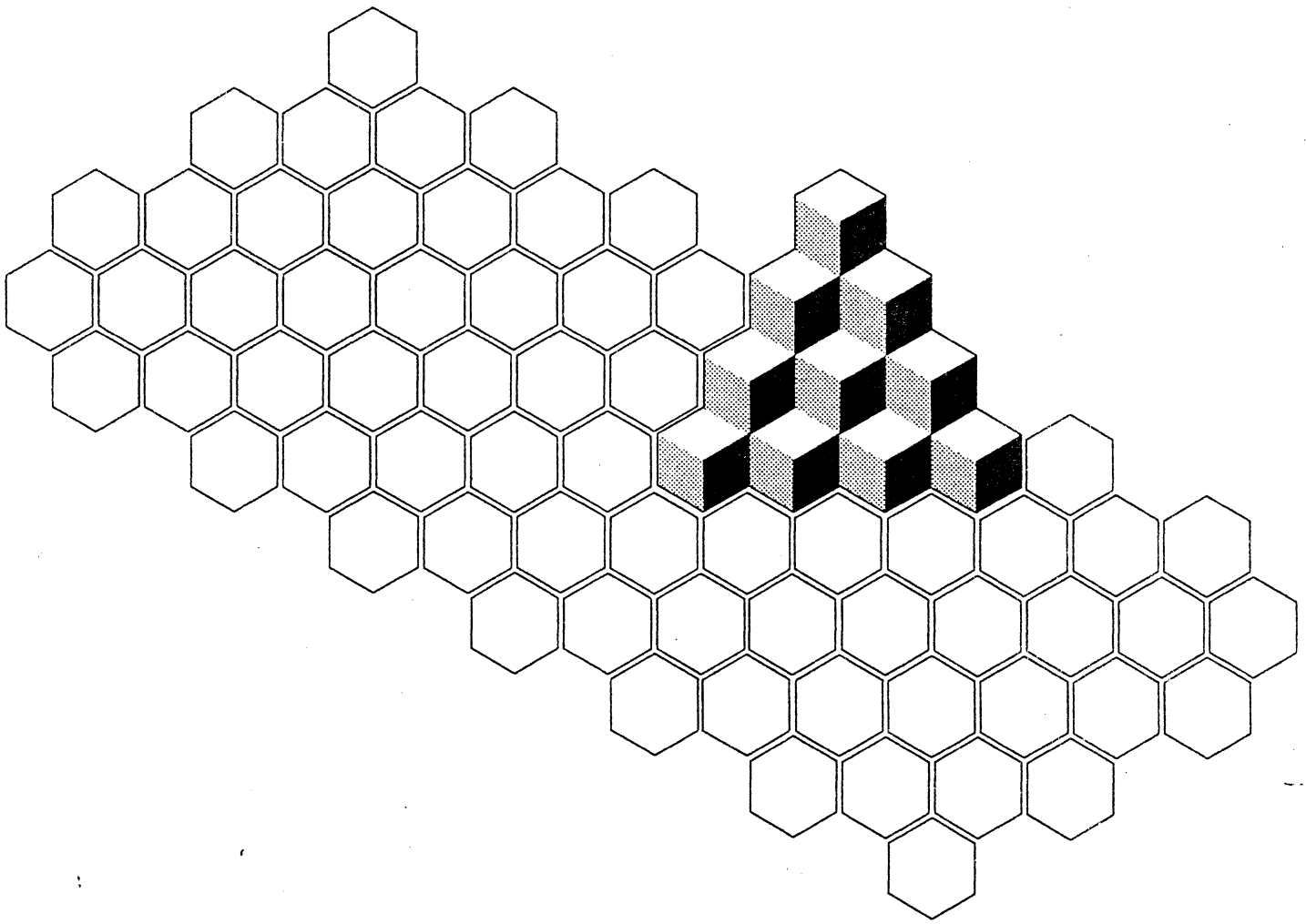
SA21-9804-2

Installing



IBM 9332 Disk Unit
Models 200/220/400/420/600

Third Edition (June 1988)

This major revision makes obsolete SA21-9804-1. Changes or additions were made to include Model 600 in the manual.

The drawings and specifications contained herein shall not be reproduced in whole or in part without written permission.

IBM has prepared this manual for use by customer employees when installing the specific machines indicated. IBM makes no representations that it is suitable for any other purpose.

Information contained in this manual is subject to change from time to time. Any such change will be reported in subsequent revisions or Technical Newsletters.

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates.

The numbers at the bottom right of illustrations are publishing control numbers and are not part of the technical content of this manual.

Publications are not stocked at the address given below. Requests for IBM publications should be made to your IBM representative or to your IBM-approved remarketer.

This publication could contain technical inaccuracies or typographical errors. A form for readers comments is provided at the back of this publication. If the form has been removed, comments may be addressed to IBM Corporation, Information Development, Department 245, Rochester, Minnesota, U.S.A. 55901. IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 1986, 1987, 1988

Federal Communications Commission (FCC) Statement

Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Instructions to User: If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

Properly shielded and grounded cables and connectors must be used for connection to peripherals in order to meet FCC emission limits. Proper cables are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables or by unauthorized modifications to this equipment. It is the responsibility of the user to correct such interference.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

How to Identify and Resolve Radio-TV Interference Problems

This booklet is available from the following:

Consumer Assistance and
Small Business Division
Room 254
1919 M St. NW
Washington, DC 20554
Tele (202) 632-7000

FOB Public Contact Branch
Room 725
1919 M St. NW
Washington, DC 20554
Tele (202) 634-1940

This equipment is Class 1 Equipment (information equipment to be used in commercial and industrial districts) which is in conformance with the standard set by Voluntary Control for Interference by Data Processing Equipment and Electronic Office Machines (VCCI) with an aim to prevent radio interference in commercial and industrial districts.

This equipment could cause interference to radio and television receivers when used in and around residential districts.

Please handle the equipment properly according to the instruction manual.

About This Manual

Who should use this manual ...

This manual is for customer employees who install the IBM 9332 Disk Unit.

How this manual is arranged ...

This manual contains:

- Six chapters with procedures to:
  - Install the 9332 in a rack
  - Install a stand-alone 9332
  - Prepare the 9332 for operation
  - Move a rack with the 9332 installed
  - Move a stand-alone 9332
  - Remove the 9332 from a rack
- A glossary of terms and abbreviations used in this manual
- An index of key words to procedures in this manual

How this manual is used ...

This manual is to be used with system instructions. System procedures will instruct you to use this manual. Procedures in this manual will instruct you to return to the system procedures.

If you need more information ...

See the following 9332 manuals for more information:

- *Analyzing Problems*, SA21-9837, which contains the procedures to analyze 9332 Disk Unit problems.
- *Reference Code Guide*, SA21-9836, which contains descriptions of the 9332 reference codes and is used to identify field-replaceable units.
- *Service Guide*, SY31-9026, which contains the procedures to service the 9332 Disk Unit.

Safety Notices in This Manual

Danger Notices

A danger notice calls attention to a condition that could be lethal or very hazardous to persons.

The following danger notices pertain throughout this manual.

DANGER

An electrical outlet that is not correctly wired could place hazardous voltage on metal parts of the system or the products that attach to the system. It is the customer's responsibility to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

1. **When installing the device, before installing signal cables, ensure that the power cord for that device is unplugged.**
2. **When adding this device to a system, disconnect all power cords, if possible, from the existing system before you connect the signal cable to that device.**

DANGER

During an electrical storm, do not connect cables or station protectors for communications lines, display stations, printers, or telephones.

DANGER

Use one hand, when possible, to connect or disconnect signal cables to prevent a possible shock from touching two surfaces with different electrical grounds.

Caution Notices

A caution notice calls attention to an action that could cause harm to persons. Caution notices appear in the following procedures:

- "Installing the Disk Unit" on pages 1-11 and 2-3
- "Moving the Disk Unit" on pages 5-8 and 6-14
- "Removing the Disk Unit" on page 6-9

Contents

1. Installing the 9332 in a Rack 1-1
Arranging the Parts 1-2
Installing the Rails 1-4
Installing the Disk Unit 1-11
Unlocking the Shock Mounts 1-13
Installing the Front Cover 1-14
Connecting the Signal Cables 1-15
Connecting the Power Cord 1-16
Saving the Packing Materials 1-17

2. Installing a Stand-Alone 9332 2-1
Arranging the Parts 2-2
Installing the Disk Unit 2-3
Unlocking the Shock Mounts 2-4
Installing the Front Cover 2-5
Connecting the Signal Cables 2-6
Connecting the Power Cord 2-7
Saving the Packing Materials 2-8

3. Preparing the 9332 for Operation 3-1
Unlocking the Shock Mounts 3-2
Setting the Address Switch 3-4
Checking the 9332 3-5

4. Moving a Rack with the 9332 Installed 4-1
Locking the Shock Mounts 4-2

5. Moving a Stand-Alone 9332 5-1
Disconnecting the Power Cord 5-2
Disconnecting the Signal Cables 5-4
Locking the Shock Mounts 5-6
Moving the Disk Unit 5-7

6. Removing the 9332 from a Rack 6-1
Disconnecting the Power Cord 6-2
Disconnecting the Signal Cables 6-4
Locking the Shock Mounts 6-6
Removing the Disk Unit 6-8
Removing the Rails 6-11
Moving the Disk Unit 6-13

Glossary of Terms and Abbreviations G-1

Index X-1

Warning Notices

A warning notice calls attention to an action that could cause damage to a program, device, system, or data. A warning notice appears in the Federal Communications Commission (FCC) Statement on page iii. Warning notices also appear in the following procedures:

- "Installing the Rails" on pages 1-8 and 1-10
- "Unlocking the Shock Mounts" on pages 1-13, 2-4, and 3-2
- "Locking the Shock Mounts" on pages 4-2, 5-6, and 6-6
- "Moving the Disk Unit" on pages 5-8 and 6-14

1. Installing the 9332 in a Rack

Arranging the Parts 1-2
Installing the Rails 1-4
Installing the Disk Unit 1-11
Unlocking the Shock Mounts 1-13
Installing the Front Cover 1-14
Connecting the Signal Cables 1-15
Connecting the Power Cord 1-16
Saving the Packing Materials 1-17

Arranging the Parts

1

You are directed here from your system instructions. Using these procedures, you will be able to install the 9332 in a rack.

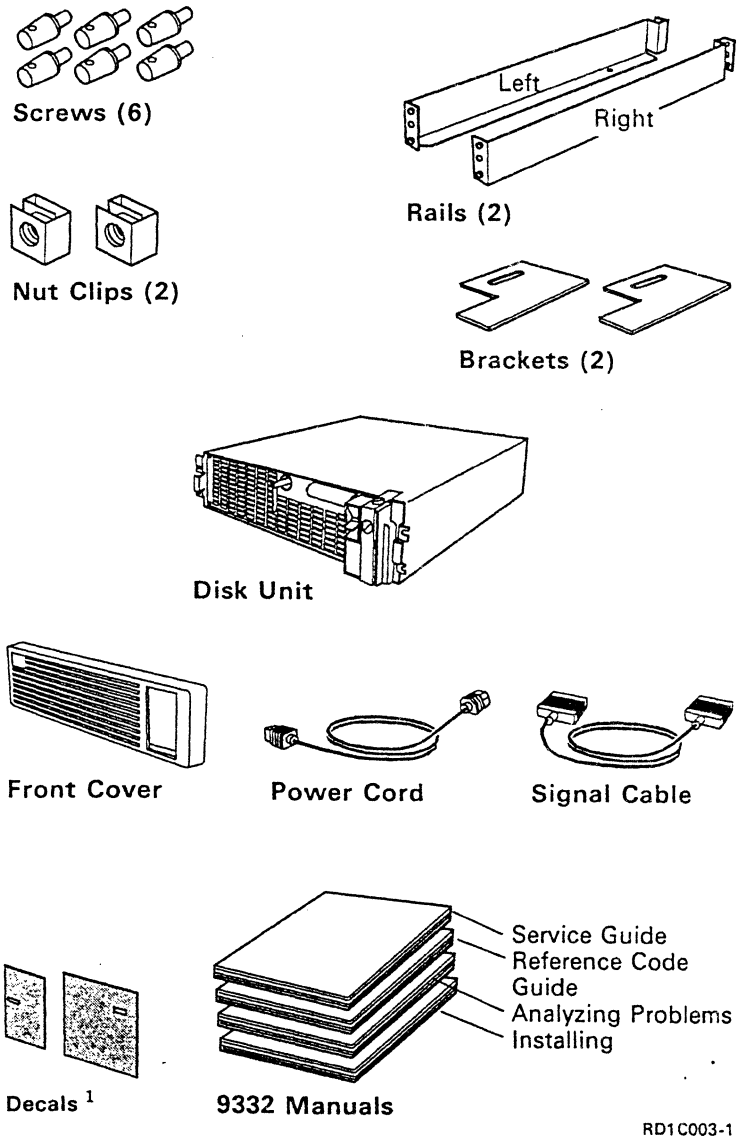
2

Check to see that you received these parts:

- ___ Screws (6)
- ___ Rails (2)
- ___ Nut clips (2)
- ___ Brackets (2)
- ___ Disk unit
- ___ Front cover
- ___ Power cord
- ___ Signal cable
- ___ Decals[1]
- ___ 9332 manuals

Note: *See "If you need more information ..." on page v for descriptions of these manuals.*

If any parts are missing or damaged, contact the representative from whom you ordered the 9332.



[1] These parts may already be installed on the 9332.

3

Continue with the next procedure.

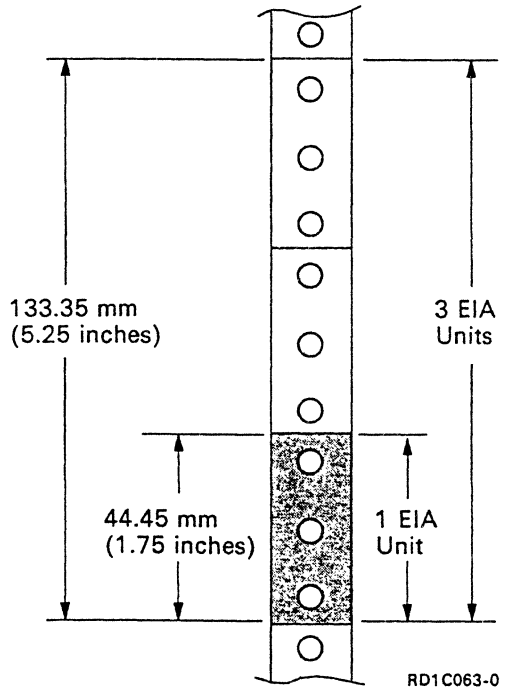
Installing the Rails

1

Ensure that the system and the rack are powered off before you perform this procedure. Refer to system or rack procedures.

2

You will need a vertical space of 133.35 millimeters or three EIA units (5.25 inches) to place the 9332 in a rack.



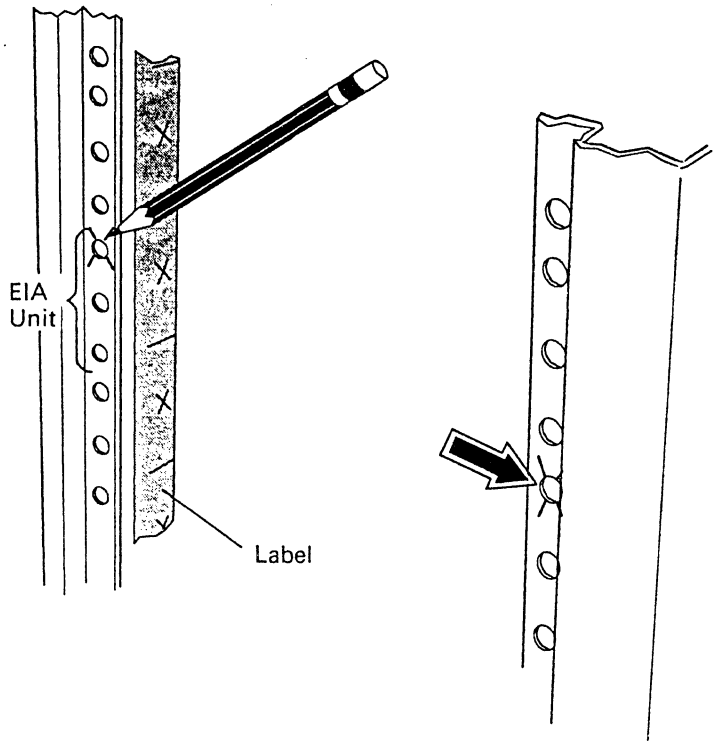
3

Mark the place on the front of the rack where you will install the rails:

Notes:

1. *See your system instructions for which rack EIA unit number to mark.*
2. *See the label on the side of the rack for the location of the EIA unit.*

- On the left side, mark the top hole of the EIA unit with a pencil.
- On the right side, mark the top hole of the same EIA unit.



