and/or as guides for the cables.



Connect the communication cable to the terminal and to the system unit.

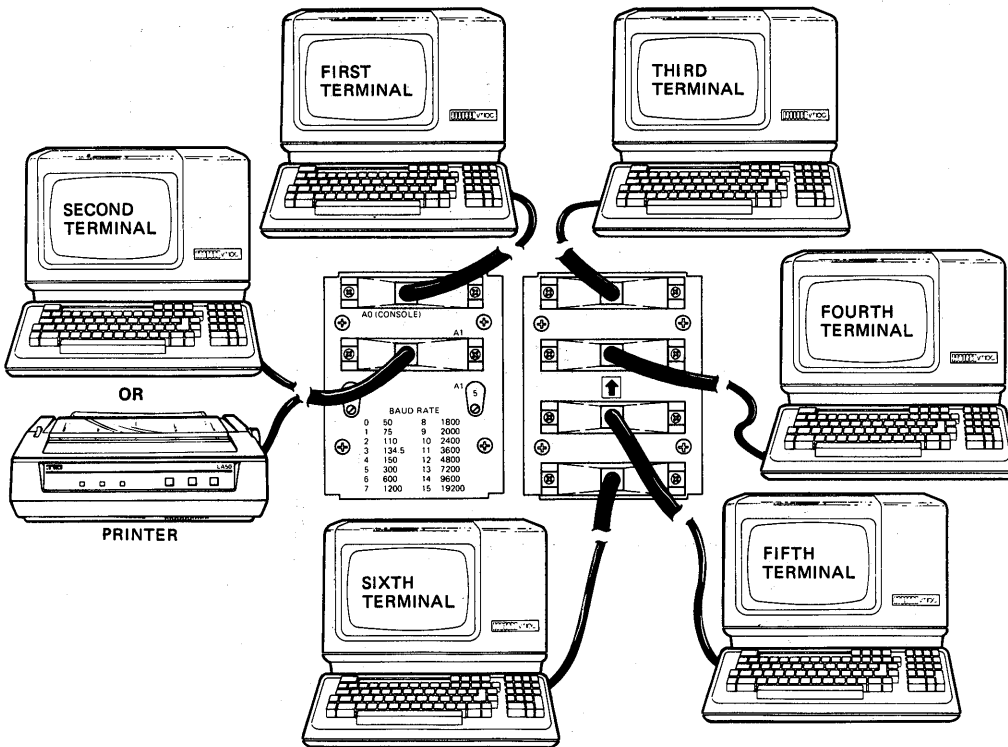
Tighten the connectors using the screwdriver provided in the Installation Accessories box.



Connect additional terminals for a multiuser system.

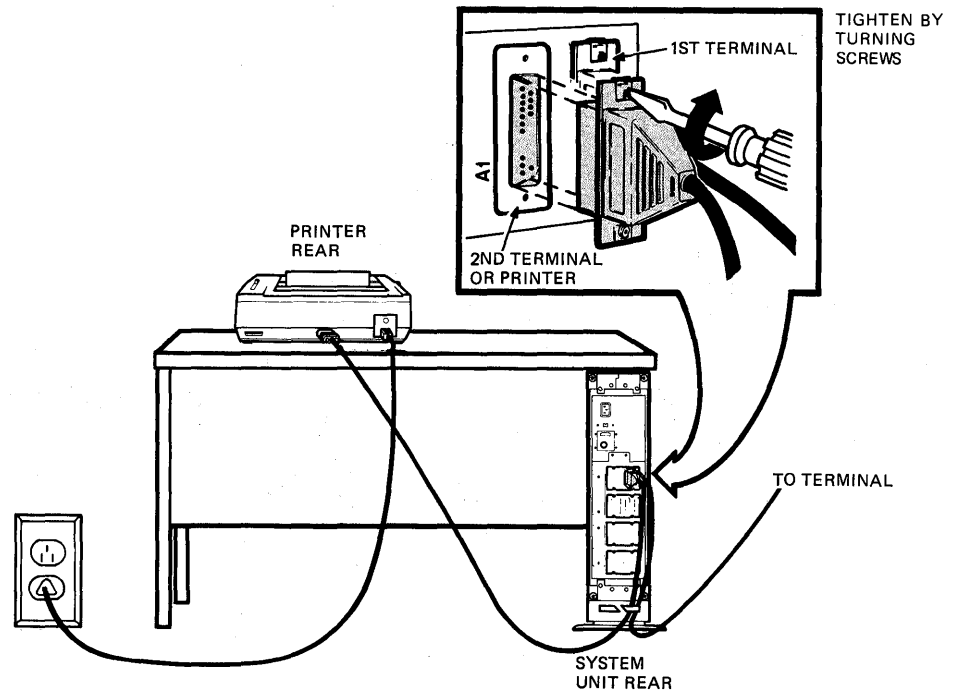
NOTE

Make connections in the sequence as shown.



Connect the printer cable to the A1 connector on the rear of the system unit.

Tighten the connector using the screwdriver provided in the Installation Accessories box.

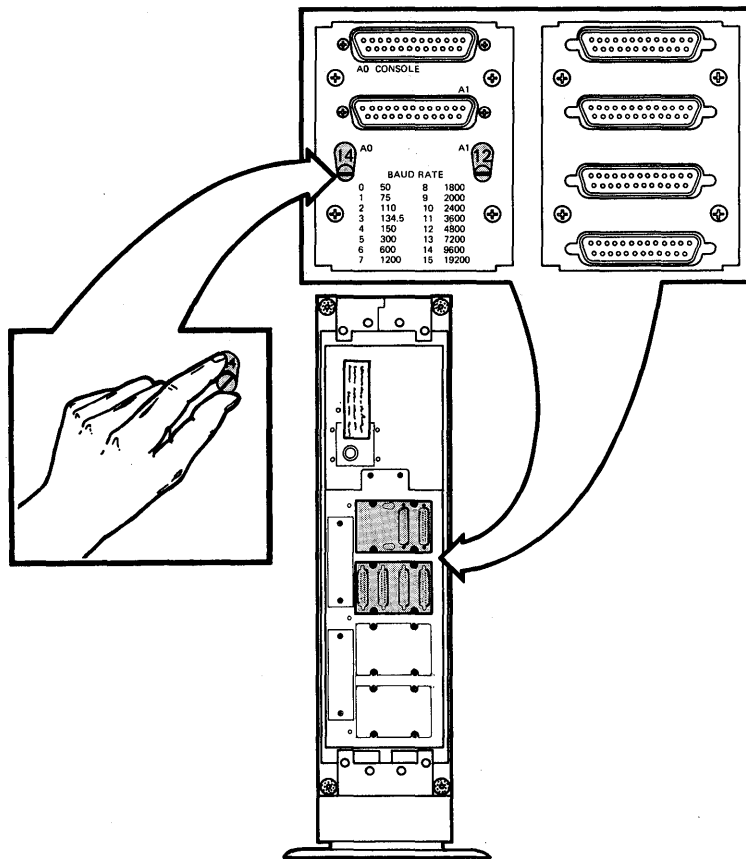


Verify that the speed (baud rate) for both the terminal (labeled A0 console) and the printer (labeled A1) are set the same as the corresponding options.

