

NEC

NVM-2000

Installing an Expansion Drive

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NEC America, Inc., Corporate Networks Group
4 Forest Parkway
Shelton, CT 06484

Attention: Manager, Technical Publications

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Install the Drive

Introduction

This supplement provides instructions for installing an expansion (slave) drive (17511D or 17511M) into the NVM-2000.

Tools and Materials Needed

- ESD Wrist Strap (to be worn on wrist and attached to a grounded metal object at all times)
- A set of Phillips-head screw drivers
- A pair of diagonal cutters
- Monitor and keyboard connected to the NVM
- Expansion Hard Drive (17511D or 17511M)
- Two Expansion Hard Drive U brackets with 8 appropriate screws (packed with Hard Drive)
- Two Expansion Hard Drive slides with 4 appropriate screws (packed with Hard Drive)

Note: Depending on the style of desktop cabinet you have, you may not have to use the two Expansion Hard Drive slides.

Install the Drive

WARNING

Do not turn off the NVM without first shutting it down. If you do not shut down first, you may corrupt the NVM database when you turn it off.

To install the expansion drive:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. From the **Main Menu**, select **Exit**.
2. Type the system password and press **Enter**.
3. Select **Shutdown Voice Mail System** to shut down the Voice Mail.
4. At the prompt, *Are you sure you want to SHUT DOWN the Voice Mail System (Y/N)?*, enter **Y**.
5. After the Voice Mail shuts down, turn off the Voice Mail's power switch and disconnect the power cord from the NVM cabinet.
6. Disconnect the monitor cord and the keyboard cord from the NVM cabinet.
7. From the rear of the cabinet, remove and retain the 5 hex-head screws that secure the cover to the cabinet. See Figure 1.

Note: The rear of your cabinet may appear differently from the one shown).

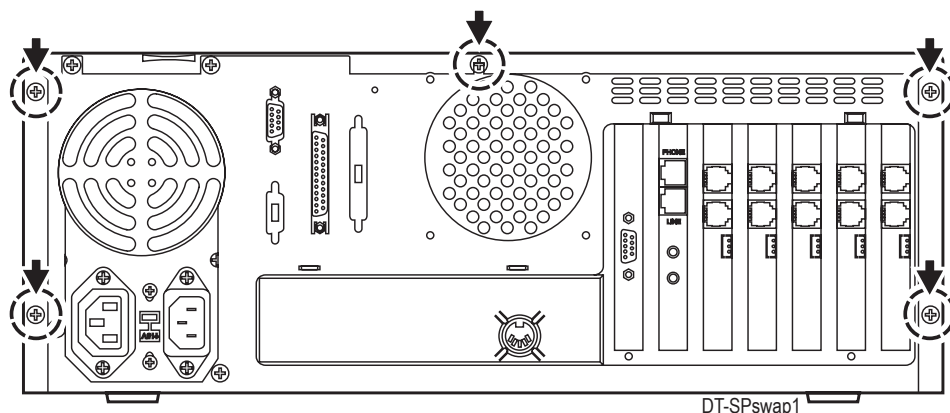


Figure 1

Installing an Expansion Drive

Install the Drive

8. Remove the cabinet cover as follows:
 - If the power switch on your cabinet is mounted anywhere on the front panel, slide the cover 1/2 inch towards the rear of the cabinet and lift up. See Figure 2 (A).
 - If the power switch on your cabinet is mounted on the rear of the cabinet (above the power supply fan vent), slide the cover/front panel assembly 1 3/4 inches towards the front of the cabinet, and lift up. See Figure 2 (B).