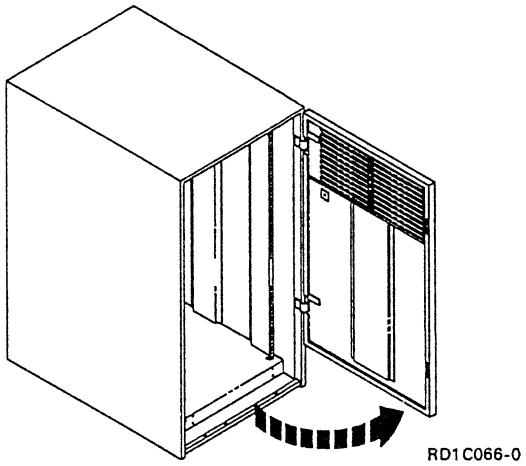
RD1C065-0

4

Open the rear door of the rack:

- Place your fingers between the bottom *left-hand corner* of the rear door and the rack.
- Pull the rear door toward you.

Note: *There will be some resistance, so pull hard.*



RD1C066-0

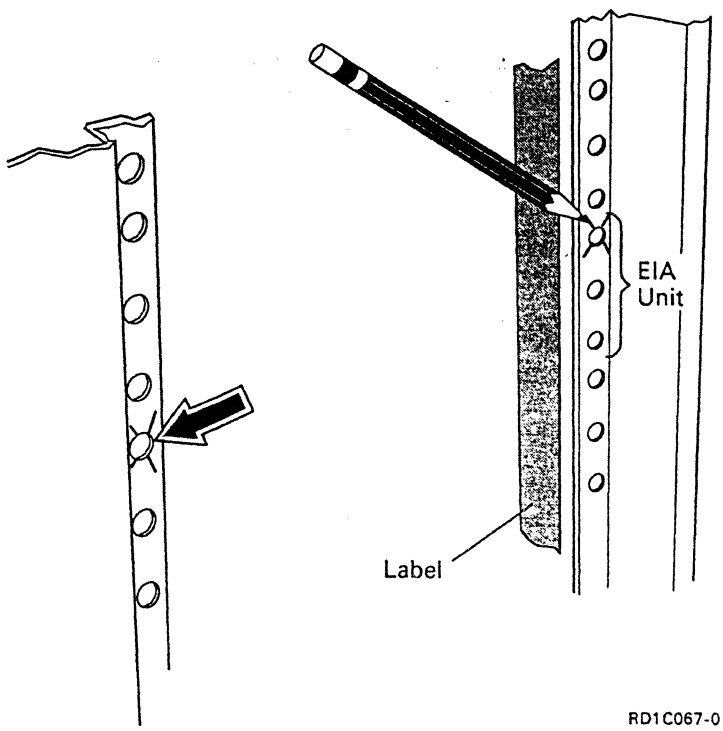
5

Mark the place on the rear of the rack where you will install the rails:

Notes:

1. *Use the same EIA unit number that you marked on the front.*
2. *See the label on the side of the rack for the location of the EIA unit.*

- On the left side, mark the top hole of the EIA unit with a pencil.
- On the right side, mark the top hole of the same EIA unit.



RD1C067-0

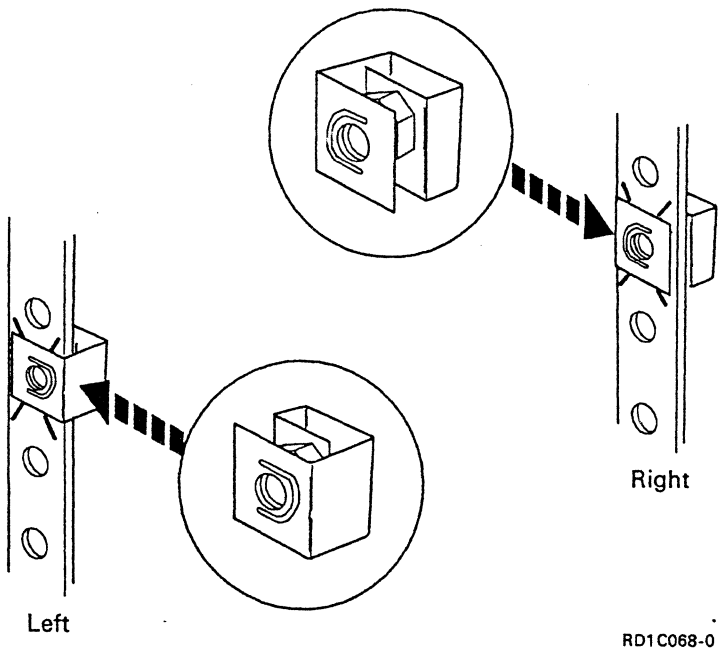
6

Install the two nut clips:

- Go to the rear of the rack.
- On the left side, attach a nut clip over the EIA unit hole that you marked.

  Note: *Ensure that the threaded nut is behind the frame as you face the rear.*

- On the right side, attach a nut clip over the other EIA unit hole that you marked.

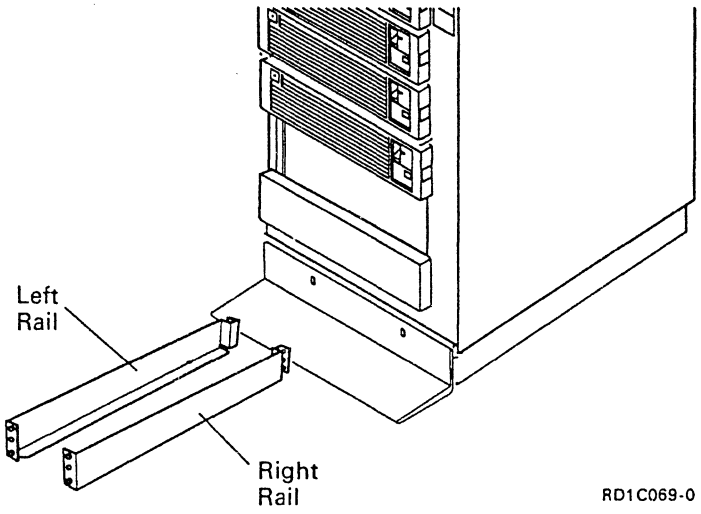


RD1C068-0

7

Position the two rails:

- Get the rails and go to the front of the rack.
- Place the rails so that the U-shaped ends point to the rear.



8

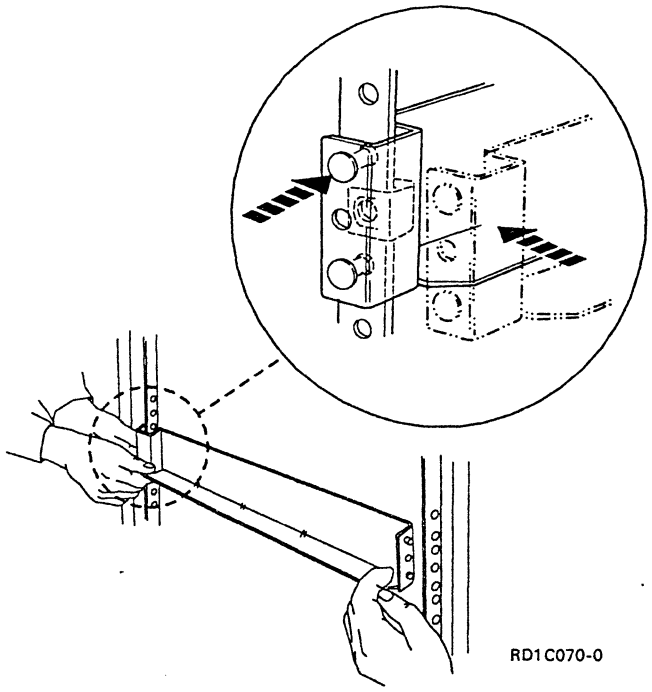
Note: *The remaining steps require two people. Read these steps before you do them.*

9

Install the rear portion of the *right* rail:

Note: *One person should stand in front of the rack, another person at the rear of the rack.*

- Place the U-shaped end around the rear frame.
- Insert the support pins that stick out from the rail so that the nut clip is between the two pins.

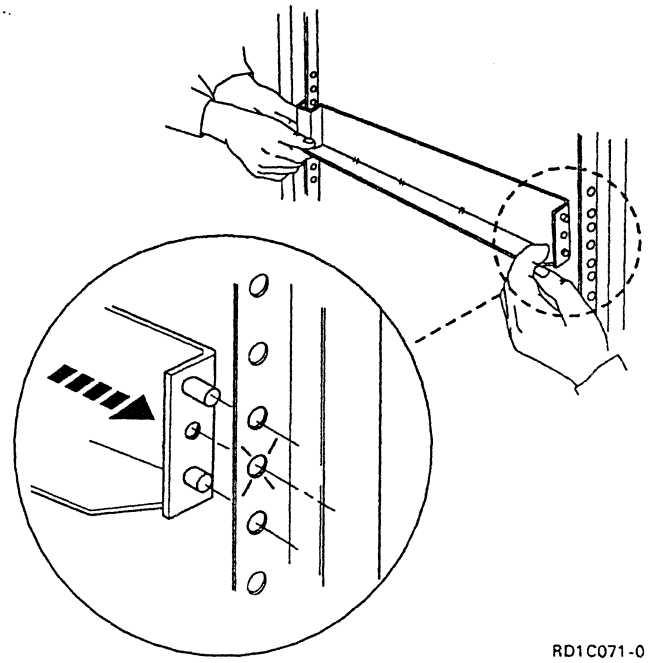


10

Install the front portion of the *right* rail:

Note: *When you move the rail, the rear pins may slide out.*

- Holding the rail in place, move the front portion of the rail to center the marked hole between the pins. Then, move the front pins behind the frame holes.
- Force the rail toward the front so that all pins are in the holes.



RD1C071-0

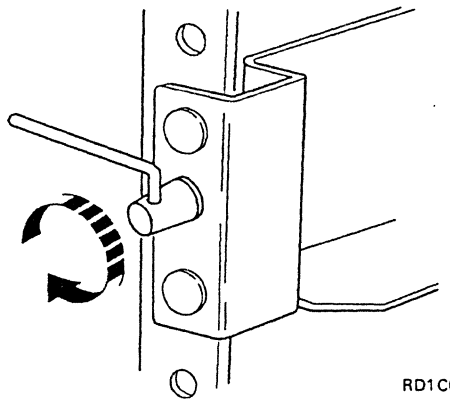
11

Warning: You must attach the rail with a screw before you continue. If you do not attach the rail, it will not hold the system devices.

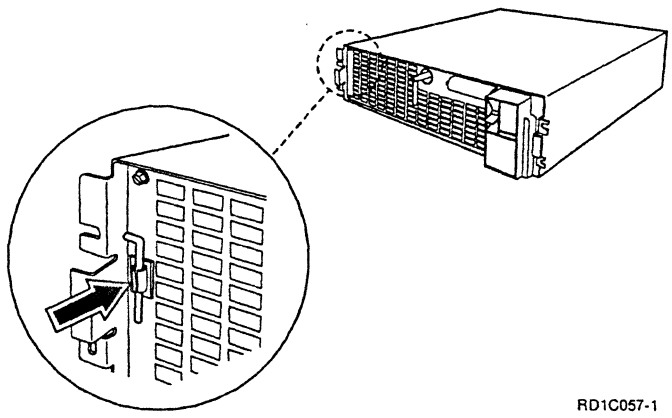
Attach the *right* rail with a screw at the rear of the rack.

Use the tightening rod to tighten the screw.

Note: *Your 9332 could have been shipped with standard type screws. Use a suitable tool to tighten the screw.*



RD1C072-0



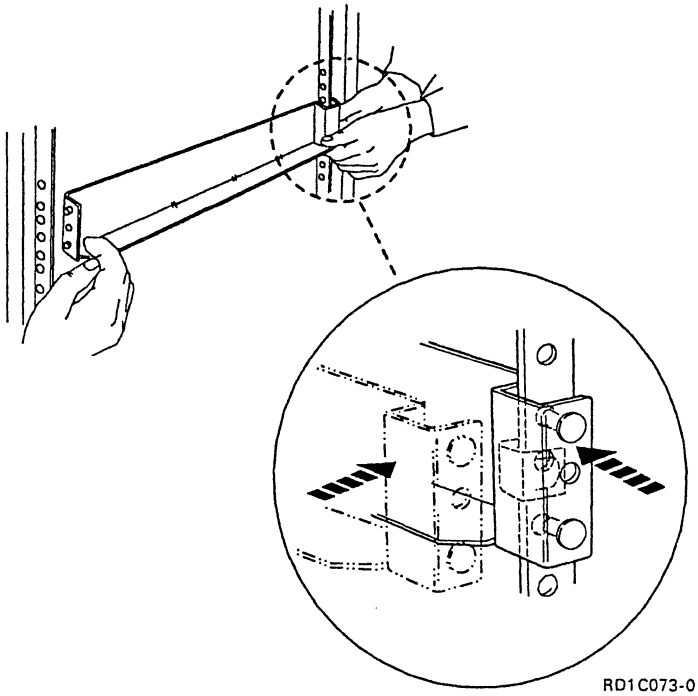
RD1C057-1

12

Install the rear portion of the *left* rail:

Note: *One person should stand in front of the rack, another person at the rear of the rack.*

- Place the U-shaped end around the rear frame.
- Insert the support pins that stick out from the rail so that the nut clip is between the two pins.



RD1C073-0

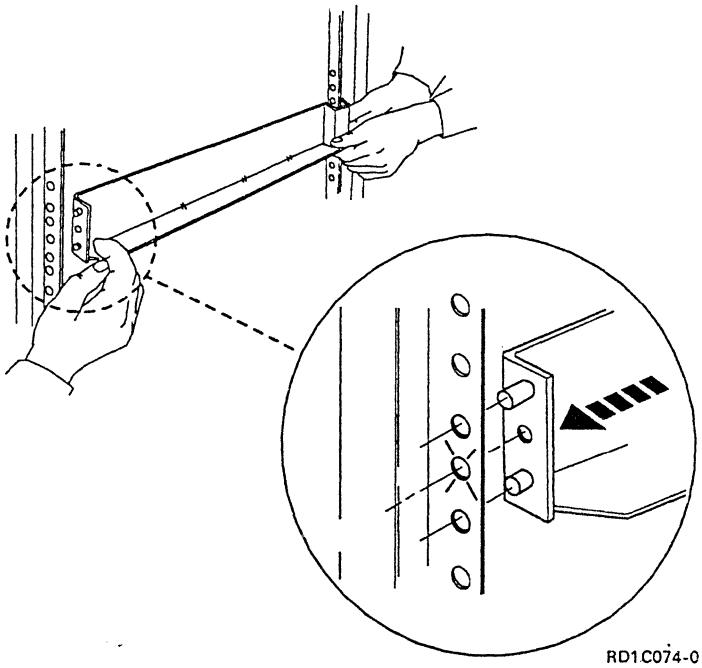
13

Install the front portion of the *left* rail:

Notes:

1. *Because of the rack padding, more pressure is needed to do this step than for the right side.*
2. *When you move the rail, the rear pins may slide out.*

- Holding the rail in place, move the front portion of the rail to center the marked hole between the pins. Then, move the front pins behind the frame holes.
- Force the rail toward the front so that all pins are in the holes.



RD1C074-0

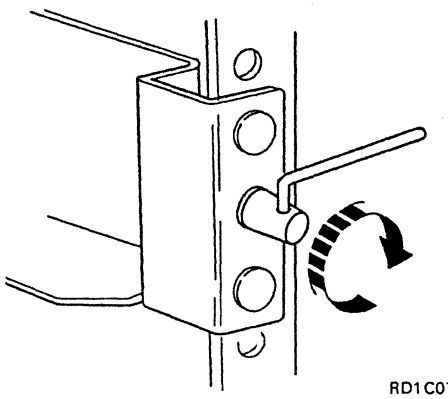
14

Warning: You must attach the rail with a screw before you continue. If you do not attach the rail, it will not hold the system devices.

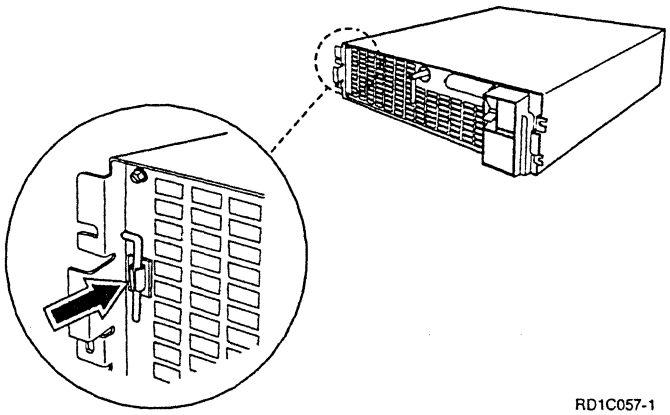
Attach the *left* rail with a screw at the rear of the rack.

Use the tightening rod to tighten the screw.

Note: *Your 9332 could have been shipped with standard type screws. Use a suitable tool to tighten the screw.*



RD1C075-0



RD1C057-1

15

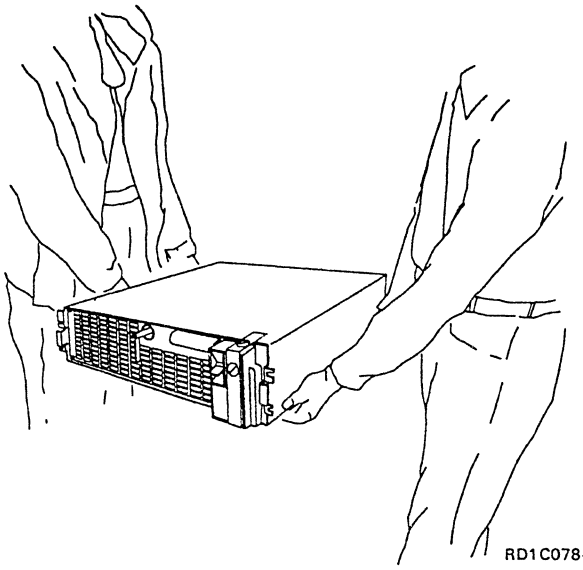
Continue with the next procedure.