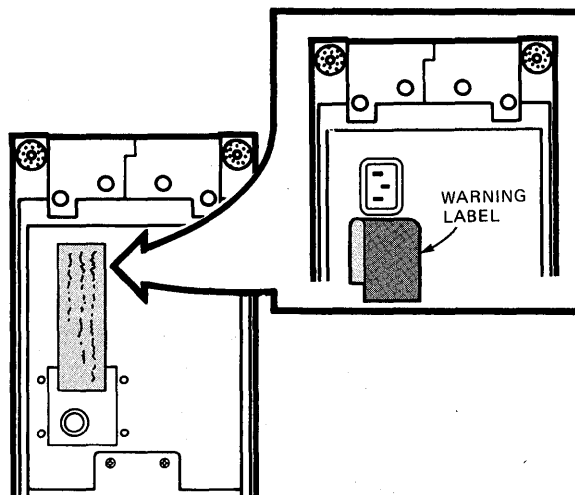
NOTE

The baud rates are set at the factory as follows: console speed is 9600; printer speed is 4800.

If the baud rates are not the same, set them by turning the correct adjustment control knob with your fingers to match the speed of the option. To determine the baud rate of the system unit, refer to the baud rate table printed on the rear of the system unit. (For example, set the control to number 14 for 9600 baud.)



Remove the warning label which covers the power connector and voltage switch on the rear of the system unit.

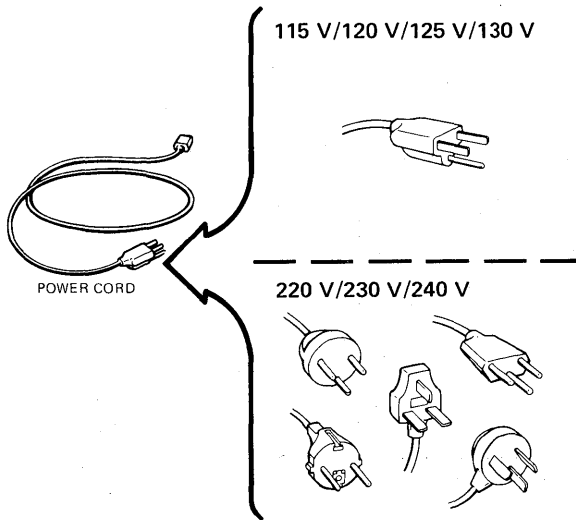


Identify the plug on the system unit power cord.

Make sure the power cord plug matches that required for your wall receptacle.

NOTE

In the United States, 115 volts is common; 230 volts is common in Europe and in other countries.



Check the voltage switch on the system unit.

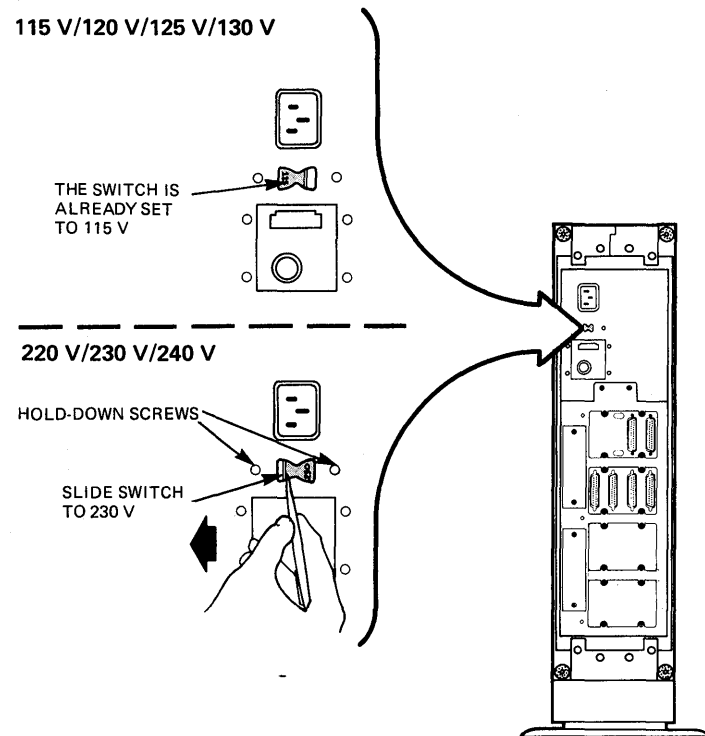
CAUTION

An incorrect voltage setting can damage your computer.

NOTE

In the United States, 115 volts is common; 230 volts is common in Europe and in other countries.

The voltage switch is factory set at 115 V. To change the setting, loosen the two hold-down screws, move the slide switch, then tighten the hold-down screws.

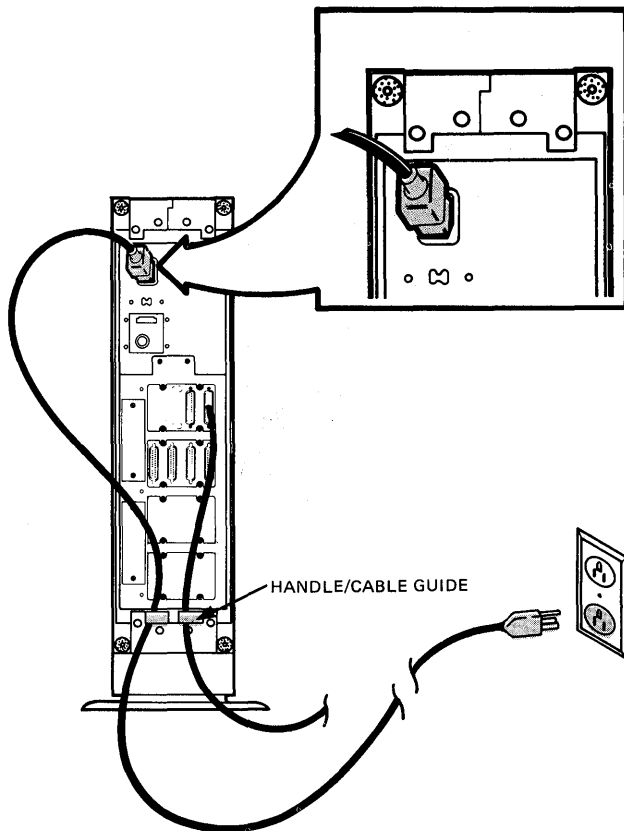


Connect the system unit power cord.

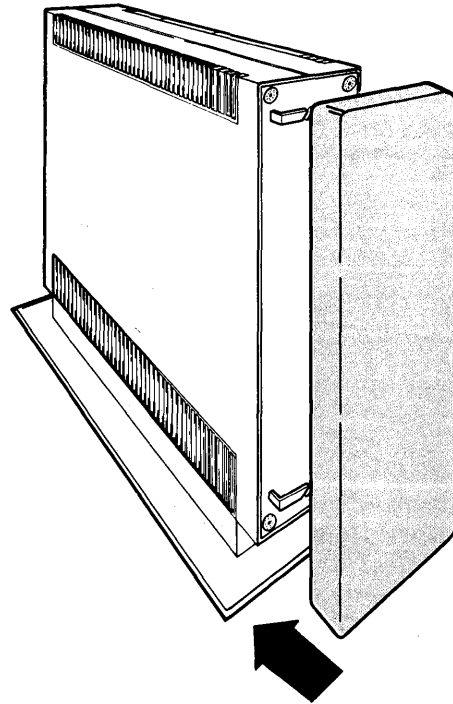
First, plug it firmly into the power connector located on the rear of the system unit. Then, insert the three-prong plug into the wall receptacle.

NOTE

Insert the power and communication cables through the lower rear handle/cable guide.



Replace the rear cover.

