DEComote

Owner's Guide



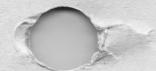
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DECmate Owner's Guide

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DIGITAL EQUIPMENT CORPORATION Maynard, Massachusetts

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IMPORTANT

DIGITAL has provided a toll-free number in Atlanta for its users. You can call this number any time you are having problems installing or operating your system. The number to call is:

(800) 241–6580

When calling the DIGITAL Office System Service Group for information, you must be able to give your "DECnumber," also known as the "access number." You cannot receive service without this number.

This number is on a label inside your customer envelope. Affix the label to this page.

stick label here



DECmate Owner's Guide

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Preface

Revision E

The <u>DECmate Owner's Guide</u> is your introduction to the DECmate system.

If you purchased word processing software or some of the business applications software such as Accounts Receivable or the Dental Management System, you also received a software application manual that describes the software you bought.

The <u>DECmate</u> <u>Owner's</u> <u>Guide</u> tells you when to start using the software application manuals.



Installing Your DECmate System

Installation - Read this first.

The purpose of the following section is to show you how to install your DECmate system. After you have installed your system, the instructions will guide you to another chapter to show you how to operate your system.

The instructions follow a series of logical steps. There are two types of instructions:

- where to proceed in the manual.
- A single asterisk (*) indicates a step in installation procedures.

There are three types of DECmate systems available.

- DECmate systems using an RXO2-P pedestal diskette drive unit
- DECmate systems using RXO2 diskette drive units
- DECmate systems using RLO2 disk drive units



Determine which type of DECmate system you are installing. In order to do this...

Turn to the next page.

Installing Your DECmate System vii Determine the type of diskette or disk drive unit you have purchased by reading the cartons. Do not open the cartons yet.

If you have an RXO2-P diskette drive unit, turn to the tab labeled Installing Pedestal.

If you have an RXO2 diskette drive unit, turn to the tab labeled Installing Basic and Minidesk.

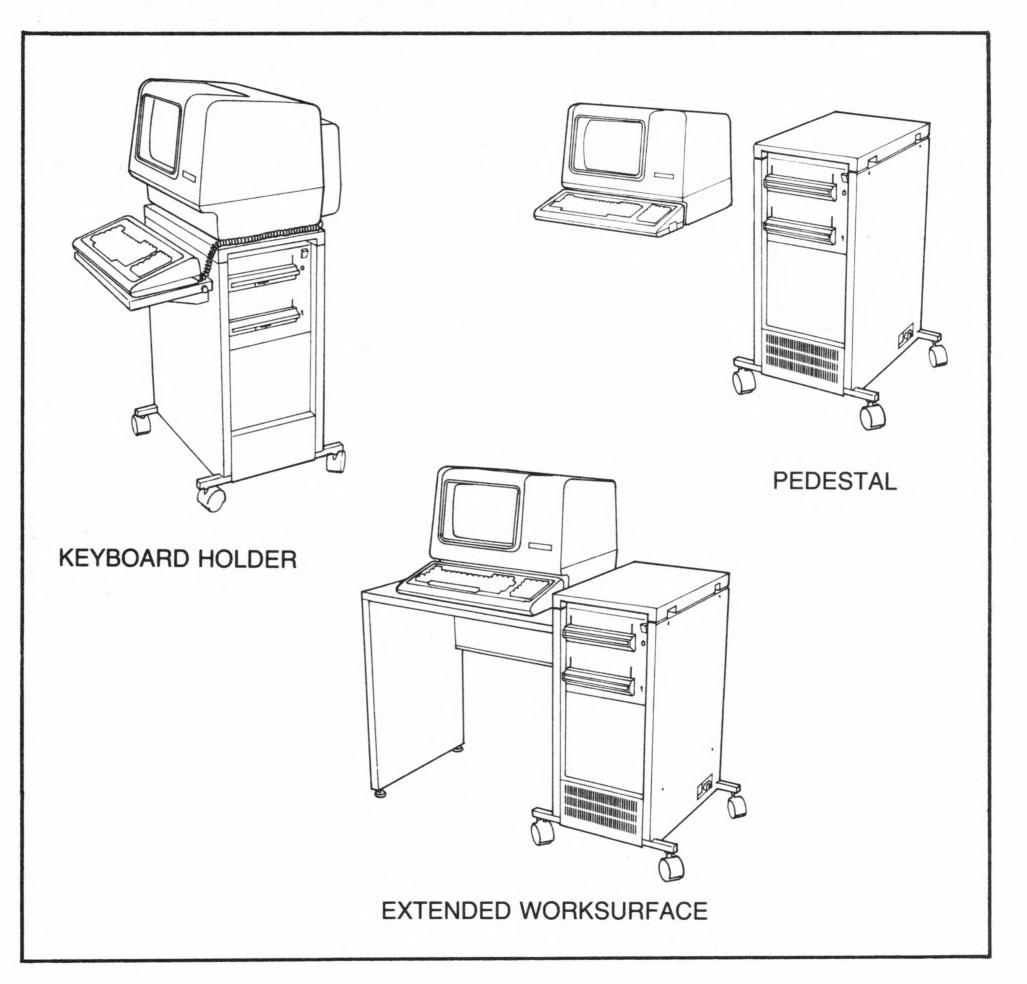
If you have an RLO2 disk drive unit, it will be installed by Field Service. Turn to the tab labeled DECmate Operation for operating instructions.

viii Installing Your DECmate System



Chapter 1 Install Your DECmate Pedestal

Start here if you have a carton labeled RXO2-P diskette drive unit.



There are three configurations possible in the DECmate Pedestal system. Following this page is a checklist for each different configuration. Each checklist contains a description of the configuration, and a list of the equipment in each one. Do not unpack your system until you are told to do so by the instructions.

If problems arise, call the Customer Service Hot Line at (800) 241-6580. If possible, complete installation before reporting problems to your DIGITAL representative.

Before cabling, be certain that your office has the proper environmental and power requirements for your particular DECmate system. See Chapters 9 and 10.

Do not attempt to connect any of the cables until the instructions tell you to do so.

Unpack and assemble DECmate near its permanent location.

Proceed through the following instructions until you reach another instruction like this one.

Turn to the next page.

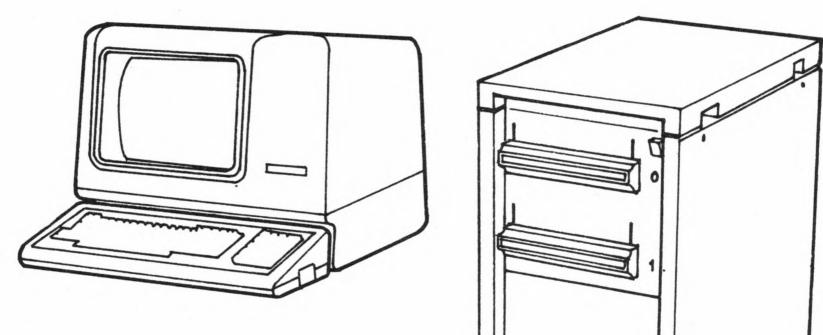
Consult the following three checklists and determine which DECmate configuration you have.

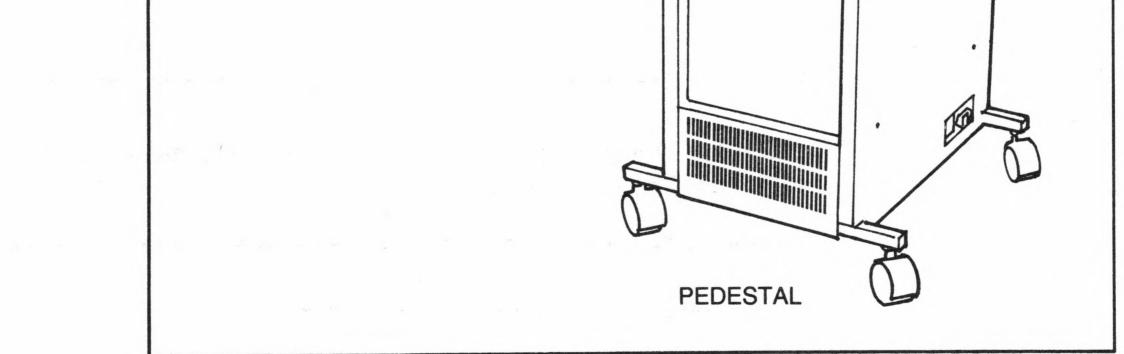
Do not unpack the cartons yet - you will be able to tell the configuration by the labels on the boxes.

Checklist for Pedestal

The DECmate Pedestal system includes:

- a DECmate terminal (video data processor) and keyboard
- an RXO2-P diskette drive unit
- connecting cables and accessories
- 10' Terminal/disk cable





Keyboard holder is not used in this configuration.

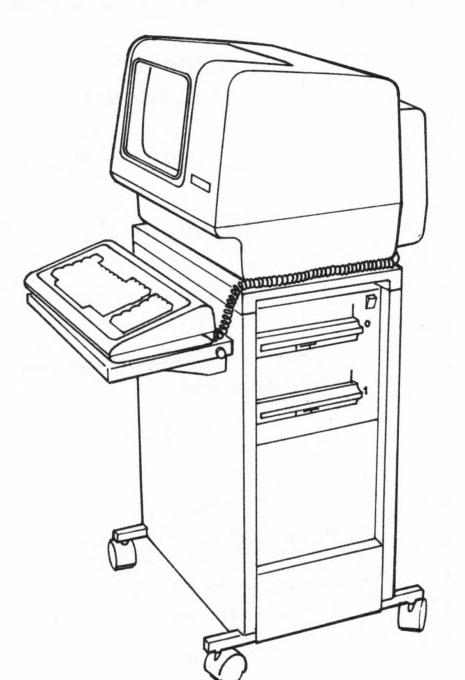
You will need a straight-bladed screwdriver and a pair of wire cutters to install your system.

Go to page 1-6 to begin unpacking.

Checklist for DECmate Pedestal with Keyboard Holder

The DECmate Pedestal with Keyboard Holder includes:

- a DECmate terminal (video data processor) and keyboard
- an RXO2-P diskette drive unit
- keyboard holder
- connecting cables and accessories



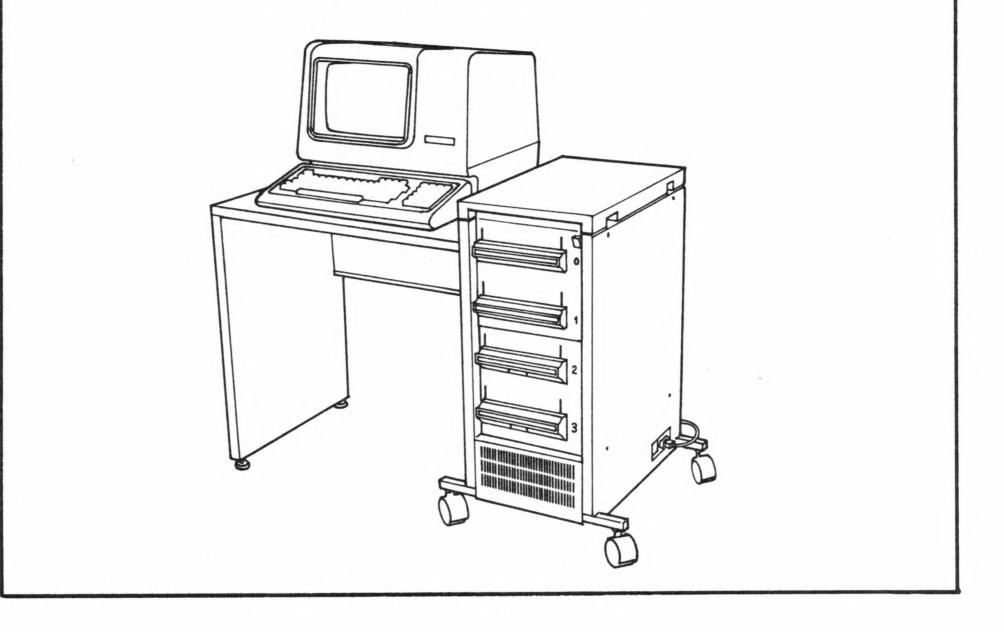
You will need a straight-bladed screwdriver and a pair of wire cutters to install your system.

Go to page 1-6 to begin unpacking.

Checklist for DECmate Pedestal with Extended Worksurface

The DECmate Pedestal with Extended Worksurface includes:

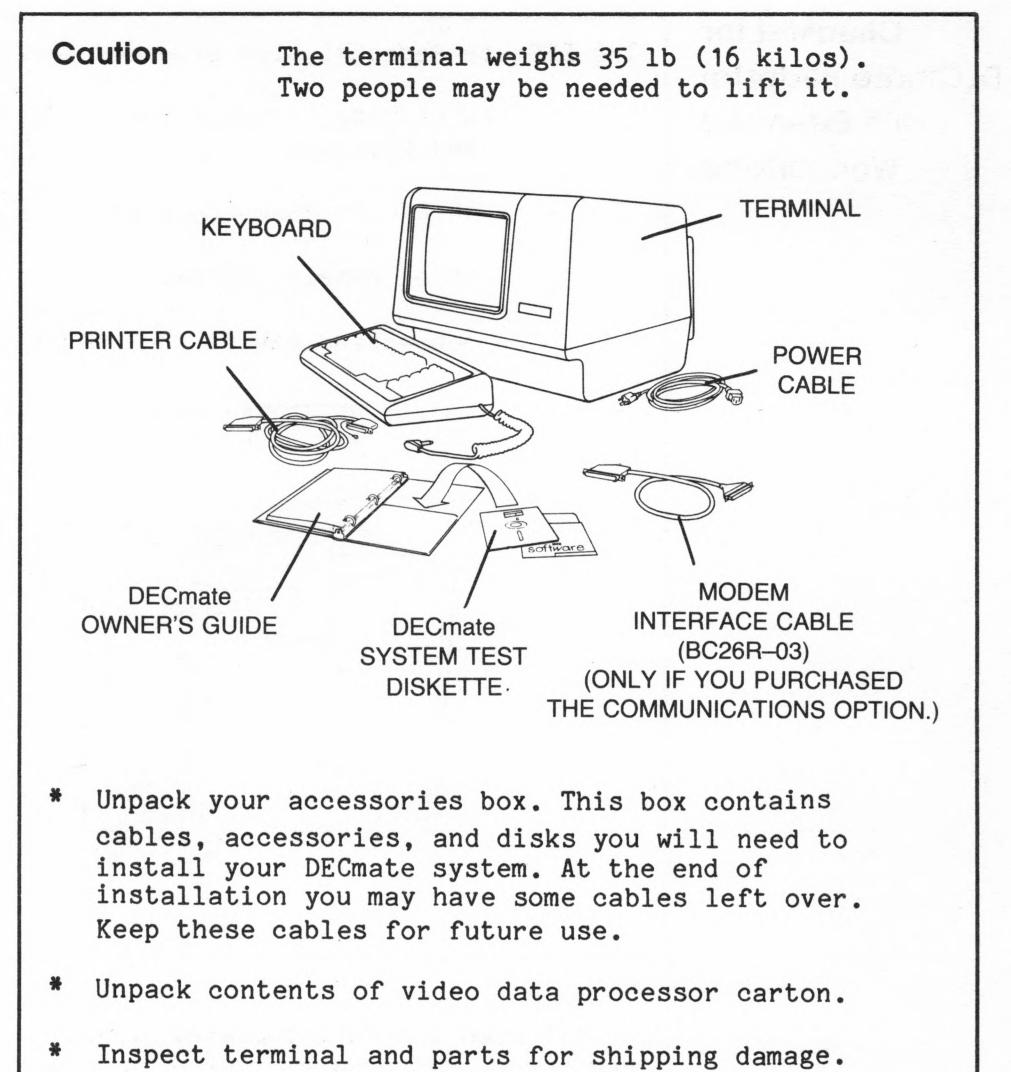
- a DECmate terminal (video data processor) and keyboard
- an RXO2-P diskette drive unit
- steel panels, screws
- connecting cables and accessories



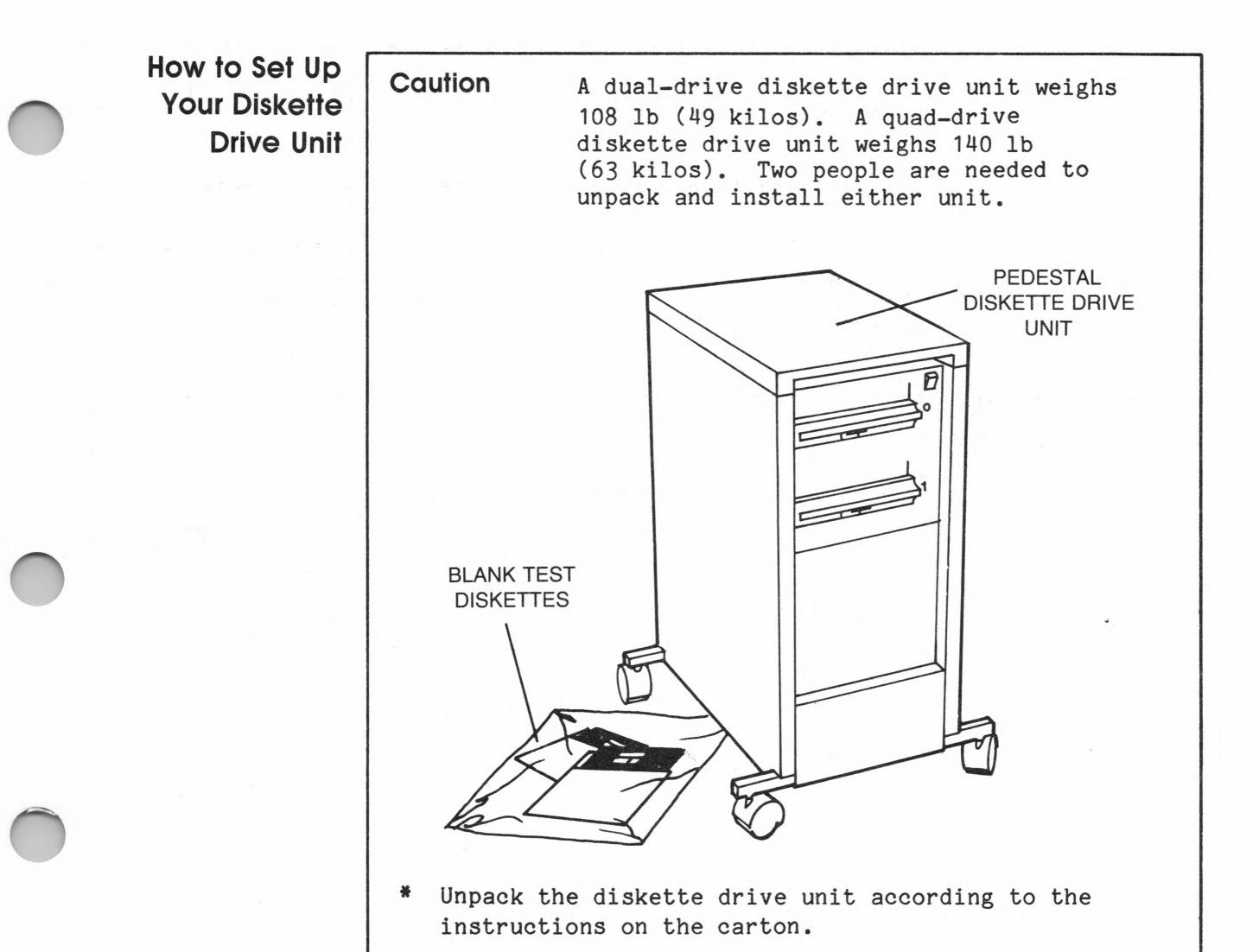
You will need a straight-bladed screwdriver, a Phillips screwdriver, and a pair of wire cutters to install your system.

Go to page 1-6 to begin unpacking.

How to Unpack Your DECmate Terminal (Video Data Processor)



* Set terminal and keyboard aside, while you unpack and install the diskette drive unit.



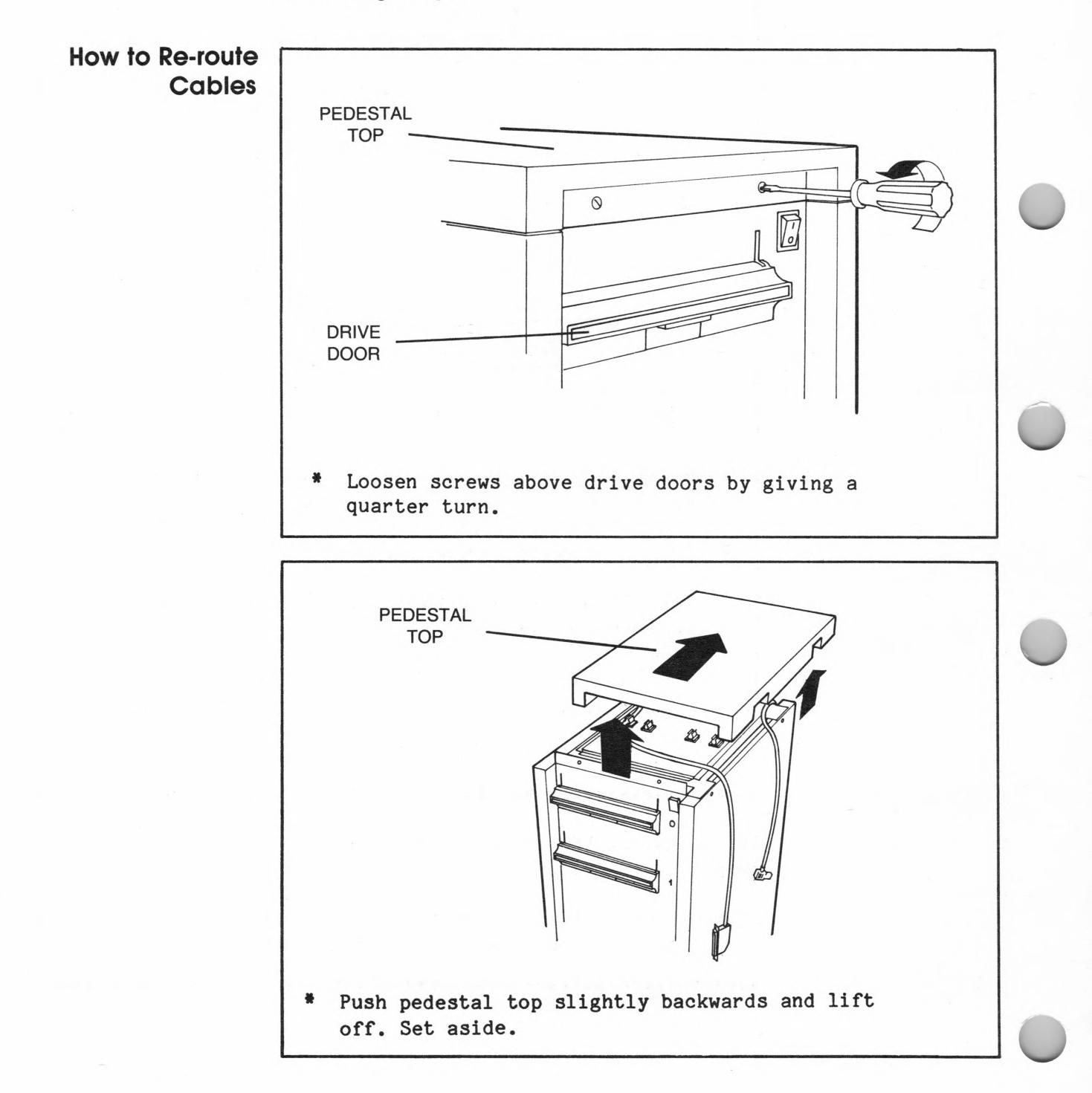
- * Inspect diskette drive unit for shipping damage.
- * Roll drive unit near the area where it will be permanently placed.
- * Press system power switch to 0 (off).

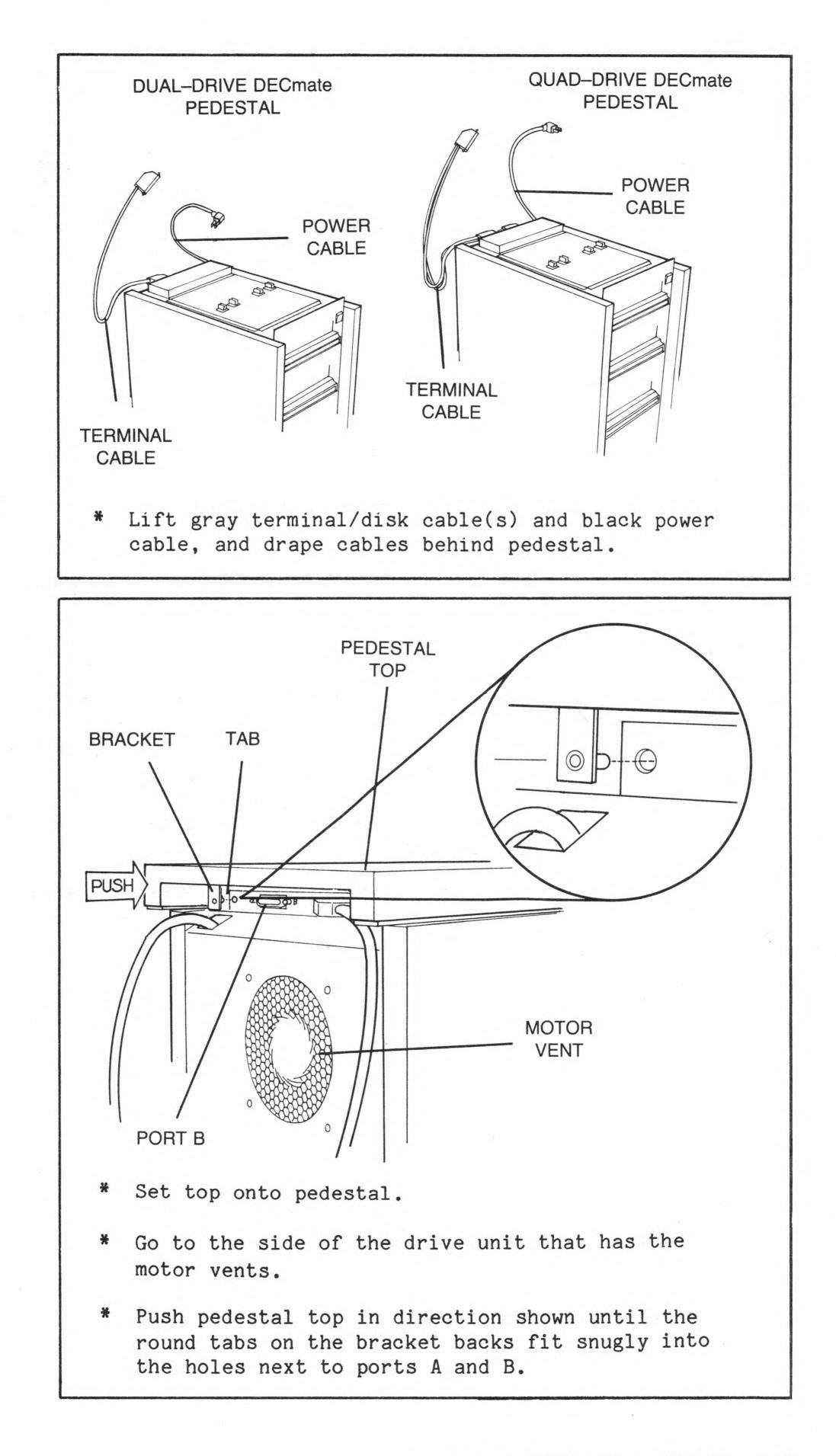
If you have a DECmate pedestal with keyboard holder, skip to page 1-16.

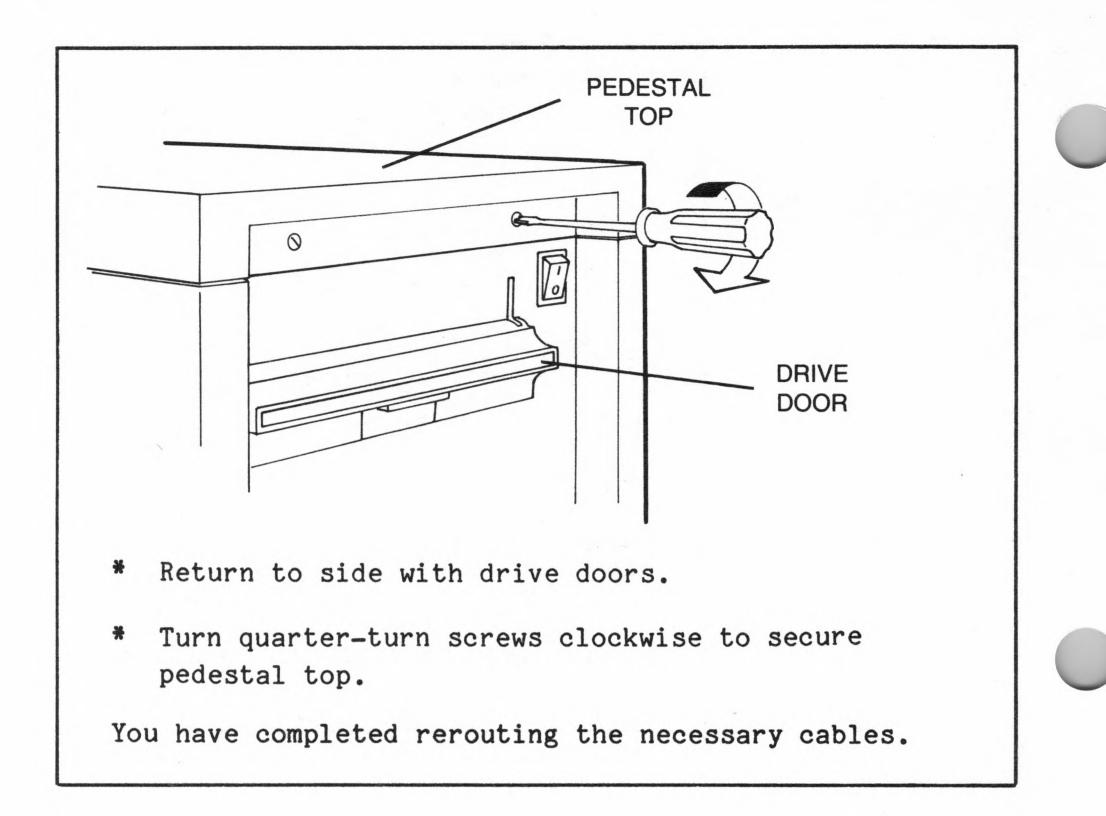
If you have a DECmate pedestal with no options, or a pedestal with extended worksurface, turn to the next page.

If you have a DECmate Pedestal with no options, or a pedestal with extended worksurface, continue below.

The DECmate Pedestal System - when it includes no options or an extended worksurface, requires rerouting of the cables inside the pedestal. This procedure is explained in the following steps.



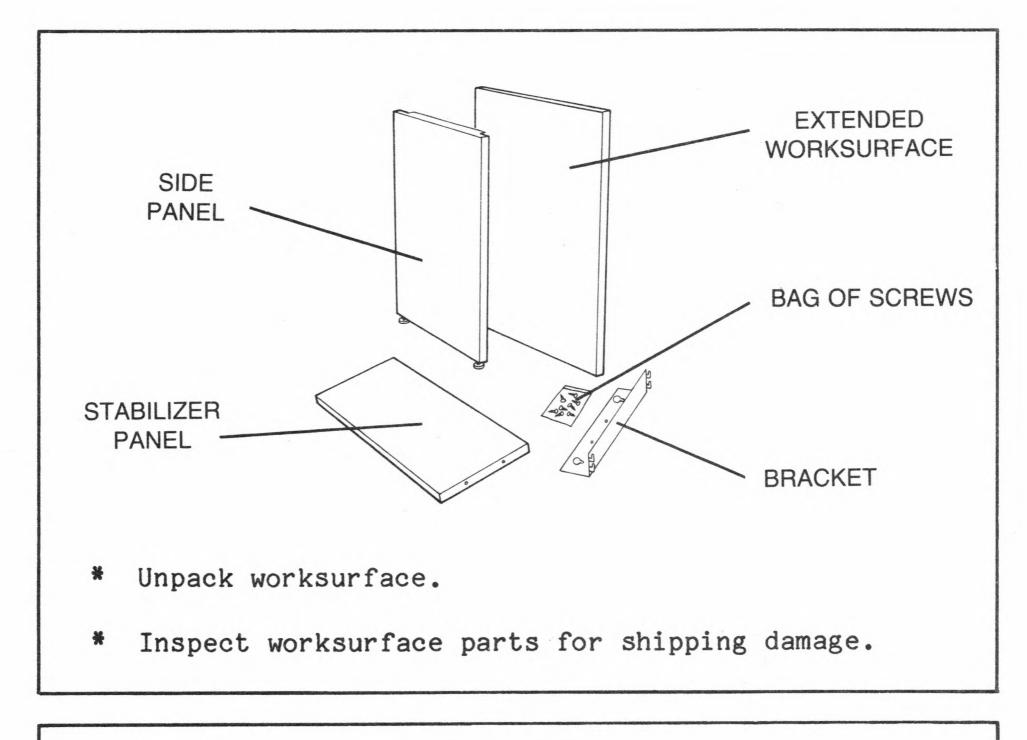


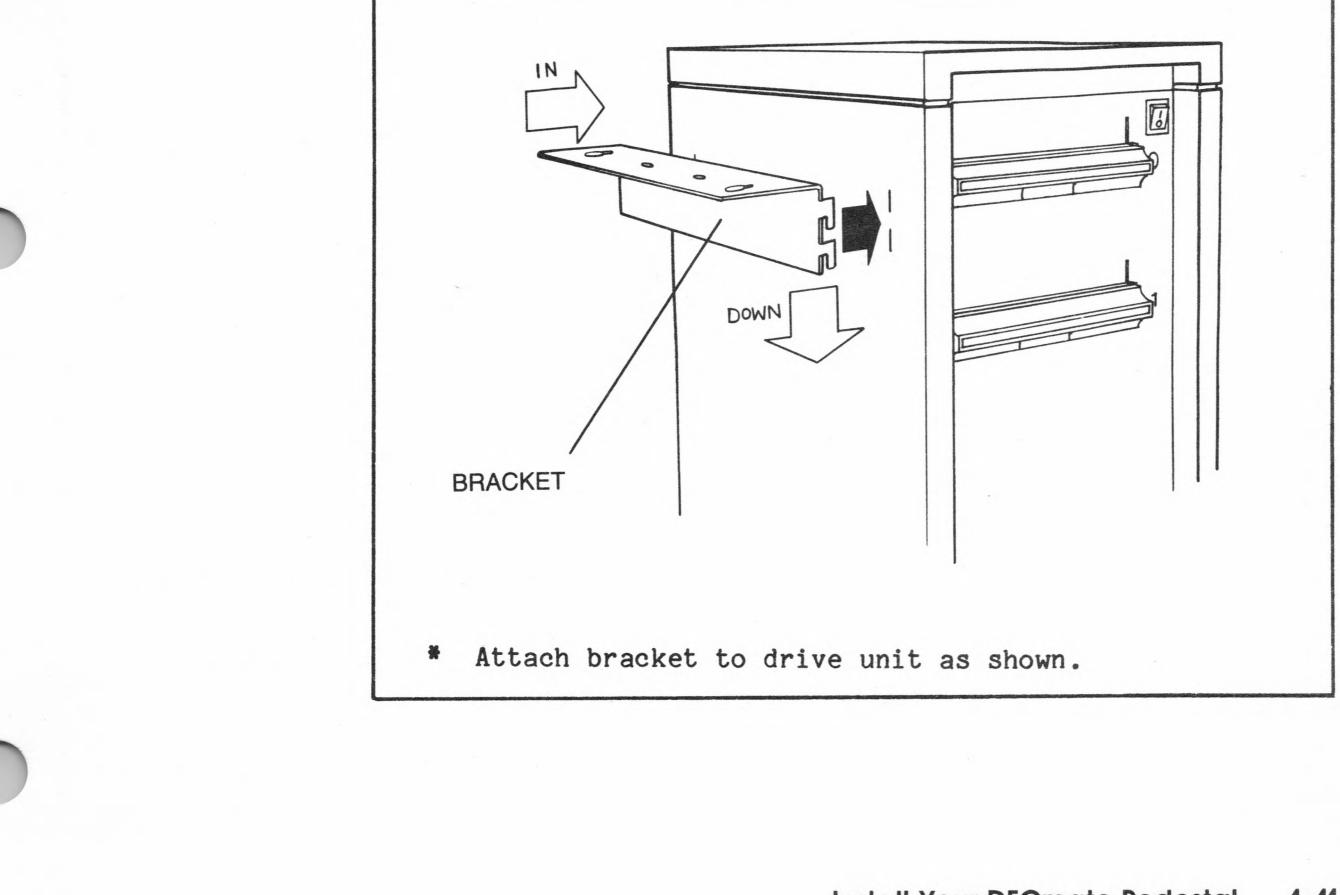


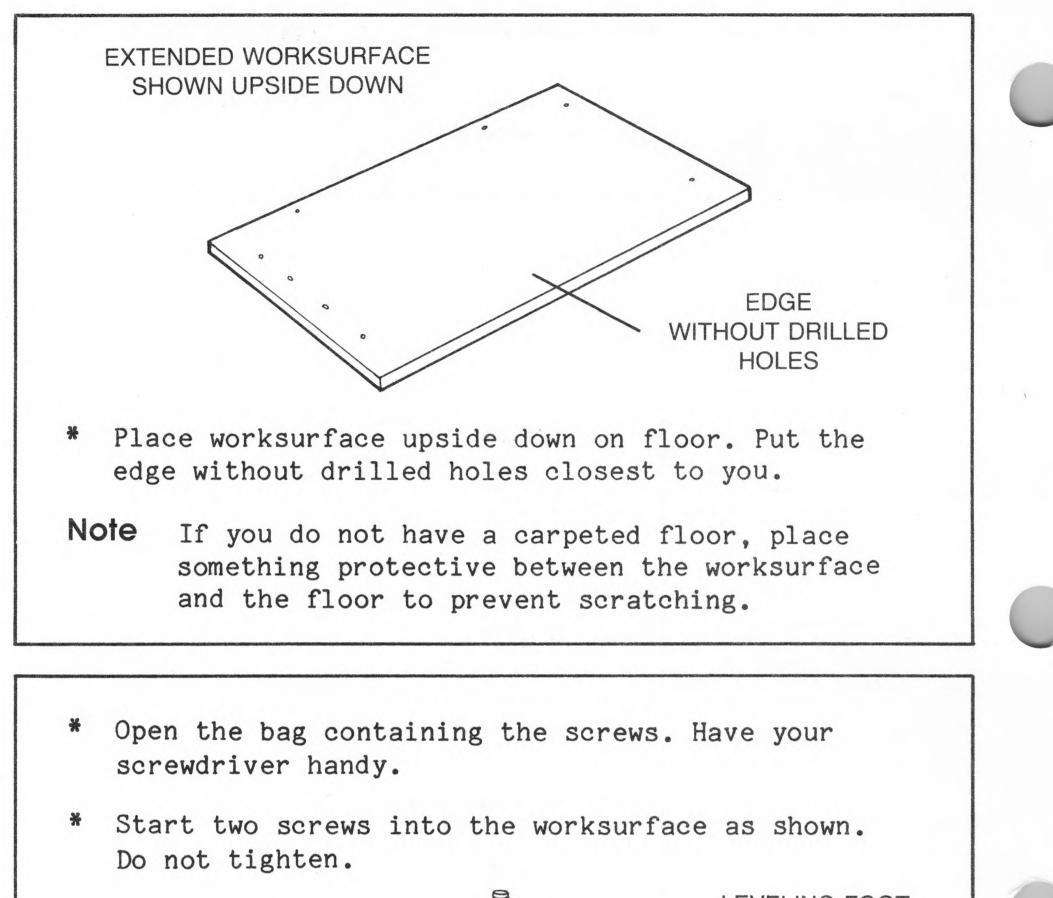
If you have a DECmate pedestal with no options, skip to page 1-18 for cabling instructions.

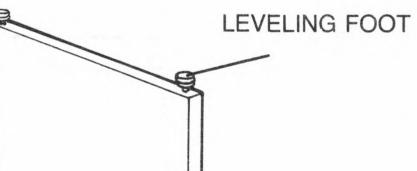
If you have a pedestal with extended worksurface, turn to the next page.

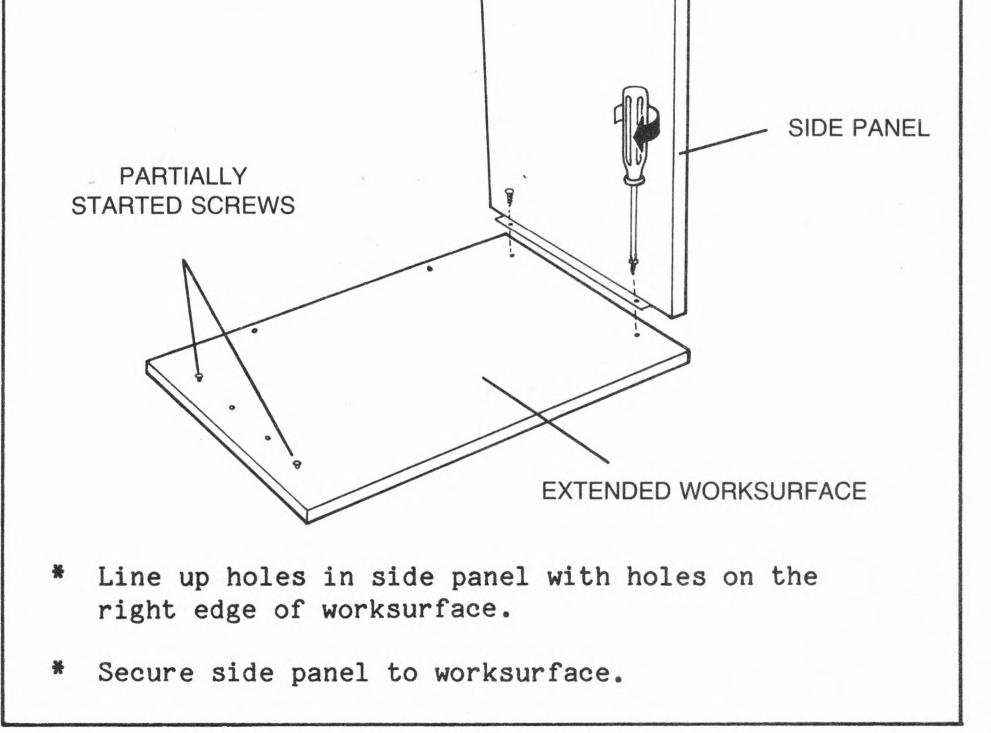
If you have a DECmate Pedestal with Extended Worksurface option, continue below.



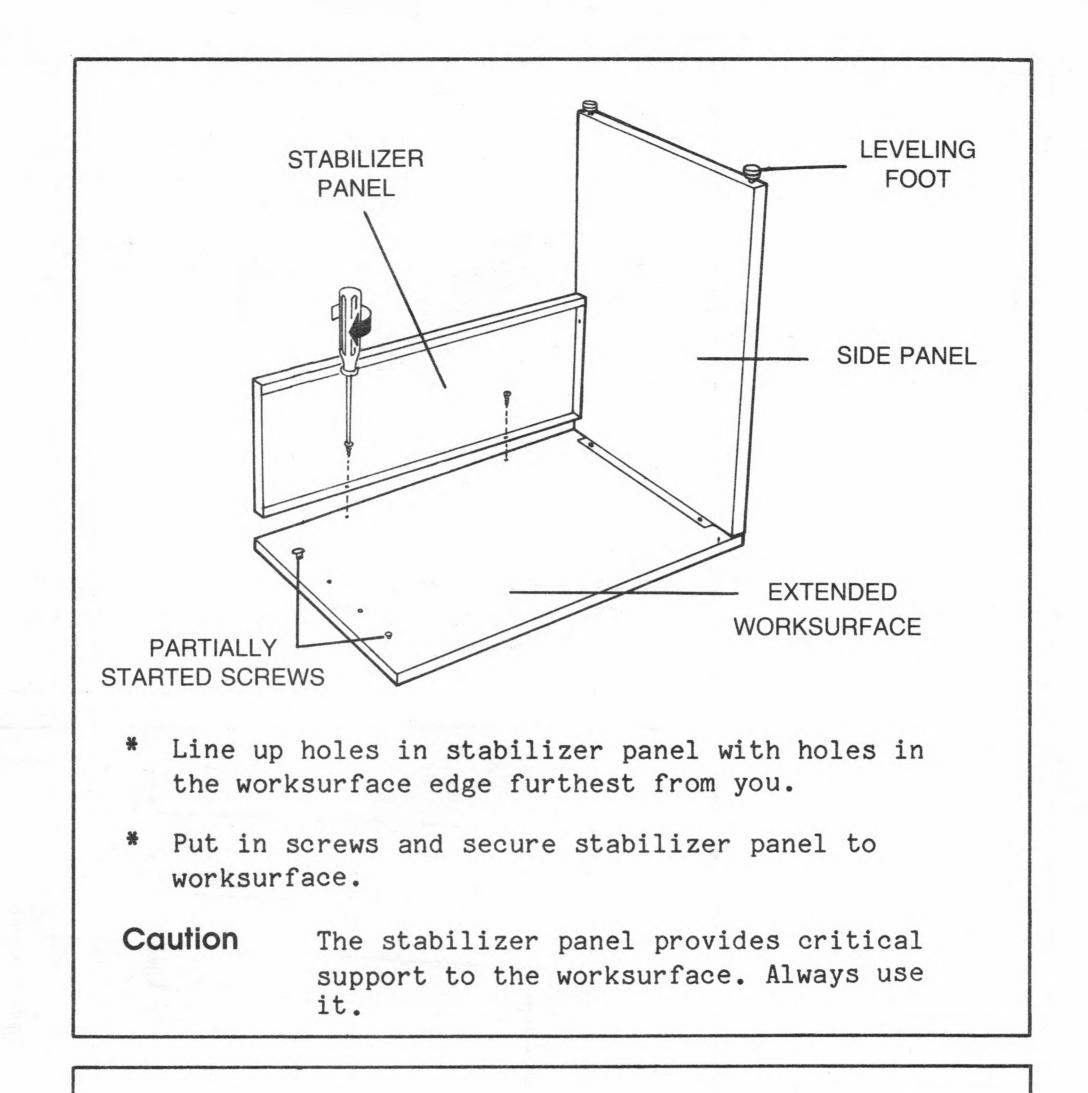


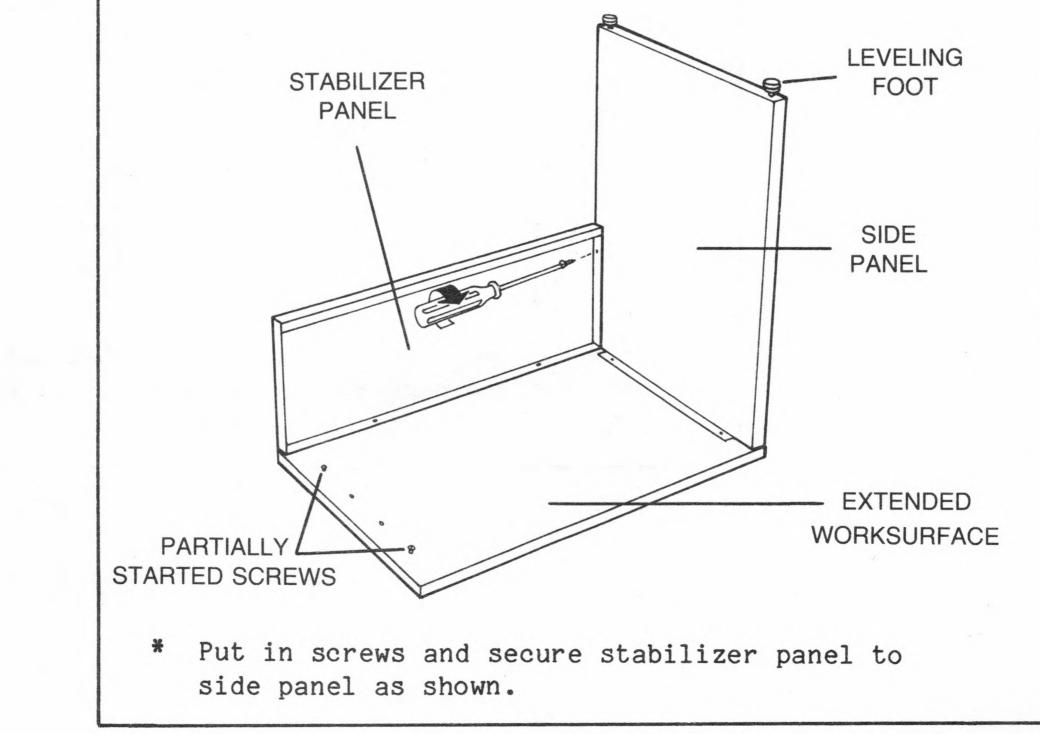


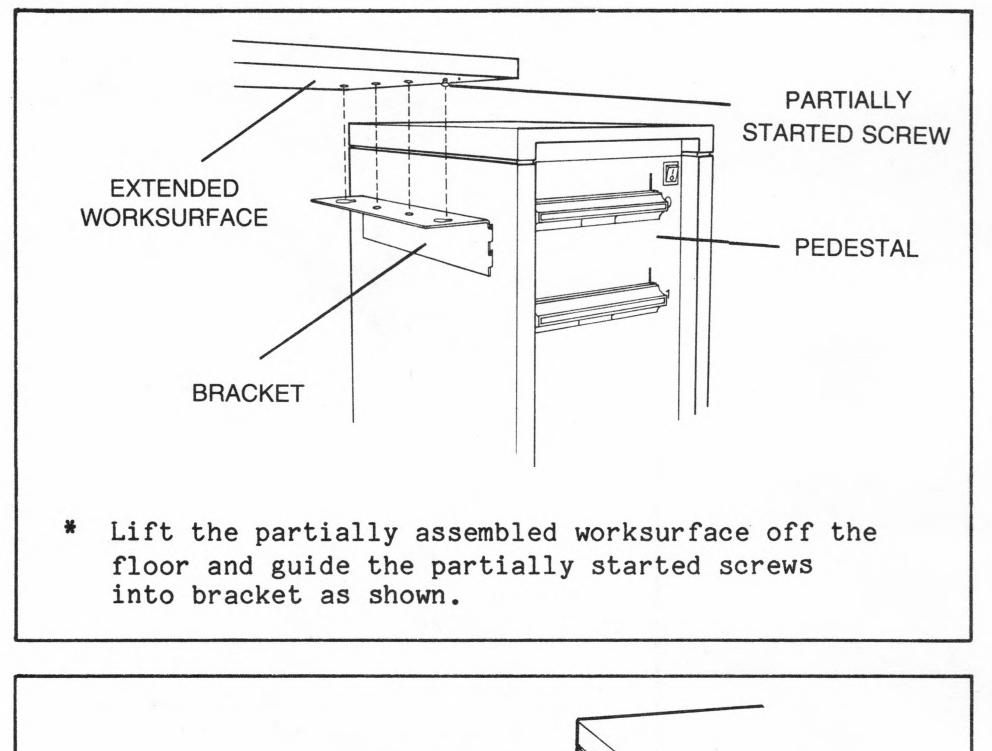


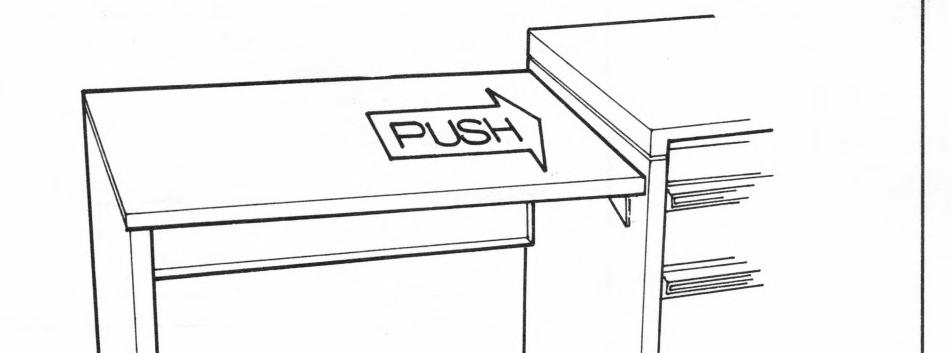


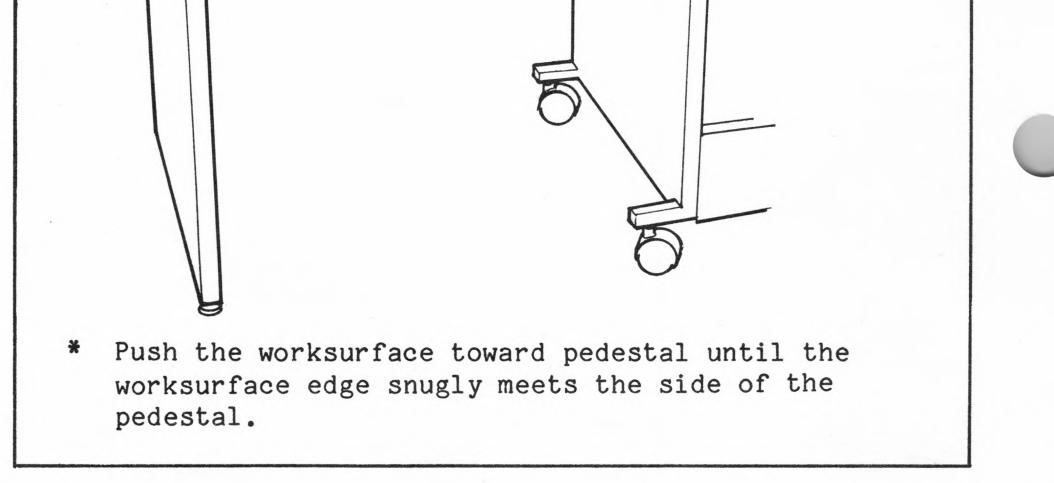
1–12 Install Your DECmate Pedestal



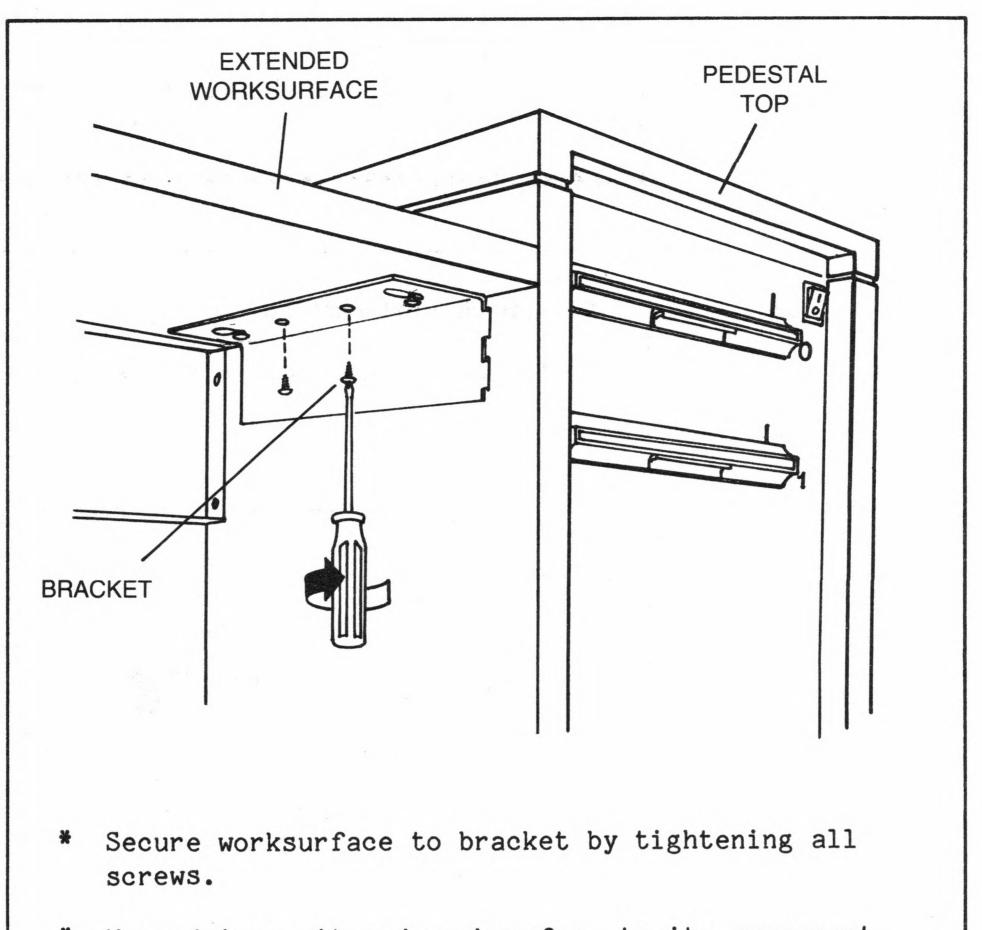








1–14 Install Your DECmate Pedestal



* Move drive unit and worksurface to its permanent location. Leave approximately 3 feet of space behind the drive unit and worksurface so you can attach the cables.

* Adjust leveling feet on worksurface.

* Set your DECmate terminal and keyboard atop the worksurface.

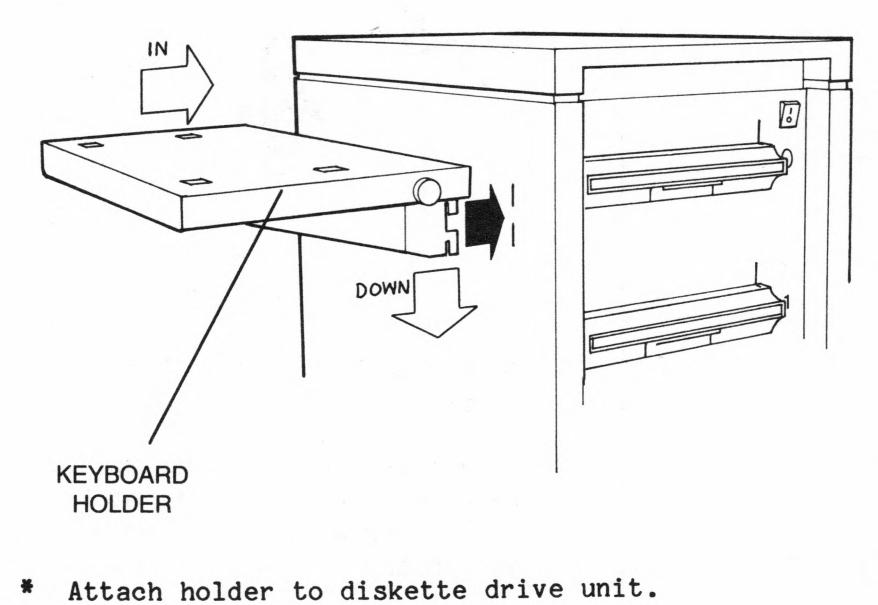
Skip to page 1-18 for cabling instructions.

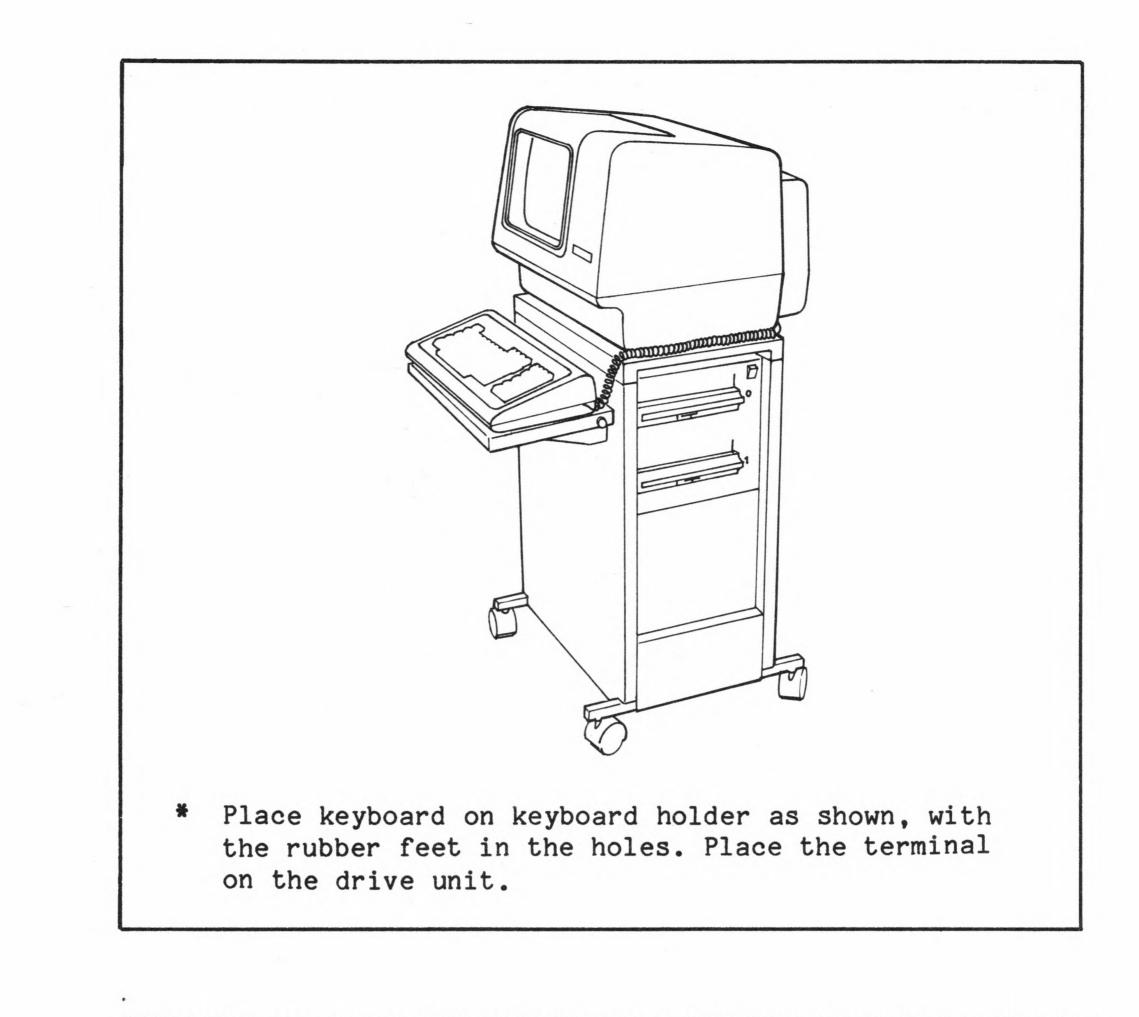
* * * ****

If your DECmate Pedestal System has a keyboard holder, continue below.