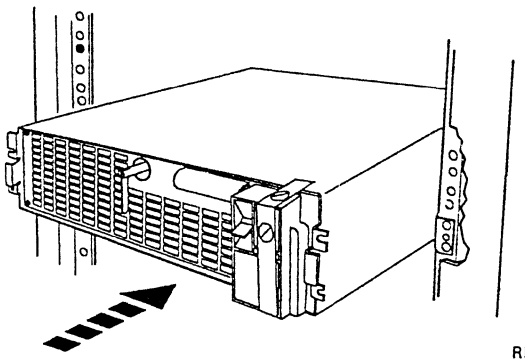
Installing the Disk Unit

1

CAUTION:
The 9332 weighs approximately 30 kilograms (65 pounds). It takes two people to safely lift and install the disk unit in the rack.

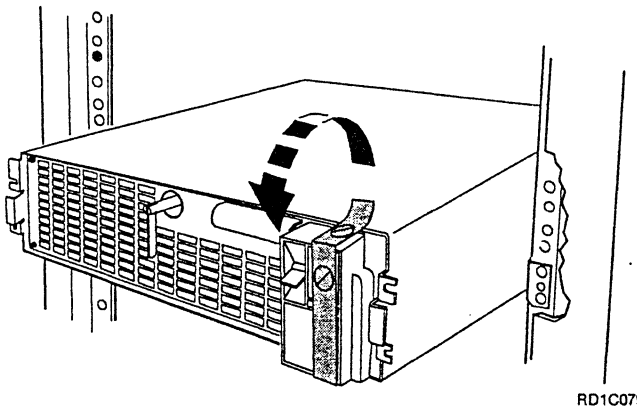
Place the disk unit on the rails. Slide the unit into the rack until the front of the disk unit frame is against the rack.


RD1C078-0


RD1C060-1

2

Remove the warning label from the control panel.

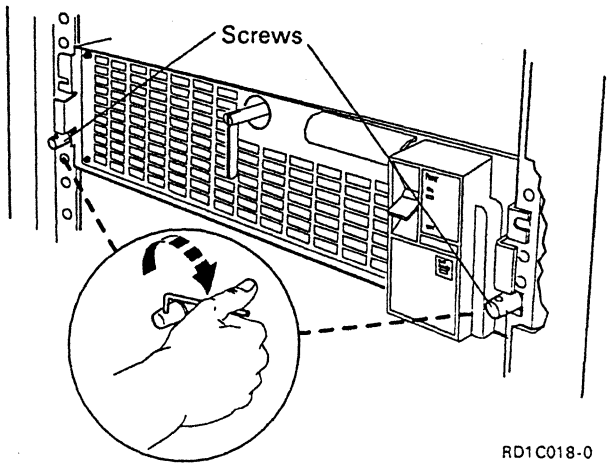

RD1C079-0

3

Attach the front of the disk unit to the rack with the two screws.

Use the tightening rod to tighten the screws.

Note: *Your 9332 could have been shipped with standard type screws. Use a suitable tool to tighten the screws.*



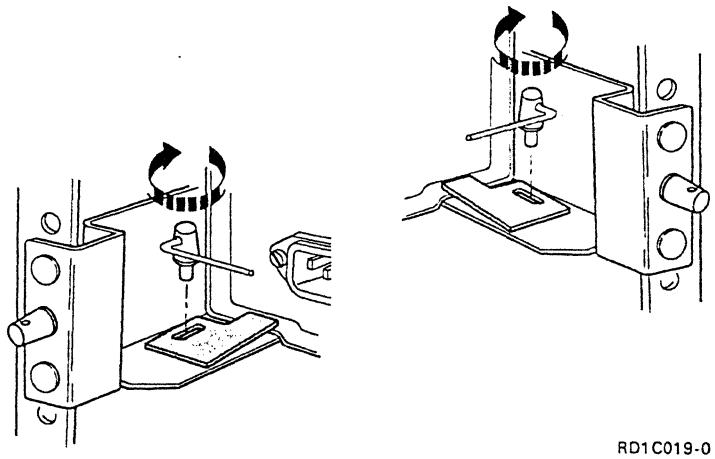
RD1C018-0

4

Attach the rear of the disk unit to each rail with the brackets and screws.

Use the tightening rod to tighten the screws.

Note: *Your 9332 could have been shipped with standard type screws. Use a suitable tool to tighten the screws.*

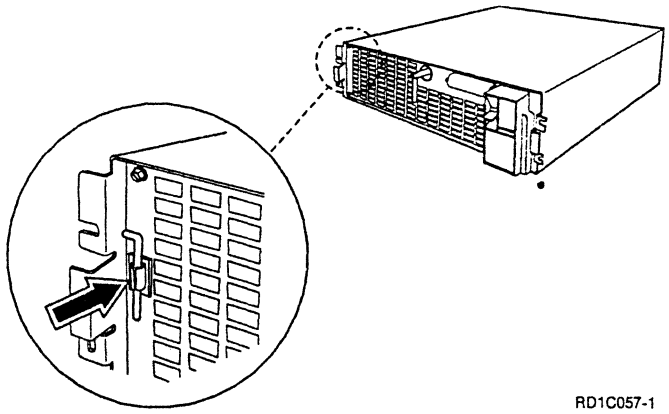


RD1C019-0

5

Place the tightening rod in its holder (left side of screen).

Note: *The tightening rod is not shipped with the 9332 if standard type screws are used.*



RD1C057-1

6

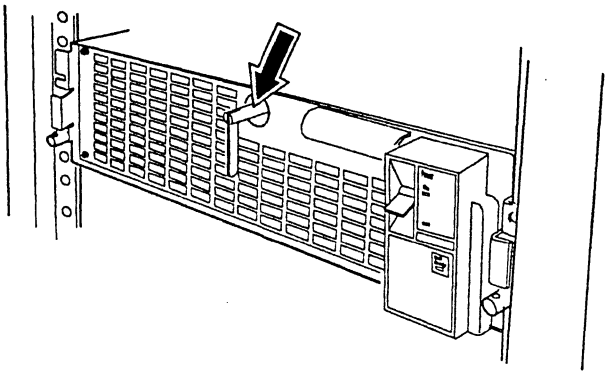
Continue with the next procedure.

Unlocking the Shock Mounts

1

Warning: Be sure to unlock the shock mounts before you operate the 9332; otherwise, there could be damage to the 9332.

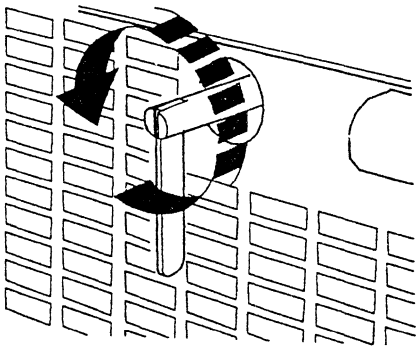
Locate the shock mount locking stud.



RD1C005-0

2

Unlock the shock mounts by turning the locking stud counter-clockwise until it disengages from the mounting threads.



RD1C006-0

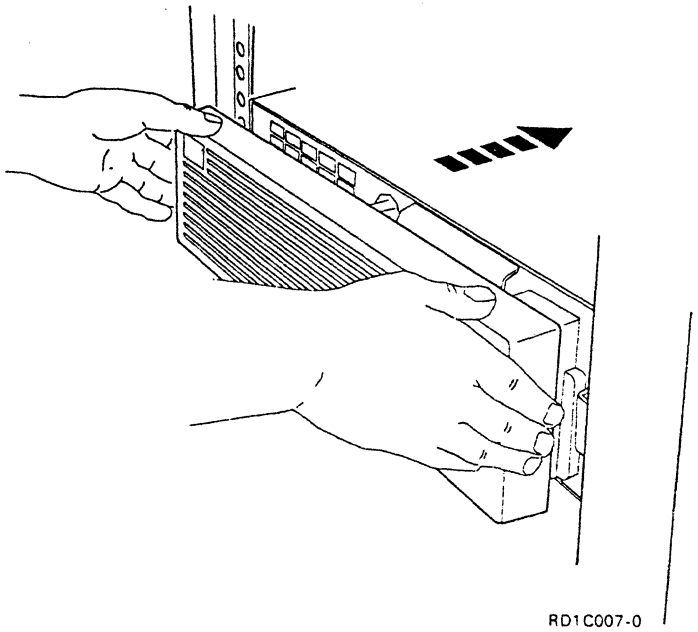
3

Continue with the next procedure.

Installing the Front Cover

1

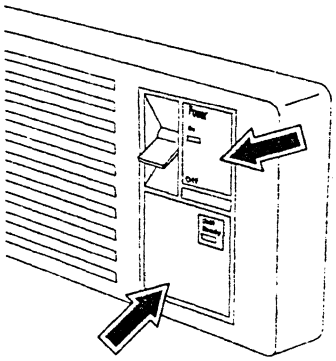
Install the front cover.



RD1C007-0

2

If necessary, install the control panel decals using the specific decals for your country's language.



RD1C008-0

3

Continue with the next procedure.

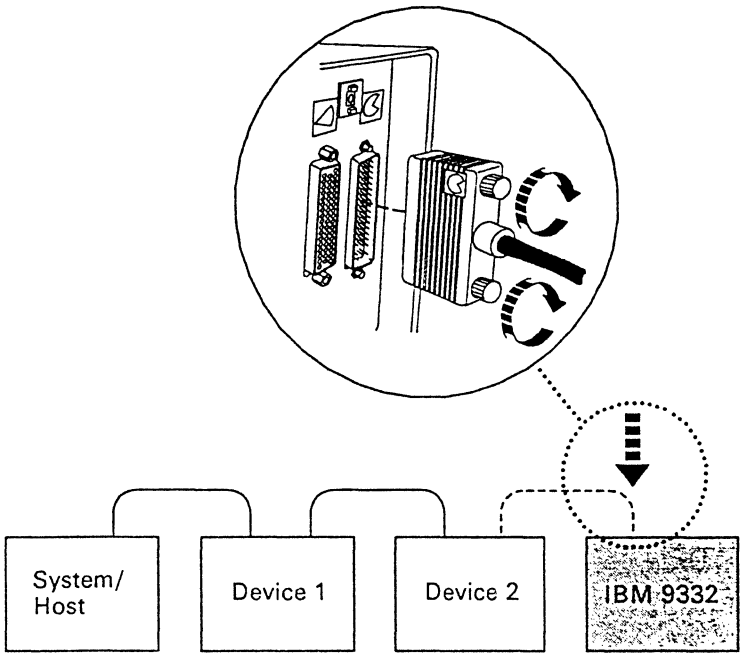
Connecting the Signal Cables

1

Connect the signal cable that is labeled with an incomplete circle to the 9332 connector that is also labeled with an incomplete circle (input signal connector).

Notes:

1. *Instructions to connect the other end of this signal cable will be supplied in your system instructions.*
2. *Instructions to connect either a terminating plug or another signal cable to the remaining 9332 connector will be supplied in your system instructions.*



RD1C012-1

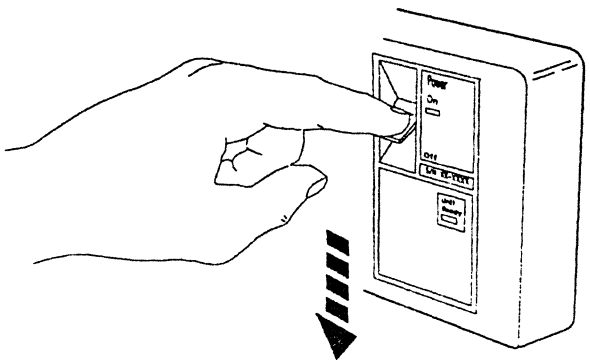
2

Continue with the next procedure.

Connecting the Power Cord

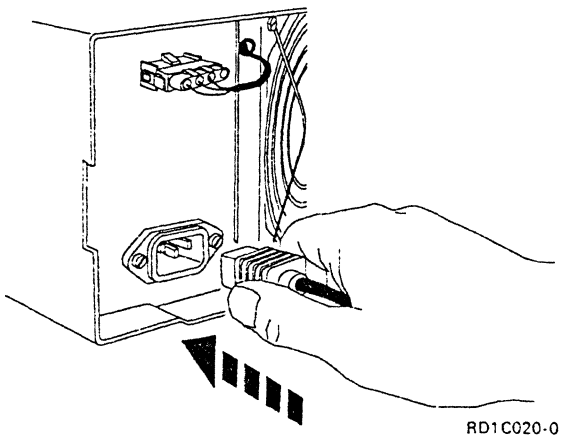
1

Ensure that the 9332 is powered off.



2

Connect one end of the power cord to the AC power connector on the 9332.



3

Instructions to connect the other end of this power cord will be supplied by your system instructions.

4

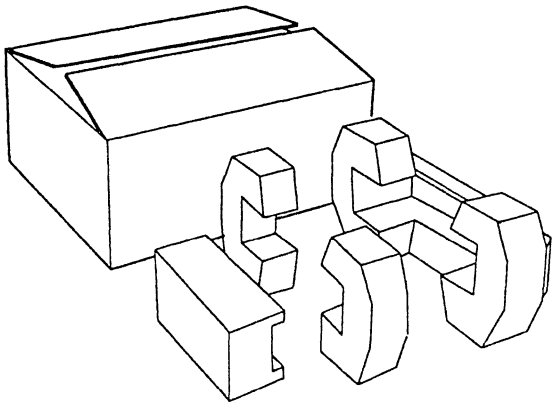
Continue with the next procedure.

Saving the Packing Materials

1

Save these packing materials for later use when you ship or move the 9332.

Note: *Skip this step if you are not installing this unit for the first time. Your packing materials were saved earlier when the disk unit was first installed.*



RD1C004-1

2

End of procedure. Return to your system instructions.

2. Installing a Stand-Alone 9332

Arranging the Parts 2-2
Installing the Disk Unit 2-3
Unlocking the Shock Mounts 2-4
Installing the Front Cover 2-5
Connecting the Signal Cables 2-6
Connecting the Power Cord 2-7
Saving the Packing Materials 2-8

Arranging the Parts

1

You are directed here from your system instructions. Using these procedures, you will be able to install a stand-alone 9332.

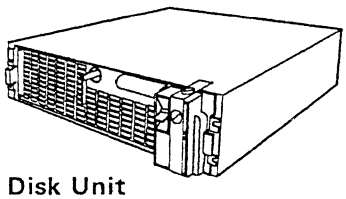
2

Check to see that you received these parts:

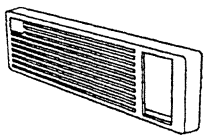
- ___ Disk unit
- ___ Front cover
- ___ Power cord
- ___ Signal cable
- ___ Decals[1]
- ___ 9332 manuals

Note: *See "If you need more information ..." on page v for descriptions of these manuals.*

If any parts are missing or damaged, contact the representative from whom you ordered the 9332.



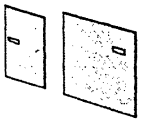
Disk Unit



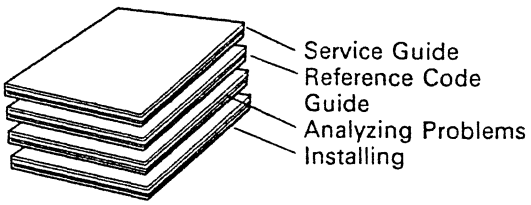
Front Cover

Power Cord

Signal Cable



Decals [1]



9332 Manuals

RD1C022-1

3

Continue with the next procedure.

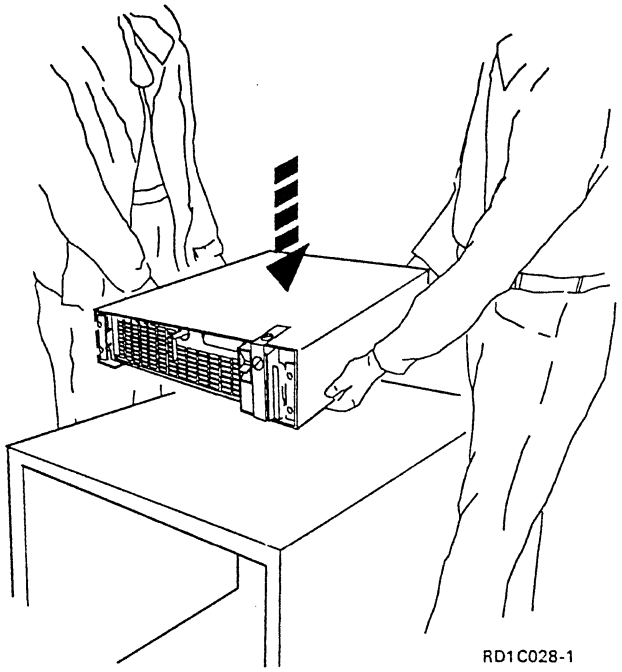
[1] These parts may already be installed on the 9332.

