◀▸ Data General

# Starting and Updating Preinstalled AOS/VS

# Installing and Updating Preinstalled AOS/VS

069-000293-00

For the latest enhancements, cautions, documentation changes, and other information on this product, please see the Release Notice (085-series) supplied with the software.

# Notice

# Preface

Read this manual if you are starting the system and you ordered Model 31133 of the AOS/VS operating system. Data General shipped your system with preinstalled AOS/VS –– the AOS/VS operating system and the SCP System Media software already installed on the system hard disk.

This manual tells you how to start preinstalled AOS/VS on a system and how to change certain system attributes to suit your specific needs. If you encounter problems with your system during powerup, this manual tells you how to interpret the power–up error codes, and other error messages, and suggests steps you can take to solve these problems.

Once the system passes the power–up diagnostic tests, the operating system is automatically loaded into the computer's memory. With your operating system software preinstalled on the system disk, this manual tells you how to power up the system routinely and install AOS/VS and SCP System Media releases and updates.

The next section contains a list of related manuals. These manuals tell you how to connect your system and how to manage and maintain your system's hardware and software on a day–to–day basis.

# Related Manuals

NOTE:     Data General has updated and revised its existing documentation to produce a more concise set of manuals supporting preinstalled AOS/VS. In doing so, we have replaced *Starting and Running AOS/VS on ECLIPSE MV/1400™ DC, ECLIPSE MV2000™ DC, and DS/7500–Series Systems* (069-000129-02) in the original documentation set with *Starting and Running Preinstalled AOS/VS* (069-000293) and *Using the AOS/VS System Management Interface (SMI)* (069-000203-01).

Data General provides a comprehensive documentation set for the ECLIPSE MV/1400™ DC, ECLIPSE MV2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 computer systems.

If you install, operate, manage, or maintain one of these Data General systems, you will find the following books useful.

*Installing and Maintaining Your ECLIPSE MV/1400™ DC, MV/2000™ DC, and ECLIPSE MV/2500™ DC Computer System* (014-001466).

This manual is written for the person who is responsible for setting up and configuring the system. It describes how to unpack and install the system. It also provides sections that describe how to maintain the hardware. The step–by–step procedures and descriptive illustrations simplify and speed up both the installation and configuration of the hardware.

*Installing and Maintaining Your DS/7500 Computer System* (014-001504).

This manual is written for the person who is responsible for setting up and configuring the DS/7500 computer system. It describes how to unpack and install the system. It also provides sections that describe how to maintain the hardware. The step-by-step procedures and descriptive illustrations simplify and speed up both the installation and configuration of the hardware.

*Using the AOS/VS System Management Interface (SMI)* (069-000203).

This manual describes the AOS/VS System Management Interface (SMI), an easy-to-use, menu-driven program that helps you with system management functions and some file maintenance tasks.

*ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* (015-000323).

This manual describes how to install and operate Data General's user-friendly diagnostics on the ECLIPSE MV/1400 DC, the ECLIPSE MV/2000 DC, and the DS/7500 computer systems.

*ECLIPSE MV/2500™ DC User Friendly Diagnostics* (015-000317).

This manual describes how to install and operate Data General's user-friendly diagnostics on an ECLIPSE MV/2500 DC computer system.

*Using the Hardware Format Utility: ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems* (014-001349).

This manual describes how to hardware format cartridge tapes and diskettes using Data General's hardware format utility programs.

## Other Manuals

*Learning to Use Your AOS/VS System* (069-000031).

This manual provides an introduction to AOS/VS and explains how to log on and use the CLI and the SED or SPEED text editors. It shows how to develop and debug programs in different AOS/VS languages: AOS/VS BASIC, Business BASIC, C, COBOL, Interactive COBOL, FORTRAN 77, PASCAL, and assembly language.

*Command Line Interpreter (CLI) User's Manual (AOS and AOS/VS)* (093-000122).

This manual serves as a guide to the CLI and the AOS/VS system command language. The manual describes how to invoke system utilities, execute user programs, maintain files, and write CLI macros. It includes a dictionary of commands and utilities.

*How to Generate and Run AOS/VS* (093-000243).

This manual describes how to generate and run AOS/VS. Generating AOS/VS includes formatting one or more blank disks, installing a starter system, then creating the AOS/VS multiuser environment. Running AOS/VS includes day-to-day operation: bringing up the AOS/VS system, shutting it down, dumping files for backup, and making decisions that help make the system run more efficiently.

*SED Text Editor User's Manual (AOS and AOS/VS)* (093-000249).

This manaul is an introduction to the line-oriented text editor, SED, that allows you to create and modify text files or program source code. SED uses function keys to facilitate editing.

*AOS/VS System Concepts* (093-000335).

This manual is for system programmers and application programmers writing assembly language routines. This manual is an explanation of basic AOS/VS concepts and how families of system calls work together. It is a companion to the two manuals *AOS/VS, AOS/VS_II, and AOS/RT32 System Call Dictionary ?A through ?M* and *AOS/VS, AOS/VS_II, and AOS/RT32 System Call Dictionary ?N through ?Z.*

*AOS/VS, AOS/VS_II, and AOS/RT32 System Call Dictionary ?A through ?M* (093-000542), and *AOS/VS, AOS/VS_II, and AOS/RT32 System Call Dictionary ?N through ?Z* (093-000543).

This system call dictionary delineates the function, use, and implementation of system calls ?A through ?Z. It specifies accumulator input and output values, parameter packets, and error codes. It is a companion to *AOS/VS System Concepts*, and geared to the system programmer. An application programmer will find it useful on occasion— primarily when a program must make explicit system calls.

*ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems Principles of Operation Supplement* (014-001203).

This manual is for assembly language programmers. It describes processor-dependent concepts and functions for the ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC, ECLIPSE MV/2500 DC, and DS/7500 computer systems. This manual must be used with the *ECLIPSE® MV/Family (32-Bit) Principles of Operation* manual and the *ECLIPSE® MV/Family (32-Bit) Systems Instruction Dictionary*.

*ECLIPSE® MV/Family (32-Bit) Principles of Operation* (014-001371).

This manual explains processor-independent concepts and functions for Data General's ECLIPSE® MV/Family systems. Also see the *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems Principles of Operation Supplement* manual.

*ECLIPSE® MV/Family (32-Bit) Systems Instruction Dictionary* (014-001372).

This manual describes each instruction of the ECLIPSE MV/Family instruction set. Also see the *ECLIPSE® MV/Family (32-Bit) Principles of Operation* manual.

*ECLIPSE MV/1400™ DC, ECLIPSE MV 2000™ DC, and DS/7500 Family System Control Program Operator's Reference* (014-001219).

This reference manual describes the SCP commands and explains how to use the system control program (SCP) features.

# Reader, Please Note

In this book, we use the words *terminal*, *console*, and *system console*. They mean the following:

*Terminal*        An interactive device with a keyboard for input and a screen or printer for output. A terminal with a screen (like the DASHER® D460) is called a *display terminal*; a terminal with a printer (like the DASHER® TP2 is called a *hard-copy terminal*.

*Console*        Another word for terminal. We use console in this book to mean any terminal on the system, including the system console. Consoles can be display terminals or hard-copy terminals.

*System Console*        The terminal that will display diagnostic messages and from which you will bring up AOS/VS.

Additionally we use certain symbols in special ways:

| Symbol | Means |
|---|---|
| ) | Press the New Line, Carriage Return (CR), or Enter key on your terminal's keyboard. |
| ) | The CLI prompt. |

Finally, in examples we use

This typeface to show your entry.
*This typeface to show system queries and responses.*

# Contacting Data General

- If you have comments on this manual, please use the prepaid Comment Form that appears at the back. We want to know what you like and dislike about this manual.

- If you require additional manuals, contact your local Data General sales representative.

# Telephone Assistance

If you cannot solve a system problem using information in either this manual or from a manual in the "Related Manuals" section, contact Data General. Data General provides free telephone support during your system's warranty period and with most Data General Service contracts.

End of Preface

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## Chapter 1 – Identifying System Features and Controls

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# Chapter 1
# Identifying System Features and Controls

This chapter familiarizes you with the front panel features and controls of your computer system.

The next four sections list which drives are available for each system: 1/8-inch (21-megabyte) cartridge tape, 1/2-inch (130-megabyte) cartridge tape, reel-to-reel tape, or Winchester hard disk. These sections are followed by illustrations showing the location of the drives and controls in the computer system and in the external mass storage subsystem that Data General currently offers. The last section describes how to identify a DS/7500 system console terminal.

Those drives that come with the base computer system are listed as standard, and drives that you can add to a base system are listed as optional. The optional internal drives mount in the computer cabinet. The optional external drives mount in separate external cabinets, or subsystems. For a full description of these external subsystems, including how to operate and maintain them, refer to the documentation that was shipped with them.

# ECLIPSE MV/1400 DC Computer System

## Standard:

- Winchester hard disk drive
- 1/8-inch cartridge tape drive

## Optional:

### Internal drives

- 1/8-inch cartridge tape drive or diskette drive

(Your system cannot have two internal diskette drives or two internal cartridge tape drives. If your system has one internal diskette and one internal cartridge tape, then only one internal optional expansion board is allowed.)

### External drives

- 1 to 4 Winchester hard disk drives
- 1/2-inch cartridge tape drive
- Reel-to-reel tape drive

(Your system cannot have more than two 1/2-inch cartridge tape drives. If your system has a reel-to-reel tape, it can only have one 1/2-inch cartridge tape drive.)

# ECLIPSE MV/2000 DC Computer System

## Standard:

- Winchester hard disk drive
- 1/8-inch cartridge tape drive or diskette drive

## Optional:

### Internal drives

- Second Winchester hard disk drive
- 1/8-inch cartridge tape drive or diskette drive

(Your system cannot have two internal diskette drives or two internal cartridge tape drives. It can only have one of each.)

### External drives

- 1 to 4 Winchester hard disk drives
- 1/2-inch cartridge tape drive
- Reel-to-reel tape drive

(Your system cannot have more than two 1/2-inch cartridge tape drives. If your system has a reel-to-reel tape, it can only have one 1/2-inch cartridge tape drive.)

# ECLIPSE MV/2500 DC Computer System

## Standard:

- Winchester hard disk drive
- One of the following:
    1/8-inch cartridge tape drive
    1/2-inch cartridge tape drive
    Diskette drive

## Optional:

### Internal drives

- Second Winchester hard disk drive
- Diskette drive or 1/8-inch cartridge tape drive

(If your system has an internal 1/2-inch cartridge tape drive, it cannot have an internal diskette drive or an internal 1/8-inch cartridge tape drive. Also, your system cannot have two internal diskette drives or two internal cartridge tape drives. It can only have one of each.)

### External drives

- 1 to 4 Winchester hard disk drives
- 1/8-inch cartridge tape drive
- 1/2-inch cartridge tape drive
- Reel-to-reel tape drive

(Your system cannot have more than two 1/2-inch cartridge tape drives. If your system has a reel-to-reel tape, it can only have one 1/2-inch cartridge tape drive. Your system can have an external 1/8-inch cartridge tape drive only if it has a 1/2-inch internal cartridge tape drive.)

# DS/7500 Computer System

## Standard:

- Winchester hard disk drive
- 1/8-inch cartridge tape drive or diskette drive

## Optional:

### Internal drives

- 1/8-inch cartridge tape drive or diskette drive

(Your system cannot have two internal diskette drives or two internal cartridge tape drives. If your system has a reel-to-reel tape, it can only have one 1/2-inch cartridge tape drive.)

### External drives

- 1 to 4 Winchester hard disk drives
- Reel-to-reel tape drive
- 1/2-inch cartridge tape drive

(Your system cannot have more than two 1/2-inch cartridge tape drives. If your system has a reel-to-reel tape, it can only have one 1/2-inch cartridge tape drive.)

# Locating Controls and Drives

This section contains illustrations showing the locations of the internal tape and diskette drives and the power switch on the different ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC, ECLIPSE MV/2500 DC, and DS/7500 systems. It also includes illustrations of the following subsystems containing external tape, diskette, and disk drives:

● Combined Storage Subsystem/DC (CSS/DC).

● Model 6426-A Cartridge Tape Subsystem.

● Model 6444-A Cartridge Tape Subsystem.

● Model 6341-A Magnetic Tape Subsystem.

**Location of the Internal Diskette Drive, Internal 1/8-Inch Cartridge Tape Drive, and Power Switch on the ECLIPSE MV/1400 DC, MV/2000 DC, MV/2500 DC, or DS/7500 Computer System**

Diskette drive

1/8-inch cartridge tape drive

Power switch

Power on    Power off
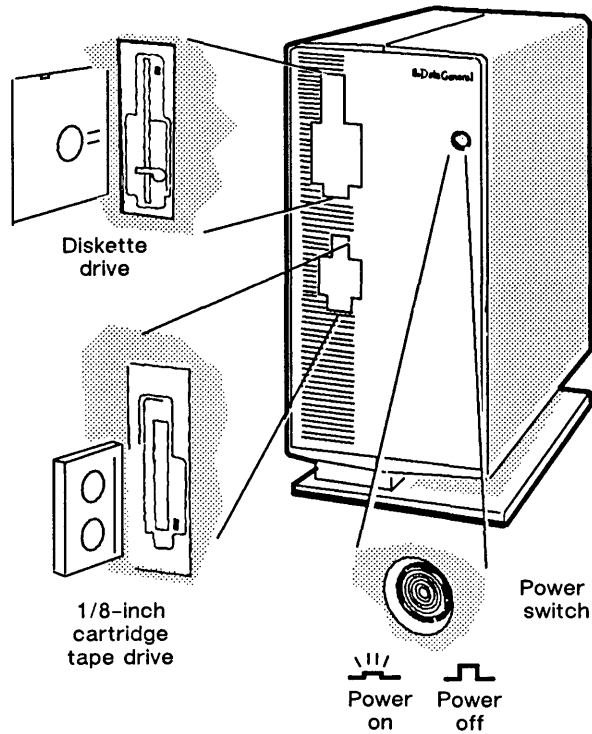
INT-01778

**Location of the Internal 1/2-Inch Tape Drive and
Power Switch on the
ECLIPSE MV/2500 DC Computer System**

1/2 –inch
cartridge
tape drive

Power
switch

Power
on

Power
off

INT–01779

## Combined Storage Subsystem/DC (CSS/DC)

(The CSS/DC can contain as many as four Winchester disk drives or as many as three Winchester disk drives and one 1/2-inch cartridge tape drive)