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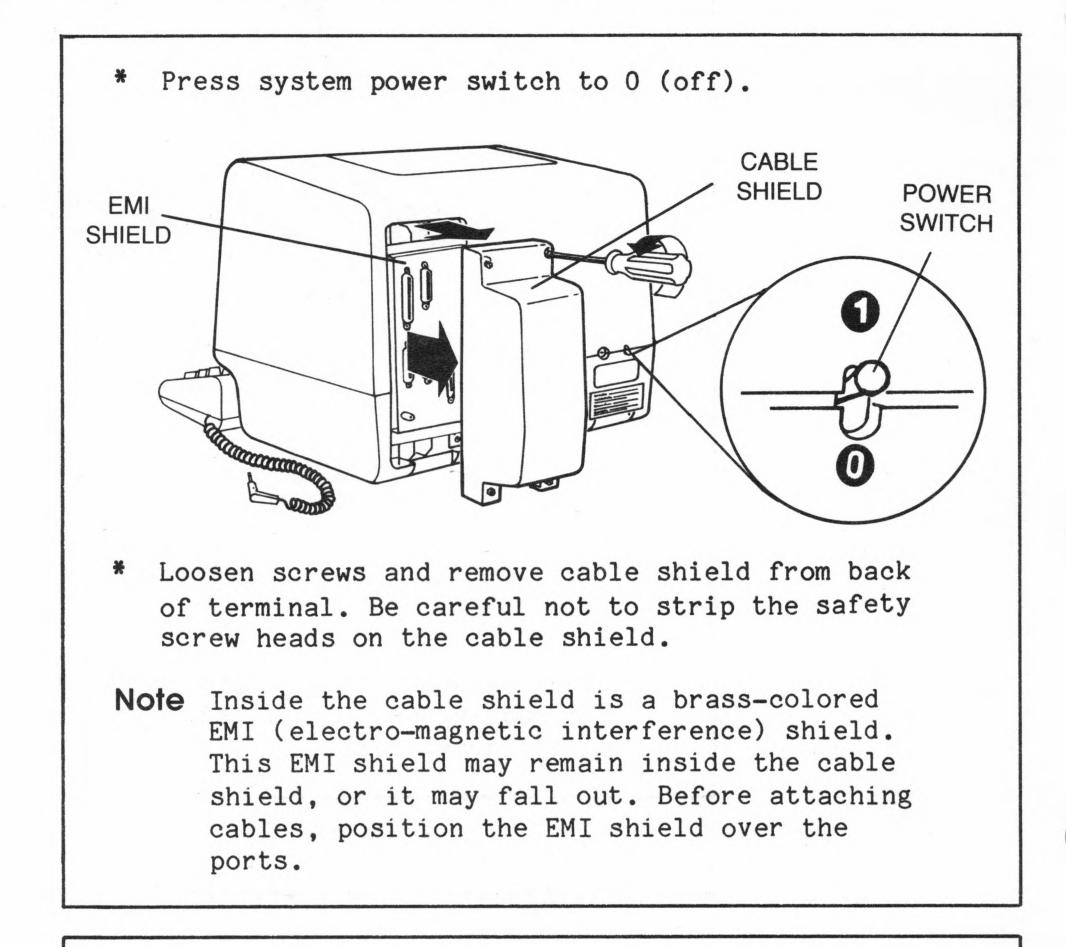
- Unpack keyboard holder. ¥
- Inspect holder for shipping damage. ¥

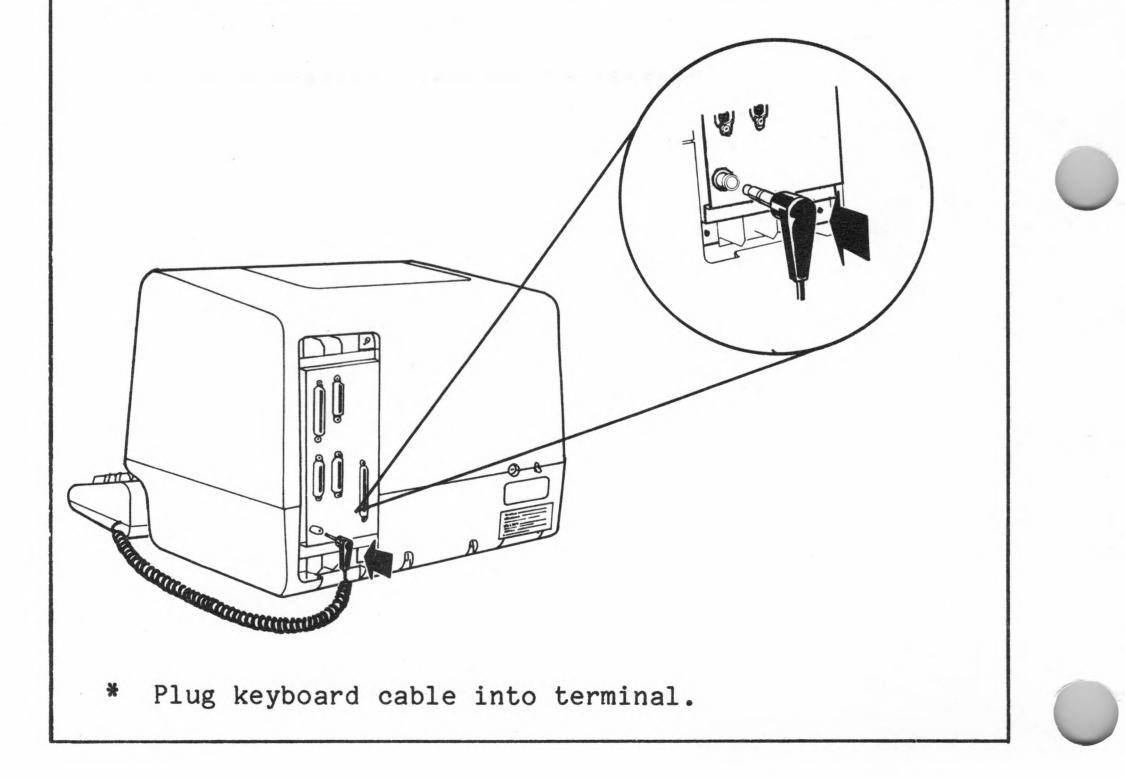




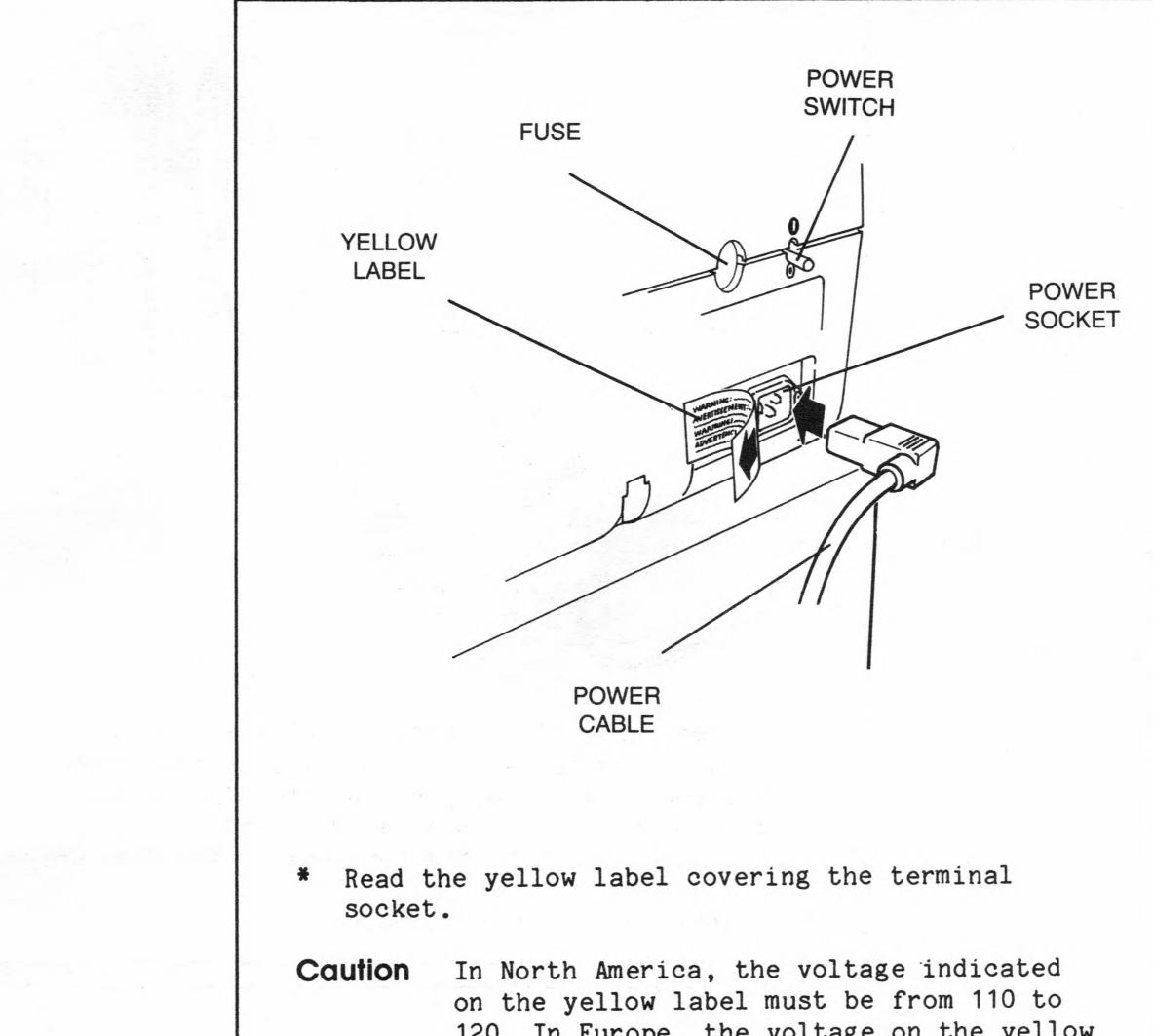
Go to the next page for cabling instructions.

How to This section explains how to attach the terminal and power Attach Cables cable for your DECmate Pedestal System.





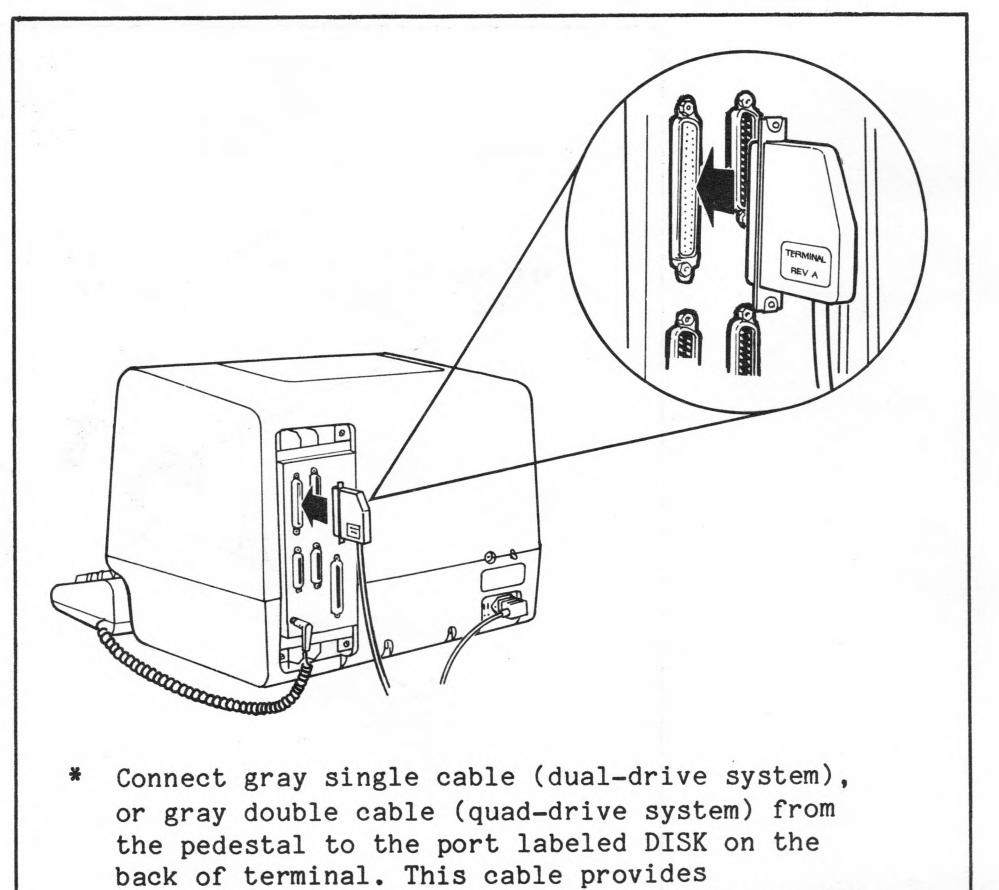
1–18 Install Your DECmate Pedestal



120. In Europe, the voltage on the yellow label must be from 220 to 240. If the voltage on the yellow label is not correct, do not continue with these instructions. Instead call your DECmate Sales Representative.

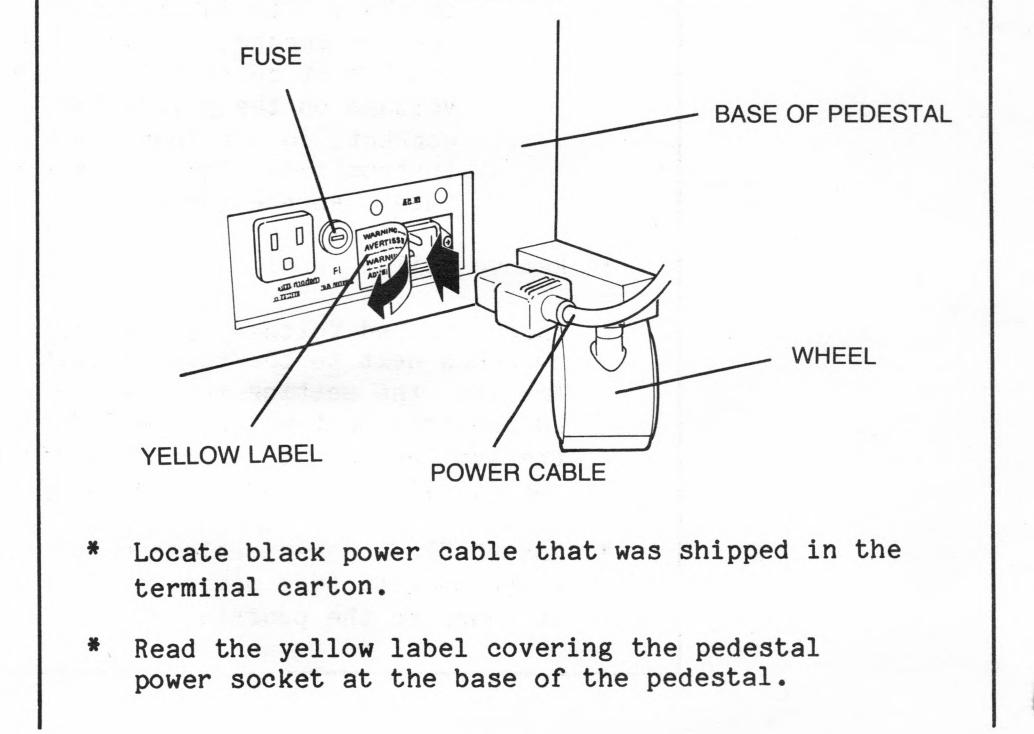
* Remove yellow label.

- * Check the red Voltage Select/Frequency Select switches next to the power socket. In North America, the setting must be 120 v/60 hz. In Europe, the setting must be 220-240 v/50 hz. If the setting is not correct, carefully move the switch(es) up or down to the proper setting.
- * Insert black power cable end into terminal power socket. (Use power cable that is already attached to the pedestal.)



communication from the terminal to the disk drives.

* Tighten screws on connectors.

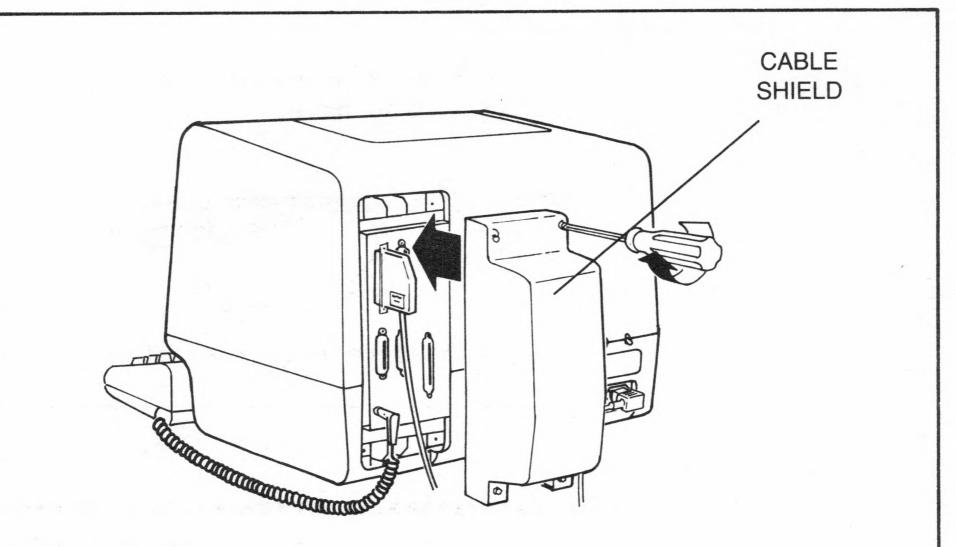


1–20 Install Your DECmate Pedestal

Caution

In North America, the voltage indicated on the yellow label must be from 110 to 120. In Europe, the voltage on the yellow label must be from 220 to 240. If the voltage on the yellow label is not correct, do not continue with these instructions. Instead call your DECmate Sales Representative.

- * Remove yellow label.
- * Plug open end of black power cable into the power socket on the pedestal base.
- * Plug prong end of black power cable into a wall outlet. This cable provides power to the entire pedestal system.







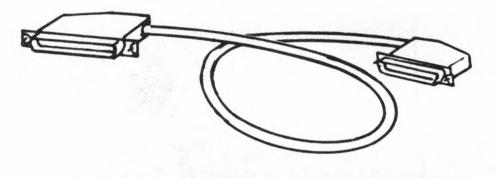
Attach cable shield. (Do not attach the cable × shield if you plan to install a printer.)

Note You may have some cables left over. Keep these for future use.

Below are the cables you should have left over: Modem Interface Cable (BC26R-03)

Printer Cable (BC26S-15)

If you have a pedestal system with no options, you will also have:



3 foot Terminal/disk cable (BC26N-2L)

Refer to Chapter 3 for printer installation instructions.

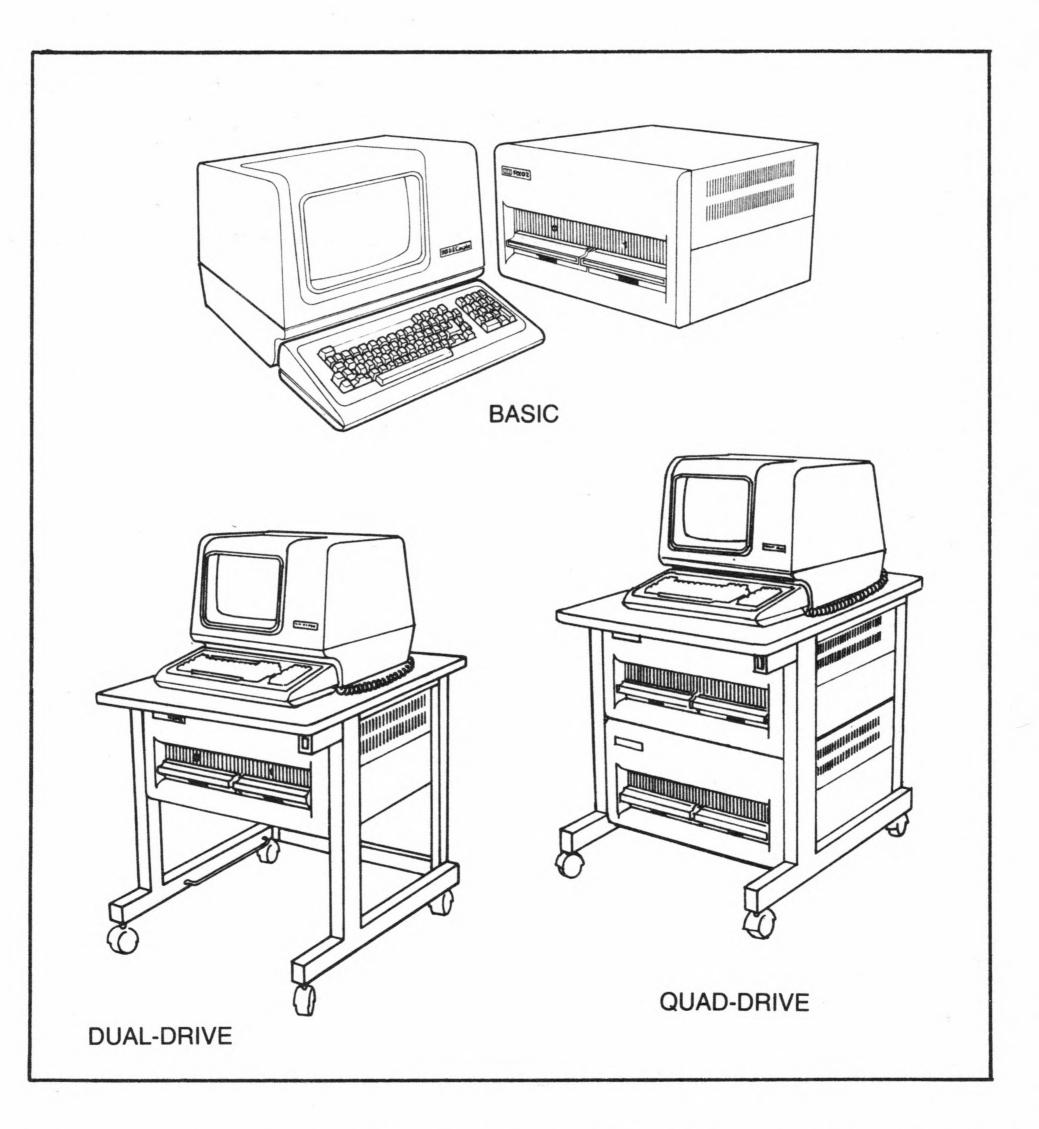


1–22 Install Your DECmate Pedestal



Chapter 2 Installing Your Basic DECmate and Minidesk System

Start here if you have a carton labeled RXO2 diskette drive unit.



There are three possible configurations with the DECmate RXO2 Diskette Drive unit. Following this page is a checklist for each different configuration. Each checklist contains a description of the configuration, and a list of the equipment in each one. Do not unpack your system until you are told to do so by the instructions.

Installing Your Basic DECmate and Minidesk System 2–1

If problems arise, call the Customer Service Hot Line at (800) 241-6580. If possible, complete installation before reporting problems to your DIGITAL representative.

Before cabling, be certain that your office has the proper environmental and power requirements for your particular DECmate system. See Chapters 9 and 10.

Do not attempt to connect any of the cables until the instructions tell you to do so.

Unpack and assemble DECmate near its permanent location.

Proceed through the following instructions until you reach another instruction like this one.

Turn to the next page.

2–2 Installing Your Basic DECmate and Minidesk System

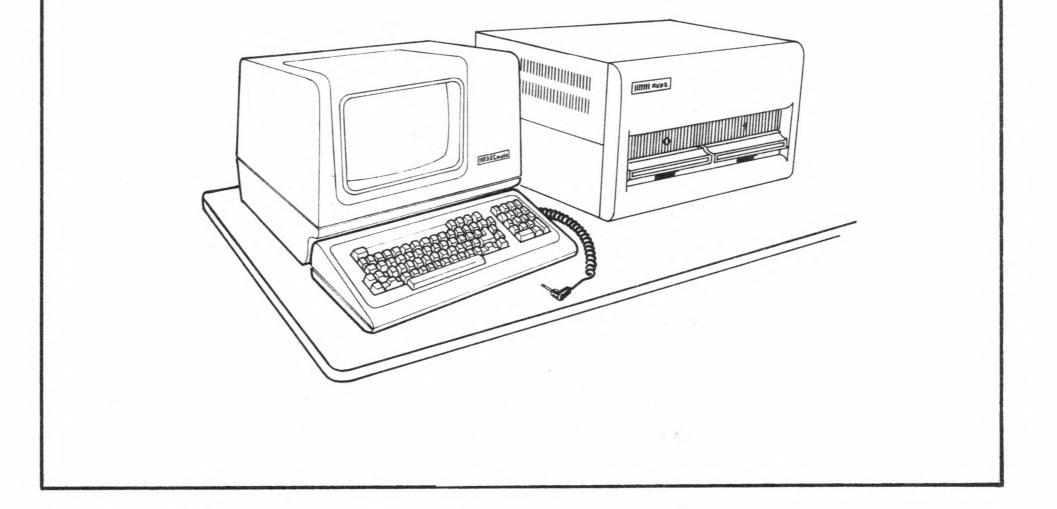
Consult the following three checklists and determine which DECmate configuration you have.

Do not unpack the cartons yet - you will be able to tell the configuration by the labels on the boxes.

Checklist for Basic DECmate System

The Basic DECmate system includes:

- DECmate terminal (video data processor) and keyboard
- One RXO2 Diskette Drive unit
- Connecting cables and accessories



You will need a straight-bladed screwdriver to install your system.

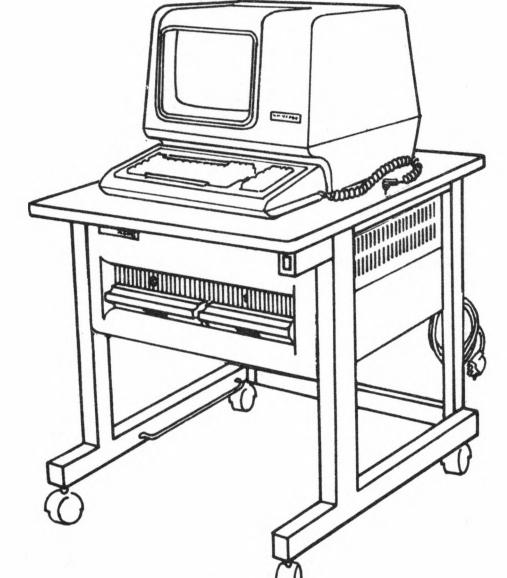
Go to page 2-6 to begin unpacking.

Installing Your Basic DECmate and Minidesk System 2–3

Checklist for Dual-drive DECmate System

The DECmate Dual-Drive with Minidesk System includes:

- DECmate terminal (video data processor) and keyboard
- One RXO2 Diskette Drive unit
- Connecting cables and accessories
- a minidesk, which holds the diskette drive unit and terminal



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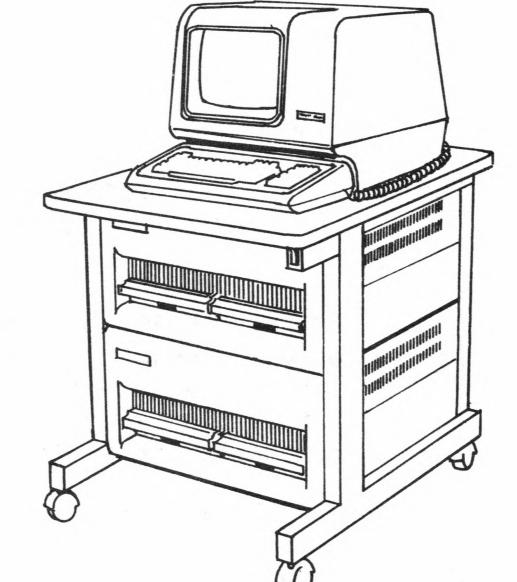
You will need a straight-bladed screwdriver and a pair of wire-cutters to install your system.

Go to page 2-6 to begin unpacking.

Checklist for Quad-drive DECmate System

The DECmate Quad-drive System includes:

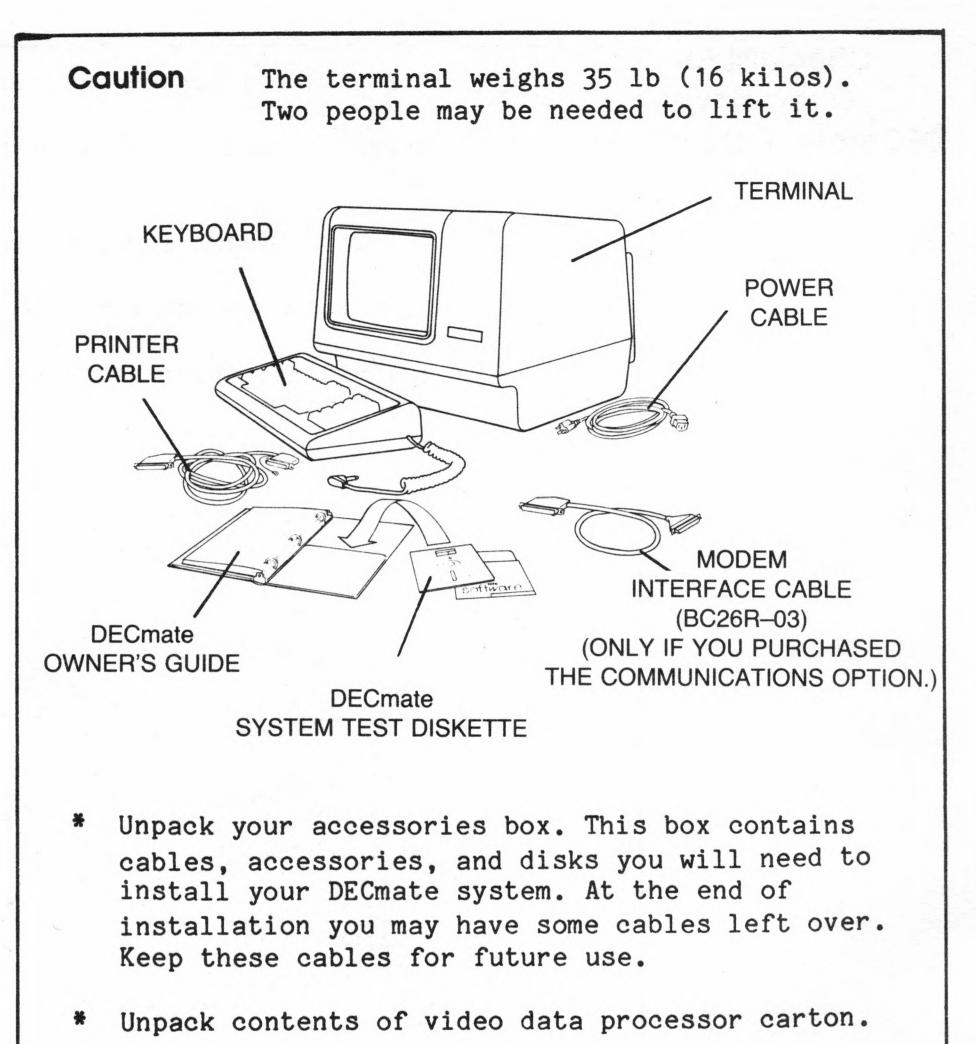
- DECmate terminal (video data processor) and keyboard
- Two RXO2 Diskette Drive units
- Connecting cables and accessories
- a minidesk, which holds the diskette drive unit and terminal



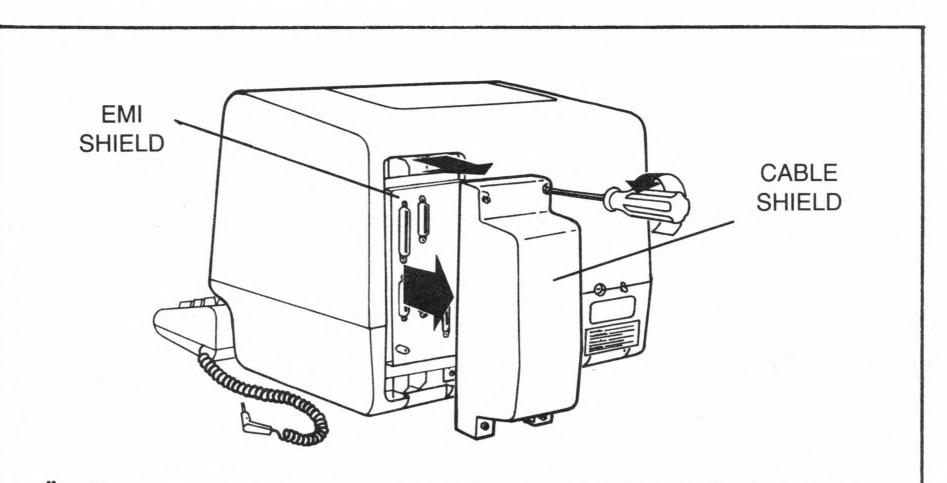
You will need a straight-bladed screwdriver and a pair of wire-cutters to install your system.

Go to page 2-6 to begin unpacking.

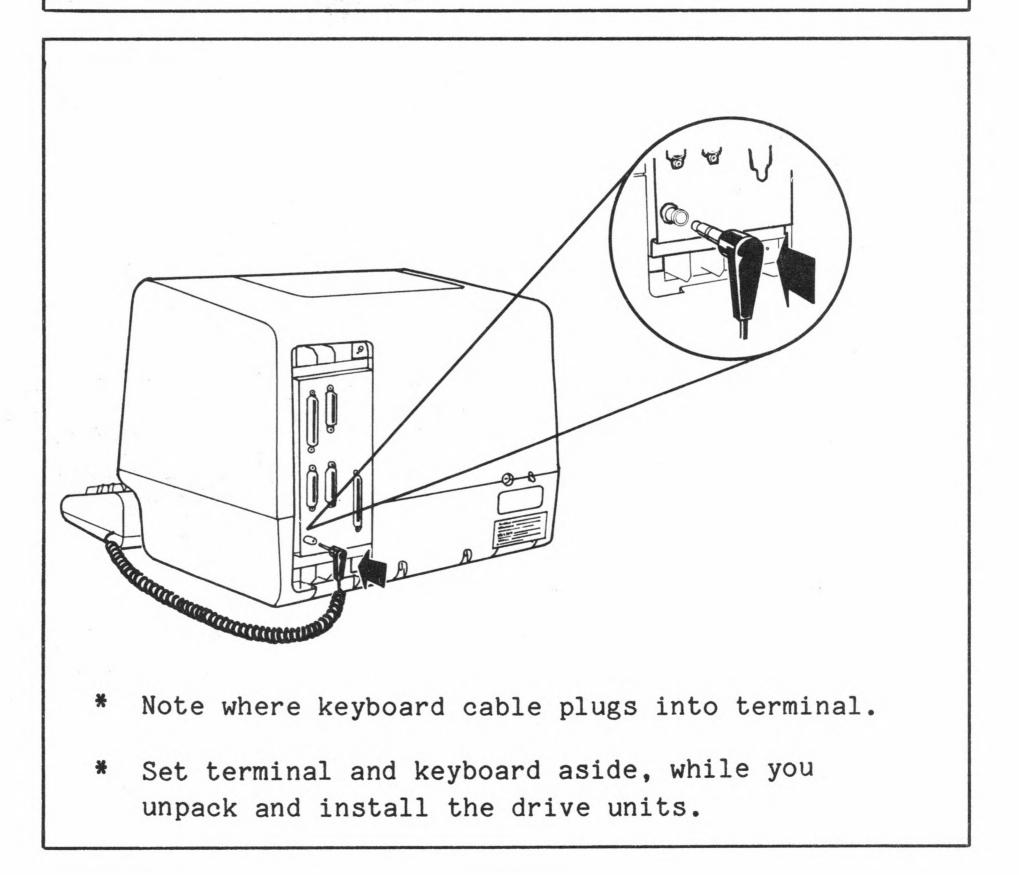
How to Unpack and Set Up Your **DECmate Terminal** (Video Data Processor)



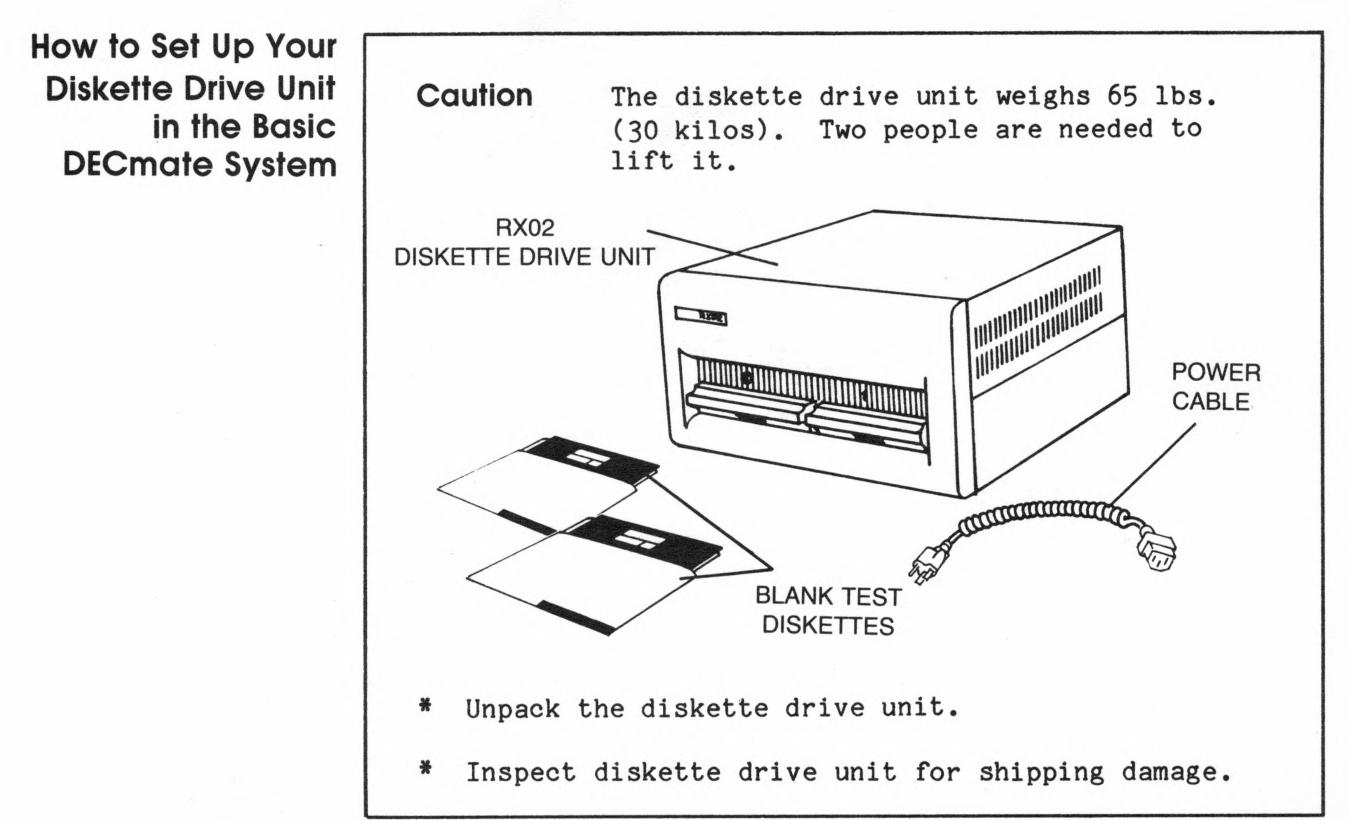
Inspect terminal for shipping damage.

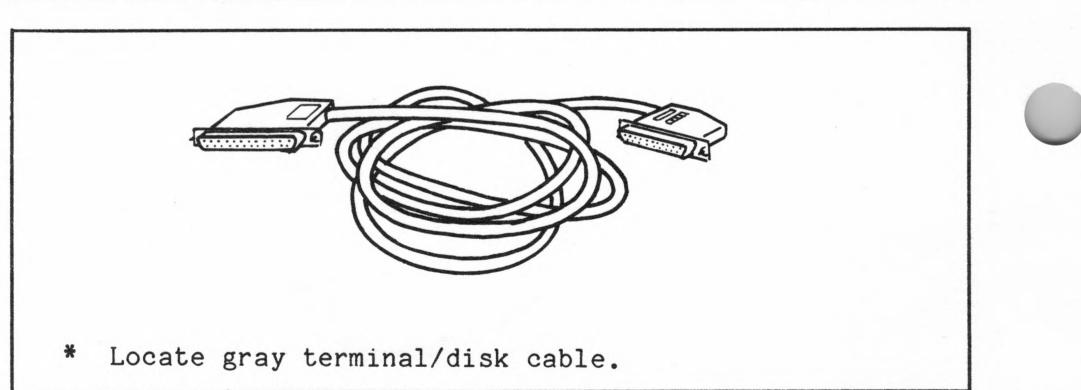


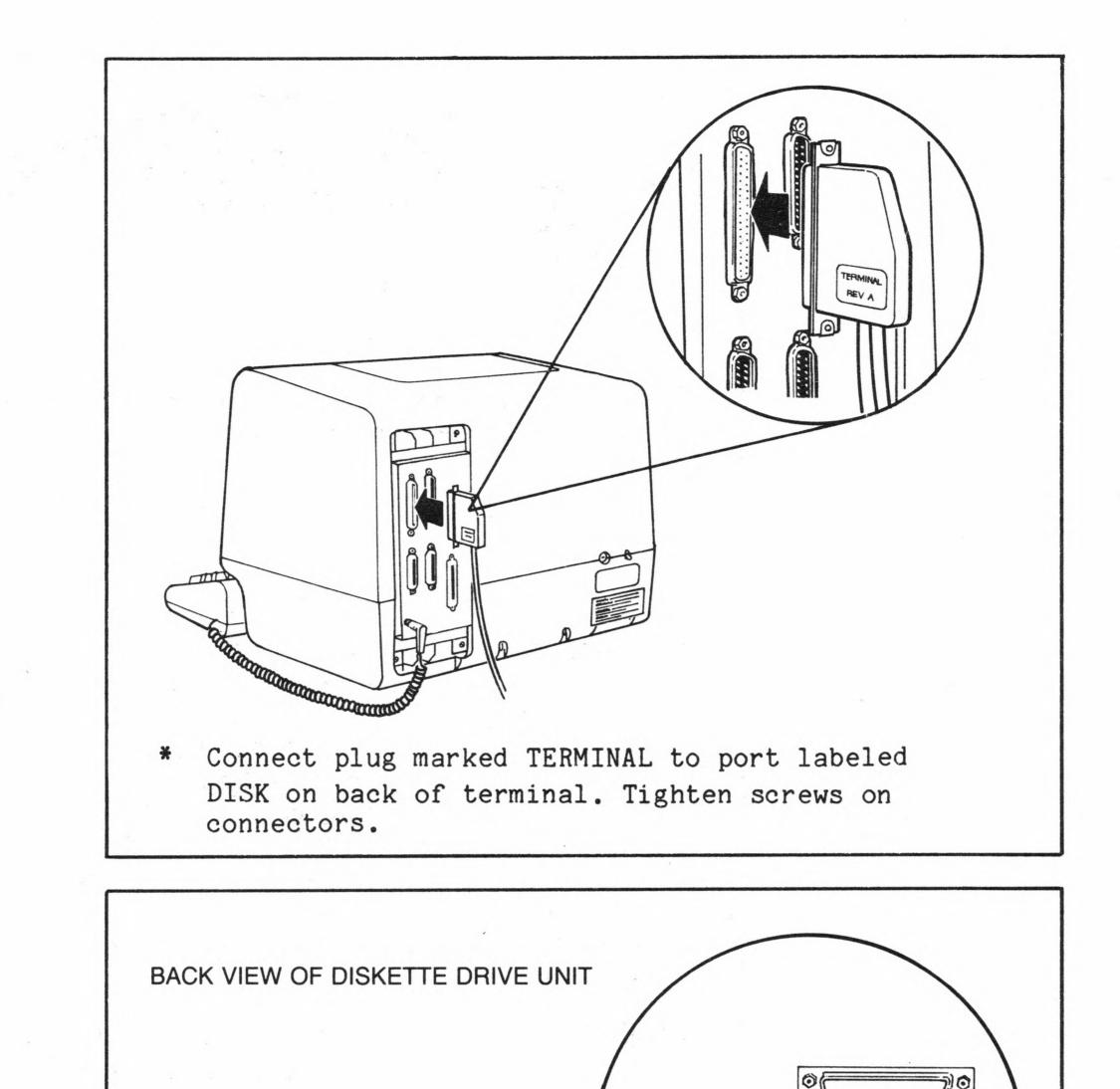
- * Loosen screws and remove cable shield from back of terminal. Be careful not to strip the safety screw heads on the cable shield.
- Note Inside the cable shield is a brass-colored EMI (electro-magnetic interference) shield. This EMI shield may remain inside the cable shield, or may fall out. Before attaching cables, position the EMI shield over the ports.

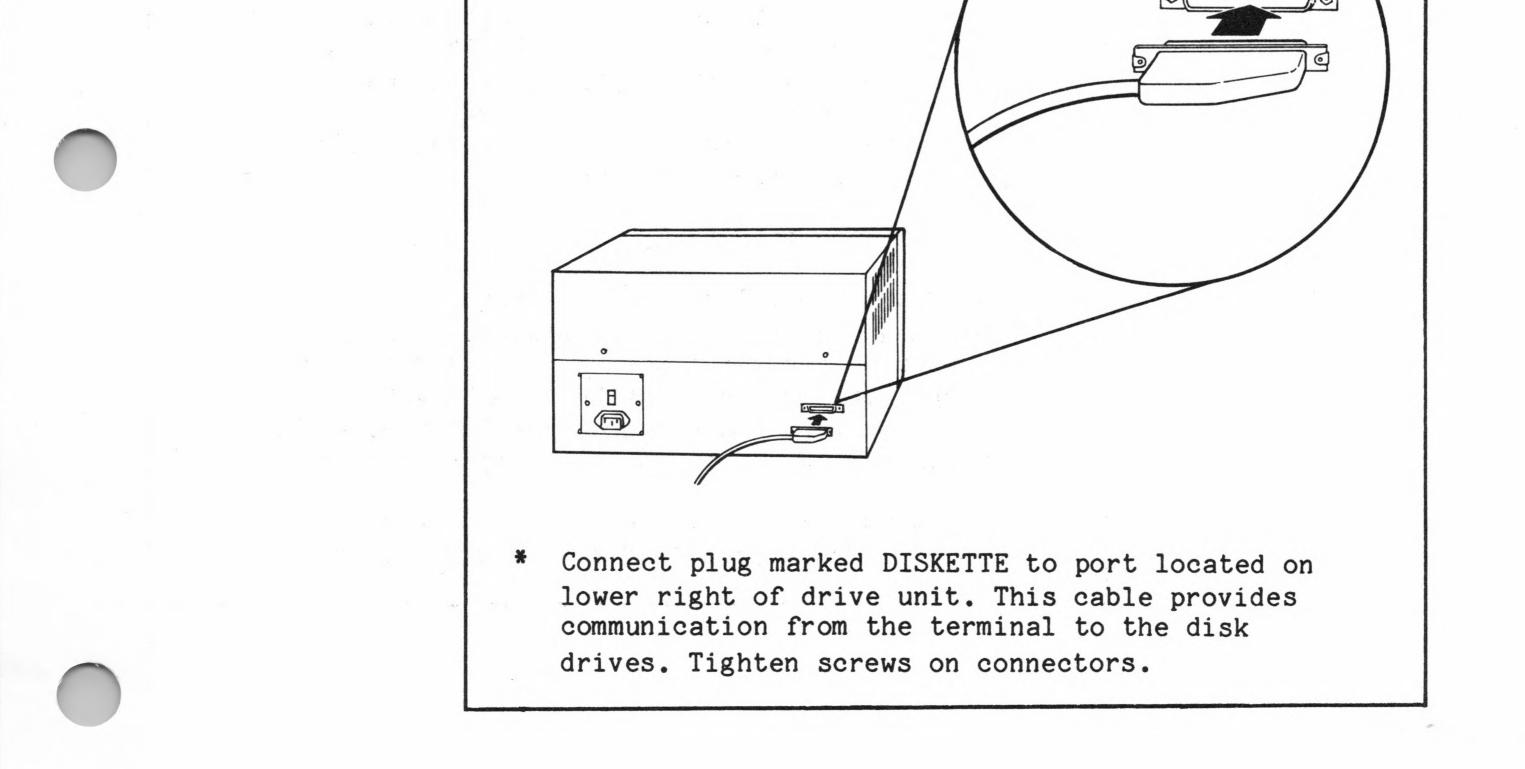


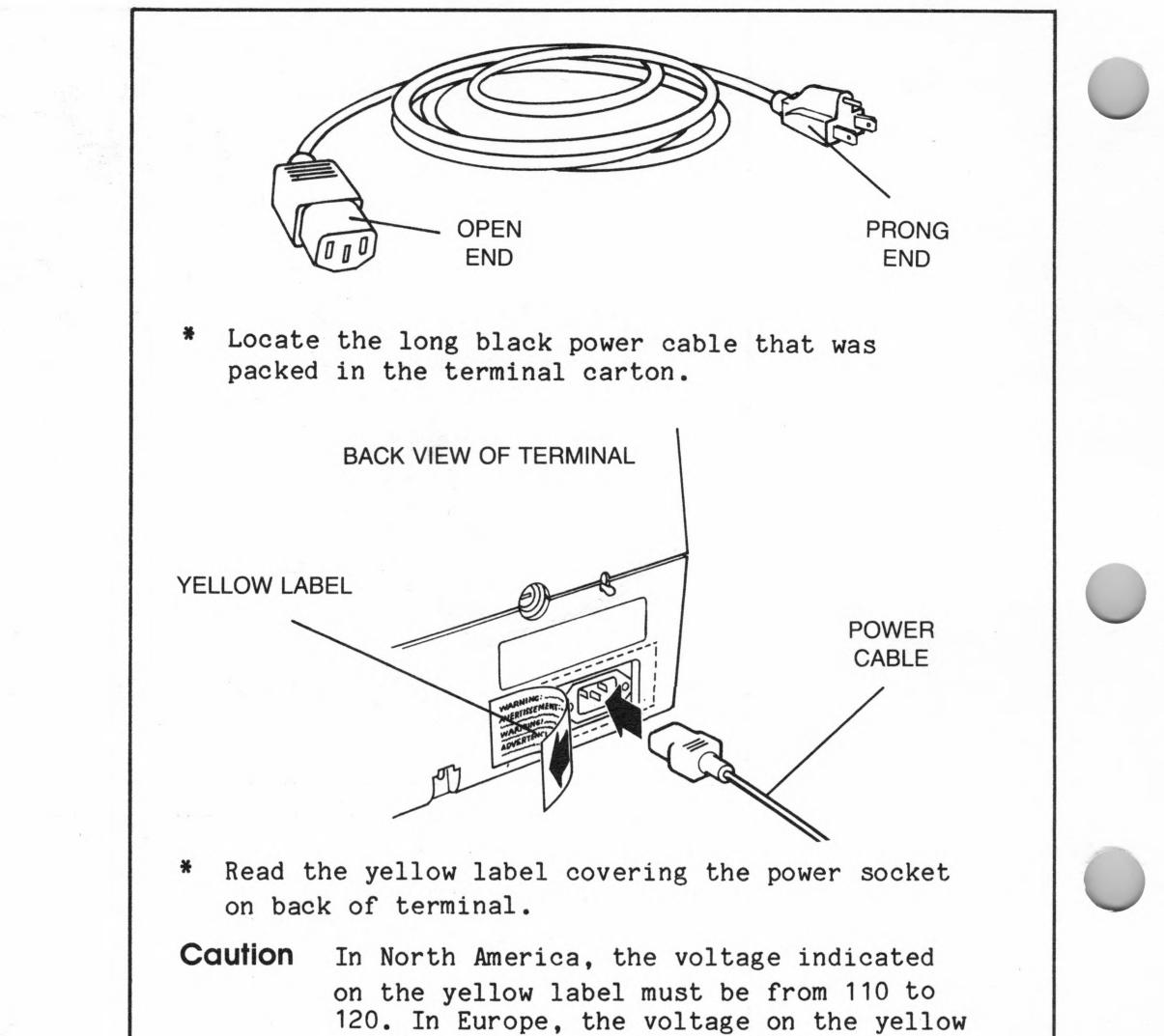
If your configuration includes a Minidesk, skip to page 2-13. Otherwise, continue below.







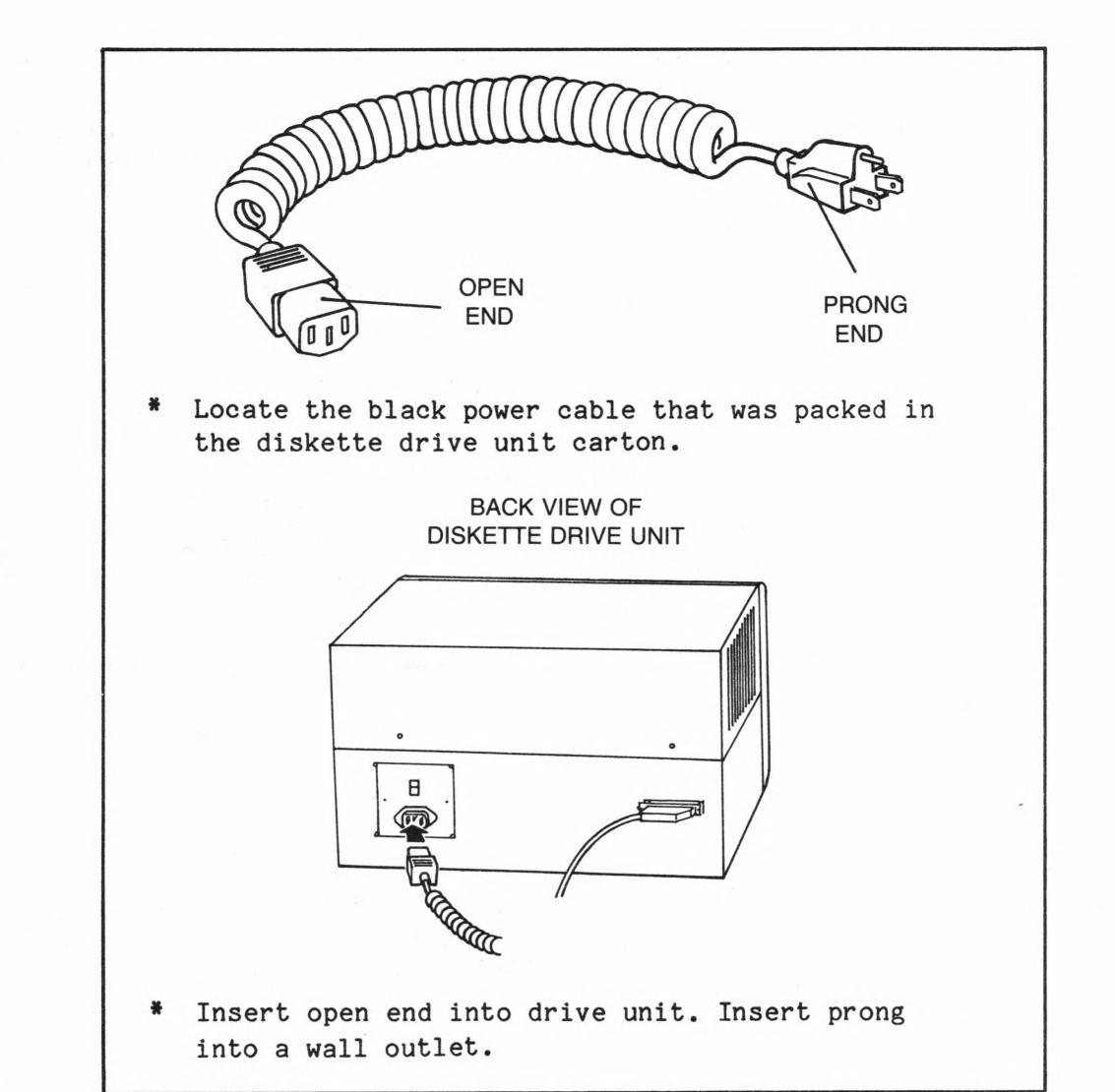


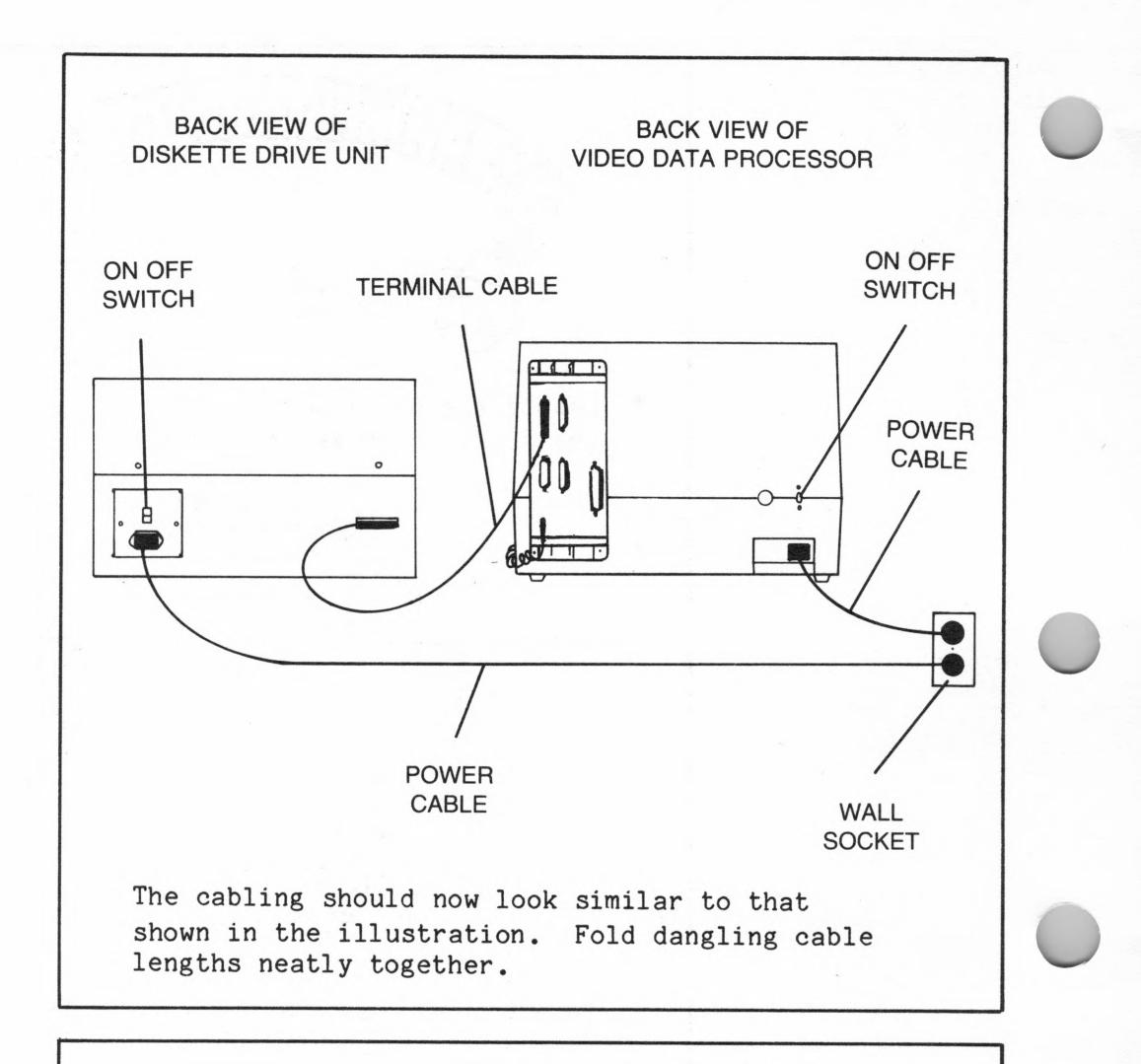


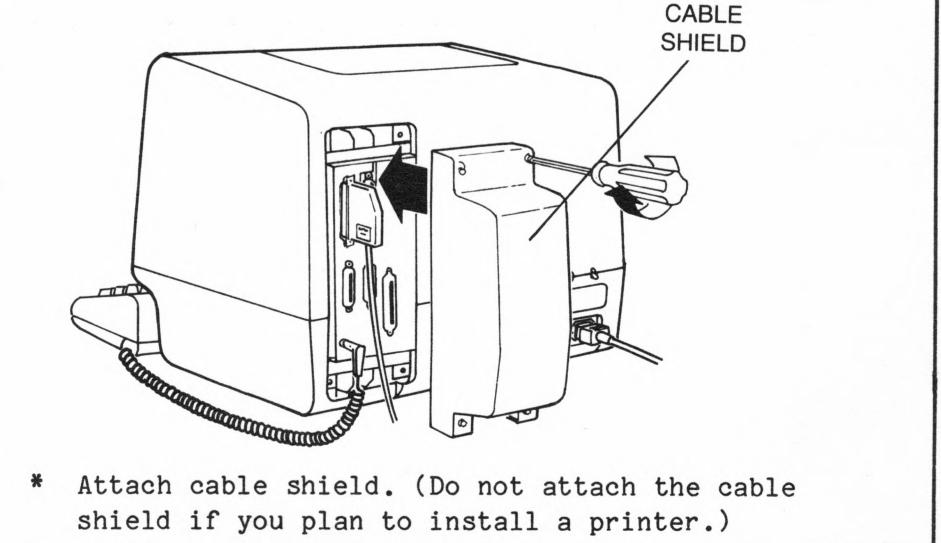
label must be from 220 to 240. If the voltage on the yellow label is not correct, do not continue with these instructions. Instead call your DECmate Sales Representative.

* Remove the yellow label.