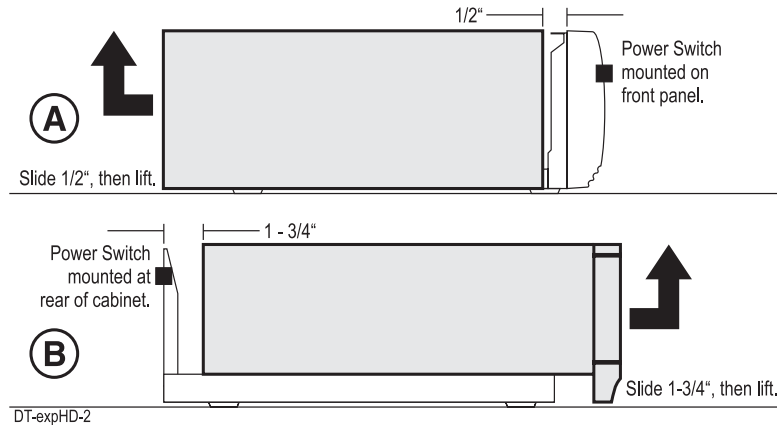


Figure 2

9. On many styles of desktop cabinets, the front panel would have been removed when you lifted off the cabinet cover. If the cabinet's front panel is removed, go to step 10. If it is still attached:
 - Do not remove the front panel if it is secured to the cabinet with screws. Go to step 10.
 - If your front panel is secured to the cabinet with 5 metal spring clips:
 - Grab the notch located beneath the front panel (on the end where the logo is located) and firmly pull the front panel away from the chassis. See Figure 3.

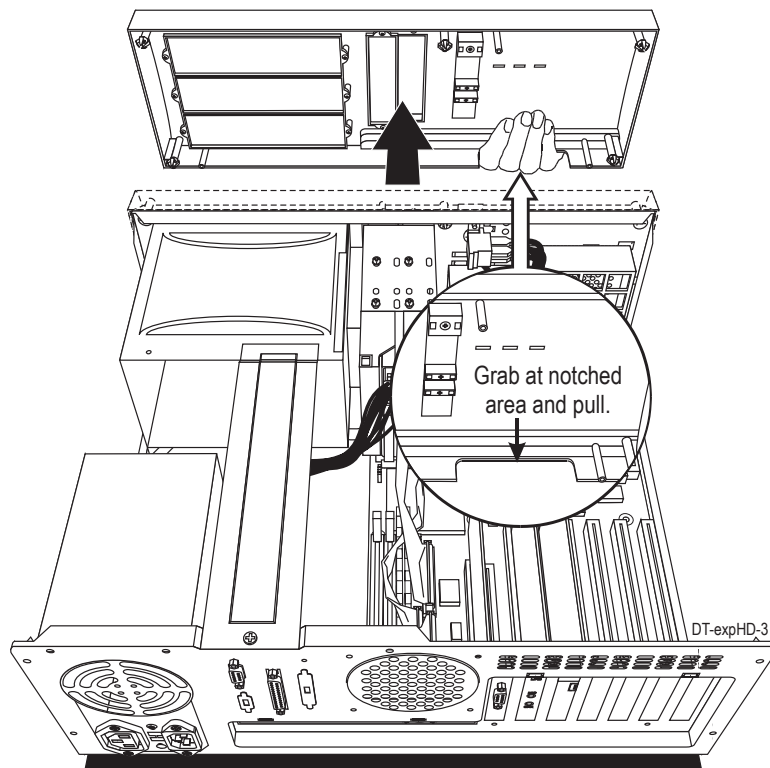


Figure 3

Installing an Expansion Drive

Install the Drive

10. Remove all jumpers from the expansion (slave) hard drive. **However, do not change any jumpers on the hard drive (master) that is installed in your cabinet.**
11. Secure the two U brackets (labeled as A and B on Figure 4) on the expansion hard drive as shown in Figure 4.

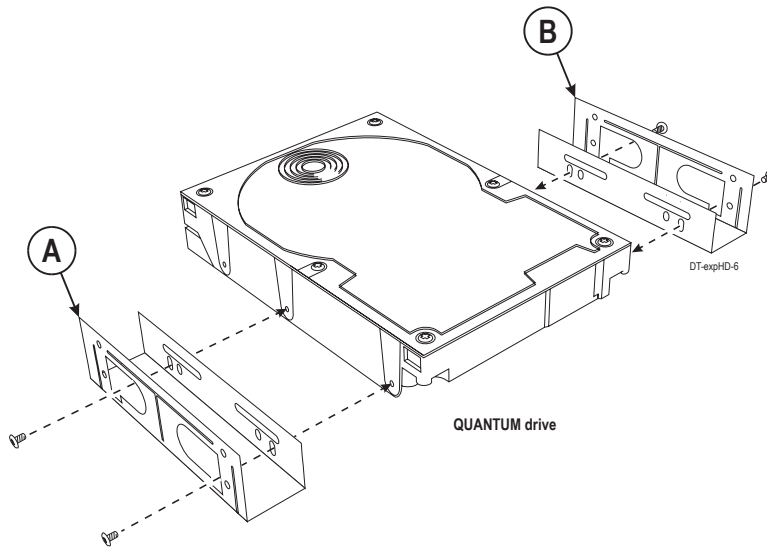


Figure 4

12. If your cabinet has a front panel that is secured with spring clips (as shown in Figure 3), then go to step 13. If your cabinet has a front panel like Figure 5, then perform the following steps:

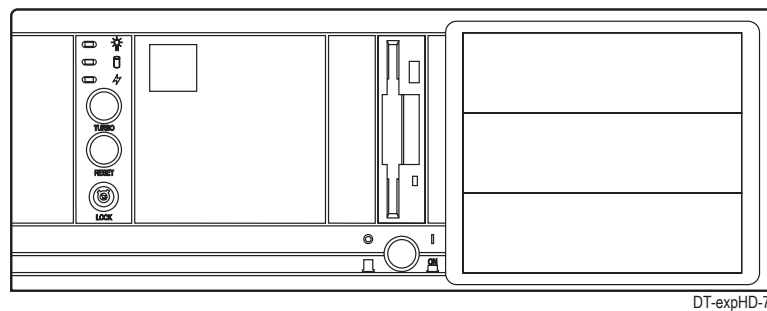


Figure 5

- Remove and retain the screws securing the floppy drive bucket assembly to the side of the expansion hard drive cage (see parts A and B, respectively, on Figure 6).

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Install the Drive

- Set the bucket assembly off to the side. Do not disconnect any wires or ribbon cables from either the floppy drive or the hard drive.
- Note:** You may also see a screw securing a green wire (chassis ground) to the hard drive/floppy drive bucket assembly (part C on Figure 6). Remove and retain this screw to disconnect the green wire.

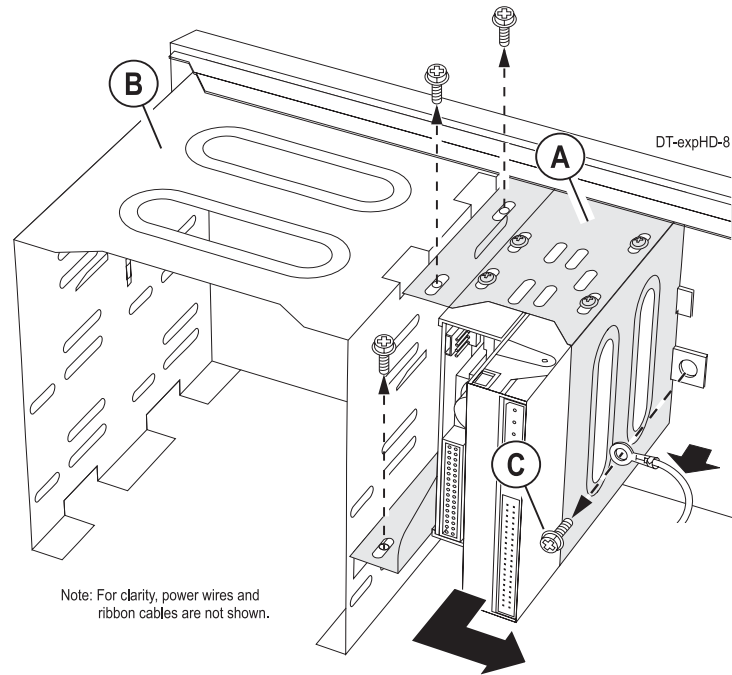


Figure 6

- Slide the expansion hard drive into the top of the cage until the top holes of the U-brackets line up with the slots in the sides of the cage. See Figure 7.