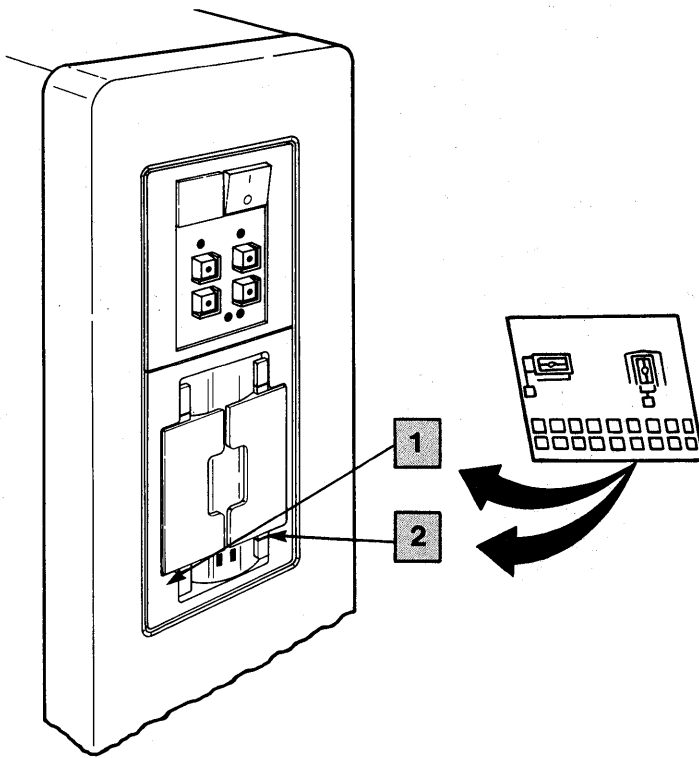


Label the diskette drives.

Remove the drive labels from the label sheet located in the Installation Accessories box.

NOTE

On MICRO/PDP-11 systems without an RD51 fixed disk drive, the RX50 diskette drives are renamed. Drive 1 (DU1) becomes drive 0 (DU0) and drive 2 (DU2) becomes drive 1 (DU1).

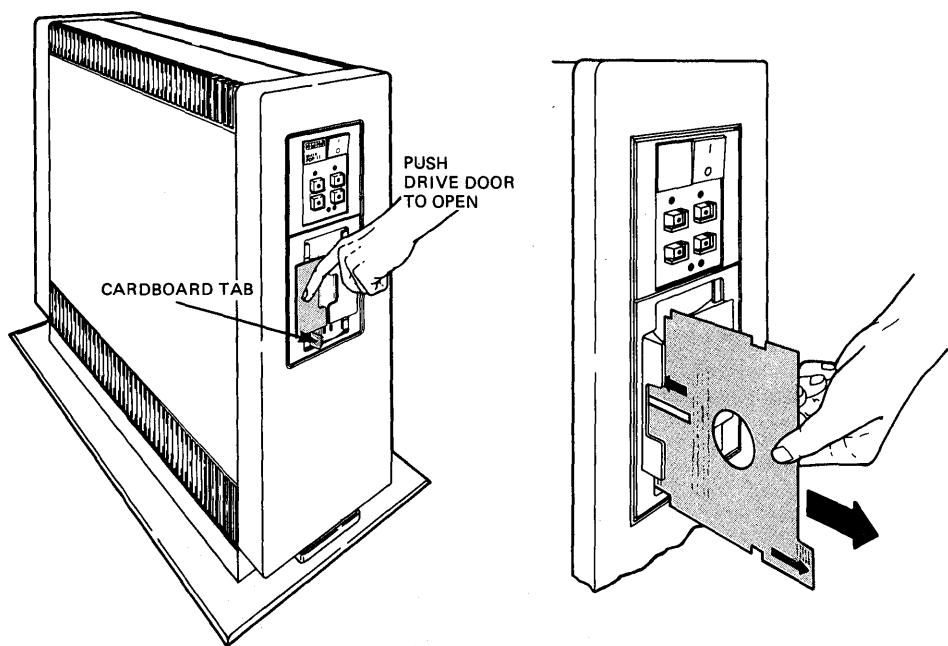


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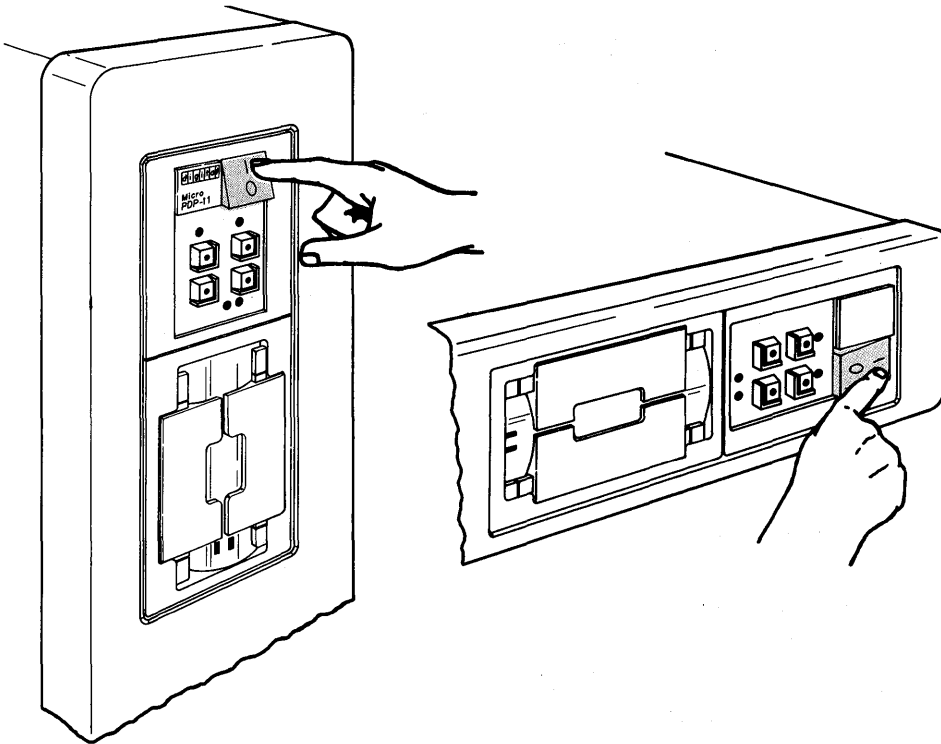
Open diskette drive door 1 and remove the protective shipping cardboard from the diskette drive.

NOTE

Some system units are shipped without the protective shipping cardboard.



Turn on the system power by setting the power switch to 1 (on).



After a beep, the system start-up message should appear on the screen.

NOTES

Ignore all error messages displayed at this time.

The version number may be different than that shown.

```
KDF11B-BE ROM V0.8  
128KW MEMORY  
9 STEP MEMORY TEST  
STEP 1 2 3 4 5 6 7 8 9  
TOTAL MEMORY ERRORS = 0  
CLOCK ENABLED
```

```
ERROR UNIT DU2  
ERR 16 NOT BOOTABLE
```

```
ERROR UNIT DU1  
ERR 16 NOT BOOTABLE
```

```
ERROR UNIT DU0  
ERR 16 NOT BOOTABLE  
WISH TO REBOOT [Y,(N)]? Y
```

BOOTING FROM DU1

```
Loading USER Tests: V2.0 this will take about 5 seconds.  
Please wait.....
```

**Congratulations.
You have successfully installed
your MICRO/PDP-11 system.**

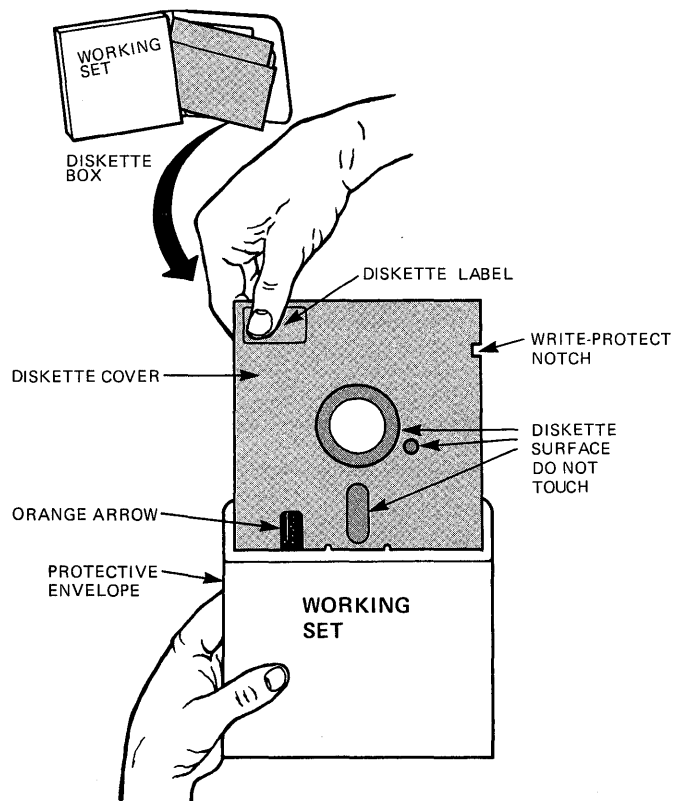
TESTING 3

Find the user test diskettes.