Power switch

Cabinet for as many as four Winchester disk drives

Cabinet for as many as three Winchester disk drives and one 1/2-inch cartridge tape drive
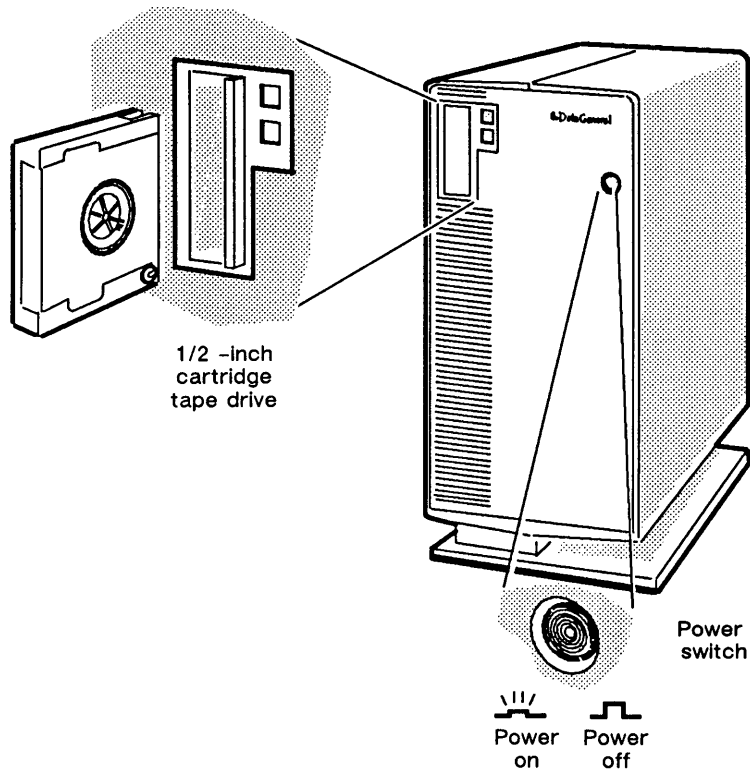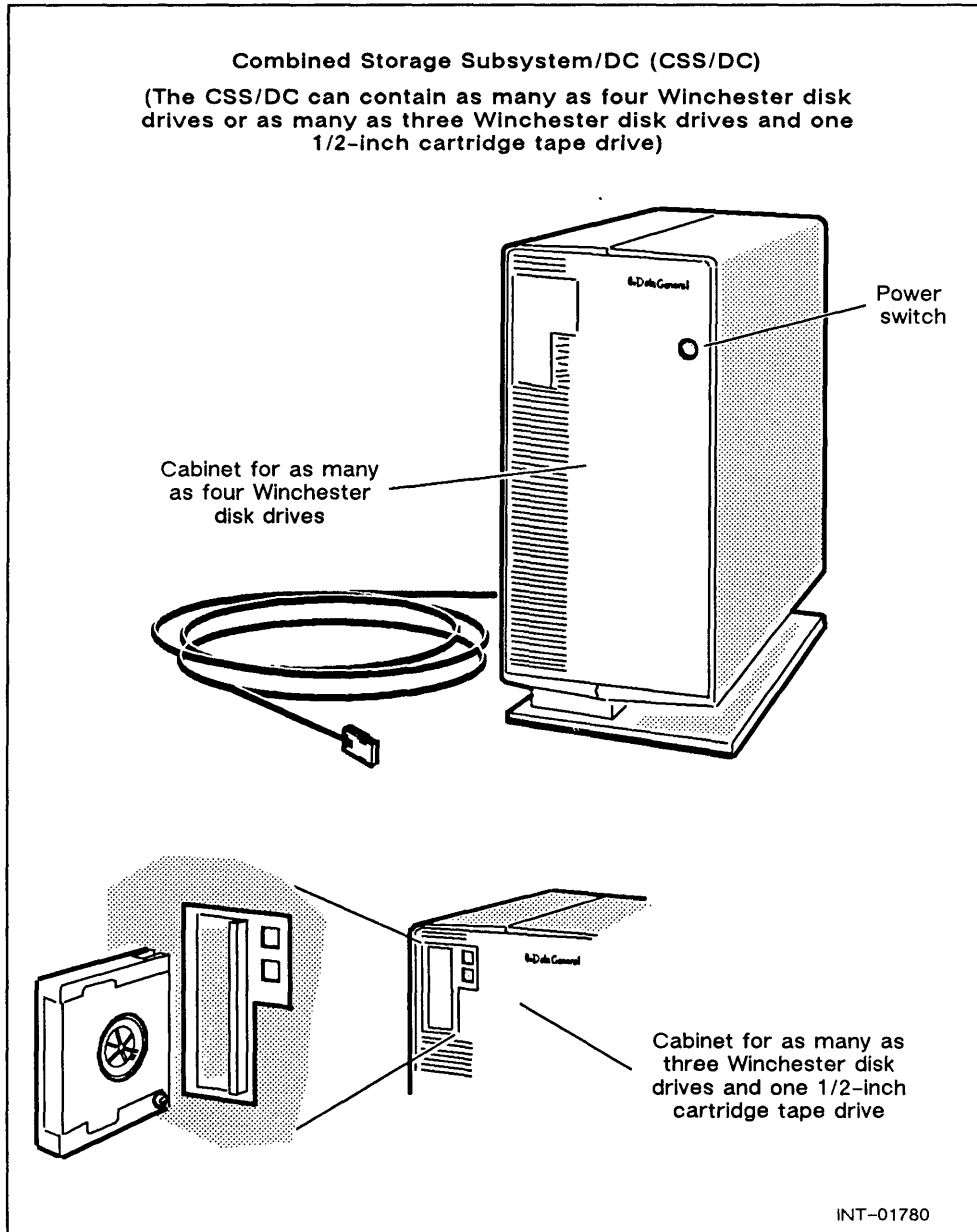
INT-01780

**Model 6426-A Cartridge Tape Subsystem (130 Mbytes)**
**(For All Systems)**

UNLOAD button

LOAD button

Power switch

1/2-inch
cartridge tape
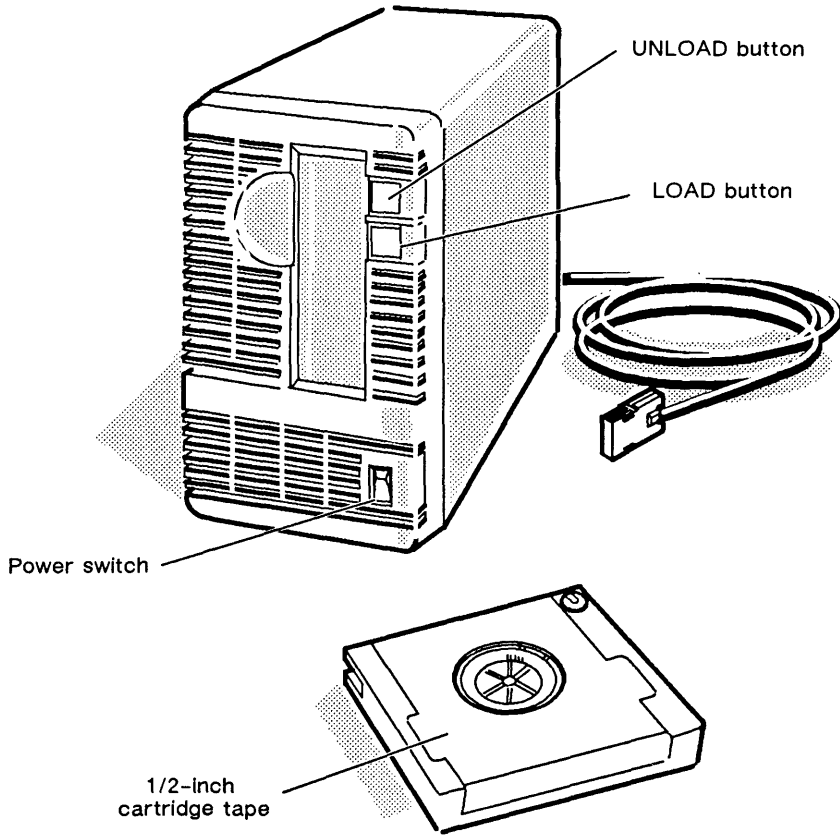
INT-01782

Model 6444-A Cartridge Tape Subsystem (21 Mbytes)
(For ECLIPSE MV/2500 Systems Only)

Eject button

Power switch

1/8-inch
cartridge tape
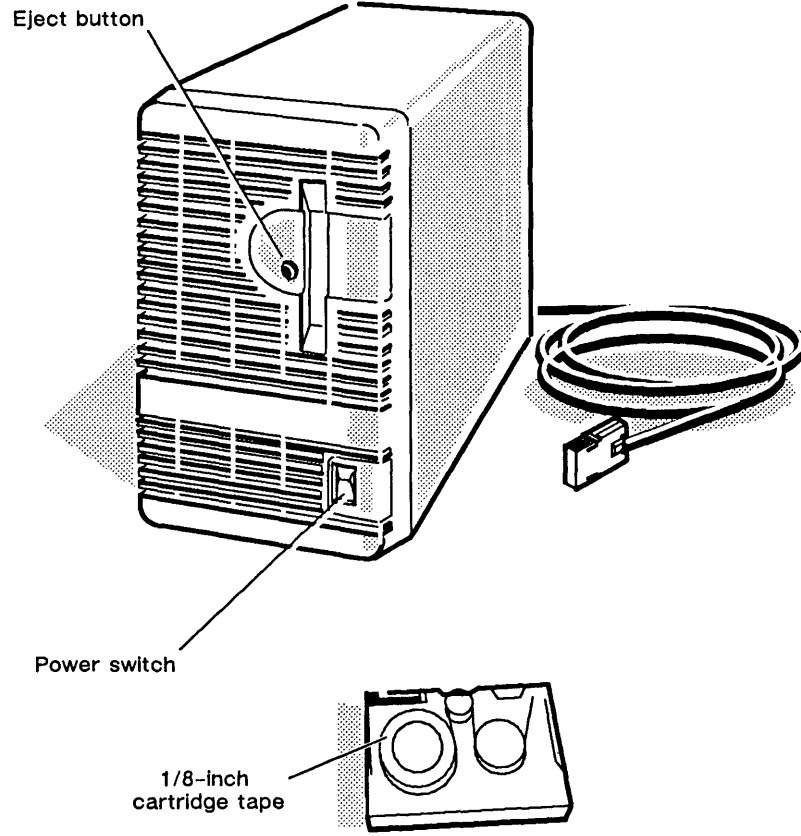
INT-01781

**Model 6341-A Magnetic Tape Subsystem
(External Reel-to-Reel Tape Drive)
(For All Systems)**
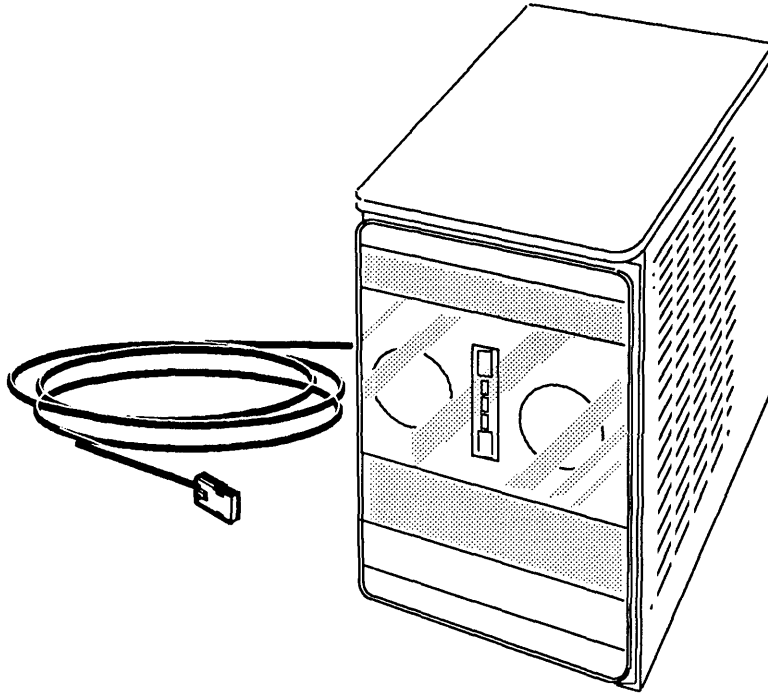
INT-01783

069-000293

# Identifying the DS/7500 System Console

You must know which terminal is the system console terminal before you attempt to power up the DS/7500 computer system. The system console can be either a *nongraphics* terminal connected to line 2 of the system board or a *graphics* terminal connected to the graphics board.

NOTE: The graphics terminal is either a color-graphics terminal, which connects to the color-graphics board, or a monochrome-graphics terminal, which connects to the User A position on the monochrome-graphics board. Refer to the manual *Installing and Maintaining Your DS/7500 Computer System* if you are not familiar with these terminal connections and you need more information.

The sections that follow tell you how to identify nongraphics and graphics system console terminals.

## System with Both a Nongraphics and a Graphics Terminal

If your DS/7500 computer system has both a nongraphics terminal connected to line 2 of the system board and a graphics terminal connected to the appropriate graphics board, the computer system automatically chooses the nongraphics terminal as the system console during the *first-time powerup*.

For *routine powerups*, the computer system chooses the system console (terminal) that you select from the Change Preset Values menu. For a description of how to select the system console after the first-time powerup, see "Option 7 – Change the System Console" section in Chapter 4.

## System with Either a Nongraphics or a Graphics Terminal

If your DS/7500 computer system has either a nongraphics terminal connected to line 2 of the system board or a graphics terminal connected to the graphics board, the computer system automatically chooses this terminal as the system console.

End of Chapter

# Chapter 2
# Powering Up the First Time

After your system hardware is installed, read this chapter to find out how to power up your system the first time. Before reading this chapter, however, make sure you have read Chapter 1, "Identifying System Features and Controls." It shows you the location of your computer system's power switch.

This chapter tells you how to turn on your computer and start your preinstalled AOS/VS system, set the time and date, configure your parallel printer port, calibrate a mouse, and format and initialize a second disk.

NOTE: A DS/7500 computer system can have the system console connected to line 2 of the system board or to the computer's graphics board. If you do not know which terminal is the system console, refer to the section "Identifying the System Console Terminal" in Chapter 1.

## Powering Up

1.  Turn on all terminals, printers, plotters, and external drives that connect to your system. Make sure that the terminals and printers are *on line*.

    NOTE: If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

    Normally, when you turn on a nongraphics terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is steadily on (when the computer power is turned on) or blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

2.  What you must do next depends on whether your system console is a color- or monochrome-graphics display terminal, DASHER® display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

    **Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.

After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

**DASHER Display Terminal (except DASHER 6053)**- Turn on the computer by pressing the computer's power button. The system begins displaying the power-up test message.

**DASHER 6053 Display Terminal**- Press and hold the New Line key, and then the Rept key, on system console's keyboard. While holding down both keys, turn on the computer by pressing its power button. When the system begins displaying the power-up test message, release the keys.

3. The system begins to display test messages like the following:

```
TESTING...

    Model # XXXX; System Processing Unit (SPU)
     ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
    --Standard Hardware Tests Complete--
    --Optional Hardware Tests Beginning--
    Model # YYYY; Slot y; Local Area Network (LAN) Board
     ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

    --Optional Hardware Tests Complete--
    --Memory size is n Megabytes--
```

| Screen Display | Indicates |
| --- | --- |
| Model # XXXX | The model number of the system |
| Letters A-Z; digits 0-9 | A test has passed |
| Slot y | The slot location of the board |
| n Megabytes | The amount of memory |
| Model # YYYY | The model number of the board |

4. Make sure the test messages are complete, and the memory size displayed on the screen is correct.

If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power-Up Problems."

If the memory size displayed is incorrect, stop here and contact Data General.

Once the system displays the correct memory size, the power-up tests are complete, and the system displays the Automatic Program Load (APL) menu.

5.   When the system displays the Automatic Program Load menu shown below, you have 45 seconds before the system automatically continues to power up. Press 2 and New Line immediately.
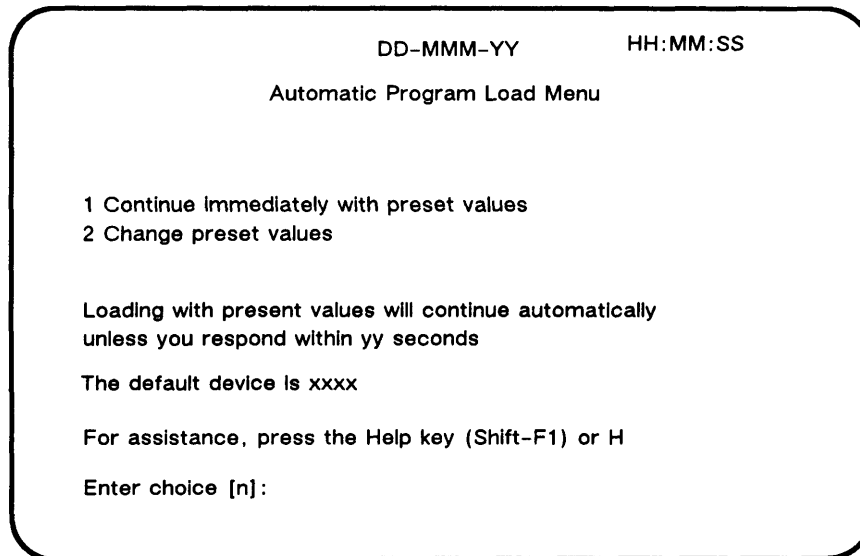
```
                         DD-MMM-YY          HH:MM:SS

                   Automatic Program Load Menu



        1 Continue immediately with preset values
        2 Change preset values


        Loading with present values will continue automatically
        unless you respond within yy seconds

        The default device is xxxx

        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

NOTE:   If the system interrupts the power-up sequence and goes into the System Control Program (SCP), the SCP-CLI prompt appears. Leave the System Control Program and continue the power-up sequence by typing CONTINUE and pressing the New Line key. The CONTINUE command returns you to the Change Preset Values menu.

6.   When the system displays the Change Preset Values menu, go to the next section, "Completing the Power-Up Sequence."

2-4

# Completing the Power-Up Sequence

At this point the Change Preset Values menu should be displayed on your screen, as the following illustration shows. This section tells you how to set the system date and time, and configure the parallel printer port on the system board (if your system has a parallel printer), This chapter also and describes how to calibrate the mouse (if your graphics terminal has a mouse device).

Once you complete the tasks in this section, you are logged on to the system.

```
                     Change Preset Values Menu

      1   Continue the powerup
      2   Change the system date or time
      3   Start from a different device
      4   Change the default device
      5   Change the time-out delay for Automatic Program Load Menu
      6   Enter the SCP CLI
      7   Change the system console
      8   Select diagnostics sequence
      9   Configure parallel printer port
     10   Select positional tracking device types for tablets
     11   Select system clock type


     For assistance, press the Help key (Shift-F1) or H
     To exit from this menu, press the Cancel/Exit key (F11) or ESC

     Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| n | Default choice |

# Setting the System Date and Time

1.  While in the Change Preset Values menu, press 2 and New Line to select option 2, "Change the system date or time." The system displays the following prompt:

    *Date [DD–MMM–YY]:*

2.  You can type the date in one of the following formats:

    >   30 SEP 88
    >   30/SEP/88
    >   30:SEP:88
    >   30–SEP–88

    Type the date and press New Line. The system displays the following prompt:

    *Time [HH:MM:SS]:*

3.  Enter the time using the 24–hour format. If you do not enter a value for seconds (:SS), the system automatically enters zeros.

    >   For example,

    >   10 42
    >   15:04:32
    >   17:49
    >    9:0

    Type the time and press New Line. The system displays the following prompt:

    *Offset to GMT [+00:00]*

## Using the GMT Offset Feature

The GMT offset is a value (in hours and minutes) that the system uses to produce the Greenwich Mean Time (GMT). If you intend to connect to a network with other computer systems that are in different time zones, you may want to use this feature. Go to step 5 to use the GMT offset feature.