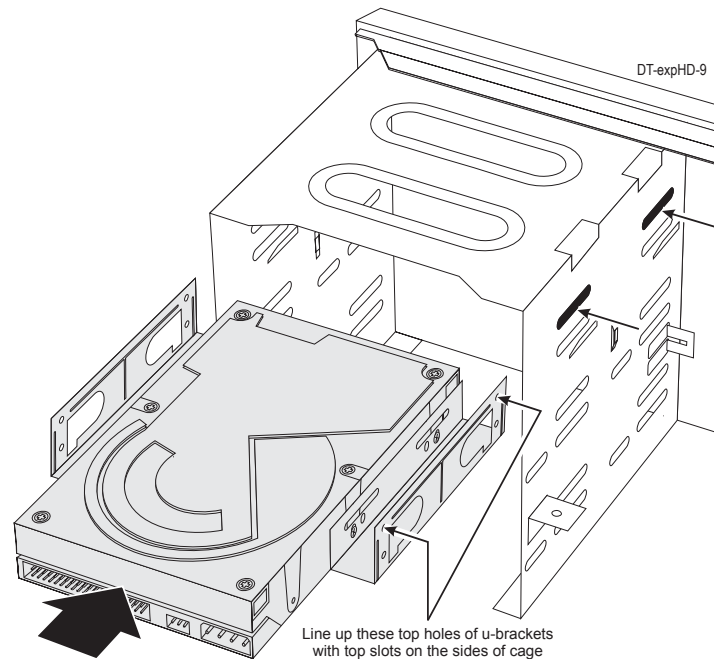


Figure 7

Installing an Expansion Drive

Install the Drive

- Secure the expansion drive in place with four screws. See Figure 8.

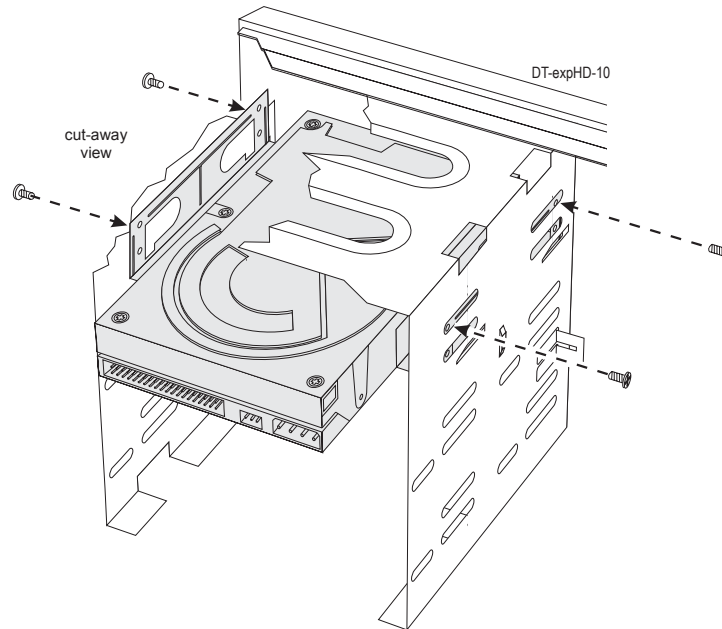


Figure 8

- Refer to Figure 9. Using the screws that you previously removed, re-attach the hard drive/floppy drive bucket assembly to the side of the expansion hard drive cage. If you disconnected a green “chassis ground” wire, re-connect it using the screw that was previously removed (part C on Figure 9).

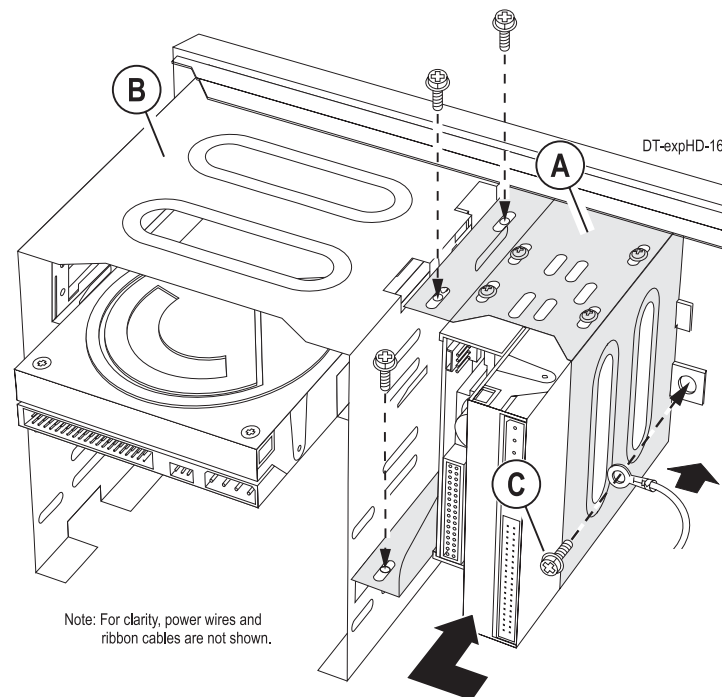


Figure 9

- Go to step 14.

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Install the Drive

13. If your desktop has a front cabinet that was secured with spring clips, then perform the following steps:

- Use screws to secure the outer two slides (parts A and B on Figure 10) to the bottom holes on the expansion hard drive U-brackets. See Figure 10.