There are two sets of user test diskettes. One is called the *master* set and the other is called the *working* set. They are packaged with the MICRO/PDP-11 documents in the Installation Accessories box.

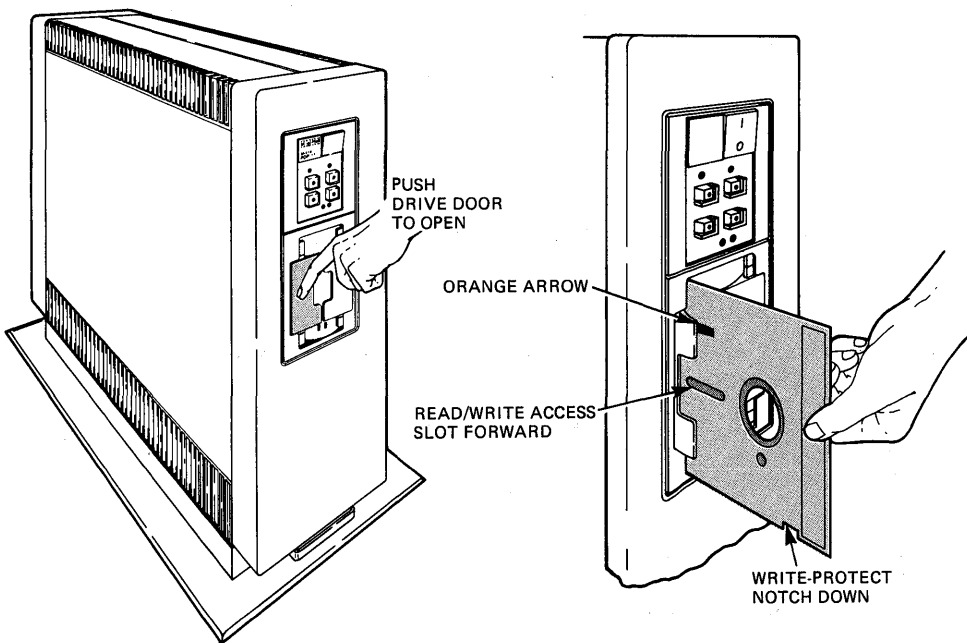
Store the *master* set in a safe place where it will not get lost or damaged. It is a backup for the *working* set.

From inside the *working* set carton, obtain one of the user test diskettes.

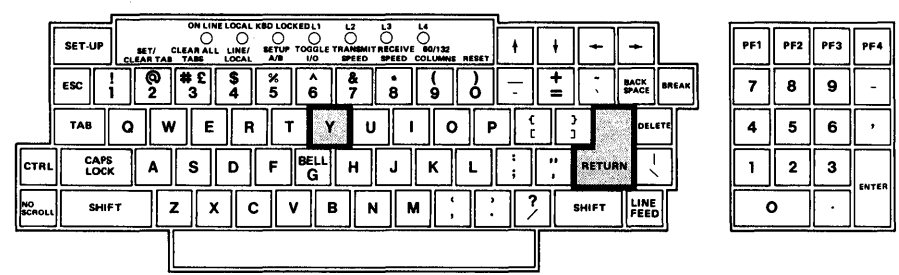


Insert the test diskette.

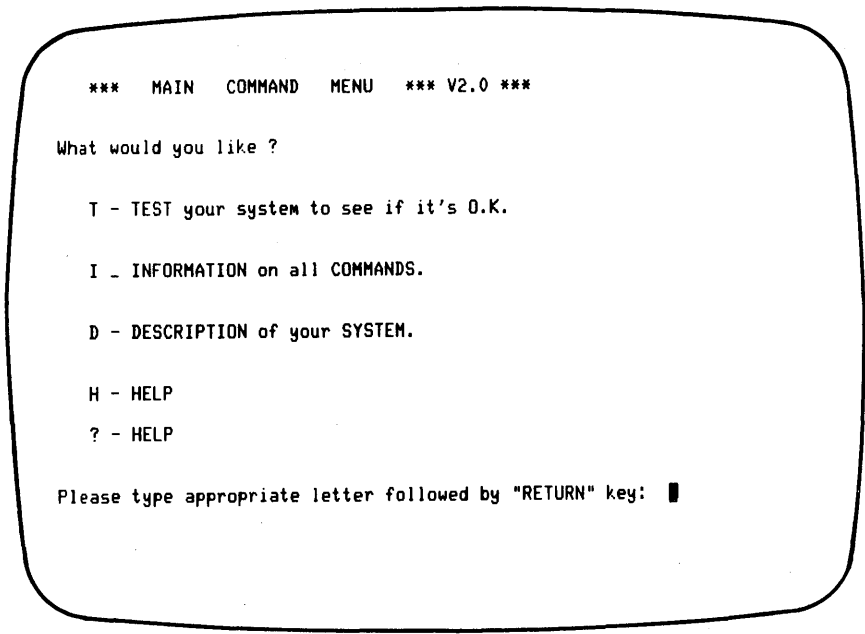
- Open the door to drive 1.
- With the write-protect notch on the diskette pointing down (pointing left on tabletop or rack mount versions), insert the test diskette in drive 1 and close the door.



At the keyboard, press the Y key, then the Return key.



The following message should appear on your screen.



Press the T key, then the Return key, and follow the directions displayed on your screen.

Directions:

Install a blank diskette in REMOVABLE DISK DRIVE #2.
Make sure that orange arrow on the diskette aligns with the orange bar on the drive.

The DZ test may print many unpredictable characters on any of the other terminals that are connected to this computer. So, if you do not want these characters to be printed on a certain terminal, please turn that terminal off now.

DO NOT TURN OFF THIS TERMINAL !

When the above has been completed proceed by typing the "RETURN" key.

Type "M" to return to MAIN COMMAND MENU or "RETURN" to proceed:

The System Test is now running.

The System test will run for approximately 10 minutes. When testing has been completed, results of the test will appear on this terminal. DOTS will be displayed in a repeating pattern to show testing in progress.

.....

After about 10 minutes, the following message should appear on your screen.

```
.....  
Testing of this system is now complete.  
No errors have been detected.  
  
The system is O.K.  
  
You can now continue by installing new software or running  
existing software. To install new software, refer to  
installation instructions in your software box.  
  
If you have finished testing, remove the user test diskettes.  
  
Type "RETURN" key to return to MAIN COMMAND MENU:
```

This message indicates a successful system installation and completion of the user test. You may now remove the user test diskette from the drive and prepare to install the operating system software.