4.  If you do not want to use the GMT offset feature, press New Line at the offset to GMT [+00.00] prompt. The system will return you to the Change Preset Values menu. Then go to step 8 to configure the parallel printer port or step 15 if the system does not have a parallel printer. If your system has a mouse device, go to step 11.

5.  If you want to use the GMT offset feature, find the group of cities, countries, or areas in Table 2–1 that are within your local time zone. Or if you know your time zone number, locate it in the left column.

**Table 2-1  GMT Time Zone and Offset Numbers**

| Time Zone Number | Cities, Countries, Areas | GMT Offset Number |
|---|---|---|
| 2 | Honolulu, Anchorage, Fairbanks | -10 |
| 4 | Vancouver, Juneau, Whitehorse, Seattle, Los Angeles, San Francisco | -8 |
| 5 | Boise, Salt Lake City, Denver, Phoenix, Calgary, Edmonton | -7 |
| 6 | Chicago, St. Louis, Houston, New Orleans, Dallas, Mexico City, Fort Worth, Wichita, Rapid City, Bismark, Winnipeg, Managua | -6 |
| 7 | Montreal, Toronto, Quebec, Ottawa, Boston, New York, Philadelphia, Baltimore, Washington D.C., Atlanta, Miami, Lima, Bogota, Quito, San Juan | -5 |
| 8 | St. John's, Halifax, Caracas, Georgetown, La Paz, Santiago, Asuncion | -4 |
| 9 | Greenland, Buenos Aires, Montevideo, Rio de Janeiro, Brasila | -3 |
| 12 | (Greenwich Mean Time) London, Manchester, Dublin, Belfast, Glasgow, Lisbon | 0 |
| 13 | Madrid, Rome, Oslo, Stockholm, Paris, Berlin, Vienna, countries of West-Central Africa | +1 |
| 14 | Helsinki, Bucharest, Cairo, Johannesburg, Ankara, countries of East-Central Africa | +2 |
| 15 | Countries of Eastern Africa | +3 |
| 17 | Karachi, Lahore<br>Bombay, New Delhi, Madras | +5<br>+5:30 |
| 18 | Calcutta | +6 |
| 19 | Sumatra, Java, Thailand, Indonesia | +7 |
| 20 | China, Taiwan, Perth, Hong Kong, Philippines | +8 |
| 21 | Tokyo, Darwin, Korea | +9 |
| 22 | Sidney, Melbourne, Brisbane, New Guinea | +10 |
| 24 | Auckland, Wellington | +12 |

6.  Find the GMT offset number in the right column opposite your time zone number. If your location is on daylight-savings time, add positive 1 to this number.

For example, if your location uses -5 and daylight-savings time is in effect, your GMT offset number is -4.

7.  Type your GMT offset number, including the + or - sign, after the prompt, and press New Line. The system displays the Change Preset Values menu again. (If you want to verify the GMT offset number that you entered, select option 2 again. The system displays the default value in brackets.)

Go to step 8 to configure your parallel printer port or step 15 if your system does not have a parallel printer. If your system has a mouse device, go to step 11.

## Configuring the Parallel Printer Port

8. If you have a parallel printer connected to the system board, you must configure the parallel printer port for your Data General printer model. To configure the parallel printer port, do the following:

9. While in the Change Preset Values menu, press 9 and New Line to select option 9, "Configure parallel printer port."

The system displays the following menu:

```
              Configure the Parallel Printer Port
    1    Positive strobe, VFU option, tab memory
    2    Positive strobe, no VFU option, tab memory
    3    Positive strobe, no VFU option, no tab memory
    4    Negative strobe, VFU option, tab memory
    5    Negative strobe, no VFU option, tab memory
    6    Negative strobe, no VFU option, no tab memory

    To exit from this menu, press the Cancel/Exit key (F11) or ESC
    For assistance, press the Help key (Shift-F1) or H

    Enter choice [1]:
```

**Strobe type** – You must select either positive or negative polarity. If the strobe setting is incorrect, the parallel printer will not work.

**Vertical forms unit (VFU) and (horizontal) tab memory** – The VFU and (horizontal tab) memory options let you program the printer to handle a variety of form lengths and to move quickly between entries within a form. If the VFU option is available but not set, the printer will operate but without the VFU feature.

Table 2–2 specifies the correct strobe type for the Data General printers currently available for your system. It also indicates whether or not the printer has the VFU option or horizontal tab memory.

**Table 2-2  Choosing Settings by Printer Model Number**

| Model Number | Strobe Type | VFU Option | Horizontal Tab Memory |
|---|---|---|---|
| 4323 | Positive | Yes | Yes |
| 4324 | Positive | Yes | Yes |
| 4365 | Positive | Yes | Yes |
| 4366 | Positive | Yes | Yes |
| 4374 | Positive | Yes | Yes |
| 4595 | Positive | Yes | Yes |
| 4596 | Positive | Yes | Yes |
| 4597 | Positive | Yes | Yes |
| 4598 | Positive | Yes | Yes |
| 4599 | Positive | Yes | Yes |
| 6190 | Negative | No | Yes |
| 6216 | Positive | No | Yes |

If your printer's model number is not listed in Table 2-2, refer either to the on-line Help file for the Change Preset Values menu or to the manual that came with your printer. If you still cannot find the information but you know your printer's interface type, choose the settings in Table 2-3.

**Table 2-3  Choosing Settings by Printer Interface Type**

| Interface Type | Settings |
|---|---|
| Centronics | Select negative strobe, and VFU and tab options supported by your printer. |
| Data Products | From the Configure the Parallel Printer Port menu, select option 2 if you want to use printer-supported escape sequences that set tabs or fonts. Otherwise, select option 3. |

10.  Type the option number of the parallel printer port configuration you want, and press New Line. The system displays the Change Preset Values menu. Go to step 11 to calibrate any mouse devices that connect to graphic terminals. If your system does not have a mouse device, go to step 15.

## Calibrating a Mouse Device

11.  If any of your graphics terminals have a mouse device, you must calibrate the mouse each time you powerup the DS/7500 computer system. To calibrate the mouse, position the mouse pad on your working surface the way you want to use it, either horizontally (with the pad's long side at the top), or vertically (with the pad's short side at the top).

12. With the mouse positioned anywhere on the mouse pad, press and hold the 3 mouse buttons for 5 seconds or so, and then release them. This procedure initiates the calibration sequence.



(Mouse pad is shown positioned horizontally.)

INT-01815
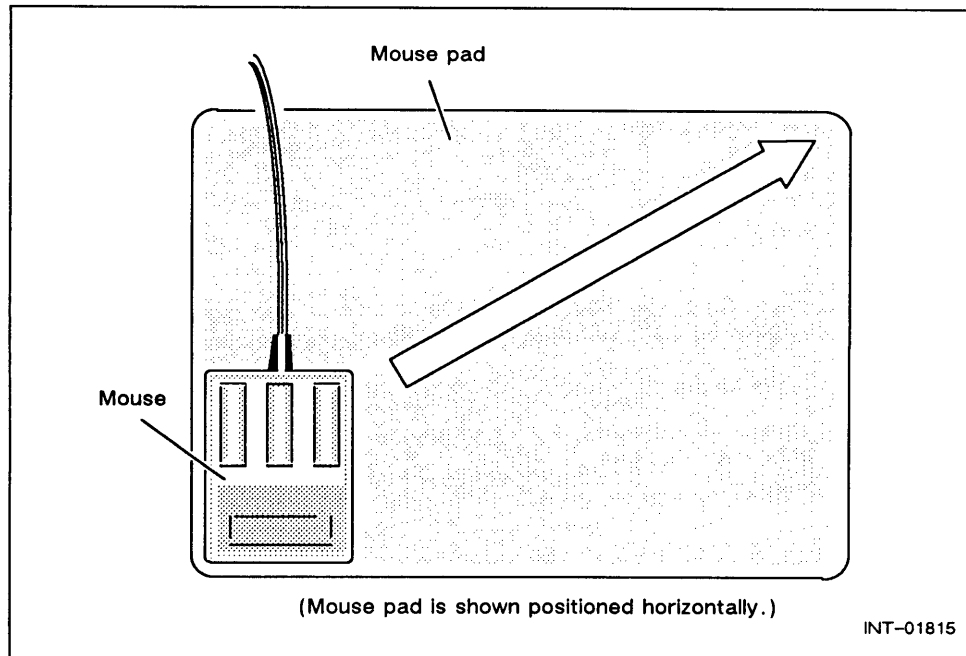
13. Position the mouse at the left bottom corner of the pad as shown.

14. Slide the mouse across the pad from the left bottom corner to the right top corner, in a diagonal direction. The mouse is now calibrated.

NOTE:   Tablet devices, which use a puck or a stylus, do not require calibration. However, if your system has a tablet, you must select either the puck or the stylus. For a description of how to do this, refer to the "Option 10 – Select Positional Tracking Device Types for Tablets" section in Chapter 4.

## Continuing the Power-Up Sequence

15. At this point you have set the system time and date, configured your parallel printer port (if you have a parallel printer connected to the system board), and calibrated any mouse devices that connect to the graphics terminals. While in the Change Preset Values menu, press 1 and New Line to select option 1, "Continue the powerup."

16. When the system displays the Automatic Program Load (APL) menu shown below, you have 45 seconds before the system automatically continues to power up. Press 1 and New Line.

```
                            DD-MMM-YY          HH:MM:SS

                    Automatic Program Load Menu



    1 Continue immediately with preset values
    2 Change preset values


    Loading will continue automatically
    unless you respond within yy seconds.

    The default device is xxxx

    For assistance, press the Help key (Shift-F1) or H

    Enter choice [n]:
```
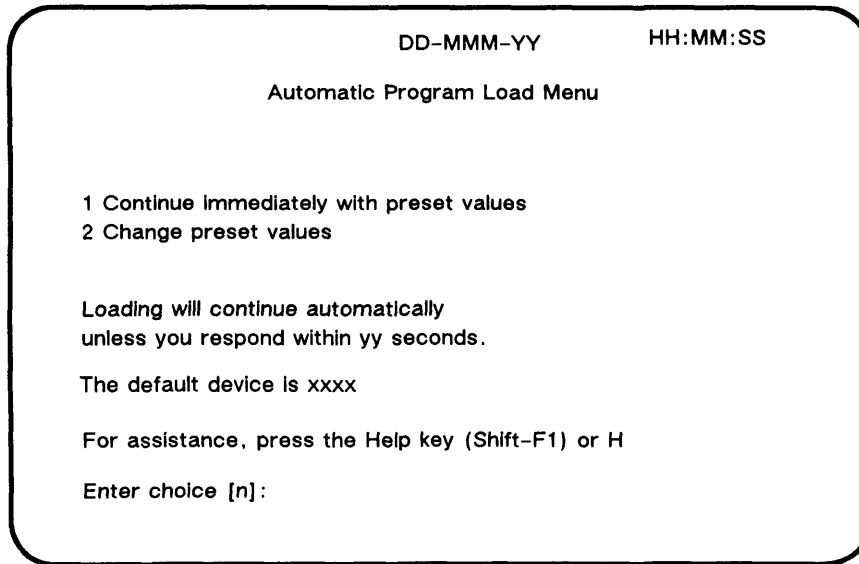
| Screen Display | Indicates |
| --- | --- |
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

17.  When the Operating System Load menu appears, you have 45 seconds before the system automatically continues to power up. Press 1 and New Line.

```
                          DD-MMM-YY          HH:MM:SS

                    Operating System Load Menu



        1 Continue immediately with preset values
        2 Enter the Technical Maintenance Menu


        Loading with present values will continue automatically unless you respond
        within yy seconds

        The default system pathname is xxxx

        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default system pathname: :STARTER.SYS |
| n | Default choice |

NOTE:  If, for some reason, the Starter program is not on your disk, the words INSTALLED SYSTEM will appear as the default operating system pathname instead of :STARTER.SYS. If this is the case, refer to Appendix D, "Handling Starter and Other Problems."

18. The system will display the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                    STARTER Main Menu

    1  Start the default operating system

    2  Start a different operating system

    3  Change the system date or time

    4  Make a physical backup of a disk (using PCOPY)

    5  Restore a physical copy of a disk (using PCOPY)

    6  Build or update the system disk


    The default operating system will start up automatically unless
    you respond within 45 seconds


    Enter choice [1]:

    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```

The system displays the default menu choice in brackets. The default choice is usually option 1, "Start the default operating system." The other menu options are described in the "Using Starter Menu Options" section in Chapter 3. Refer to Appendix D if the default menu choice is an option number other than 1.

19. If you have one disk on your system, continue to step 20. If you have two or more disks on your system, you will need to format the additional disks. Skip ahead to the "Formatting Additional Disks" section later in this chapter.

20. While in the Starter Main Menu, press 1 and New Line or just press New Line if the system displays 1 as the default menu choice.

The system displays the following message.

*Please wait. The system is being loaded:*
  *:SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, the system's log-on banner appears.

**** *MODEL ID / Press New Line to begin logging on* ****

| Screen Display | Indicates |
|---|---|
| MODEL ID | MV/1400, MV/2000 DC, MV/2500 DC, DS/7500 depending on which system you have. |

The log-on banner indicates that the operating system is up and running.

NOTE:   If the Starter program discovers a disk flaw while loading your operating system, your system console will automatically display the Format a Disk Menu. Appendix D, "Handling Starter and Other Problems," describes this menu and explains what you should do if it appears during system power up.

21.   Press New Line to begin logging on.

The system will prompt you for a username/password pair.

```
AOS/VS  n.nn.nn.nn / EXEC  n.nn.nn.nn   23-Sep-88   14:04:38   @CONn

Username:
```

22.   Enter the system management username SYSMGR, (either upper- or lowercase is fine), and press New Line.

Next, the system will prompt you for a password, as shown below.

```
AOS/VS  n.nn.nn.nn / EXEC  n.nn.nn.nn   23-Sep-88   14:04:38   @CONn
Username:   SYSMGR
Password:
```

23. Change your password at this time, by entering the supplied password, SYSTEM_MANAGER (note that the password does not appear on the screen). *Do not* press New Line; instead, press the Erase Page key or Ctrl–L (press the Ctrl key and hold it down while you press L).

    If you have entered the System Manager username/password pair correctly, the system will prompt you to enter a new password.

24. Enter a new password from 6 to 15 characters long and press New Line. Any printable characters on the keyboard are allowed except the caret (^) character.

    For password security, the system will not echo on the screen any keystrokes entered after the "Enter new password" prompt. To check that you typed the new password exactly as you intended, you will see the following prompt:

    *Reenter new password for validation:*

    Type the new password again and press New Line. The system will not echo the second entry on your terminal. If the two new password entries match, your terminal displays the message

    *––New password in effect––*

    AOS/VS allows you five attempts to enter a matching new password/confirmation pair, and will display errror messages after unacceptable entries. If the system does not receive a valid pair in five tries, it informs you that your former password will remain in effect with the following message:

    *––Password not changed––*

    AOS/VS will then log you on, without changing your password.

    *Be sure to select a password you can remember!* You will use this new password each subsequent time you log on (pressing New Line after typing the password instead of Erase Page), until you change the password again. (See the manual *Learning to AOS/VS* for a more detailed discussion of system security.) If you forget your SYSMGR password, and you are the only system user with system management privileges, you will have to reload the SYSMGR profile from diskettes or tape to get the initial password back again.

25. Once you have typed in the System Manager username/password pair correctly, you will see the System Management Interface (SMI) Main Menu on your screen. The system is now up and running and you are logged on as its system manager.

If you have two disks on your system, you will have to edit the UP macro to *initialize* the second disk unit. If this is the case, skip the remainder of this section and proceed to the section "Initializing Additional Disks" later in this chapter.

If you do not have additional disks on your system, use the SMI to specify your system's configuration as follows:

a. While in the SMI Main Menu, press 4 and New Line to select option 4, "Run administrative functions."

b. While in the Administrative Functions menu press 3 and New Line to select option 3, "Customize the system."

c. While in the Customize the System menu, press 1 and New Line to selection option 1, "Specify system configuration." We describe this option, and all of the other SMI menus and options, in the *Using the AOS/VS System Management Interface (SMI)* manual.

## Formatting Additional Disks

If you have two or more disks on your system, you will need to format the additional disks before logging on the system.

1. While in the Starter Main Menu press 6 and New Line or enter the SYSDISK keyword to select option 6, "Build or update system disk."

The system displays the Build or Update the System Disk menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm


                  Build or Update System Disk Menu


        1  Build the system disk

        2  Format a disk

        3  Load new system software on the disk

        4  Load the default operator profile on the disk

        *  Load new system firmware on the disk



        Enter choice [1]:



        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```
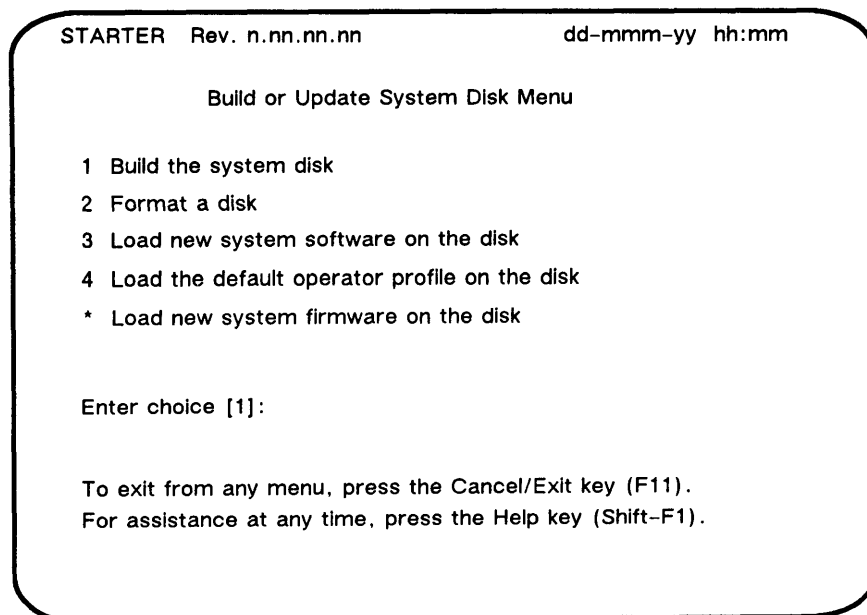
2. While in the Build or Update System Disk menu press 2 and New Line or enter the FORMAT keyword to select option 2, "Format a disk."

When prompted, enter the disk unit name as @DPJnn, as follows:

*Enter the disk unit name:*   **@DPJnn** ↲

The system displays the Format a Disk menu.