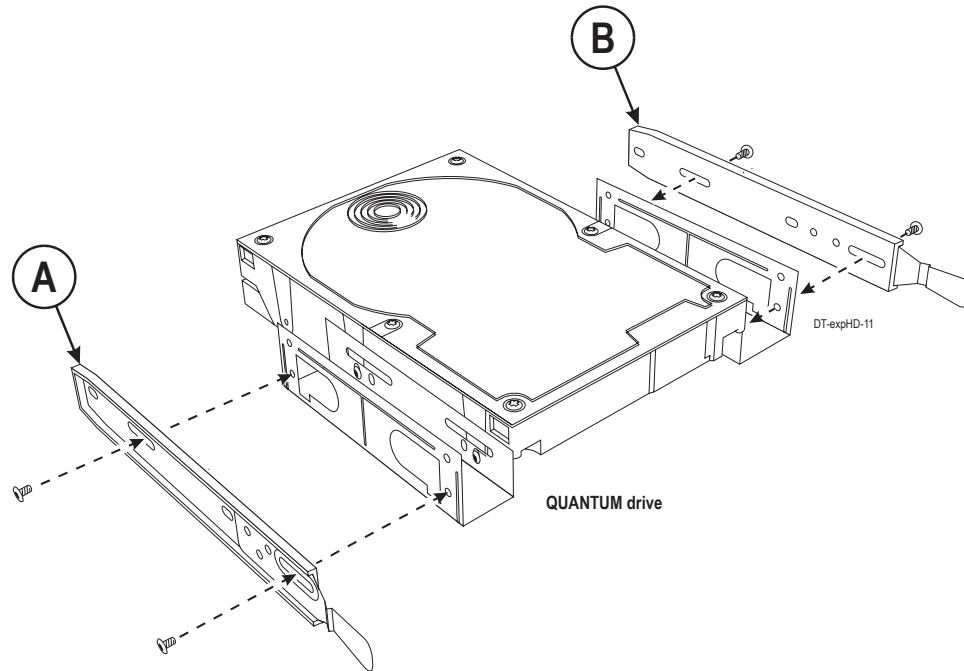


Figure 10

- Push the expansion hard drive into the front of the cabinet until both spring tabs on the slides (A and B on Figure 11) snap and lock the hard drive in place. See Figure 11.

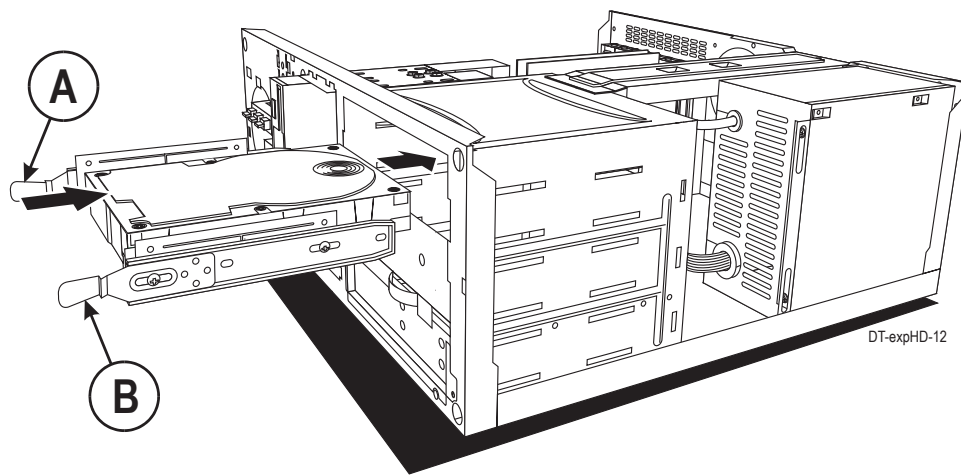


Figure 11

Installing an Expansion Drive

Install the Drive

- Use Figure 3 as a reference for panel location. To re-attach the front panel to the cabinet, simply push the spring clips into the holes of the cabinet until the clips snap and lock the front panel in place.
14. Disconnect the ribbon cable from the master hard drive.
 15. Plug the **end connector** of the ribbon cable into the **expansion** hard drive. See Figure 12.

IMPORTANT
Insert the connector on the ribbon cable so that the red stripe on the ribbon cable is closest to the power connector on the hard drive.