If the test detects an error, a message similar to the following will appear on your screen.

```
An error was detected by the System Test.

An audible signal will be heard from the terminal
when the cause has been found.

                                APPROXIMATE
                                MINS TO
                                TEST:           Results
Testing Processor.....1 ..... OK
Testing Memory .....1 ..... ERROR

Error detected in Testing Memory

Check Owners Manual trouble shooting chapter on how to proceed or
Please call your Field Service Representative

What would you like ?

R - RETRY The failing test.
C - CONTINUE with test sequence.
M - Return to the MAIN COMMAND MENU.

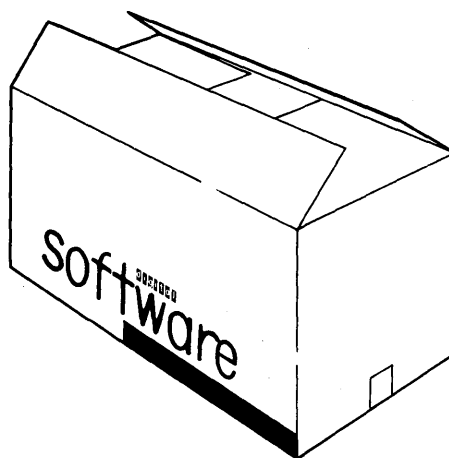
Please type appropriate letter followed by "RETURN" key:
```

If your terminal displays an error message while running the user test, refer to Appendix A of the *MICRO/PDP-11 System Owner's Manual* to retry the failing test, or call the appropriate Digital hotline number listed on page 1.

OPERATING SYSTEM SOFTWARE INSTALLATION

4

To install your operating system software, follow the directions given in the Software Installation booklet or card located in the software box.

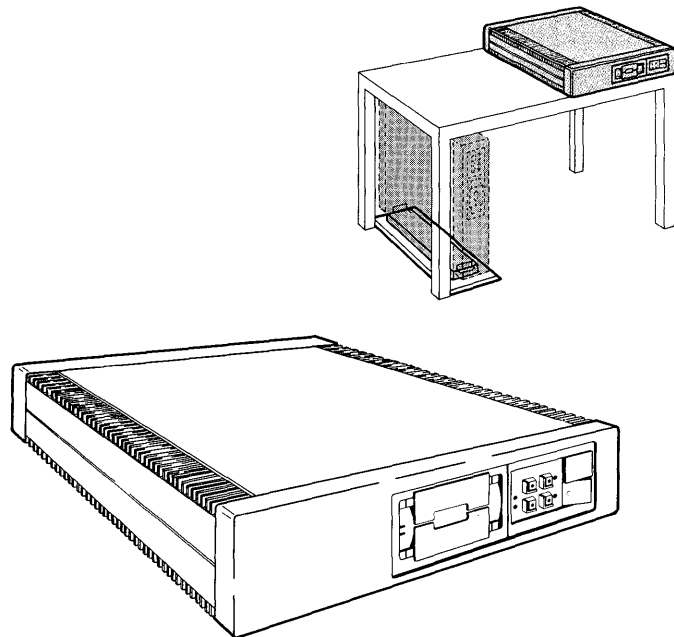


Once you have installed your operating system, read the *MICRO/PDP-11 System Owner's Manual* for more detailed information on the operation and maintenance of your MICRO/PDP-11 system.

TABLETOP CONVERSION INSTALLATION

5

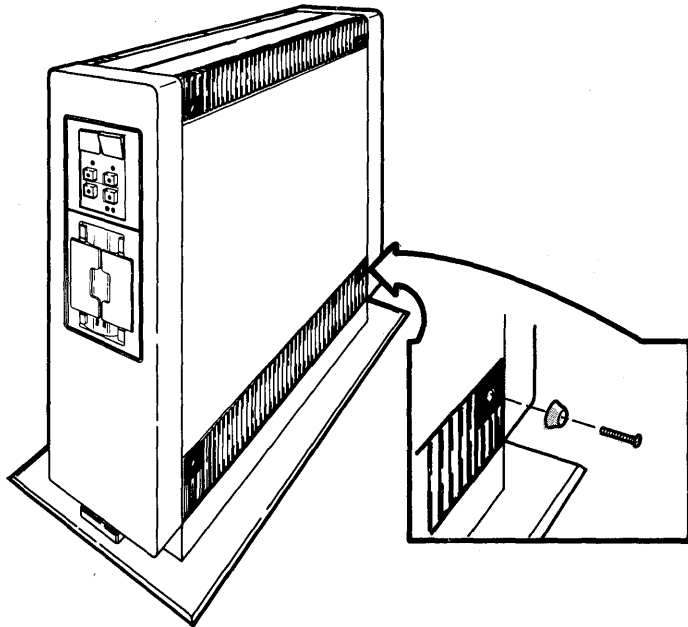
To convert a floor stand system unit to a tabletop system, perform the following steps.



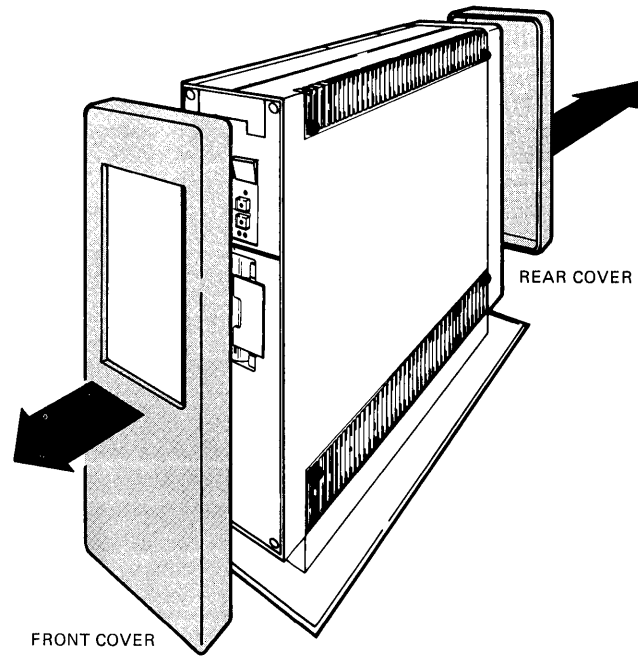
Install the four rubber feet on the right side of the system unit.

NOTE

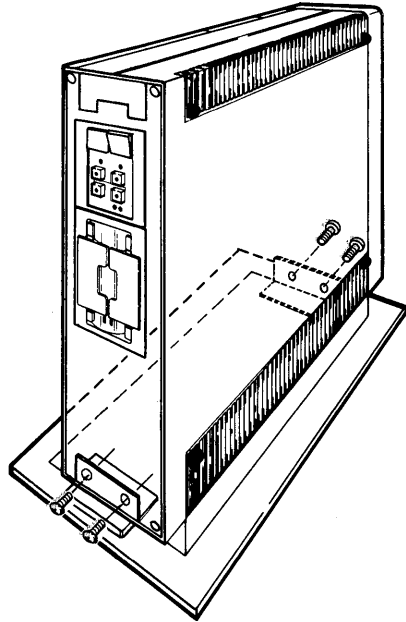
The rubber feet and associated screws are packed in the plastic bag in the system box.



Pop off the front and rear covers by pulling the bottom of each cover.