Installing the Disk Unit

1

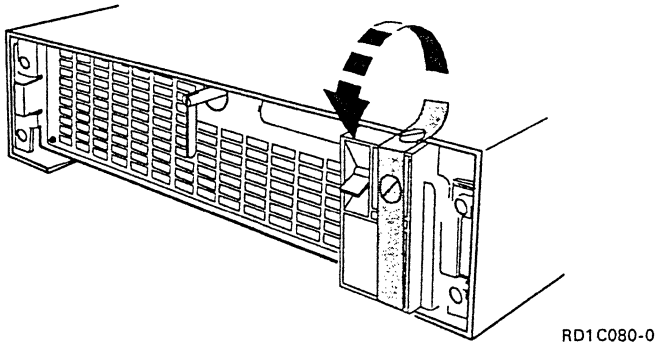
CAUTION:
The 9332 weighs approximately 36 kilograms (80 pounds) with the stand-alone cover assembly installed. It takes two or more persons to safely lift and move the unit.

Place the 9332 on the surface where you plan to install the disk unit.



2

Remove the warning label from the control panel.



3

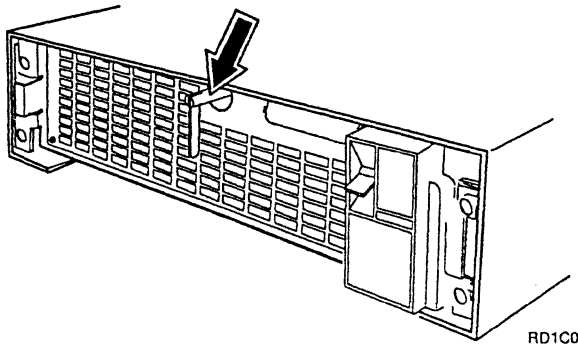
Continue with the next procedure.

Unlocking the Shock Mounts

1

Warning: Be sure to unlock the shock mounts before you operate the 9332; otherwise, there could be damage to the 9332.

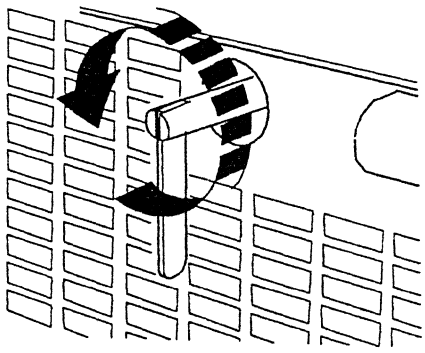
Locate the shock mount locking stud.



RD1C030-1

2

Unlock the shock mounts by turning the locking stud counter-clockwise until it disengages from the mounting threads.



RD1C006-0

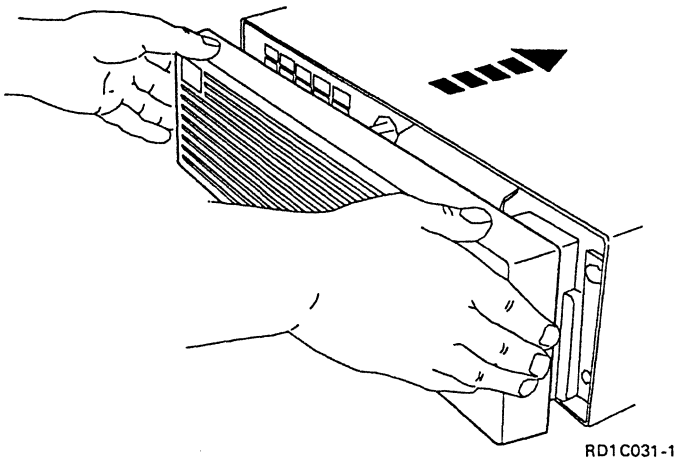
3

Continue with the next procedure.

Installing the Front Cover

1

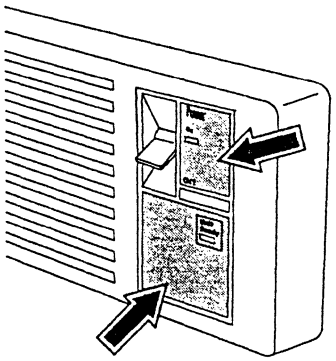
Install the front cover.



RD1C031-1

2

If necessary, install the control panel decals using the specific decals for your country's language.



RD1C008-0

3

Continue with the next procedure.

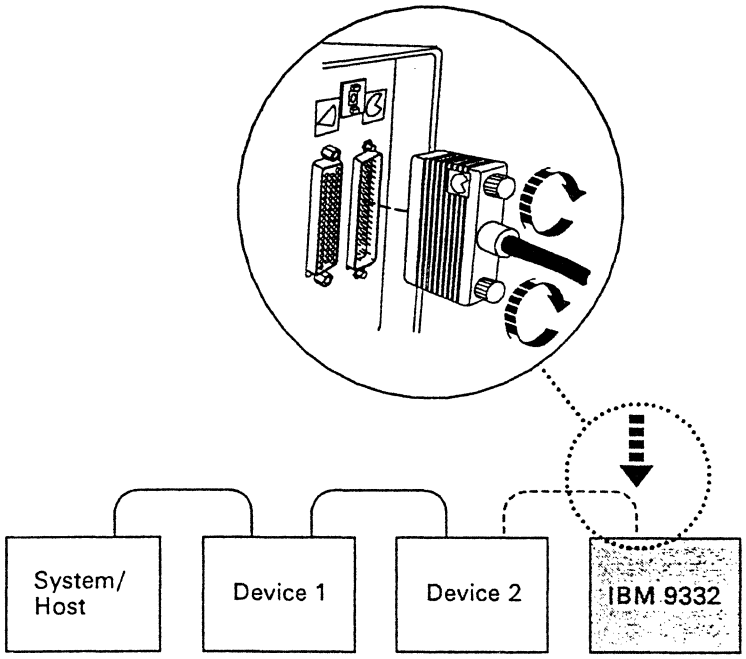
Connecting the Signal Cables

1

Connect the signal cable that is labeled with an incomplete circle to the 9332 connector that is also labeled with an incomplete circle (input signal connector).

Notes:

1. *Instructions to connect the other end of this signal cable will be supplied in your system instructions.*
2. *Instructions to connect either a terminating plug or another signal cable to the remaining 9332 connector will be supplied in your system instructions.*



RD1C012-1

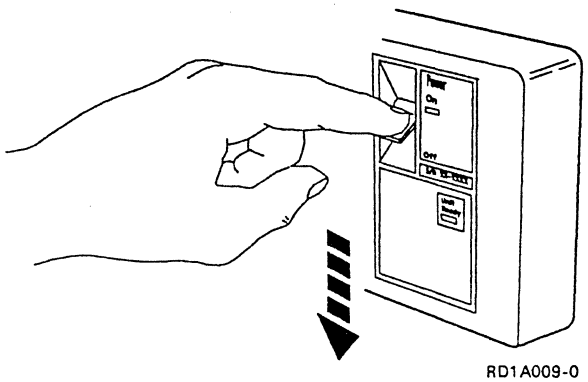
2

Continue with the next procedure.

Connecting the Power Cord

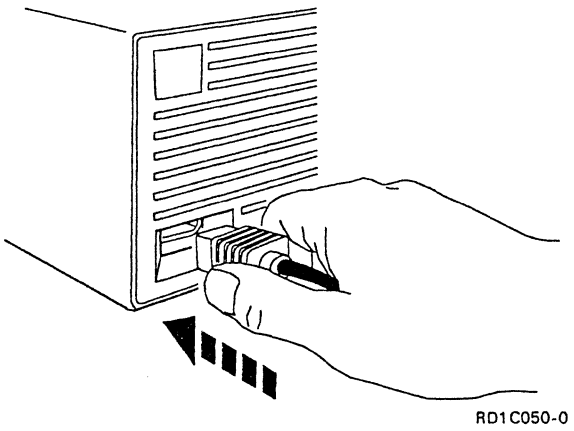
1

Ensure that the 9332 is powered off.



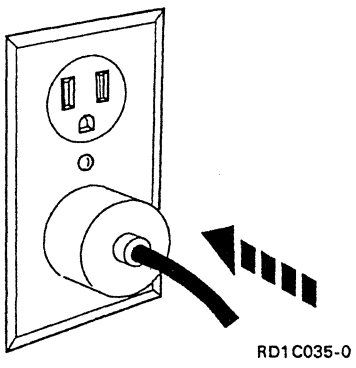
2

Connect one end of the power cord to the AC power connector on the 9332.



3

Connect the other end of the power cord to an available AC power outlet.



4

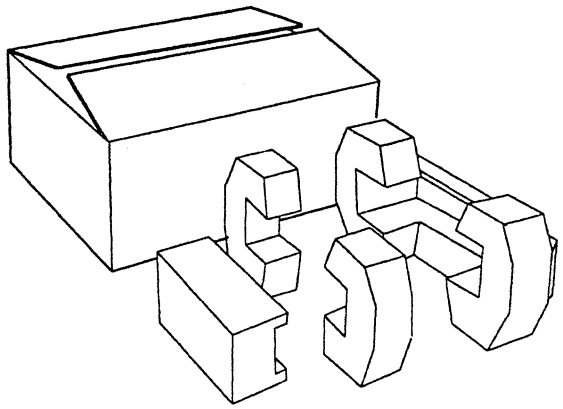
Continue with the next procedure.

Saving the Packing Materials

1

Save these packing materials for later use when you ship or move the 9332.

Note: *Skip this step if you are not installing this unit for the first time. Your packing materials were saved earlier when the disk unit was first installed.*



RD1C004-1

2

End of procedure. Return to your system instructions.

3. Preparing the 9332 for Operation

Unlocking the Shock Mounts 3-2
Setting the Address Switch 3-4
Checking the 9332 3-5

Unlocking the Shock Mounts

1

You are directed here from your system instructions. Using these procedures, you will prepare the 9332 for operation with a host or a system.

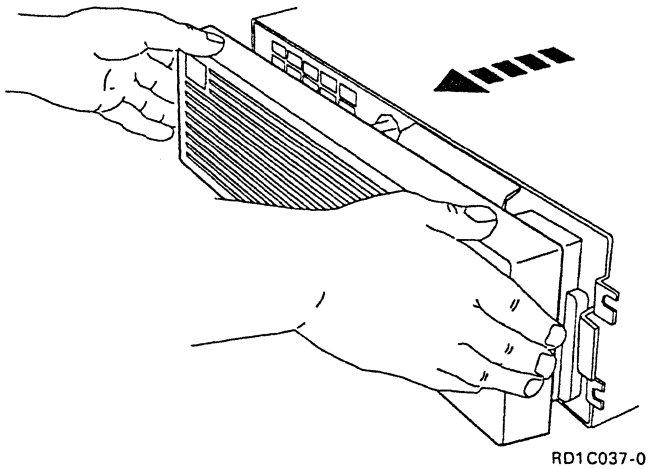
Warning: Be sure to unlock the shock mounts before you operate the 9332; otherwise, there could be damage to the 9332.

The shock mounts may have already been unlocked from a previous procedure.

If you have already unlocked the shock mounts, continue to "Setting the Address Switch" on page 3-4.

2

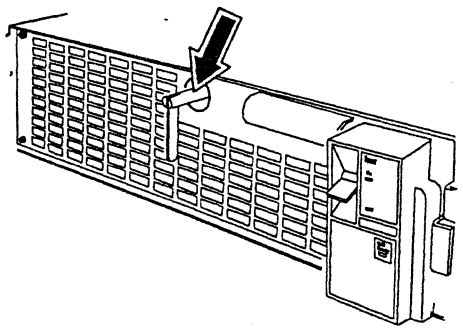
Remove the front cover.



RD1C037-0

3

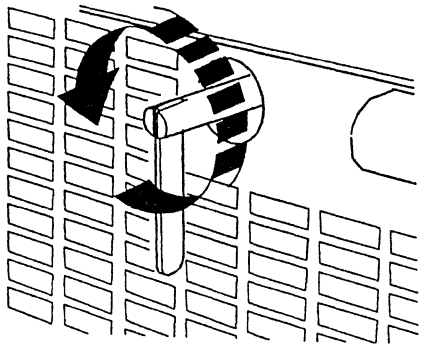
Find the shock mount locking stud.



RD1C036-0

4

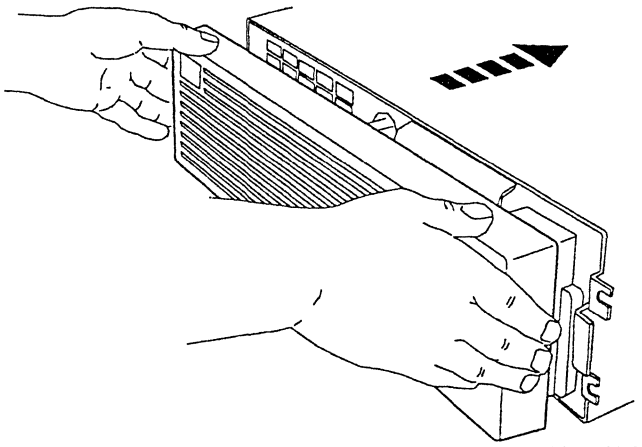
Unlock the shock mounts by turning the locking stud counter-clockwise until it disengages from the mounting threads.



RD1C006-0

5

Install the front cover.



RD1A006-0

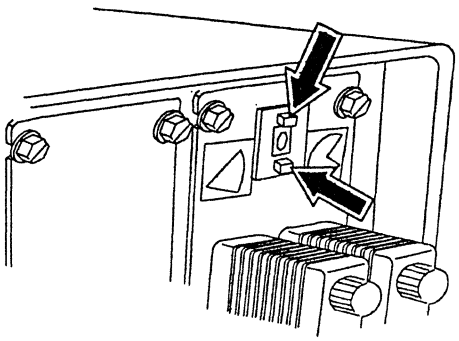
6

Continue with the next procedure.

Setting the Address Switch

1

Push the top button or bottom button of the address switch until the device address you have selected is displayed.



RD1A015-1

2

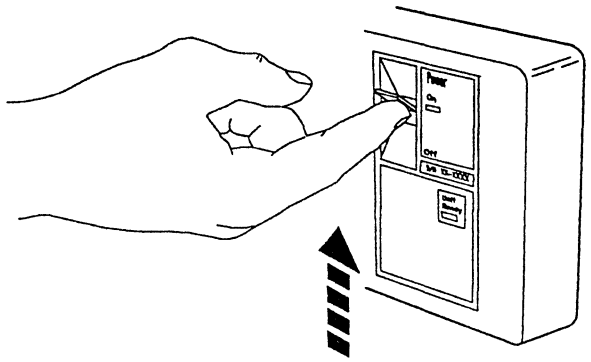
Continue with the next procedure.

Checking the 9332

1

If your disk unit is mounted in a rack, ensure that the rack is powered on. See the rack user's guide for rack power-on instructions.

Power on the 9332.



RD1A012-0

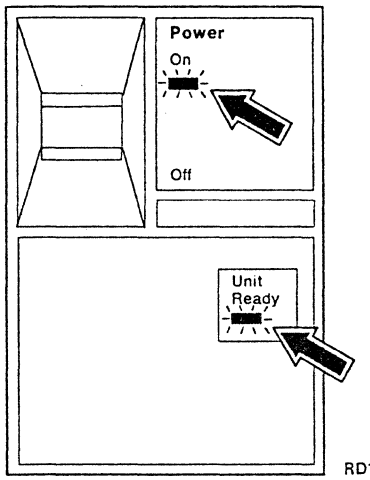
2

Observe the condition of the Power light and the Unit Ready light.

Note: *Wait 30 seconds to 90 seconds. Both the Power light and the Unit Ready light should be on continuously.*

Are both lights on continuously?

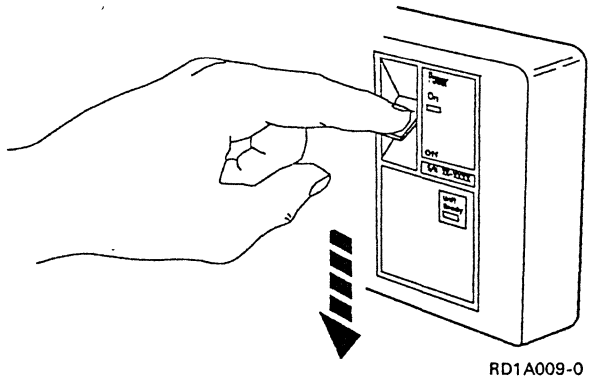
No	**Yes**
↓	Go to step 7.



RD1A013-0

3

Power off the 9332.



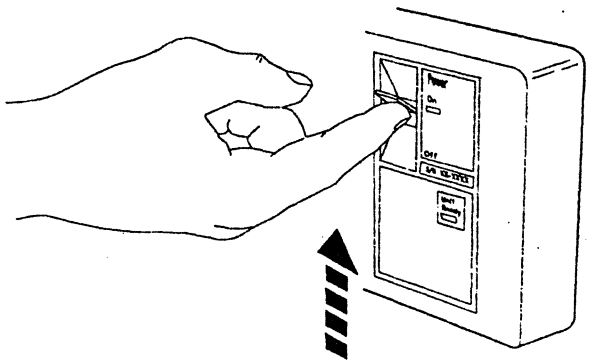
RD1A009-0

4

Wait approximately 30 seconds.

Power on the 9332.