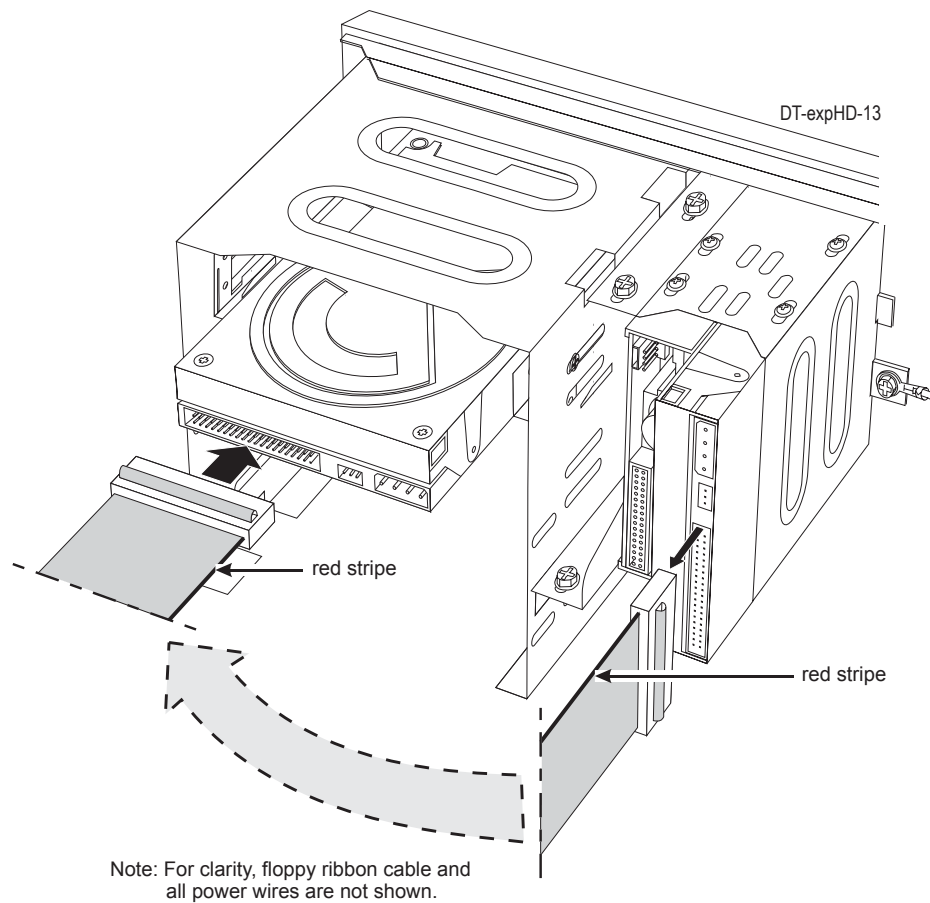


Figure 12

Installing an Expansion Drive

Install the Drive

16. Plug the **middle connector** of the ribbon cable into the **master** hard drive. See Figure 13.

IMPORTANT
Insert the connector on the ribbon cable so that the red stripe on the ribbon cable is closest to the power connector on the hard drive.