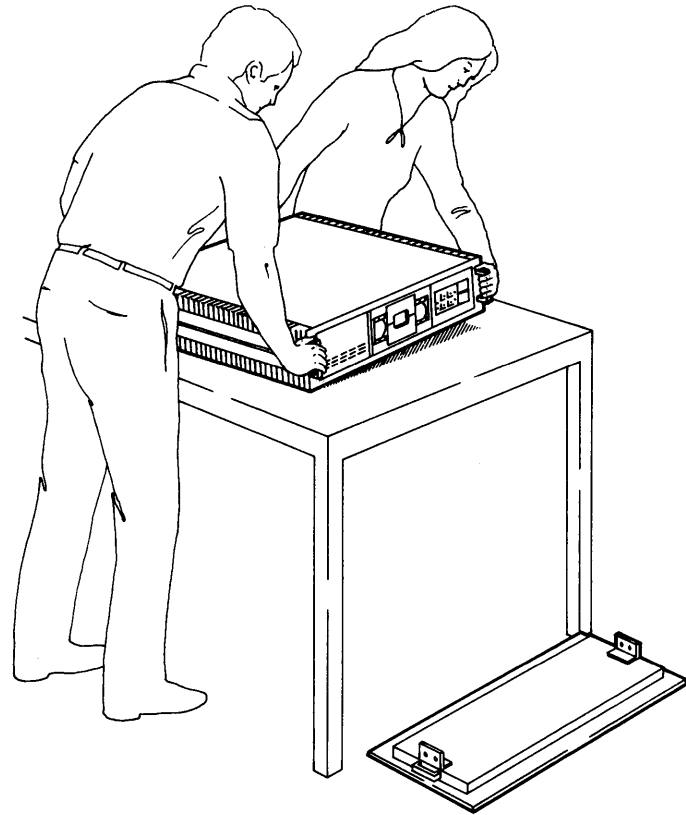
Using the Phillips screwdriver provided, remove the four screws (two in front, two in rear) at the base of the system unit.



Place the system unit on the table.

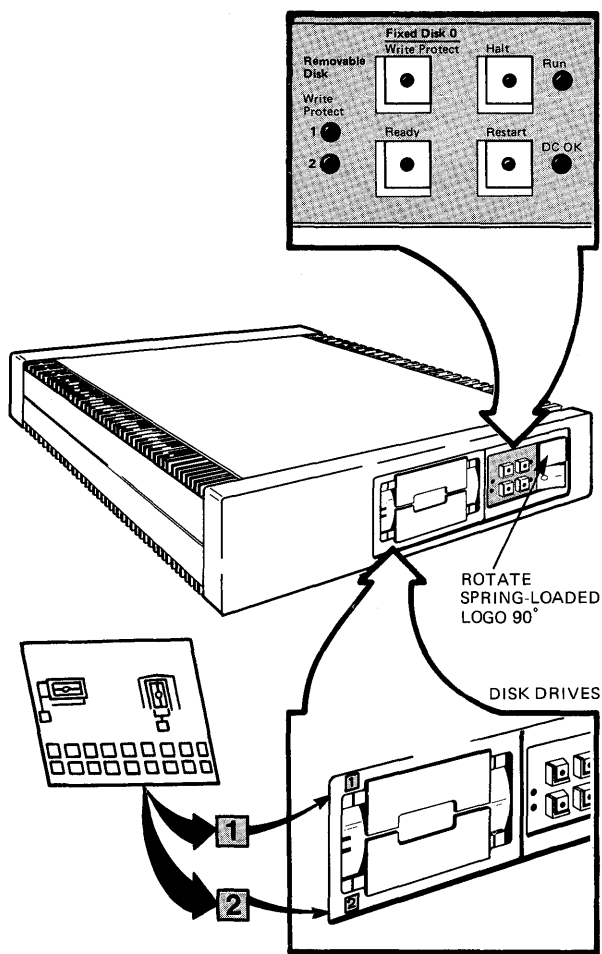
NOTE

Use the handles/cable guides when moving the system unit.



Locate the label sheet in the Installation Accessories box, then label the diskette drives and the front panel.

- Place label on front panel.
- Place labels on drives.
- Rotate spring-loaded logo 90 degrees.
- Replace front cover.

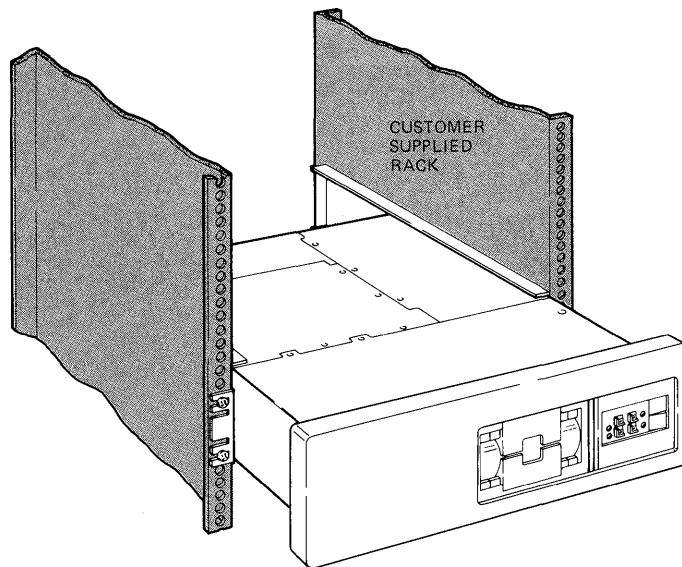


To complete the MICRO/PDP-11 system installation, turn to page 12.

RACK MOUNT PACKAGE INSTALLATION

6

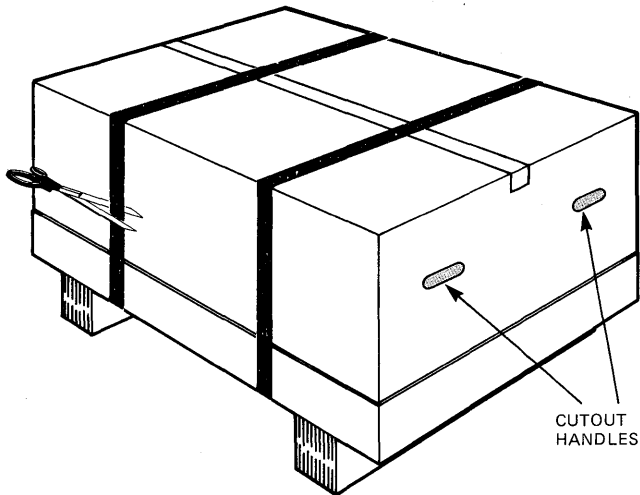
The rack mount package lets you mount the system unit in a standard 48.2 cm (19 in) cabinet (rack) that you supply. To do this, perform the following steps.



Cut and remove the shipping straps.