Note: *When you power on the 9332 with the system powered off or when the signal cable from the 9332 to the system is disconnected, the 9332 may not always indicate Unit Ready.*



RD1A012-0

5

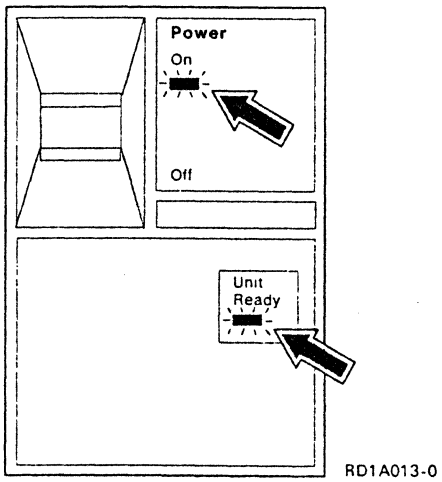
Observe the condition of the Power light and the Unit Ready light.

Note: *Wait 30 seconds to 90 seconds. Both the Power light and the Unit Ready light should be on continuously.*

Are both lights on continuously?

No **Yes**

↓ Go to step 7.



RD1A013-0

6

See the 9332 manual *Analyzing Problems* to analyze problems indicated by the Power light or the Unit Ready light.

7

The 9332 is operating correctly. It is ready to be used by your system.

8

End of procedure. Return to your system instructions.

4. Moving a Rack with the 9332 Installed

Locking the Shock Mounts 4-2

Locking the Shock Mounts

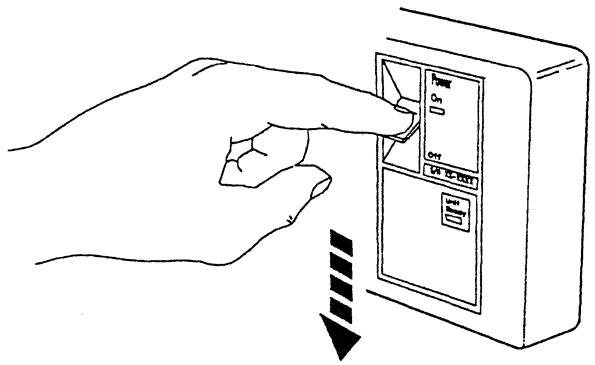
1

You are directed here from your system instructions. Using these procedures, you will prepare to move a rack with the 9332 installed.

Warning: Be sure to lock the shock mounts before you move or ship a rack with the 9332 installed; otherwise, there could be damage to the 9332.

2

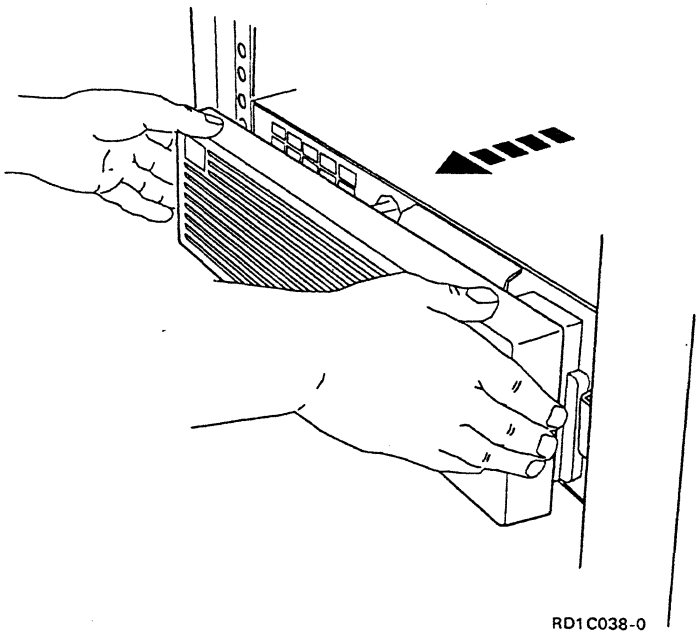
Power off the 9332.



RD1A009-0

3

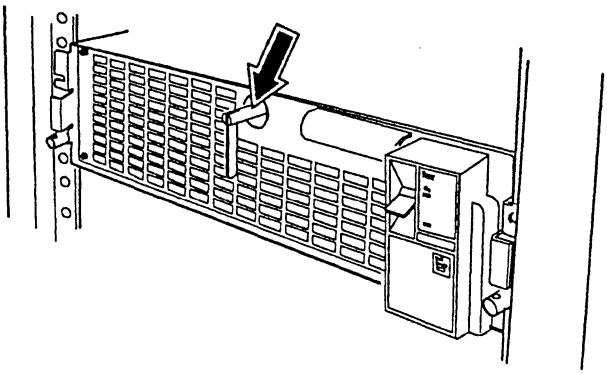
Remove the front cover.



RD1C038-0

4

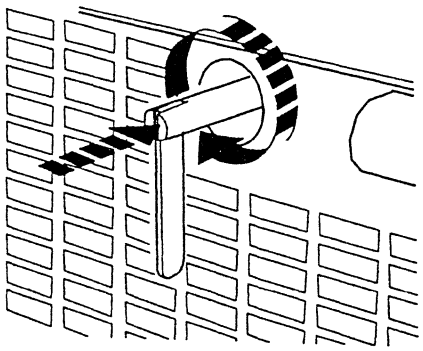
Find the shock mount locking stud.



RD1C005-0

5

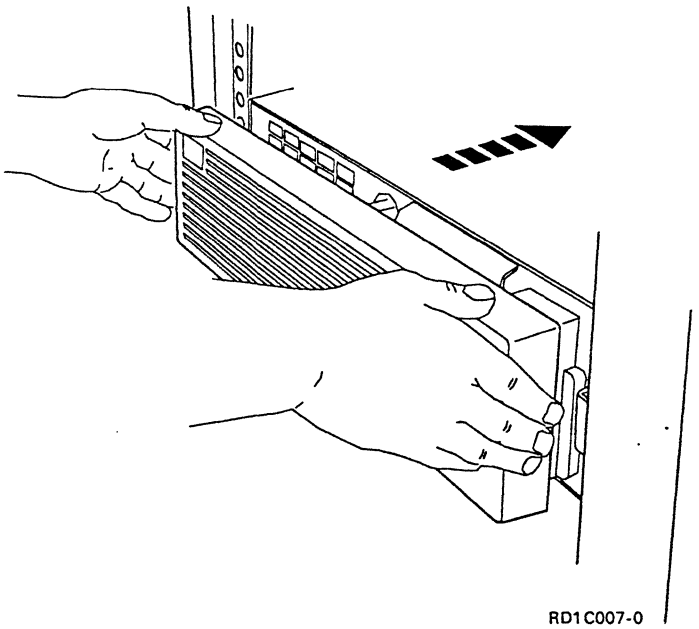
Lock the shock mounts by engaging the locking stud in the mounting threads and turning the locking stud clockwise until it stops.



RD1C039-1

6

Install the front cover.



RD1C007-0

7

End of procedure. Return to your system instructions.

5. Moving a Stand-Alone 9332

Disconnecting the Power Cord 5-2
Disconnecting the Signal Cables 5-4
Locking the Shock Mounts 5-6
Moving the Disk Unit 5-7

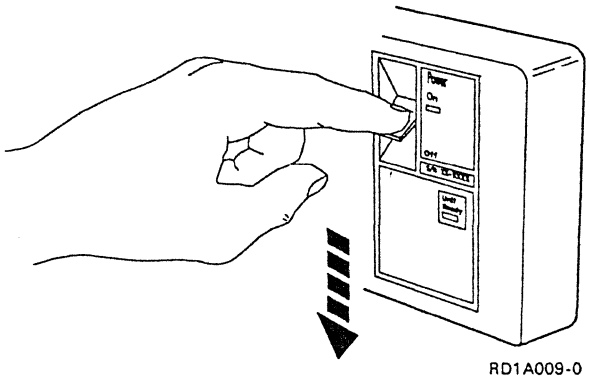
Disconnecting the Power Cord

1

You are directed here from your system instructions. Using these procedures, you will prepare to move a stand-alone 9332.

2

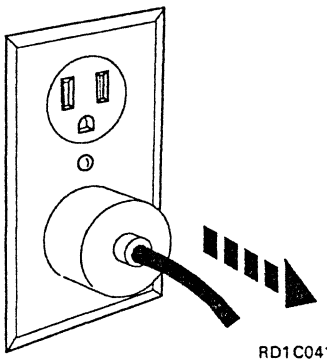
Power off the 9332.



RD1A009-0

3

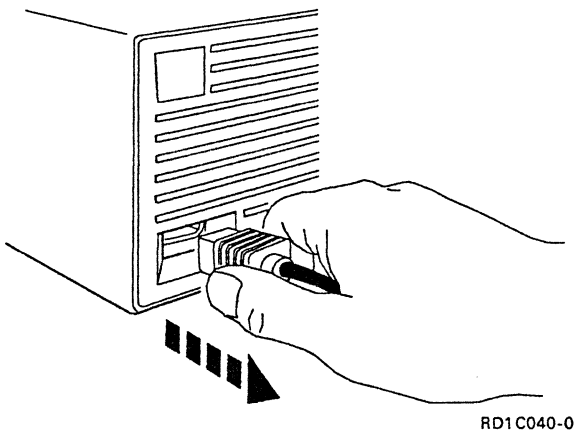
Disconnect the power cord from the AC power outlet.



RD1C041-0

4

Disconnect the power cord from the AC power connector on the 9332.



RD1C040-0

5

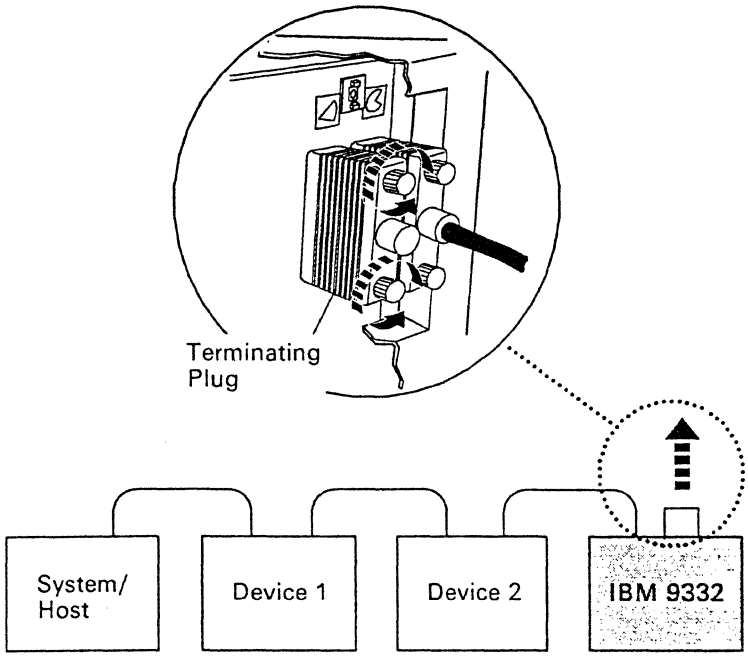
Continue with the next procedure.

Disconnecting the Signal Cables

1

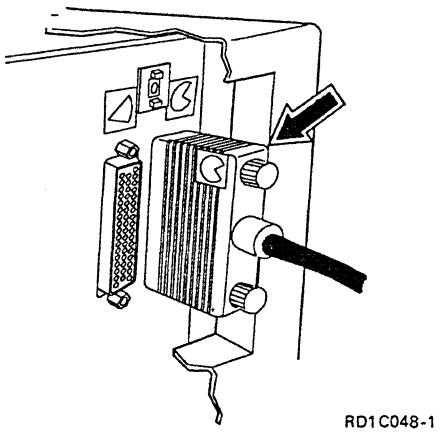
Remove the terminating plug (or signal cable) from the 9332 connector that is marked with a wedge (output signal connector).

Note: *The terminating plug is to remain with the system or host, not with the 9332 you are moving.*



2

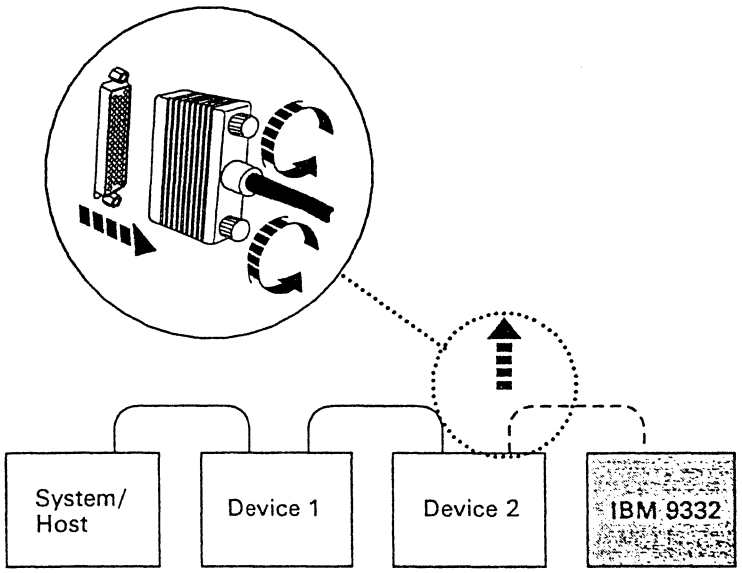
Remove the signal cable from the 9332 connector that is marked with an incomplete circle (input signal connector).



3

Remove the other end of the signal cable (removed in step 2) from the next unit on the cable path. The signal cable connector is marked with a wedge.

Note: *This signal cable stays with the 9332 being moved and is used again when you install the 9332.*



4

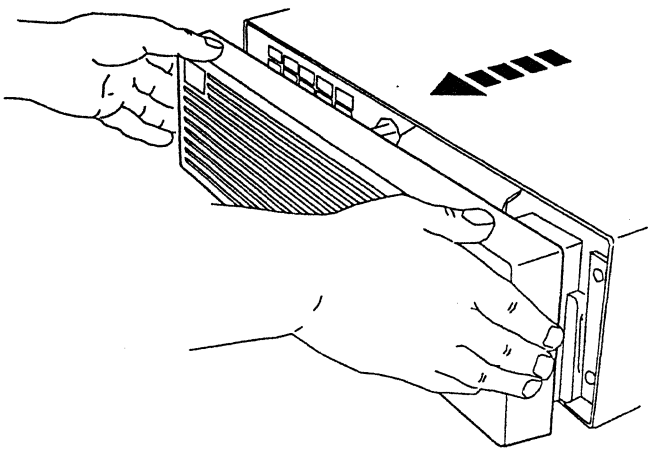
Continue with the next procedure.

Locking the Shock Mounts

1

Warning: Be sure to lock the shock mounts before you move or ship the 9332; otherwise, there could be damage to the 9332.

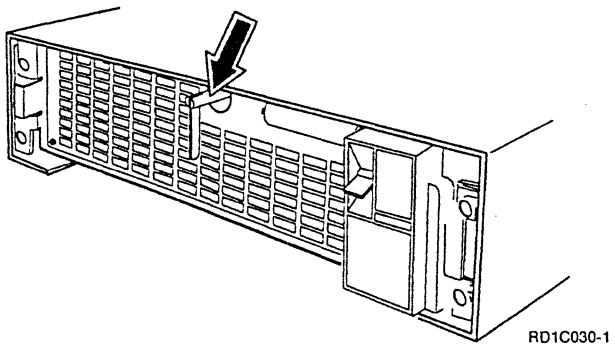
Remove the front cover.



RD1C049-0

2

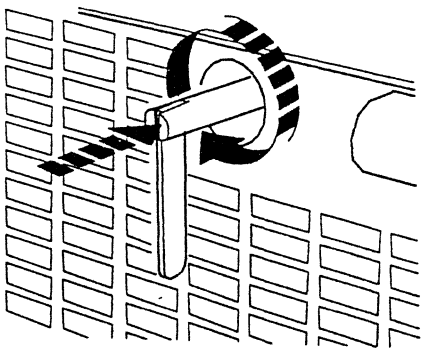
Find the shock mount locking stud.



RD1C030-1

3

Lock the shock mounts by engaging the locking stud in the mounting threads and turning the locking stud clockwise until it stops.



RD1C039-1

4

Continue with the next procedure.

Moving the Disk Unit

1

You must determine if you are going to move the 9332 a short distance or a long distance.

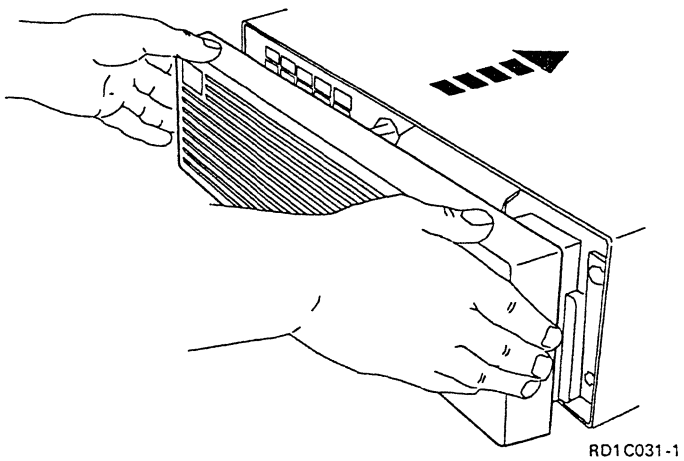
Note: *A short distance move is one where a truck is not involved; for example, moving the 9332 from one room to another room. A long distance move is one where you will use a truck to relocate the 9332; for example, moving the 9332 from one city to another city.*

Are you doing a short distance move?