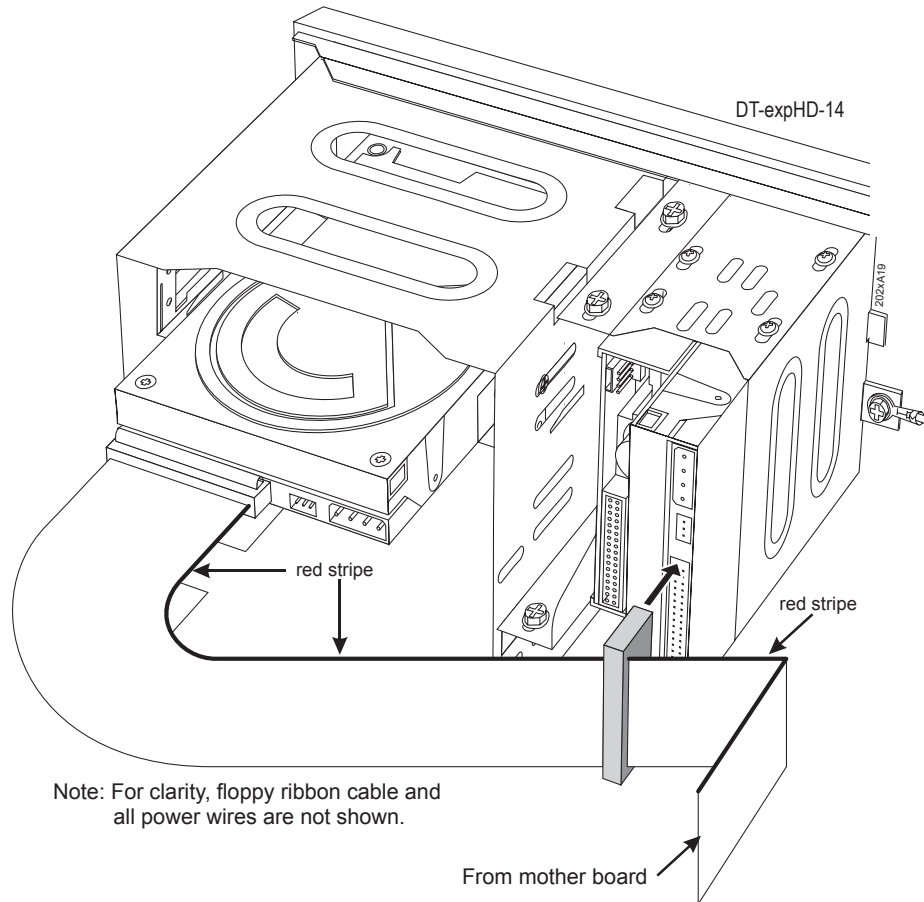


Figure 13

Installing an Expansion Drive

Install the Drive

17. Select one of the three **available** (extra) power supply connectors and connect the power supply to the expansion hard drive. See Figure 14.

Note: You may find that the available (extra) power supply wires with connectors are bundled and secured with pull-ties. If they are, carefully cut the pull-ties with a pair of diagonal cutters.

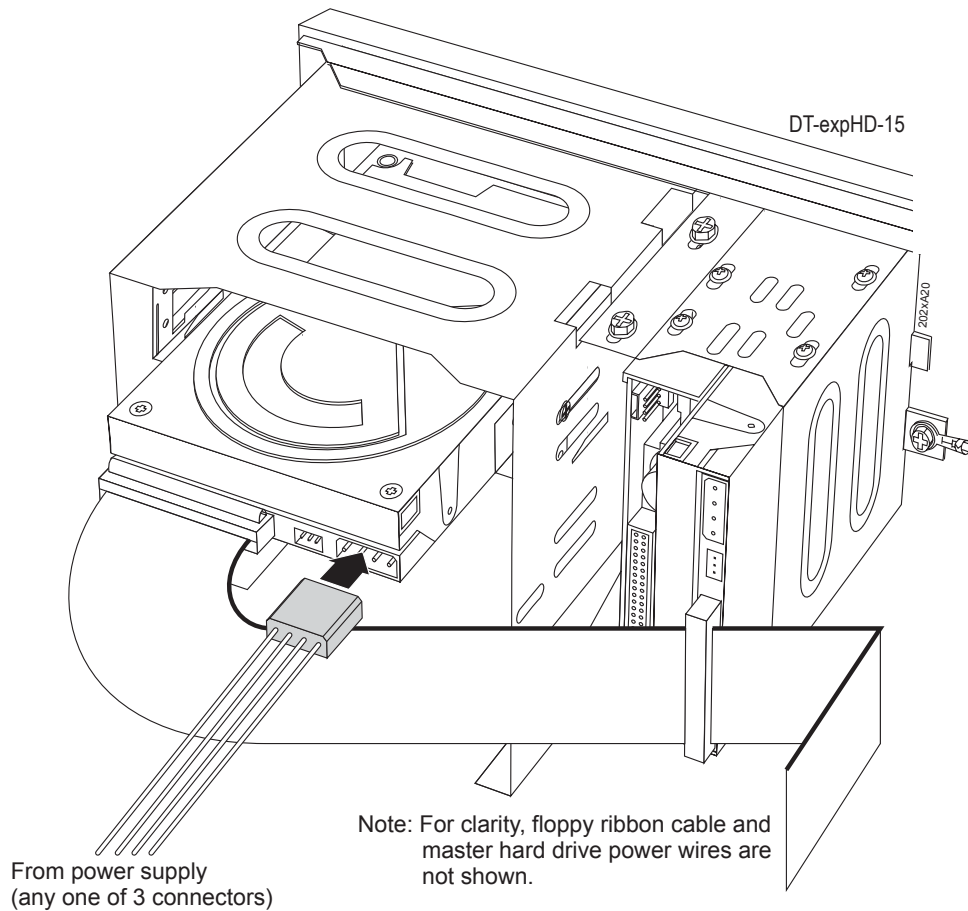


Figure 14

18. Replace the cover of the Voice Mail cabinet and secure in place with screws retained in step 6.
19. Connect the monitor cord and the keyboard cord.
20. Connect the system power cord.