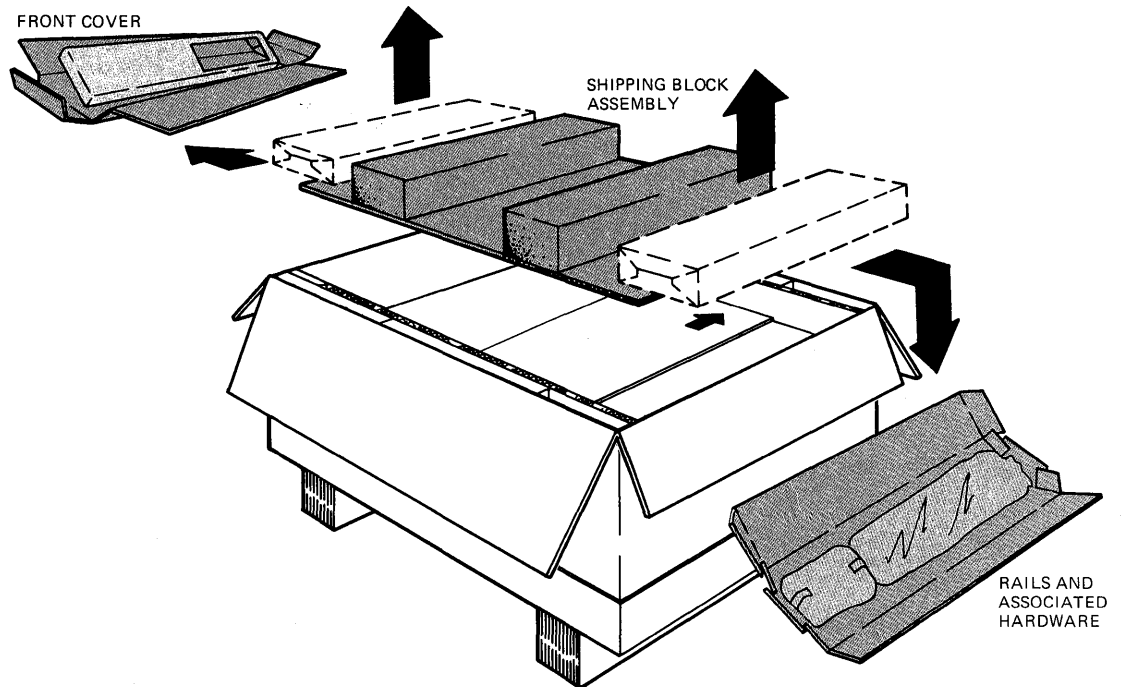
WARNING

You will need two people to unpack the system unit. It weighs 24 kg (53 lb).



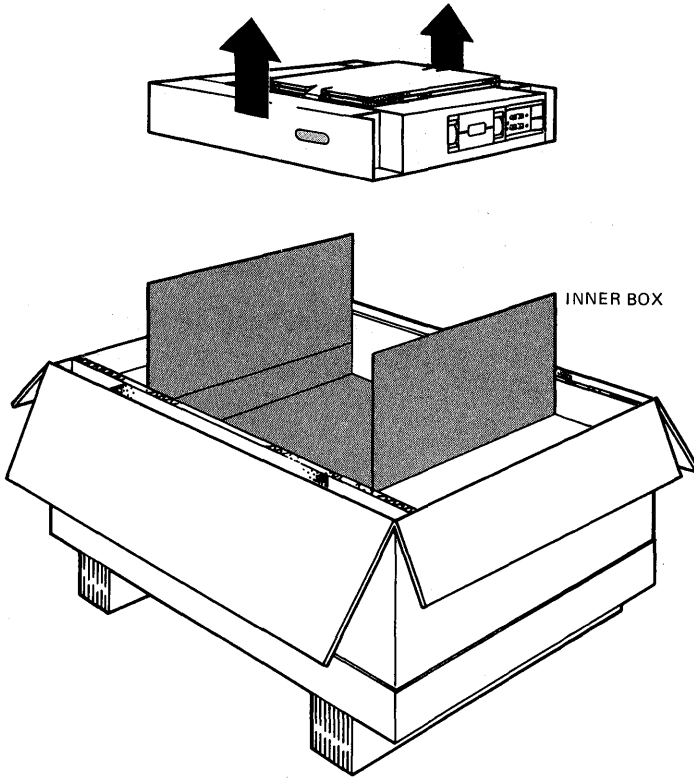
Open the shipping carton, fold back the flaps, and remove the two small cartons and the shipping block assembly.

One carton contains the power cable, two mounting rails, and a plastic bag with associated hardware. The other carton contains the front cover.

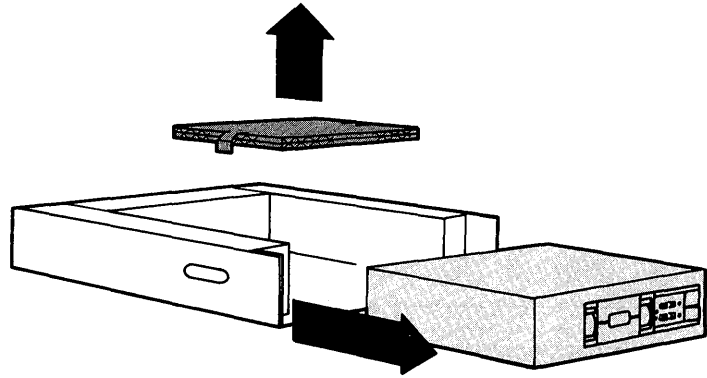


RACK MOUNT PACKAGE INSTALLATION

Open the inner box and, using the cutout handles, remove the system unit.

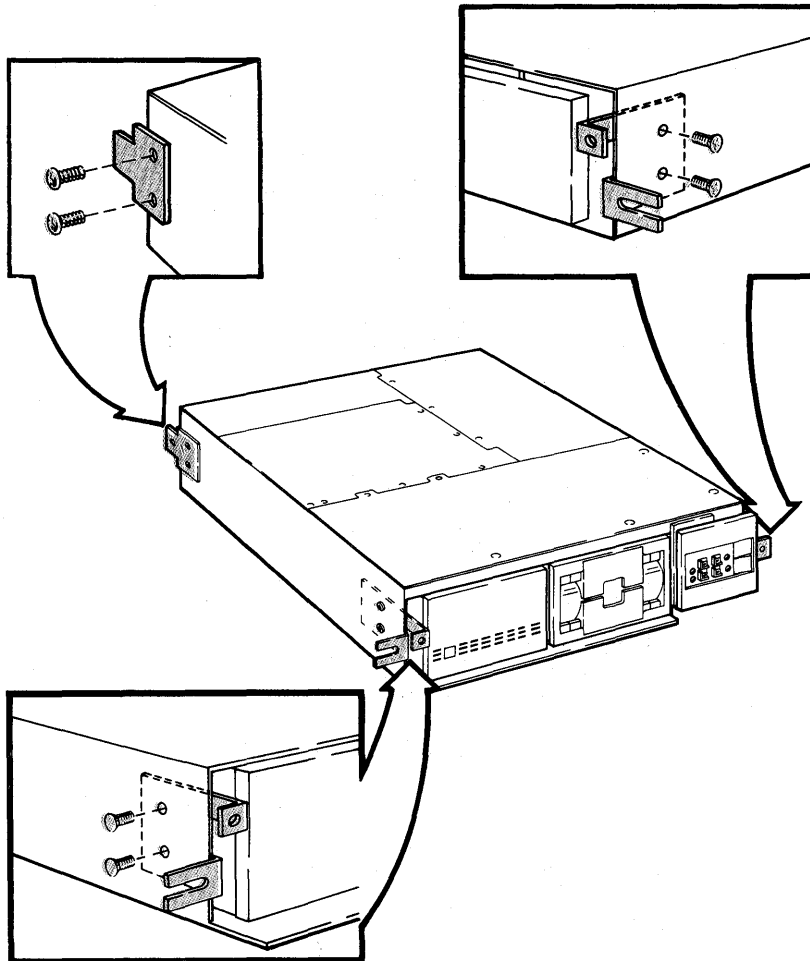


Remove the packing cardboard and slide the system unit out of the shipping carton.



Locate the plastic bag containing the locking plate, the two front brackets, and associated hardware.