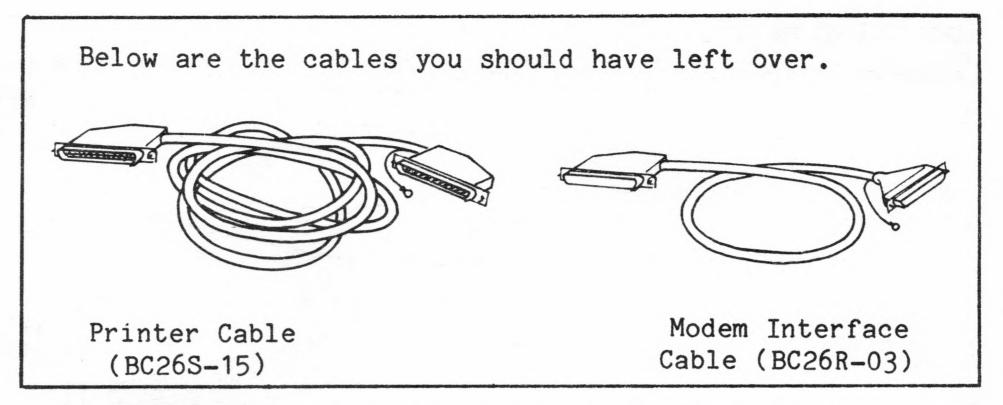
- * Check the red Voltage Select/Frequency Select switches next to the power socket. In North America, the setting must be 120 v/60 hz. In Europe, the setting must be 220-240 v/50 hz. If the setting is not correct, carefully move the switch(es) up or down to the proper setting.
- * Insert open end of black cable into power socket. Insert prong end into a wall outlet.







Your DECmate Basic System is now ready to operate. Refer to Chapter 3 for printer installation instructions.



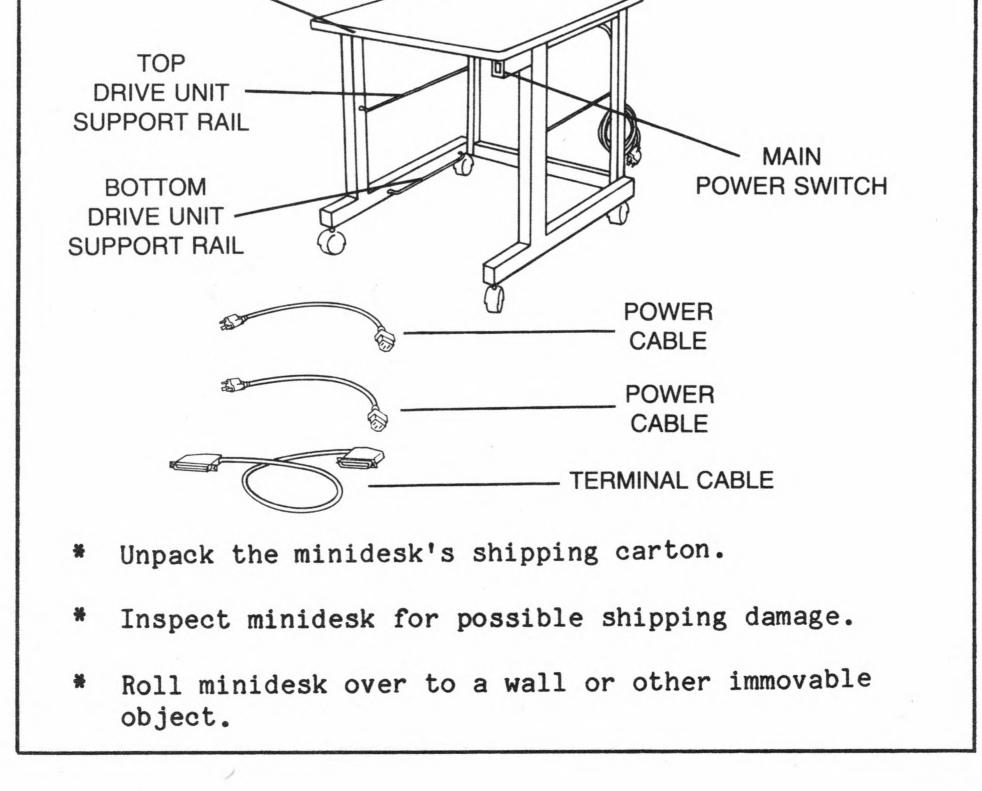
Your DECmate Basic System is now ready to operate. Refer to Chapter 3 for printer installation instructions.

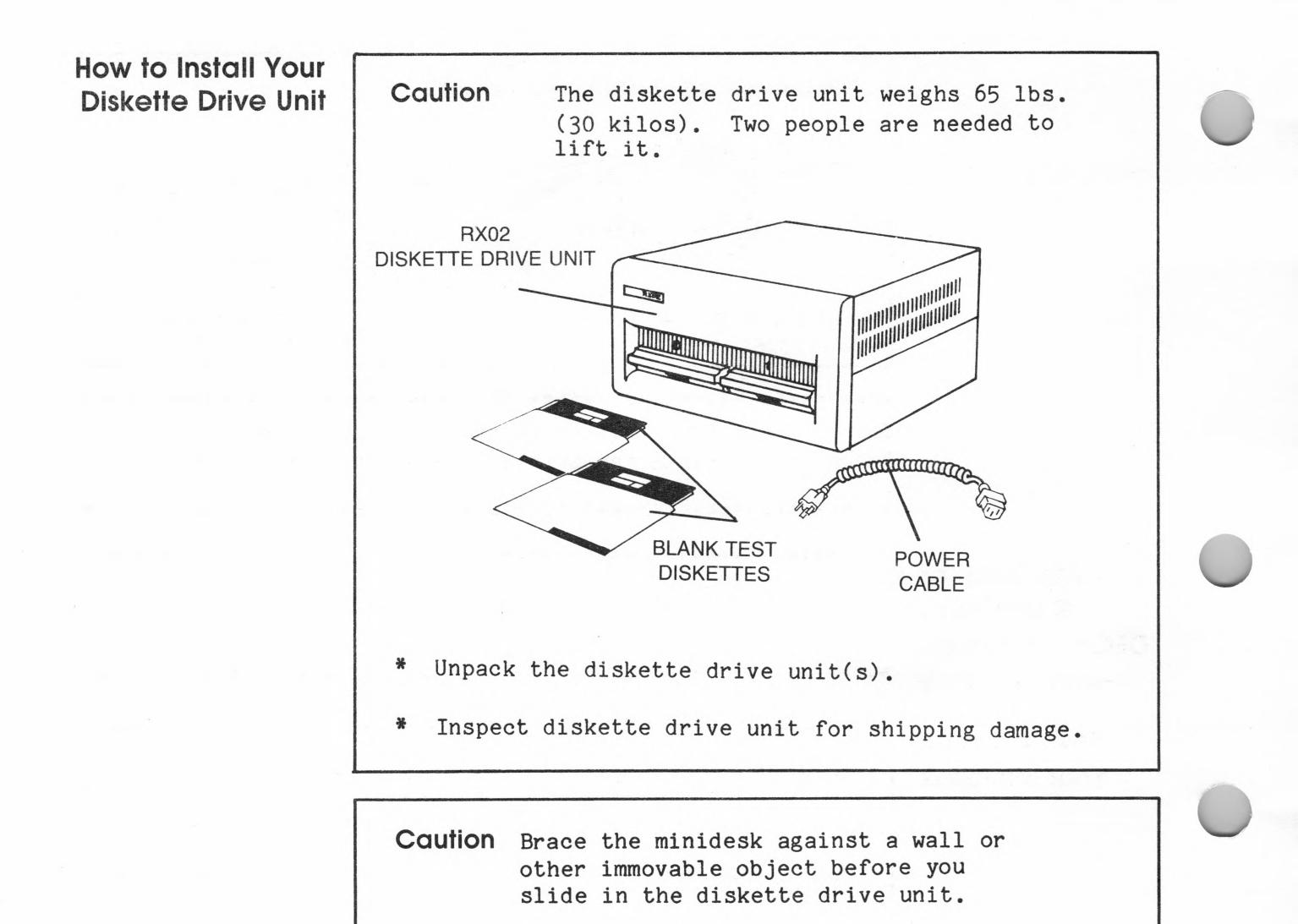
The Dual- or Quad-drive DECmate System with Minidesk

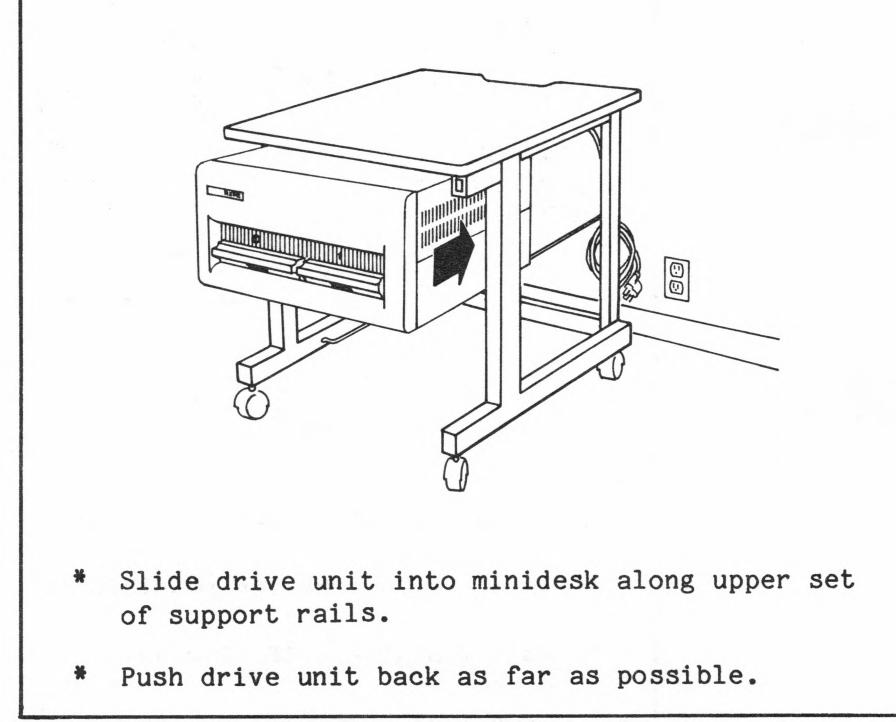
If your configuration has a Minidesk and one or two Diskette Drives, continue below.

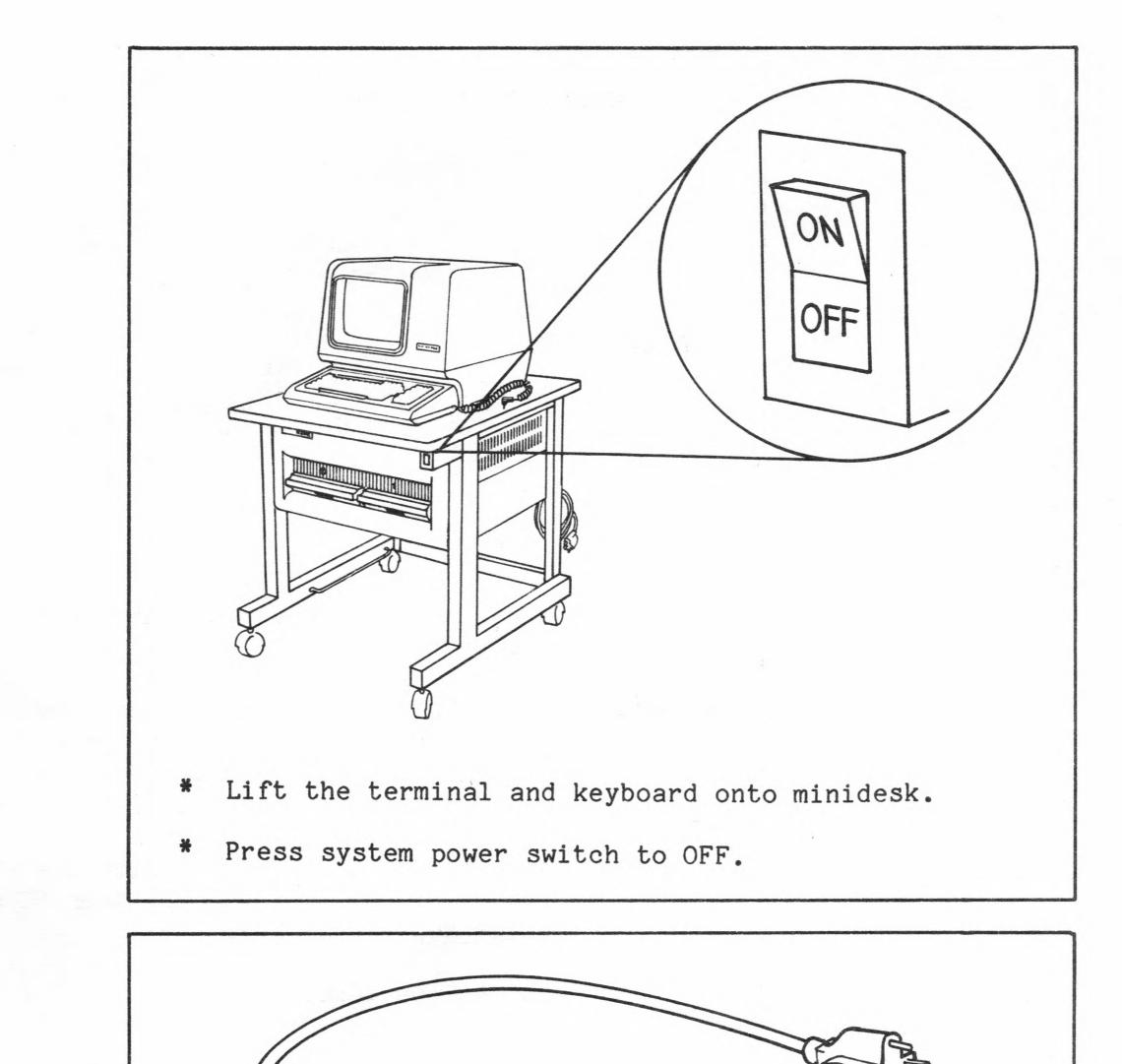
How to Set Up Your Minidesk

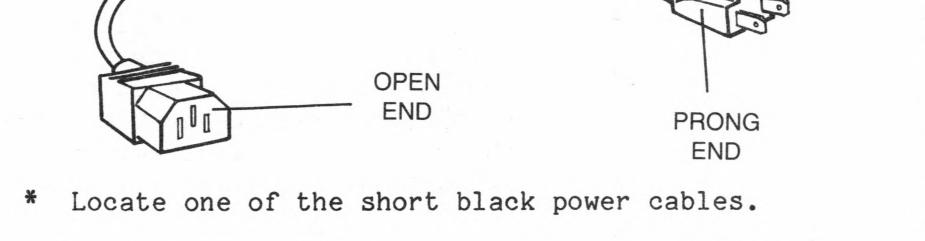
Caution	The minidesk weighs 59 lbs (27 kilos). Two people may be needed to lift or move it.
FRONT OF MIN	IDESK BACK OF MINIDESK

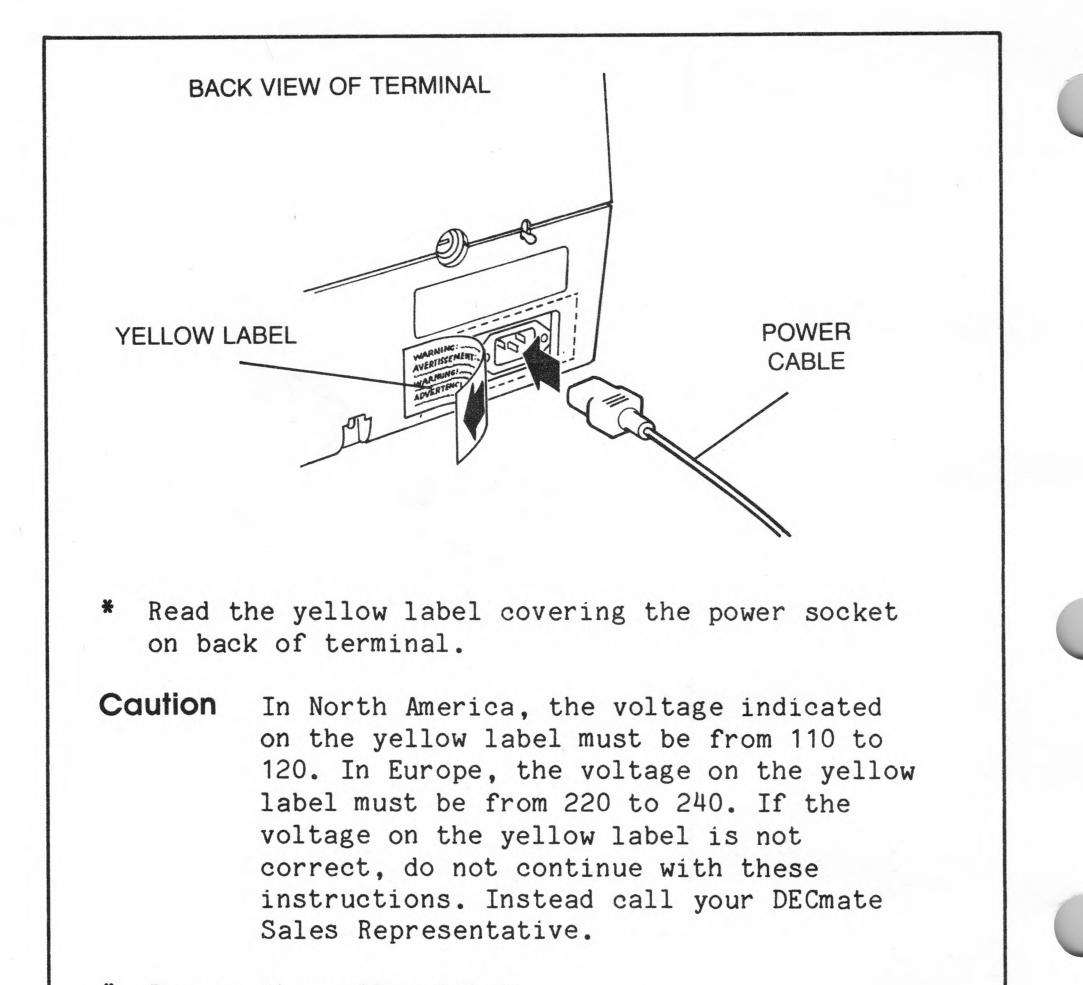






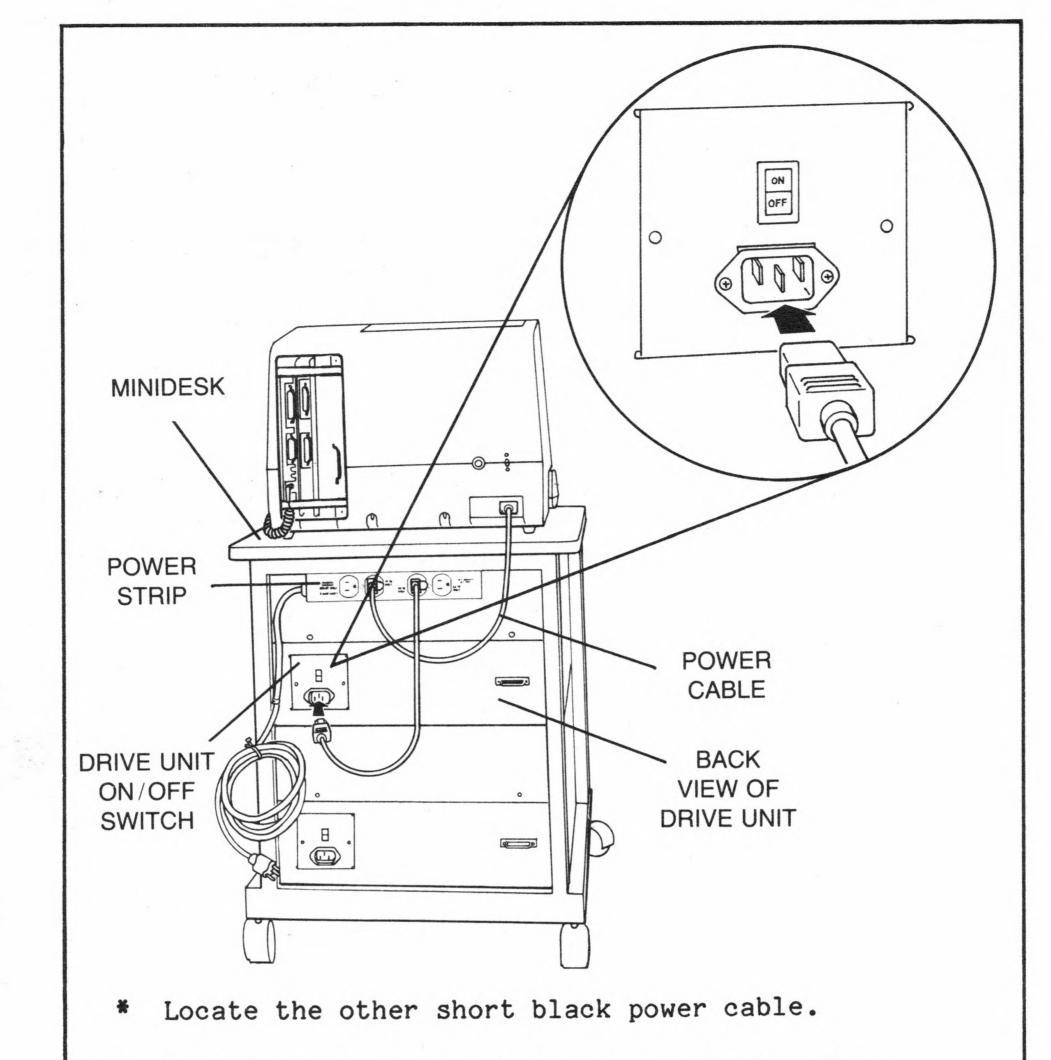




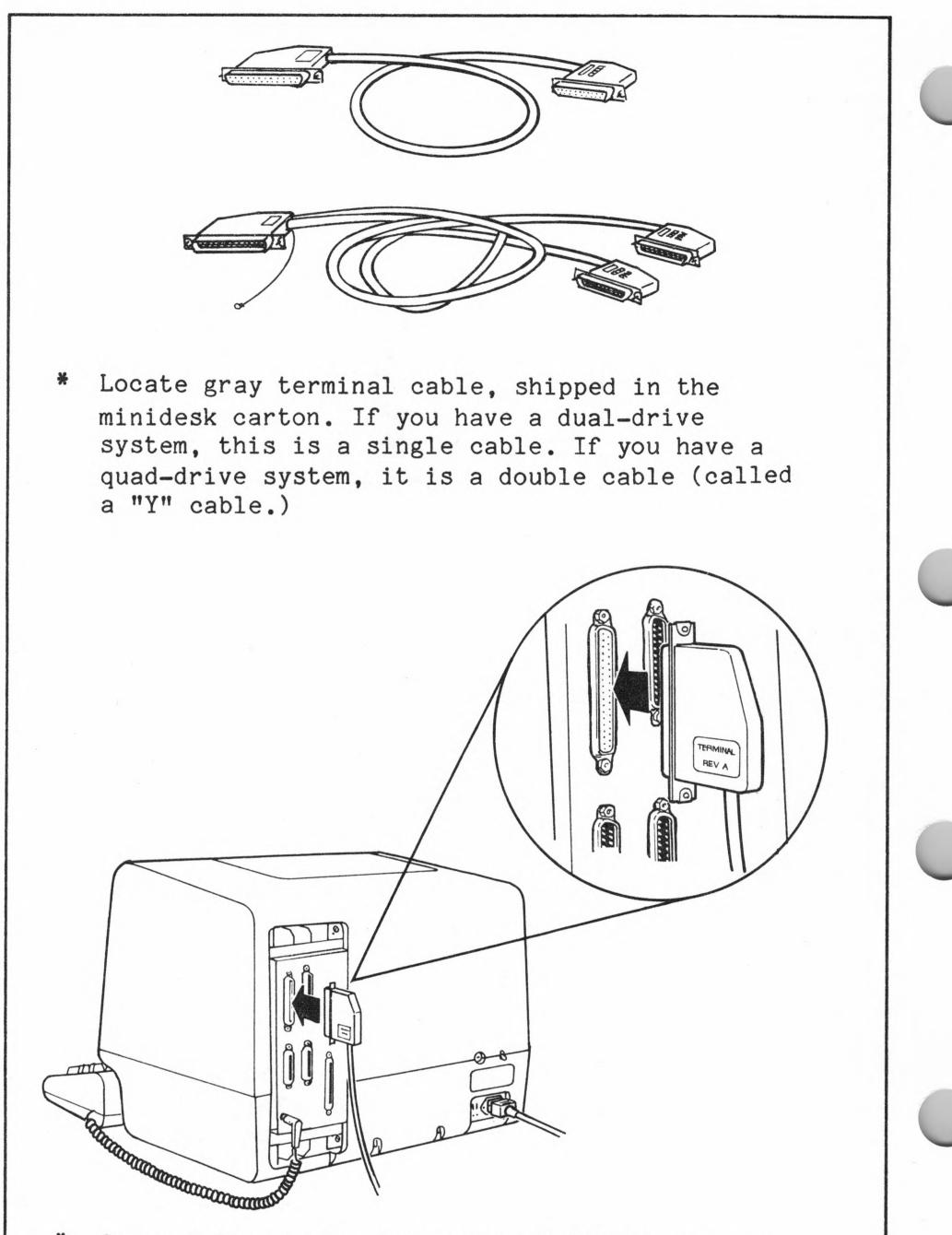


* Remove the yellow label.

- * Check the red Voltage Select/Frequency Select switches next to the power socket. In North America, the setting must be 120 v/60 hz. In Europe, the setting must be 220-240 v/50 hz. If the setting is not correct, carefully move the switch(es) up or down to the proper setting.
- * Insert the open end of the power cable into the terminal socket. Insert prong end into second power socket from left on minidesk power strip. This cable provides power to the terminal from the minidesk's main power source.

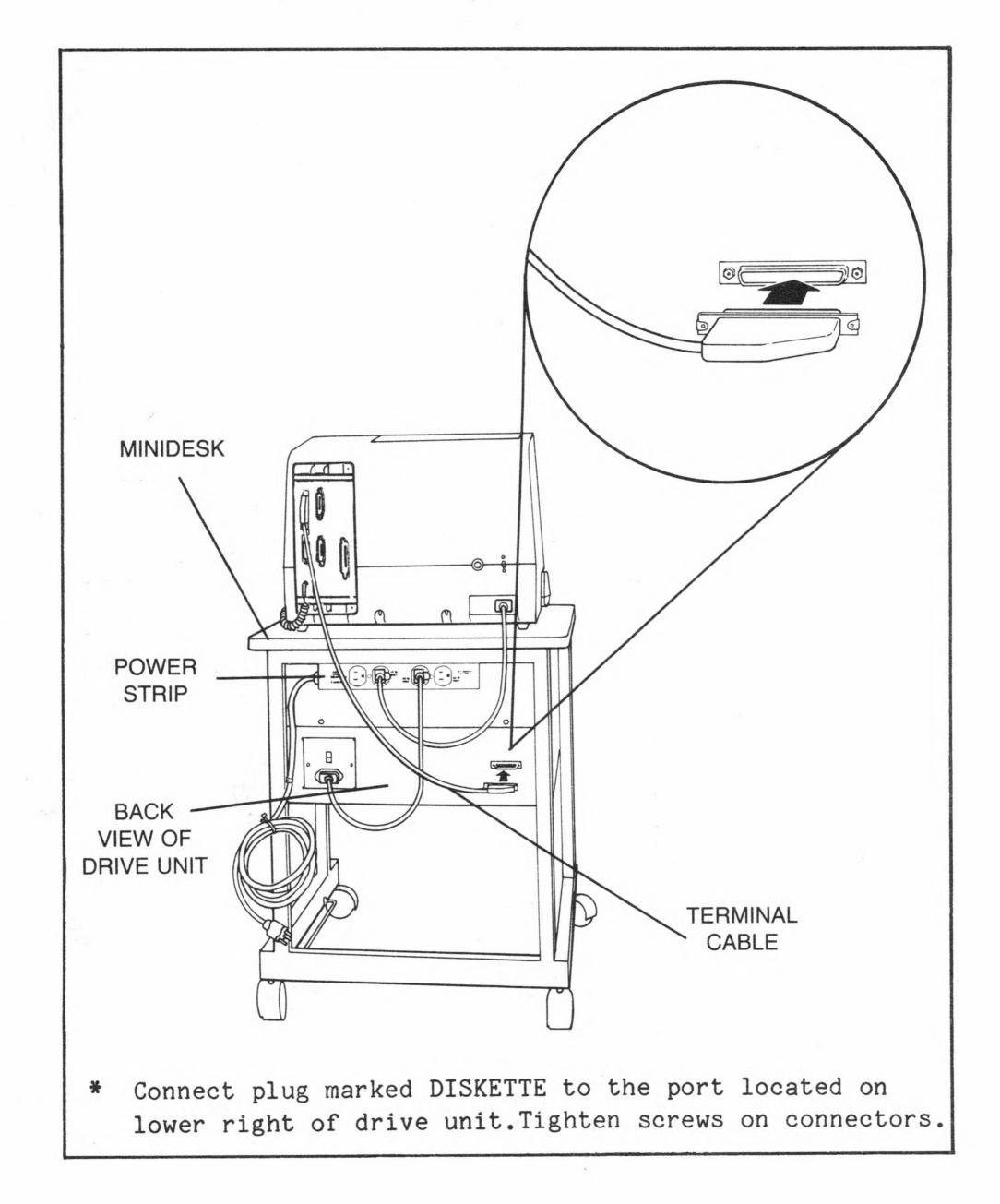


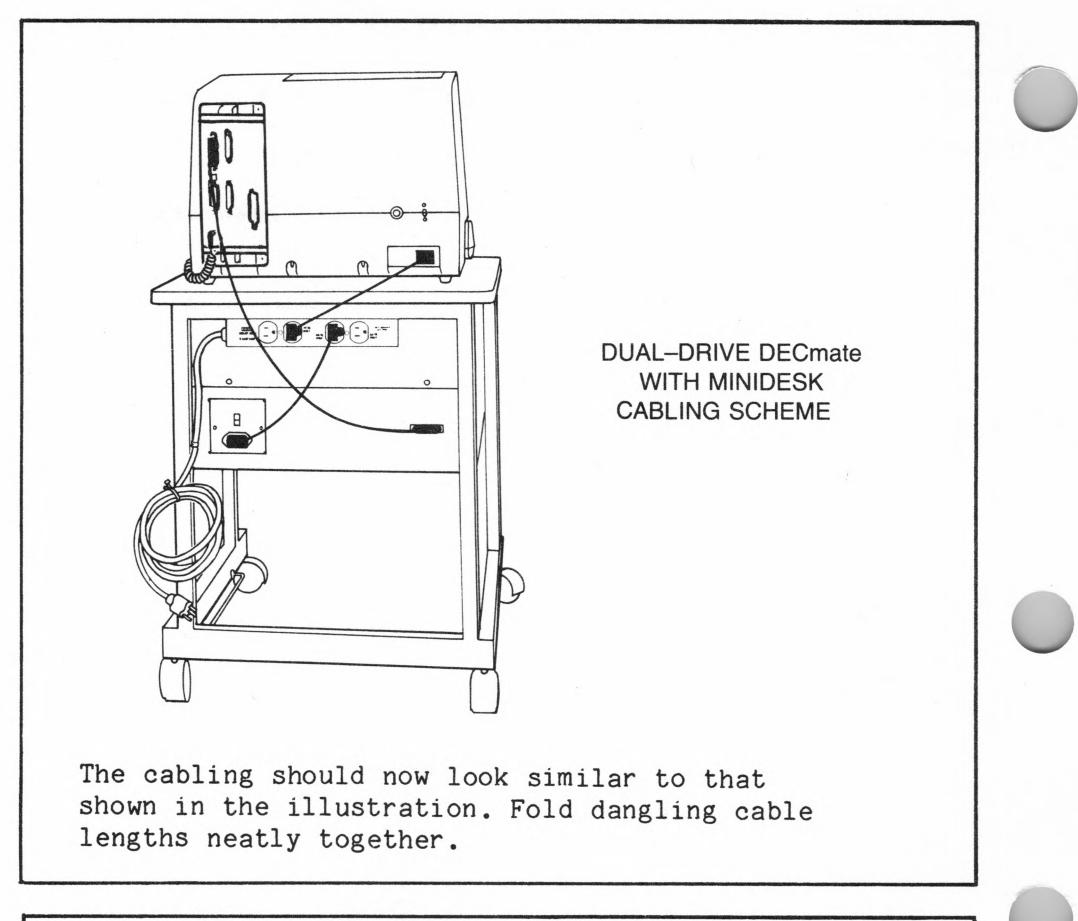
- Insert prong end into third power socket from left on minidesk's power strip.
- ¥ Insert open end into drive unit (below ON/OFF power switch). This cable provides power to the drive unit from the minidesk's main power source.

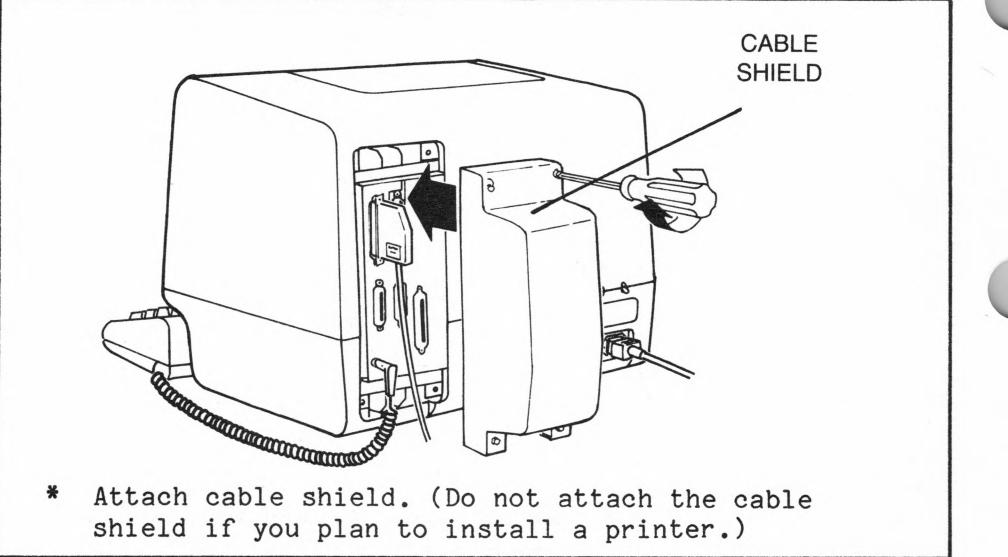


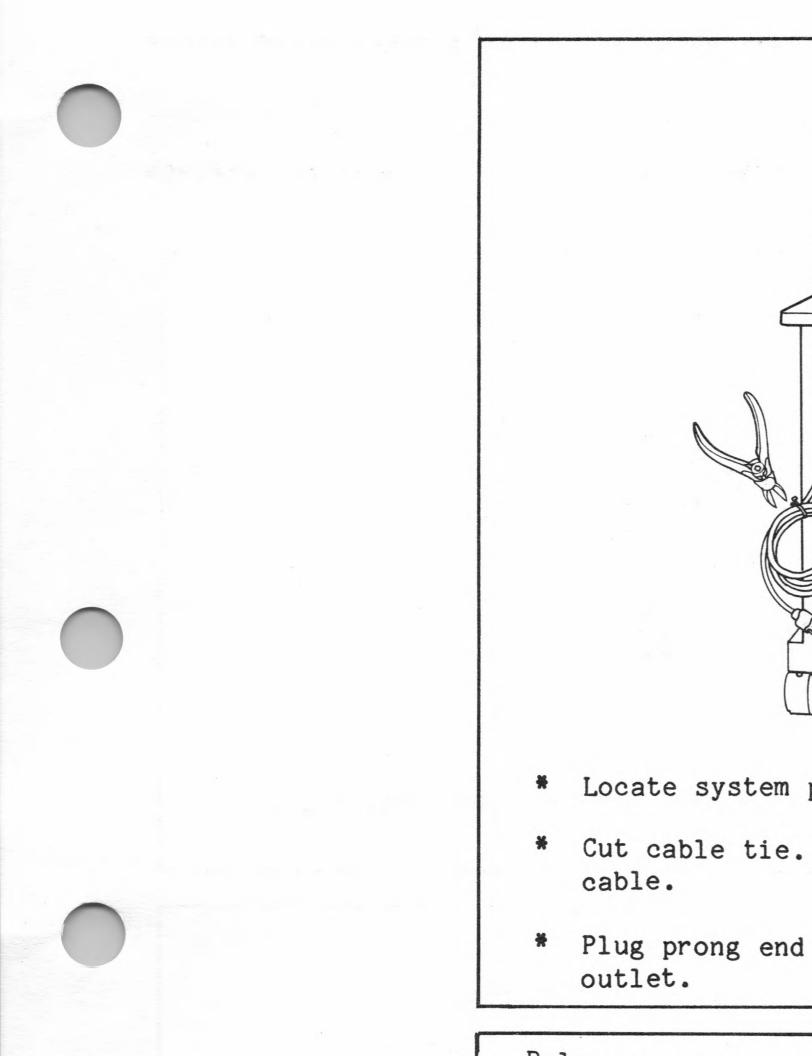
* Connect the cable plug marked TERMINAL to port labeled DISK on back of terminal. Tighten screws on connectors. This cable will provide communication from the terminal to the drive unit(s).

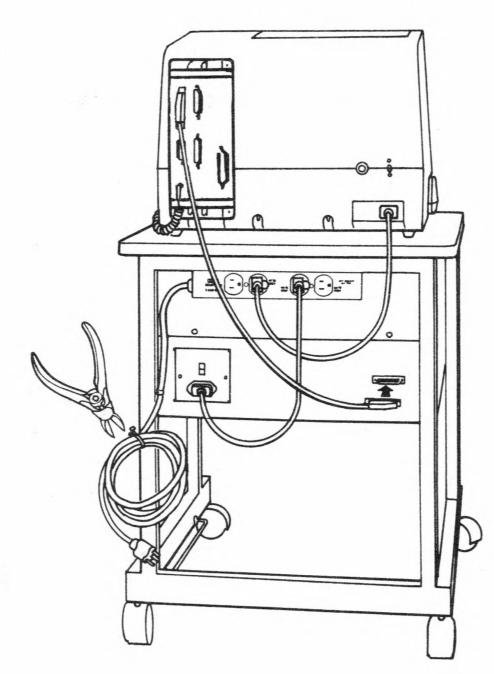
If you have another Diskette Drive left, skip to page 2-22. Otherwise, continue below.



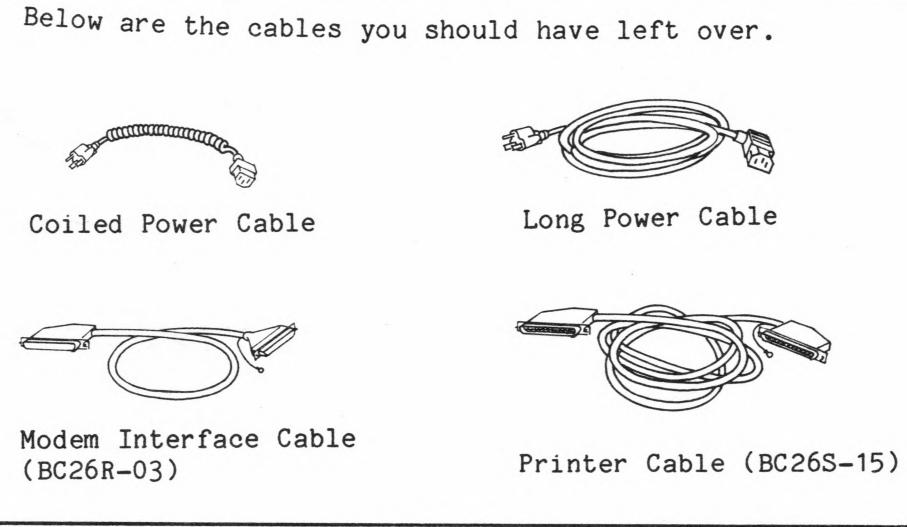








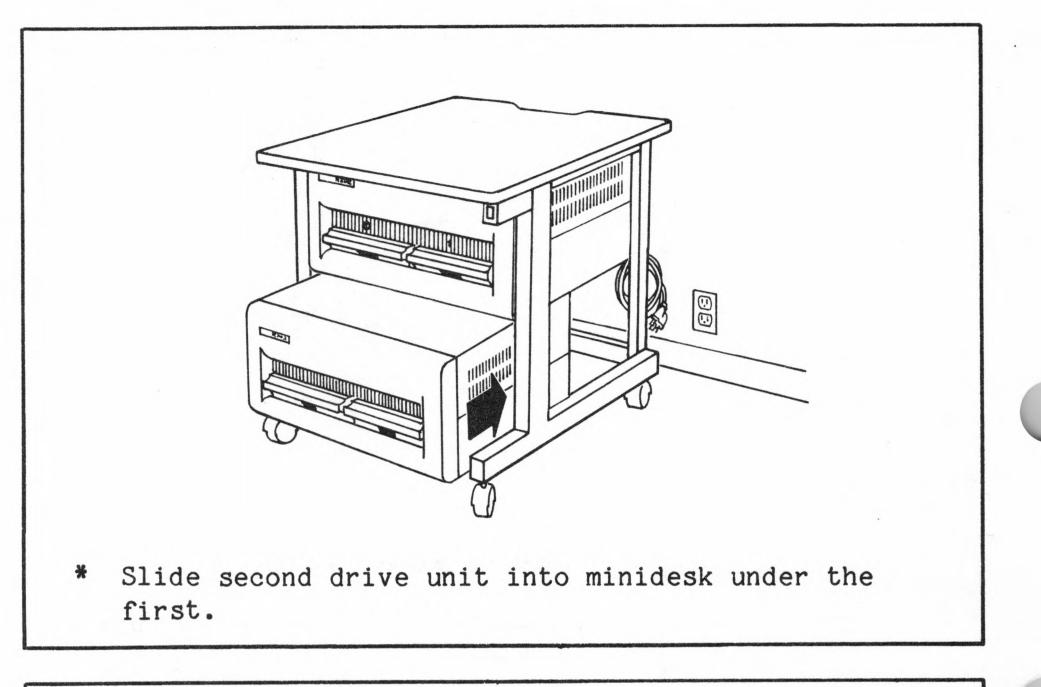
- Locate system power cable.
- Cut cable tie. Be careful not to cut the power
- Plug prong end of system power cable into a wall

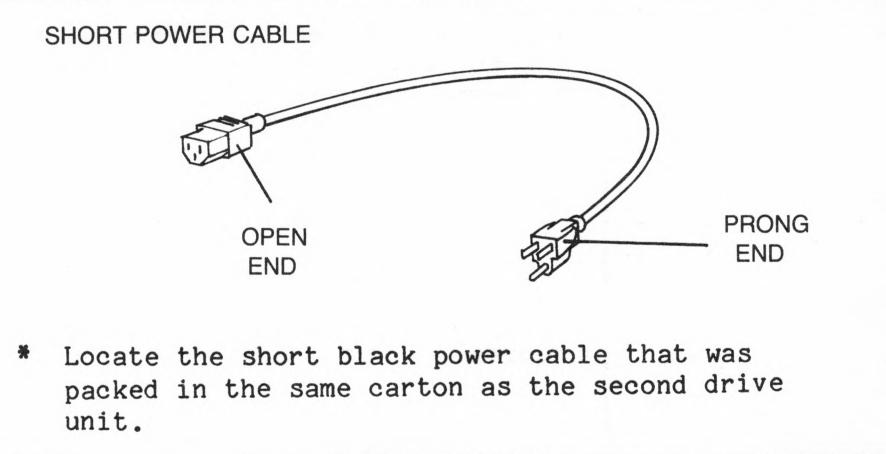


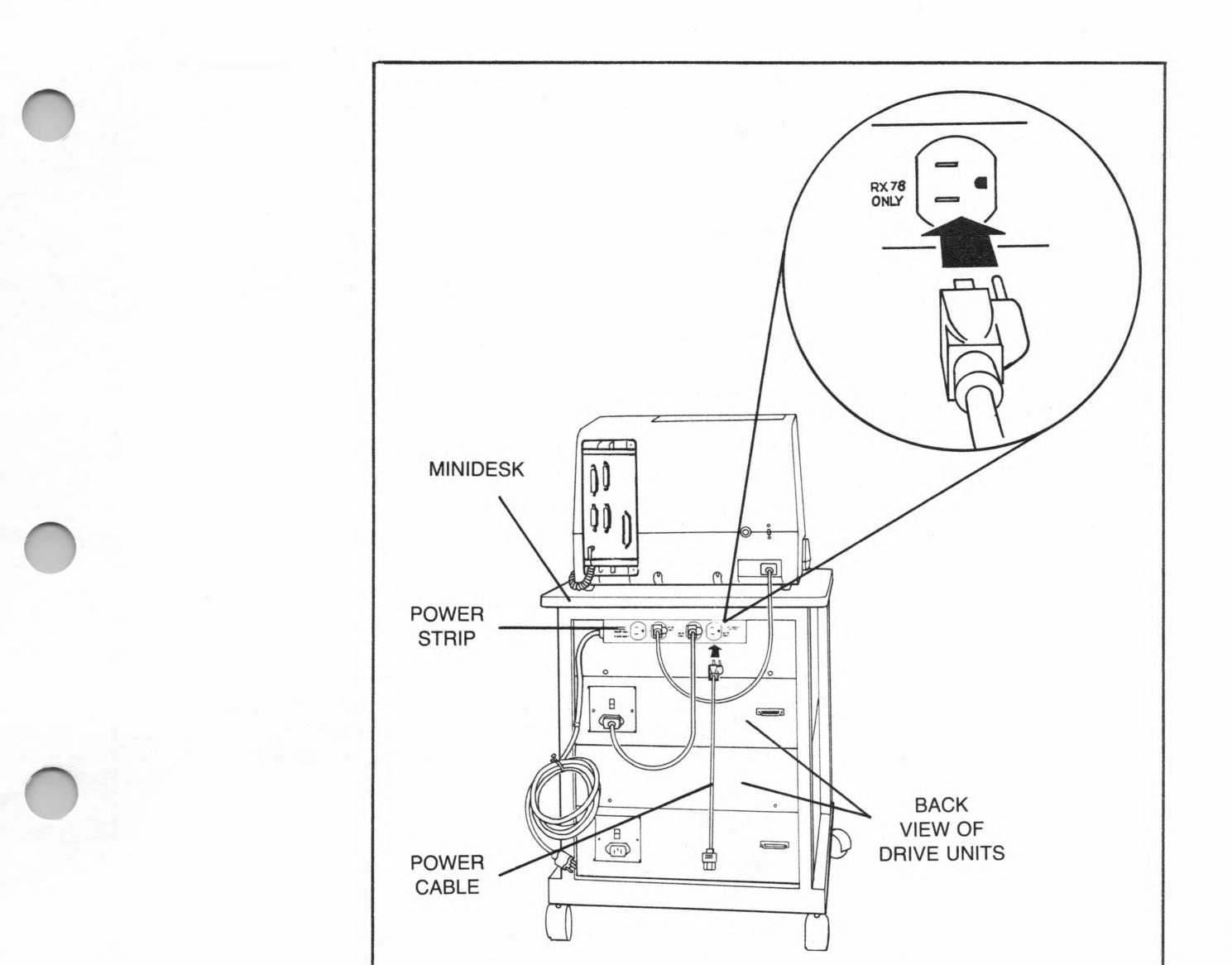
You have completed installing your Dual-Drive DECmate system.

Refer to Chapter 3 for printer installation instructions.

If your configuration is a Quad-Drive system, continue below.







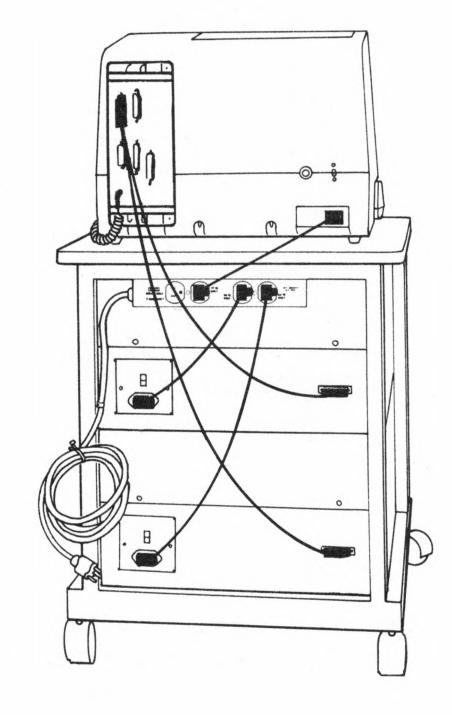
* Insert prong end into fourth power socket from left on minidesk power strip. This cable provides power to the drive unit from the minidesk's main power source.

* Insert open end into bottom drive unit (below ON/OFF power switch).

* Locate gray terminal/disk cable, that is already attached to the terminal.

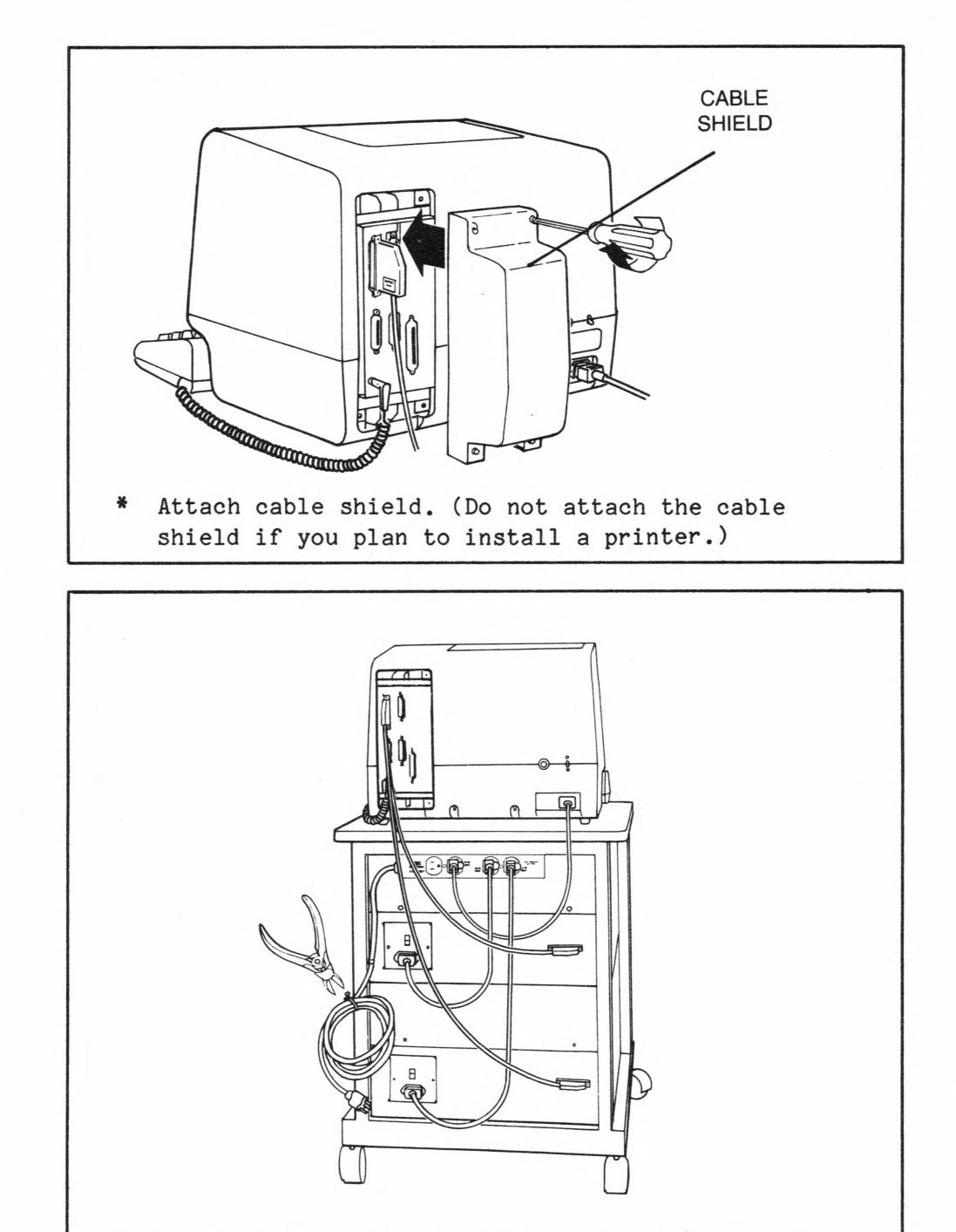
(See illustration below.)

- * Connect plug on shorter leg of the cable (marked 1) to port located on lower right of top drive unit. Tighten screws on connectors.
- * Connect plug on longer leg of the cable (marked 2) to port located on lower right of bottom drive unit. These cables provide communication from the terminal to the disk drives. Tighten screws on connectors.

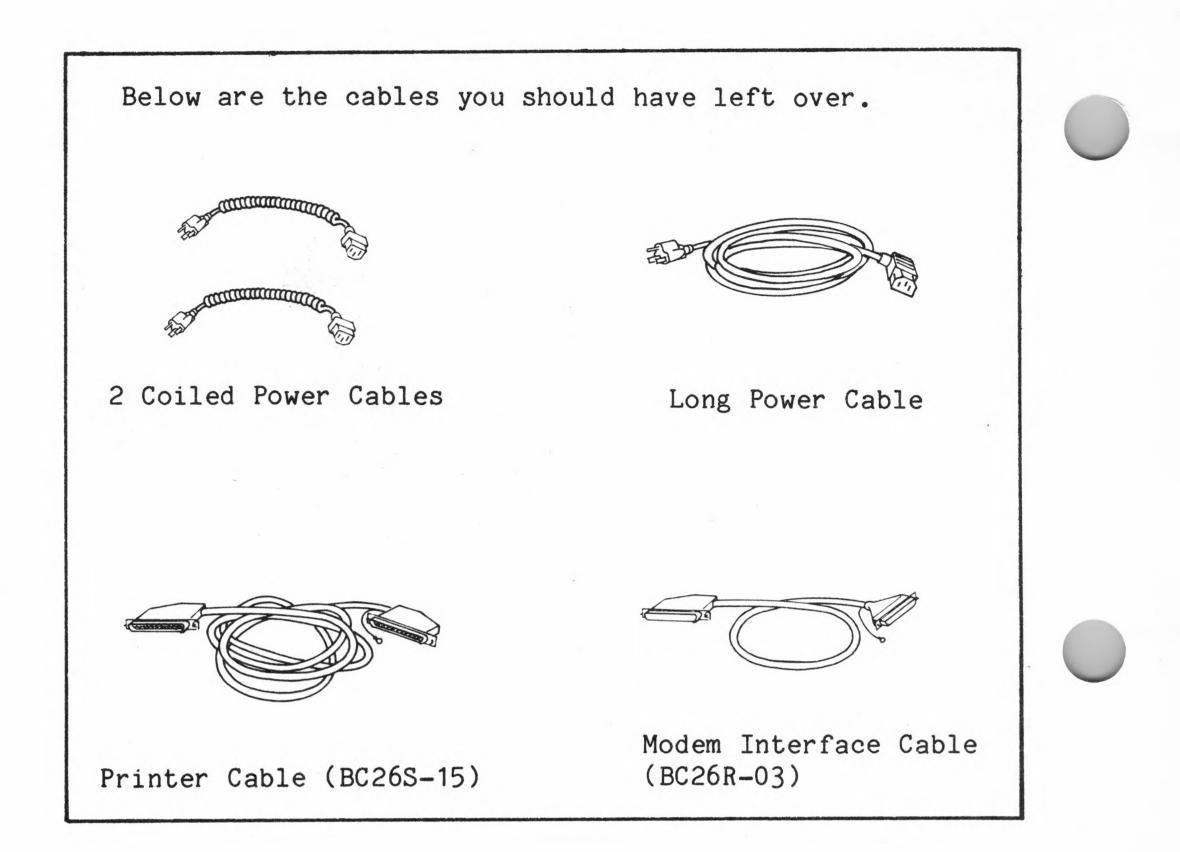


QUAD–DRIVE DECmate WITH MINIDESK CABLING SCHEME

The cabling should now look similar to that shown in the illustration. Fold dangling cable lengths neatly together.



- * Locate system power cable and cut cable tie. Be careful not to cut the power cable.
- * Plug prong end of system power cable into a wall outlet.



Chapter 3 Install Your Printer

Identify Your Printer There are several types of printers that may be successfully used with the DECmate system.

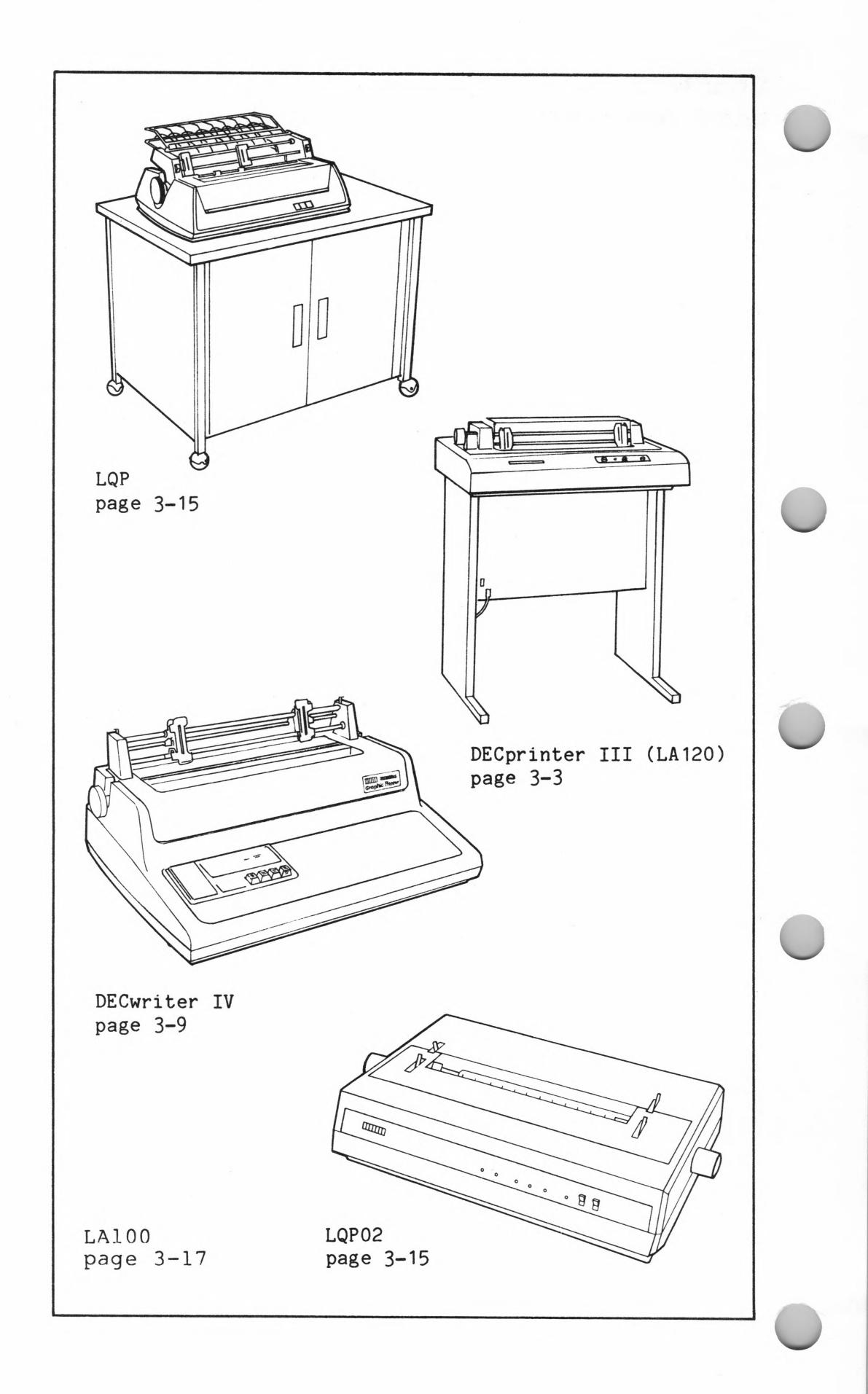
This chapter explains how to install your printer.

Identify which printer you have from the illustrations on the next page, and refer to the appropriate page.

Notes on Installation:

- When installing your printer, use the printer cable that is provided with your DECmate (gray with black plugs). This cable is specially designed to fit under the terminal cable shield.
- Double-Throw Shared Printer Switch. A shared printer switch is an option available from your DECmate Sales Representative. It allows you to connect two terminals to a single printer. If you have this option, follow the installation instructions on the bottom of the switch itself.