Note: Do not turn on the system power switch.

21. Go to, *Write the Hardware Settings for the New Drive to CMOS* on the next page.

Installing an Expansion Drive

Write the Hardware Settings for the New Drive to CMOS

Write the Hardware Settings for the New Drive to CMOS

You must write the settings for the new expansion (slave) drive to CMOS. The procedure you use depends on the type of motherboard installed in your Voice Mail.

Determine the Proper Procedure for Writing to CMOS

To determine which procedure to use:

1. Turn on the Voice Mail system power switch.
2. Carefully watch the screen on your monitor.
 - If you see **486BL CPU** in the upper right-hand corner of the screen, immediately press the **Esc (Escape)** key. Continue using *Procedure A*.
 - If you see the **ENERGY/Star** logo in the upper right-hand corner of the screen, immediately press the **Delete** key. Continue using *Procedure B*.

Note: If you do not press the **Escape** or **Delete** key quickly enough, the NVM will try to boot up. You will eventually see the NVM Main Menu. If this occurs:

- Shut down the Voice Mail System (using the **Shutdown** command).
- Turn off the system power switch.
- Repeat steps 1 and 2 (above).

Procedure A: Write Expansion Drive Settings to CMOS

Note: You should have completed the two steps in *Determine the Proper Procedure for Writing to CMOS* (on page 10) before you continue with this procedure.

To write the hardware settings for the Expansion Drive to CMOS:

1. Wait for the **MR BIOS** main menu screen to appear.
2. Use the **Arrow** key to move to the option, **Fixed Disk**.
3. Press **Enter**. The cursor moves to **Type** field in the **Fixed Disk (D:)** column.
4. Press **Shift + ?** key to enter the correct values in all the **Fixed Disk** fields. At the bottom of the screen, look for the message: *Completed - Press Any key to Continue*.
5. Press the **Escape** key twice to return to the **MR BIOS** main menu screen.
6. Press **F10** to **Record & Exit** from the **MR BIOS** utility.

Result: NVM will boot up.

Installing an Expansion Drive

Write the Hardware Settings for the New Drive to CMOS

Procedure B: Write Expansion Drive Settings to CMOS

Note: You should have completed the two steps in *Determine the Proper Procedure for Writing to CMOS* (on page 10) before you continue with this procedure.

To write the hardware settings for the Expansion Drive to CMOS:

1. Wait for the **CMOS SETUP UTILITY** menu to appear.
2. From the **CMOS SETUP UTILITY** menu, use the **Arrow** key to move to the option **IDE HDD AUTO**. You will see *Auto Configure HDD: Sector, Cylinder, Head* at the bottom of the screen.
3. Press **Enter**. You will see:
Select Primary Master Option (N=Skip): N
4. At the flashing **N**, press **Enter**. You will see:
Select Primary Slave Option (N=Skip): N
5. At the flashing **N**, enter **Y** and press **Enter**. You will see:
Select Secondary Master Option (N=Skip): N
6. At the flashing **N**, press **Enter**. You will see:
Select Secondary Slave Option (N=Skip): N
7. Press **Enter**. You will return to the **CMOS SETUP UTILITY** menu.
8. Press **F10** to **Save & Exit** from the **CMOS SETUP UTILITY**
9. At the prompt, *SAVE to CMOS and EXIT (Y/N)*, enter **Y** and press **Enter**.

Result: NVM will boot up.

Installing an Expansion Drive

Write the Hardware Settings for the New Drive to CMOS

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NEC America, Inc., Corporate Networks Group
4 Forest Parkway, Shelton, CT 06484
Tel: 800-365-1928 Fax: 203-926-5458
cng.nec.com

Other Important Telephone Numbers

Sales:203-926-5450
Customer Service:203-926-5444
Customer Service FAX:203-926-5454
Technical Service:203-925-8801
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NEC

NEC America, Inc., Corporate Networks Group

4 Forest Parkway, Shelton, CT 06484

TEL: 203-926-5400 FAX: 203-929-0535

cng.nec.com



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