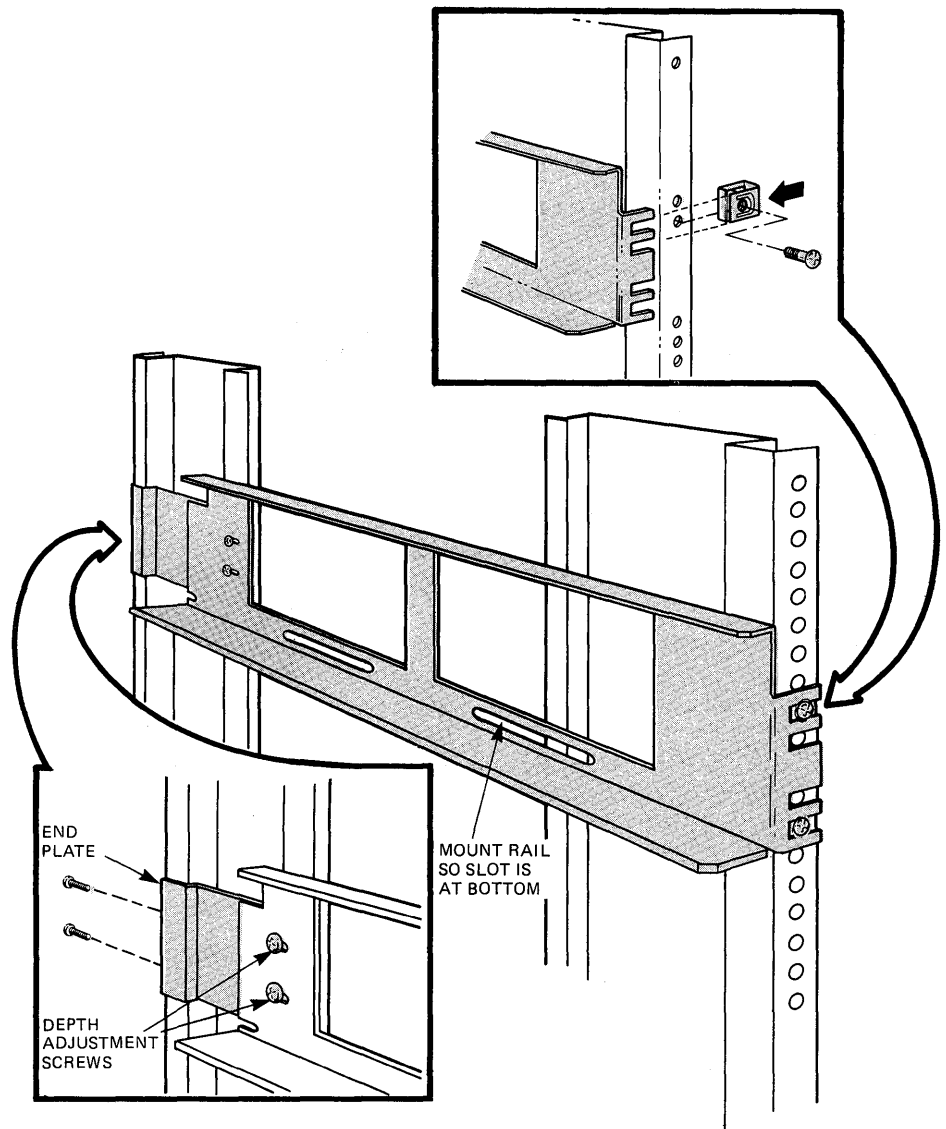
- Install the front brackets by sliding them into their slots and securing each with two screws.
- Install the locking plate on the left rear side.



Locate and install the left and right rails in the cabinet using the hardware supplied in the plastic bag.

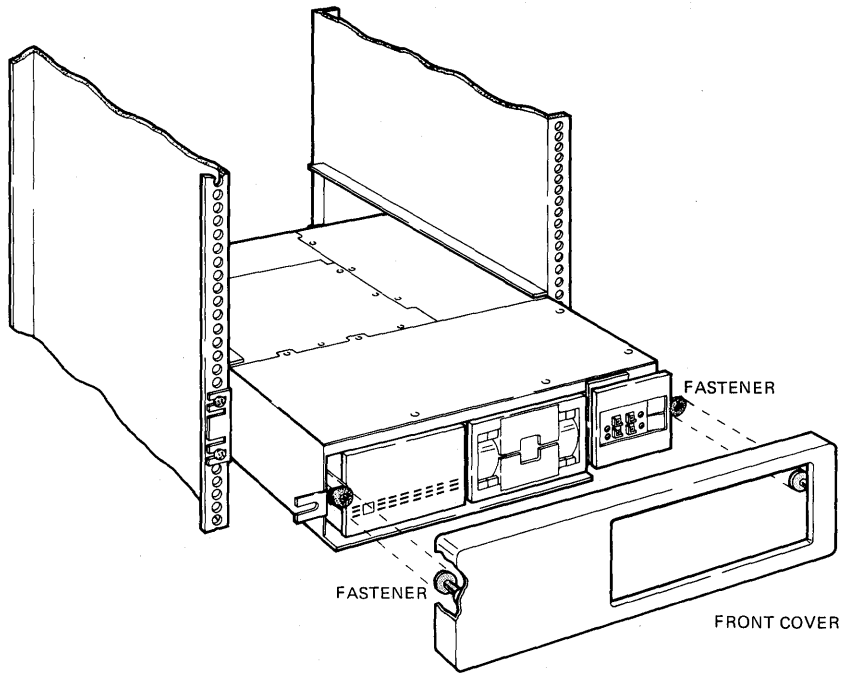
NOTE

Consult the instructions for your particular cabinet for more details on placement of rails in the cabinet.



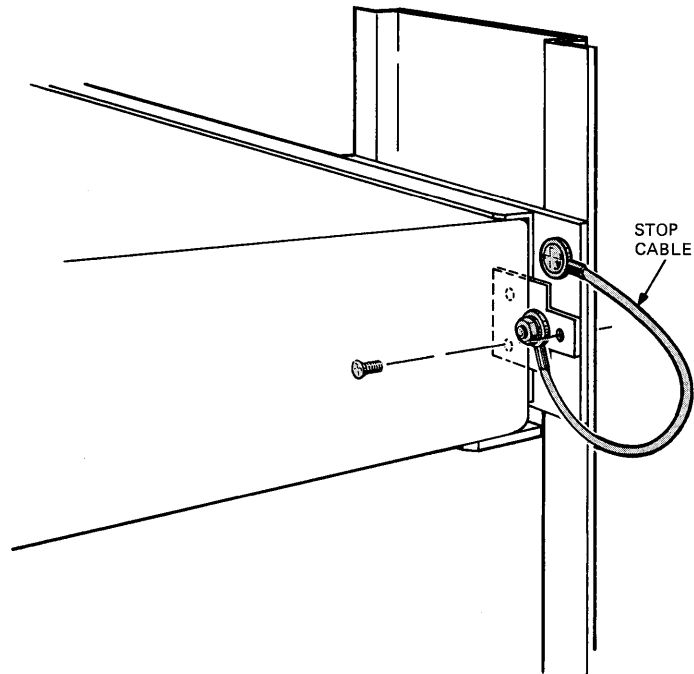
RACK MOUNT PACKAGE INSTALLATION

Slide the system unit into the cabinet. Install the cover fasteners, then install the front cover.



Secure the system unit to the cabinet.

- First, install the stop cable.
- Second, with the system unit fully inserted in the cabinet, secure the system unit to the cabinet frame using the screw provided.



To complete the MICRO/PDP-11 system installation, turn to page 12.

PACKING NOTES



Save this unpacking and installation guide to help you disassemble, pack, and reassemble your system, if necessary. To ensure maximum protection when returning a unit to a service center for repair or to your dealer, pack the unit in its original box.

Should you need to move the computer to another office or to send it to a service center for repair, remember to install the protective shipping cardboard in the diskette drive to keep its moving parts in place. Install the cardboard using the following steps.

1. Remove any diskettes from the diskette drives.
2. Turn power on and wait 10 seconds.
3. Turn power off.
4. Insert the cardboard in diskette drive 1.
5. Close the door on diskette drive 1.

READER'S COMMENTS

Did you find this manual understandable, usable, and well organized? Please make suggestions for improvement.

Did you find errors in this manual? If so, specify the errors and their page numbers.

How would you rate this manual?

- Excellent Good Fair Poor

Please check the boxes that most nearly describe your position.

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