Yes	No
↓	Go to step 5.

2

Install the front cover.

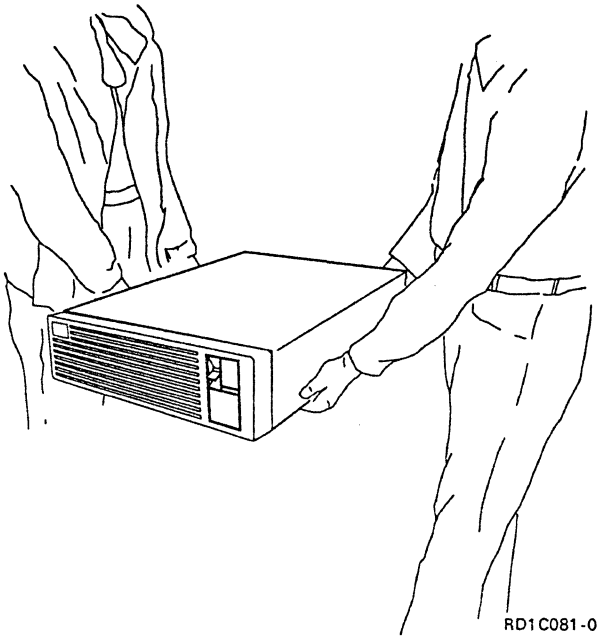


RD1C031-1

3

CAUTION:
The 9332 weighs approximately 36 kilograms (80 pounds) with the stand-alone cover assembly installed. It takes two or more persons to safely lift and move the disk unit.

Move the disk unit to its new location.



4

End of procedure. Return to your system instructions.

5

These steps will prepare your 9332 for a long distance move.

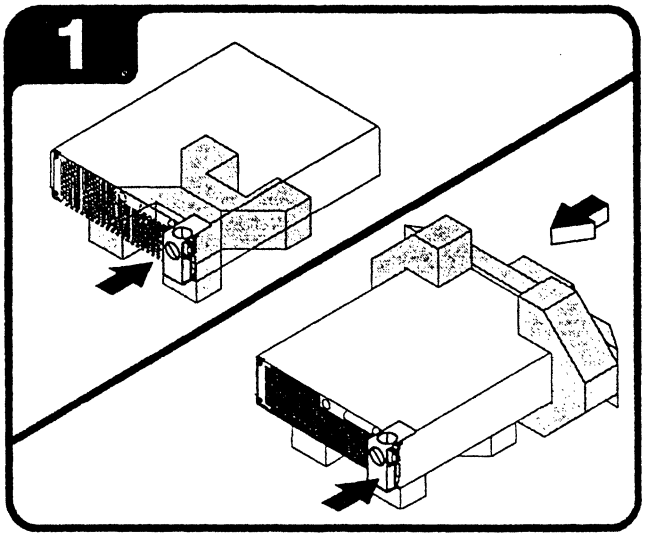
Warning: To avoid damage to the 9332. IBM recommends shipping the 9332 only in the original 9332 shipping carton. You should also use the associated packing materials.

If you do not have the original 9332 shipping carton and packing materials, you can order them from your IBM sales representative.

6

Using the original 9332 shipping carton and packing materials, pack the 9332 as follows:

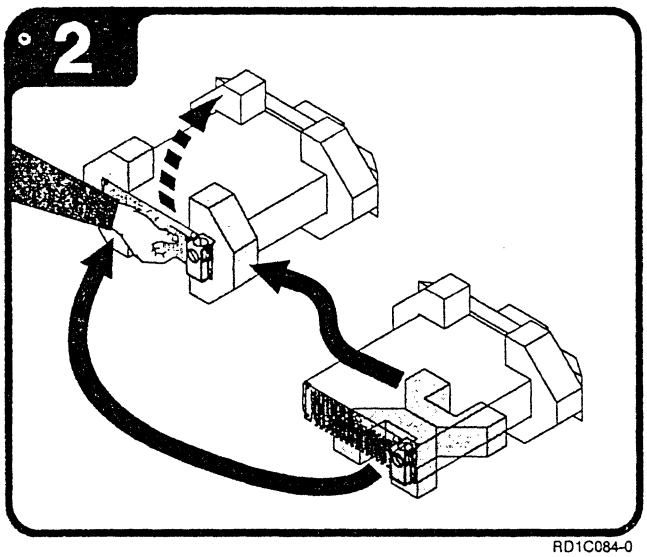
- Place the two front corner pads on a level working surface. Then, place the 9332 on top of the corner pads.
- Install the rear pad assembly to the 9332.
- Install the warning label over the control panel.



RD1C083-0

7

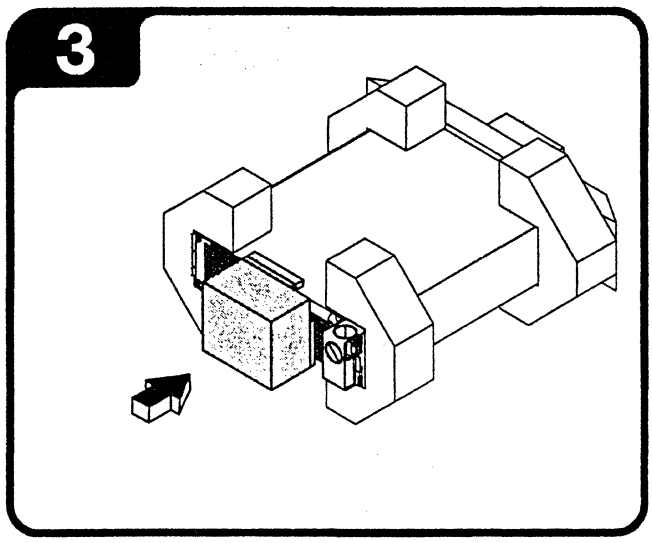
Remove the corner pads (one at a time) from under the 9332 and install the pads on the front corners of the 9332.



RD1C084-0

8

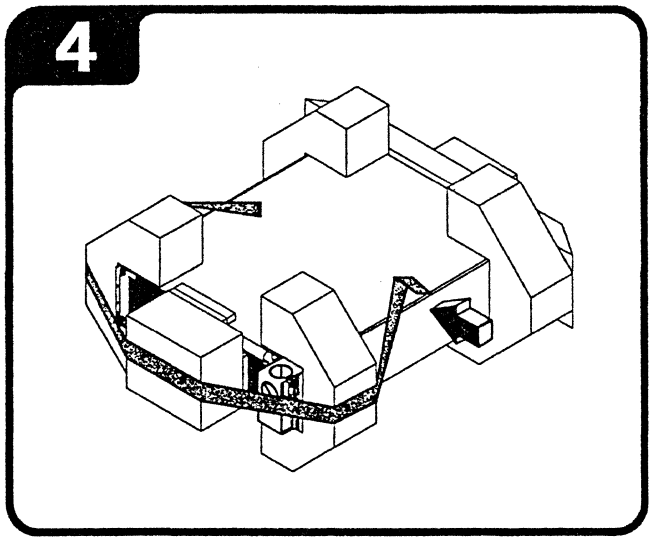
Install the front pad on the 9332.



RD1C085-0

9

Tape the front pad and corner pads to the 9332.

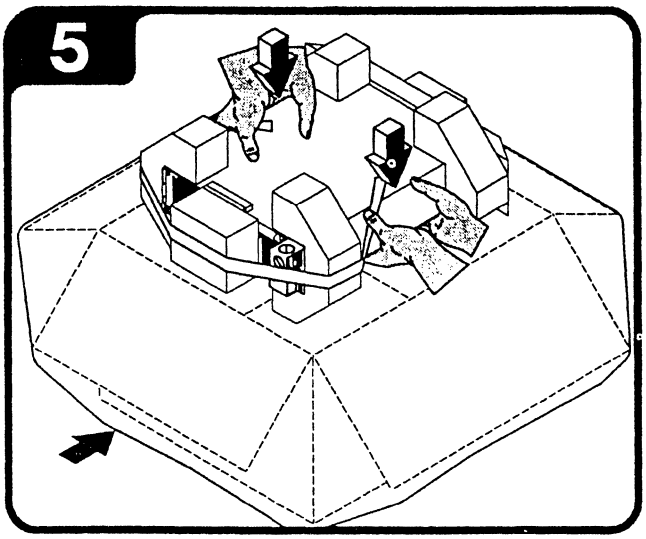


RD1C086-0

10

Do the following:

- Place the plastic bag in the shipping carton.
- Place the 9332 in the shipping carton.

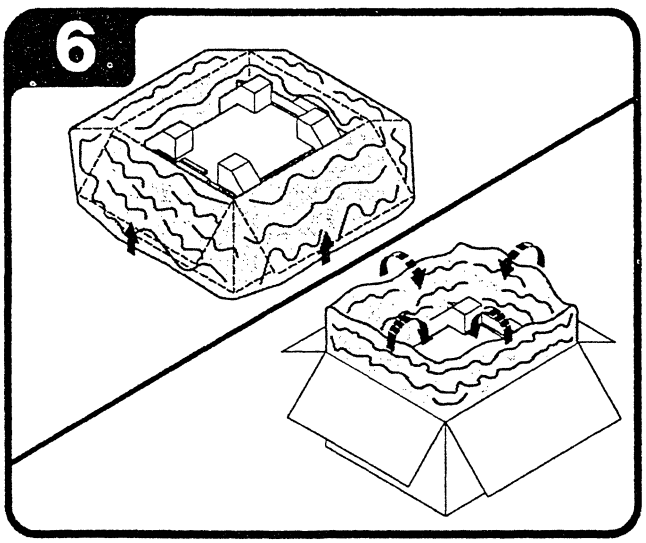


RD1C087-0

11

Do the following:

- Raise the plastic bag up and around the 9332.
- Fold the plastic bag over the top of the 9332.



RD1C088-0

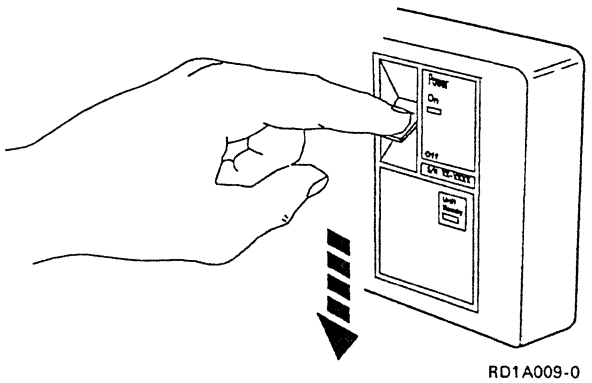
Disconnecting the Power Cord

1

You are directed here from your system instructions. Using these procedures, you will be able to remove the 9332 from the rack and move the 9332.

2

Power off the 9332.



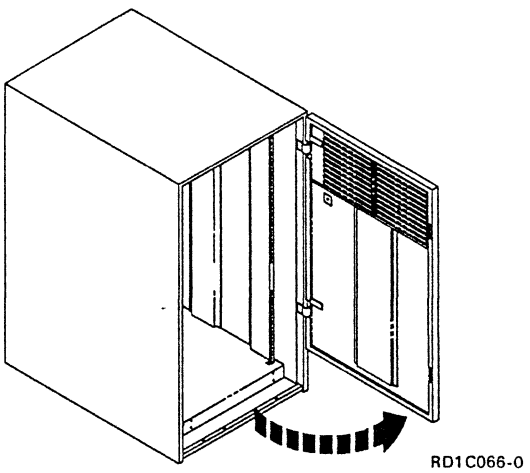
RD1A009-0

3

Power off the system and remove power from the rack.

4

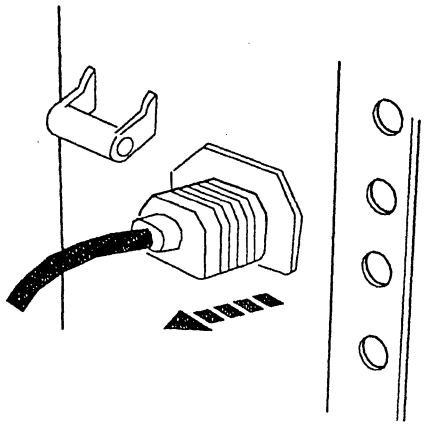
Open the rear door of the rack.



RD1C066-0

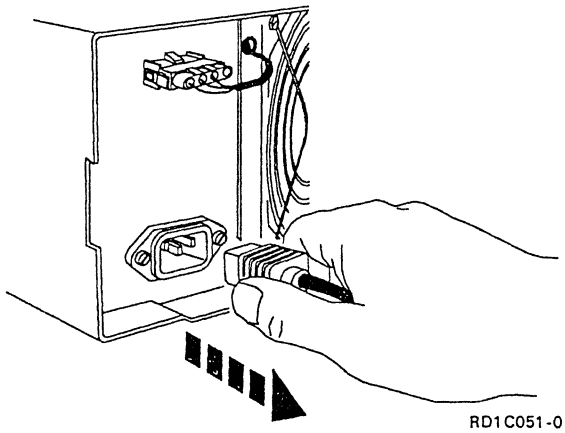
5

Disconnect the power cord from the AC power outlet on the rack.



6

Disconnect the power cord from the AC power connector on the 9332.



7

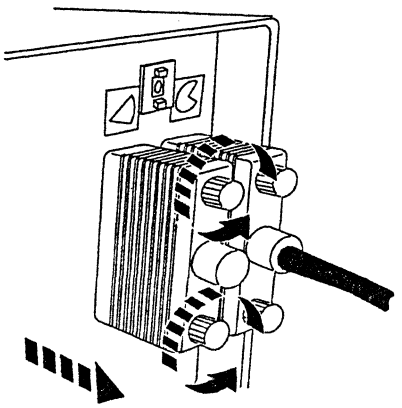
Continue with the next procedure.

Disconnecting the Signal Cables

1

Remove the terminating plug (or signal cable) from the 9332 connector that is marked with a wedge (output signal connector).

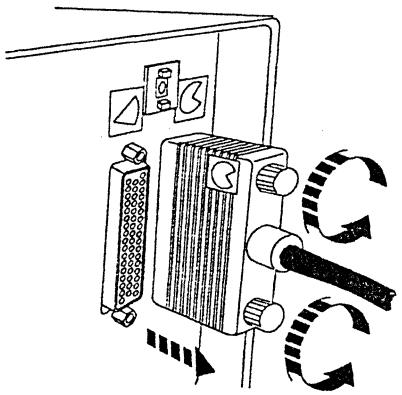
Note: *The terminating plug is to remain with the system or host, not with the 9332 you are removing.*



RD1C043-1

2

Remove the signal cable from the 9332 connector that is marked with an incomplete circle (input signal connector).

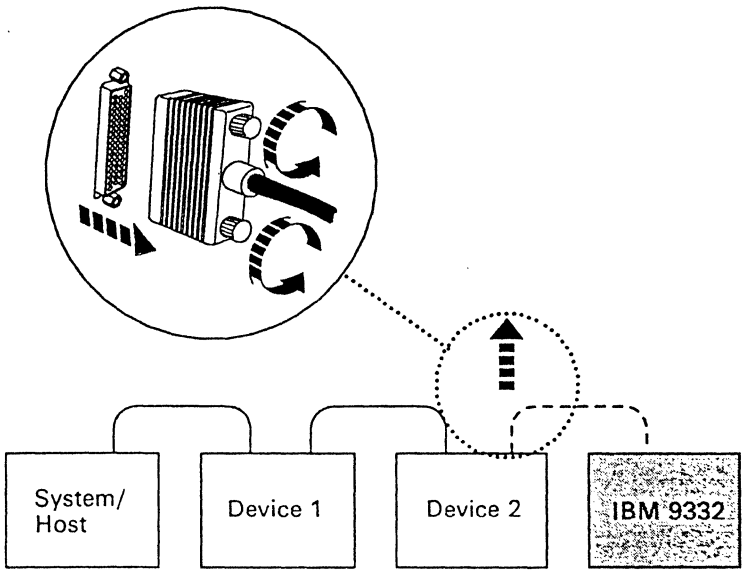


RD1C044-1

3

Remove the other end of the signal cable (removed in step 2) from the next unit on the cable path. The signal cable connector is marked with a wedge.

Note: *This signal cable stays with the 9332 being moved and is used again when you install the 9332.*



RD1C058-0

4

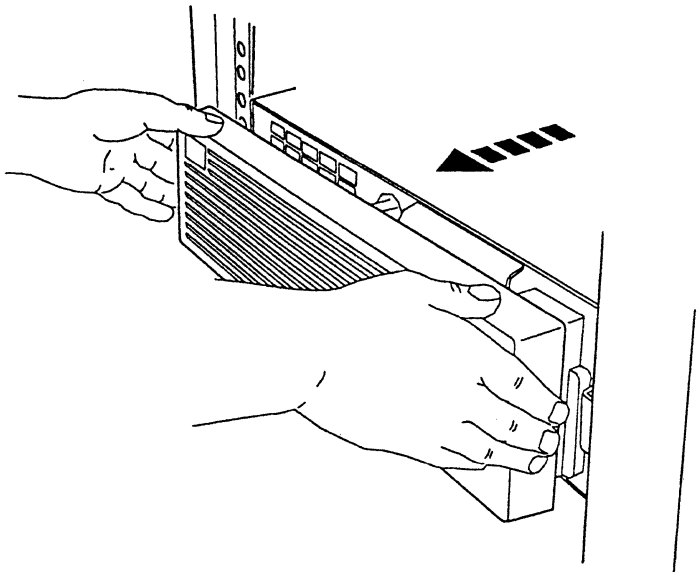
Continue with the next procedure.