```
                          Format a Disk

         Formatting the disk will destroy its current contents, if any.

                    Disk unit name   :@DPJn
                    Logical disk name:

         Do you really want to format this disk (Y or N)? N

         To exit from this menu, press the Cancel/Exit key (F11)
         For assistance at any time, press the Help key (Shift-F1)
```
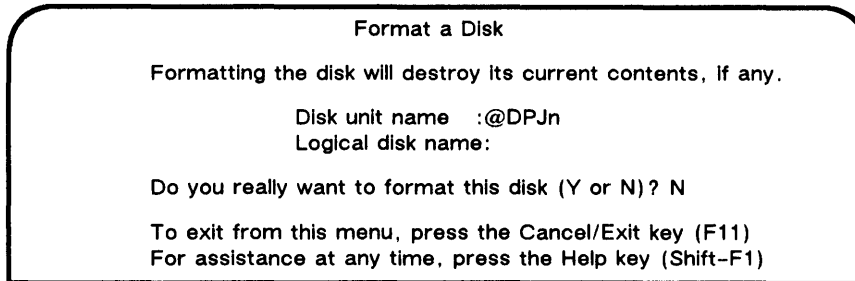
**Screen Display    Indicates**

n                   0, 1, 20, 21, 22, or 23  depending on specified
                    disk unit

The system provides a logical disk name for your second disk when it is software formatted.

The system prompts you with

*Do you really want to format this disk?*

3.    Type Y and press New Line. The system displays the following message:

*Please wait while the disk is being software formatted, @DPJnn*

Software formatting a hard disk takes from 1 to 2 hours.  Once you have software formatted the disk, the system returns you to the Starter Main Menu.

4.    Continue the powerup sequence with step 20 in the previous section, "Continuing the Power-up Sequence."

# Initializing Additional Disks

If you have two or more disks on your system, after formatting your additional disks you will have to edit the UP macro to *initialize* these disk units.

Note the names that the Starter program gives your disks. The Starter program names your first disk DPJ0_LDU. This is the *system disk*. It contains :UDD, :UTIL, :PER, :QUEUE, and other system directories. When you refer to any files on this disk with pathnames, the pathname starts with : (the root).

The Starter program names your second integral disk DPJ1_LDU (disks in a CSS/DC peripheral unit are named DPJ20_LDU, DPJ21_LDU, and so on). The system will treat this disk like a directory in the root. In other words, to refer to a file on this disk, you must include DPJ1_LDU in its pathname. For example, suppose you have the directory PRODUCTS on your second disk. To refer to the file WIDGEN in the PRODUCTS directory, you would enter the following:

**:DPJ1_LDU:PRODUCTS:WIDGEN**

NOTE:     The UP macro causes the FIXUP program to create a log file called :FIXUP.LOG whenever FIXUP runs on the two disks. If the log file becomes too large, you can delete it to regain disk space.

To initialize additional disk units, follow the steps below.

1.   When the system is up and running and you are logged on as its system manager, enter the System Management Interface.

2.   While in the SMI Main Menu, press 4 and New Line to select option 4, "Run administrative functions." The system displays the Administrative Functions menu.

3.   While in the Administrative Functions menu, press 3 and New Line to select option 3, "Customize the system." The system displays the Customize the System menu.

4.   While in the Customize the System menu, press 5 and New Line, or enter the UPCLI keyword to select option 5, "Edit the UP macro."

     You will use the SED text editor to edit the UP macro, so make sure you have your SED documentation on hand. (See *Using the AOS/VS System Management Interface (SMI)* for details on editing the UP macro.) If you are initializing DPJ1, continue with step 5. If you are are initializing a CSS/DC disk, skip ahead to step 11.

5.  If you are initializing DPJ1, find the following line in the UP macro:

    *Comment   INITIALIZE THE SECOND DISK*

    The line directly following this line looks like this:

    *[!EQUAL,1,2]*

    You must change the [!EQUAL] statement to make the following lines executable.  To do so, just change the 2 to 1.  The line will then look like this:

    *[!EQUAL 1,1]*

    The SMI displays the Customize the System menu.

6.  Enter the CLI from the System Management Interface.  If you do not know how to enter the CLI from the System Management Interface, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

7.  At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

    *SMI-CLI)* **SUPERUSER ON⤶**

8.  At the SMI_CLI prompt, type the following command line and press New Line to enter the : (root) directory as follows:

    *SMI-CLI\*)* **DIRECTORY : ⤶**

9.  At the SMI_CLI prompt, type INITIALIZE @DPJ1 and press New Line as follows:

    *SMI-CLI\*)* **INITIALIZE @DPJ1 ⤶**

    The system will return to the SMI Main Menu.

    If your system does not include a CSS/DC disk unit, continue with Step 10.

    If your system does include CSS/DC disks, you need to initialize each of them as well.  Skip Step 10; continue with Steps 11 through 20.

10. After you have completed initializing all of the additional disks on your system, specify your system's configuration as follows:

    While in the SMI Main Menu, press 4 and New Line to select option 4, "Run administrative functions."

    While in the Administrative Functions menu press 3 and New Line to select option 3, "Customize the system."

    While in the Customize the System menu, press 1 and New Line to selection option 1, "Specify system configuration."  We describe this option, and all of the other SMI menus and options, in the *Using the AOS/VS System Management Interface (SMI)* manual.

    When you have specified your system's configuration, your first powerup is completed.

11. If you are initializing a CSS/DC disk, you must add the following lines to the UP macro (where n = 0, 1, 2, or 3, as in DPJ23):

Comment  INITIALIZE CSS DISKS

[!EQUAL,1,1]

    INITIALIZE/S/1=IGNORE @DPJ2n

    [!EQUAL, [!STRING],]

      COMMENT INIT FAILED

      DELETE/2=IGNORE :FIXUP.LOG :FIXUP.IN :FIXUP.OUT

      CREATE :FIXUP.(IN OUT)

      PROCESS/DEFAULT/BLOCK/STRING/INPUT=FIXUP.IN/OUTPUT=
      :FIXUP.OUT FIXUP/SCRIPT=DPJ2n_FIXUP_SCRIPT

      DELETE/2=IGNORE :FIXUP.IN :FIXUP.OUT

      [!EQUAL,[!STRING],]

        INITIALIZE/S @DPJ2n

        [!EQUAL,[!STRING],]

          COMMENT FAILED AGAIN

          WRITE CANNOT INITIALIZE @DPJ2n

        [!END]

      [!ELSE]

        COMMENT FIXUP ABORTED

        WRITE CANNOT FIXUP @DPJ2n

      [!END]

    [!END]

    COMMENT @DPJ2n INITIALIZED

[!END]

12. If you are initializing a CSS/DC disk, you must also create a fixup script as described in steps 13-18. For assistance, refer to the *How to Generate and Run AOS/VS* manual.

13. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the System Management Interface, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

14. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

   *SMI_CLI)* **SUPERUSER ON** ⟩

15. At the prompt, type the following command line and press New Line to enter the : (root) directory as follows:

   *SMI-CLI\*)* **DIRECTORY :** ⟩

16. At the prompt, type the following command line and press New Line to execute the Fixup program as follows (where n = 0, 1, 2, or 3, as in DPJ23).

   *SMI-CLI\*)***X**
   **FIXUP/BUILDSCRIPT=DPJ2n_FIXUP_SCRIPT/DEFAULT=DPJ1_FIXUP_SCRIPT**⟩

17. Press New Line to accept each of the default values listed in the Fixup script that appears on your screen *except* the values for disk unit name and device code.

   ● Change the disk unit name listing to DPJn (where n = 0, 1, 2, or 3)

   ● Change the device code listing to 25.

18. Exit the program to build a fixup script. The system will return to the CLI.

19. At the SMI_CLI prompt, type INITIALIZE @DPJ2n and press New Line as shown in the following example:

   *SMI-CLI\*)* **INITIALIZE @DPJ20** ⟩

   The system will return to the SMI Main Menu.

20. Repeat the sequence described in Steps 11–19 for each disk in your CSS/DC peripheral unit. After you have completed initializing all of the additional disks on your system, specify your system's configuration as follows:

   While in the SMI Main Menu, press 4 and New Line to select option 4, "Run administrative functions."

   While in the Administrative Functions menu press 3 and New Line to select option 3, "Customize the system."

   While in the Customize the System menu, press 1 and New Line to select option 1, "Specify system configuration." We describe this option, and all of the other SMI menus and options, in the *Using the AOS/VS System Management Interface (SMI)* manual.

   When you have specified your system's configuration, your first powerup is completed.

<p align="center">End of Chapter</p>

# Chapter 3
# Powering Up Routinely

Read this chapter after setting the system values as described in Chapter 2. If your system disk is damaged, refer to Appendix A, "Reinstalling AOS/VS from Tapes," or Appendix B, "Reinstalling AOS/VS from Diskettes."

Before getting started, make sure the computer and all peripherals are turned off. Peripherals include terminals, printers, and external drives, or subsystems.

Follow the steps in remaining sections in order; otherwise, the peripherals will not operate properly.

To start your system, follow these steps:

1.  Turn on all terminals, printers, plotters, and external drives that connect to your system. Make sure that the terminals and printers are *on line*.

    NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

    Normally, when you turn on a nongraphics terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is steadily on (when the computer power is turned on) or blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

2.  What you must do next depends on whether your system console is color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

    **Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.

    After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

    **DASHER Display Terminal (except Dasher 6053)**– Turn on the computer by pressing the computer's power button. The system displays the power-up test message.

**DASHER 6053 Display Terminal–** Press and hold the system console's New Line key, and then the Rept key. While holding down both keys, turn on the computer by pressing its power button. When the system displays the power-up test message, release the keys.

3. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each keyboard turns white for about four seconds and then goes blank. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

4. In about a minute or so, the system begins to display test messages like the following:

```
TESTING...

  Model # XXXX; System Processing Unit (SPU)
   ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
  --Standard Hardware Tests Complete--
  --Optional Hardware Tests Beginning--
  Model # YYYY; Slot y; Local Area Network (LAN) Board
   ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

  --Optional Hardware Tests Complete--
  --Memory size is n Megabytes--
```

| Screen Display | Indicates |
|---|---|
| Model # XXXX | The model number of the system |
| Letters A–Z; digits 0–9 | A test has passed |
| Model # YYYY | The model number of the board |
| Slot y | The slot location of the board |
| n Megabytes | The amount of memory |

5. Make sure the test messages are complete and the memory size displayed on the screen is correct.

If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power-Up Problems."

If the memory size is not correct, stop here and contact Data General.

Once the system displays the correct memory size, the power-up tests are complete, and the system displays the Automatic Program Load menu.

069-000293

NOTE:   You set the date and time when you powered up the system the first time. Thereafter, the system maintains and displays the time and date at the top of the Automatic Program Load (APL) menu. If the APL menu displays the letters DD-MMM-YY during a routine powerup instead of the current date and time, you may have to replace the Time-of-Day batteries. To replace the batteries, refer to one of the following manuals: *Installing and Maintaining Your ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, or ECLIPSE MV/2500™ DC Computer System* or *Installing and Maintaining Your DS/7500 Computer System.*

```
                      DD-MMM-YY          HH:MM:SS

                   Automatic Program Load Menu



     1 Continue immediately with preset values
     2 Change preset values


     Loading with present values will continue automatically
     unless you respond within yy seconds

     The default device is xxxx

     For assistance, press the Help key (Shift-F1) or H

     Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

6.  While in the Automatic Program Load menu, press 1 and New Line to select option 1, "Continue immediately with preset values."

NOTE:   If any of your graphics terminals has a mouse device, you need to calibrate the mouse each time you powerup the DS/7500 computer system. For more information refer to the "Calibrating a Mouse Device" section in Chapter 2.

7. When the Operating System Load menu appears, you have 45 seconds before the system automatically continues to power up. Press 1 and New Line immediately.

Note that the time-out interval might be a value other than 45 seconds, if you previously used the Technical Maintenance menu to change the time-out interval value for the Operating System Load menu.
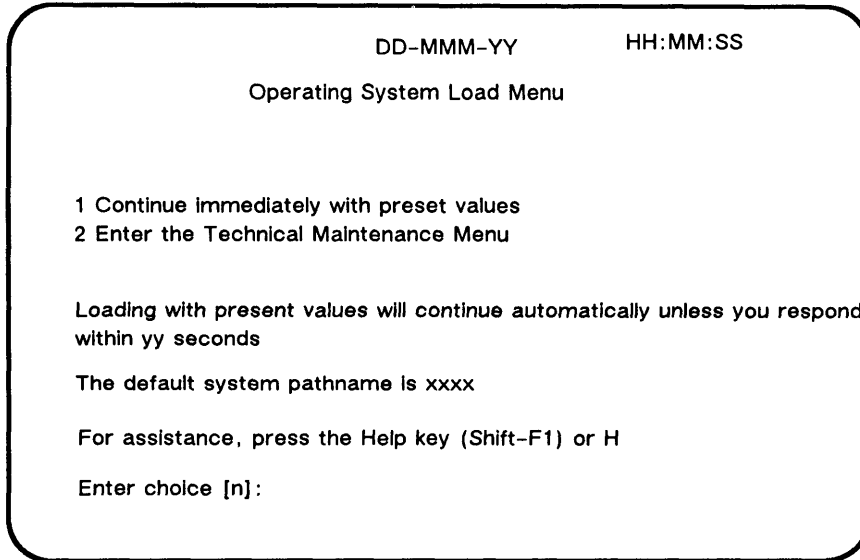
```
                        DD-MMM-YY          HH:MM:SS

                  Operating System Load Menu



      1 Continue immediately with preset values
      2 Enter the Technical Maintenance Menu


      Loading with present values will continue automatically unless you respond
      within yy seconds

      The default system pathname is xxxx

      For assistance, press the Help key (Shift-F1) or H

      Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default system pathname: :STARTER.SYS |
| n | Default choice |

NOTE: If, for some reason, the Starter program was not on your disk, the words INSTALLED SYSTEM would appear as the default operating system instead of :STARTER.SYS. If this is the case, refer to Appendix D, "Handling Starter and Other Problems."

**8.** The system displays the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm
                        STARTER Main Menu

   1  Start the default operating system
   2  Start a different operating system
   3  Change the system date or time
   4  Make a physical backup of a disk (using PCOPY)
   5  Restore a physical copy of a disk (using PCOPY)
   6  Build or update the system disk

   The default operating system will start up automatically unless
   you respond within 45 seconds


   Enter choice [1]:

   To exit from any menu, press the Cancel/Exit key (F11).
   For assistance at any time, press the Help key (Shift-F1).
```

The system displays the default menu choice in brackets. The default choice is usually option 1, which continues the default operating system load. Refer to Appendix D, "Handling Starter and Other Problems" if the default menu choice is an option number other than 1.

Note that the time-out interval might be a value other than 45 seconds, if you previously used the Technical Maintenance menu to change the time-out interval value for this menu and the Operating System Load menu.

**9.** Type 1 and press New Line or just press New Line if option 1 is the default.

The system displays the following message.

*Please wait. The system is being loaded:*
    *:SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, the system's log-on banner will appear.

**** *MODEL ID / Press New Line to begin logging on* ****

| Screen Display | Indicates |
|---|---|
| MODEL ID | MV/1400, MV/2000 DC, MV/2500 DC, DS/7500 depending on which system you have. |

The log-on banner indicates that the operating system is up and running.

NOTE: If the Starter program discovers a disk flaw while loading your operating system, your system console will automatically display the Format a Disk menu. Appendix D, "Handling Starter and Other Problems," describes this menu and explains what you should do if it appears during system power up.