Install Your Printer 3–1

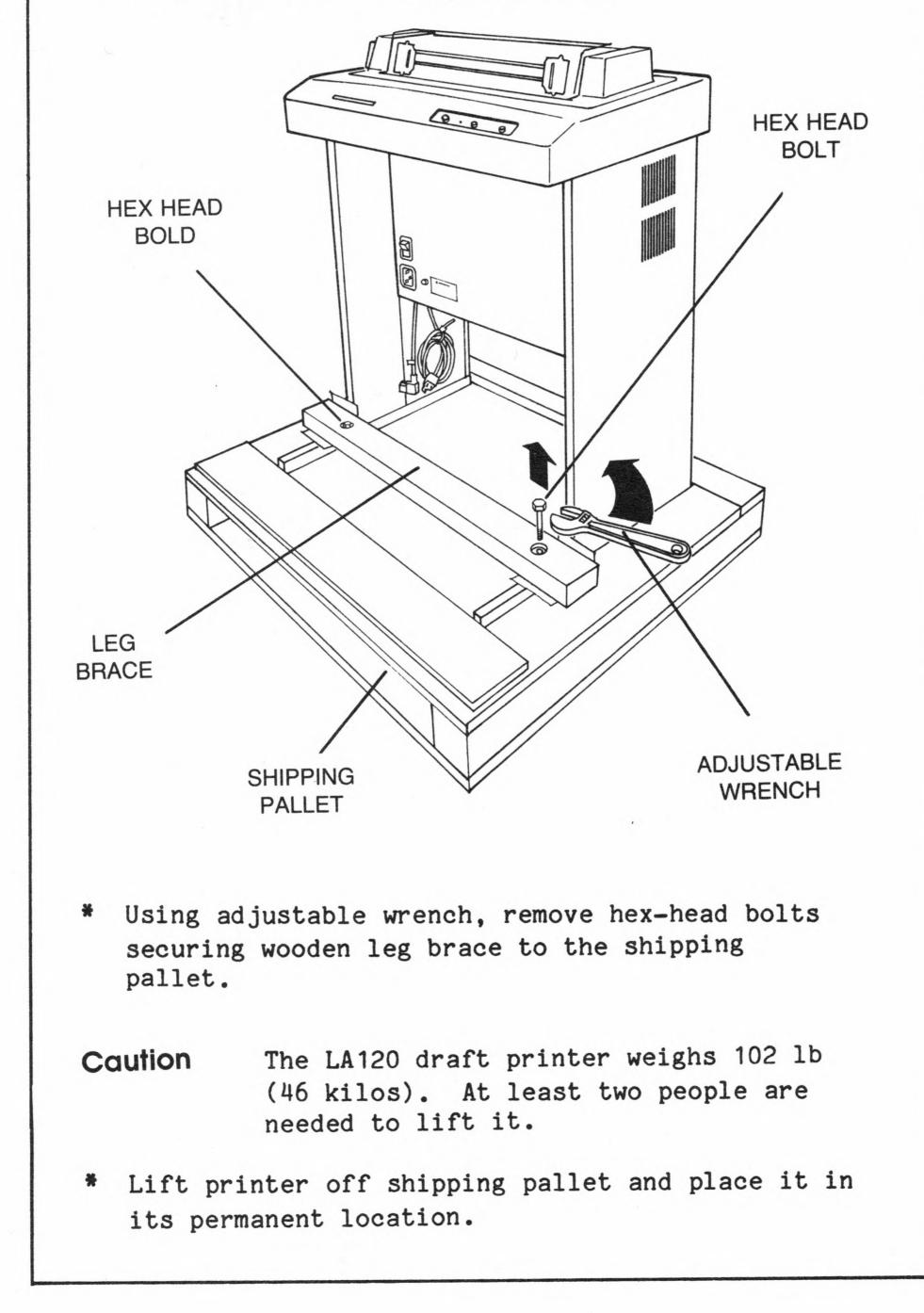


3–2 Install Your Printer

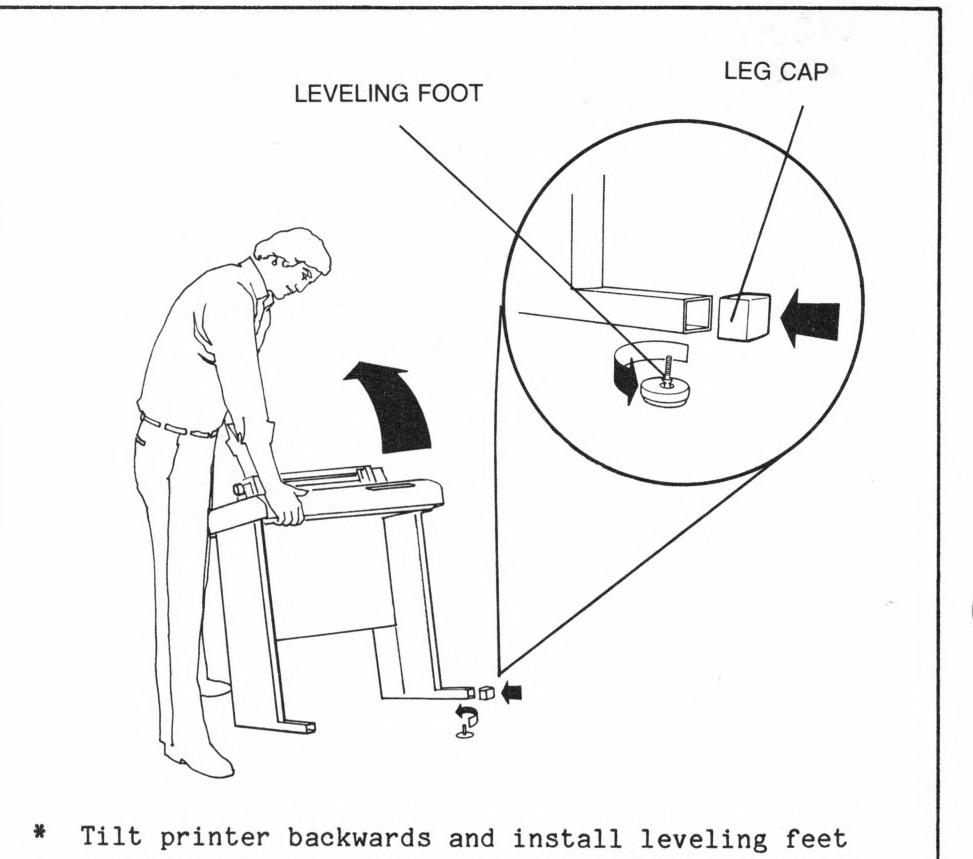
DECprinter III (LA120) Printer

Note You will need an adjustable wrench to install your DECprinter III (LA120).

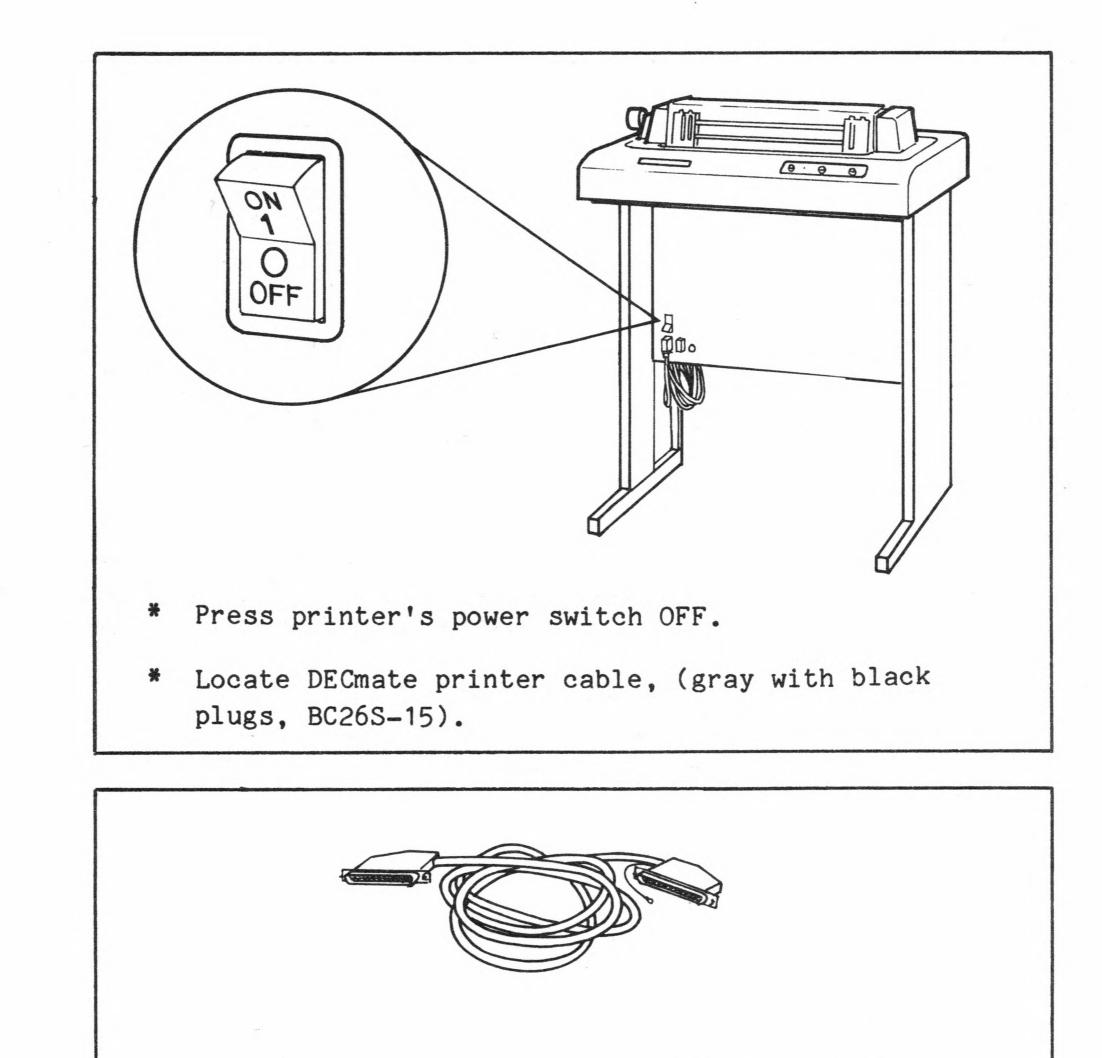
- Cut plastic strapping and remove cardboard shipping carton.
- * Remove all packing material.
- * Make sure you have everything shown in the illustration.
- * Inspect LA120 for shipping damage.



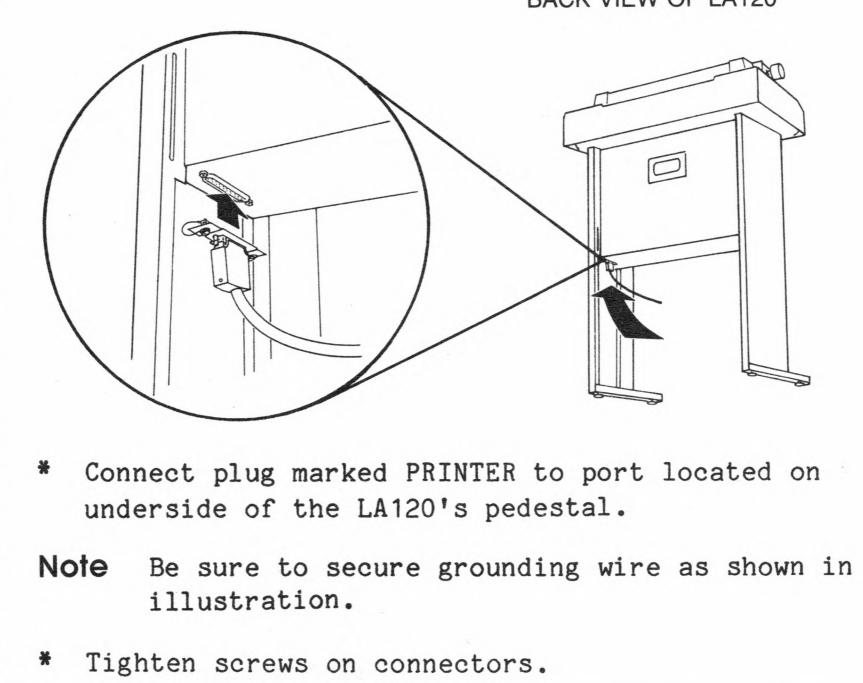
Install Your Printer 3–3



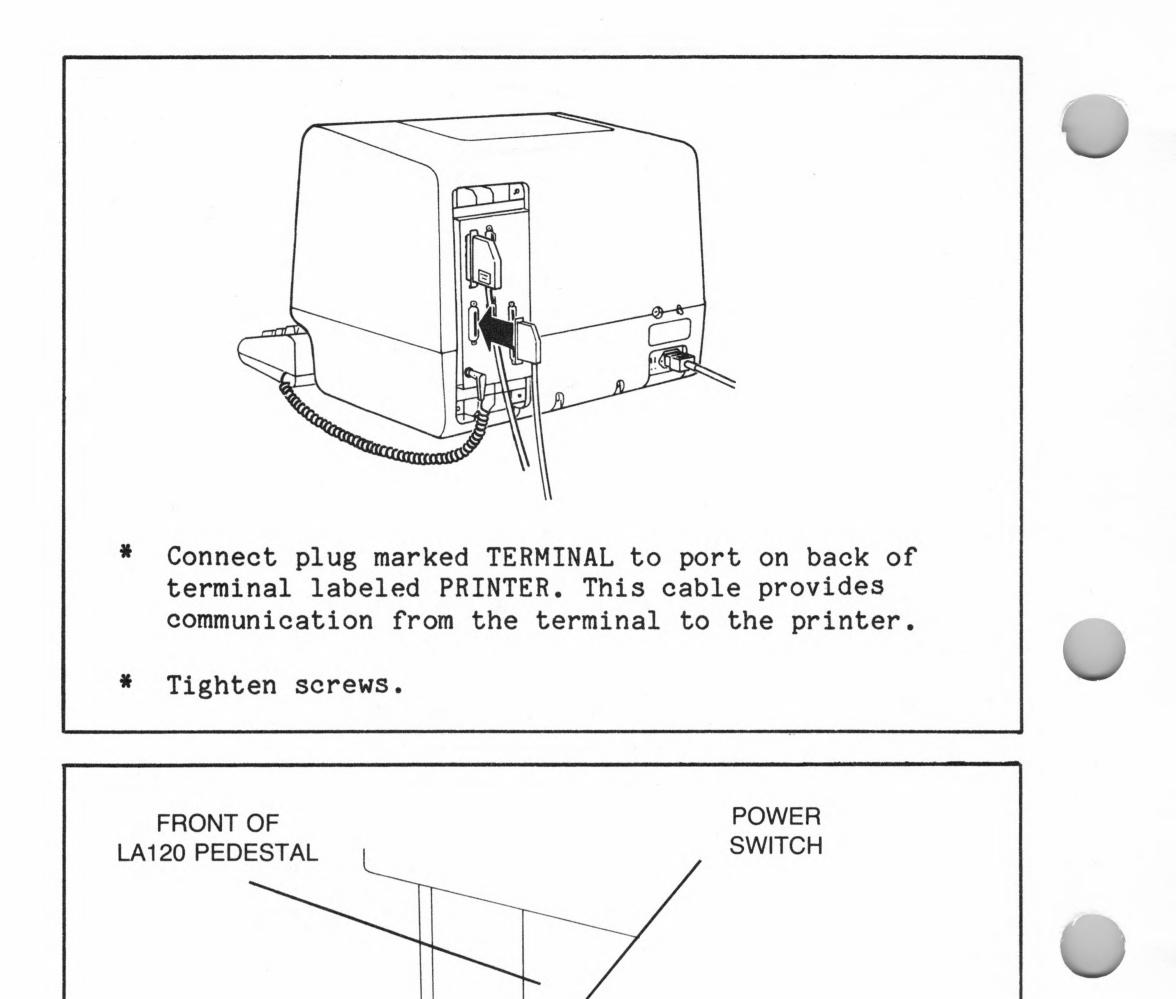
- on printer's front legs. Turn the round end of each leveling foot clockwise until it fits snugly.
- Attach leg caps. ¥
- Tilt printer in opposite direction. *
- Install leveling feet on back legs. *
- ¥ Return printer to standing position. If printer wobbles, adjust appropriate leveling feet by turning them counterclockwise.



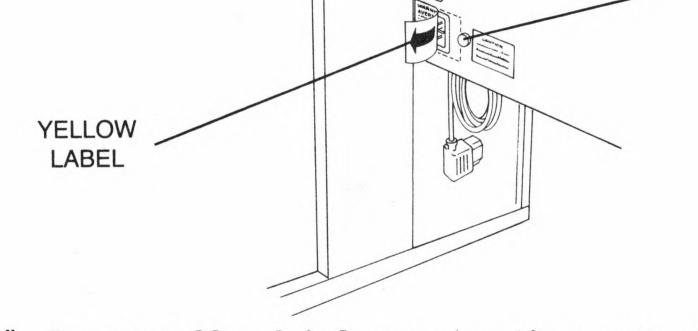
BACK VIEW OF LA120







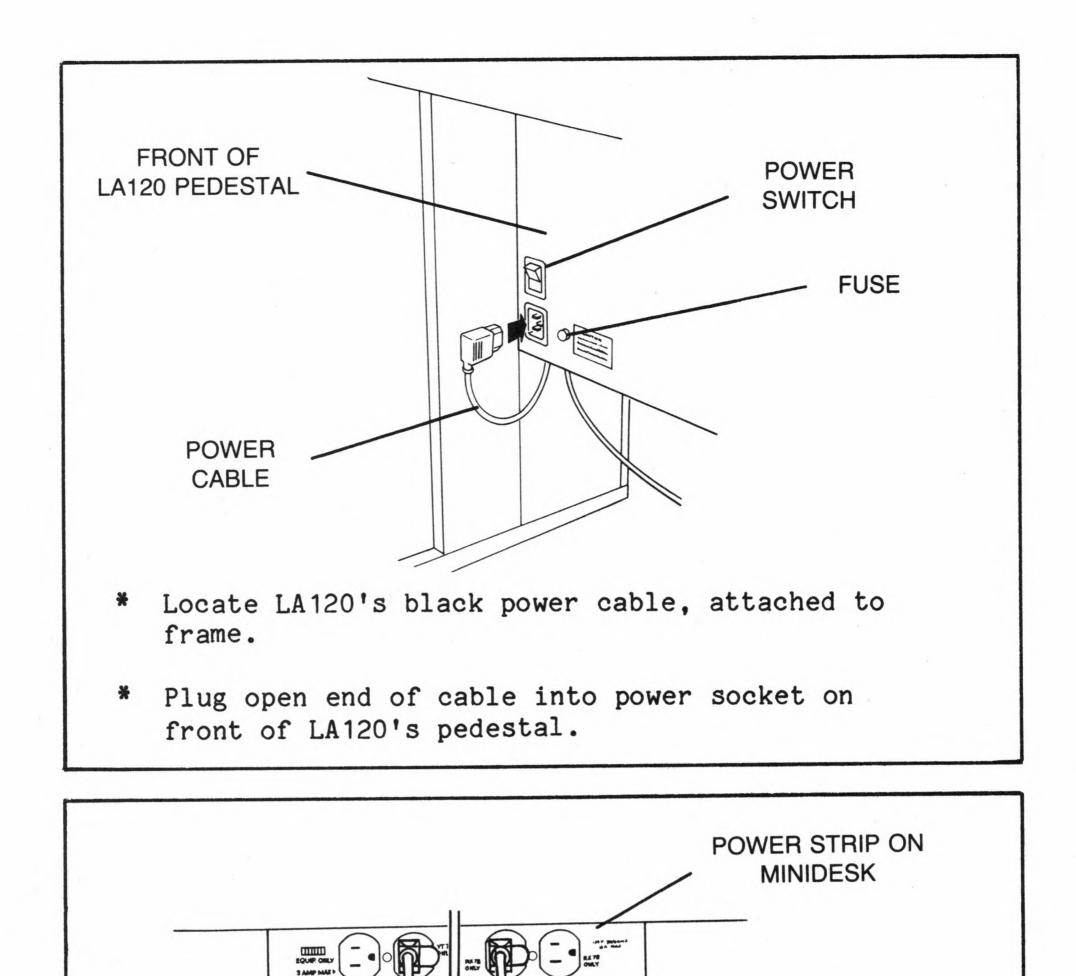
FUSE



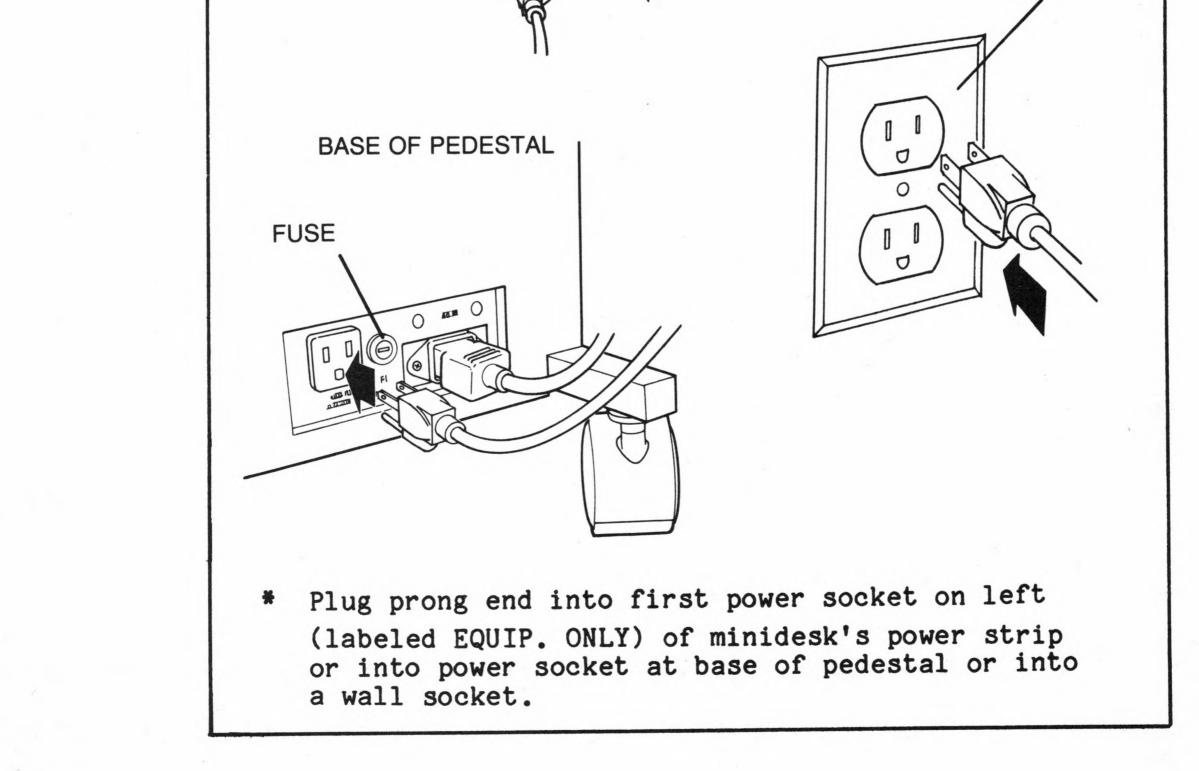
* Remove yellow label covering the power socket located on front of LA120's pedestal.

Caution In North America, the voltage on the yellow label must be from 110 to 120. In Europe, the voltage on the yellow label must be from 220 to 240. If the voltage on the yellow label is not correct, do not continue with these instructions. Instead call your DECmate Sales Representative.

3-6 Install Your Printer



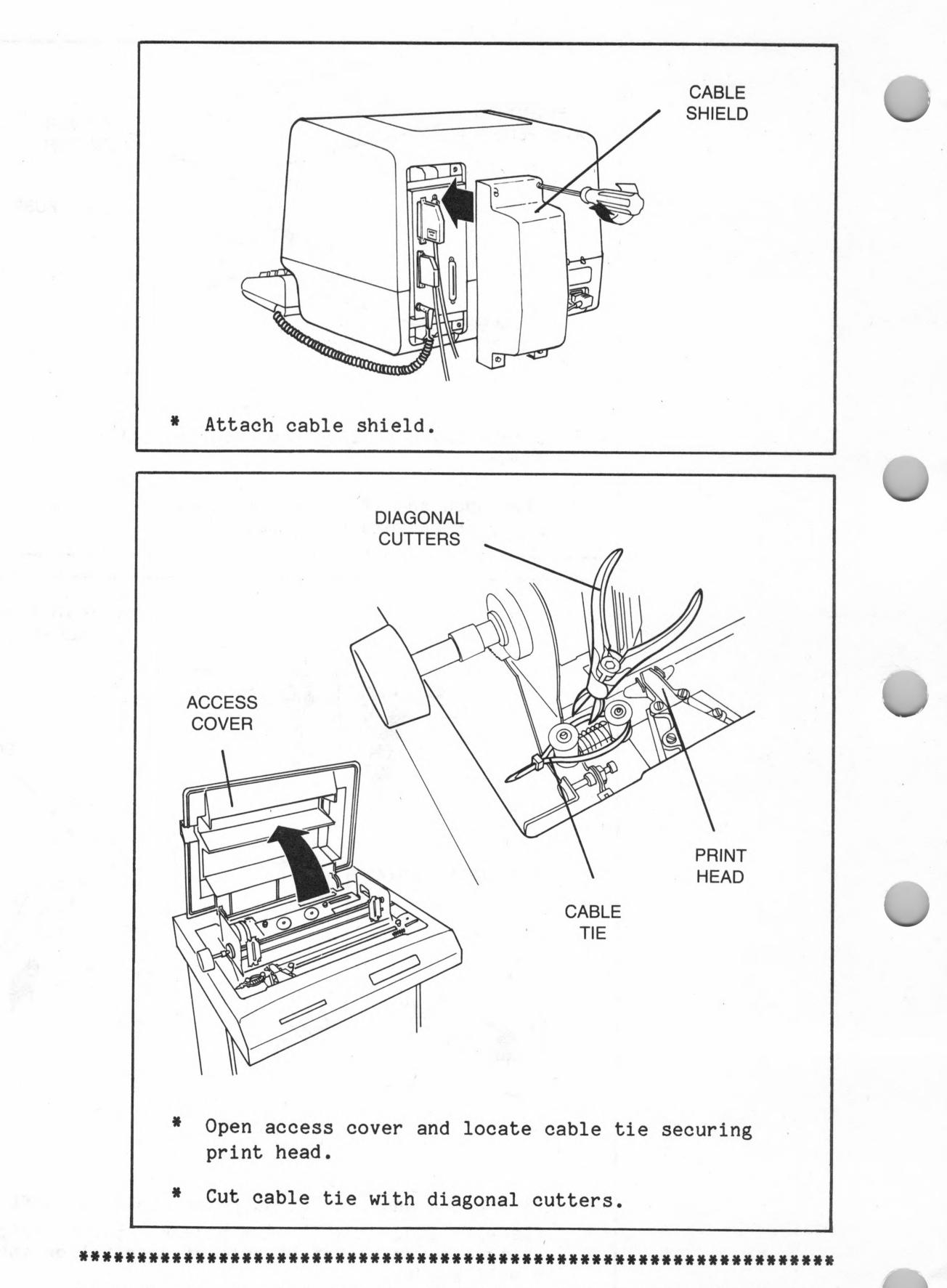




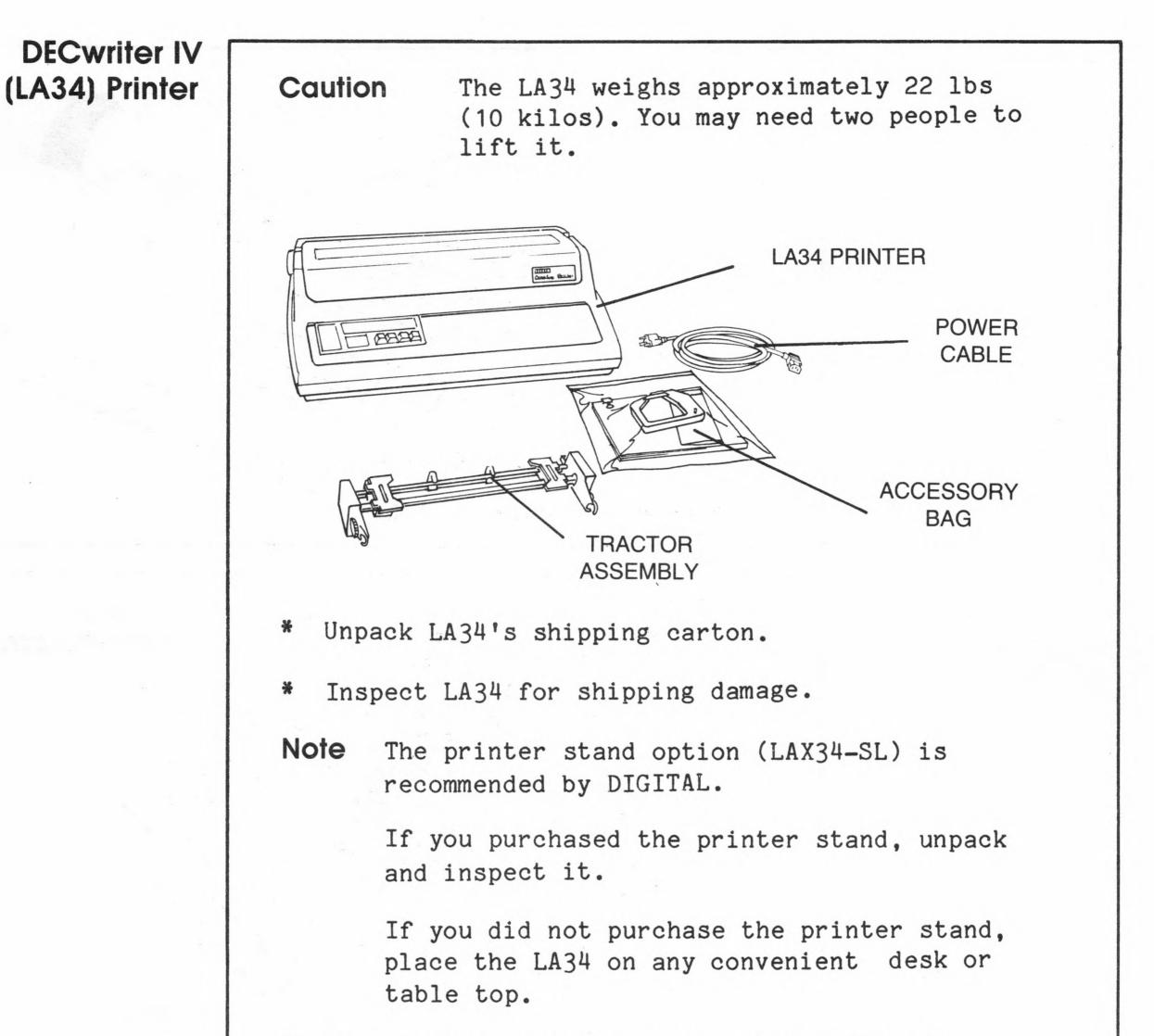
Install Your Printer 3–7

WALL

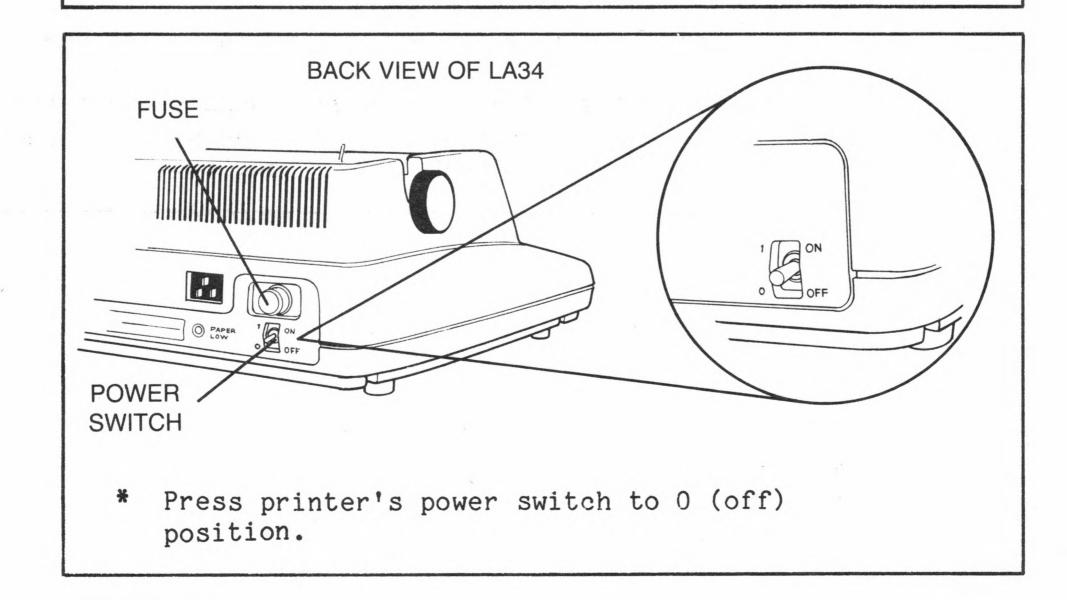
SOCKET



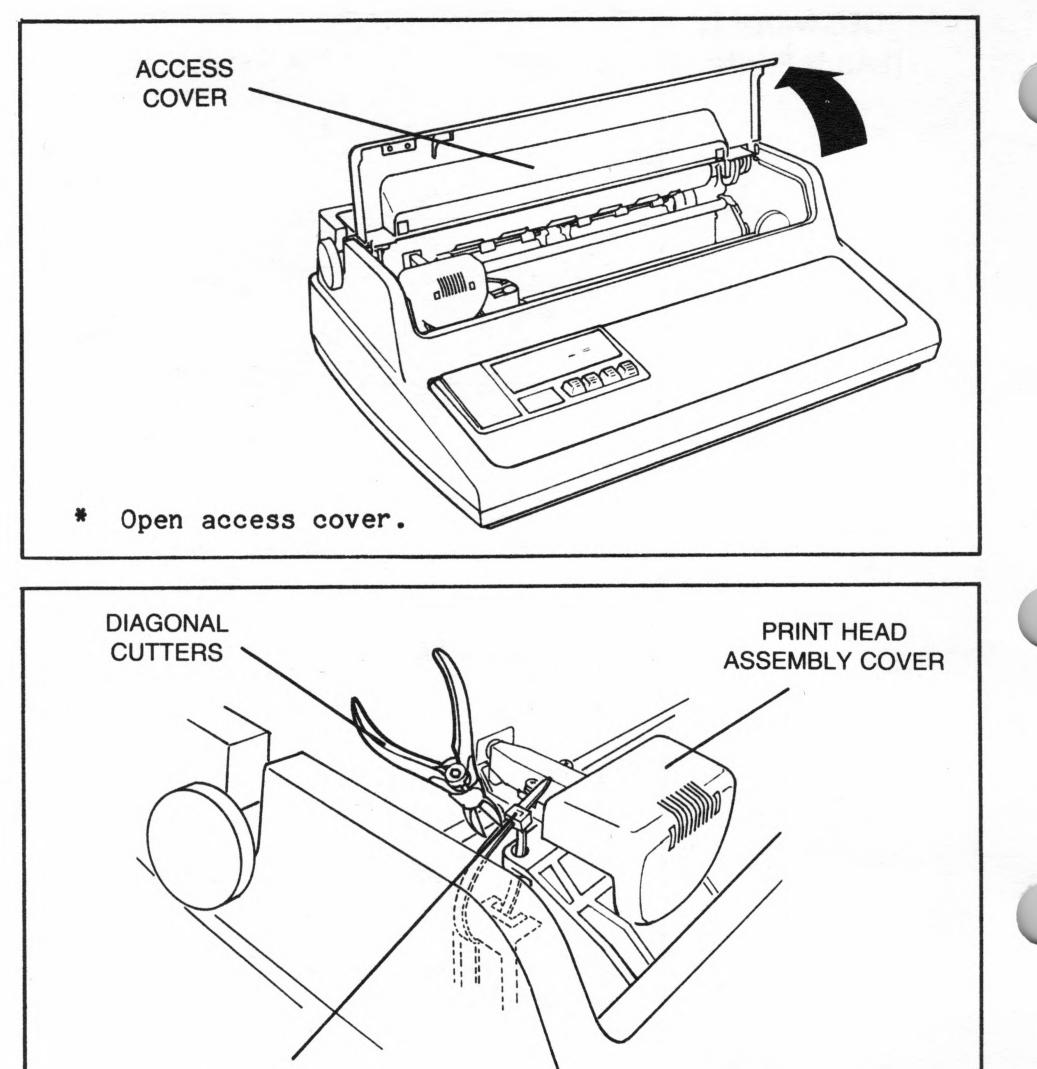
Refer to Chapter 4 for instructions in loading paper and ribbon.



* Place printer in its permanent location (on printer stand, desk, or table top).



Install Your Printer 3–9

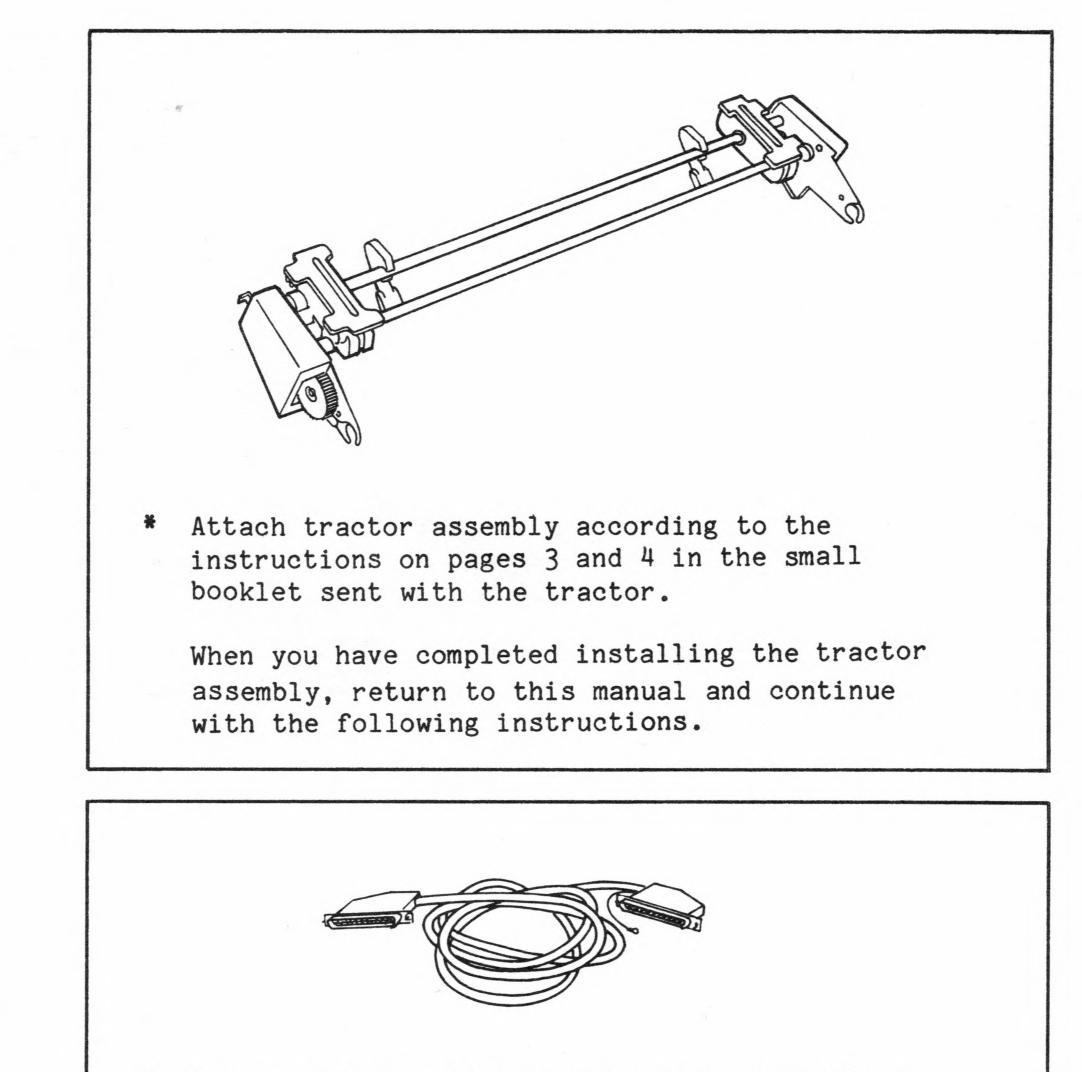


CAB	F	TI	F
UND			-

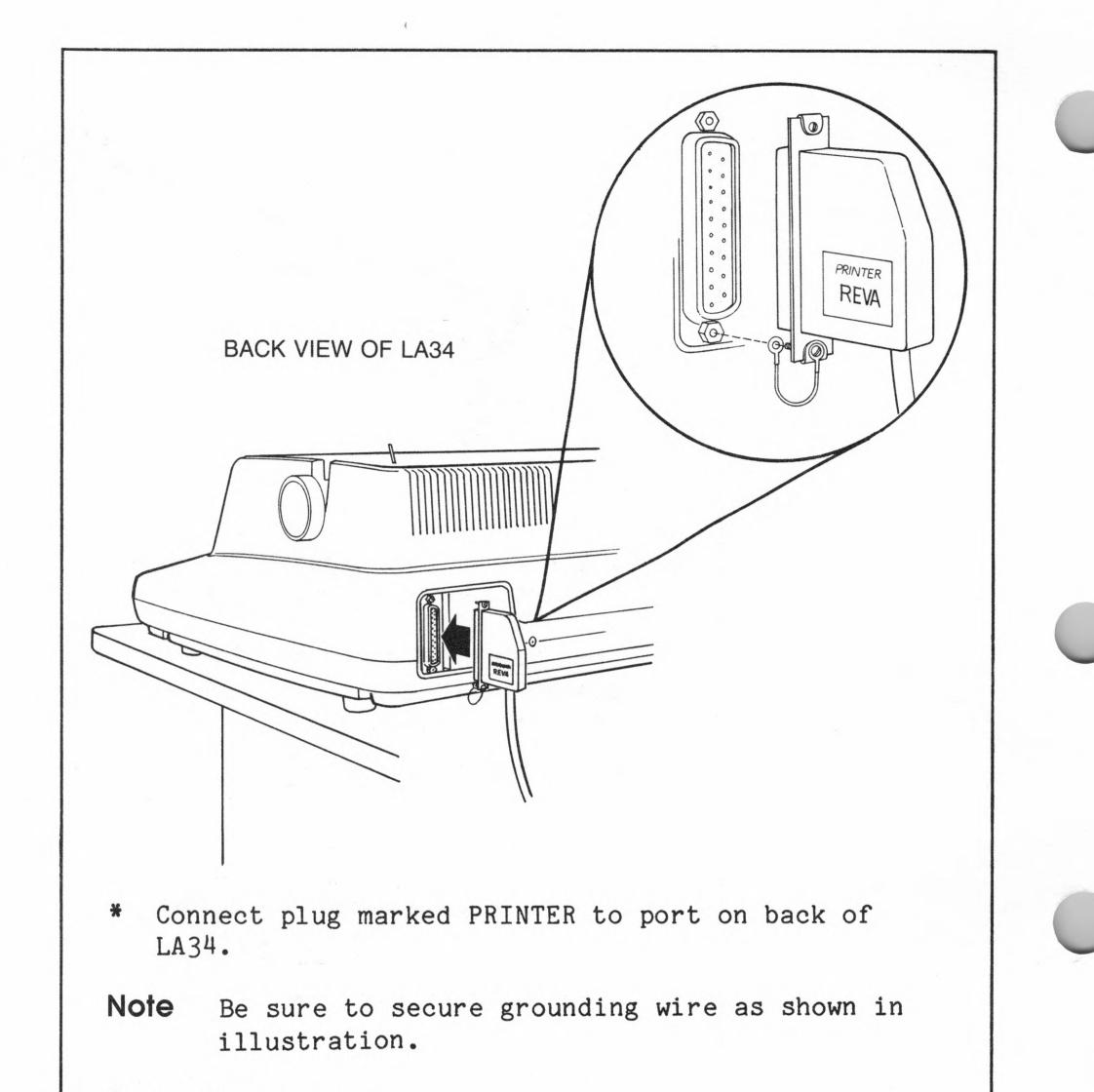
DO NOT USE SCISSORS

* Remove cable tie securing print head.

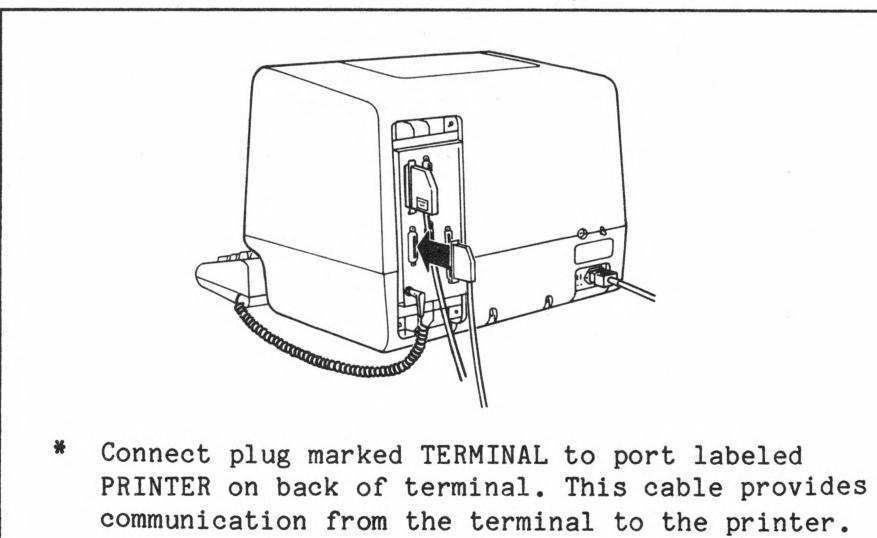
Note The print head assembly cover may fall off. It is intended to be a loose piece and you can put it back easily.



- * Locate DECmate printer cable (gray with black plugs).
- Note Use the printer cable provided with your DECmate, numbered BC26S-15 (gray with black plugs). Do not use the cable BC22A-25 sent with your LA34.

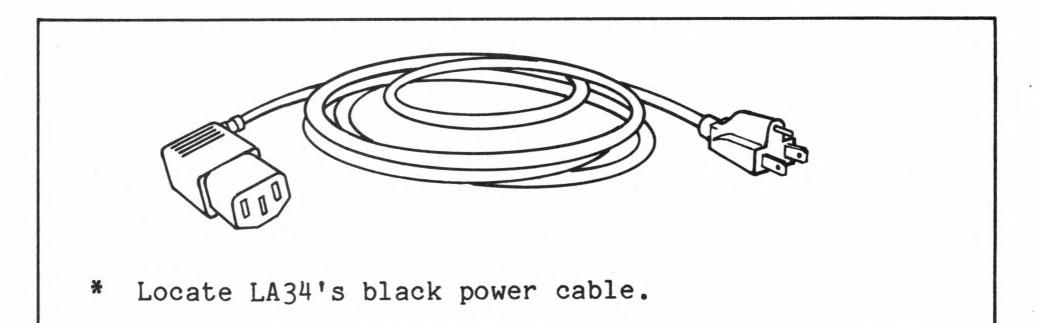


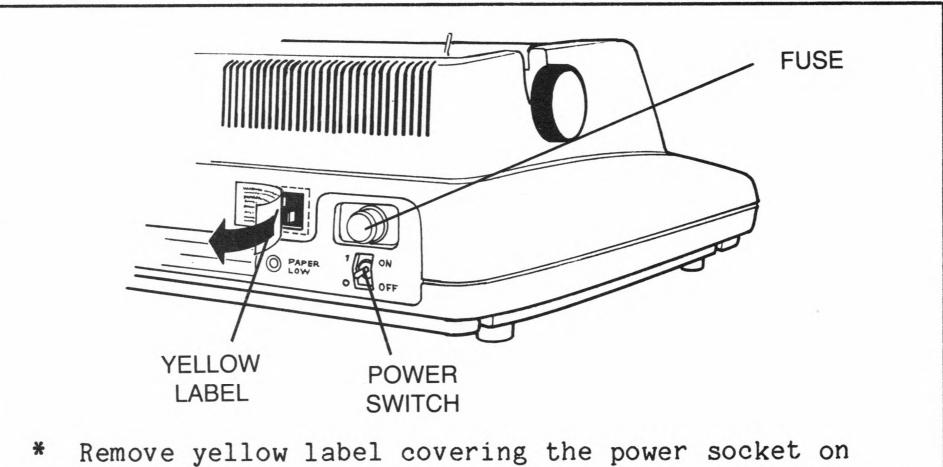
* Tighten screws.



* Tighten screws on connectors.

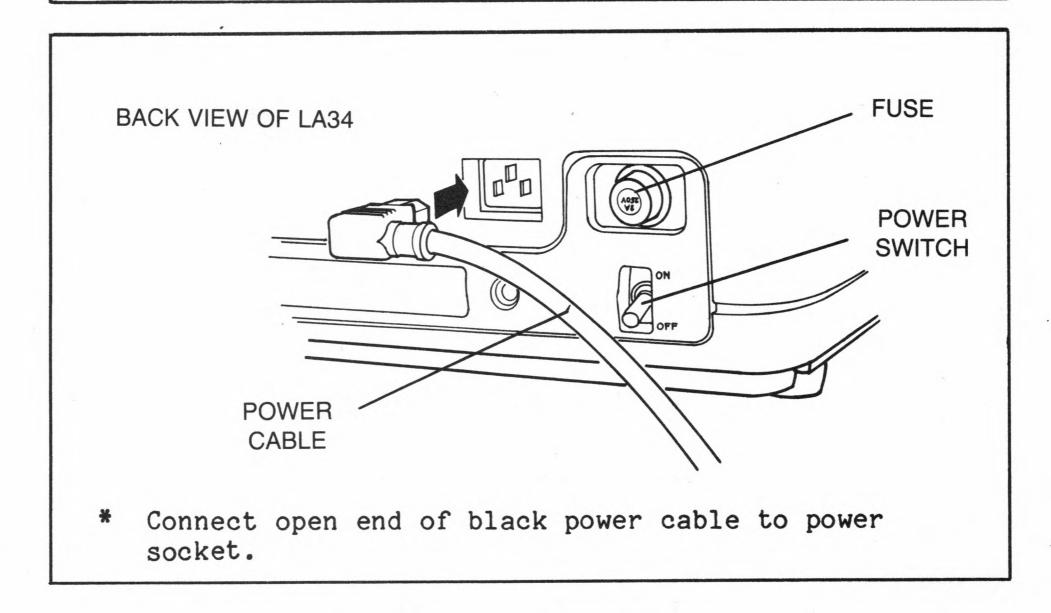
3–12 Install Your Printer



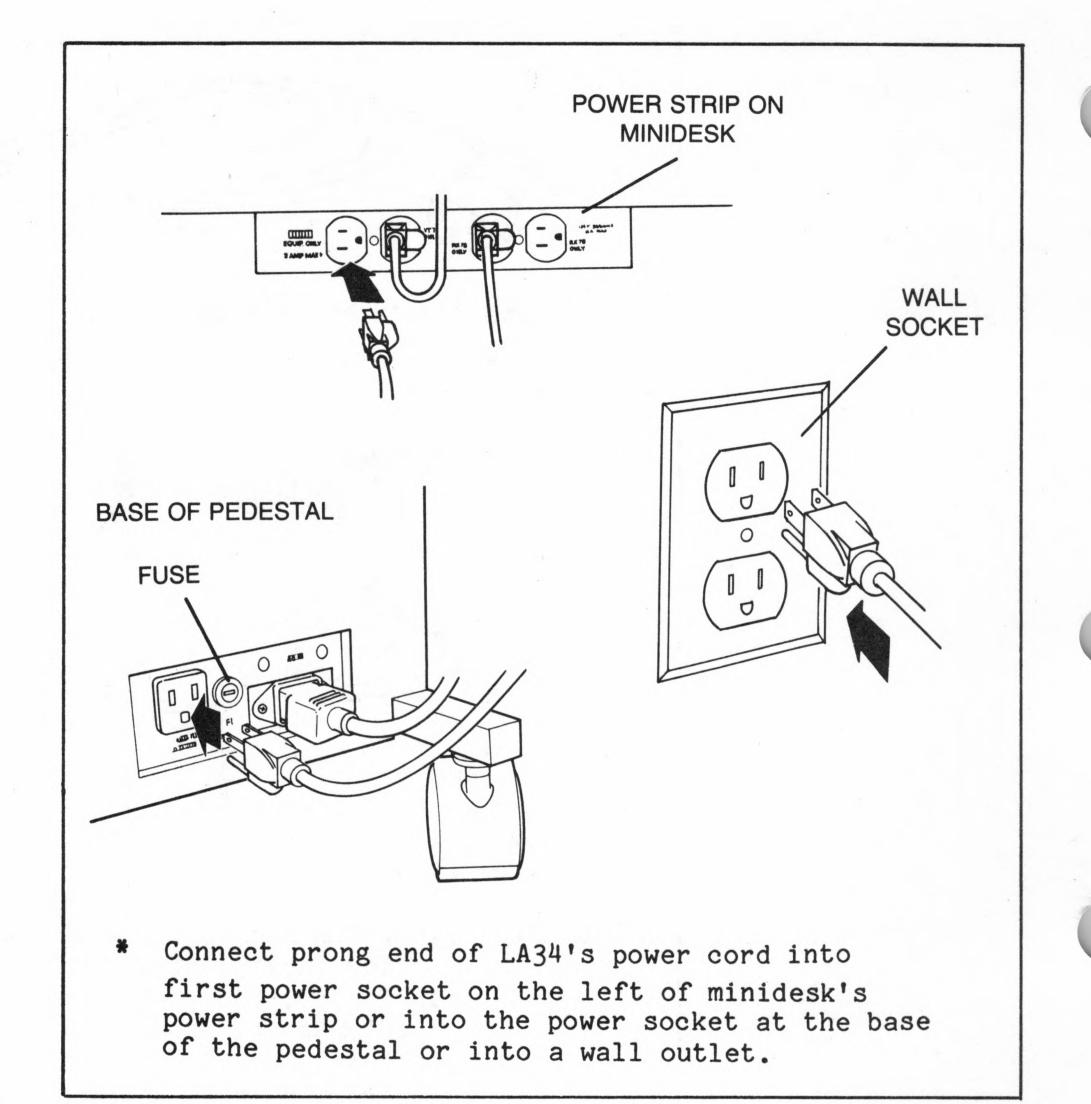


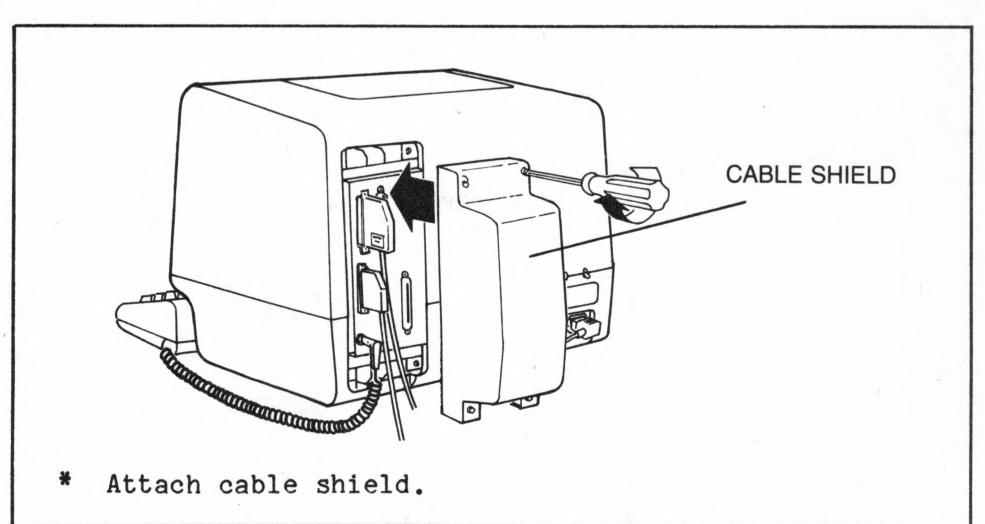
- * Remove yellow label covering the power socket on back of LA34.
- Caution In North America, the voltage on the yellow label must be from 110 to 120. In Europe, the voltage on the yellow label must be from 220 to 240. If the voltage on the yellow label is not

correct, do not continue with these instructions. Instead call your DECmate Sales Representative.



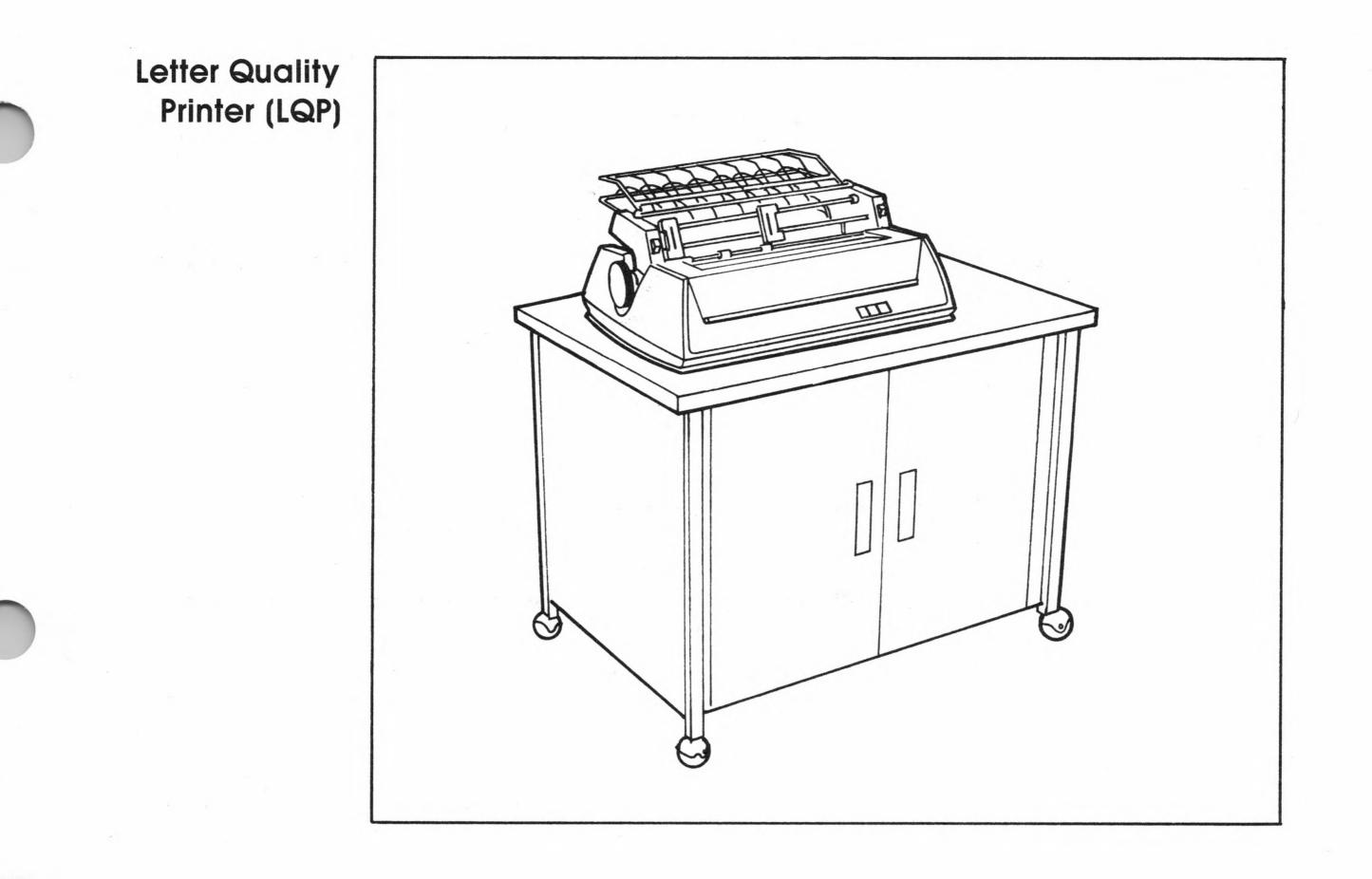
Install Your Printer 3–13





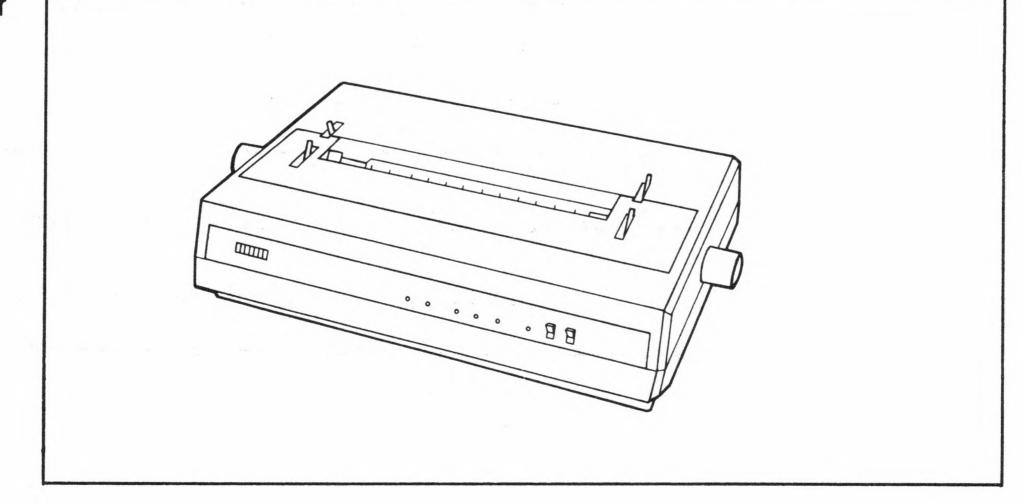
Refer to Chapter 4 for instructions in loading paper and ribbon.

3–14 Install Your Printer

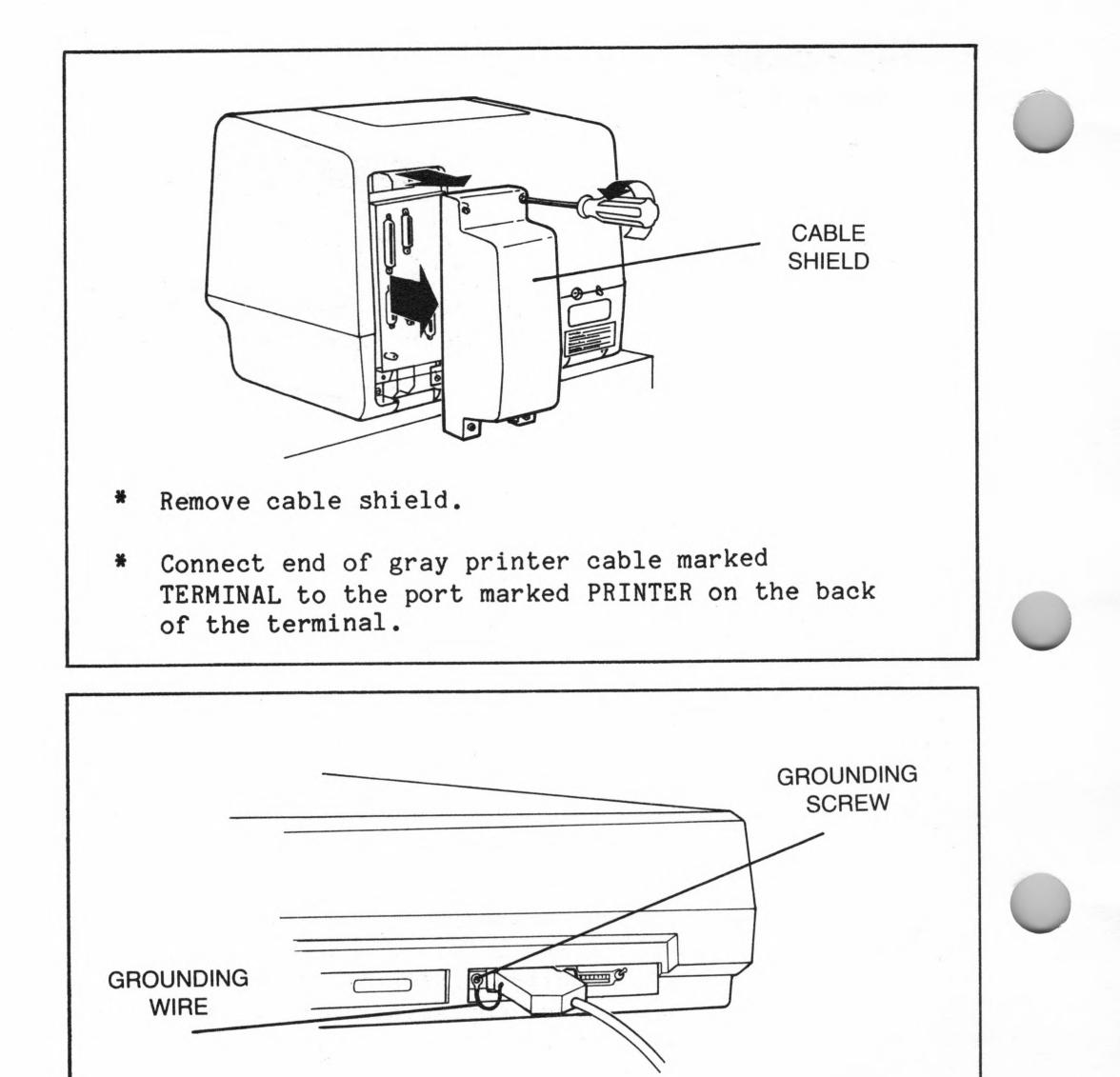


If you purchased an LQP, Digital's field service personnel will install it. Do not open the LQP carton. After your LQP is installed, refer to Chapter 4 for instructions in removing the cover, replacing print wheels, replacing ribbons, and loading paper.