Locking the Shock Mounts

1

Warning: Be sure to lock the shock mounts before you remove the 9332 from the rack; otherwise, there could be damage to the 9332.

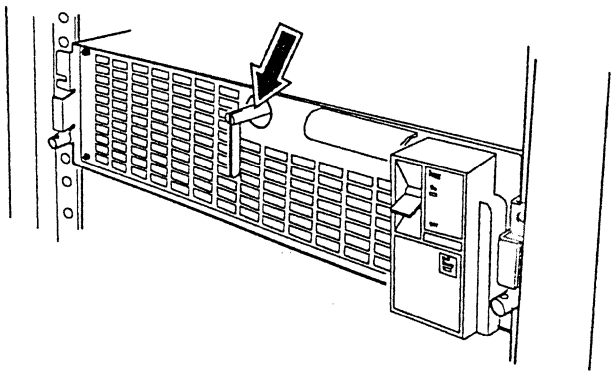
Remove the front cover.



RD1C038-0

2

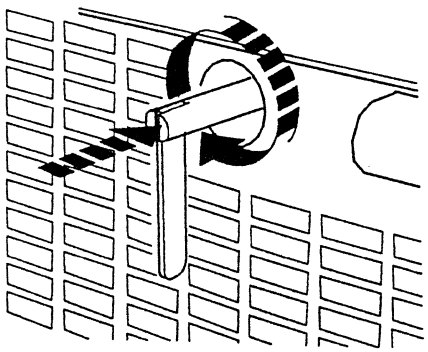
Find the shock mount locking stud.



RD1C005-0

3

Lock the shock mounts by engaging the locking stud in the mounting threads and turning the locking stud clockwise until it stops.

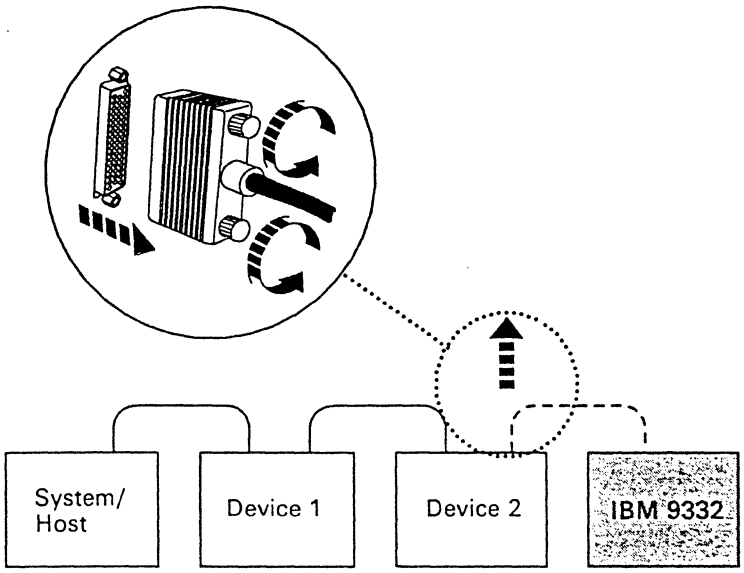


RD1C039-1

3

Remove the other end of the signal cable (removed in step 2) from the next unit on the cable path. The signal cable connector is marked with a wedge.

Note: *This signal cable stays with the 9332 being moved and is used again when you install the 9332.*



RD1C058-0

4

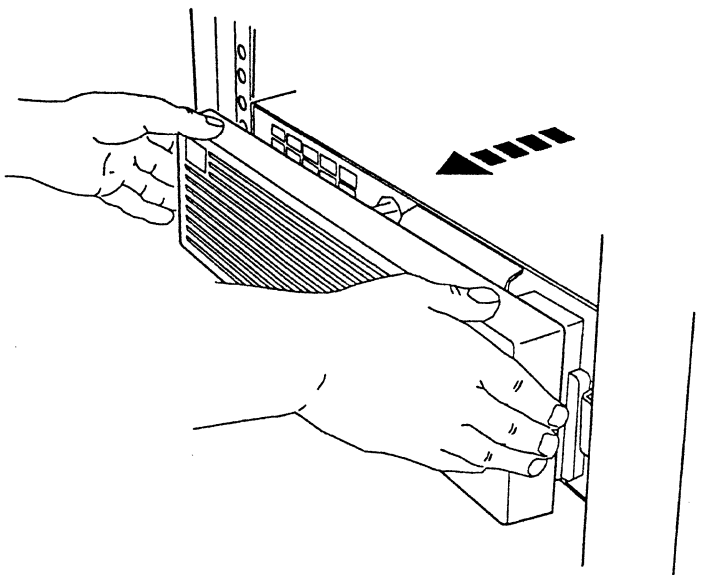
Continue with the next procedure.

Locking the Shock Mounts

1

Warning: Be sure to lock the shock mounts before you remove the 9332 from the rack; otherwise, there could be damage to the 9332.

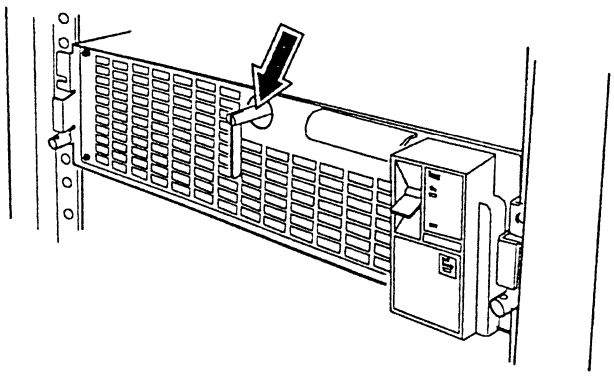
Remove the front cover.



RD1C038-0

2

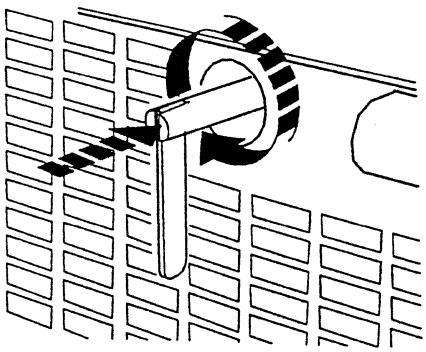
Find the shock mount locking stud.



RD1C005-0

3

Lock the shock mounts by engaging the locking stud in the mounting threads and turning the locking stud clockwise until it stops.



RD1C039-1

4

Continue with the next procedure.

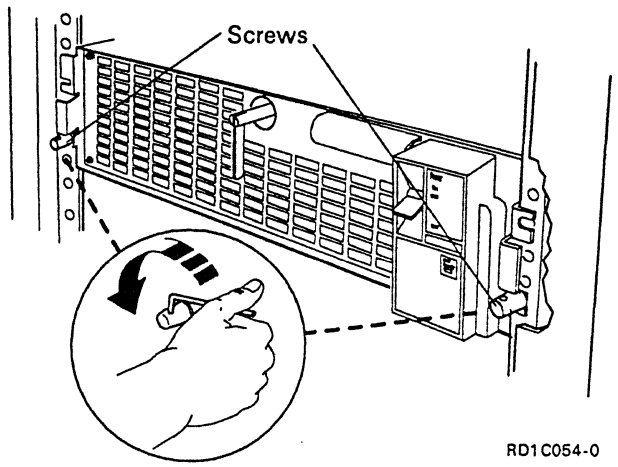
Removing the Disk Unit

1

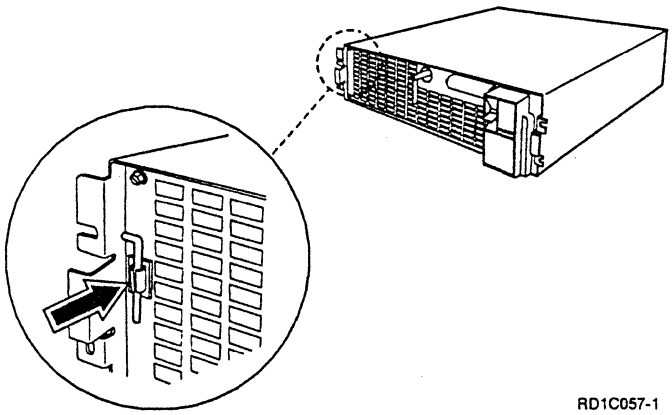
Remove the two screws that hold the 9332 to the rack.

Notes:

1. *Use the tightening rod (stored on the left side of the screen) to loosen the screws.*
2. *Your 9332 could have been shipped with standard type screws. Use a suitable tool to loosen the screws.*



RD1C054-0



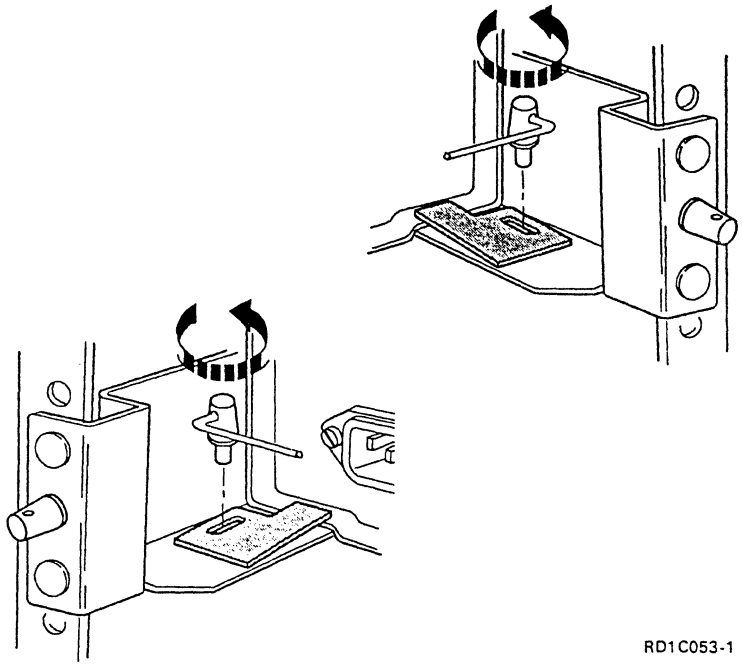
RD1C057-1

2

Remove the two screws that hold the brackets to the rails.

Notes:

1. *Use the tightening rod to loosen the screws.*
2. *Your 9332 could have been shipped with standard type screws. Use a suitable tool to loosen the screws.*



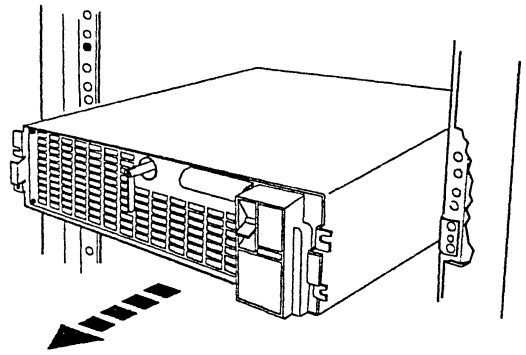
RD1C053-1

3

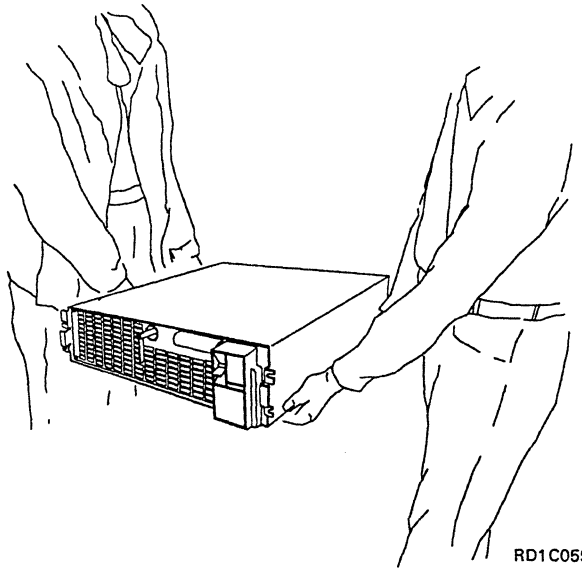
CAUTION:
The 9332 weighs approximately 30 kilograms (65 pounds). It takes two or more persons to safely lift and remove the disk unit from the rack.

Be sure you have a good hold of the 9332 as you slide it out of the rack. If there is no unit installed in the rack above the 9332, the 9332 can tip and fall out once it gets more than half way out.

Remove the 9332 from the rack.



RD1C061-0



RD1C059-0

4

Continue with the next procedure.

Removing the Rails

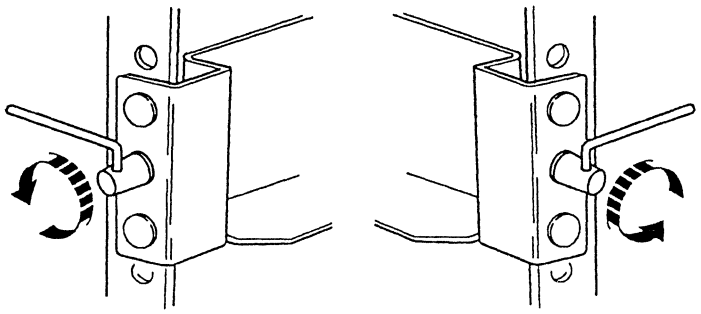
1

Remove the two screws from the rear of the rails.

Then, remove the two rails from the rack.

Notes:

1. *Use the tightening rod to loosen the screws.*
2. *Your 9332 could have been shipped with standard type screws. Use a suitable tool to loosen the screws.*

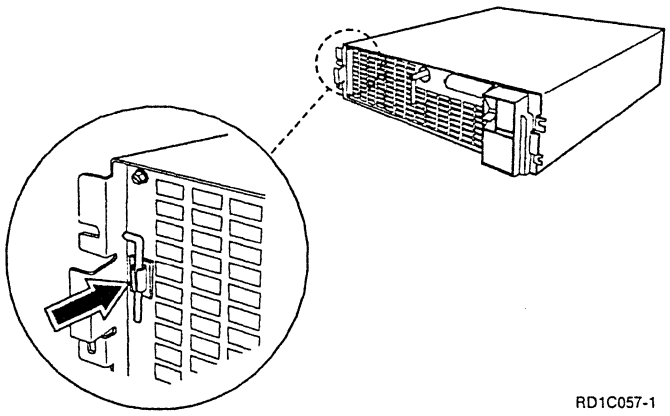


RD1C062-0

2

Place the tightening rod in the holder located on the left side of the screen.

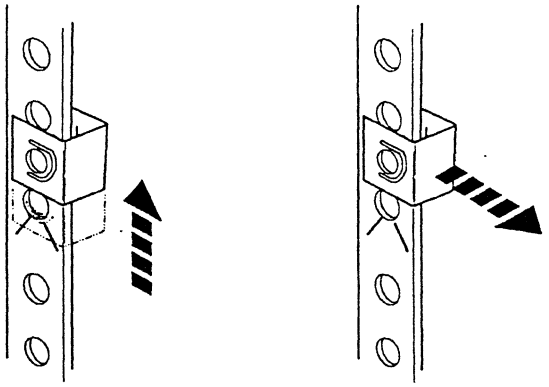
Note: *The tightening rod is not shipped with the 9332 if standard type screws are used.*



RD1C057-1

3

Remove the two nut clips from the rear of the rack.



RD1C077-0

4

Continue with the next procedure.

Moving the Disk Unit

1

You must determine if you are going to move the 9332 a short distance or a long distance.

Note: *A short distance move is one where a truck is not involved; for example, moving the 9332 from one room to another room. A long distance move is one where you will use a truck to relocate the 9332; for example, moving the 9332 from one city to another city.*

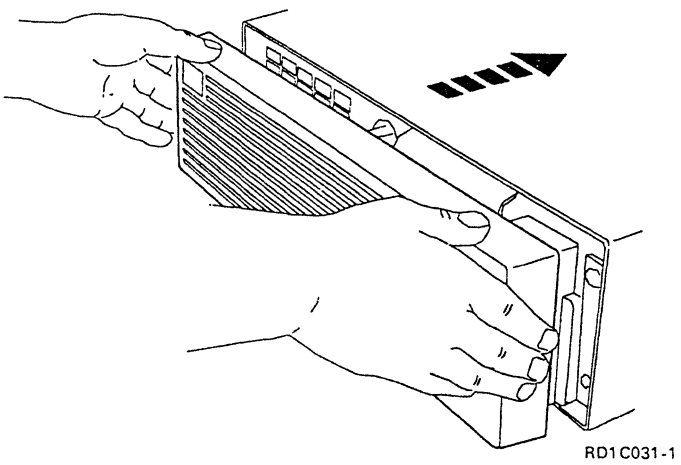
Are you doing a short distance move?

Yes **No**

↓ Go to step 5.