10. Press New Line.

The system will prompt you for a username/password pair.

```
AOS/VS  n.nn.nn.nn / EXEC  n.nn.nn.nn   23-Sep-88   14:04:38   @CONn

Username:
```

11. Enter the system management username, SYSMGR (either upper- or lowercase is fine), and press New Line.

Next, the system will prompt you for a password, as shown below.

```
AOS/VS  n.nn.nn.nn / EXEC  n.nn.nn.nn   23-Sep-88   14:04:38   @CONn
Username:    SYSMGR
Password:
```

12. Enter your password and press New Line.

If you have entered the username/password pair correctly, you will come up in the program your profile specifies as your initial command (IPC) file. If you haven't ever changed your initial IPC file, you will be running the SMI program, as you did the first time powering up. For information on modifying your profile to change your initial command (IPC) file, refer to the *Using the AOS/VS System Management Interface (SMI)* manual.

The system is now up and running. If you want to change you password, follow steps 13 and 14. If you do not want to change your password, skip the rest of this section and go on with your work. Refer to the *Using the AOS/VS System Management Interface (SMI)* manual for information on the SMI program.

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13. To change your password at this time, enter your password, (note that the password does not echo on the screen). *Do not* press New Line; instead, press the Erase Page key or Ctrl–L (press the Ctrl key and hold it down while you press L).

   If you have entered the System Manager username/password pair correctly, the system will prompt you to enter a new password.

14. Enter a new password from 6 to 15 characters long and press New Line. Any printable characters on the keyboard are allowed except the caret (^) character.

   For password security, the system will not display on the screen any keystrokes entered after the "Enter new password" prompt. To check that you typed the new password exactly as you intended, you will see the following prompt:

   *Reenter new password for validation:*

   Type the new password again. The system will not echo the second entry on your terminal. If the two new password entries match, your terminal displays only the message

   *—New password in effect—*

   AOS/VS allows you five attempts to enter a matching new password/confirmation pair, and will display errror messages after unacceptable entries. If the system does not receive a valid pair in five tries, it informs you that your former password will remain in effect with the following message:

   *—Password not changed—*

   AOS/VS will then log you on, without changing your password.

   *Be sure to select a password you can remember!* You will use this new password each subsequent time you log on (pressing New Line after typing the password instead of Erase Page), until you change the password again. If you forget your SYSMGR password, and you are the only system user with system management privileges, you will have to reload the SYSMGR profile from diskettes or tape to get the initial password back again. See the *How to Generate and Run AOS/VS* manual for a more detailed discussion of system security.

   Once you have typed in the System Manager username/password pair correctly, you will see the System Management Interface (SMI) Main Menu on your screen. We discuss this menu and system management functions in the *Using the AOS/VS System Management Interface (SMI)* manual.

   The system is now up and running and you are logged on as its system manager.

# Using Starter Menu Options

The Starter Main Menu, through a list of options, lets you choose system functions or values that you want to change. You can get to this menu only when you are powering up the system. To display the Starter Main Menu from any other Starter menu, enter the MAIN keyword.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm
                        STARTER Main Menu

        1  Start the default operating system

        2  Start a different operating system

        3  Change the system date or time

        4  Make a physical backup of the disk (using PCOPY)

        5  Restore a disk from a physical backup (using PCOPY)

        6  Build or update the system disk


        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [1]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

## The Starter Program

The Starter Program (Starter) is a disk initialization and bootstrap program. *Initializing*, in this context, means building the disk; that is, software formatting the disk and loading software onto it. The disk must be initialized before you can use AOS/VS. *Bootstrapping* means loading a program from disk into the computer's memory. Therefore, Starter prepares the disk for AOS/VS files, loads the files onto the disk, and then loads AOS/VS from the disk into the computer's memory.

Starter is both menu driven and command driven. This means you can either select menu choices or enter command keywords. Table 3-1 lists all of the keywords for the Starter program.

The heading for each option specifies the appropriate keyword in parentheses. For example, "Option 1 – Start the Default Operating System (BOOTSTRAP)" means that while you are in a Starter menu you can type BOOTSTRAP and press New Line to select option 1. Table 3-1 lists the Starter keywords, whether the keyword calls a command screen or menu, and the keword's releated menu or function.

Table 3-1  Starter Keywords

| Keyword | Menu or Function | Command or Menu | Optional Arguments |
|---|---|---|---|
| BACKUP | Make a physical backup of the disk | Command | media type disk unitname |
| BOOTSTRAP | Logon banner | Command | None |
| BUILD | Build the system disk | Command | disk unitname |
| BYE | Exit the Starter program | Command | None |
| DATE | Change the system date or time | Command | datetime |
| FIRMWARE | Load new system firmware | Command | N/A |
| FORMAT | Format a disk | Command | disk unitname |
| MAIN | Starter Main Menu | Menu | None |
| PROFILE | Reload the SYSMGR profile | Command | media type |
| RESTORE | Restore the disk from physical backup | Command | media type disk unitname |
| SOFTWARE | Load new system software | Command | media type |
| SYSDISK | Build or update system disk menu | Menu | None |
| SYSTEM | Start a different operating system | Command | pathname |

# Entering Device Names and Device Codes

With some of the Starter options, the system prompts you to enter a *device name* (or unit name). The device name is a series of characters that the system uses to identify the device, such as a disk or tape unit. Your peripherals directory (:PER) contains an entry for each device. Each device name begins with a commercial at sign (@), which is an abbreviation for the :PER directory. Therefore, the device name @DPJ0 refers to the peripherals directory enter named :PER:DPJ0.

When you enter a device name, you can specify it with or without the @ sign. The Starter program will fill in the missing @ sign if you don't include it. In addition, if you specify the pathname of the device, such as :PER:MTJ0, the Starter program will shorten it to the device name with the @ sign (@MTJ0 in this example). Finally, if you have created any links to device names in the :PER directory, Starter will resolve the links. (For information on how to create links, see the *Command Line Interpreter (CLI) User's Manual (AOS and AOS/VS)*.)

Table 3–2 lists the device names and device codes for each device you might need to specify. Note that you won't need to use the device code for anything, but you might see one in an error code, such as *SOFT ERROR, DEVICE 23*. This table will help you identify which device is causing any such error.

Table 3-2  Device Names and Device Codes

| Device | Device Name | Device Code |
|---|---|---|
| System Disk Unit | @DPJ0 | 24 |
| Additional Disk Unit | @DPJ1 | 24 |
| CSS/DC Disk Units | @DPJ20 | 25 |
|  | @DPJ21 | 25 |
|  | @DPJ22 | 25 |
|  | @DPJ23 | 25 |
| Diskette Drive | @DPJ10 | 64 |
| Model 6351 (21-Mbyte) 1/8-in. Mini Cartridge Tape Drive | @MTJ0 | 23 |
| Second 1/8-in. Mini Cartridge Tape Drive | @MTJ1 | 23 |
| Model 6352 (130-Mbyte) 1/2-in. Cartridge Tape Drive or Model 6341 1/2-in. Reel-to Reel Tape Drive | @MTJ10 | 63 |
| Second 1/2-in. Tape Drive | @MTJ11 | 63 |

# Option 1 - Start the Default Operating System (BOOTSTRAP)

If you press New Line, or enter the BOOTSTRAP keyword, the system starts up
AOS/VS and displays the log-on banner. Until AOS/VS is running, no users can log
on to the system.

## Option 2 – Start Up a Different Program or Operating System (SYSTEM)

NOTE:    Select this option only if you have the correct program or operating system documentation on hand. Refer to this documentation for loading instructions.

If you have an operating system on your disk other than AOS/VS, you can start it by selecting option 2, "Start a different program or operating system," or by entering the SYSTEM keyword. Option 2 also allows you to run any stand-alone program you have, including FIXUP, Disk Formatter (DFMTR), and other utilities. (A stand-alone program is one that can run only when the operating system is not running.) The system will prompt you for the AOS/VS pathname to the program or operating system.

## Option 3 – Change the System Date and Time (DATE)

When you powered up the system for the first time, you set the system date and time. There might be other instances when you will have to change the date or time. For example, if you live in a region that observes Daylight Savings Time, you will have to change the time twice a year. You will also have to reset the date and time whenever you change your computer's battery pack, which powers the clock and calendar.

To change the date and/or time, do the following:

1.    While in the Starter Main Menu, press 3 and New Line or enter the DATE keyword to select option 3, "Change the system date or time." The system displays the following prompt:

*Enter the current date (dd–mmm–yy or mm/dd/yy):*

2.    You can type the date in one of the following formats:

30 SEP 88
30/SEP/88
30:SEP:88
30–SEP–88

Type the date after the prompt and press New Line. The system displays the following prompt:

*Enter the current time (hh:mm:ss, AM or PM optional):*

3.    Enter the time using the 24–hour format. If you do not enter a value for seconds, the system automatically enters zeros. If you don't enter AM or PM, a 24–hour clock will be assumed.

For example,

10 42
15:04:32
17:49
 9:0

Note that if you do specify AM or PM, you can use the abbreviations A and P, and use either upper- or lowercase; but don't type any periods (for example, type PM or pm, but not P.M. or p.m.).

Type the time after the prompt and press New Line.

When you have entered a valid date and time, Starter will redisplay the Starter Main Menu (or whatever screen you were on if you entered the DATE keyword). The date and time you entered will appear on the status (top) line of each Starter screen. Note, however, that the time will be updated on the screen only when the screen is refreshed; that is, when a new menu or command screen appears, or when you press the Erase Page key. Press the Erase Page key to see the updated time.

## Option 4 – Make a Physical Backup of a Disk Using PCOPY (BACKUP)

A *physical backup* copies files on the disk in the order in which they are stored; whereas a *logical backup* copies files by user (for example, copies User A's files; then User B's files, etc.). Logical backup is described in *Using the AOS/VS System Management Interface (SMI)*.

To make a physical backup copy of the disk using the PCOPY utility, do the following:

1.   While in the Starter Main Menu, press 4 and New Line or enter the BACKUP keyword to select option 4, "Make a physical backup of a disk (using PCOPY)."

     The system displays a screen and the following prompt:

     *Enter T (Tape), D (Diskette), or a unit name: T*

2.   Type T to specify a backup to tape or D to specify a backup to diskette. Alternatively, you can enter the device name; for example, @DPJ10 for diskette.

     The system displays the following prompt:

     *Enter the disk unit name: @DPJ0*

3.   Press New Line to backup your system disk. If you have two disks, your second disk unit name will be @DPJ1. If you have a Combined Storage Subsystem/DC, your disk unit name will be @DPJ2n.

     If you are backing up to diskettes, the system displays the following prompt:

     *Press any key when ready.*

     Press New Line or the space bar.

     After you enter a valid media type and disk unit name, Starter places you in the PCOPY utility program. See the *How to Generate and Run AOS/VS* manual for information on PCOPY.

     When PCOPY finishes the backup, press New Line to return to the Starter Main Menu.

## Option 5 – Restore a Physical Copy of a Disk Using PCOPY (RESTORE)

If you have made a physical copy of a hard disk using option 4 on the Starter Main Menu, you can restore the disk from the copy using option 5.

To restore a physical backup copy of the disk using the PCOPY utility, do the following:

1.  While in the Starter Main Menu, press 5 and New Line or enter the keyword RESTORE to select option 5, "Restore a physical copy of a disk (using PCOPY)."

    The system displays a screen and prompts

    *Enter T (Tape), D (Diskette), or a unit name: T*

2.  Type T to specify a restore from tape or D to enter a restore from diskette. Alternatively, you can enter the device name; for example, @MTJ10 for tape.

    The system displays the following prompt:

    *Enter the disk unit name: @DPJ0*

3.  Press New Line to restore your disk unit. If you have two disks, type @DPJ1 and press New Line.

    If your disk has not yet been software formatted, the system displays the following menu:

```
                         Format a Disk

         Formatting the disk will destroy its current contents, if any.

                    Disk unit name    :@DPJn
                    Logical disk name:

         Do you really want to format this disk (Y or N)? N

         To exit from this menu, press the Cancel/Exit key (F11)
         For assistance at any time, press the Help key (Shift-F1)
```

| Screen Display | Indicates |
|---|---|
| n | 0 or 1 depending on specified disk unit |

If the Disk Formatter program already has a logical disk name for your disk, the menu displays that name. If not, the system will automatically supply a logical disk name if you choose to format the disk.

The system prompts you with

*Do you really want to format this disk?*

**4.** Type Y and press New Line. The system displays the following message:

*Please wait while the disk is being software formatted, @DPJn*

Software formatting a hard disk takes from 1 to 2 hours. Once you have software formatted the disk, the Starter program returns you to the PCOPY utility. Refer to the *How to Generate and Run AOS/VS* manual for information on the PCOPY utility. When PCOPY is finished, press New Line to return to the Starter Main Menu.

## Option 6 – Build or Update the System Disk (SYSDISK)

To update system information on your hard disk or build a new system disk do the following:

**1.** While in the Starter Main Menu, press 6 and New Line or enter the SYSDISK keyword to select option 6, "Build or update the system disk." The system displays the following menu:

```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm


                     Build or Update System Disk Menu


       1  Build the system disk

       2  Format a disk

       3  Load new system software on the disk

       4  Load the default operator profile on the disk

       *  Load new system firmware on the disk



       Enter choice [1]:



       To exit from any menu, press the Cancel/Exit key (F11).
       For assistance at any time, press the Help key (Shift-F1).
```

**2.** Select the task that you want to perform by entering the option number for the task and pressing New Line. The system prompts you with a menu corresponding to the option you chose. Go to the appropriate section below, and follow the instructions to perform the task that you selected.

> NOTE: If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

## Build the Disk (BUILD)

If your system disk is damaged, select option 1 or enter the BUILD keyword to rebuild your system on a new hard disk. You will know your disk needs rebuilding if you receive error messages on attempting to start up the operating system, or if the Starter program replaces some of the option numbers on the Starter Main Menu with asterisks.

Because building the disk is a fairly involved process, it is described separately, in Appendix A, "Reinstalling AOS/VS From Tapes," and Appendix B, "Reinstalling AOS/VS From Diskettes." If option 1 on the Starter Main Menu has an asterisk where the number 1 should be, refer to Appendix D, "Handling Starter and Other Problems." Appendix D will refer you to either Appendix A or B if it is appropriate for your situation.

## Format a Disk (FORMAT)

To software format a disk do the following:

1.  Select option 2 to software format a disk unit. The system prompts you with

    *Enter the disk unit name: @DPJ0*

    NOTE:  Option 1, "Build the disk" also formats a disk. If you have selected option 1, you need not select option 2 unless you purchase an additional disk unit. (See the section "Formatting Additional Disks," in Chapter 2.)

2.  Press New Line to accept the default, @DPJ0. If you have a second disk unit, enter @DPJ1 and press New Line. To specify the diskette drive, enter @DPJ10. The system displays the following menu:

```
                          Format a Disk

        Formatting the disk will destroy its current contents, if any.

                   Disk unit name    :@DPJn
                   Logical disk name:

        Do you really want to format this disk (Y or N)? N

        To exit from this menu, press the Cancel/Exit key (F11)
        For assistance at any time, press the Help key (Shift-F1)
```

| Screen Display | Indicates |
| --- | --- |
| n | 0 or 1 depending on specified disk unit |

If the Disk Formatter program already has a logical disk name for your disk, the menu displays that name. If not, the system will automatically supply a logical disk name if you choose to format the disk.

The system prompts you with

*Do you really want to format this disk?*

3.   Type Y and press New Line.  The system displays the following message:

*Please wait while the disk is being software formatted, @DPJn*

Software formatting a hard disk takes from 1 to 2 hours. Once you have
software formatted the disk, the system returns you to the Build or Update
System Disk menu, where you can choose another option.

## Load New System Software on the Disk (SOFTWARE)

To load new system software do the following:

Select option 3 to load AOS/VS system software on your disk.  Select this option if
you have received a new revision of the software and want to upgrade, or if the
Starter Main Menu has replaced option numbers 1 and or 2 with asterisks during
powerup.

1.   While in the Starter Main Menu, press 3 and New Line or enter the
     SOFTWARE keyword to select option 3, "Load new system software on the
     disk."

     The Starter program will attempt to determine what type of media you will use.
     If the Starter program has been loaded from tape or diskette, it will assume that
     you will be loading the new software from the same media. But if Starter has
     been loaded from the disk, as is usually the case, it won't be able to tell whether
     you are going to use tape or diskette. The Starter program will prompt you as
     follows:
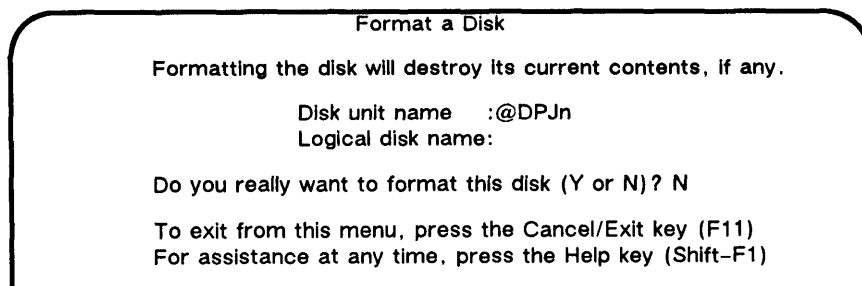
     *Enter T (Tape), D (Diskette), or a unit name: T*

2.   Type T to specify a load from tape or D to specify a load from diskette.
     Alternatively, you can enter the device name; for example, @MTJ10 for tape.