LQP02 Printer



If you purchased an LQP02 printer, refer to the installation guide provided with your printer for assembly instructions. Then return to this page.



* Connect grounding wire to grounding screw on back of printer as shown.

* Replace cable shield.

Refer to Chapter 5 for DECmate operation instructions.

3–16 Install Your Printer

LA100 If you have purchased an LA100, refer to the installation guide provided for instructions on how to install it with your DECmate. You must use the printer cable provided with your DECmate, BC26S-15.

If after installing your LA100, you find the operation faulty, check that the baud rate, parity bit, and number of data bits is set to 9600, Mark, and 7 respectively. Refer to the LA100 installation guide for instructions in changing these settings.

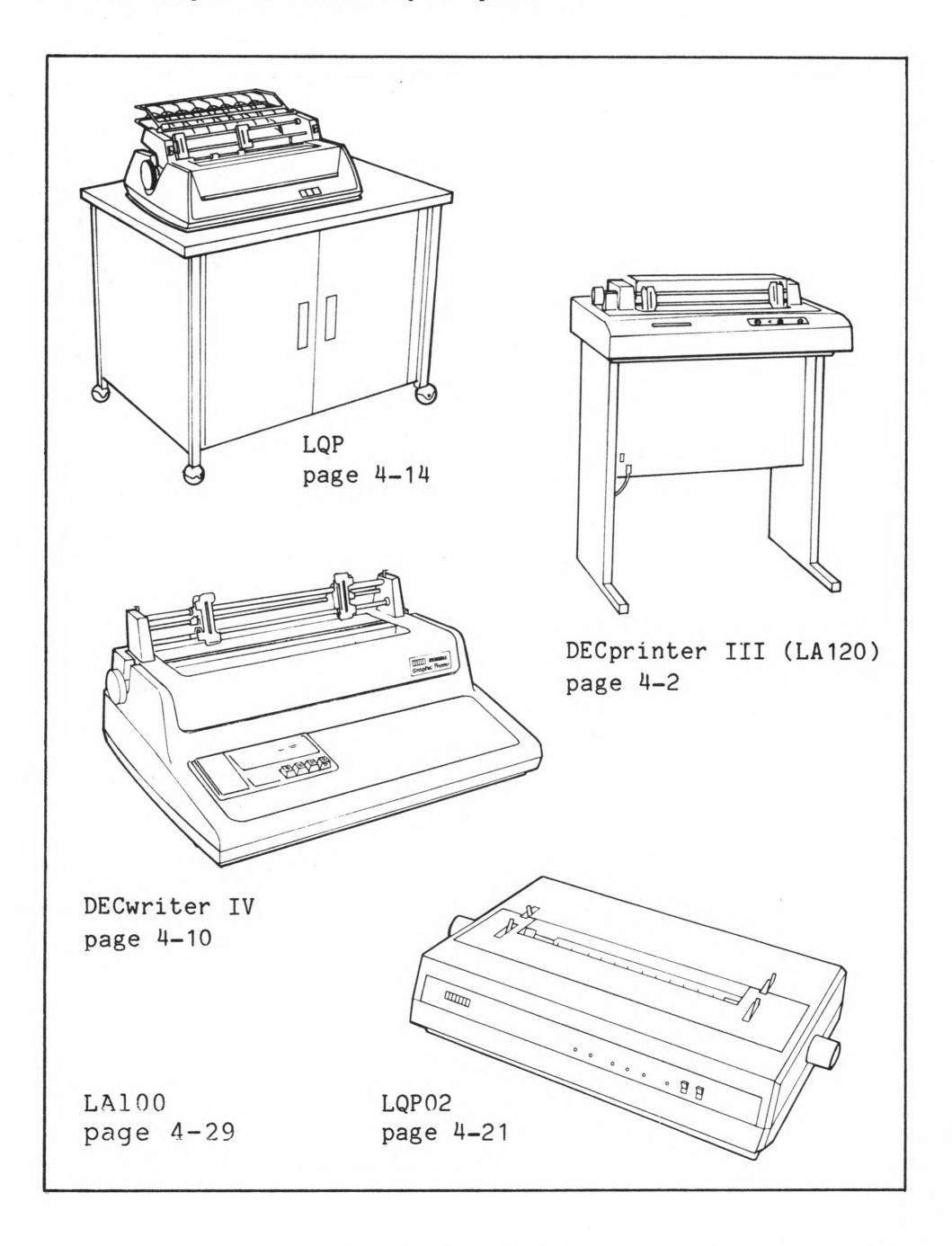
Install Your Printer 3–17

Chapter 4 Install Printer Accessories & Supplies

There are several types of printers that may be successfully used with the DECmate system.

This chapter deals with their use - explaining how to load paper, insert printwheels, and change ribbons.

For installation of these printers with your DECmate, refer to the Chapter 3 Install your printer.

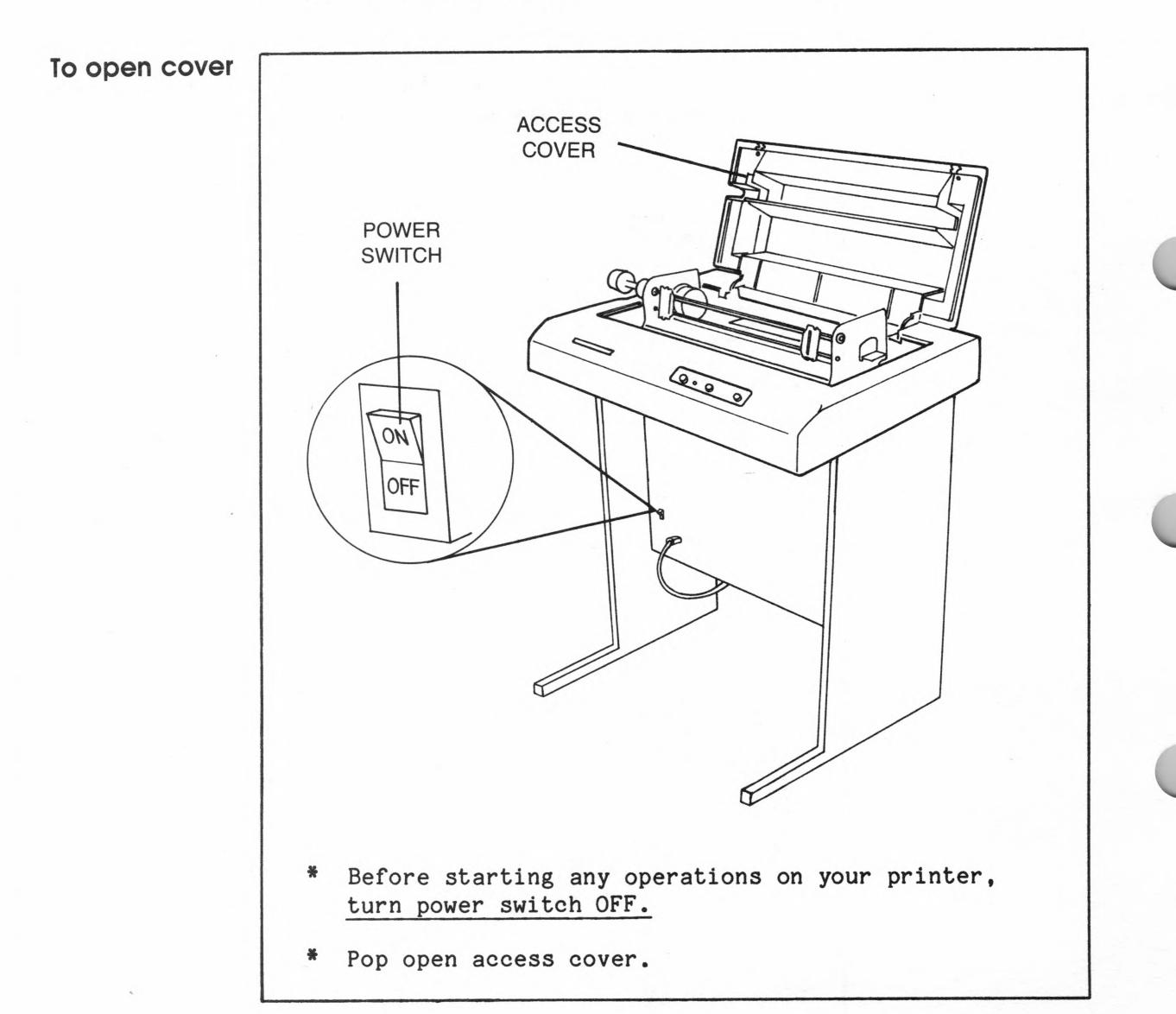


Install Printer Accessories and Supplies 4–1

DECprinter III How to: (LA120 Matrix Printer)

- Open cover

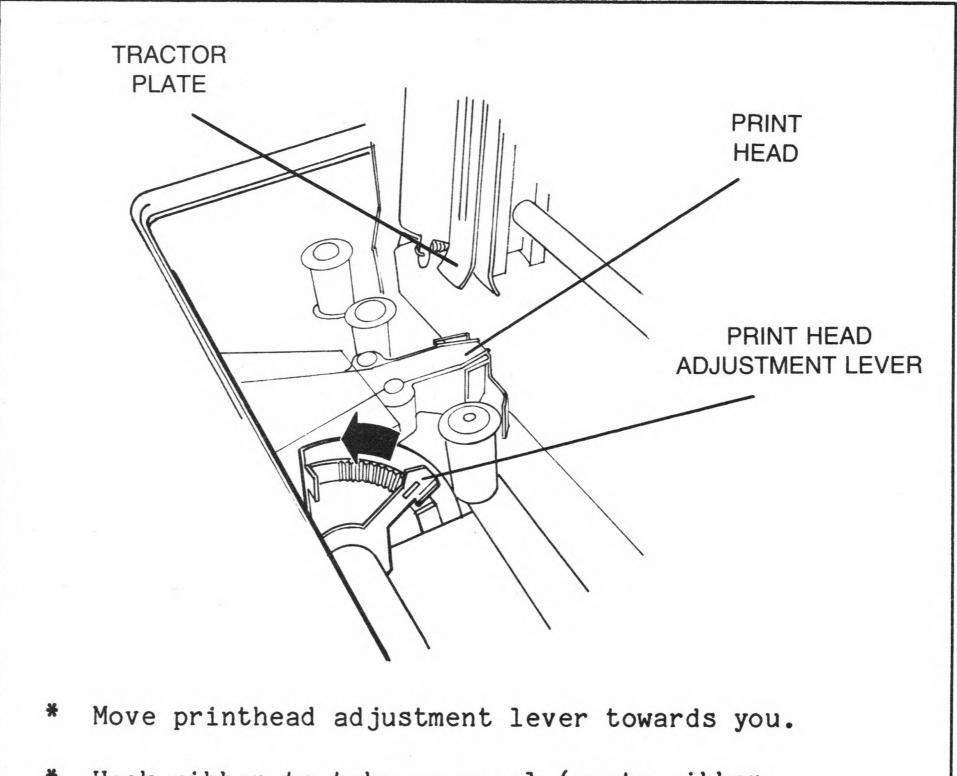
- Replace ribbon
- Load paper
- Set baud rate (speed)



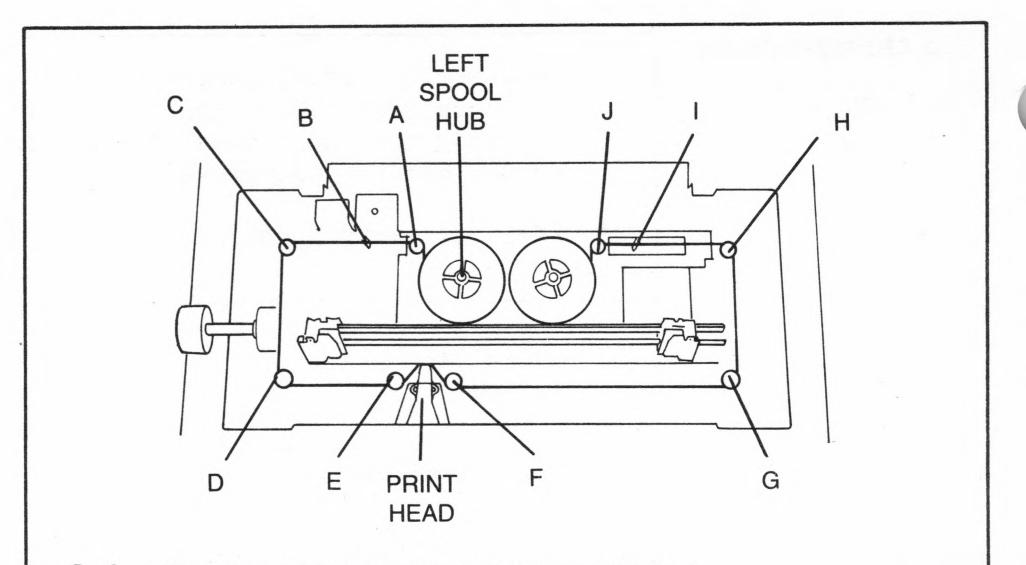
4–2 Install Printer Accessories and Supplies

To change ribbon

- * Remove old ribbon, gently threading from around guideposts and idler spools. (It will help you to study how the ribbon threads through the guides before you remove it.)
- * Keep one empty spool.



- * Hook ribbon to take-up spool (empty ribbon spool). Make sure ribbon lays flat from spool to spool.
- * (Several inches from the end of the ribbon is a small round grommet. This grommet changes ribbon direction. In threading the ribbon, the grommet must be between the spool and the ribbon guide I.)
- * Wind several inches of ribbon onto take-up spool.



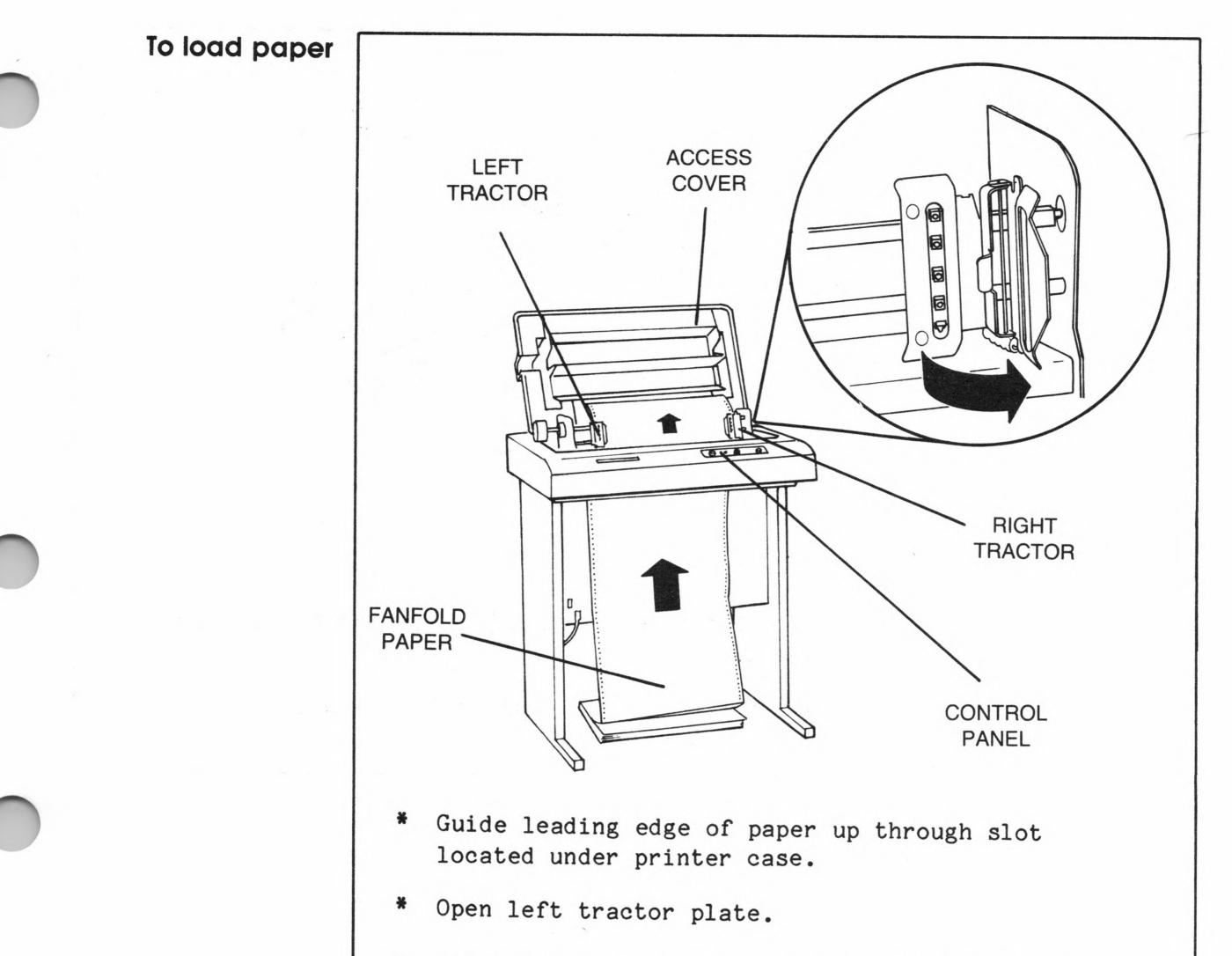
Refer to the illustration as you thread ribbon.

- * Place full spool on left spool hub, turning it clockwise until spool drops into position.
- * Guide ribbon around idler spool A.
- * Slip ribbon through ribbon guide B.
- * Guide ribbon around outside of idler spools C, D, and E.
- * Guide ribbon around front of printhead.
- * Run ribbon around outside of idler spools F, G, and H.
- * Slip ribbon through ribbon guide I.
- * Guide ribbon around outside of idler spool J.
- * Without twisting ribbon, place take-up spool on right spool hub. Turn take-up spool clockwise on hub until it drops into position.

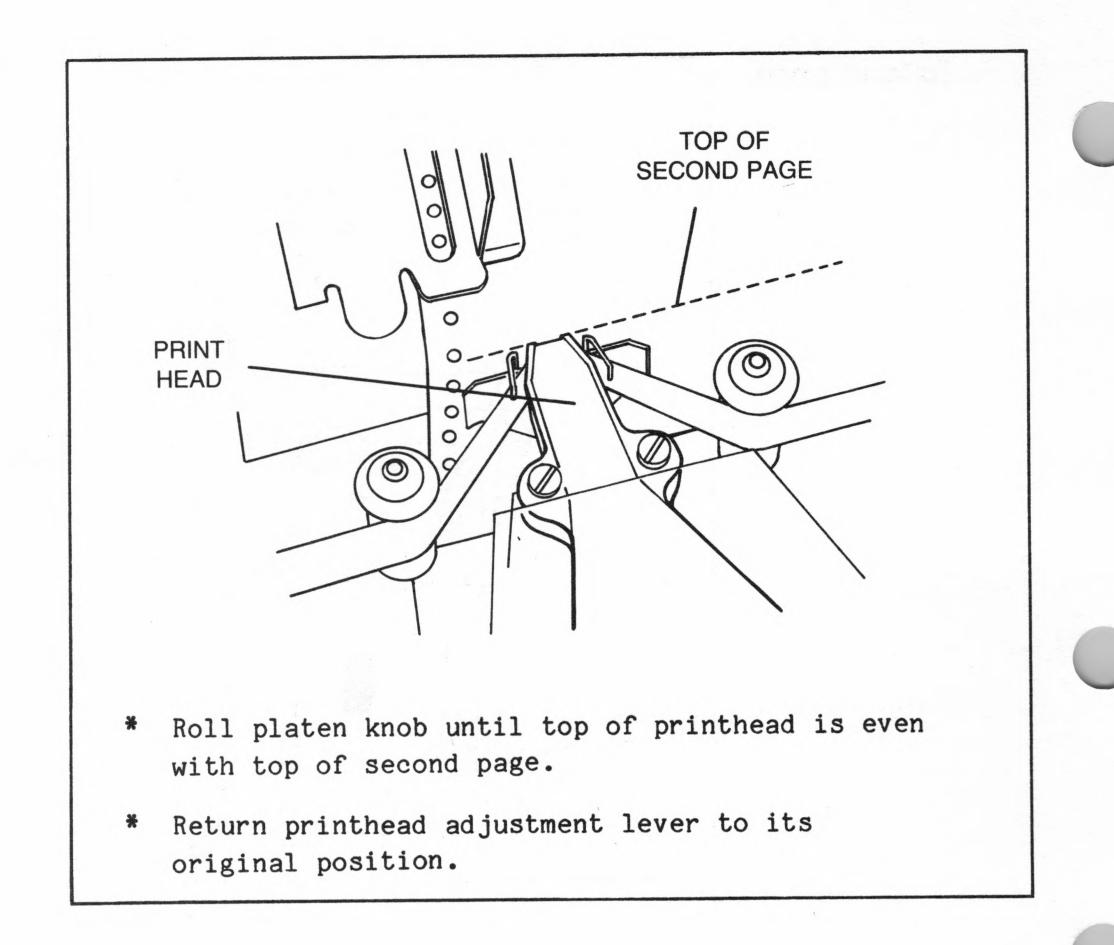
(The take-up spool must be placed on spool hub so that it will rotate in the same direction as the full spool during printer operation.)

- * Return printhead adjustment lever to its original position.
- * Place paper on floor in front of printer pedestal.
- * Move printhead adjustment towards you.

4–4 Install Printer Accessories and Supplies



- * Fit holes in left margin of paper over tractor pins, and close left tractor plate.
- * Loosen thumbscrew or lever on right tractor, and slide tractor to fit paper holes.
- * Close tractor plate, and tighten thumbscrews or levers.

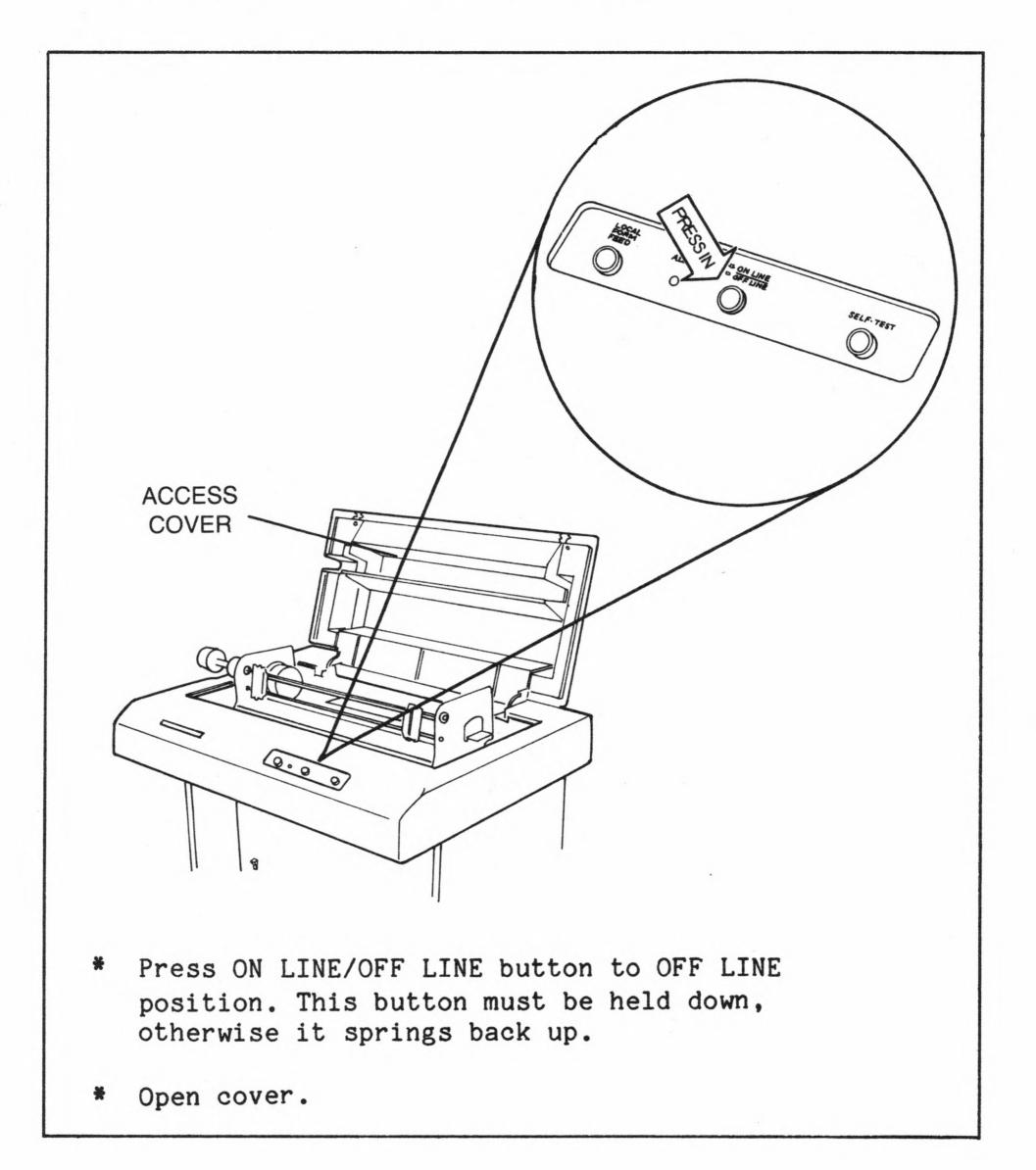


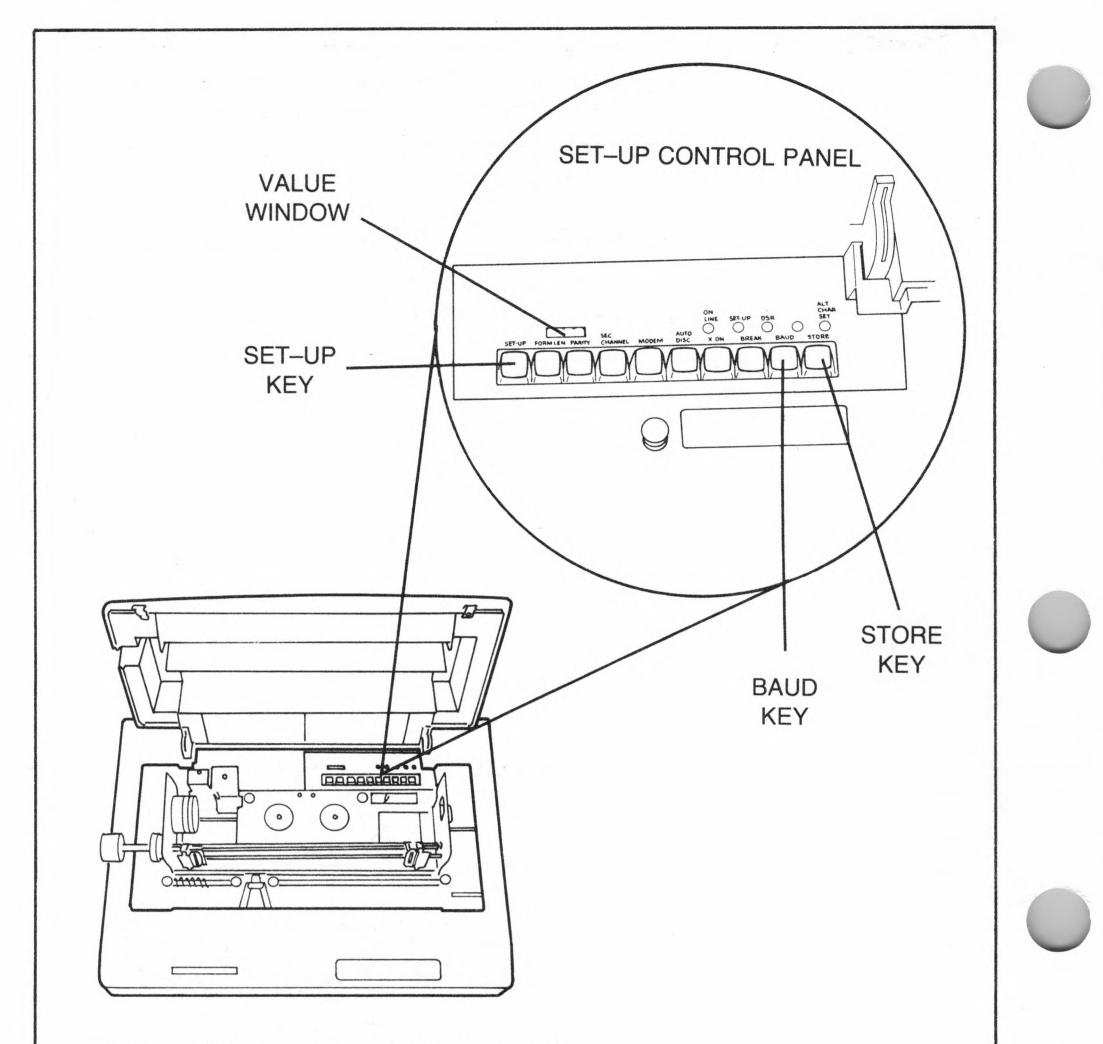
4–6 Install Printer Accessories and Supplies

To set baud rate

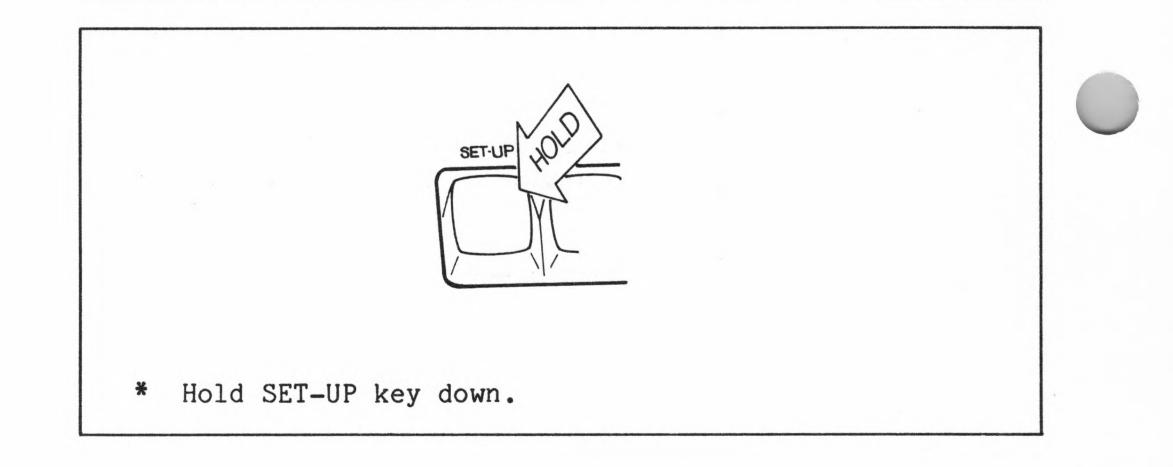
In order for your DECmate and printer to communicate, they must have the same baud rate (speed). DECmate runs at a speed of 9600 baud (9600 characters per second). Your LA120 must be set to 9600 baud.

Setting the baud rate requires two people.

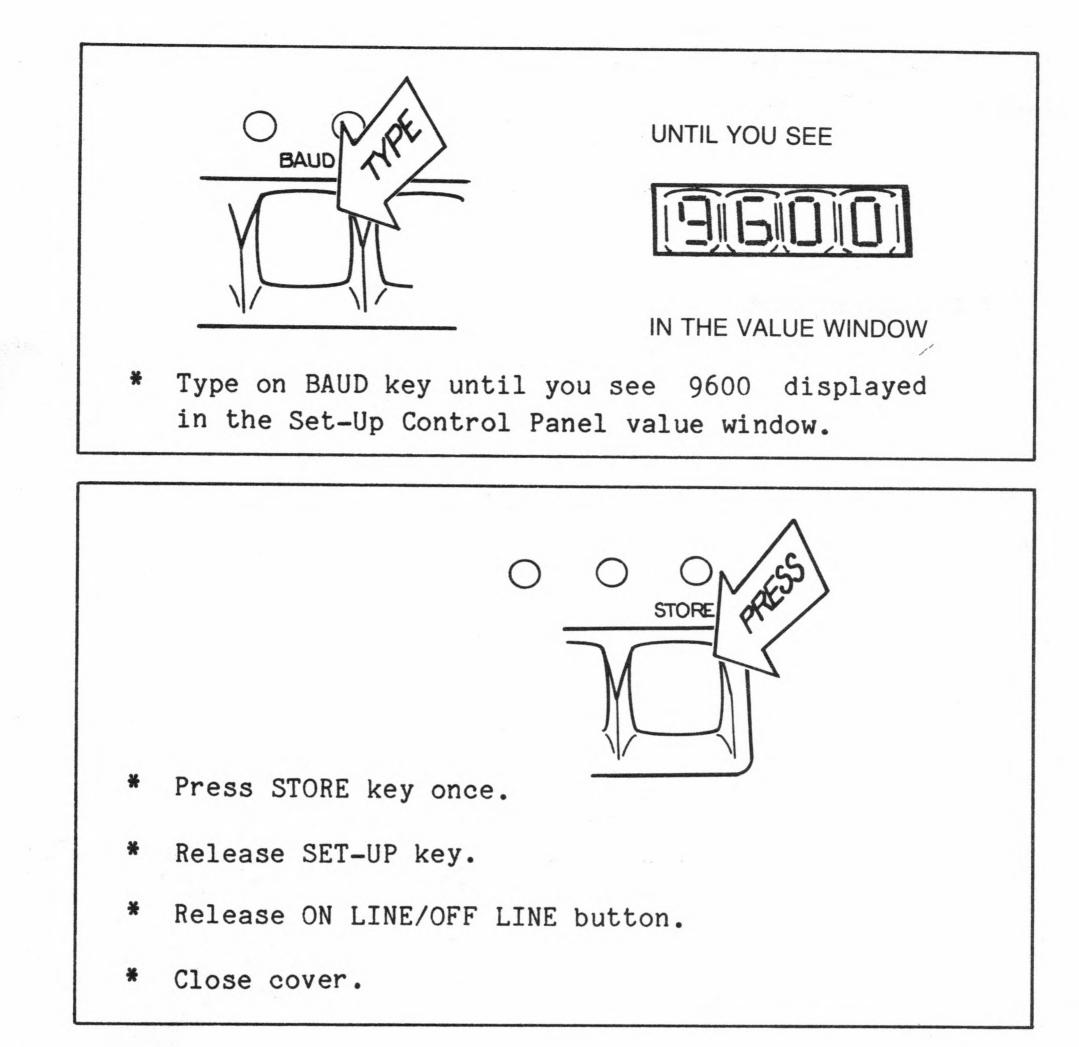




* Locate Set-Up Control Panel.



Install Printer Accessories and Supplies 4-8

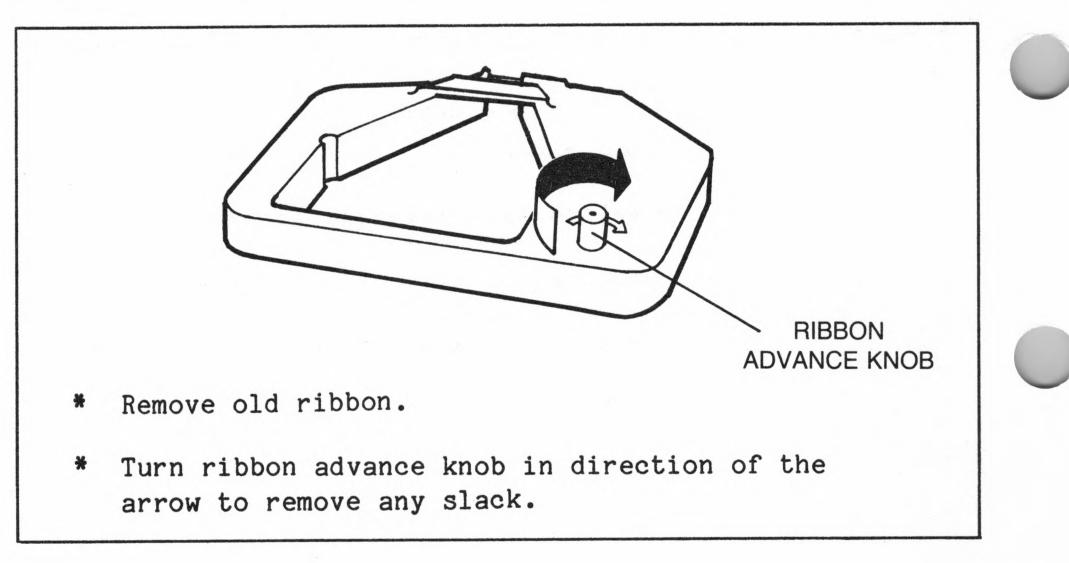


Refer to Chapter 5 for DECmate operation instructions.

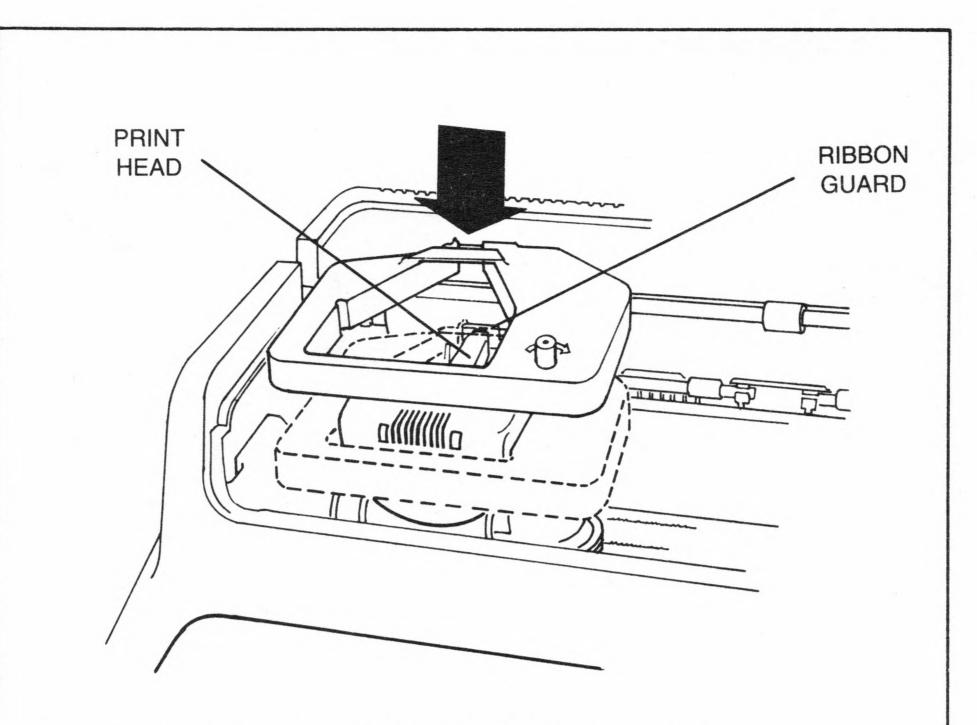
DECwriter IV How to: (LA34 Matrix Printer)

- Change ribbon
- Load paper -

To change ribbon ACCESS COVER 00 Open access cover. ¥



Install Printer Accessories and Supplies 4-10



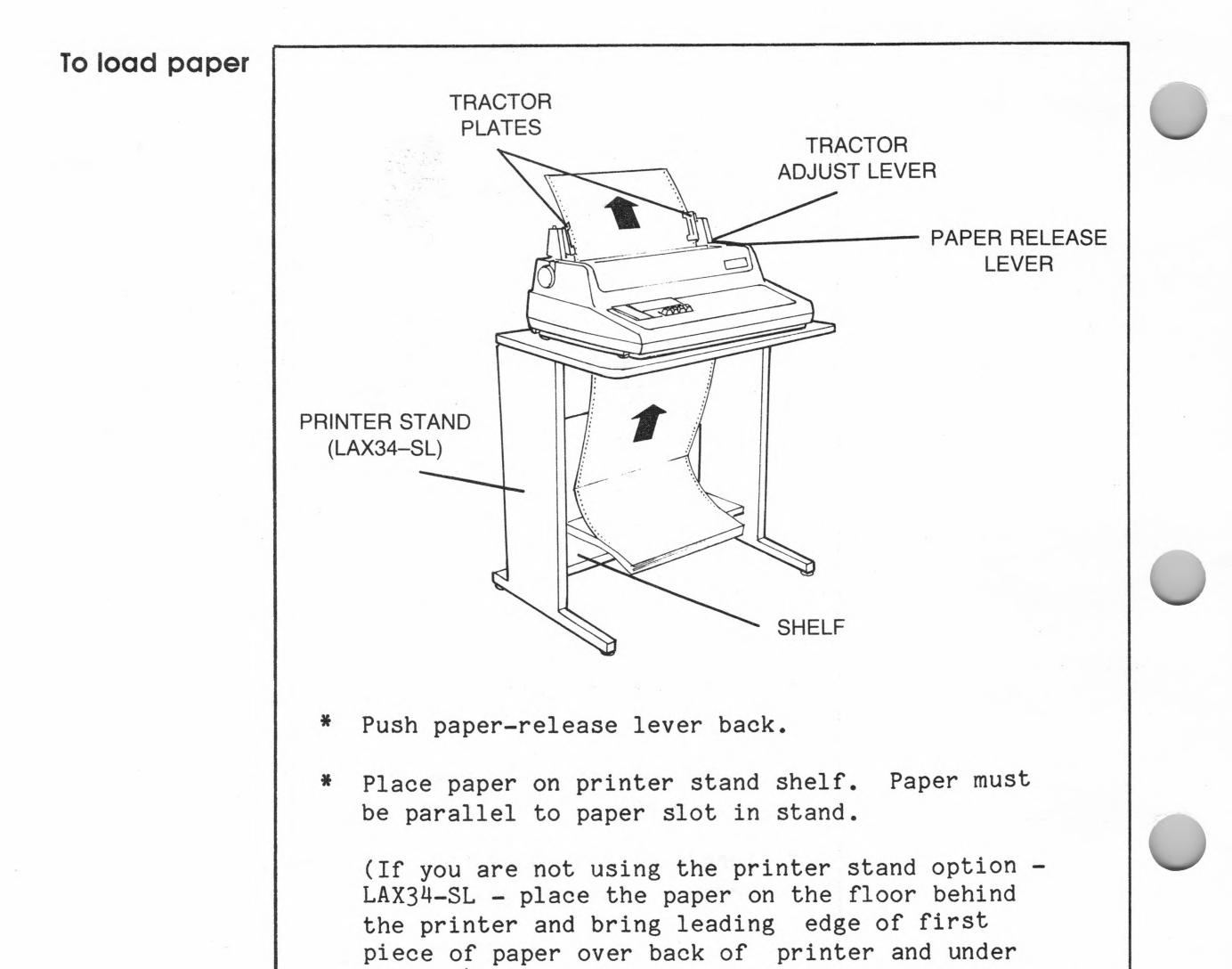
- * Slide exposed portion of ribbon between printhead and ribbon guard.
- * Press down on cartridge until you hear it click into place.
- * Turn ribbon-advance knob in direction of the arrow to take up any slack.
- * Manually move the printhead to the right and

then to the left several times. Watch the ribbon-advance knob. The ribbon-advance knob should turn in a clockwise direction.

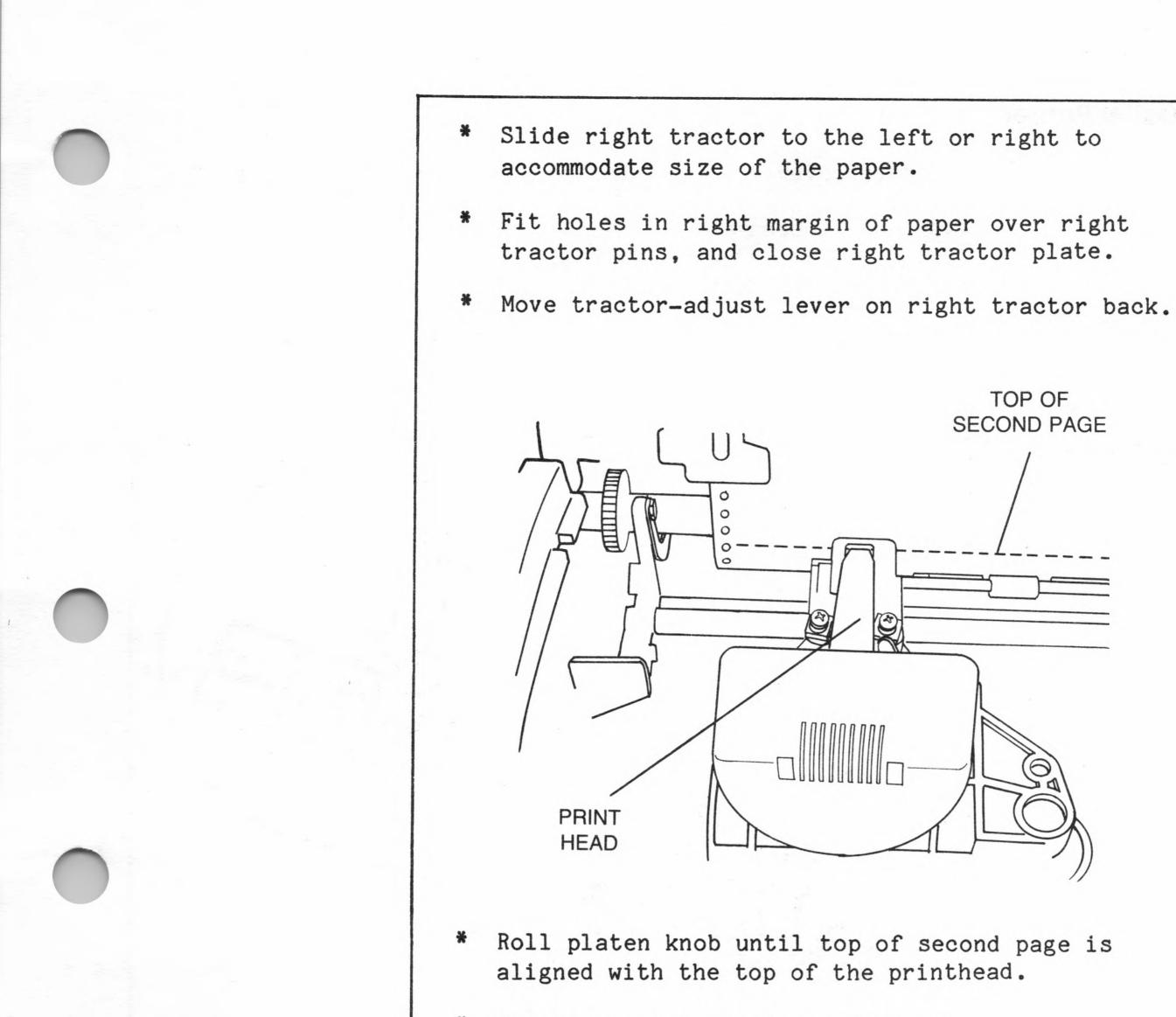
* Close access cover.

* Press CLEAR FAULT Key

Install Printer Accessories and Supplies 4–11



- platen.)
- * Guide leading edge of first piece of paper up through paper slot in stand and printer. Feed the paper upwards until you can grasp the leading edge of the first piece as it is fed up between the printhead and platen.
- * Open left tractor plate.
- * Fit holes in left margin of paper over left tractor pins, and close tractor plate.
- * Gently move tractor-adjust lever on the right tractor toward front of printer.



* Move paper-release lever forward.

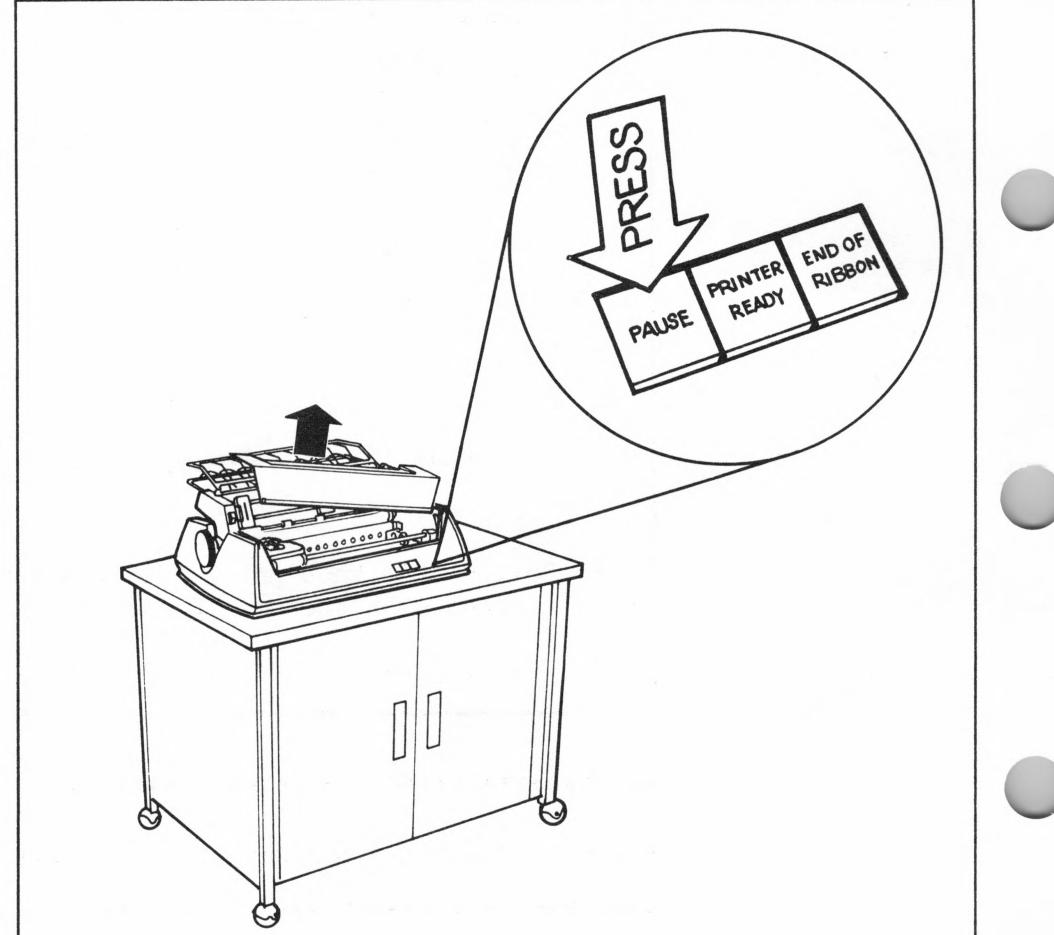
Refer to Chapter 5 for DECmate operation instructions.

Install Printer Accessories and Supplies 4–13

Letter Quality Printer How to:

- Remove cover
- Change ribbon
- Replace printwheel
- Load paper



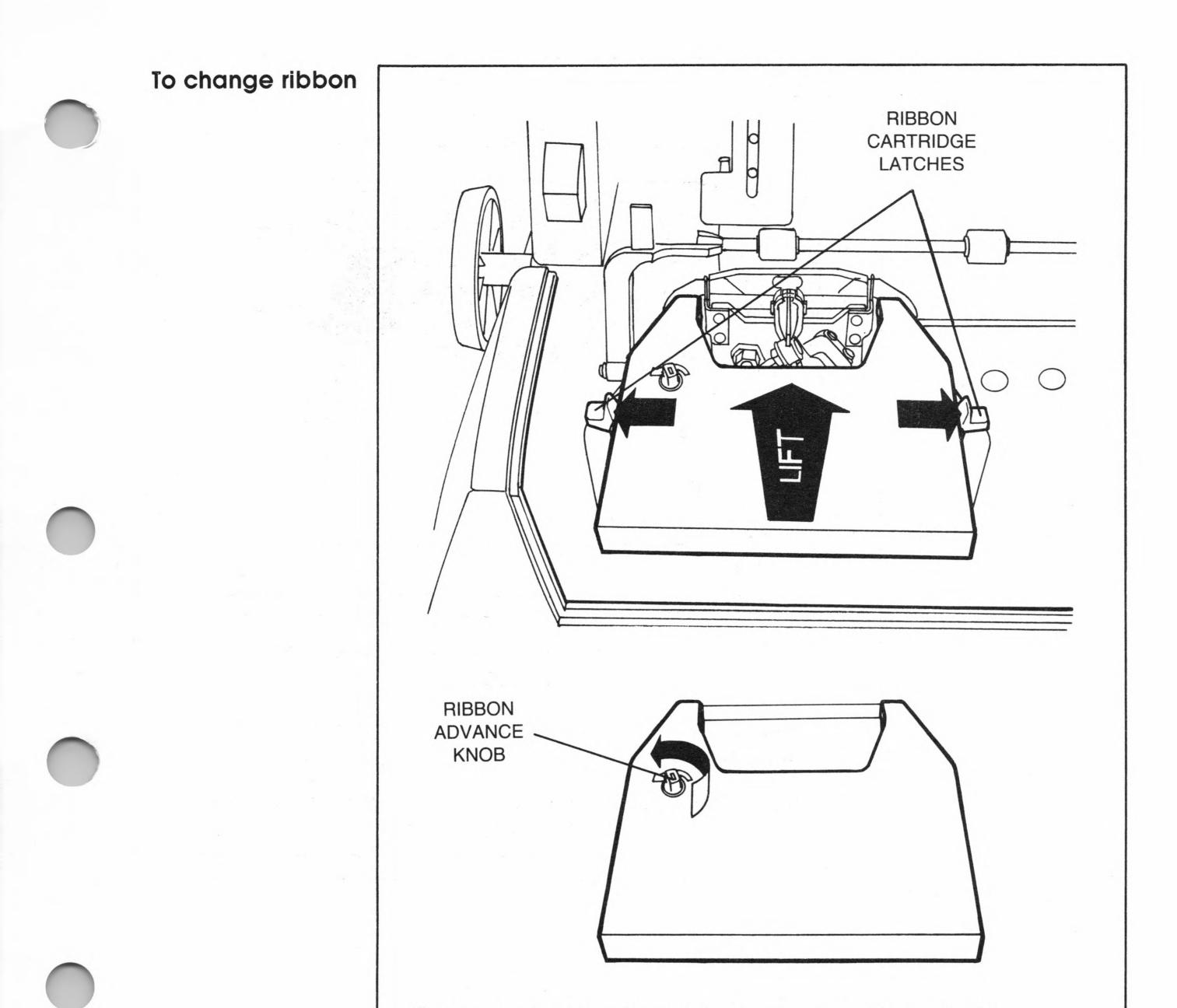


* Press PAUSE button so that it lights up.

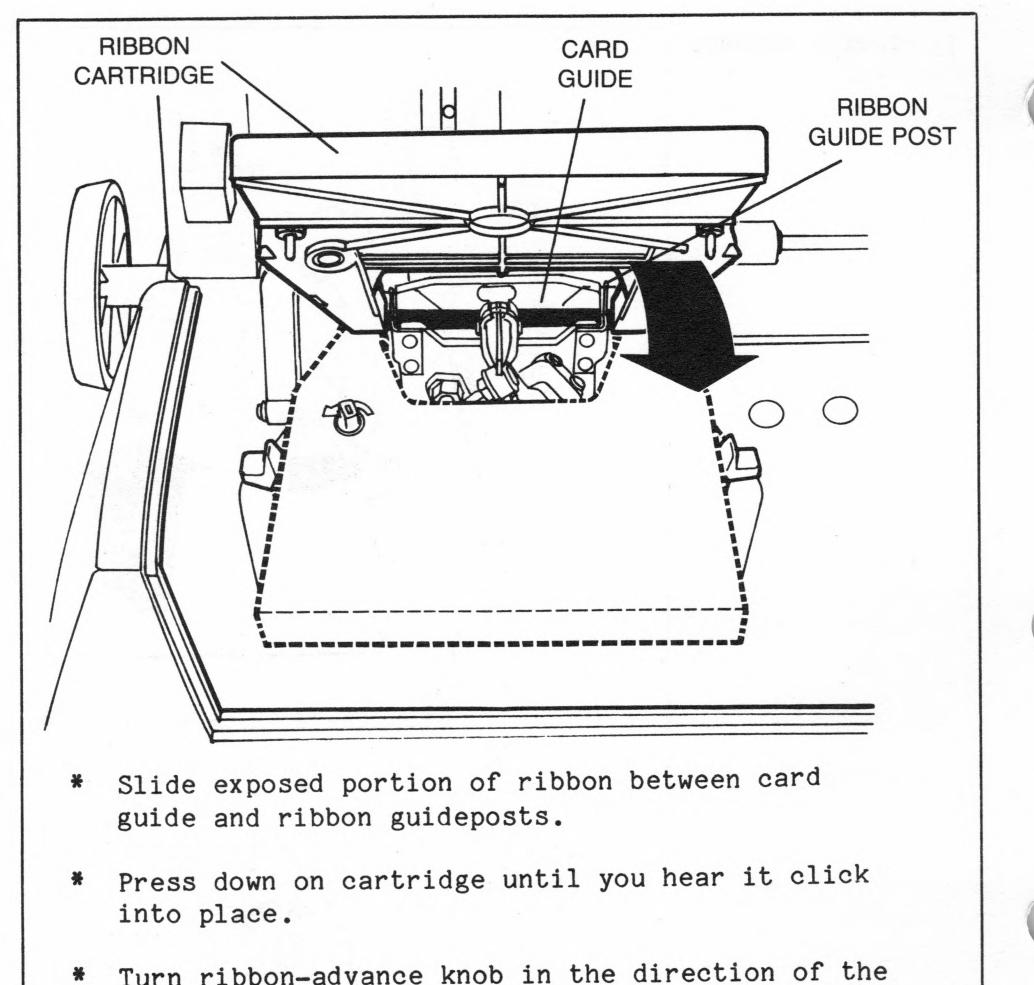
<u>Never</u> remove the printer cover without first pressing the PAUSE button so that it is lit.

- * Remove printer cover.
- * After you have completed loading paper, changing ribbon, or similar action, replace cover and press PAUSE again, to return to PRINTER READY.