2

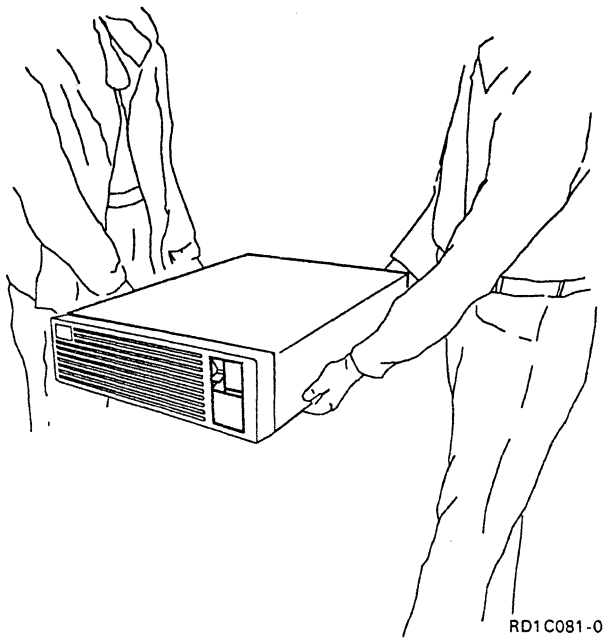
Install the front cover.



3

CAUTION:
The 9332 weighs approximately 36 kilograms (80 pounds) with the stand-alone cover assembly installed. It takes two or more persons to safely lift and move the disk unit.

Move the disk unit to its new location.



4

End of procedure. Return to your system instructions.

5

These steps will prepare your 9332 for a long distance move.

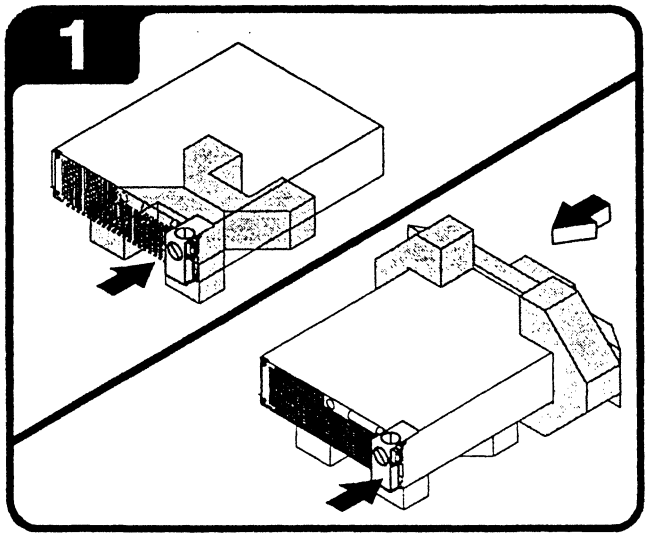
Warning: To avoid damage to the 9332, IBM recommends shipping the 9332 only in the original 9332 shipping carton. You should also use the associated packing materials.

If you do not have the original 9332 shipping carton and packing materials, you can order them from your IBM sales representative.

6

Using the original 9332 shipping carton and packing materials, pack the 9332 as follows:

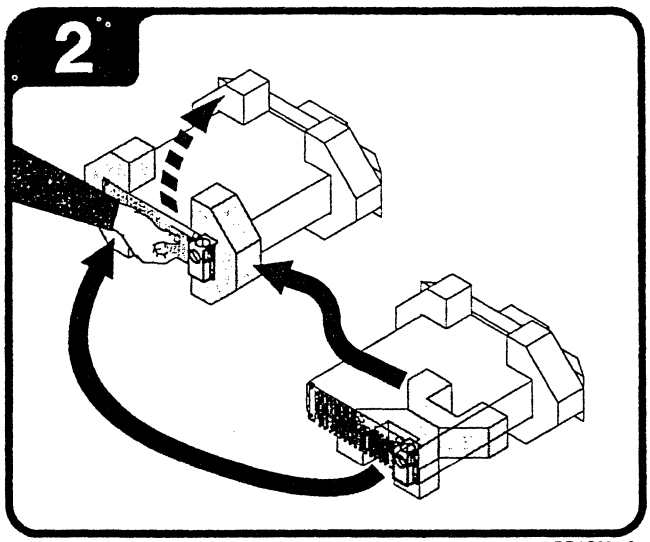
- Place the two front corner pads on a level working surface. Then, place the 9332 on top of the corner pads.
- Install the rear pad assembly to the 9332.
- Install the warning label over the control panel.



RD1C083-0

7

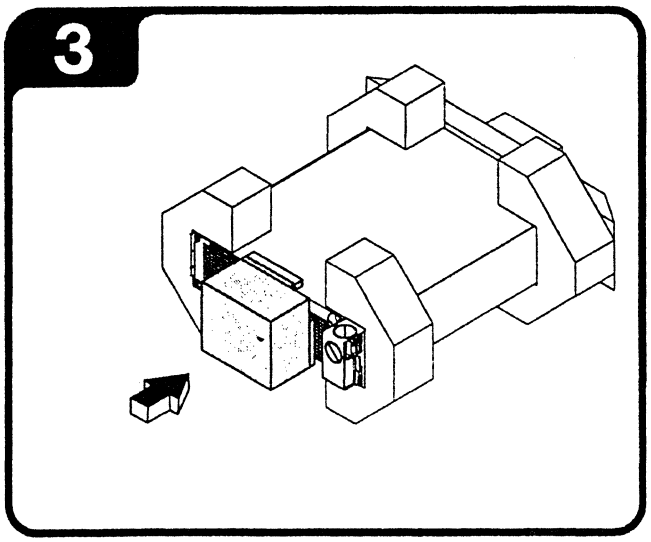
Remove the corner pads (one at a time) from under the 9332 and install the pads on the front corners of the 9332.



RD1C084-0

8

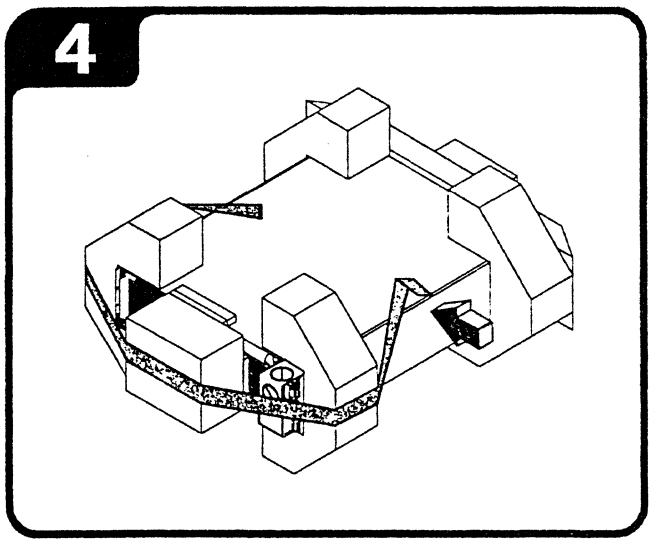
Install the front pad on the 9332.



RD1C085-0

9

Tape the front pad and corner pads to the 9332.

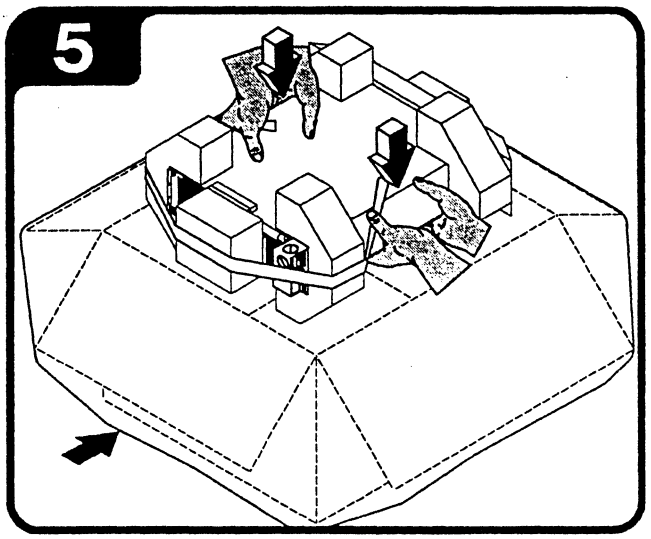


RD1C086-0

10

Do the following:

- Place the plastic bag in the shipping carton.
- Place the 9332 in the shipping carton.

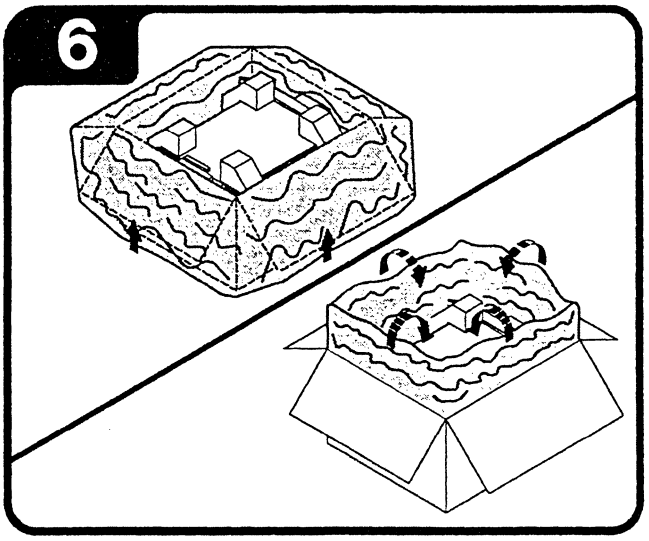


RD1C087-0

11

Do the following:

- Raise the plastic bag up and around the 9332.
- Fold the plastic bag over the top of the 9332.

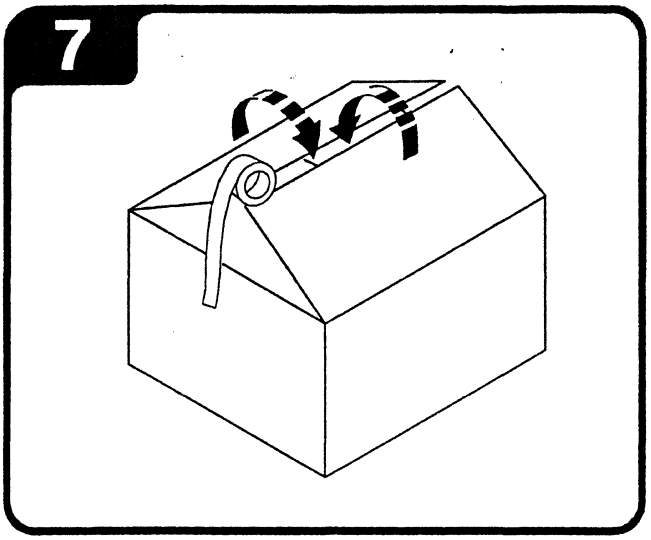


RD1C088-0

12

Do the following:

- Close the shipping carton.
- Fasten the shipping carton with tape.

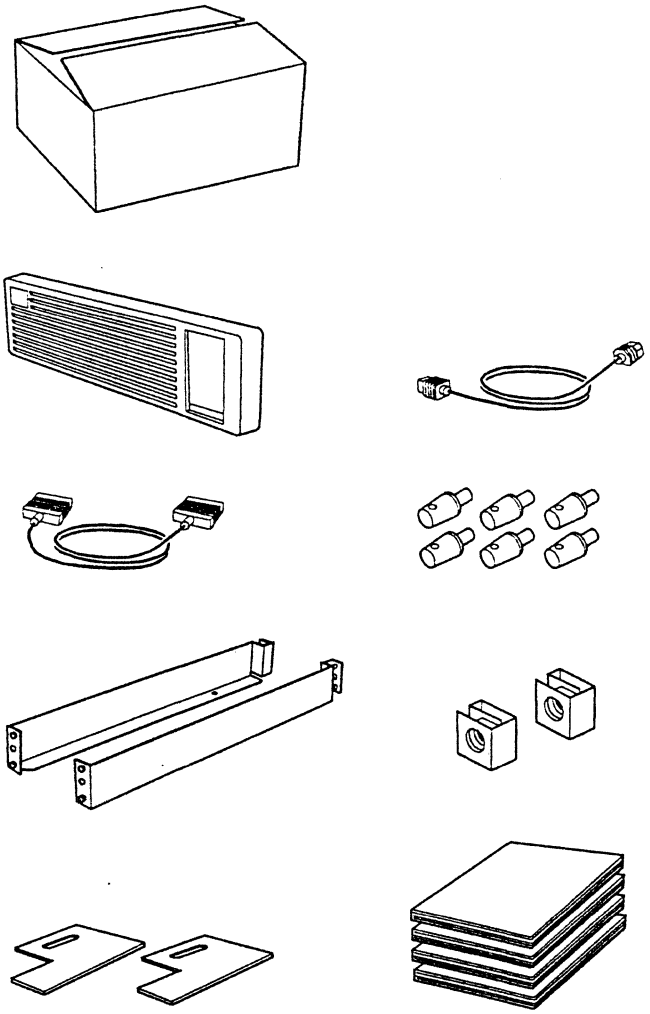


RD1C089-0

13

Pack the following items in a separate shipping carton:

- Front cover
- Power cord
- Signal cable
- Screws (6)
- Rails (2)
- Nut clips (2)
- Brackets (2)
- 9332 manuals:
  - Service Guide
  - Reference Code Guide
  - Analyzing Problems
  - Installing



RD1C090-0

14

End of procedure. Return to your system instructions.

Glossary of Terms and Abbreviations

This glossary includes terms and definitions from the *IBM Dictionary of Computing*, SC20-1699.

AC. Alternating current.

address switch. A switch to set the device address.

configuration. The devices and programs that make up a system.

EIA unit. A unit of measure, established by the Electronics Industries Association, equal to 44.45 millimeters (1.75 inches).

host. Pertaining to the primary or controlling unit in a system.

mm. Millimeter; one thousandth (0.001) of a meter.

nut clip. A fastener.

rack. A framework that holds devices.

Index

A

abbreviations G-1
acronyms G-1
address switch, setting 3-4
arranging parts 1-2, 2-2

C

checking the 9332 3-5
checkout
  9332 3-5
connecting the power cord 1-16, 2-7
connecting the signal cables 1-15, 2-6

D

danger notices, list of vi
disconnecting the power cord 5-2, 6-2
disconnecting the signal cables 5-4, 6-4

F

front cover 1-14
front cover (rack-mounted unit)
  installing 1-14
front cover (stand-alone unit)
  installing 2-5
front cover assembly 1-14, 2-5

G

glossary G-1

I

installing
  front cover (rack-mounted unit) 1-14
  front cover (stand-alone unit) 2-5
  power cord (rack-mounted unit) 1-16
  power cord (stand-alone unit) 2-7
  stand-alone 9332 2-1, 2-3
  9332 in a rack 1-1, 1-11
installing procedures
  rails 1-4
installing the rails 1-4
installing the 9332
  as a stand-alone unit 2-1
  in a rack 1-1, 1-11

L

list of danger notices vi
locking the shock mounts 4-2, 5-6, 6-6

M

moving a rack
  with 9332 installed 4-1
moving the 9332
  as a stand-alone unit 5-1, 5-7
  in a rack 6-13
  installed in a rack 4-1

O

operation, preparing the 9332 for 3-1

P

packing
  saving materials 1-17, 2-8
packing materials 1-17, 2-8
parts
  rack-mounted unit 1-2
  stand-alone unit 2-2
parts arrangement 1-2, 2-2
parts arrangement (rack-mounted unit) 1-2
parts arrangement (stand-alone unit) 2-2
power cord, disconnecting 5-2, 6-2
power cord, installation 1-16, 2-7
preparing the 9332 for operation 3-1

R

rack rails
  installing 1-4
  removing 6-8
rails
  installing 1-4
  removing 6-8
reference
  abbreviations G-1
  acronyms G-1
  glossary G-1
removing the rails 6-8
removing the 9332 from a rack 6-1

S

setting the address switch 3-4
shock mounts
locking 4-2, 5-6, 6-6
locking (when moving unit) 4-2
unlocking 1-13, 2-4, 3-2
unlocking (for operation) 3-2
unlocking (rack-mounted unit) 1-13
unlocking (stand-alone unit) 2-4
signal cables
connecting 1-15, 2-6
disconnecting 5-4, 6-4
stand-alone installation 2-1

U

unlocking shock mounts
for operation 3-2
rack-mounted unit 1-13
stand-alone unit 2-4

Numerics

9332
checking the 3-5
installing 1-1, 2-1
preparing for operation 3-1
removing from a rack 6-1
setting up 1-1, 2-1

READER'S COMMENT FORM

Please use this form only to identify publication errors or to request changes in publications. Direct any requests for additional publications, technical questions about IBM systems, changes in IBM programming support, and so on, to your IBM representative or to your IBM-approved remarketer. You may use this form to communicate your comments about this publication, its organization, or subject matter, with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

☐ If your comment does not need a reply (for example, pointing out a typing error), check this box and do not include your name and address below. If your comment is applicable, we will include it in the next revision of the manual.

☐ If you would like a reply, check this box. Be sure to print your name and address below.

Page number(s): Comment(s):

Please contact your IBM representative or your IBM-approved remarketer to request additional publications.

Name _____

Company or Organization _____

Address _____

_____

City State Zip Code

Phone No. _____

Area Code

No postage necessary if mailed in the U.S.A.

Cut Along Line

Fold and Tape **Please do not staple**

NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS / PERMIT NO. 40 /ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

International Business Machines Corporation
Information Development
Department 245
Rochester, Minnesota, U.S.A. 55901

Fold and Tape **Please do not staple**

Cut Along Line

IBM®