     The system displays the following prompt:

     *Mount the tape labeled OS SYSTEM MEDIA on unit @MTJ0*
     *Press New Line when ready.*

3.   Mount or insert your tape and press New Line. The system loads system
     software from your tape.

     (If you are using diskettes, two separate programs will prompt you to insert the
     appropriate diskette.)  Starter will display some messages as it loads software
     from the media, but you don't respond to them. When the system finishes
     loading the new software, it displays the Build or Update System Disk menu,
     where you can choose another option.

## Load the Default Operator Profile on the Disk (PROFILE)

AOS/VS comes with a system manager profile, called SYSMGR.  This is the profile
you use when powering up the system for the first time.  You might use the SYSMGR
profile all the time as your normal user profile. We recommend that you change the
SYSMGR password occasionally to keep the profile secure.

If you forget the SYSMGR password and there is no other system user with the
necessary privileges to give you a new password, you can reload the profile using this
option.

To load default operator profile do the following:

1.  While in the Starter Main Menu, press 4 and New Line or enter the PROFILE keyword to select option 4, "Load the default operator profile on the disk." The system displays a screen and prompts

    *Enter T (Tape), D (Diskette), or a unit name: T*

The original SYSMGR profile will be renamed SYSMGR.BU in the :UPD directory.

2.  Type T to load the default operator profile from tape or D to load the profile from diskette. Alternatively, you can enter the device name; for example, @MTJ10 for tape.

    The system displays the following prompt:

    *Mount the tape labeled OS SYSTEM MEDIA on unit @MTJ0*
    *Press New Line when ready.*

3.  If you are loading from tape, mount or insert your OS SYSTEM MEDIA tape and press New Line. If you are loading from diskette, insert the first OS UTILITIES MEDIA diskette. The system loads the default operator profile from the specified device.

The system displays the Build or Update System Disk menu. You can then continue the power up and log on as SYSMGR using the supplied password. *Don't forget to change the password immediately.*

## Load New System Firmware on the Disk

This menu option does not apply to systems running preinstalled AOS/VS. The number 5 is replaced with an asterisk on the Build or Update System Disk menu for these systems.

# Using the Technical Maintenance Menu

The Technical Maintenance menu, through a list of options, lets you choose maintenance functions that you want to perform.

These functions include the following:

● Load and start the default operating system.

● Load and verify microcode.

● Enter the SCP CLI.

● Change the time-out delay for the Operating System Load menu.

● Run Diagnostics.

You can get to this menu only when you are powering up the system. At the Operating System Load menu, select option 2, "Enter the Technical Maintenance Menu." The rest of this section tells you how to complete the technical functions you chose on the Technical Maintenance menu.

NOTE:   The Technical Maintenance menu will look like the one shown below
whether or not you have User-Friendly Diagnostics installed on your system
disk. On systems without User-Friendly Diagnostics, option 5,
"Run diagnostics," invokes the Tape and Diskette Hardware Format Utility.
See the *Using the Hardware Format Utility: ECLIPSE MV/1400™ DC,
ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems*
manual for more information on the Hardware Format Utility.

```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm

                    Technical Maintenance Menu


    1  Load and start the default operating system
    2  Load and verify microcode
    3  Enter the SCP CLI
    4  Change the time-out delay
    5  Run diagnostics


    Enter choice [1]:


    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```

If an option that you select from the Technical Maintenance menu causes an error
condition, the menu will reappear, and the error condition will appear on the line
between the "Enter choice [1]:" prompt and the "For assistance..." line.  See
Appendix D, "Handling Starter and Other Problems," for an explanation of the errors
that are possible from this menu.

## Option 1 – Load and Start the Default Operating System

If you select option 1, "Load and start the default operating system," or press New
Line, the system continues the default operating system load from the Technical
Maintenance menu and displays the Starter program's Main Menu.

## Option 2 – Load and Verify Microcode

Option 2 on the Technical Maintenance menu, "Load and verify microcode," does
not apply to your system.

If you select option 2 by mistake, the system attempts to find an applicable microcode
file on the disk and load it into the computer's memory.  Since it cannot find such a
file, it will send you the following message:

*Microcode file does not exist.*

You can ignore this message and continue with the task you entered the Technical
Maintenance menu to perform.

## Option 3 – Enter the System Control Program CLI (SCP CLI)

*CAUTION:*   *Select this option only if you know how to use the System Control Program (SCP) and you have the correct SCP documentation on hand. Refer to the* ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, and DS/7500 Family System Control Program *manual for instructions on using the SCP.*

To enter the SCP CLI, press 3 and New Line or enter the SCPCLI keyword to select option 3, "Enter the SCP CLI." The system displays the following prompt:

*SCP-CLI>*

NOTE:   If you want to exit from the System Control Program, type CONTINUE and press New Line. The system displays the Technical Maintenance menu, where you can choose another option.

## Option 4 – Change the Time-Out Delay

The system provides a time-out delay after displaying the Operating System Load menu. If you do not respond to the Operating System Load menu, the operating system loads automatically from the default (load) device at the end of the time-out delay. The default value for the time-out delay is 45 seconds, which gives you ample opportunity to interrupt the operating system load sequence when you want to go to the Technical Maintenance menu. If you want, you can speed up the operating system load sequence by reducing the length of the time-out delay from 45 seconds to as low as 10 seconds (in 5-second increments).

To change the time-out delay, do the following:

1. Press 5 and New Line to select the "Change the time-out delay for Automatic Program Load Menu option." The system displays the following prompt:

   *Number of seconds to wait before loading the operating system [45]:*

2. Enter the number of seconds from 10 to 45 (in 5 second increments) for the new time-out delay value. Then press New Line. The system displays the Technical Maintenance menu again, where you can choose another option.

   NOTE:   The new time-out delay takes effect on subsequent powerups. The next time you see the Operating System Load menu, it will display the new time-out delay value. The same interval will also apply to the Starter Main Menu, which displays after the Operating System Load menu during power up during the powerup sequence.

# Option 5 – Run Diagnostics

User–Friendly Diagnostics is a small operating system with a set of diagnostic test programs. These tests are separate from the power–up diagnostic programs that run when you start up your system. The power–up diagnostic programs are a limited set of diagnostic programs that include the Tape and Diskette Hardware Format Utility. You received the complete User–Friendly product on separate media. User–Friendly Diagnostics is an extensive diagnostics system that is able to isolate faults in the system to certain Field Replaceable Units (FRUs), so that your Field Engineer can easily replace a defective part.

When you select option 5, "Run diagnostics," the system displays the following message:

*Are you sure you want to boot diagnostics? [N]:*

If you want to run diagnostics or the hardware format utility, type Y and press New Line. Otherwise, just press New Line and the Technical Maintenance menu will redisplay.

What you see next depends on whether or not you have the complete user–friendly diagnostics installed on your hard disk.

## Systems with User–Friendly Diagnostics

If your system includes User–Friendly Diagnostics on your system disk, your system displays the Current Inventory List. Review the Current Inventory List to make sure that correctly lists your system configuration. At the following prompt:

*Is this inventory list correct (Yes or No?)*

Press Y and New Line to display the Communication Inventory List.

Review the Communication Inventory List to make sure that all communication boards and their slot locations are correctly listed for your system configuration. At the following prompt:

*Is this inventory list correct (Yes or No?)*

Press Y and New Line to display the User–Friendly Diagnostics Main menu.

For more information on User–Friendly Diagnostics, see the *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC_II* (Models 91347 — 91349) and DS/7500_II* Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

## Systems without User-Friendly Diagnostics

If the complete User–Friendly Diagnostics are not installed on your disk, the diagnostic system displays the Format Utility Main Menu. Press 1 and New Line to select option 1, "Exit the Format Utility." The system displays the Technical Maintenance menu. For more information on the hardware format utility, see the *Using the Hardware Format Utility: ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems* manual.

End of Chapter

# Chapter 4
# Changing Preset Values

You can change certain system attributes. These attributes include values that you can set when you power up the system and features that the system chooses automatically during powerup. These values and features include the following:

- Changing the system date or time

- Starting from a different device

- Changing the default device

- Changing the time-out delay for the Automatic Program Load menu

- Entering the system-console program, command-line interpreter (SCP-CLI)

- Selecting the diagnostic sequence

- Configuring the parallel printer port

- Selecting positional tracking device types for tablets

This chapter tells you how to select options from the Change Preset Values menu that will allow you to change these attributes.

NOTE:    A DS/7500 computer system can have the system console terminal connected to line 2 of the system board or to the computer's graphics board. If you do not know which terminal is the system console, refer to the "Identifying the System Console Terminal" section in Chapter 1.

## Using the Change Preset Values Menu Options

The Change Preset Values menu lets you choose system features or values that you want to change. You can get to this menu only when you are powering up the system. If your computer system is on and your operating system is running, go to step 1. If your computer system is not on, go to step 2.

To display the Changing Preset Values menu, do the following:

1.   Shut down your operating system and turn off the computer and peripherals.

     If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2.   With the computer power turned off, turn on all terminals, printers, plotters and external drives. Make sure that the terminals and printers are *on line*.

Normally, when you turn on a nongraphics terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is on steady (when the computer power is turned on) or blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

3.   What you must do next depends on whether your system console is a color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

**Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.

After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

**DASHER Display Terminal (except Dasher 6053)–** Turn on the computer by pressing the computer's power button. The system displays the power-up test message.

**DASHER 6053 Display Terminal–** Press and hold the system console's New Line key and then the Rept key. While holding down both keys, turn on the computer by pressing its power button. When the system displays the power-up test message, release the keys.

4. The system begins to display test messages like the following:

```
TESTING...

  Model # XXXX; System Processing Unit (SPU)
   ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
  --Standard Hardware Tests Complete--
  --Optional Hardware Tests Beginning--
  Model # YYYY; Slot y; Local Area Network (LAN) Board
   ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

  --Optional Hardware Tests Complete--
  --Memory size is n Megabytes--
```

| Screen Display | Indicates |
|---|---|
| Model # XXXX | The model number of the system |
| Letters A–Z; digits 0–9 | A test has passed |
| Slot y | The slot location of the board |
| Model # YYYY | The model number of the board |
| n Megabytes | The amount of memory |

5.  If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power-Up Problems."

```
                      DD-MMM-YY          HH:MM:SS

                   Automatic Program Load Menu



      1 Continue immediately with preset values
      2 Change preset values


      Loading with present values will continue automatically
      unless you respond within yy seconds

      The default device is xxxx

      For assistance, press the Help key (Shift-F1) or H

      Enter choice [n]:
```
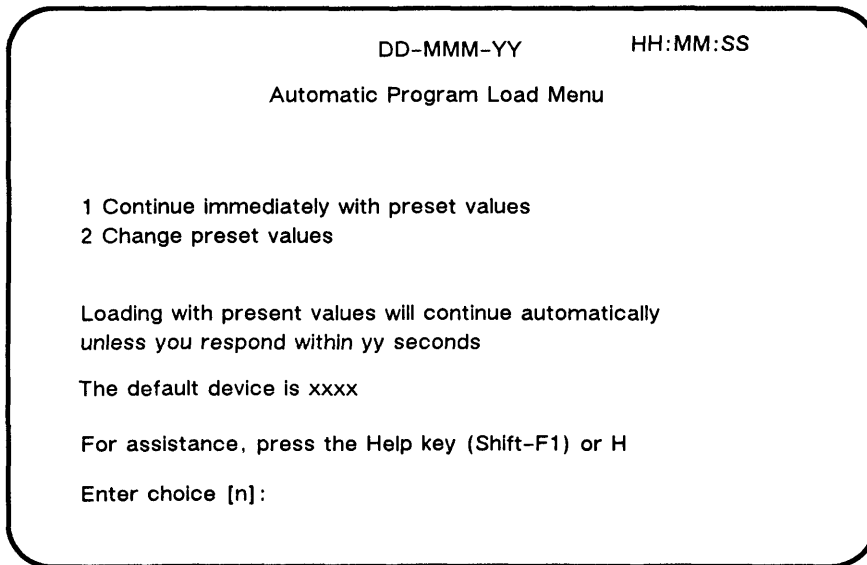
| Screen Display | Indicates |
| --- | --- |
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

6.  At the end of the power-up tests, the system displays the Automatic Program Load menu. Immediately press 2 and New Line to select option 2, "Change preset values."

The rest of this chapter tells you how to change each of the attributes (values or features) by using the options on the Changing Preset Values menu.

```
                    Change Preset Values Menu
        1   Continue the powerup
        2   Change the system date or time
        3   Start from a different device
        4   Change the default device
        5   Change the time-out delay for Automatic Program Load Menu
        6   Enter the SCP CLI
        7   Change the system console
        8   Select diagnostics sequence
        9   Configure parallel printer port
        10  Select positional tracking device types for tablets
        11  Select system clock type


        For assistance, press the Help key (Shift-F1) or H
        To exit from this menu, press the Cancel/Exit key (F11) or ESC

        Enter choice [n]:
```

**Screen Display**    **Indicates**

n                     Default choice

## Option 1 – Continue the Powerup

If you select option 1, "Continue the powerup," or press New Line, the system returns you to the Automatic Program Load menu, where you can continue the power-up sequence. See Chapter 3, "Powering Up Routinely," for a description of the Automatic Program Load menu.

## Option 2 – Change the System Date or Time

You can change the system date or time, or use the Greenwich Mean Time (GMT) offset feature, by selecting option 2, "Change the system date or time" from the Change Preset Values menu. To change the system date or time, or to use the Greenwich Mean Time offset feature from the Change Preset Values Menu" do the following:

1.   Press 2 and New Line to select option 2, "Change the system date or time." The system displays the following prompt:

     *Date [DD-MMM-YY]:*

2.   You can type the date in any one of the following formats:

     30 SEP 88
     30/SEP/88
     30:SEP:88
     30-SEP-88

Type the date after the prompt and press New Line. The system displays the following prompt:

*Time [HH:MM:SS]:*

3.  Enter the time using the 24–hour format. If you do not enter a value for seconds, the system automatically enters zeros.

    For example,

    10 42
    15:04:32
    17:49
     9:0

Type the time after the prompt and press New Line.

The system displays the following prompt:

*Offset to GMT [+00:00]:*

The GMT offset is a number (in hours and minutes) that the system uses to produce the Greenwich Mean Time (GMT).

4.  If your operating system supports the GMT offset feature, and you intend to connect to a network with other computer systems that are in different time zones, you may want to use this feature. Go to step 6 to use the GMT offset feature.

5.  If you do not want to use the GMT offset feature, press New Line at the offset to GMT [+00:00] prompt. The system returns you to the Change Preset Values menu, where you can choose another option.

## Using the GMT Offset Feature

6. In the Table 4-1, find the group of cities, countries, or areas that are within your local time zone. Or if you know your time zone number, locate it in the left column.

### Table 4-1 GMT Time Zone and Offset Numbers

| Time Zone Number | Cities, Countries, Areas | GMT Offset Number |
|---|---|---|
| 2 | Honolulu, Anchorage, Fairbanks | -10 |
| 4 | Vancouver, Juneau, Whitehorse, Seattle, Los Angeles, San Francisco | -8 |
| 5 | Boise, Salt Lake City, Denver, Phoenix, Calgary, Edmonton | -7 |
| 6 | Chicago, St. Louis, Houston, New Orleans, Dallas, Mexico City, Fort Worth, Wichita, Rapid City, Bismark, Winnipeg, Managua | -6 |
| 7 | Montreal, Toronto, Quebec, Ottawa, Boston, New York, Philadelphia, Baltimore, Washington D.C., Atlanta, Miami, Lima, Bogota, Quito, San Juan | -5 |
| 8 | St. John's, Halifax, Caracas, Georgetown, La Paz, Santiago, Asuncion | -4 |
| 9 | Greenland, Buenos Aires, Montevideo, Rio de Janeiro, Brasila | -3 |
| 12 | (Greenwich Mean Time) London, Manchester, Dublin, Belfast, Glasgow, Lisbon | 0 |
| 13 | Madrid, Rome, Oslo, Stockholm, Paris, Berlin, Vienna, countries of West-Central Africa | +1 |
| 14 | Helsinki, Bucharest, Cairo, Johannesburg, Ankara, countries of East-Central Africa | +2 |
| 15 | Countries of Eastern Africa | +3 |
| 17 | Karachi, Lahore <br> Bombay, New Delhi, Madras | +5 <br> +5:30 |
| 18 | Calcutta | +6 |
| 19 | Sumatra, Java, Thailand, Indonesia | +7 |
| 20 | China, Taiwan, Perth, Hong Kong, Philippines | +8 |
| 21 | Tokyo, Darwin, Korea | +9 |
| 22 | Sidney, Melbourne, Brisbane, New Guinea | +10 |
| 24 | Auckland, Wellington | +12 |

7. Find the GMT offset number in the right column opposite your time zone number. If your location is on daylight-savings time, add 1 to this number.

For example, if your location uses −5 and daylight−savings time is in effect, your GMT offset number is −4.

NOTE:    If you added 1 to the GMT offset because daylight−savings time was in effect, do not forget to reset the offset as well as the time when daylight−savings time ends. To reset the offset, simply enter the exact value shown in Table 4−1 for your time zone.

8.    Type your GMT offset number, including the + or − sign, after the prompt and press New Line. The system displays the Change Preset Values menu, where you can choose another option.

To check the GMT offset number that you entered, select option 2 again. The system displays the default values in brackets.

After you set the current date and time, the system maintains and displays them at the top of the Automatic Program Load (APL) menu. If the APL menu displays the letters DD−MMM−YY during a routine powerup instead of the current date and time, you may have to replace the Time−of−Day batteries. To replace the batteries, refer to the manual, *Installing and Maintaining Your ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, or ECLIPSE MV/2500™ DC Computer System* or the *Installing and Maintaining Your DS/7500 Computer System* manual.

## Option 3 − Start from a Different Device

After your system finishes the power−up tests and enters the Automatic Program Load menu, the system assumes you want to load software from the default device shown on the APL menu. You can start from a device other than the default device shown on the APL menu by selecting option 3, "Start from a different device." The device you select, however, must be a *unit 0 device*. Unless your system was reconfigured after Data General shipped it, the following internal drives are unit 0 devices:

● First (upper) disk drive

● Diskette drive

● Cartridge tape drive.

NOTE:    This option does not change the default device, it simply overrides the existing default device. You can change the default device rather than override it using option 4, "Change the Default Device," on the Change Preset Values menu.

To start from a different device, from the Change Preset Values Menu, do the following:

1.  While in the Change Preset Values menu, press 3 and New Line to select option 3, "Start from a different device." The system displays the following menu:

```
                    Start from a Different Device


        1 Hard disk
        2 Diskette
        3 Tape


        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        Start from which device?  [n]
```
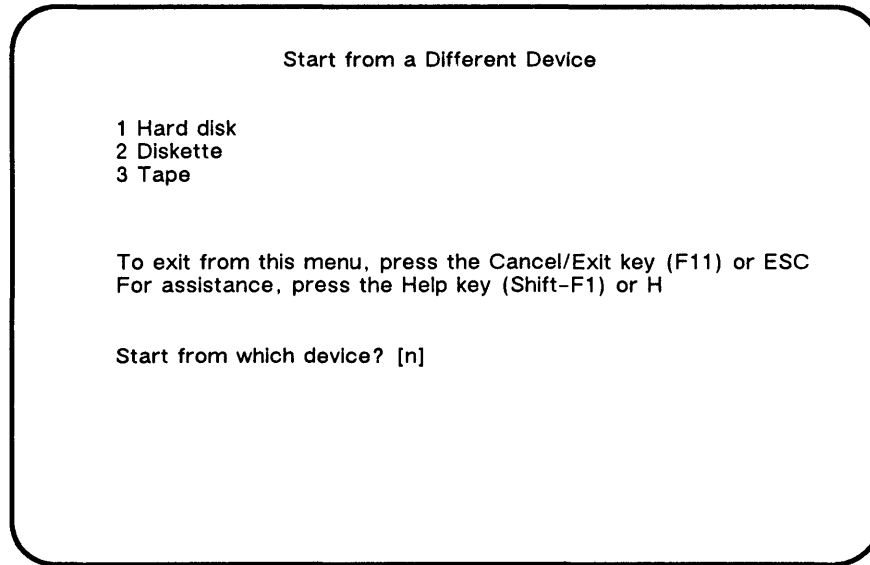
| Screen Display | Indicates |
|---|---|
| n | Default choice |

2.  Select the device that you want to start from by entering the option number for the device and pressing New Line. The system prompts you with a message or a menu. Go to the appropriate section below, "Starting from a Hard Disk," "Starting from the Diskette," or "Starting from a Tape," and follow the instructions to start from the device that you selected.

    NOTE:   If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

## Starting from a Hard Disk

When you select option 1, the system immediately loads software from the internal hard disk (unit 0).

## Starting from the Diskette

When you select option 2, the system prompts you with

*Please insert diskette, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection.*

Insert your diskette into the diskette drive and press New Line. The system loads software from your diskette. If you make a mistake and want to cancel your selection, press the Escape key, and the system will return you to the Change Preset Value menu.

NOTE:     If you accidently press New Line before you insert your diskette, your system attempts to load software from the empty diskette drive. Then after about two or three minutes the system displays the following message:

*\*\*Missing or Bad Media\*\**

*To return to the menu, press the Cancel/Exit key.*

*If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.*

## Starting from a Tape

When you select option 3, the system prompts you with

*1   1/8–inch Cartridge Tape*
*2   1/2–inch Cartridge or Reel Tape*

Choose either option 1, the 1/8–inch cartridge tape drive, or option 2, the 1/2–inch cartridge tape drive or the reel–to–reel tape drive. Once you choose either option, the system prompts you with

*Please insert or mount tape, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection.*

Insert or mount your tape on the proper drive and press New Line. The system loads software from your tape.

NOTE:     If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

*\*\*Missing or Bad Media\*\**

*To return to the menu, press the Cancel/Exit key.*

*If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.*

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## Option 4 – Change the Default Device

If you are in the Automatic Program Load menu and you enter option 1, press the New Line key, or simply do nothing, the system automatically loads software from the the default device displayed in the Automatic Program Load menu. You can change the default load device to another available device, either a diskette drive, a cartridge tape drive, or a hard disk drive. Doing so allows you to load software automatically from that device when you are in the Automatic Program Load menu. The device you select, however, must be a *unit 0 device*. Unless your system was reconfigured after Data General shipped it, the following internal drives are unit 0 devices:

- First (upper) disk drive

- Diskette drive

- Cartridge tape drive.

For example, if you make the default device the cartridge tape drive, the next time you power up the system, the Automatic Program Load menu will display the cartridge tape as the default device. The cartridge tape drive will be the default device for every powerup until you change it again.

NOTE: You can temporarily override the default device. Doing so allows you to immediately load software, once, from a different device. See the previous section "Option 3 – Start From a Different Device" in this chapter.

To change the default device from the Change Preset Values Menu, do the following:

1. Press 4 and New Line to select the "Change the default device option." The system displays the following menu:

```
                    Change the Default Device


    1 Hard disk
    2 Diskette
    3 Tape



    To exit from this menu, press the Cancel/Exit key (F11) or ESC
    For assistance, press the Help key (Shift-F1) or H


    Start from which device? [n]
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

2. Select the new default device from the menu by entering the option number for the device and pressing New Line. The system prompts you with a message or a menu. Go to the appropriate section below, "Changing to a Hard Disk," "Changing to the Diskette," or "Changing to a Tape," and follow the instructions to change the default device.

> NOTE: If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape function key.

## Changing to a Hard Disk

When you select option 1, the internal hard disk (unit 0) becomes the default device, and the system returns you to the Change Preset Value menu.

> NOTE: This device will not become the default device until the next time you power up the system.

## Changing to the Diskette

When you select option 2, the internal diskette drive becomes the default device, and the system returns you to the Change Preset Value menu.

> NOTE: This device will not become the default device until the next time you power up the system.

## Changing to a Tape

When you select option 3, the system prompts you with

*1 1/8-inch Cartridge Tape*
*2 1/2-inch Cartridge or Reel Tape*

Choose either option 1, the 1/8-inch cartridge tape drive, or option 2, the 1/2-inch cartridge tape drive or the reel-to-reel tape drive. (Note that if you press the New Line key without entering a number, the system automatically selects option 2, the 1/2-inch cartridge tape or reel tape.) Once you choose either option, the system returns you to the Change Preset Value menu, where you can choose another option.

> NOTE: The device you select will not become the default (load) device until the next time you power up the system.

## Option 5 – Change the Time–Out Delay for Automatic Program Load Menu

The system provides a time–out delay after displaying the Automatic Program Load (APL) menu. If you do not respond to the APL menu, the system powers up automatically from the default (load) device at the end of the time–out delay. The default value for the time–out delay is 45 seconds, which gives you ample opportunity to interrupt the power–up sequence when you want to go to the Change Preset Values menu. If you want, you can speed up the power–up sequence by reducing the length of the time–out delay from 45 seconds to as low as 10 seconds (in 5–second increments).

To change the time–out delay for the APL menu, from the Change Preset Values Menu, do the following:

1.  While in the Change Preset Values menu, press 5 and New Line to select the option, "Change the time–out delay for Automatic Program Load Menu." The system displays the following prompt:

    *Time–out delay (in seconds) for the Automatic Program Load Menu (45)*

2.  Enter the number of seconds from 10 to 45 (in 5 second increments) for the new time–out delay value. Then press New Line. The system displays the Change Preset Values menu, where you can choose another option.

    NOTE:   The new time–out delay takes effect immediately. The next time you see the Automatic Program Load menu, it will display the new time–out delay value.

## Option 6 – Enter the SCP CLI

*CAUTION:   Select this option only if you know how to use the System Control Program (SCP) and you have the correct SCP documentation on hand. Refer to* ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, and DS/7500 Family System Control Program *for instructions on using the SCP.*

To enter the SCP CLI, from the Change Preset Values menu, press 6 and New Line to select option 6, "Enter the SCP CLI." The system displays the following prompt:

*SCP–CLI>*

NOTE:   If you want to exit the System Control Program, type CONTINUE and press New Line, and the system will display the Change Preset Values menu.

# Option 7 – Change the System Console

When your DS/7500 computer system has a nongraphics terminal connected to line 2 of the system board and a graphics terminal (either monochrome graphics or color graphics) connected to a graphics video memory board, you can select either terminal to serve as the system console. For more information, refer to "Identifying the System Console Terminal" in Chapter 1.

To change the system console terminal, from the Change Preset Values Menu, do the following:

1. While in the Change Preset Values menu, press 7 and New Line to select option 7, "Change system console."

   The system displays the following menu:

```
                        Change System Console


        1 System board
        2 Video Memory board




        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        System console on which board?  [n]
```
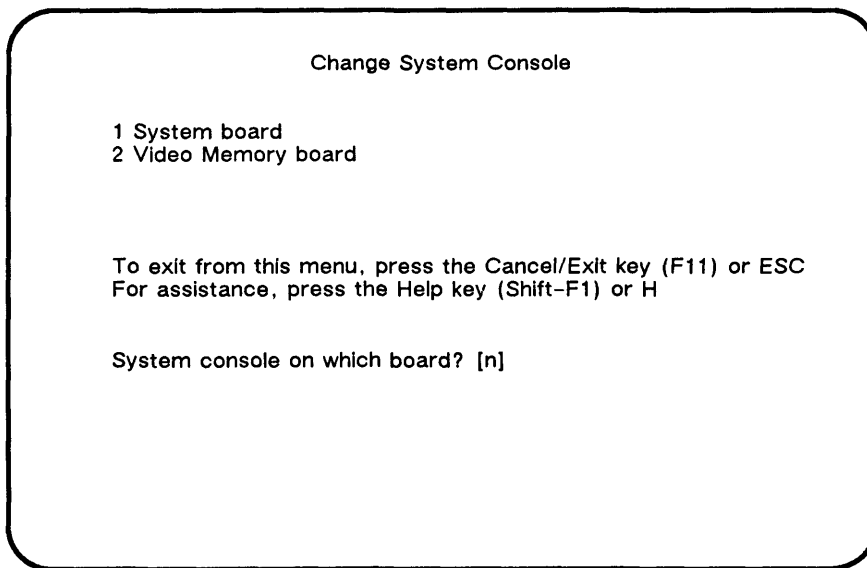
|  Screen Display  |  Indicates  |
|------------------|-------------|
|  n               |  Default choice  |

2. Select either option 1, "System board," to choose the nongraphics terminal connected to the system board, or option 2, "Video memory board," to choose the graphics terminal connected to the graphics board.

3. Enter your selection, and press New Line. The system displays the Change Preset Values menu where you can choose another option.

   NOTE: The terminal you select does not become the system console until the next time you power up the system.

# Option 8 – Select Diagnostics Sequence

If you have the User-Friendly Diagnostics installed on your system hard disk, the system can run an additional set of diagnostic tests during powerup. You can then choose to run either full diagnostics or abbreviated diagnostics during each powerup.

Full diagnostics include both the standard diagnostics and the optional system diagnostics. Abbreviated diagnostics include only the standard diagnostics. Once you select an option, that selection does not take effect until the next time you power up the system.

Running the abbreviated diagnostics takes approximately one minute. Running the full diagnostics takes from two to three minutes. Whenever possible run the full diagnostics.

To select the diagnostic sequence, do the following:

1.  Press 8 and New Line to select option 8, "Select diagnostics sequence." The system displays the following menu:

```
                       Select Diagnostics Sequence




       1 Run full diagnostics
       2 Run abbreviated diagnostics




       To exit from this menu, press the Cancel/Exit key (F11) or ESC
       For assistance, press the Help key (Shift-F1) or H




       Enter choice [n]
```
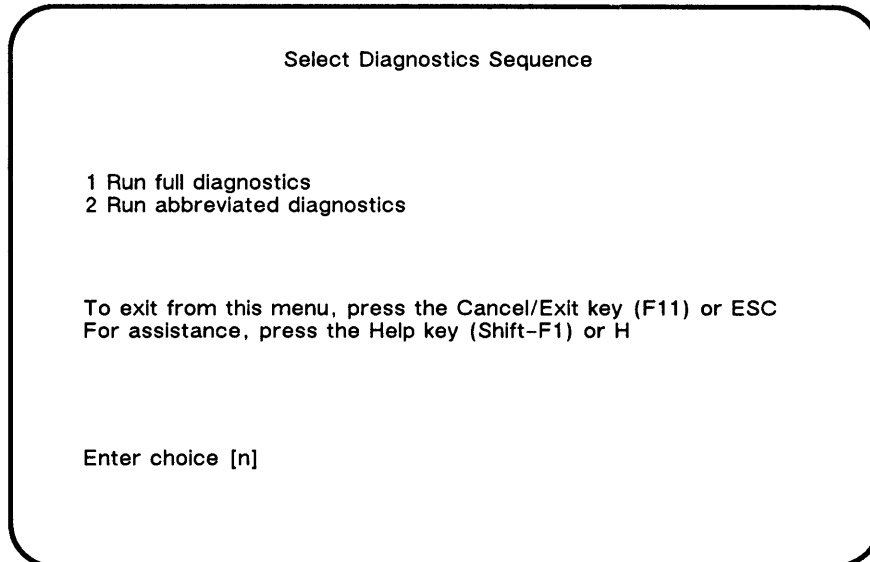
| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

2.   Enter your selection, and press New Line. The system displays the Change
     Preset Values menu, where you can choose another option.

     NOTE:   If the system prompts you with

             *Option Not Available*

             you must install the User–Friendly Diagnostics on your system disk
             before you can run full diagnostics (option 1). For information on
             installing, entering, and starting User–Friendly Diagnostics, refer to
             either the *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC_II
             (Models 91347 — 91349) and DS/7500_II Series Systems User
             Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User
             Friendly Diagnostics* manual.

## Option 9 – Configure Parallel Printer Port

If you have a parallel printer connected to the system board, you must configure the
parallel printer port for your particular printer.

To configure the parallel printer port, from the Change Preset Values Menu, do the
following:

1.   Press 9 and New Line to select option 9, "Configure parallel printer port."

     The system displays the following menu:

```
                    Configure the Parallel Printer Port
        1    Positive strobe, VFU option, tab memory
        2    Positive strobe, no VFU option, tab memory
        3    Positive strobe, no VFU option, no tab memory
        4    Negative strobe, VFU option, tab memory
        5    Negative strobe, no VFU option, tab memory
        6    Negative strobe, no VFU option, no tab memory

        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H

        Enter choice [1]:
```

**Strobe type** – You must select either positive or negative polarity. If the
strobe setting is incorrect, the parallel printer will not work.

**Vertical forms unit (VFU) and (horizontal) tab memory** – The VFU and
(horizontal tab) memory options let you program the printer to handle a variety
of form lengths and to move quickly between entries within a form. If the VFU
option is available but not set, the printer will operate but without the VFU
feature.

Table 4-2 specifies the correct strobe type for the Data General printers currently available for your system. It also indicates whether or not the printer has the VFU option or horizontal tab memory.

**Table 4-2  Choosing Settings by Printer Model Number**

| Model Number | Strobe Type | VFU Option | Horizontal Tab Memory |
|---|---|---|---|
| 4323 | Positive | Yes | Yes |
| 4324 | Positive | Yes | Yes |
| 4365 | Positive | Yes | Yes |
| 4366 | Positive | Yes | Yes |
| 4374 | Positive | Yes | Yes |
| 4595 | Positive | Yes | Yes |
| 4596 | Positive | Yes | Yes |
| 4597 | Positive | Yes | Yes |
| 4598 | Positive | Yes | Yes |
| 4599 | Positive | Yes | Yes |
| 6190 | Negative | No | Yes |
| 6216 | Positive | No | Yes |

If your printer's model number is not listed in Table 4-2, refer either to the on-line Help file for the Change Preset Values menu or to the manual that came with your printer. If you still cannot find the information but you know your printer's interface type, choose the settings in Table 4-3.