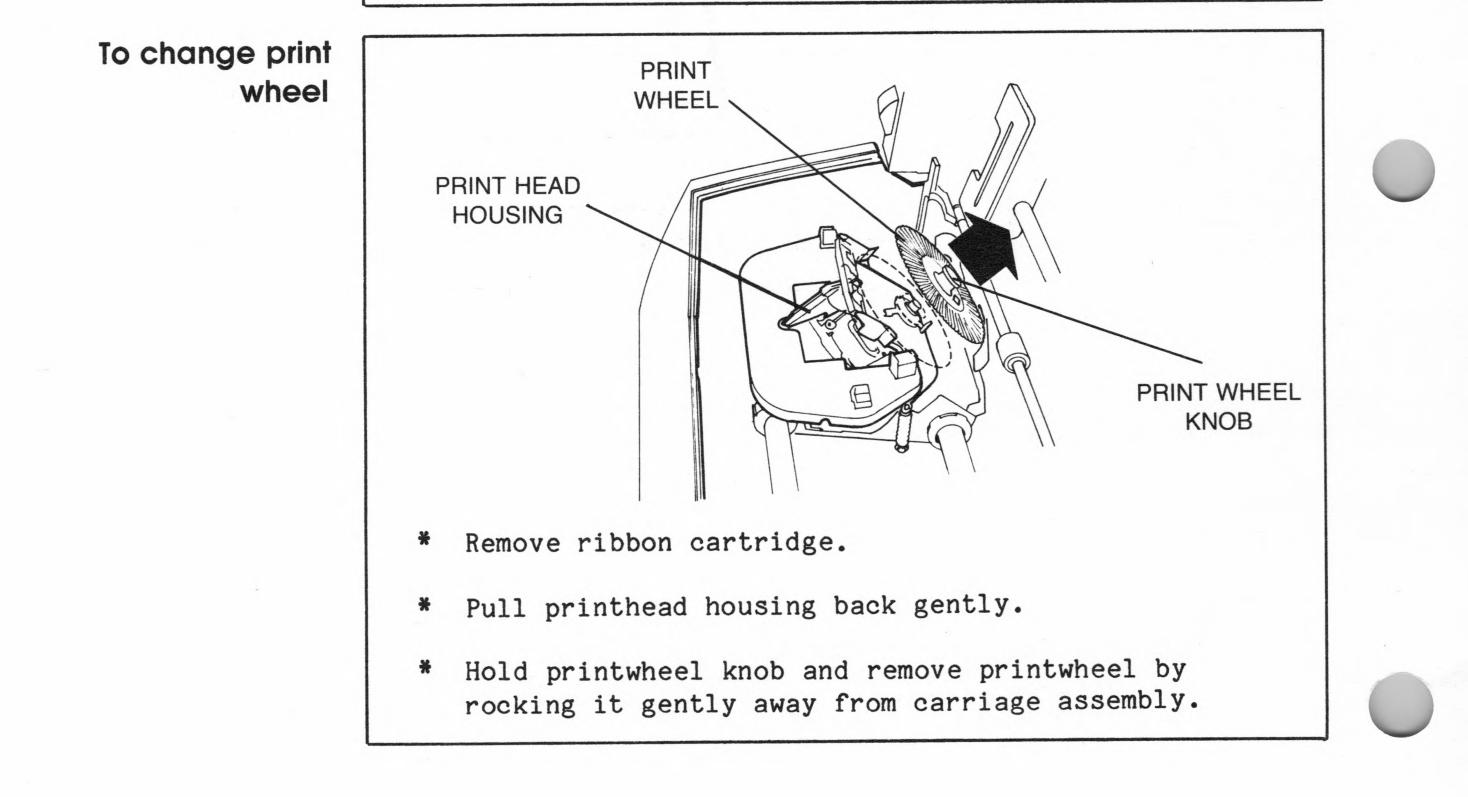
4–14 Install Printer Accessories and Supplies



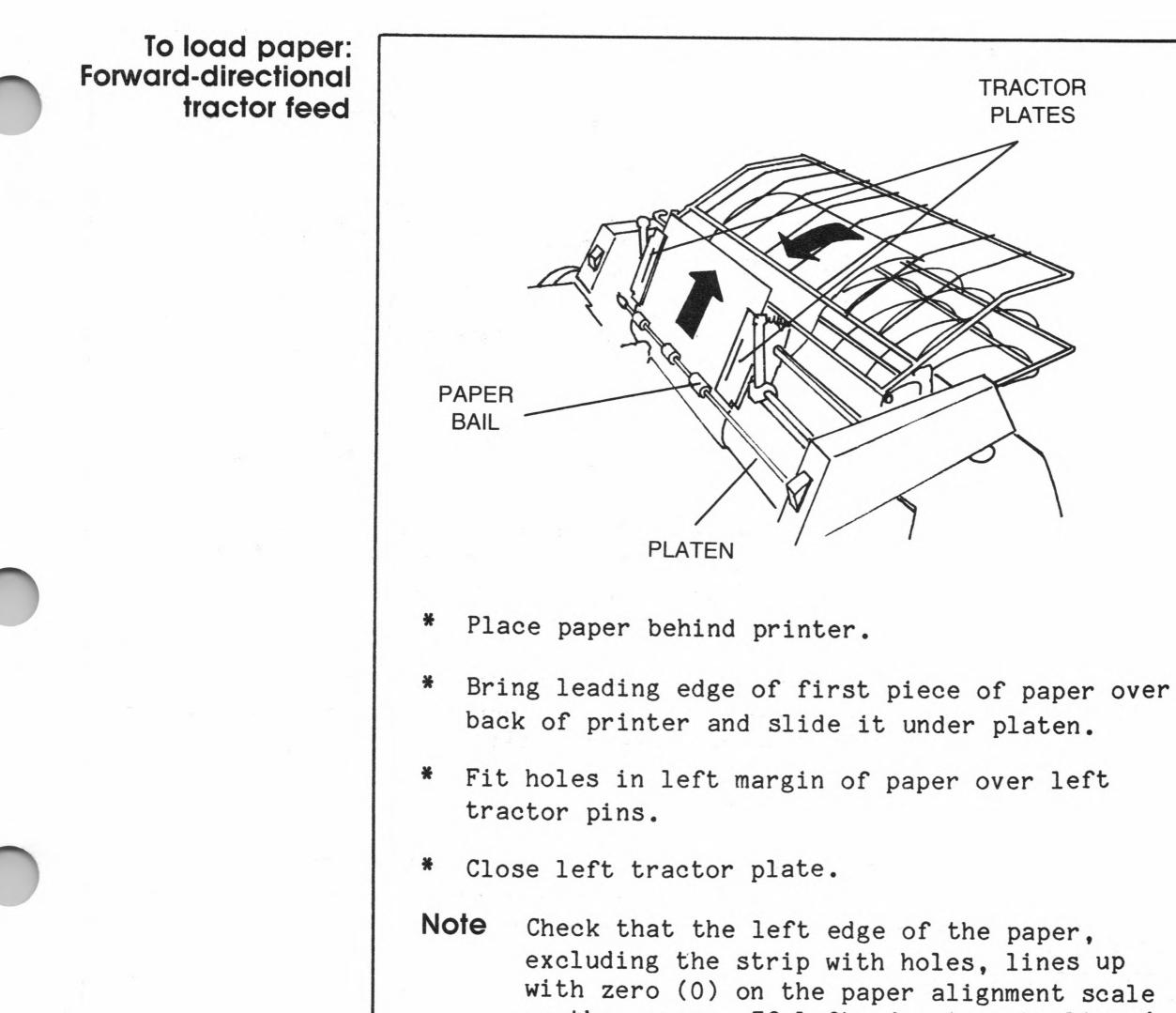
* Turn ribbon-advance knob in direction of the arrow to remove slack in new ribbon cartridge.



Turn ribbon-advance knob in the direction of the arrow again to take up any slack.

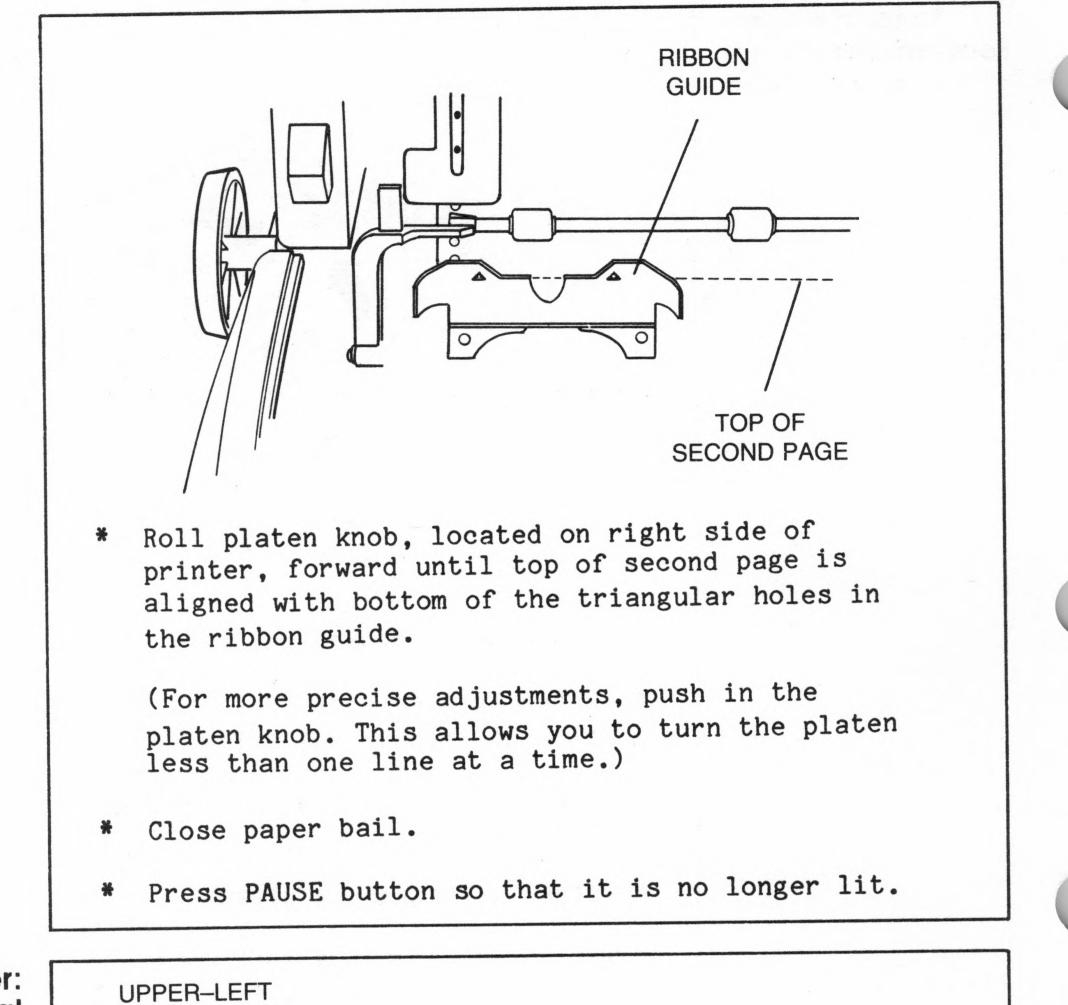


4–16 Install Printer Accessories and Supplies



on the cover. If left edge is not aligned, loosen tractor clamp by moving it toward the front of the printer. Then slide the tractor left or right until the paper's left edge is aligned with zero. Tighten the tractor clamp.

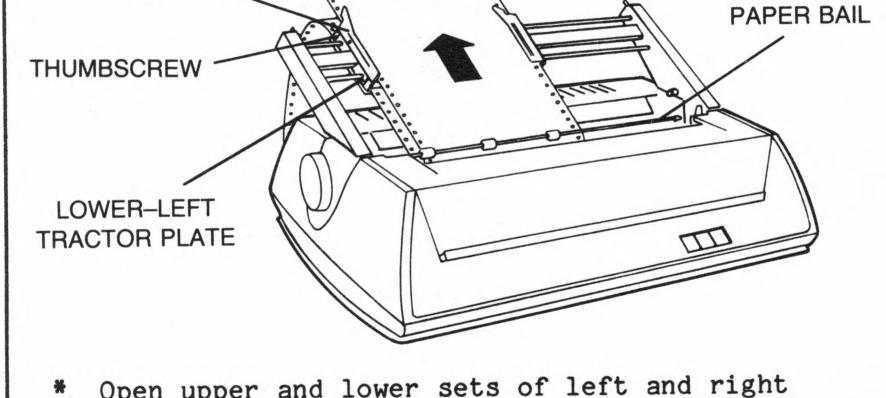
- * Loosen the tractor clamp on the right tractor.
- * Slide the right tractor to the left or right to accommodate size of the paper.
- * Fit holes in right margin of paper over right tractor pins.
- * Close right tractor plate.
- * Tighten tractor clamp on right tractor.



To load paper: **Bidirectional** tractor feed



TRACTOR PLATE



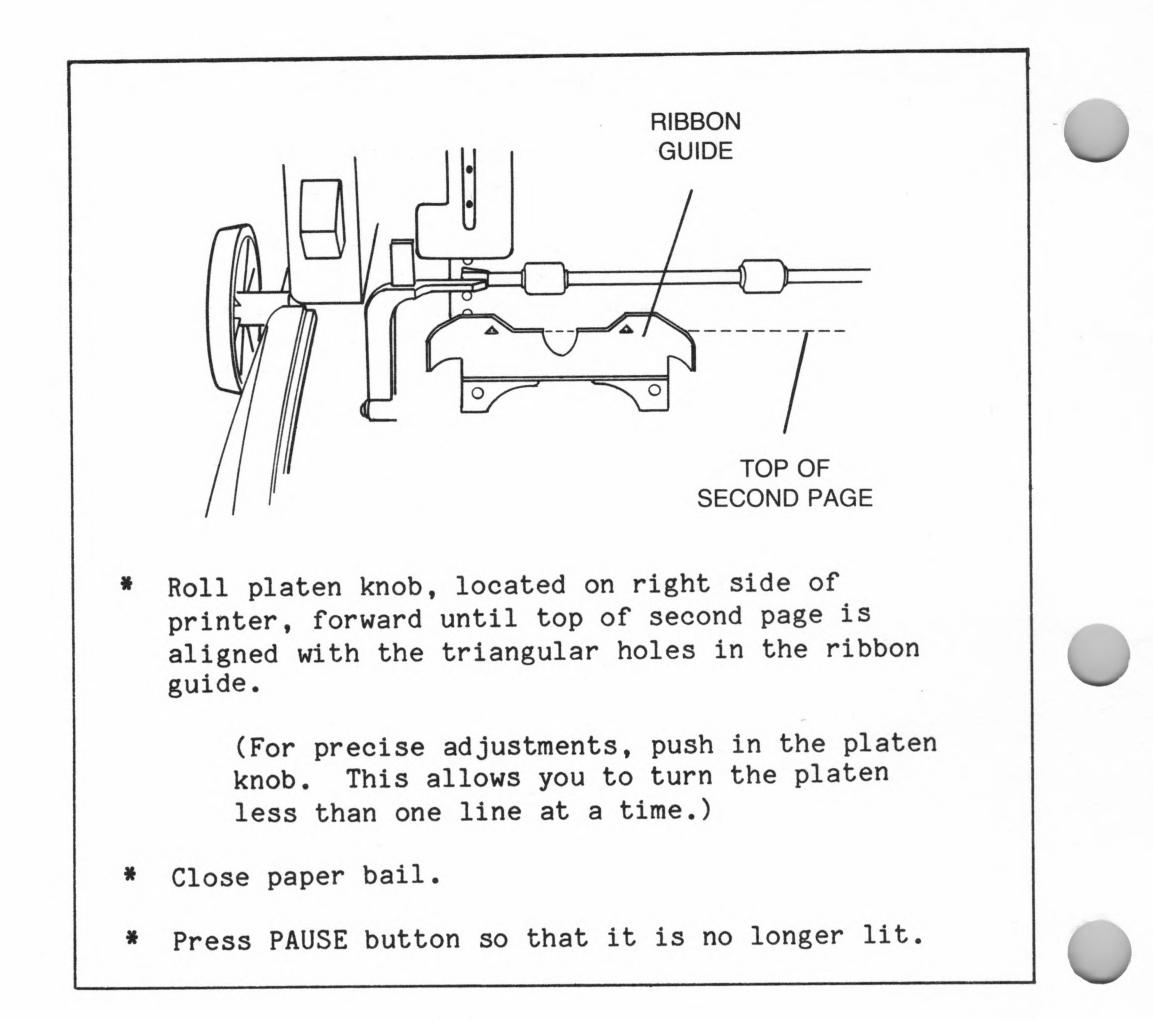
- * Open upper and lower sets of left and right tractor plates.
- Pull paper bail forward, away from platen. ¥
- * Place paper behind printer.
- Bring leading edge of first piece of paper over ¥ back of printer and under platen.

Install Printer Accessories and Supplies 4-18

- * Advance paper to upper set of tractor plates.
- * Fit holes in left margin of paper over pins in upper left tractor.
- * Close upper-left tractor plate.
- Note Check that the left edge of the paper, excluding the strip with holes, lines up with zero (0) on the paper alignment scale on the cover. If left edge is not aligned, loosen thumb screw. Then slide the tractor left or right until the paper's left edge is aligned with zero. Tighten the thumb screw.
- * Loosen thumbscrew on right tractor.
- * Slide right tractor to the left or right to accommodate size of the paper.
- * Fit holes in right margin of paper over upper-right tractor pins.
- * Close upper-right tractor plate.
- * Tighten thumbscrew on right tractor.
- * Hold the paper where it feeds into the printer and gently pull backwards until paper is snug. Fit the paper holes over the pins in both the lower left and lower right tractors.

* Close both lower tractor plates.

Install Printer Accessories and Supplies 4–19



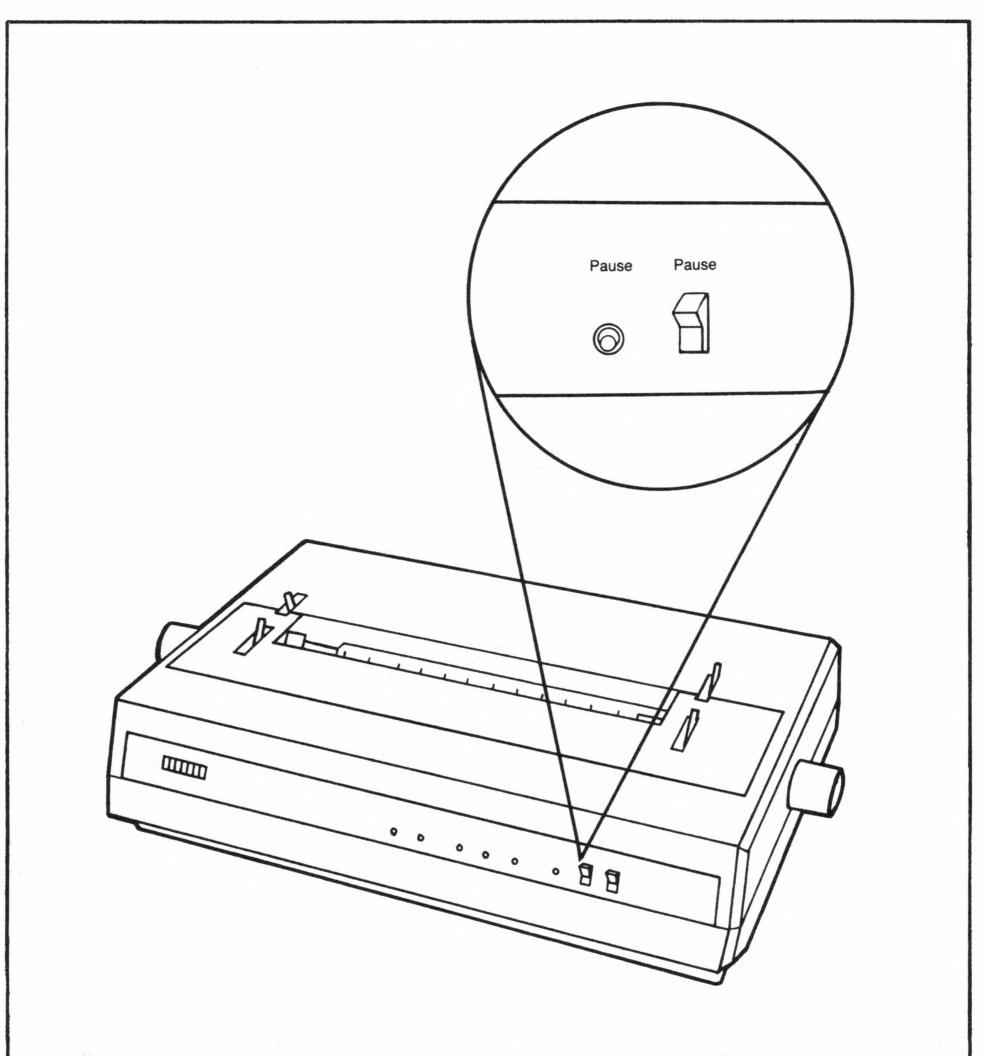
To load paper -For instructions in how to load single sheets of

Single sheets paper into your LQP, refer to the manual Using the Letter Quality Printer (AA-J042-TK).

Refer to Chapter 5 for DECmate operation instructions.

LQP02 Printer How to:

- Remove access cover
- Change ribbon cartridge
- Replace printwheel
- Load paper

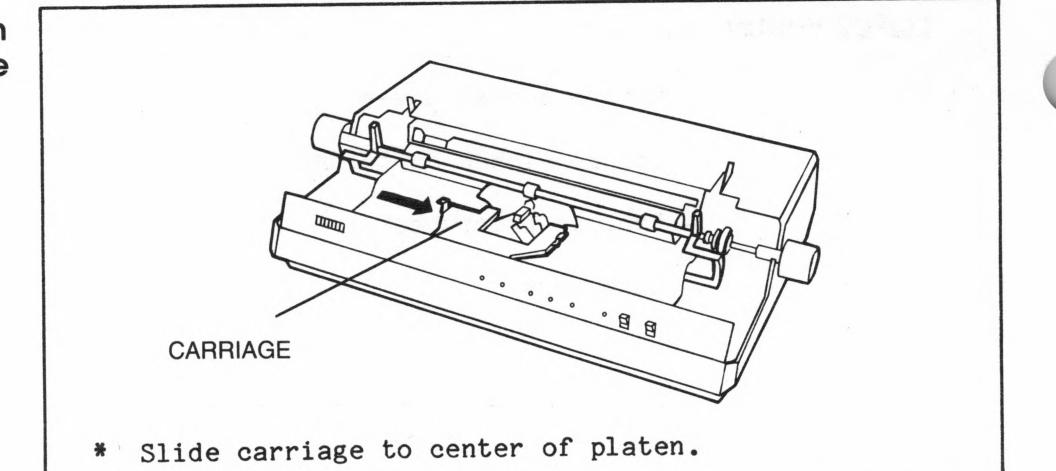


* Press Pause switch. Wait for Pause light to come on.

IMPORTANT: Always press Pause before performing any operations on your printer.

* Remove access cover.

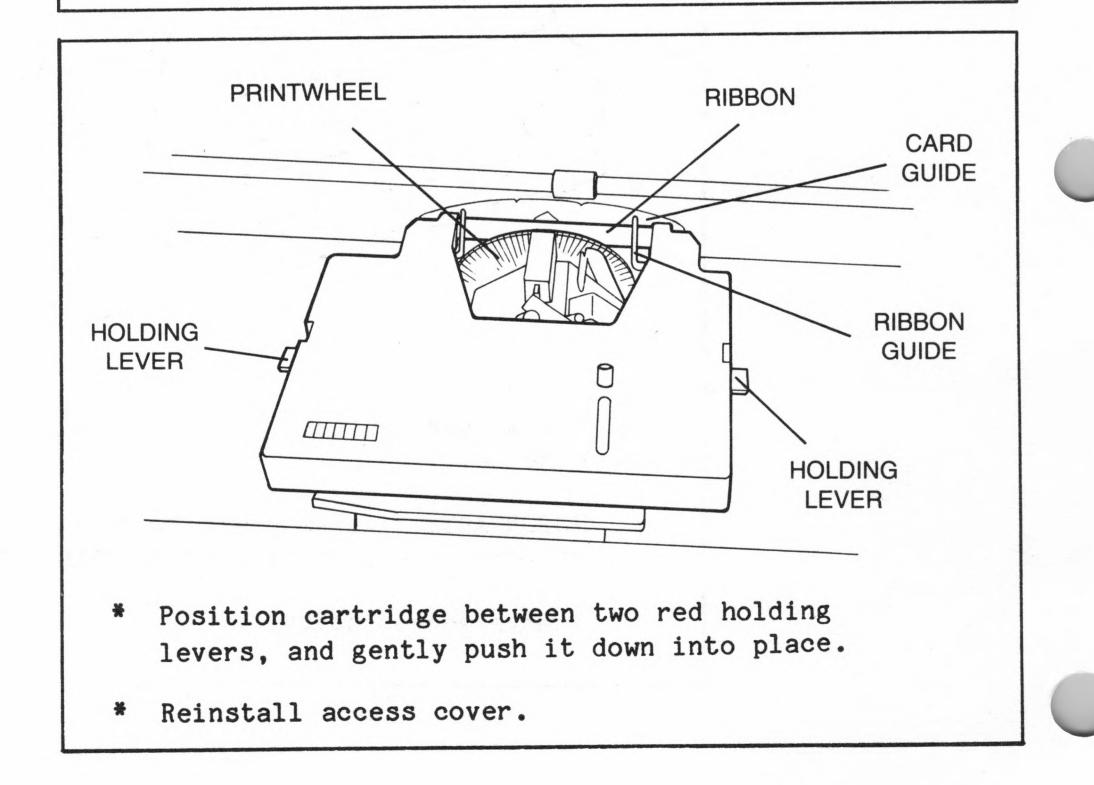
Install Printer Accessories and Supplies 4–21



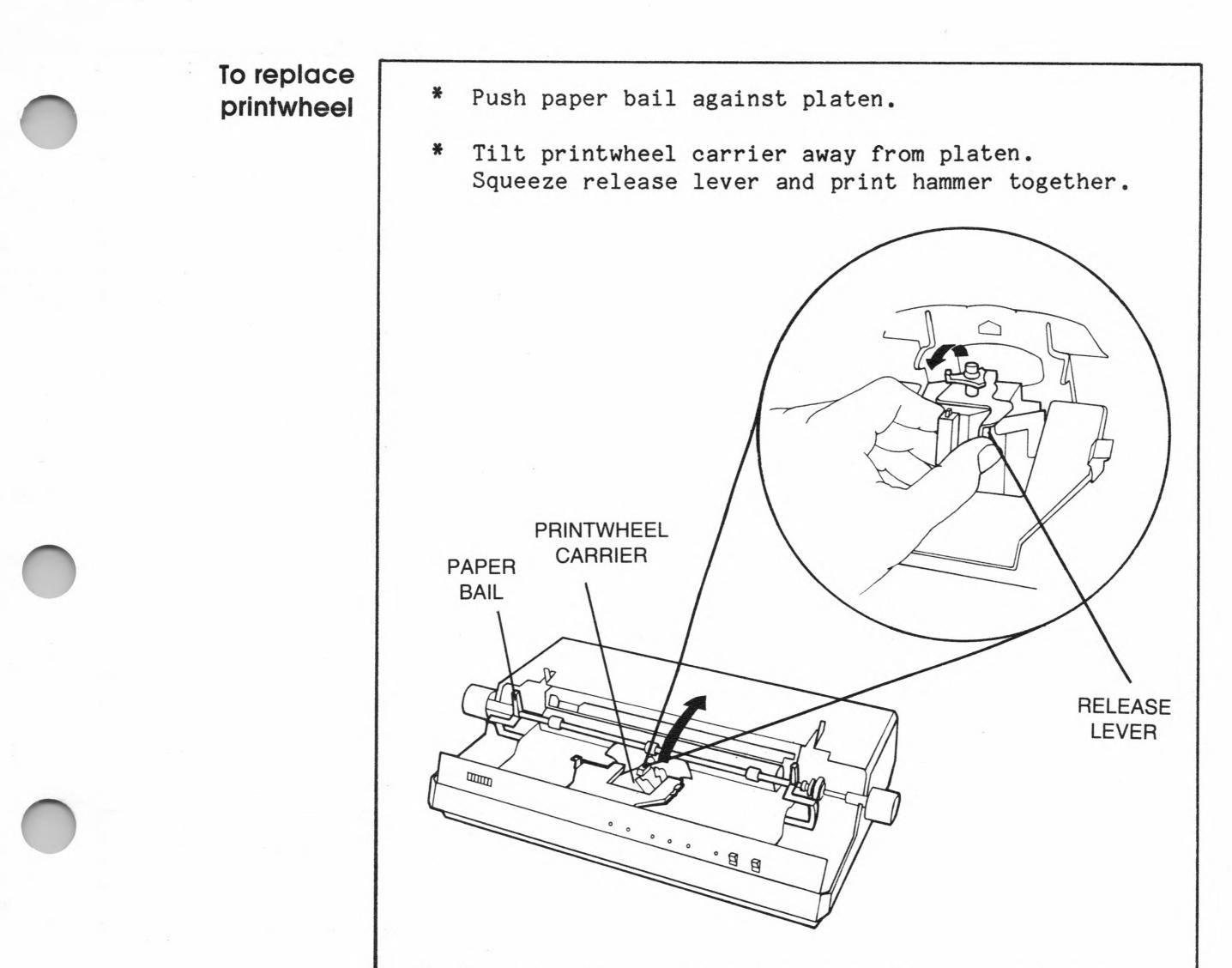
* Take up slack in ribbon by turning rewind knob in direction indicated on cartridge.
* Place ribbon between printwheel and card guide,

Place ribbon between printwheel and card guide, in front of two ribbon guides.

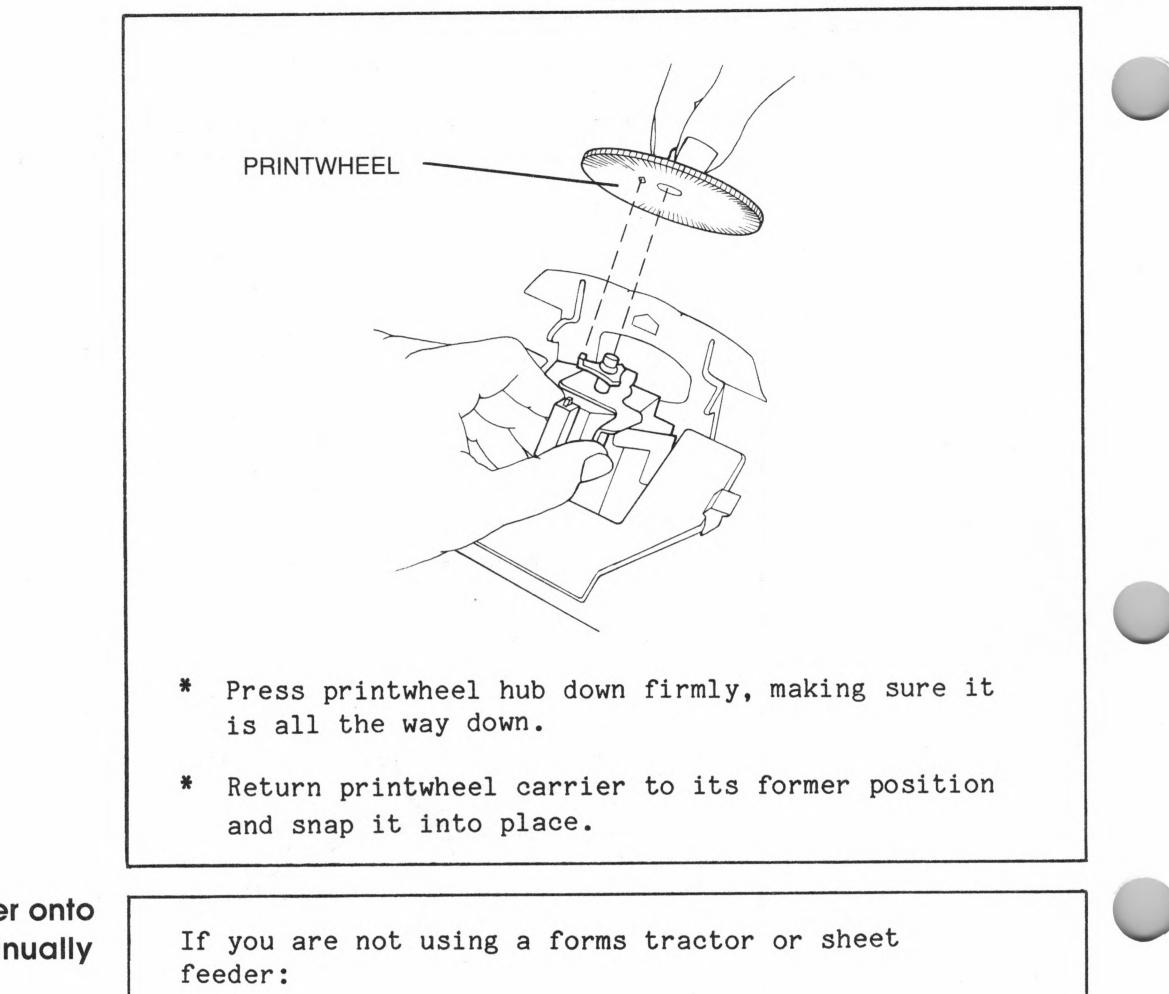
To change ribbon cartridge



4–22 Install Printer Accessories and Supplies

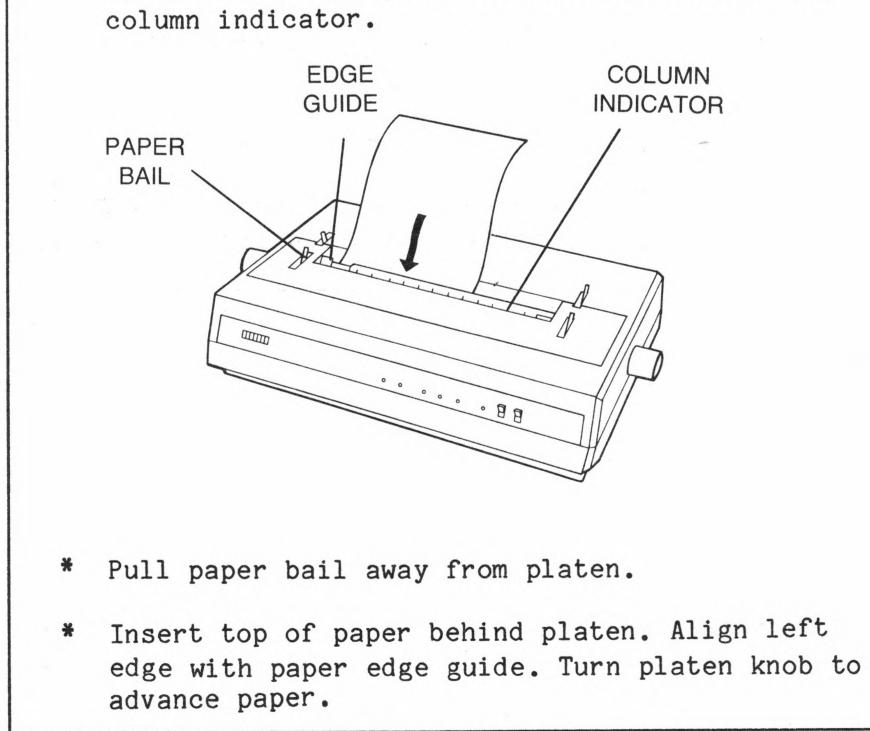


- * Gently pull printwheel carrier forward as far as it will go.
- * Pull printwheel upwards gently but firmly.
- * Install new printwheel. Align center hole with shaft, and align square hole with tab.

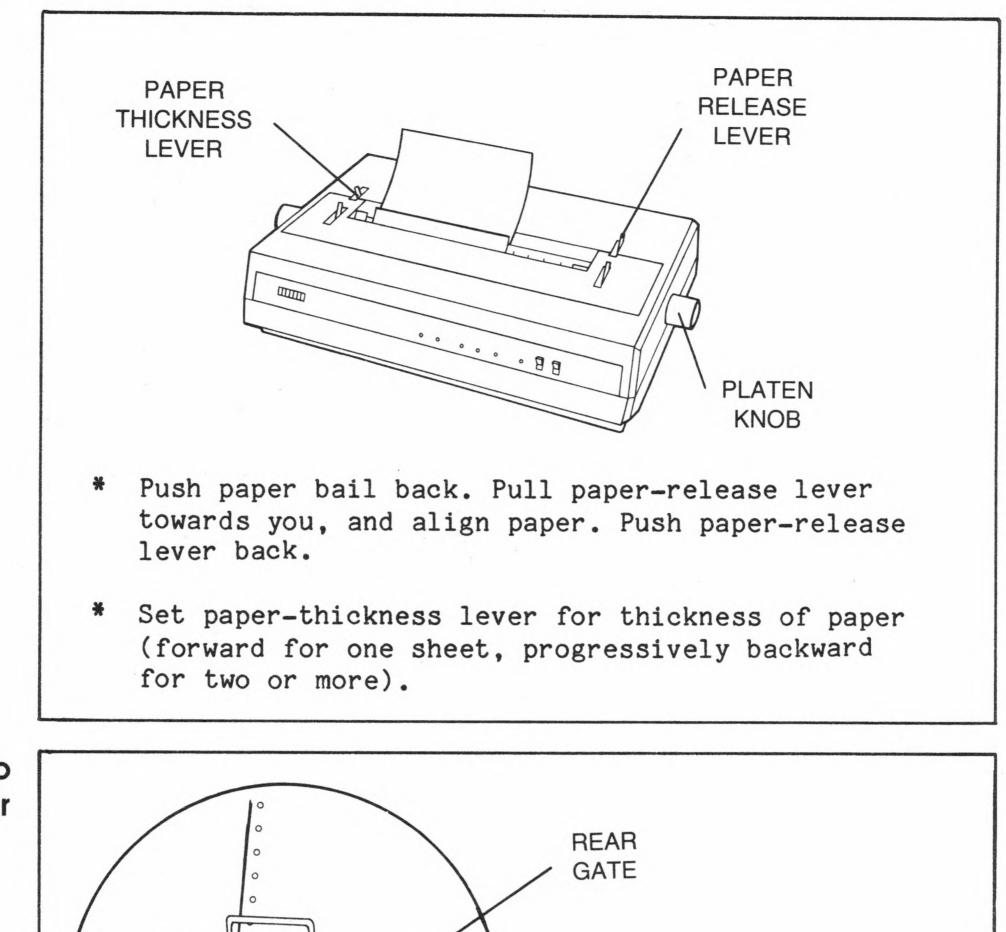


* Set movable edge guide at desired location on

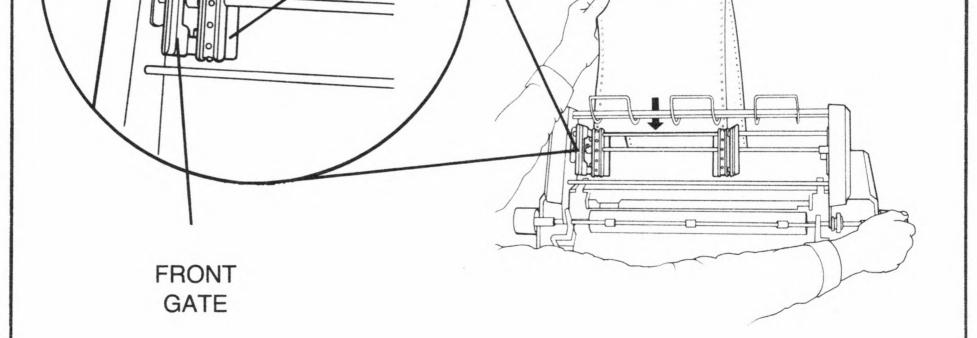
To load paper onto platen manually



4–24 Install Printer Accessories and Supplies

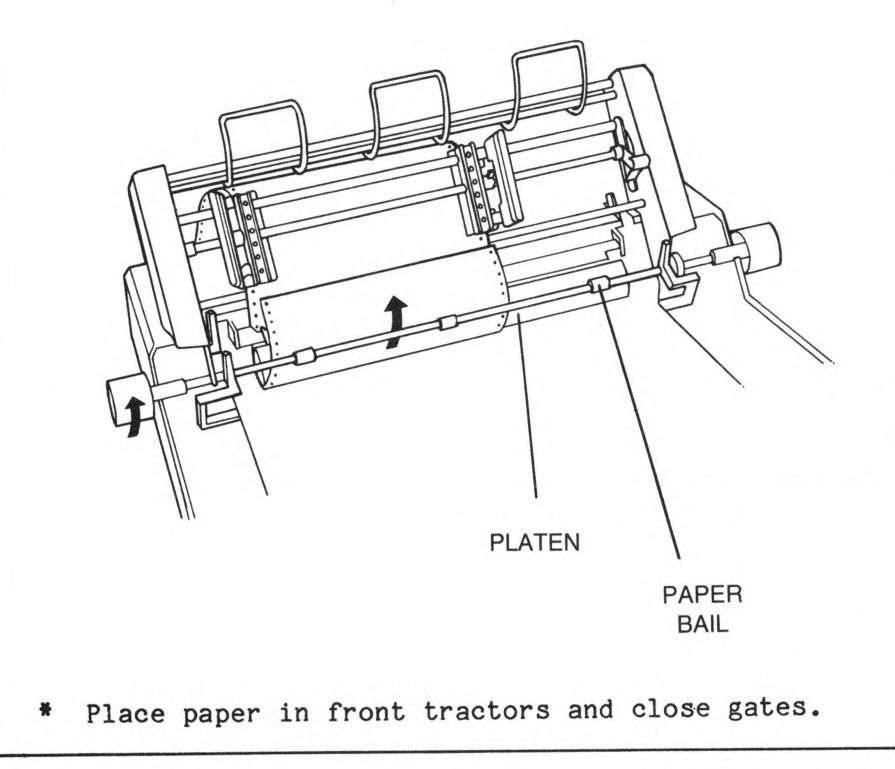


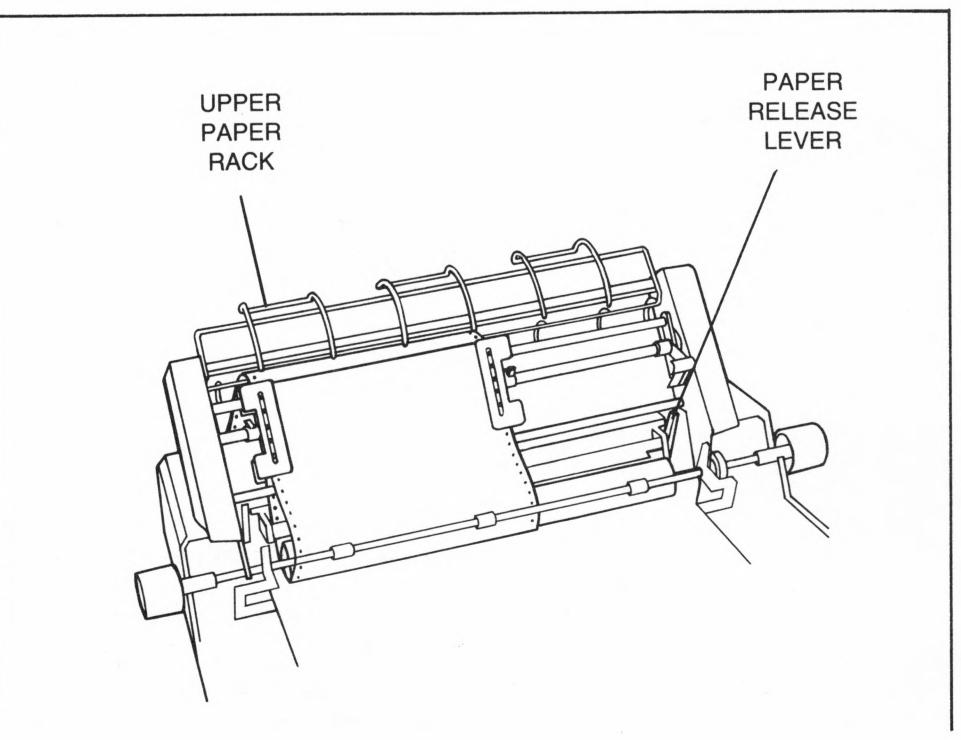
To load paper into forms tractor



- * Loosen left and right tractors by pressing down on locking levers.
- * Open front tractor gates.
- * Position tractors so that left edge of paper is aligned with left edge of platen.
- * Push paper-release lever back. Pull paper bail forward. Push paper-tension lever all the way down. Pull upper paper rack forward.

- * While turning platen knob, guide paper into both rear gates until tractor pins enter several holes.
- * Turn platen knob again to advance paper around platen, and up between paper bail and platen, until it covers front tractor pins.



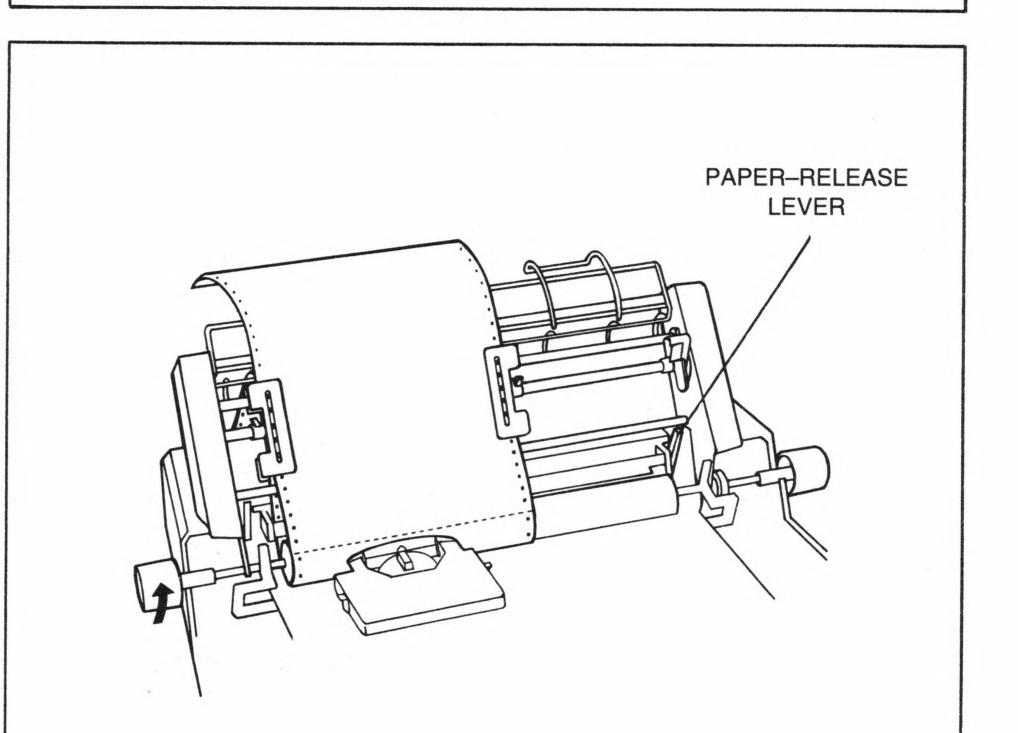


4–26 Install Printer Accessories and Supplies

* Move upper paper rack backward. Pull printer paper release lever forward. Slowly push up on tension lever to tighten paper.

Do not let tractor pins stretch or rip paper holes.

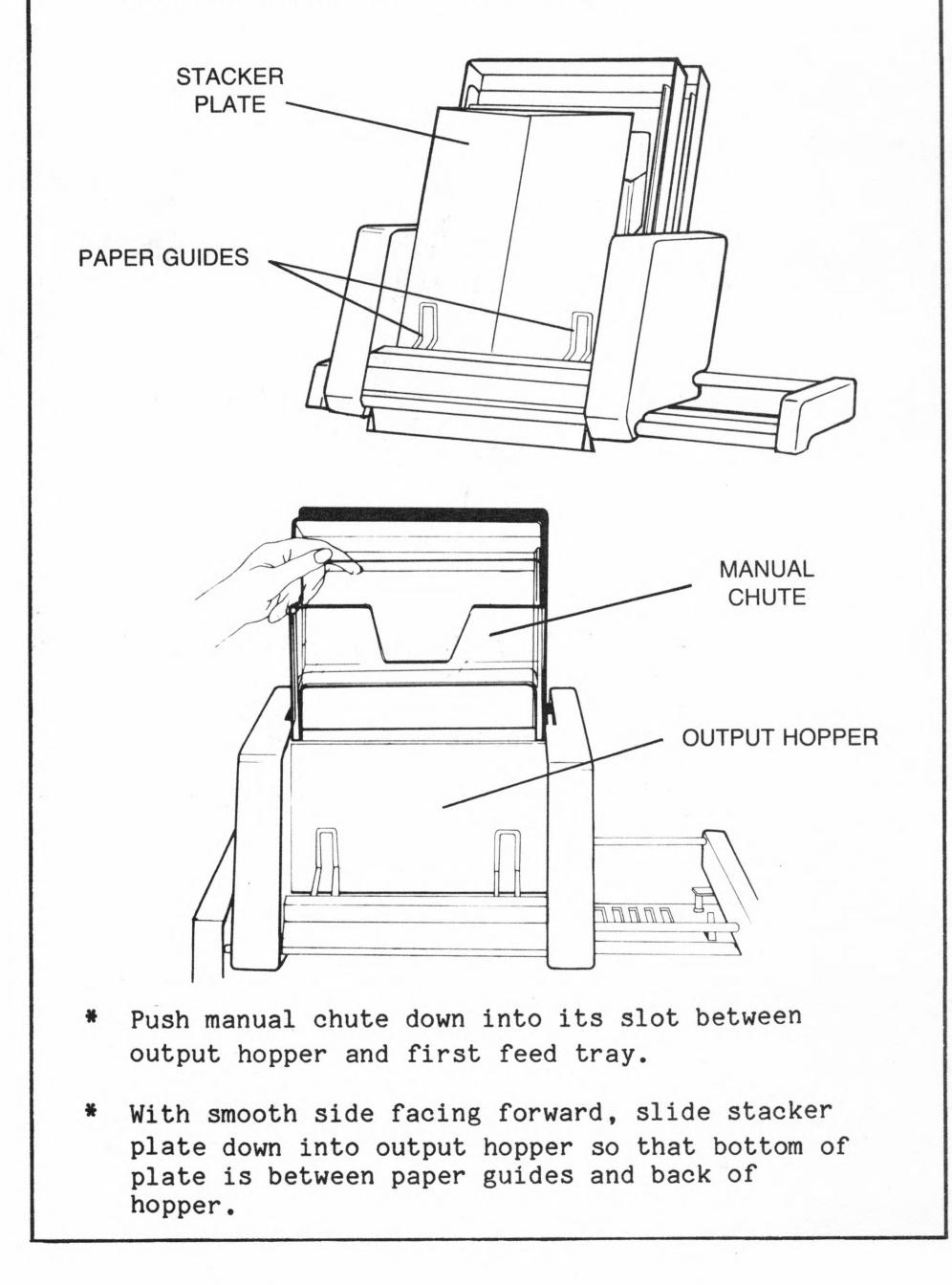
* Turn platen knob to advance paper to top of next page.



- * Keep the paper-release lever in the forward position.
- * Replace access cover.

To load paper into Automatic Sheet Feeder

- * Remove paper trays by tilting the top towards you until it clicks, and lifting upward.
- * Fan paper. Flip through sheets to separate them. Align edges of sheets.
- * Lay paper in tray. Press down on plate, and slide paper under corner separators.
- Insert the front and rear trays into either feed tray slot.
- * Lower tray into slot and push top of tray backward until it clicks into place.



4–28 Install Printer Accessories and Supplies

LA100 If you have purchased an LA100 printer, refer to the installation guide provided for instructions on installing paper and ribbons.

Install Printer Accessories and Supplies 4–29



Chapter 5 DECmate Operation

Immediately after you have installed your DECmate system, you must turn on and test your system.

This chapter explains:

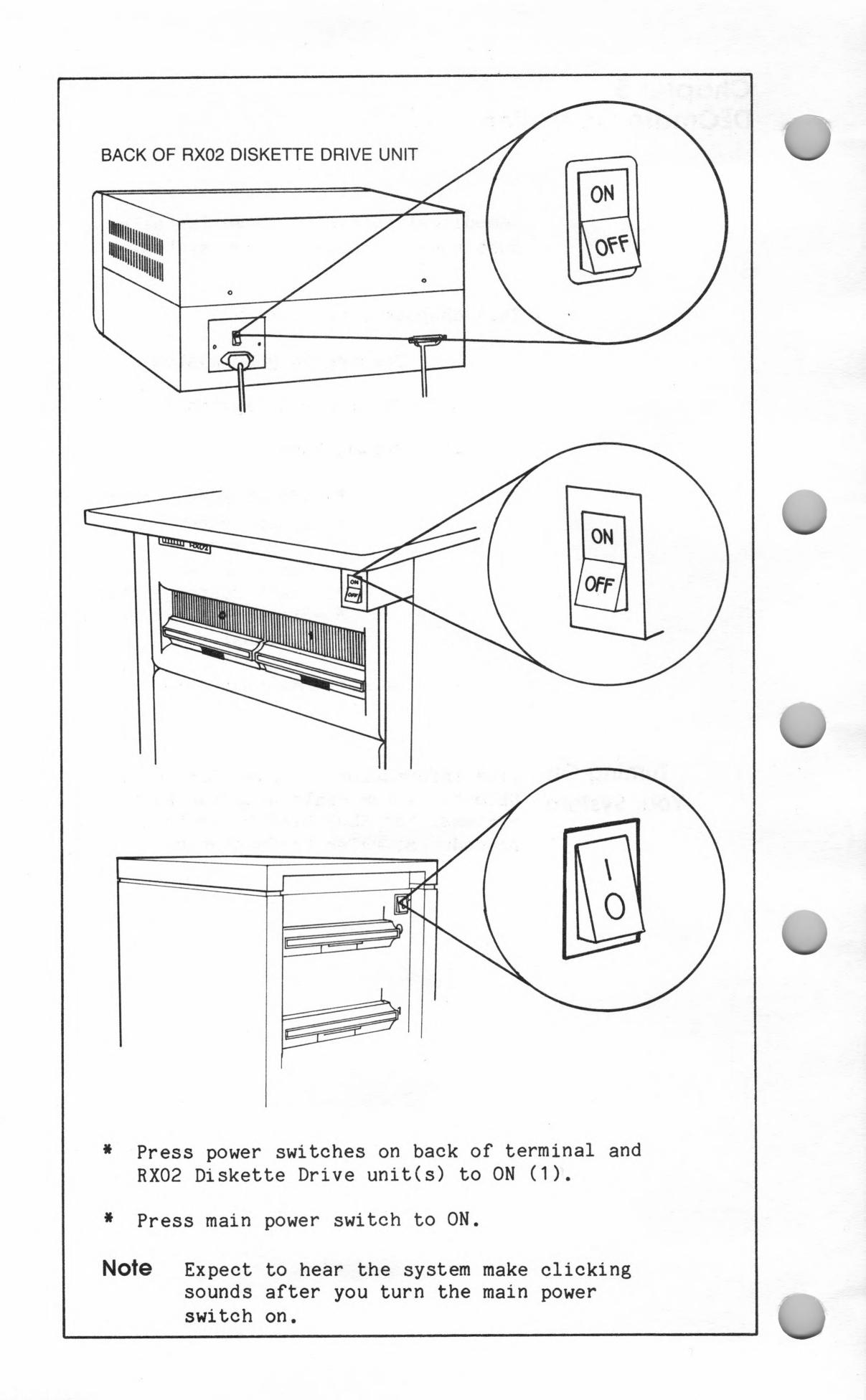
- Turning on your system
- Testing your system
- Set-Up Mode
 - * Adjust screen brightness
 - * Reset system
 - * Local mode
 - * Print screen
 - * Start system software
 - * Stop and start key click
 - * Terminal mode

Care and maintenance

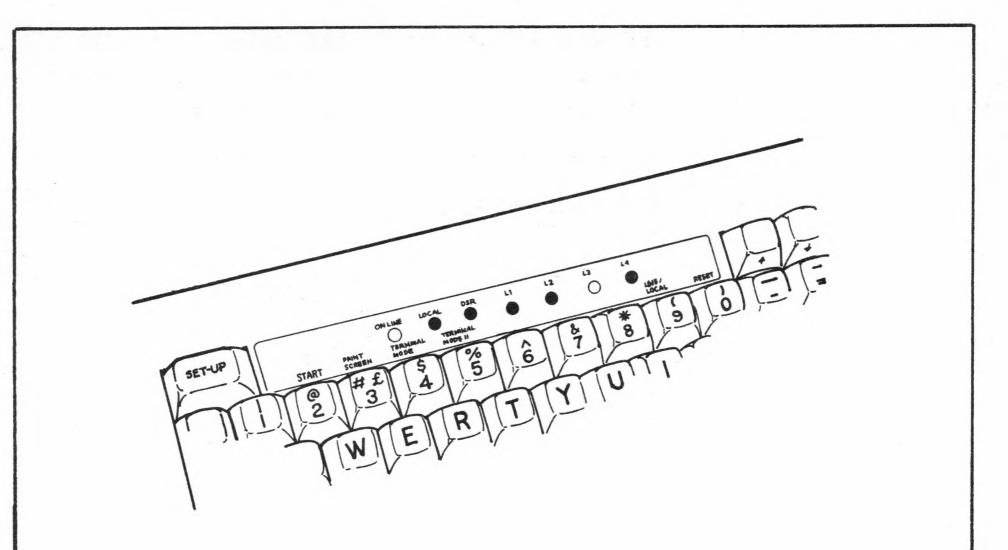
Turning On Your System

(The information included for turning on and testing your DECmate system deals with the Basic, Minidesk, and Pedestal systems. For RLO2 Disk Drive turning on and testing procedures, refer to Chapter 6.)

DECmate Operation 5-1



5–2 DECmate Operation



* Check keyboard indicators as system performs self-test.

The system performs a quick self-test every time you turn on the main power switch. All of the indicators should light up except ON LINE and L3. After a few seconds the indicators go off, and the ON LINE indicator comes on and stays on. This indicates a successful completion of the internal self-test.

*

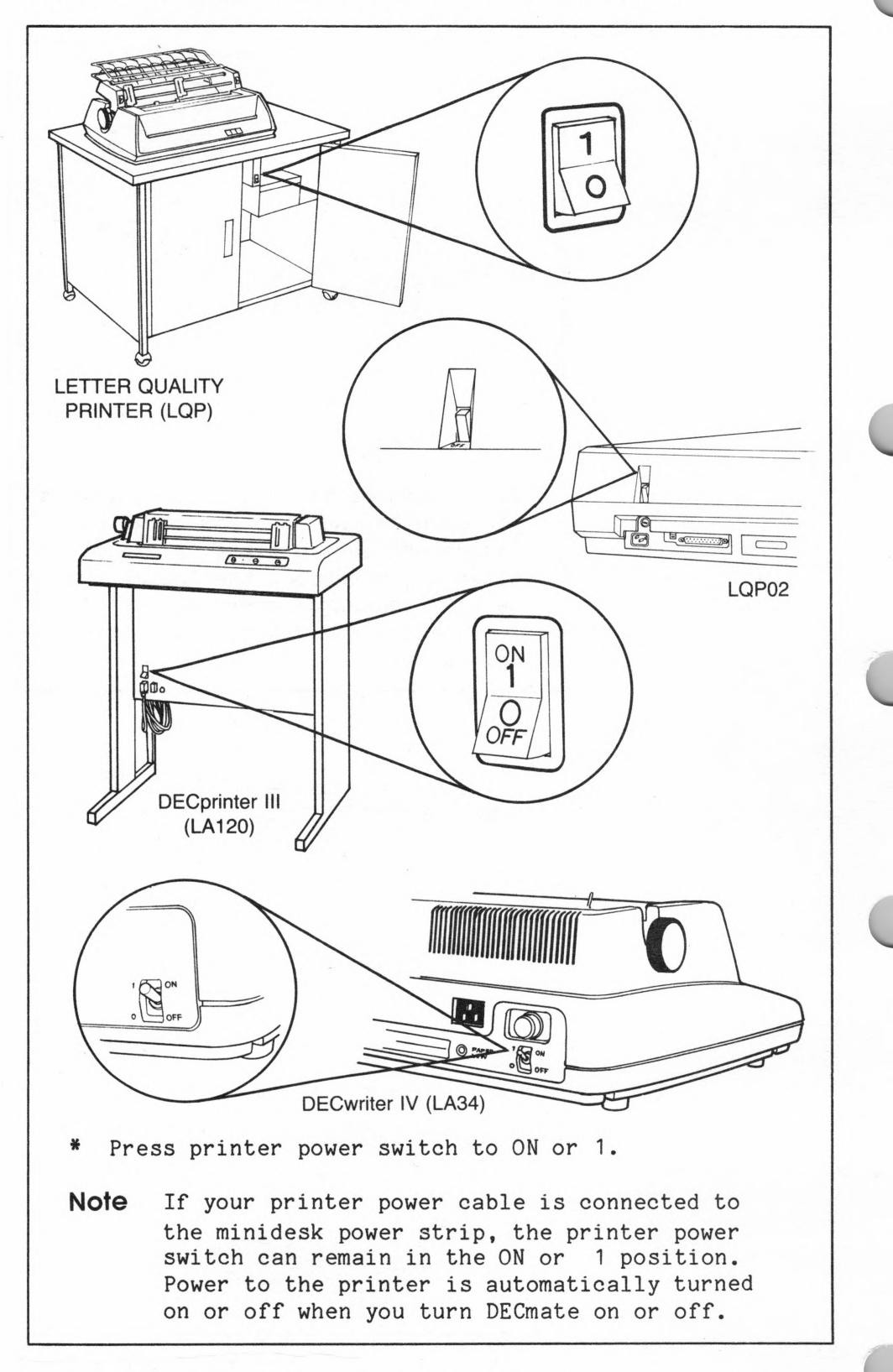
SET-UP

After several seconds a rectangular, blinking "cursor" appears in the upper left corner of the screen. The word SET-UP appears in the lower left.

DECmate Operation

5-3

If any lights stay lit other than ON LINE, or the word Set-Up does not appear, refer to the section "Solving Problems" later in this chapter.



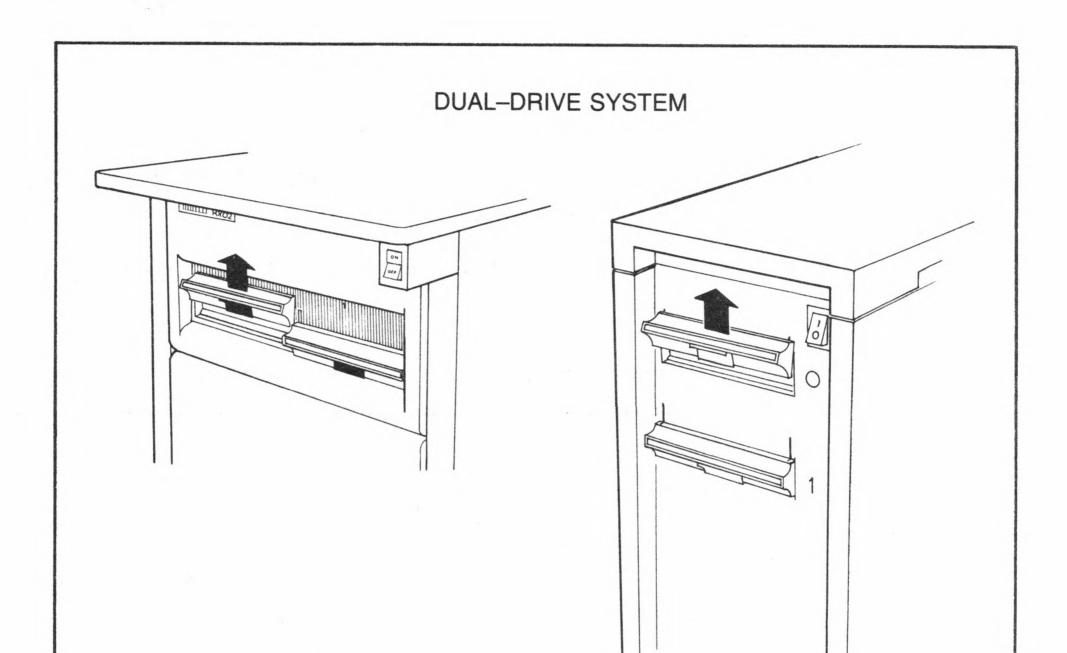
Turn to the next page to test your system.

5–4 DECmate Operation

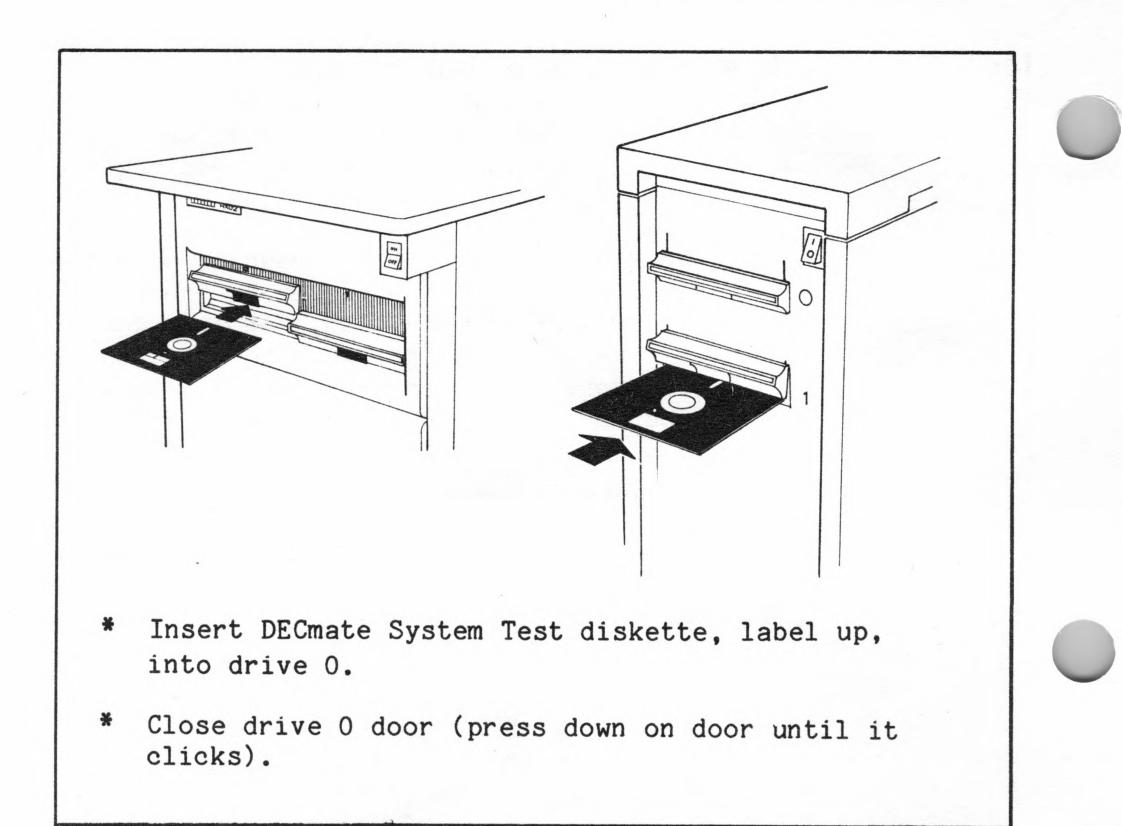
Testing Your System When to test your DECmate

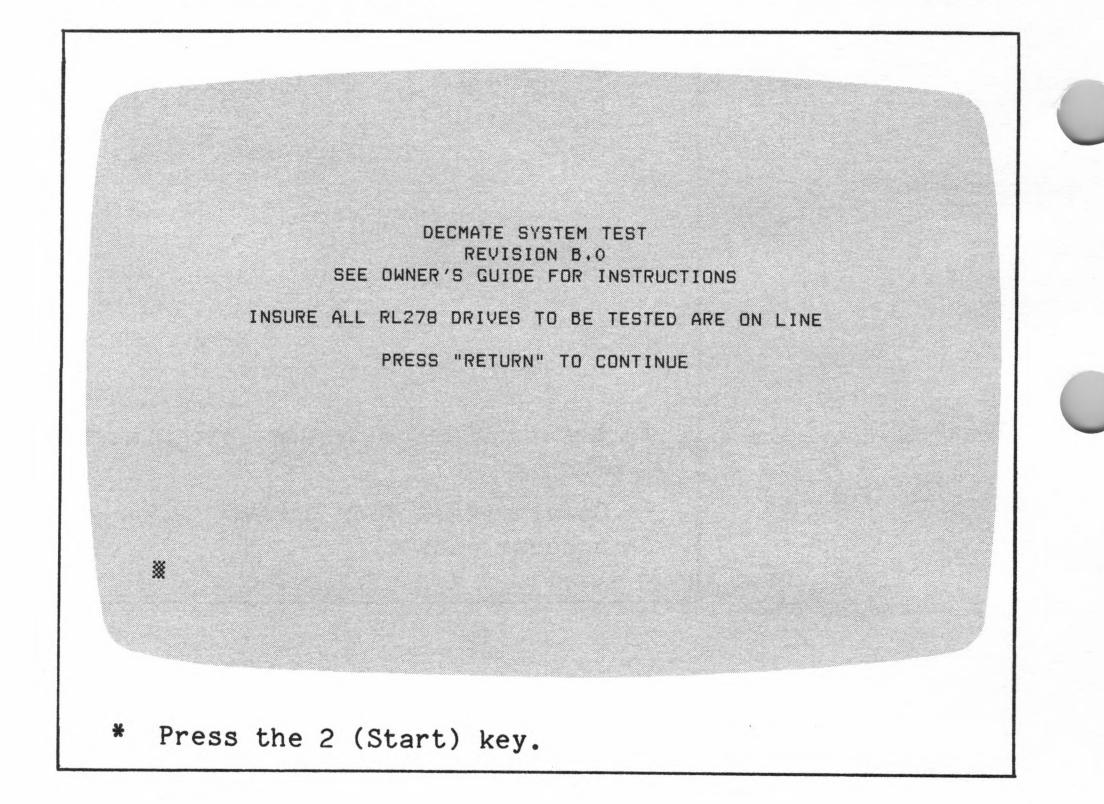
- Test your DECmate immediately after installation.
- Test your DECmate whenever you think it may be malfunctioning. The test takes only a few minutes to run.

As you run the test, if your results differ from those given in the instructions, refer to the problem solving section at the end of this section. Complete the problem-solving section before reporting problems to the Customer Service Hot Line. However, should you run into a problem that does not allow you to continue testing, report it immediately.

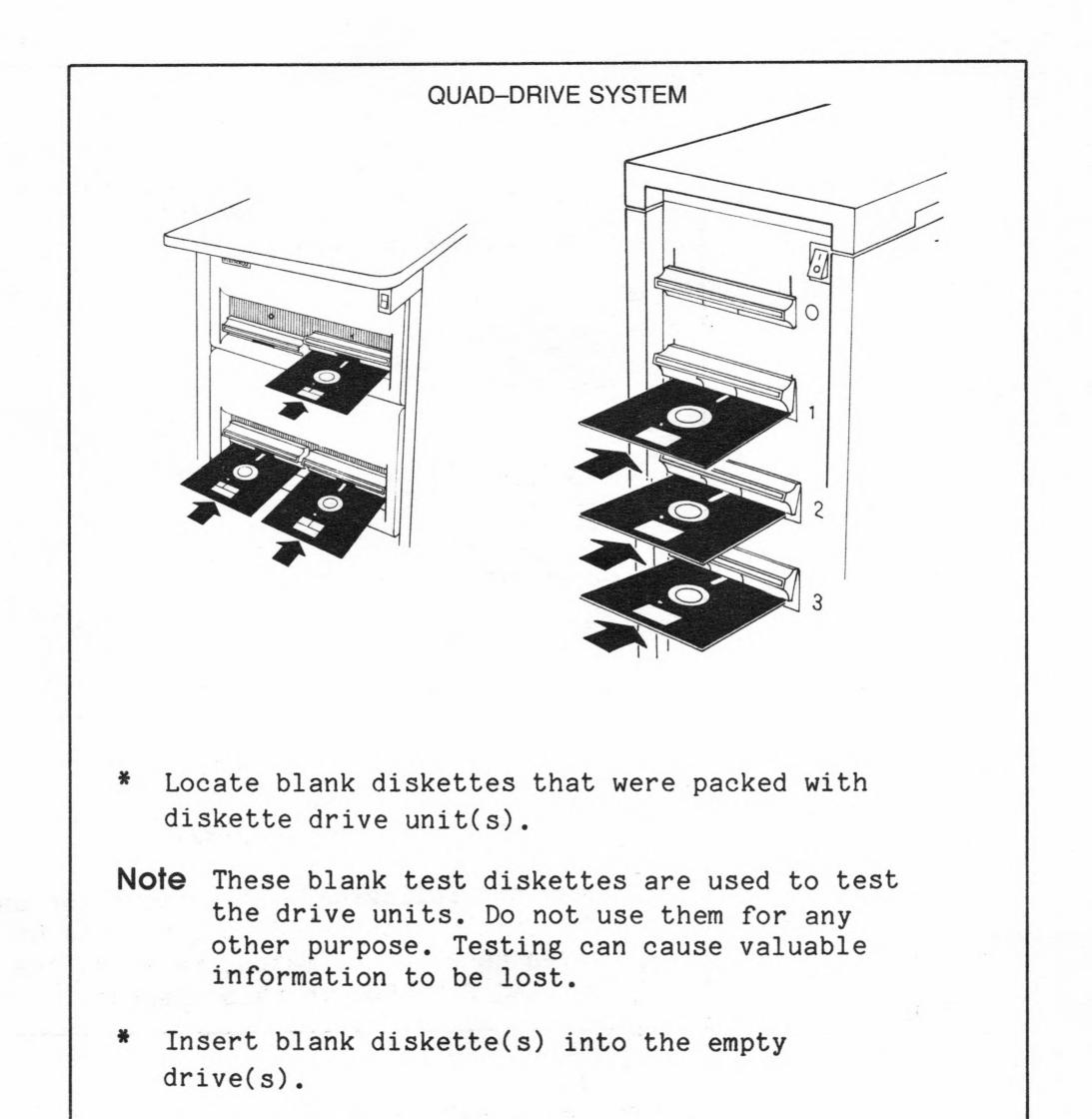


- * Locate DECmate System Test diskette.
- * Open drive 0 door (grasp center of handle and squeeze catch).





This display tells you the name of the test and its revision number.



* Close all drive doors.

Run System Test Diskette

Having started the system and inserted the test diskettes, you are now ready to make DECmate test itself. Do not press any keys until instructions tell you to do so.

* Press RETURN.

DECmate Operation 5–7

SYSTEM CONFIGURATION KEYBOARD LANGUAGE ENGLISH

MEMORY AVAILABLE: 32K WORDS

CLOCK

PRINTER PORT

FLOPPY DRIVES AVAILABLE UPPER: TYPE: LOWER:

COMMUNICATIONS OPTION TYPE:

PRESS "RETURN" TO TEST 💥

* Look at the screen display.

* Read the following explanations for each line of the screen display. If the results of any line given here do not match, refer to the section SOLVING PROBLEMS in this chapter.

SYSTEM CONFIGURATION

A heading.

KEYBOARD LANGUAGE

DECmate is sold in many countries and has a different keyboard for each language. This line of the display tells you the language for which your keyboard is designed. Be sure your keyboard language is appropriate.

MEMORY AVAILABLE

This line tells you how much memory your DECmate has. Make certain that the amount of memory is 32K.

5–8 DECmate Operation

CLOCK

The terminal contains an electronic clock. When you enter a date and time, you set the clock. This line of the display indicates that your system clock will be tested.

PRINTER PORT

You may have a printer connected to your terminal. If you do, the display identifies the printer for you.

Printer type:

Display:

Letter Quality Printer	LQP
DECwriter IV (LA34) Printer	LA34
DECprinter III (LA120) Printer	LA120

If you do not have a printer, nothing appears on the screen next to the word PRINTER.

FLOPPY DRIVES AVAILABLE UPPER: TYPE: LOWER:

On a minidesk: The word UPPER refers to the top drive unit (dual-drive system). The word LOWER refers to the bottom drive unit (quad-drive system).

On a pedestal: UPPER LEFT refers to Drive 0, UPPER RIGHT refers to Drive 1, LOWER LEFT refers to Drive 2, and LOWER RIGHT refers to Drive 3.

If you have a dual-drive system, you should see BOTH next to the word UPPER and NONE next to the

Note Since empty drives are not tested, you should have a diskette in every drive.

If you do not have a diskette in each drive, put them in now. Close all drive doors. Hold the CTRL key down, and press the SET-UP key. Next, release the CTRL key and press the 2 key. The test restarts and your screen should display the correct words next to UPPER and LOWER.

DECmate Operation 5–9

This portion of the screen display also identifies your drive unit. Most DECmate systems have RXO2 drive units. Next to the word TYPE you should see either RXO2 or RXO1. Make sure that the name displayed on your screen matches the name on your drive unit(s).

COMMUNICATIONS OPTION

If your DECmate system has the communications option, the type of option is displayed. There are two communications option types: Type A and Type B.

If you do not have the communications option, the word NONE appears.

RL278 DRIVES AVAILABLE

If your DECmate system has an RLO2 disk drive, this line indicates the number of drives (0 and 1) available.

PRESS "RETURN" TO TEST

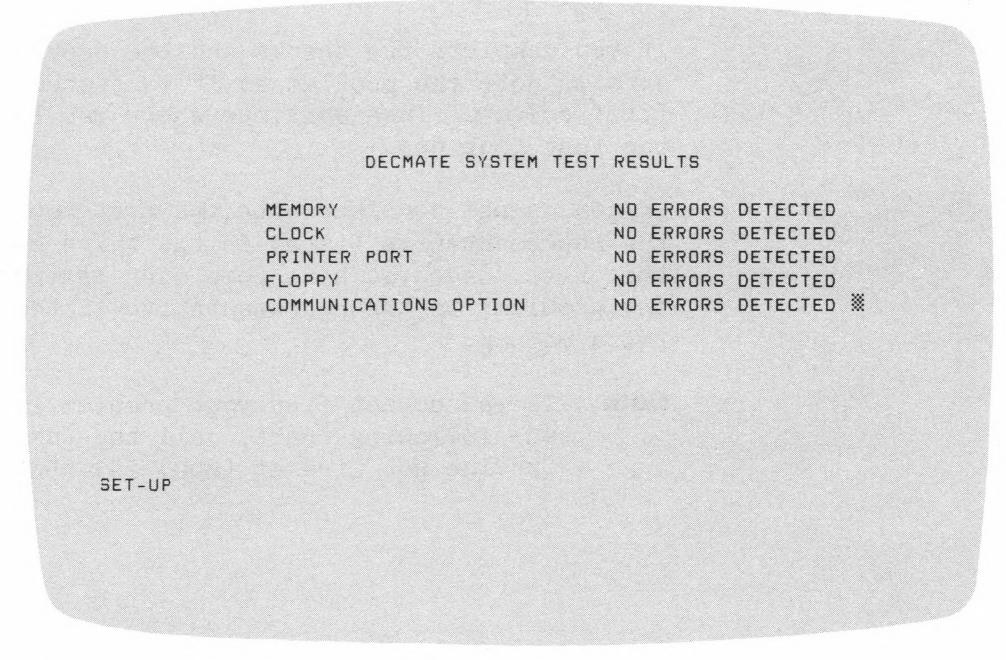
This line of the screen display is an instruction.

* Press RETURN.

The test begins, and the following occurs:

- A new screen display appears.
- The word RUNNING in the lower-left corner of the screen indicates the test is in progress.
- DECmate makes clicking sounds.
- If you have a printer attached, it prints several lines of characters.

The test takes approximately one minute. When finished, the following displays:



* Remove the System Test diskette and all other diskettes from the drives.

You have now completed testing your DECmate system.

If You Found No Errors Your DECmate is ready to operate with your purchased software. If you have purchased an application package, refer to the owner's manual provided. If you have purchased Word Processing Software, refer to the DECmate System Overview (EY-0026E-ES) and the DECmate Word Processing Startup Guide (AA-L924A-TA).

If You Found Errors If ERRORS DETECTED appears next to the name of the malfunctioning component, go to the subsection, SOLVING PROBLEMS on the next page.

Read the section Set-Up Mode in this chapter to learn how to make necessary adjustments to your terminal, such as adjusting screen brightness, stopping and starting key click, and others.

DECmate Operation 5–11

SOLVING PROBLEMS

Use this section to solve simple problems that can occur during the test routines.

If you complete the checks and the problem still exists, note the problem as it is stated in the first column. Then continue where you left off in the test routines.

If you cannot continue with the test routines, call the representative listed in the third column of the chart. Once you have completed testing, report any problems to the representative listed in the third column.

Note If you do not find your problem listed in the following chart, call the Customer Service Hot Line at (800) 241-6580.

5–12 DECmate Operation

Description of Problem	What to Check or Do to Correct the Problem	Who to Call for Help
DECmate does not perform self-test OR	* The keyboard cable should be plugged into the back of the terminal.	
When DECmate is turned on, the system does not appear to start or make any sound.	* If you have the cabinet, the system power cord should be plugged into a wall socket.	
	* The terminal power cable should be plugged into the cabinet power strip or into a wall outlet if you do not have the cabinet.	
	* The drive unit power cable should be plugged into cabinet power strip or into a wall socket if you do not have the cabinet.	
	* The terminal power switch should be in 1 (ON) position.	
	* The drive unit ON/OFF power switch should be in ON position.	
	* The terminal fuse should not look	Customer Service

Cursor and the word SET-UP do not appear after pressing the main power switch to ON. However you can hear the system's cooling fans operating and the ON LINE keyboard indicator is lit. burned, nor should the filament in the fuse be broken.

* Press system main power switch to OFF, then press it back to ON and wait about 3 seconds for cursor and SET-UP to appear. (If you do not have the cabinet, check that the terminal and drive unit power switches are turned on.)

* Hold CTRL key down and press SET-UP key. Then type on the up-arrow key several times. The cursor and SET-UP should appear on your screen. Hot Line (800) 241-6580

DECmate Operation 5–13

Description of Problem	What to Check or Do to Correct the Problem	Who to Call
	* The keyboard cable should be plugged into the back of the terminal.	Customer Service Hot Line (800) 241-6580
Printer does not start when the main power	* The printer power switch should be in in the ON or 1 position.	
is turned on.	* You should be able to hear the system's fans and see the cursor and word SET-UP on the screen.	
	* If you have the cabinet, check to make sure that the printer power cord is plugged into the cabinet power strip.	
	* If you do not have the cabinet, be sure that the printer power cord is plugged into a wall socket.	
	* The printer's fuse should not look burned, nor should	Customer Service

You hear a rapid clicking sound after pressing the 2 key. not look burned, nor should the filament in the fuse be broken.

* The System Test diskette should be in drive 0.

* The drive 0 door should be closed.

*

Insert System Test diskette into drive 0 if it is not already there. Be sure you are putting diskettes into the drives correctly. (See the subsection entitled Turning System On.) Close drive 0 door. While holding the CTRL key down, press the SET-UP key. When you see SET-UP key. When you see SET-UP and the cursor, press the 2 key.

Customer Service Hot Line (800) 241-6580

Hot Line

(800) 241-6580

5–14 DECmate Operation

rvice

Description of Problem	What to Check or Do to Correct the Problem	Who to Call
The first screen display described in this chapter does not appear.	* Press main power switch to OFF. Then press it to ON. After the word SET-UP appears, press the 2 key.	Customer Service Hot Line (800) 241-6580
	DO NOT press any other keys. The first screen display should appear.	
An inappropriate keyboard language is displayed.	* This condition must be corrected by the appropriate service representative.	Customer Service Hot Line (800) 241-6580
The amount of memory displayed is not 32K.	* This condition must be corrected by the appropriate service representative.	Customer Service Hot Line (800) 241-6580
The word CLOCK is not shown in the screen display.	* This condition must be corrected by the appropriate service representative.	Customer Service Hot Line (800) 241-6580

You have a printer connected to your system, but its name is not displayed next to the word PRINTER. * Check to be sure that the printer cable is connected correctly.

* The printer power cable should be connected to both the printer and to the cabinet power strip (or, to a wall outlet, if you do not have the cabinet).

* The printer power switch should be turned on.

Customer Service Hot Line (800) 241-6580

DECmate Operation 5–15

Description of Problem	What to Check or Do to Correct the Problem	Who to Call
You have a dual-drive system, but you do not see the word BOTH next to the word UPPER in the first screen display.	* A blank diskette should be in drive 1 and the drive 1 door should be closed. If not, insert a blank diskette in drive 1 and close the drive 1 door. While holding down the CTRL key, press the SET-UP key. Release the CTRL key and press the 2 key. This restarts the test. You should now see the word BOTH next to the word UPPER in the first screen display.	Customer Service Hot Line (800) 241-6580
You have a quad-drive system, but you do not see the word BOTH next to the words UPPER and LOWER in the first screen display.	* Blank diskettes should be in drives 1, 2, and 3. All drive doors should be closed. If not, insert blank diskettes in drives, and be sure all drive doors are closed. While holding down the CTRL key, press the SET-UP key. Release the CTRL key and press the 2 key. This restarts the test. You should now see	

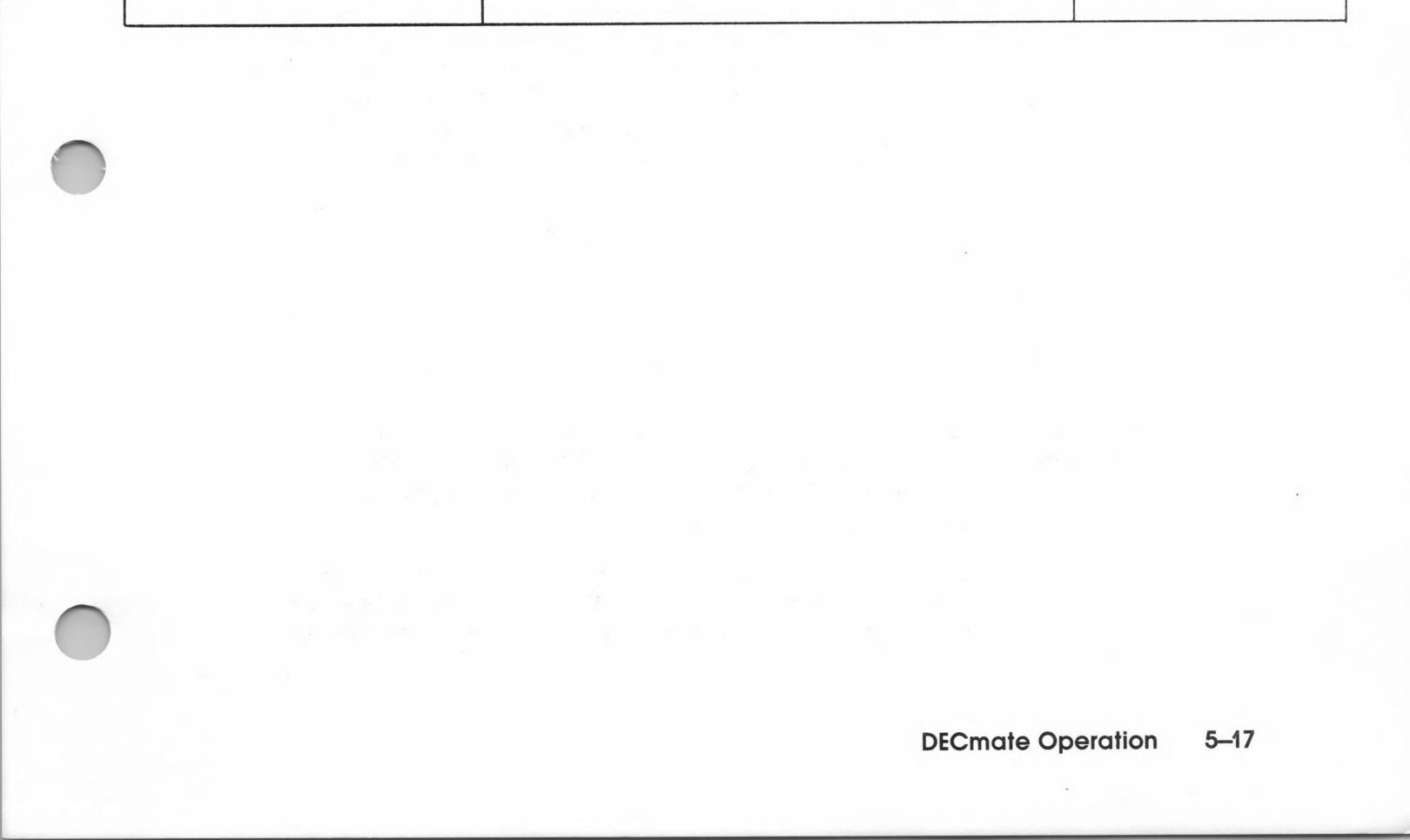
the word BOTH next to the words UPPER and LOWER in the first screen display.

- * If you still do not see the word BOTH next to UPPER and LOWER, check to be sure the terminal cable is connected correctly
- ¥ Both drive unit ON/OFF switches should be in the ON position.
- * The drive unit power cables should be plugged into the cabinet power strip.

Customer Service Hot Line (800) 241-6580

5-16 **DECmate Operation**

Description of Problem	What to Check or Do to Correct the Problem	Who to Call
You purchased the Communications Option but you do not see TYPE A or TYPE B displayed.	* Check your purchase agreement to be certain the Communications Option was ordered.	If your purchase order shows that you ordered the Communications Option and you do not have the
	* If the Communications Option was ordered, remove the cable shield on the back of the terminal. There should be two ports,	two ports labeled COMM 0 and COMM 1, call your Sales Repre-
	one labeled COMM 0 and one labeled COMM 1.	sentative. If you do have the two communi- cations ports
		and the type is not displayed, call your DIGITAL Sales representative.
ERRORS DETECTED appears in the last screen display.	* If ERRORS DETECTED appears on your screen, write down the name that is shown on the same line and to the left of the	representative.
	words ERRORS DETECTED.	Customer Service Hot Line



Set-Up Mode Your DECmate terminal has many special Set-Up functions such as:

- × Adjust screen brightness
- Reset system ¥
- ¥ Local mode
- ¥ Print screen
- × Start system software
- ¥ Stop and start key click
- Terminal mode ¥

The Set-Up functions can be used after you put DECmate into Set-Up Mode.

Caution The functions Reset System, Start System Software, and Terminal Mode must be used carefully. See specific functions for details.

Enter and Exit Set-Up Mode

There are two ways to enter Set-Up Mode.

- 1. When you turn DECmate on, the system automatically enters Set-Up Mode.
- 2. You can enter Set-Up Mode while the system is

running by holding down the CTRL key, then pressing the SET-UP key. The last line of information on your screen disappears and is replaced by the word SET-UP. Once in Set-Up Mode, you can use any of the following functions and features.

To exit Set-Up Mode, see the following sections.

Set-Up Mode **Functions**

Adjust screen To make the characters on the screen brighter, brightness enter Set-Up Mode and press the A key. The characters increase in brightness a little each time you press the 📥 key.

> To reduce the brightness of the characters, enter Set-Up Mode and press the 🛹 key. The brightness decreases a little each time you press the 🛹 key.

5-18 **DECmate Operation** When the system's power is turned off, the degree of brightness returns to average the next time you use the system.

To leave Set-Up Mode, press the SET-UP key. You are returned to where you were before you used this function.

Reset system The system performs a self-test each time you turn on the power. The keyboard indicators light up when you start the system. The momentary lighting of the keyboard indicators tells you that the self-test is being performed.

> To reset the system, enter Set-Up Mode. Then press the O (zero) key. When the self-test is complete, you automatically return to Set-Up Mode.

Caution Do not use this function unless your work is stored on your diskette. Any information displayed on the screen when you start the self-test is permanently lost.

Local Mode To test any of the numeric, alphabetic, or character keys on the keyboard, use Local Mode.

To enter Local Mode, first enter Set-Up Mode and press the 9 key. The light labeled LOCAL at the top of your keyboard should be the only one lit. Press the SET-UP key; the word Set-Up disappears from the bottom of the screen. You are now in Local Mode. Any characters you type will appear on the screen.

To exit Local Mode, enter Set-Up Mode (hold the CTRL key down, then press SET-UP).

Note Local Mode does not record what you type on the keyboard onto a diskette. Also, what you type does not affect a software application program you may be running when you enter Local Mode.

Print screen To quickly print what appears on your terminal screen, use Print Screen. Enter Set-Up Mode, then press the 3 key. Whatever is displayed on your screen is printed. DECmate stays in Set-Up Mode until printing stops. While the screen is being printed, an interference pattern appears repeatedly. This is normal and indicates that the information on the screen is being sent to the printer. If printing does not start, check for proper printer set-up and cabling (see Chapter 3). When printing is complete, exit Set-Up Mode by pressing SET-UP. Note Some nonstandard (non-ASCII) characters printed may not match the characters displayed on the screen. Start system software You start your system from Set-Up mode. When you start the system, the system begins the software program on the diskette in drive 0. This procedure is frequently referred to as "bootstrapping" or "booting" the system. Restart the system every time you put a different system diskette into drive 0.

> To start or restart the system, enter Set-Up Mode. (Hold down the CTRL KEY AND PRESS SET-UP.)

ONCE IN SET-UP MODE:

- Press the 2 key to start a diskette-based system.
- Press the 6 or 7 key to start an RLO2 disk-based system. See Chapter 6 for a full explanation of these two keys.

IMPORTANT: Do not restart your system when you are in the middle of a software application program. Valuable information can be lost if you do.

Stop and Start To stop the keys from clicking as you type, enter Key Click Set-Up Mode and press the 8 key.

To restart the key click, enter Set-Up Mode and press the 8 key again.

To leave Set-Up Mode, press the SET-UP key.

5–20 DECmate Operation

Terminal Mode Is a special mode of operation that lets your DECmate "communicate" with other computers. Terminal Mode is discussed in detail in Chapter 7.

Care and Maintenance

- Points to remember * Make copies of your work every day. Always copy your diskettes after using them to avoid losing valuable information. Since each software package has its own method for copying diskettes, refer to the appropriate operator's manual for instructions.
 - Turn your system off. After storing (filing) × your work, remove all diskettes from the drives and put them in their protective paper jackets and diskette boxes. Then press main power switch to OFF (or, if you have a Basic DECmate System, turn off the terminal and drive unit power switches individually).
 - * Never move the terminal, drive unit, or printer while they are operating.
 - * If a power failure occurs while you are using DECmate, turn off the system. When power is restored, turn the system back on and restart the software.

Care of Your The DECmate system requires very little care. However, to prevent unnecessary damage you should: DECmate System

- * Keep the area around your DECmate system clean. Don't drop cigarette ashes or spill liquids on the keyboard.
- * Keep small objects and liquids away from the system.
- * Clean the terminal screen with glass cleaner. Power must be OFF when cleaning the screen.
- * Clean the exterior surfaces of the system using a soft cloth and a mild detergent. The cloth should not be sopping wet during cleaning and the power to all components of the system must be OFF.
- Do not cover the terminal ventilation slots by × stacking books and papers on top of the unit.

DECmate Operation 5-21

Care of Diskettes Diskettes are easily damaged. When handling them, take the following precautions:

- * Store diskettes in their protective paper jackets when they are not mounted in the diskette drives.
- * Store diskettes that are not being used immediately in their box. Keep no more than 10 diskettes in a box.
- Do not expose diskettes to direct heat, * sunlight, or cold.
- * Do not use magnets or magnetized objects near diskettes. Exposure to a magnetic field can cause loss of data.
- * Place identification labels on new diskettes in the same location as that used on the diskettes you received with your DECmate system. Never place labels one on top of another.
- * Use only fiber tip pens to write on labels already placed on a diskette.
- * Do not use erasers on diskette labels or surfaces.
- * Do not use rubber bands, paper clips, or any other type of fastener on diskettes.
- Hold diskettes by the corners near the diskette labels. Touching the diskette surface can cause errors or loss of information.
- * Never try to clean the diskette surface with any type of solution.
- * Do not fold or bend diskettes.
- * Do not place heavy books on diskettes.
- * Never force a diskette into a diskette drive. If you have difficulty, check to be sure a diskette is not already in the drive.
- * Avoid eating or drinking in areas where diskettes are used or stored.

5-22 **DECmate Operation**

Care of RL02 * Disk Drive units

To maintain the RLO2 disk drives clean the exterior surfaces of the disk cabinets using a soft cloth and a mild detergent. The cloth should not be sopping wet during cleaning and the power to the disk cabinet must be OFF.

Do not try to clean the inside of the disk chamber yourself.

Care of RLO2 Disks You may have already read the rules for handling diskettes. There are similar rules for handling disks. These rules help keep the disk and the disk drive clean and prevent damage.

- * Never touch the surface of the disk. When you take the lid off the disk, you can sometimes see the brown surface of the actual disk. Hold the disk only by its housing.
- * Do not touch anything inside the disk compartment of the disk drive. When you raise the hatch of the disk drive, you can see the internal components that read the surface of the disk.
- * Keep dust out. Never leave the disk's lid off the disk except when the disk is inside the disk drive. Never leave the disk drive's hatch open.
- * Keep foreign matter away. When you have a disk

or a disk drive open, do not eat, drink, or smoke. Ashes or other matter can contaminate the delicate parts of the disk drive and cause it to fail.

* Never force anything. The controls of the RLO2 disk drive sometimes lock. For instance, the RLO2 may prevent you from raising the lid if the disk is not ready to come out. If a lever does not seem to want to move, do not force it; instead, wait a few seconds before trying again or find out the cause.

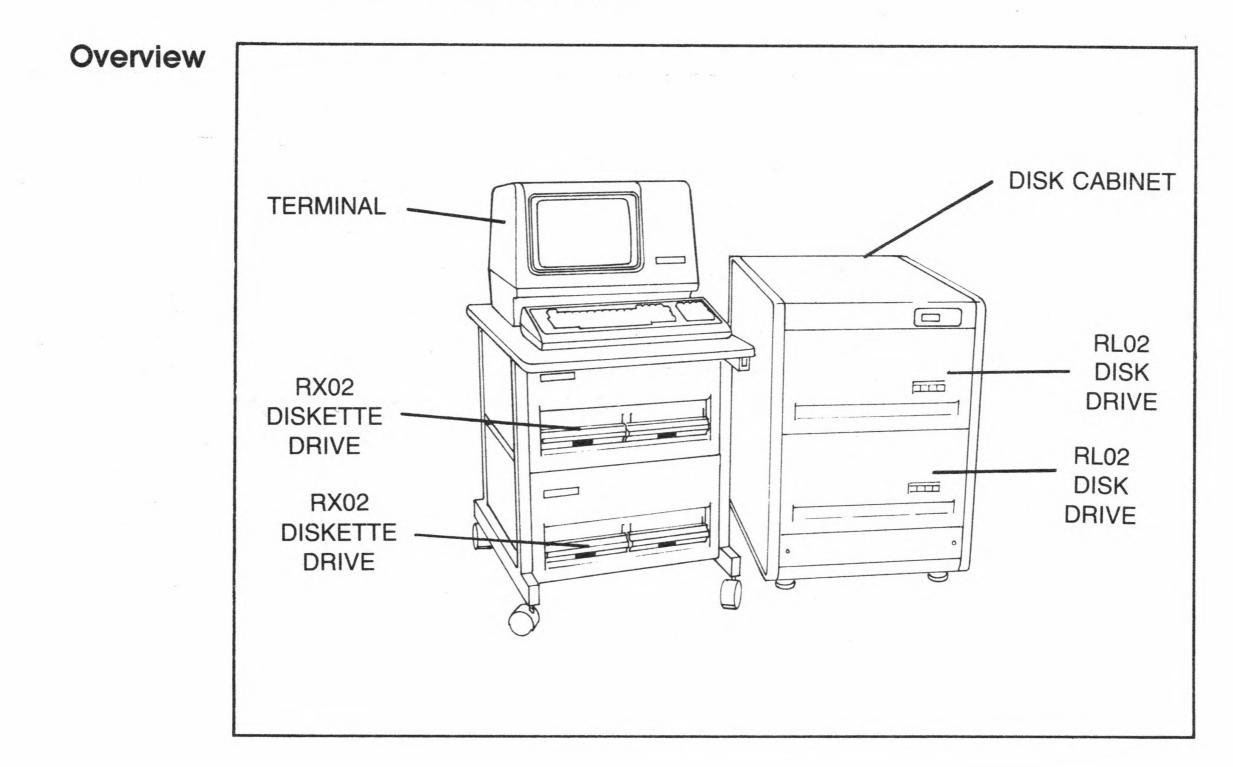
Chapter 6 RL02 Disk Systems

Installation note:

If you have a Disk-Based DECmate, Digital's field service personnel will unpack and install it. Do not open any shipping cartons. Digital's field service personnel will do the entire installation.

This chapter discusses:

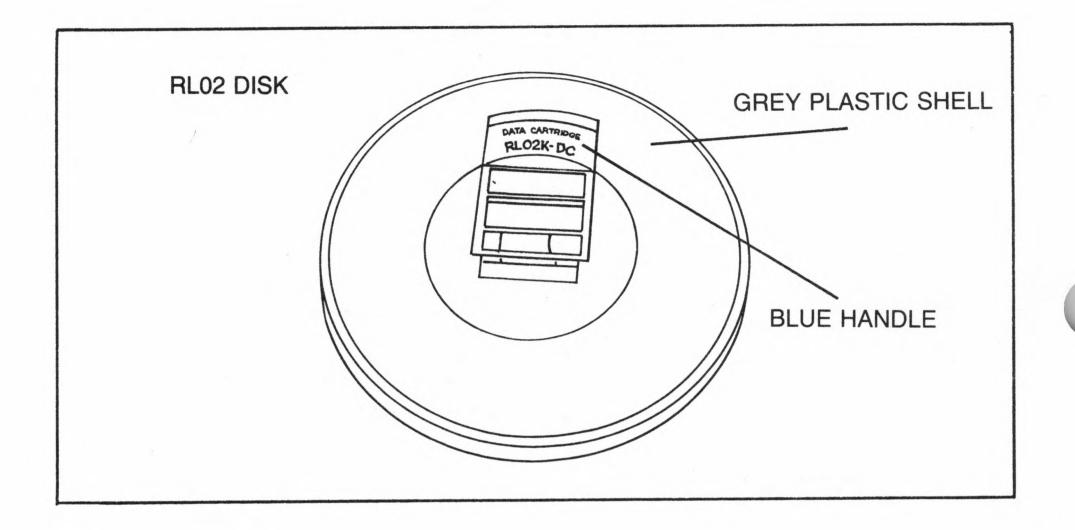
- Overview of the RLO2 disk system
- Turning on the system
- Installing and removing a disk
- Operating your DECmate RLO2 system
- Testing your DECmate RLO2 system
- Disk drive buttons



An RLO2 Disk Drive unit can also work with a pedestal system.

The RLO2 occupies a cabinet separate from the terminal. A single disk cabinet can contain one or two RLO2 drives.

A disk, like a diskette, is a storage medium. The RLO2 disk drive lets you efficiently store large amounts of text or other information on disks. Each disk can hold up to ten million characters of information. You can order a DECmate with up to two RLO2 disk drives. A DECmate with two RLO2 drives can store 20 million characters of information or about 800 pages of text.



Disks for the RLO2 have a grey plastic shell with a blue handle.

A disk is much larger than a diskette and therefore can hold a greater amount of information. Disks, because they are capable of holding large amounts of information, are often multifunctional. For instance, one disk might be a system disk as well as a test and information holding disk.

An RLO2 disk can store 20 times as much information as a diskette can. Also, disks spin faster than diskettes. Although the disk has a higher speed and capacity than the diskette, it is also a more delicate instrument.

You must follow the procedures discussed in this chapter whenever you install, remove, and use disks.

6–2 RL02 Disk Systems

Turning On the Unit

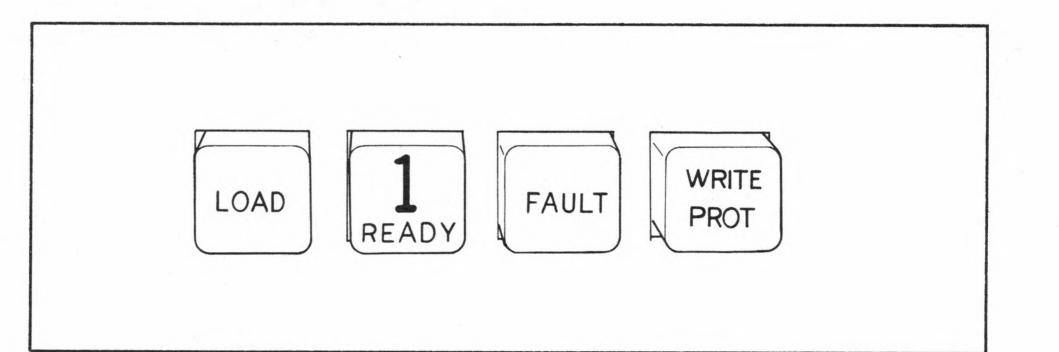
The first step in using the DECmate with RLO2 is to apply power to all its components.

If your system has a minidesk or a pedestal, you can apply power to the terminal and diskette drives by using the main power switch.

- * Press the main power switch to ON.
- * If you do not have a minidesk or a pedestal, turn on the terminal and diskette drive unit power switches individually.

The power switch for the RLO2 disk drives is in the upper-right corner of the disk cabinet. This switch applies power to all the RLO2 drives in that cabinet.

* To turn on the cabinet, press the part of the switch marked 1.



Notice the group of four buttons on the front of each disk drive. The white READY button has a number on it that identifies the disk drive numbers:

The 0 button identifies drive RLO The 1 button identifies drive RL1

The yellow buttons marked LOAD and WRITE PROT are also switches. If you press them, they lock into position. Pressing them again releases them. Neither switch should be pressed now.

Note that the LOAD light on each drive is lit.

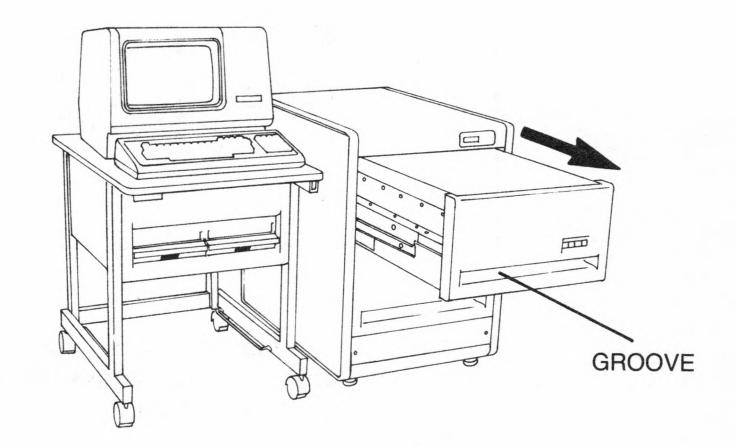
RL02 Disk Systems 6–3

Installing and Removing a Disk

Installing a Disk

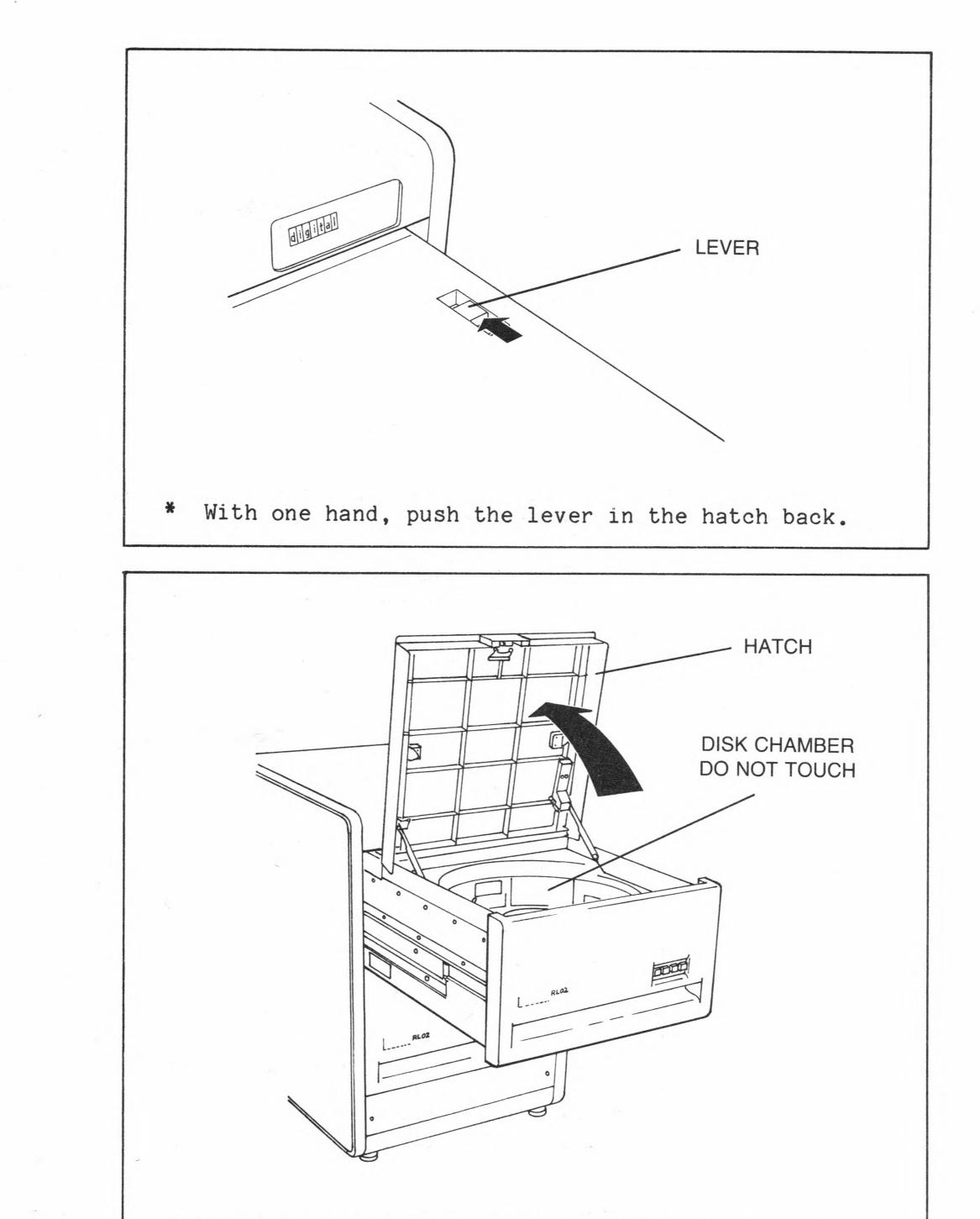
To gain access to the information stored on a disk, you must install it in a disk drive. There are five steps to installing a disk:

- Open the disk drive
- Remove disk cover
- Put the disk in the disk drive
- Close the disk drive
- Start the disk rotating by pressing the Load button.
- * Open the disk drive. The LOAD light must be lit.
- * Based on the numbered white READY button, select the disk drive where you want to put the disk.



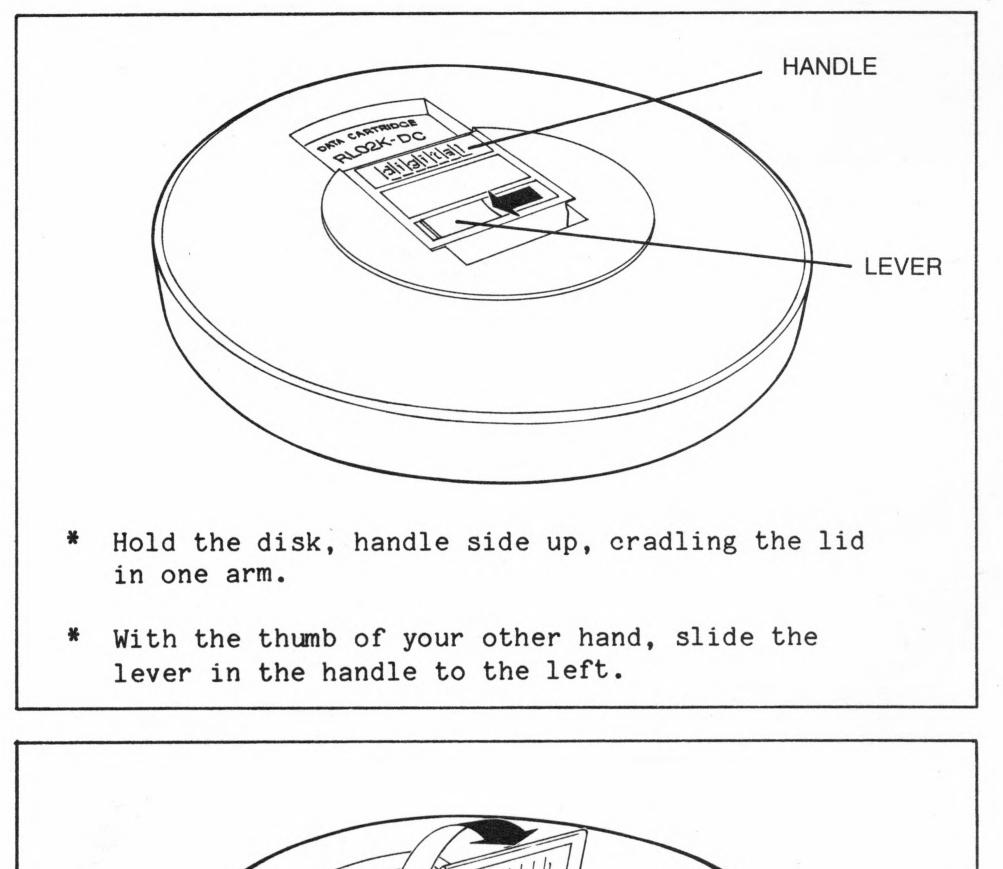
* Grasp the groove in the front of the disk drive and pull the drive toward you until it stops moving freely.

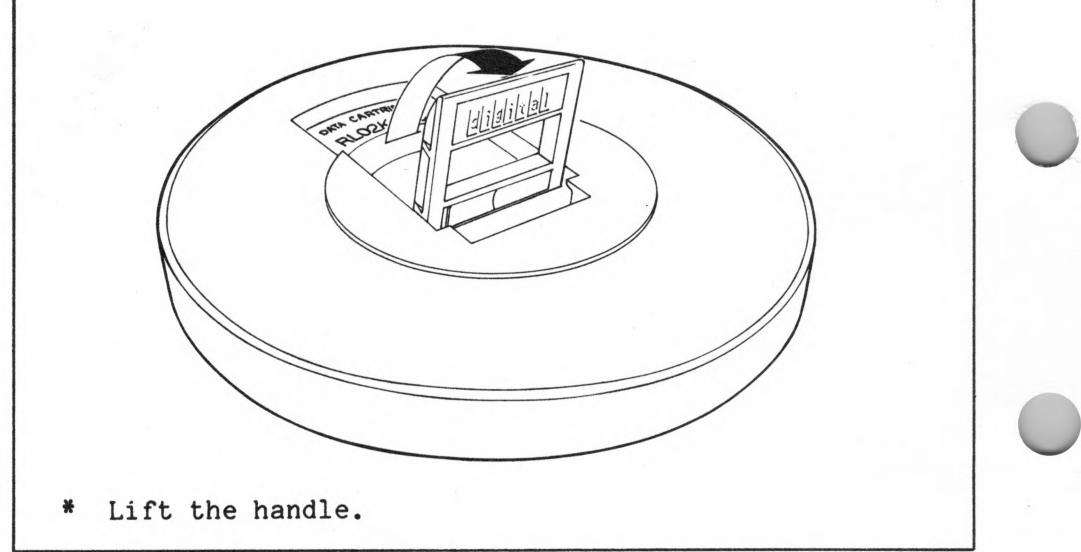
Note To make sure the cabinet is stable, both drives should never be in this forward position at the same time.



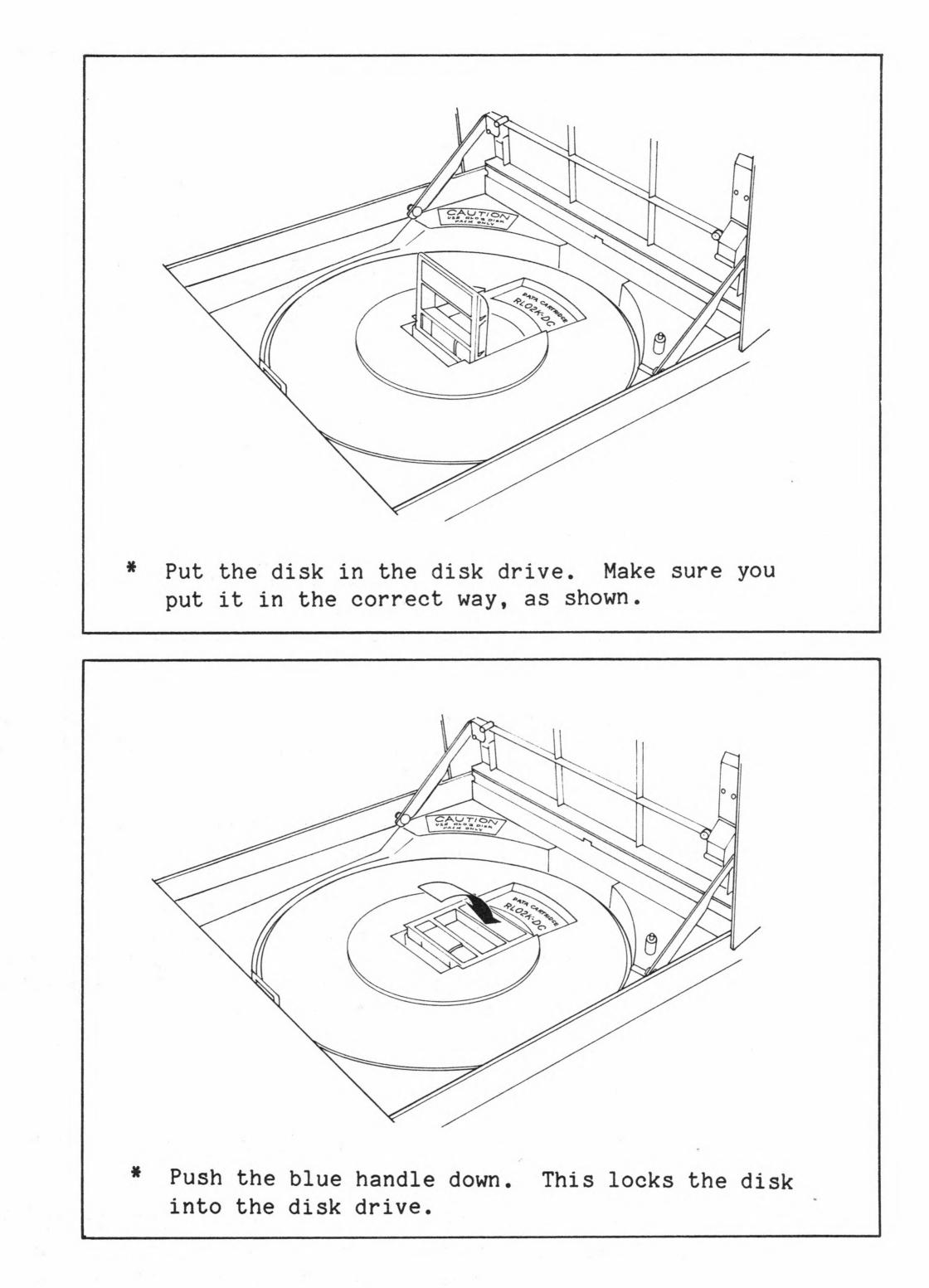
* With the other hand, lift the hatch to reveal the disk chamber.

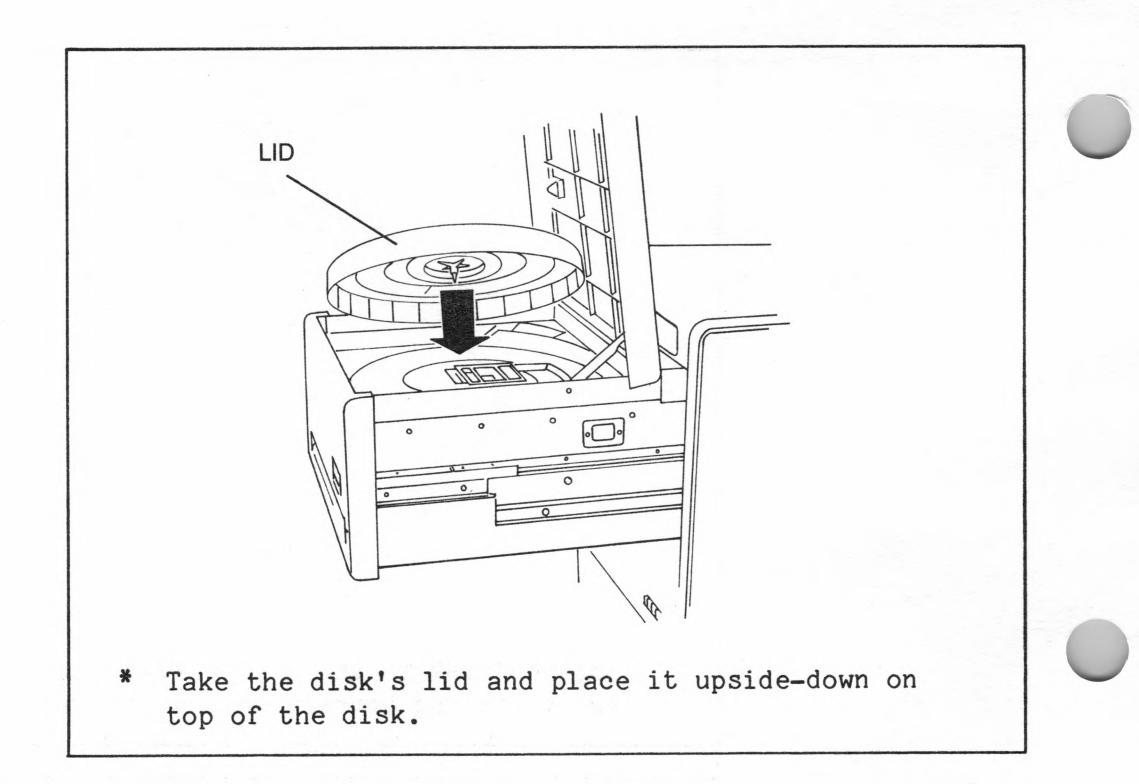
Remove disk cover. The disk's grey plastic shell is actually two parts. One part has the blue handle. The other (bottom) part is the lid.





Lifting the handle lets the two halves of the disk case come apart. Now you should be able to gently pull the disk away from the lid. Temporarily rest the lid on a level surface, such as the top of the disk cabinet.





Close the disk drive. Shut the hatch. Make sure it latches closed. Then gently push the disk drive back into the cabinet.

"Spin up" the drive. The DECmate cannot use the disk you installed, because it is not yet rotating.

* To start the disk rotating, press the yellow

LOAD button on the disk drive where you installed the disk. The LOAD light should go out immediately. Then, 5 to 30 seconds later, the READY light should go on.

Removing a Disk

* To unload or stop the disk drive, press the LOAD button so as to unlatch the switch.

Just as you have to wait for the READY light before the disk is ready, you must wait for the LOAD light to come on before you can continue to the next step. This can take up to a minute. During this time, the disk drive gradually brings the rotating disk to a stop.

6–8 RL02 Disk Systems

Do not do the remaining steps until the LOAD light comes on. Remember that you can only install or remove disks when the LOAD light is on.

Open the disk drive, using the same procedure as before:

* Pull the disk drive toward you.

- * Unlatch and then raise the hatch.
- Note If the hatch latch does not move or if the hatch does not raise, check to make sure the disk is spun down and the LOAD light is lit. Do not force the latch or the hatch.
- * Remove the disk's lid from the disk chamber and place it on a level surface, such as the top of the disk cabinet.
- * Just as you did when removing the disk from.its lid, use your thumb to push the lever in the blue handle to the left.
- * Raise the handle to the upright position.
- * Gently raise the disk out of the disk chamber.

Replace the disk cover:

* Holding the disk by the handle, bring it

together with the lid.

- * Push the handle down flush against the disk. This locks the disk and the lid together until you open them again.
- * Close the disk drive (unless you intend to insert a different disk in the drive).
- * Press the hatch down over the disk chamber and push the disk drive back into the cabinet.

Carrying a Disk

You can raise the handle to the upright position to carry the disk around. The lid will not fall off. In this case, do not push the blue lever as you raise the handle to the upright position.

Operating Your When you apply power to the DECmate, the terminal DECmate RLO2 performs some simple tests to make sure it is working correctly. Here are the things you may see and hear:

- The lights on the RLO2 disk drives blink as the terminal resets the disk drives.
- If your unit has diskette drives, they may make a clicking sound.
- The keyboard indicators light up.

After a few seconds, only the ON-LINE keyboard indicator will be lit. You'll see a rectangular, blinking "cursor" in the upper left-corner of the screen and the word SET-UP in the lower-left corner.

If the terminal is malfunctioning, you will Note not see this display. Turn the terminal off and back on again. If you consistently fail to see the SET-UP message, report the problem to DIGITAL Field Service. Make a note of which keyboard indicators were on and which were off; this may help Field Service identify the problem.

Set-Up Mode has been introduced earlier in this guide. In Set-Up Mode, some of the numeral keys on the main keyboard cause special things to happen. On DECmates with RLO2 disk drives, use the following keys.

The 6 Key: Starting Software

When the DECmate is in Set-Up Mode, pressing the 6 key starts the "bootstrap" program on the disk you installed in drive 0. Thus, to use software from an RLO2 disk, follow these steps:

- Apply power to all parts of the DECmate. 1
- Install the disk you want to use in drive 0 2 and wait for it to become READY.
- Press the 6 key. 3

RL02 Disk Systems 6-10

What happens now depends on the software that is present on that disk drive. If nothing happens, the most common problem is that the disk you installed did not have a "bootstrap" program.

The 7 Key: Disk Self-Test

When the DECmate is in Set-Up Mode, pressing the 7 key also starts the "bootstrap" program on the disk you installed in drive 0. But before doing so, the DECmate tests each RL02 disk drive which is READY to make sure it is operating correctly. Using the 7 key takes a little longer to start software than the 6 key does, but the 7 key gives you greater certainty that the disk drives are working properly.

If drive 0 is not READY when you press the 7 key, you'll see this message on the screen:

WAITING FOR DRIVE O TO BECOME READY

Make sure you have installed the disk correctly, closed the hatch, and pressed the LOAD button. When the disk drive becomes READY, the DECmate tests it and each other drive that is also READY. At the end of the test, you'll see a message like this:

DRIVES READY: 0, 1

(These numbers may not be present if some of the drives are not READY.)

After this message appears, the DECmate proceeds to the "bootstrap" program contained on the disk in drive 0.

If the disk self-test detects a problem with one of the disks, you'll see a message like this:

RL DISK PACK SUB-SYSTEM ERROR RL DRIVE : #1 ERROR CODE : #5

Write down the drive and error code number actually displayed on the screen. The DECmate is now back in Set-Up Mode. Press 7 again to repeat the test. If the error occurs consistently, use the DECmate System Test diskette, as described below.

DECmate System Test Diskette

Chapter 5 describes how to use the DECmate System Test diskette to prove that all parts of the DECmate are operating properly. On DECmates equipped with RLO2 disk drives, this program also tests the disk drives.

You should use the DECmate System Test diskette:

- Immediately after DIGITAL Field Service installs the DECmate, as proof that it works correctly.
- Any time the disk self-test fails and displays an error message.
- Any time any of the red FAULT lights on the disk drives comes on.
- Once a month to correct any new problems before they disrupt your work.

You will see some additional messages on the screen pertaining to the disk drives, but the general form of the displays is the same as for diskette-based DECmates.

Install disks in all drives and make sure they are READY before starting the DECmate System Test diskette. It does not matter what disks you use; the disk tests will not destroy any information

contained on these disks.

Disk Drive Buttons Write Protect

By pressing the WRITE PROT button on a disk drive, you prevent the DECmate from modifying any information on the disk in that drive, even if you type a command to do so. The meaning of this depends on the software you are using. For instance, if you try to edit a document or change a file on an RLO2 that is "write protected," your attempt will fail and the text on the disk will be unchanged.

When you press the WRITE PROT button, it latches into position and the yellow WRITE PROT light comes on.

To cancel write protection--that is, to let the DECmate modify the information on the disk once again, press the WRITE PROT button again so that it unlatches. The yellow WRITE PROT light goes off.

6–12 RL02 Disk Systems

Ready

The white READY light on a disk drive comes on when the drive contains a disk and the disk is spinning at top speed. READY means the disk is ready to be read or written.

The READY light goes out briefly when the DECmate is actually reading information from the disk or writing information on the disk. Thus, you may see the READY light flicker during certain operations.

Fault

If the red FAULT light comes on, it may indicate a number of problems:

- the disk drive is having difficulty reading or writing information on the disk.
- your DECmate terminal fuse is blown.
- your DECmate terminal is not turned on.
- the terminal board is not working properly.

Whenever you see the FAULT light, you should use the DECmate System Test diskette to identify the location of the problem.

Changing Disk Designations

The numbers on the white READY buttons tell which disk drive is which. For instance, the disk drive with the O button is drive RLO.

You can give any drive number to any drive by exchanging the READY buttons. Exchanging the READY buttons is easier than exchanging the disks inside the drives. Changing a disk drive's number also lets you temporarily use one drive in place of another if one of your drives is malfunctioning.

Suppose you are using software that deals with information on RLO, but the disk you want to use is presently in RL1. Pull out the 0 and 1 buttons and exchange them. Now the disk you want is in RLO.

Do not pull out the numbered buttons when a disk operation is in progress. Always leave one button in each drive, even the ones you are not using, so that the buttons do not get lost. Make sure you put the buttons in right-side up. Depending on what software you are using, you may have to restart your program or otherwise inform it any time you change disk designations or install different disks.

6–14 RL02 Disk Systems

Chapter 7 Modems and Communications

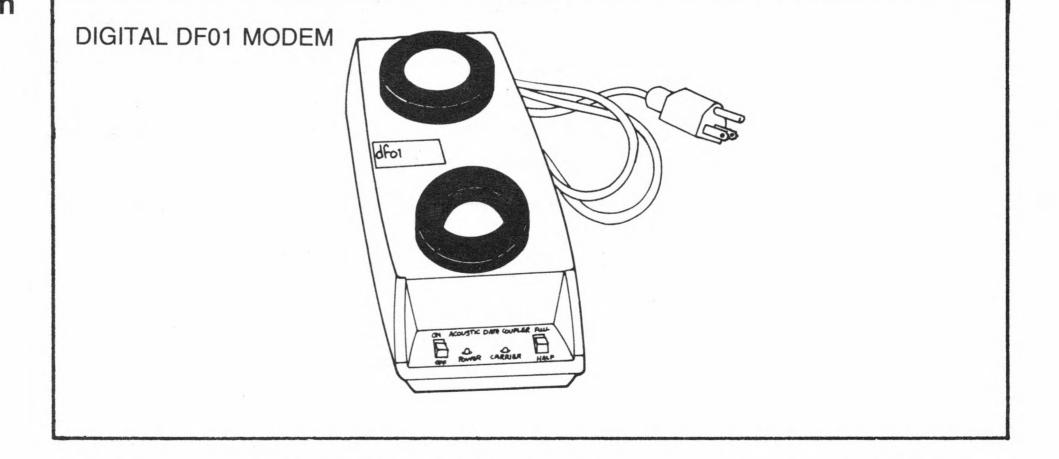
This chapter explains:

- Installing your DF01, DF02, or DF03
- Choosing software or hardware to connect to a host computer
- Communicating with a host computer

Installing your DF01, DF02, or DF03 Modem

There are three types of modems that may be used with your DECmate - the DF01, DF02, and DF03. This section illustrates each one and provides diagrams for their installation.

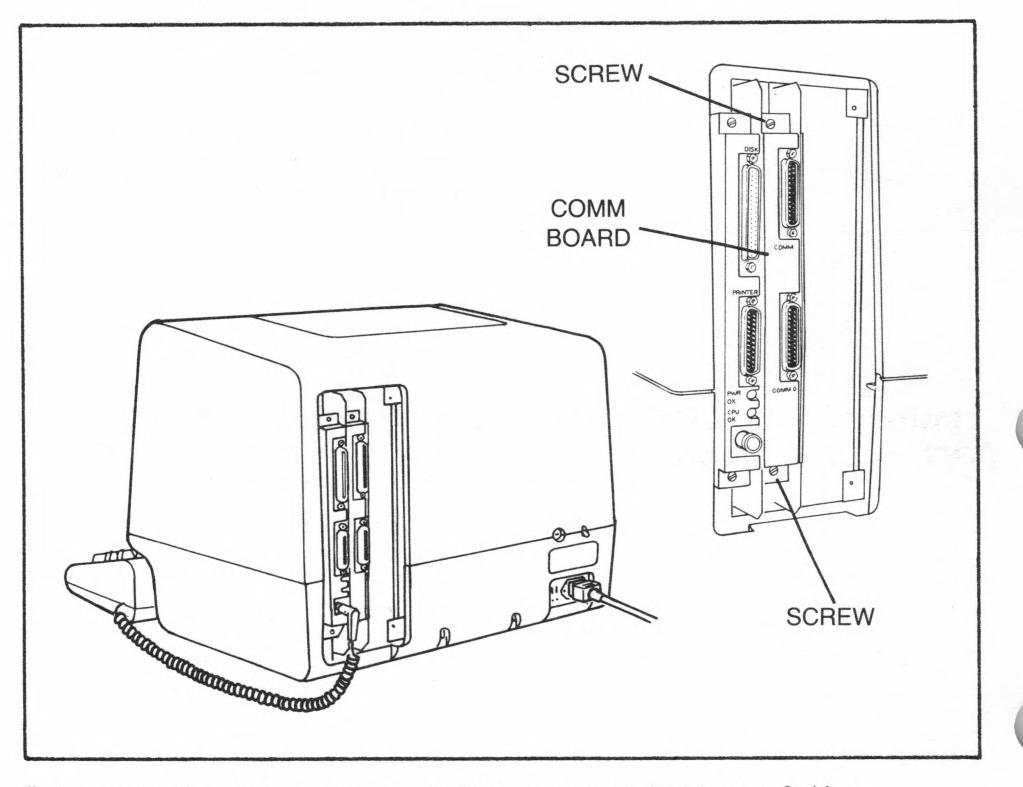
DF01 Modem



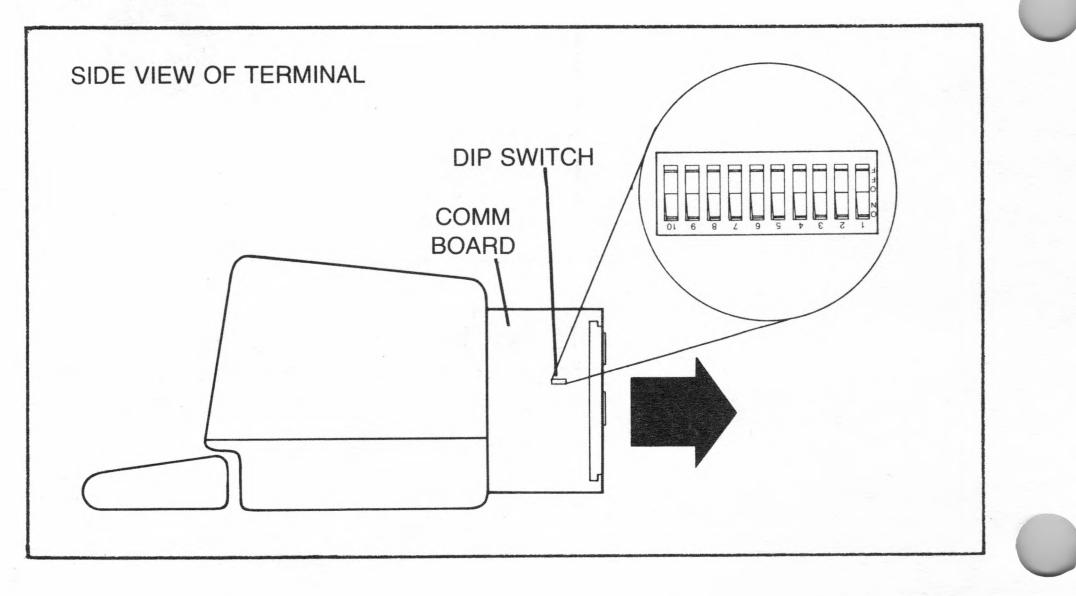
If you have a DF01 Modem, you can connect it to your DECmate by changing a setting on the Communication Board inside the terminal. The following steps show how.

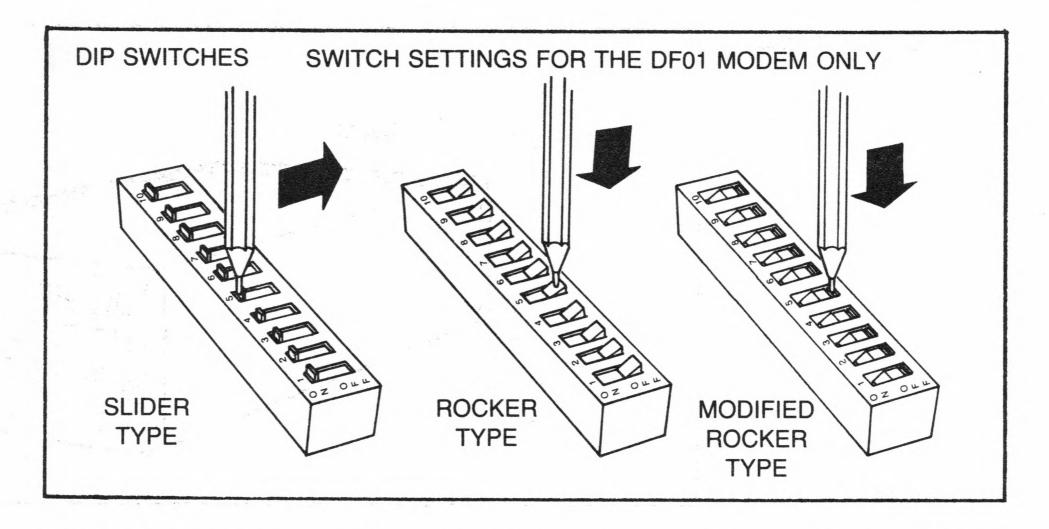
Modems and Communications 7–1

- * Turn off the power to your DECmate, and pull the plug out of the terminal.
- * At the back of the terminal, remove the cable shield, cables, and the EMI shield.



- * Loosen the two screws at the top and bottom of the Communications Board.
- * Slide the Communications Board halfway out of the terminal. The board is held in place by plastic tracks that provide a tight fit. Use gentle pressure to guide the board along the tracks.





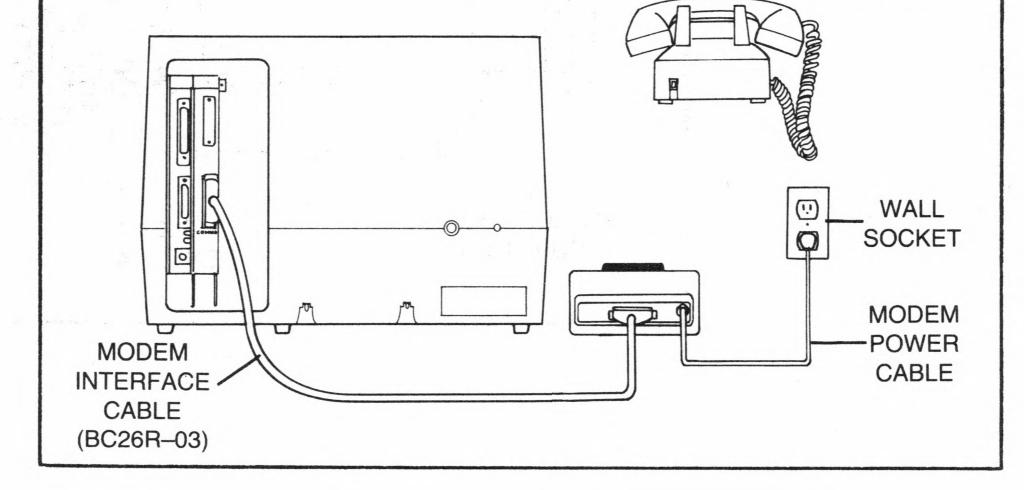
- * Locate the DIP switches on the Communication Board. Using the tip of a ball-point pen, gently move switches 4 and 5 to the OFF position.
- * Replace the Communications Board, and tighten screws.

* Reconnect EMI shield, cables and cable shield.

The following illustration helps you install the cables used with your DF01 Modem. For detailed installation instructions, refer to the manual sent with your modem.

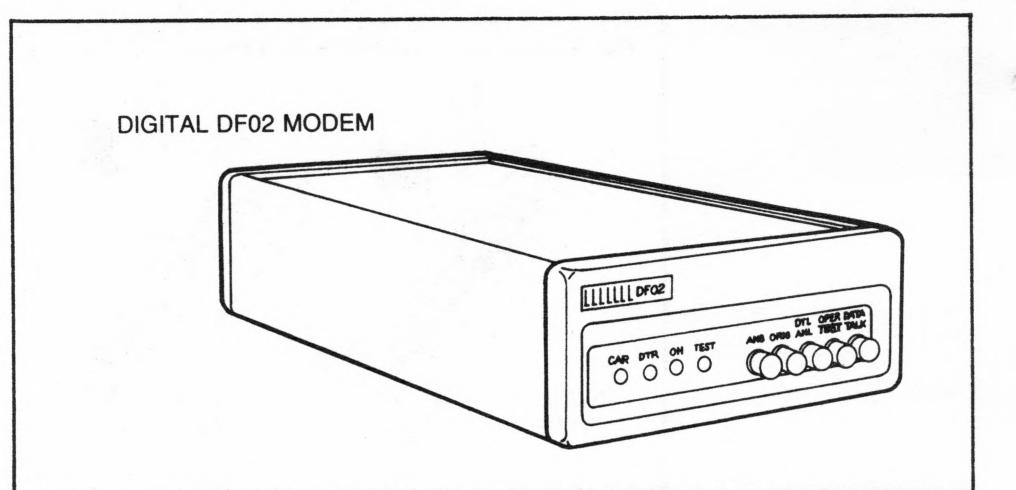
BACK VIEW OF TERMINAL

BACK VIEW OF TELEPHONE AND MODEM

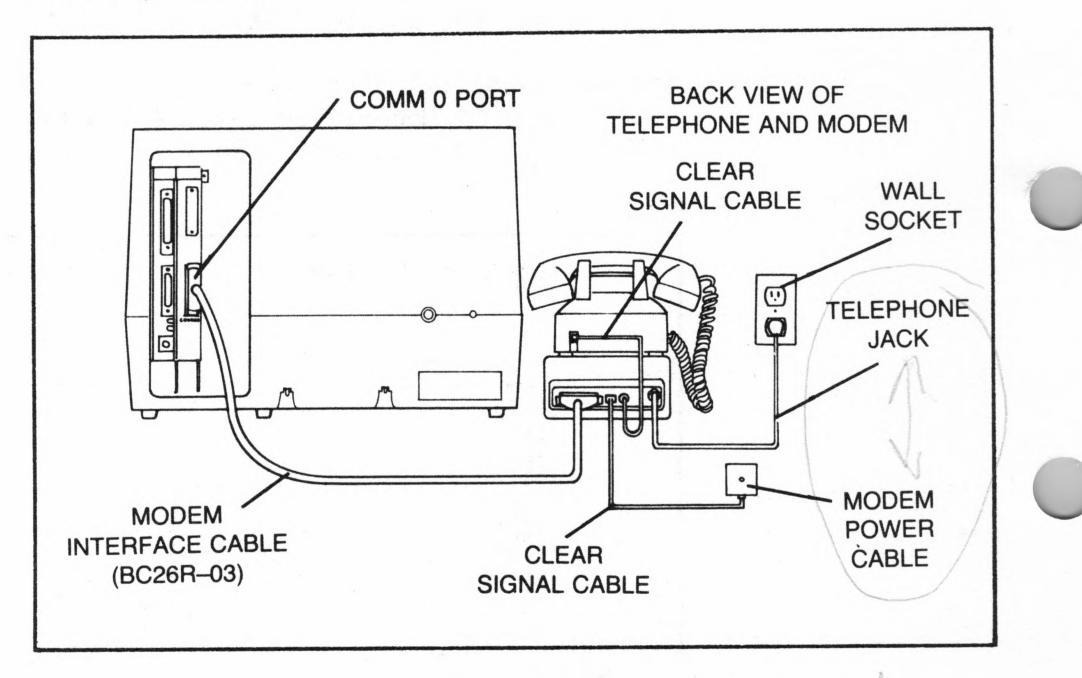


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The following illustration helps you install the cables used with your DF02 Modem. For detailed installation instructions, refer to the manual sent with your modem. Be sure to replace the EMI shield and the cable shield after installation. (The DIP switches on the Communication Board do not need adjustment.)

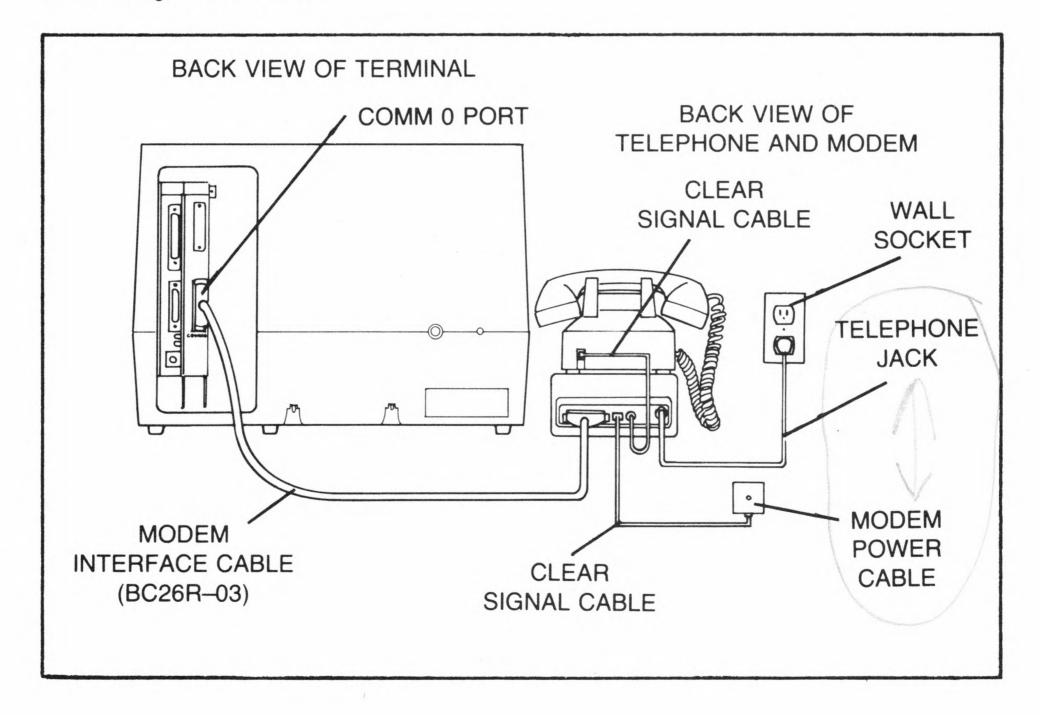


7–4 Modems and Communications

DF03 Modem

The DF03 modem provides the same function as the DF02, but with a wider range of capabilities.

The following illustration helps you install the cables used with your DF03 Modem. For detailed installation instructions, refer to the manual sent with your modem. Be sure to replace the EMI shield and the cable shield after installation. (The DIP switches on the Communication Board do not need adjustment.)





Choosing Software or Hardware to Connect to a Host Computer Your DECmate terminal can connect to a host computer using either application software or word processing software. Or you can connect to a host computer using DECmate's built-in features (Terminal Modes I and II).

* Connecting through your software gives you the benefits of Word Processing.

If you want to use your software to connect to a host computer:

- For word processing, refer to DECmate Word Processing Using Communications (AA-K666B-TA).
- For application packages, refer to the manuals sent with that software.
- * Connecting through DECmate hardware allows you to operate without floppy diskettes. This type of connection also enables you to use Autodial, and maintain full modem control.

If you want to use your DECmate's hardware, continue below.

Communicating with a Host Computer

The instructions in the following sections show how to use DECmate's special features in communicating with a host computer.

Technical information about communications can be found in the DECmate Architecture Manual (order number: EK-VT278-HR).

Technical information about the DIGITAL DF02-AC and DF02-AA Modem can be found in the DF02 Modem User Guide (order number: EK-ODF02-UG-002).

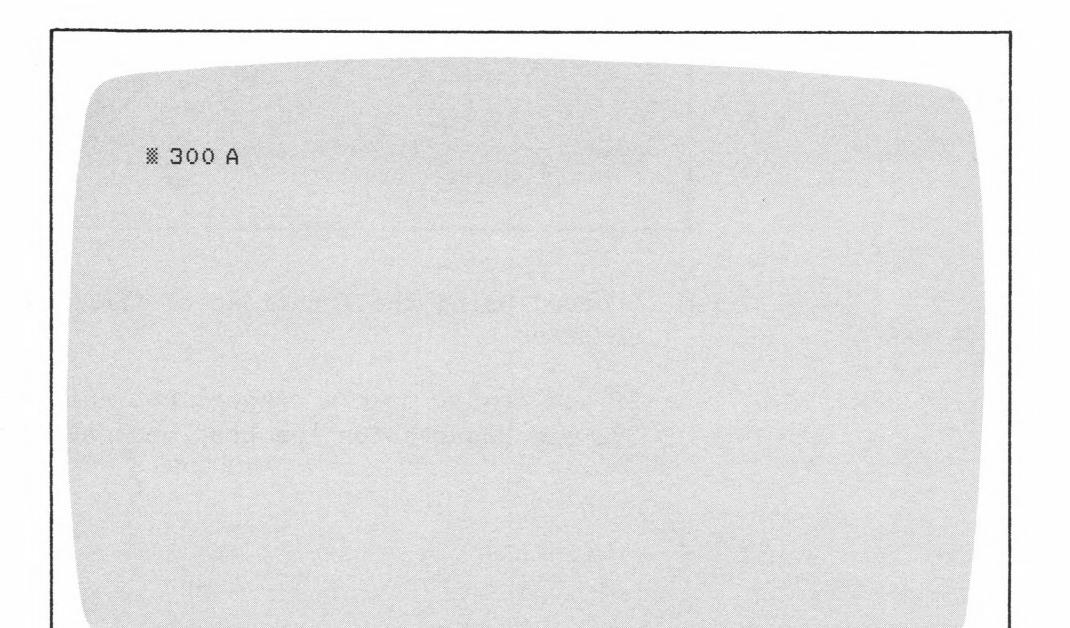
Technical information about the DIGITAL DF03-AC and DF03-AA Modem can be found in the DF02 Modem User Guide (order number: EK-ODF03-UG-001).

Connecting Your Terminal to a host Computer: Terminal Modes I and II

> Terminal Mode I: Hardwired Connection

The following steps explain how to make a connection to a host computer through a hardwire.

- * Enter Set-Up Mode.
- * Press the 4 key. This puts the system into Terminal Mode I.



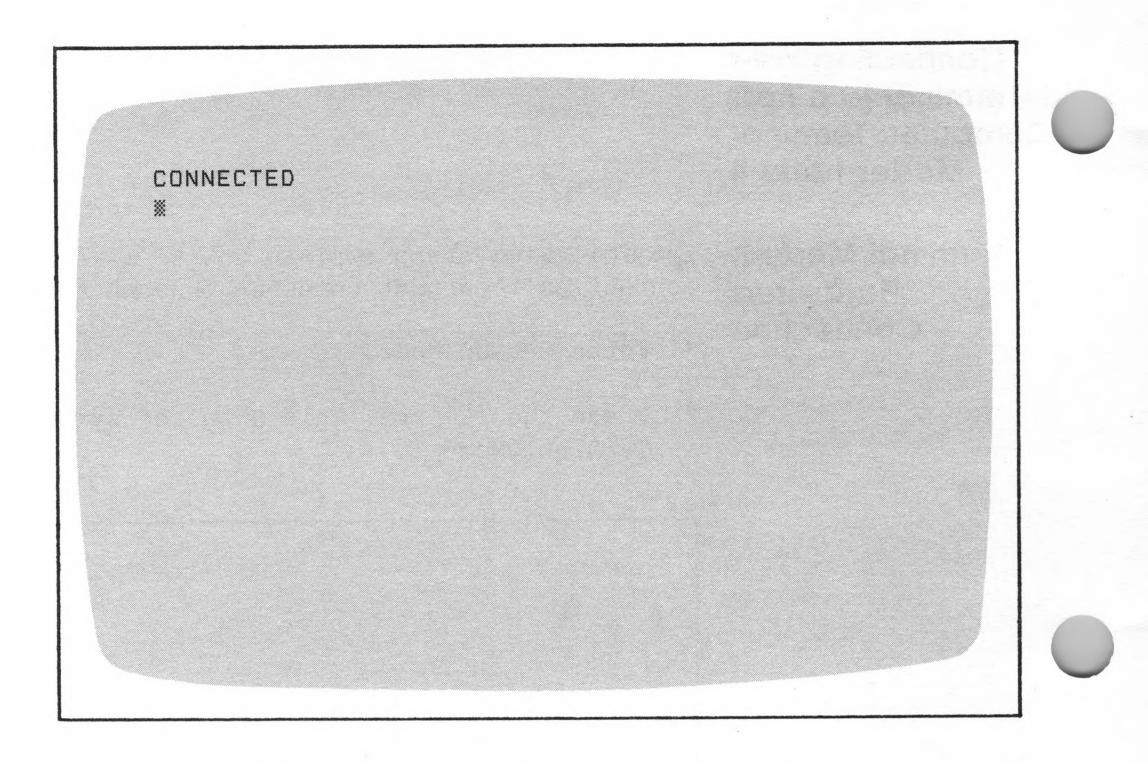
The default baud rate (300) will display, along with the default Mode Letter (A). Mode Letter A indicates 80 column, 8 data.bits, no parity, one stop bit.

* Change the baud rate and mode letter, if necessary, according to Tables I and II given at the end of this section.

* Press the RETURN key.

The word CONNECTED should appear on your screen. This message tells you that DECmate is ready to communicate with your host computer.

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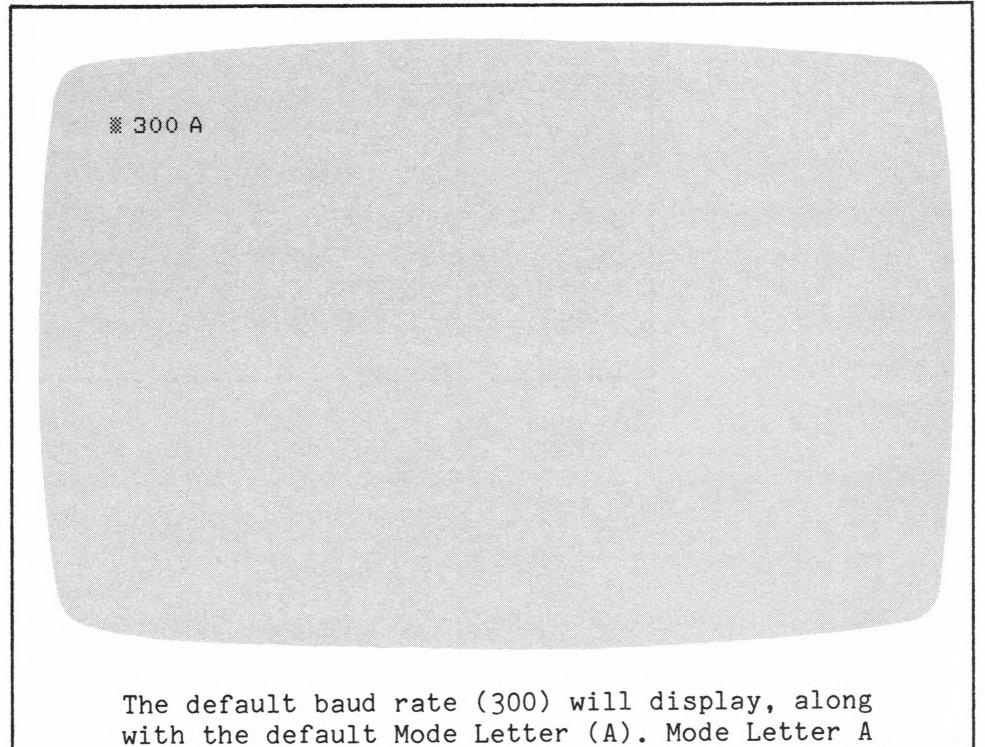
* Proceed using the functions of the host computer.

If you cannot make a connection, call the Systems Manager for the host computer.

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Terminal Mode II: The following steps explain how to connect your Modem Connections terminal to a host computer using a DF01, DF02 and DF03 modem.

- ¥ Enter Set-Up Mode.
- Press the 5 key. This puts the system into ¥ Terminal Mode II.



indicates 80 column, 8 data bits, no parity, one stop bit.

Change baud rate and mode letter, if necessary, ¥ by inputting number or letter keys according to the Tables I and II given at the end of this chapter.

* Press the RETURN Key.

7-9 Modems and Communications

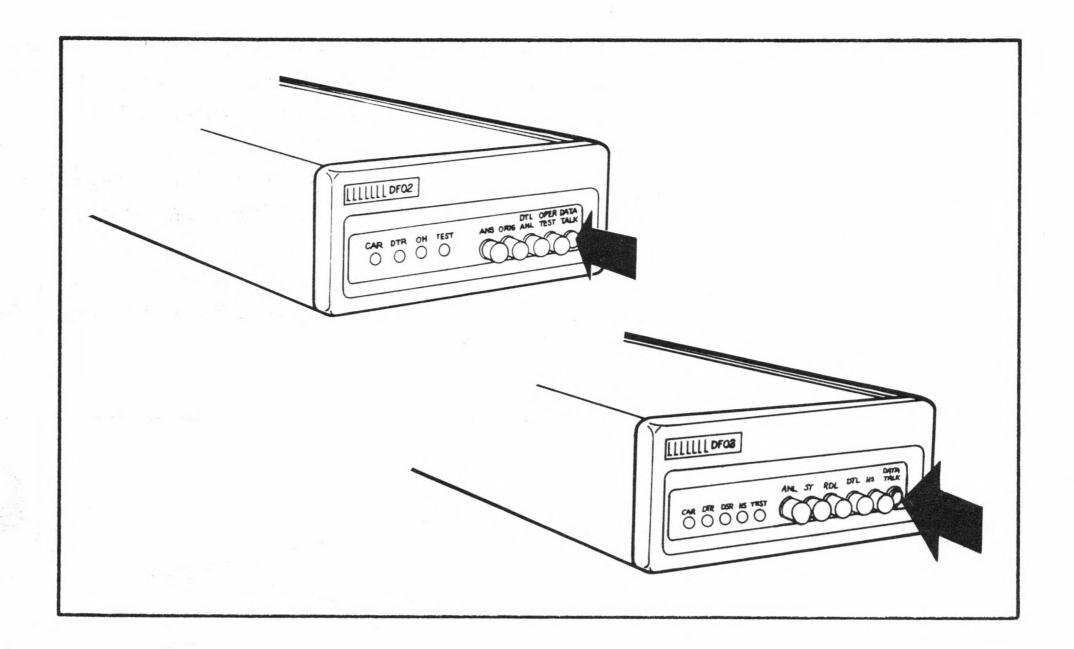
CALL X

The word CALL displays.

7-10

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Modems and Communications

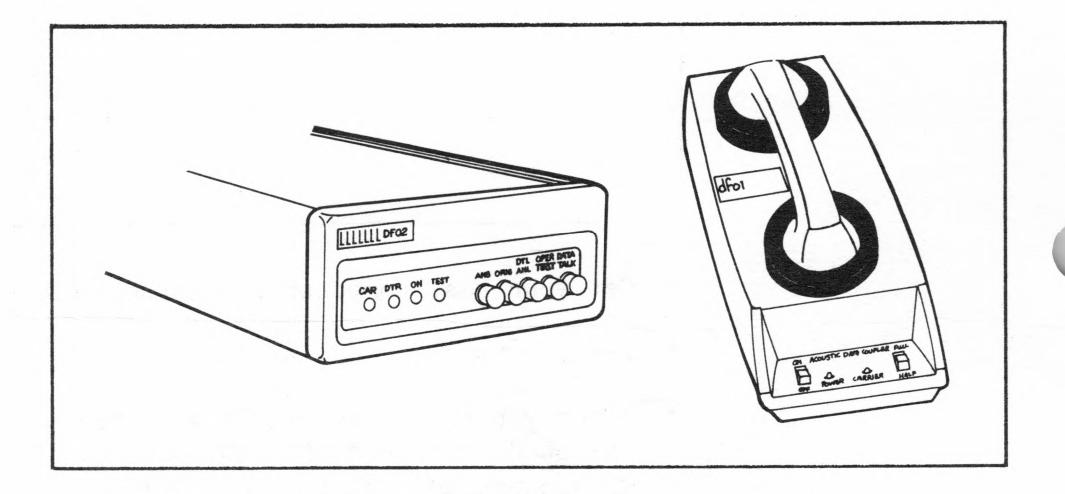


- * Get your host computer's telephone number.
- * Press Return.
- * After you press the RETURN key and take the telephone receiver off its hook, you have 30 seconds to dial the host computer. If you do not dial the number within 30 seconds, you are disconnected.
- NOTE: If the word DISCONNECTED appears, it may be because the host computer's telephone lines are busy, or the computer cannot answer, or

you allowed 30 or more seconds to elapse. If you are disconnected, place your telephone receiver back on its hook and follow the Stop Communications instructions in this chapter. You can then start the procedure over.

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- * Take the telephone receiver off its hook and dial the host computer's telephone number. The OH (DF02) or the DSR (DF03) light will come on.
- * With a DF01: When you hear a high-pitched whistle, place the telephone handset in the acoustic coupler.
- * With a DF02 or DF03: When you hear a high-pitched whistle, pop out the Data/Talk button. Replace the phone handset on its cradle.



The word CONNECTED appears on the screen to tell you the connection has been made successfully. The CAR (Carrier) light comes on. Follow the instructions of the host computer.

- * With a DF03: IF you selected 1200 baud operation, the
 - HS (High Speed) light on your modem comes on.
- * If you do not hear a high-pitched tone, or the CAR does not come on, there is a problem making the connection. Try 3 times. If you cannot connect, the problem can be in the modem, line, or host computer. Call the Systems Manager responsible for the host computer.

7–12 Modems and Communications

Operating features used when connected to a host computer

This section explains how to:

- Change parameters
- Stop communications
- Stop and restart scrolling
- Dial host computer from the keyboard
- Automatically redial the last host telephone number used

To change parameters

- * If you need to reset the parameters (baud rate or mode letter) after you are connected to the host computer, follow these steps:
 - * Hold CTRL key down and press K key.
 - * Press RETURN key.
 - * If you also want to change the terminal mode, press either the 4 key (for Terminal Mode I) or the 5 key (for Terminal Mode II) instead of the RETURN key.
 - * Make the desired parameter changes.

* Press RETURN.

You are returned to where you were before pausing to make parameter changes.

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To stop To end the communication link with the host communications computer:

- * Hold CTRL key down and press the K key.
- * Press D key.
- * Within 2 seconds, the communication line is disconnected and you are returned to the parameter screen.
- * With a DF01: Hang up your phone.
- * With a DF02 or DF03: If you are not planning to communicate with the host again, push the DATA/TALK Button on your modem in (TALK position) to free your telephone line.

To stop and restart scrolling

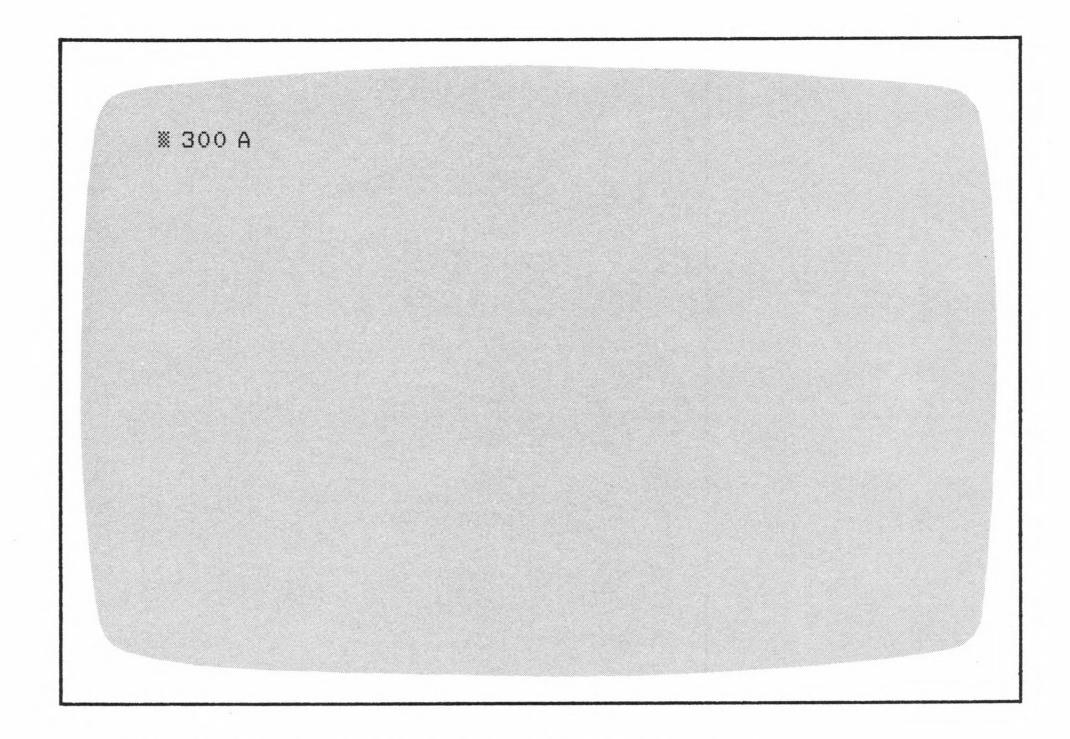
rt Information from the host computer is sometimes
g scrolled (moved) off the screen before you can read
it. To stop the screen from scrolling:

- * Press NO SCROLL key
- To restart scrolling:
- * Press NO SCROLL key again

To dial the host from the keyboard with a DF02-AC or DF03-AC Modem If you have a Digital DF02 or DF03 Modem with an auto call unit (-AC), you can use your keyboard to dial the host computer.

- * Be certain that the DATA/TALK button on modem is out ("data" position).
- * Enter Set-up mode.
- * Press the 4 key. This puts DECmate into Terminal Mode I.

7–14 Modems and Communications



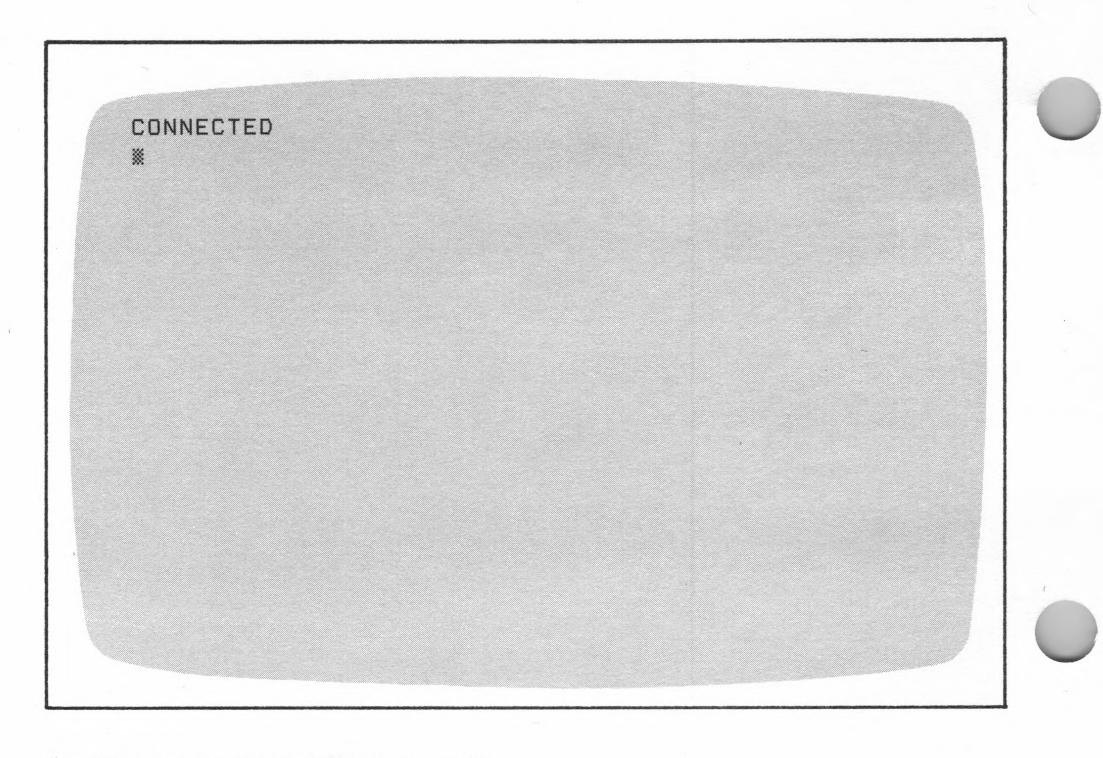
The default baud rate (300) displays. The default Mode Letter also displays (A). Mode Letter A indicates 80 column, 8 data bits, no parity, one stop bit.

A DF03-AC Modem can auto-dial at either 300 or 1200 baud (110 is also possible, but rare). You must know at what rate the modem is auto-dialing.

Change the baud rate or mode letter, if ¥ necessary, by typing in the numbers or letters from the chart at the end of this section.

Press RETURN. ×

> Modems and Communications 7-15



- * The word CONNECTED appears
- * Hold CTRL key down and press A key.
- * Hold CTRL key down and press B key.

The OH (DF02) or the DSR (DF03) light on the modem lights up.

* Type in your host computer's telephone number

using either the main keyboard or mini keyboard.

If when dialing manually, you need to wait for a second dial tone, include an equal sign for the second dial tone.

Example:

8=6175551212 means to "dial" (type) an 8, get a second dial tone, and dial the rest of the number, 6175551212.

* When the CAR (Carrier) light on your modem comes on, you are connected to your host. Now switch to Terminal Mode II for Full Modem Control with these steps:

- * Hold CTRL key down and press K key
- * Press 5 key
- * Change the parameters, if necessary, by entering codes selected from Tables I and II
- * Press RETURN
- * Prompt the computer as necessary

Modems and Communications 7–17

To automatically redial the last host telephone number used If you dial using the keyboard, the DFO2 Auto Call Modem (DFO2-AC) stores the last telephone number that you dialed.

- * Enter Set-up mode.
- * Press 4 key.
- * (The preceding two steps are not necessary if you have not used the system since communicating with the host. You should see the current parameters displayed on the last line of the screen. If so, proceed with the following steps.)
- * Be certain that DATA/TALK button on modem is out (DATA position).
- * When correct parameters for Autodialing display, press RETURN key.

When CONNECTED appears, the DTR light on your modem lights up.

- * Hold CTRL key down and press A key.
- * Hold CTRL key down and press B key.
- * The OH (DF02) or DSR (DF03) light on the modem lights up.
- * Hold CTRL key down and press C key.

The system automatically calls the last host telephone number you used. After a few moments, the connection is made (if the host computer is available).

Now switch to Terminal Mode II for Full Modem Control with these steps:

- * Hold CTRL key down and press K key.
- * Press 5 key.
- * Press RETURN.
- * Prompt the computer as necessary.

110	1
300*	2
600	3
1200	4
2400	5
4800	6

Baud Rate Table

Modems and Communications 7–19

Mode Letter Table

To Change to This Mode	Enter This Letter
NO parity, 1 stop bit, 8 data bits, 80 display columns *	Α
NO parity, 1 stop bit, 8 data bits, 132 display columns	В
NO parity, 2 stop bits, 8 data bits, 80 display columns	С
NO parity, 2 stop bits, 8 data bits, 132 display columns	D
ODD parity, 1 stop bit, 7 data bits, 80 display columns	E
ODD parity, 1 stop bit, 7 data bits, 132 display columns	F
ODD parity, 2 stop bits, 7 data bits, 80 display columns	G
ODD parity, 2 stop bits, 7 data bits, 132 display columns	Н
EVEN parity, 1 stop bit, 7 data bits, 80 display columns	Ι
EVEN parity, 1 stop bit, 7 data bits, 132 display columns	s J

EVEN parity, 2 stop bits, 7 data bits, 80 display columns

EVEN parity, 2 stop bits, 7 data bits, 132 display columns

L

K

* Communications mode defaults to NO parity, 1 stop bit, 8 data bits, 80 display columns (letter A) when an alternate mode is not specified.

7–20 Modems and Communications

Chapter 8 Services, Training and Supplies

Services Various services are available for your DECmate depending upon your specific needs.

If you run Word Processing software, WPS 278, on your DECmate, the following service is available.

DECmate service

DECmate Service is a comprehensive and responsive program for ongoing support of DECmate hardware and word processing software.

Whether you have a small business application, or a complex computer application in a large corporation, you want continuous and effective use of your system. When questions or problems occur, you want effective response. To achieve the maximum return on your investment and to insure operating efficiency, you need long term solutions. DECmate Service delivers both.

DECmate Service - key benefits

* toll free hot-line (800) 241-6580
* engineering modifications
* software and documentation updates
* all parts and labor
* predictable costs

Toll Free Hot-line

(800) 241-6580

When you have a question about your DECmate hardware or software, you need an immediate response. Dedicated office system specialists are only a phone call away at the Customer Services Support Center in Atlanta. Trouble-shooting is their business. DIGITAL office product specialists know your system's features and its capabilities. They are trained in all aspects of DECmate's operation. Once your problem is defined, a specialist will assign the appropriate hardware and/or software resource to resolve it - the first time, on time, every time.

Should on-site hardware assistance become necessary, a local service representative will be dispatched to your site. Your service needs will be given priority over those of all noncontracted customers. Once remedial maintenance has begun, it will continue through all coverage hours, until your system is completely operational again.

Services, Training and Supplies 8–1

DECmate Service - key benefits (cont'd)

Toll Free Hot-line (cont'd)

Should remedial maintenance exceed acceptable time limits, our "Problem Escalation Procedure" goes into effect. DECmate Service places priority on all back-up technical and management resources at an early stage, when they can be of most assistance in reducing repair time and increasing your system availability.

Equipment engineering modifications

Once you have purchased your DECmate you want to be sure it will always reflect the most advanced "state of the art" computer technology. With the installation of field engineering changes, DECmate Service ensures your system's compatibility with any future options and software offerings. As new technological developments are made, the applicable hardware updates and enhancements are installed at your site. These changes help maintain the value of your system as long as you own it.

Software and documentation updates

To help you keep pace with changing technology, DECmate Service supplies you with any software product improvements and documentation refinements, automatically. You will receive updates and changes tailored specifically to your DECmate word processing software. Each update is designed to help improve your system's efficiency and your programmer's productivity.

All parts and labor

DECmate Service facilitates your budget planning and control with a fixed monthly charge for all parts, materials and labor within the contracted hours. Technical support is provided by qualified professionals with in-depth training in specialized areas as well as in overall system maintenance. Since we know your system availability is critical to your business, our Service Representatives make every effort to perform remedial maintenance quickly and efficiently. Your Service Representative has quick access, 24 hours a day, 7 days a week, to an inventory of all parts and materials stocked at DIGITAL'S local branch and Regional Distribution Centers worldwide.

Predictable costs

Budget planning and control are made considerably easier because all expenses associated with the maintenance of your DIGITAL computer system are covered by a fixed monthly charge. There are no hidden charges.

The DECmate Service is also available with a guaranteed response time for on-site hardware assistance and continuous hardware remedial service at an additional charge.

For more information on the DECmate Service Agreement contact either your local Digital Field Service Branch Office or dial toll free (800) 241-6580.

If you do NOT run Word Processing Software, the following services are available.

Basic service

A hardware only service with the same features as DECmate Service except for NO toll free hotline for solution of word processing software problems and NO software and documentation updates.

DECservice

At an additional charge, DECservice provides the same as Basic Service but with a guaranteed response time for on-site hardware assistance and continuous hardware remedial service.

PerCall Service

PerCall Service is maintenance on a noncontractual time and materials basis. You are charged portal-to-portal for mileage and labor with additional charges for parts used.

This service is also available as a supplement to service agreement customers who occasionally require service outside their coverage hours. Customers with a DIGITAL Service Agreement are not charged for materials.

DECmailer

DECmailer Service is available to you if you are a self-maintenance customer. It provides a repair service for modules and subassemblies with a five day turnaround at a Digital Repair Center.

For further information on any of the above services contact your local DIGITAL Field Service Branch Office.

Services, Training and Supplies 8–3

Training Contact the following DIGITAL organizations and persons **Opportunities** for information about courses, individualized training, or self-paced training manuals.

- * Local DIGITAL Computer Store
- * Your DIGITAL Sales Representative
- * Educational Services

Supplies and Accessories

The following table lists some of the supplies and accessories that may be purchased through your DIGITAL Sales Representative or directly through your nearest DIGITAL Accessories and Supplies Center.

The Accessories and Supplies center will take your order, arrange for installation, and provide product and configuration information. Although the table below gives you an idea of the kinds of items available, you can get a complete list from DIGITAL's Accessories and Supplies Centers by requesting the Accessories and Supplies Catalogue. For your copy call or write to:

Digital Equipment Corp. 5001 B. Forbes Boulevard Lanham, MD 20801 (301) 459-9272 Annapolis: (301) 721-2400 Baltimore: (301) 792-2206 Digital Equipment Corp. 1010 Knox Street Torrance, CA 90502 (213) 532-5622

Digital Equipment Corp. 1050 East Remington Road Schaumburg, IL 60195 (312) 640-5612 Digital Equipment Corp. 632 Caribbean Drive Sunnyvale, CA 94086 (408) 734-4915

8–4 Services, Training and Supplies

Description	Model Number
Second RXO2 Diskette Drive Unit	RX78-BA
Box of 10 diskettes in library case	RX01K-10
Five RX01K-10	RX01K-50
Ten RX01K-10	RX01K-A0
Diskette storage binder and five inserts	RX01K-AE
Keyboard Holder for DECmate Pedestal System	H974-BA
Extended Worksurface for DECmate Pedestal System (Gray)	H974-CC
Modem Holder for DECmate Pedestal System (Gray)	H974-DC
Text Holder for DECmate Pedestal System	H974-EA
LA34 ribbon cartridge, three per box	LA34R-03
LA34 low paper sensor for roll paper	LAX34-LL
LA34 printer stand	LAX34-SL
LA34 printer stand casters (set of 2)	LAX34-SM
LA34 paper out switch for fanfold paper	LAX34-PL
Wireform paper catch for LAX34-SL	LAX34-SP
Wireform paper shelf for LAX34-SL	LAX34-SQ
Wireform paper tray for LA34	LAX34-SW

Services, Training and Supplies 8–5

1

Description	Model Number
Roll paper holder	LAX34-RL
Fanfold paper tractors	LAX34-AL
Keypad option, 14 keys	LAX34-KL
Heavy gauge vinyl dust cover for LA34 with roll-paper option	H9850-HA
Heavy gauge vinyl dust cover for LA34 with tractor option	H9850–HB
12 LA120 nylon ribbons	36-12153-01
12 Doz. 36-12153-01	36-12153-03
60 Doz. 36-12153-01	36-12153-04
14 7/8" x 11" 1/2" green & white bar, 18 lb., 1-part, 2600 sheets per box	H9850-PA
5 boxes H9850-PA	H9850-LC
10 boxes H9850-PA	H9850-LD

14 7/8" x 11" 1/2" green & white bar, 15 lb., 2-part, carbon, 1300 sheets per box

14 7/8" x 11" 1/2" green & white bar, 15 lb., 4-part, carbon, 650 sheets per box

14 7/8" x 11" 1/2" green & white bar, 2-part carbonless, 1500 sheets per box

14 7/8" x 11" 1/2" green & white bar, 4-part carbonless, 700 sheets per box H9850-PB

H9850-PC

9850-PD

9850-PE

8-6 Services, Training and Supplies

Description	Model Number
Copy holder	H981–A
Accessory kit (includes one LAXX-KB, one	
LAXX-KC, and one LAXX-KD)	LAXX-KA
10 Accessory kits	LAXX-UA
Caster set, 2 pieces	LAXX-KB
10 Accessory kits (LAXX-KB)	LAXX-UB
Worksurface shelf, 24" long x 15" wide x 2 " high	LAXX-KC
10 Accessory kits (LAXX-KC)	LAXX-UC
Wire shelf, 10 1/2" long x 18" wide x 2" high	LSXX-KD
10 Accessory kits (LAXX-KD)	LAXX-UD
Paper basket, 12" long x 16" wide	
13" high	LAXX-NC
10 Accessory kits (LAXX-NC)	LAXX-UE
Heavy guage vinyl dust cover, charcoal brown	H9850-HL
Antistatic floor mat, 4 x 6 ft. Several colors available.	H9859-DA
Bidirectional forms tractor for letter	LQPXX-AA
	Copy holder Accessory kit (includes one LAXX-KB, one LAXX-KC, and one LAXX-KD) 10 Accessory kits Caster set, 2 pieces 10 Accessory kits (LAXX-KB) Worksurface shelf, 24" long x 15" wide x 2 " high 10 Accessory kits (LAXX-KC) Wire shelf, 10 1/2" long x 18" wide x 2" high 10 Accessory kits (LAXX-KD) Paper basket, 12" long x 16" wide, 13" high 10 Accessory kits (LAXX-NC) Paper basket, 12" long x 16" wide, 13" high 10 Accessory kits (LAXX-NC) Heavy guage vinyl dust cover, charcoal brown Antistatic floor mat, 4 x 6 ft. Several colors available. Bidirectional forms

Services, Training and Supplies 8–7

Description	Model Number
Word Processing starter kit (includes: 2 boxes continuous-form paper H9850-PH, 2 boxes of mylar ribbons LQP01-KB, 2 boxes of nylon ribbons LQP01-KB, 2 boxes of printwheels; Elite 12 (LQP01-PC) and Courier 72 (LQP01-PD) 3 boxes of diskettes (RX01K-10), and one flexible ruler with	
pica and elite divisions.	WP31K-ST
6 Printwheels, Courier 10	LQP01-PA
6 Printwheels, Pica 10	LQP01-PB
6 Printwheels, Elite 12	LQP01-PC
6 Printwheels, Courier 72	LQP01-PD
6 Printwheels.	

O Hrintwheels,
French Prestige CubicLQP01-PE6 Printwheels,
General ScientificLQP01-PF6 Printwheels,
OCR-BLQP01-PH6 Printwheels,
Courier Legal 10ALQP01-PJRL02 disk - 10M byte
data cartridgeRL02K-DC

,

8–8 Services, Training and Supplies

Chapter 9 **U.S. Environment and Power Requirements**

This chapter lists the DECmate's environmental requirements ranges of temperature, humidity, and so on, that must be maintained for your DECmate to operate properly.

A poor environment or inadequate power supply can affect equipment reliability. You are required to comply with the specifications outlined for the DECmate system that you have.

Your building's engineers should study the specifications in this chapter and determine whether humidifiers, dehumidifiers, or special equipment is necessary.

> **U.S. Environment and Power Requirements** 9-1

DECmate SYSTEM ENVIRONMENT and POWER REQUIREMENTS	CONDITIONS NEEDED DURING SYSTEM OPERATION	WHAT THIS MEANS TO YOU
Temperature	Maximum range: 59 to 90 F (+15 to 32 C) Recommended: 65 to 75 F (18 to 24 C)	If you have trouble keeping your office within the recommended temperature range, you may have to consider air conditioning. Note: <u>Do not</u> operate the system near heating or cool- ing devices, large windows, or doors that open to the outside. Rapid tempe- rature changes affect the system's operation.
Relative Humidity	Maximum range: 20 to 80% Recommended: 40 to 60%	A low humidity level can cause static electricity, which affects DECmate's operation. If the humidity level in your office is too low, you may have to consider a humidifier. On the other hand, an office that is too humid can also adversely affect DECmate's operation, and a dehumidifier may be needed to correct the situ- ation. Vinyl tile or anti - static carpet are recommended to
		Note: Do not operate the system heating or cooling devices, near large windows, or doors that open to the outside. Rapid humidity changes affect the system's operation.
Maximum Altitude	8,000 Feet (2.4 Kilometers)	

9–2 U.S. Environment and Power Requirements

X

DECmate SYSTEM ENVIRONMENT and POWER REQUIREMENTS	CONDITIONS NEEDED DURING SYSTEM OPERATION	WHAT THIS MEANS TO YOU
System Placement	Allow 6 inches (15 centimeters) of airspace on all sides of the system.	Six inches (fifteen centi- meters of unobstructed air- space on all sides of the system allows easy access for maintenance and adequate airflow to the cooling fans.
Total Power Needed All Configurations:	Line Voltage: 120 nominal volts, 3-wire, single phase Line frequency: 59.5 to 60.5 Hz Service: 15-amp service	Most wall outlets in North America deliver 120 volts, have a line frequency of 60 Hz (hertz), are single phase and are 3 wire. However, you should check with an electrician to make sure you have a 3-wire, grounded, 15-amp service. Important: Each DECmate system should be on its own circuit breaker. Power circuits should be clean, stable, and noise free Other office machines, coffee
Minimum System Configuration:	Power: 3.1 amp maximum¦ at 120 volts 315 watts	pots, electric pencil sharpen ers, or the like must not be plugged into lines using the same circuit breaker that your DECmate is using.
Maximum System Configuration:	Power: 8.6 amp maximum at 120 volts	Also, your electrical system must conform to all applicable national and local codes and ordinances.
	985 watts	The next page contains detailed power requirements.
BTU Output		
Minimum System Configuration Up to Maximum	1075 BTU/hour	If your office is normally at the high end of the temperature range, the DECmate system may
System Configuration	3360 BTU/hour	create enough BTUs to necessi tate air conditioning.

-

U.S. Environment and Power Requirements 9–3

Chapter 10 European Environment & Power Requirements

This chapter lists the DECmate's environmental requirements - ranges of temperature, humidity, and so on, that must be maintained for your DECmate to operate properly.

A poor environment or inadequate power supply can affect equipment reliability. You are required to comply with the specifications outlined for the DECmate system that you have.

Your building's engineers should study the specifications in this chapter and determine whether humidifiers, dehumidifiers, or special equipment is necessary.

European Environment and Power Requirements 10–1

DECmate SYSTEM ENVIRONMENT and POWER REQUIREMENTS	CONDITIONS NEEDED DURING SYSTEM OPERATION	WHAT THIS MEANS TO YOU
Temperature	Maximum range: 59 to 90 F (+15 to 32 C) Recommended: 65 to 75 F (18 to 24 C)	If you have trouble keeping your office within the recommended temperature range, you may have to consider air conditioning. Note: Do not operate the system heating or cooling devices, near large windows, or doors that open to the outside. Rapid tempe- rature or humidity changes affect the system's operation.
Relative Humidity	Maximum range: 20 to 80% Recommended: 40 to 60%	A low humidity level can cause static electricity, which affects DECmate's operation. If the humidity level in your office is too low, you may have to consider a humidifier. On the other hand, an office that is too humid can also adversely affect DECmate's operation, and a dehumidifier may be needed to correct the situ- ation. Vinyl tile or anti-static carpet are recommended to minimize static electricity.
Maximum Altitude	8,000 Feet (2.4 Kilometers)	
System Placement	Allow 6 inches (15 centimeters) of airspace on all sides of the system.	Six inches (fifteen centi- meters of unobstructed air- space on all sides of the system allows easy access for maintenance and adequate airflow to the cooling fans.

10–2 European Environment and Power Requirements

0	DECmate SYSTEM ENVIRONMENT and POWER REQUIREMENTS	CONDITIONS NEEDED DURING SYSTEM OPERATION	WHAT THIS MEANS TO YOU
	Total Power Needed All Configurations	Line Voltage: 220-240 nominal volts, 1N+PE	Most wall outlets in Europe deliver 240 volts, have a line frequency of 50/60 Hz (hertz), are single phase and are 3 wire. However, you should check with an electrician to make sure you have a 3 wire, <u>earthed</u> , service.
		Line frequency: 47 to 63 Hz	Important:
			Each DECmate system should be on its own circuit breaker. Power circuits should be clean, stable, and noise free. Other office machines, coffee pots, electric pencil sharpen-
	Minimum System Configuration:	Power: 1.5 amp maximum at 240 volts 250 watts	ers, or the like must not be plugged into lines using the same circuit breaker that your DECmate is using. on.
	Maximum System Configuration:	Power: 4.3 amp maximum at 240 volts	Also, your electrical system must conform to all applicable national and local codes and ordinances.
		800 watts	The next page contains detailed power requirements.
	BTU Output		
	Minimum System Configuration	1075 BTUs/hour	If your office is normally at the high end of the temperature
	Up to Maximum System Configuration	3360 BTUs/hour	range, the DECmate system may create enough BTUs to necessi- tate air conditioning.

European Environment and Power Requirements 10–3

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