**Table 4-3 Choosing Settings by Printer Interface Type**

| Interface Type | Settings |
|---|---|
| Centronics | Select negative strobe, and VFU and tab options supported by your printer. |
| Data Products | From the Configure the Parallel Printer Port menu, select option 2 if you want to use printer-supported escape sequences that set tabs or fonts. Otherwise, select option 3. |

2.  Type the option number of the parallel printer port you want, and press New Line.  The system displays the Change Preset Values menu.

# Option 10 – Select Positional Tracking Device Types for Tablets

If any of the system's graphics terminals has a tablet connected to it, you must tell the system what type of positional tracking device you are using by selecting that device on a menu. The device can be either a stylus or a puck. If you do not select the proper device, the system will incorrectly interpret the buttons on the puck or the switches on the stylus.

To select the positional tracking device from the Change Preset Values Menu, do the following:

1.  Type 10 and press New Line to select option 10, "Select positional tracking device types for tablets."

    The system displays a menu similar to the following:

    ```
                            Current Settings:

            Primary User A: Stylus      Secondary User A: Puck
            Primary User B: Puck        Secondary User B: Puck


            1   Change Primary User A to Puck
            2   Change Primary User B to Stylus
            3   Change Secondary User A to Stylus
            4   Change Secondary User B to Stylus
            5   Save the above settings, and exit from this menu


        To exit from this menu, press the Cancel/Exit key (F11) or Esc
        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
    ```

    | Screen Display | Indicates |
    | --- | --- |
    | n | Default choice |

    The top of the menu shows the current settings (selection) for the graphics terminals connected to the user A port and user B port of the monochrome graphics board. The menu your system displays may vary according to the "Current Settings" for your system.

    NOTE:    If your system has a color-graphics terminal, only options 1 and 5 are valid.

2.  Choose the option that you would like to change.

    In the sample menu, for example, to change the current setting of primary user B (which is a puck) to a stylus, press 2 and New Line to choose option 2, "Change Primary User B to Stylus."

After you enter your selection, the system shows you the new "Current settings."

> NOTE:   Current DS/7500 computer systems interpret only the primary user A and primary user B puck and stylus settings, options 1 and 2 on the menu. Options 3 and 4 are not supported.

3.   Once you are satisfied with your selection, save the new settings and exit the menu by entering option 5 and a New Line. The system displays the Change Preset Values menu where you can choose another option.

> NOTE:   Your selection takes effect immediately.

## Option 11 – Select System Clock Type

NOTE:   Preinstalled AOS/VS Model 31133 does not support the architectural clock. If you do not select option 1, your system defaults to option 1, the PIT/Real Time Clock.

To find out more about these clocks, refer to the manual, *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems Principles of Operation Supplement.*

To select the PIT/Real Time Clock, from the Change Preset Values Menu, do the following:

1.   Type 11 and Press New Line to select "Select system clock type." The system displays the following menu:

```
                    Select System Clock Type




     1  PIT/Real Time Clock
     2  Architectural Clock




     To exit from this menu, press the Cancel/Exit key (F11) or ESC
     For assistance, press the Help key (Shift-F1) or H




     Enter choice [n]
```

| Screen Display | Indicates |
|----------------|-----------|
| n              | Default choice |

.

2.  Select option 1 and press New Line. The system displays the following message:

*PIT/Real Time Clock Selected*

*Turn Power Off and On to Implement New Choice*

****Press the Cancel/Exit key (F11) or ESC to continue****

3.  If you want your selection to take effect immediately, turn off the system's power and power up the system again.

If you want your selection to take effect the next time you power up, press the Cancel/Exit function key (F11) or ESC fucntion key to continue. The system displays the Change Preset Values menu, where you can choose another option.

End of Chapter

# Chapter 5
# Installing Releases and Updates
# from Tape

Read this chapter to find out how to install an AOS/VS or SCP System Media update or release on the system disk from either cartridge tape or reel–to–reel tape. Before reading this chapter, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drives and the computer system's power switch.

This chapter tells you how to

- Handle cartridge tape or reel–to–reel tape

- Insert a cartridge tape or mount a reel–to–reel tape

- Turn on your computer and start your system from the SCP System Media

- Install an AOS/VS update or release from cartridge tape or reel–to–reel tape

- Install SCP System Media from cartridge tape or reel–to–reel tape

- Create a backup of operating system and utility files on cartridge tape or reel–to–reel tape

## Handling Media

Your update or release consists of media labeled with the operating system name and/or media labeled SCP System Media. (The media will either be tape and/or diskettes, depending on whether your system has a tape drive or a diskette drive.). Appendix E contains a list of Data General computers and the SCP System Media that Data General ships with them. Use this information to verify that you have the correct SCP System Media.

Depending on the type of drives in your system, AOS/VS Media and the SCP System Media for your computer was shipped to you on either an 1/8–inch cartridge tape, a 1/2–inch cartridge tape, a reel–to reel tape, or diskettes. There are two types of cartridge tapes available for your computer system. One type contains magnetic tape that is approximately 1/8–inch wide (0.15 inches); the other contains magnetic tape that is 1/2–inch wide. The next sections describe how to care for cartridge tapes and reel–to–reel tapes and how to protect the data that is stored on them.

## Handling Cartridge and Reel-to-Reel Tapes

The 1/8-inch cartridge tape comes in its own plastic storage case. Because dust, dirt, and moisture can damage a cartridge tape, it is very important to keep the cartridge tape in the case when it is not in use. The 1/2-inch cartridge tape has a heavy plastic case. It does not require a storage case. Both the 1/8-inch and 1/2-inch cartridge tapes have a shutter on one end of the case that closes to protect the magnetic tape inside the cartridge when the tape is not in use. Avoid opening the shutter; otherwise, you may damage the magnetic tape or cause dirt or other foreign substances to enter the case. The reel-to-reel tape comes with a removable plastic collar that protects the tape when it is not in use and also provides a hook for storing the tape. Keep the collar on the tape until you are ready to use it. Dust and dirt can damage not only the tape but also the tape drive device.

1/8-inch cartridge tape

1/2-inch cartridge tape

Reel-to-reel tape

INT-01773
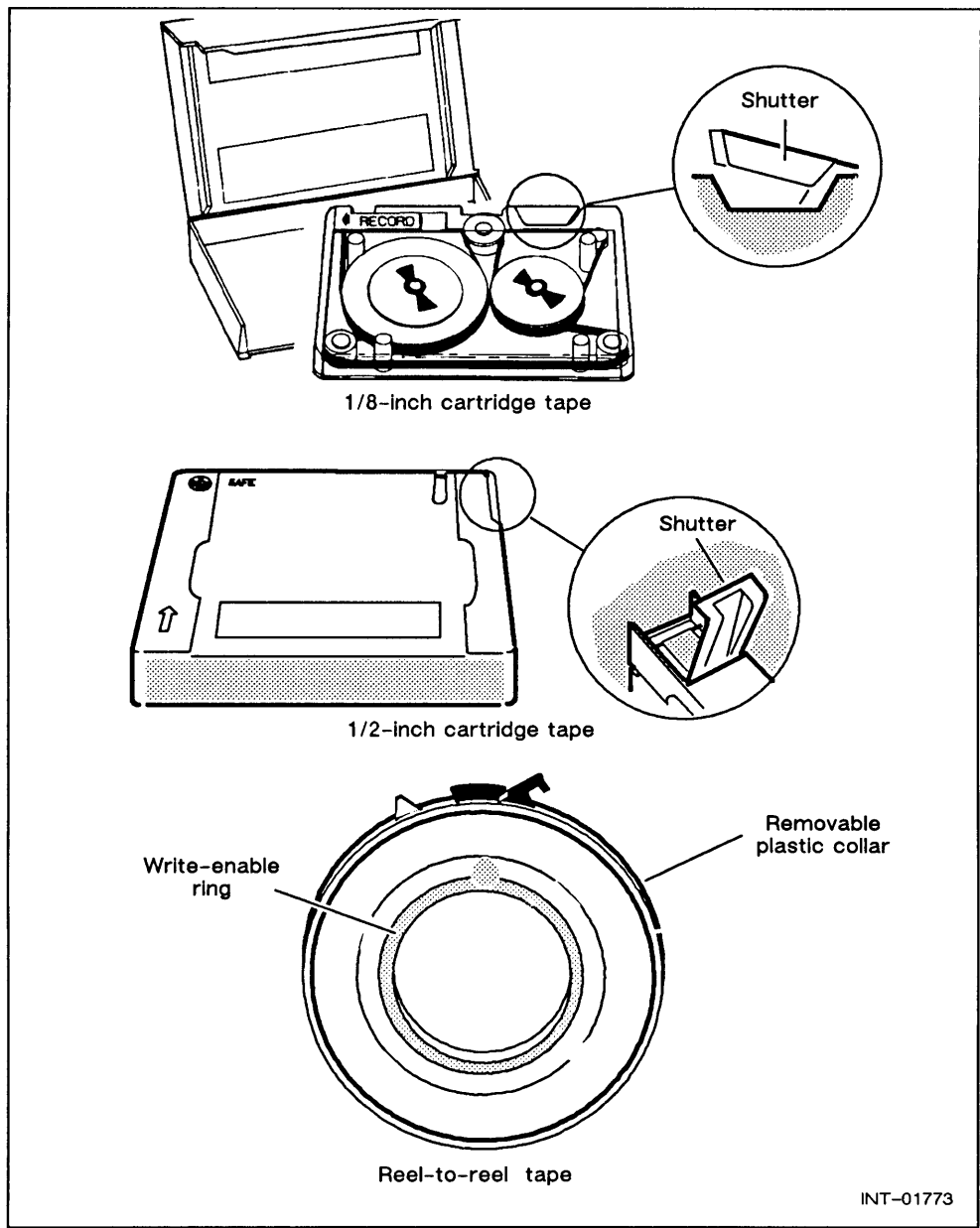
Avoid placing tapes near magnets or equipment that produces magnetic fields, such as a telephone, power supply, printer, or terminal. For cartridge tapes, do not touch parts of the tape that are exposed at the openings of the cartridge. When you thread a reel-to-reel tape into the tape drive, handle only the portion of the tape that comes before the foil beginning of tape (BOT) marker. Never touch the portion of the tape after the BOT marker. The oil or dirt from your hands can make the data on cartridge tapes and reel-to-reel tapes inaccessible to the computer.

## Protecting Data on Cartridge and Reel-to-Reel Tapes

The computer uses a cartridge and reel-to-reel tapes in two ways. It retrieves information from the tape in a process called *reading*, and it stores information on the tape in a process called *writing*. When the computer reads the information from an area of the tape, that information remains intact on the tape. On the other hand, when the computer writes new information to a cartridge tape, it writes over (erase) the information already stored on the tape. Once the information is lost, the system cannot recover it. Read the next sections to find out how you can protect data that is stored on your cartridge and reel-to-reel tapes.

## 1/8-Inch Cartridge Tape

To prevent the accidental erasure of valuable information that is stored on the 1/8-inch cartridge tape, slide the record switch on the cartridge tape all the way to the right. With the record switch all the way to the *right*, the system cannot write any information on the cartridge tape. The cartridge tape is write protected.
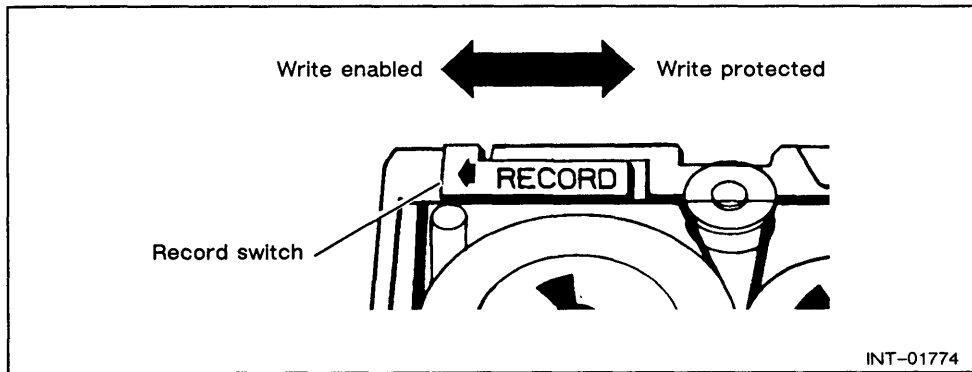


To write information on the cartridge tape, move the record switch all the way to the *left*. Now the system can write new information and also write over any information stored on the cartridge tape. The cartridge tape is write enabled.

## 1/2-Inch Cartridge Tape
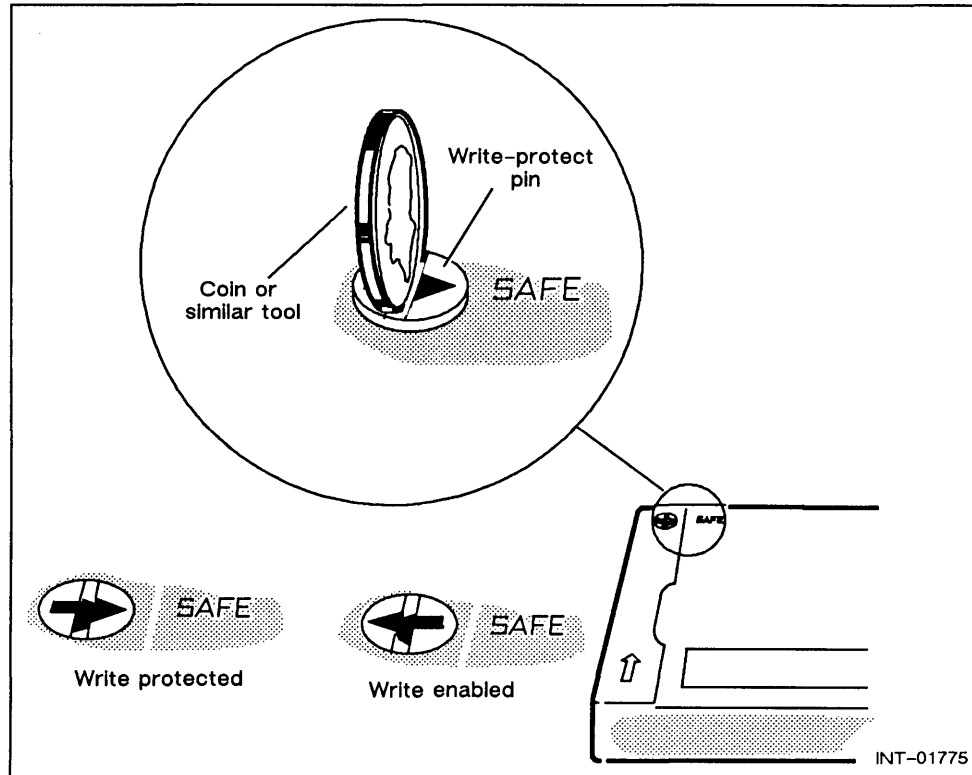
To prevent the accidental erasure of valuable information that is stored on the 1/2-inch cartridge tapes, push the write-protect pin up from the bottom of the cartridge tape with your finger. While holding the pin up with your finger, place a coin, a small flat-blade screwdriver, or similar tool into the groove of the write-protect pin. Then turn the pin so that the arrow on the top of the pin points toward the word SAFE. With the arrow pointing toward the word SAFE, the system cannot write information on the cartridge tape. The cartridge tape is write protected.



To write information on the cartridge tape, turn the pin so that the arrow points away from the word SAFE. Now the system can write new information, and also write over any information stored on the cartridge tape. The cartridge tape is write enabled.

## Reel-to-Reel Tape

To prevent the accidental erasure of valuable information that is stored on the reel-to-reel tape, remove the write-enable ring from the groove on the back side of the reel. With the write-enabled ring removed from the groove, the system cannot write information on the tape. The reel-to-reel tape is write protected.

To write information on the reel-to-reel tape, press the ring into the groove on the back side of the reel. Now the system can write new information, and also write over any information stored on the reel-to-reel tape. The reel-to-reel tape is write enabled.

## Hardware Formatting Tapes

The 1/8-inch cartridge tapes sold by Data General are specially hardware formatted for use in your computer system. If you obtain 1/8-inch cartridge tapes from a source other than Data General, you must hardware format them before using them in your system. To hardware format 1/8-inch cartridge tapes, refer to the manual, *Using the Hardware Format Utility: ECLIPSE MV/1400™DC, ECLIPSE MV/2000™DC, ECLIPSE MV/2500™DC, and DS/7500 Systems.*

NOTE:   Reel-to-reel tapes and 1/2-inch cartridge tapes do not require hardware formatting.

# Starting from a Tape

You must power up from SCP System Media before you load an AOS/VS update as described in this chapter, or reinstall AOS/VS on the system disk as described in Appendix A.

The steps in this section tell you how to insert a cartridge tape or mount a reel-to-reel tape, power up the computer from the SCP System Media software. The tape labeled SCP System Media contains the system microcode, power-up diagnostics, and a program to install power-up diagnostics on the disk.

If your SCP System Media is on 1/8-inch cartridge tape, follow the steps in the "Powering Up from SCP System Media (1/8-inch Cartridge Tape)" section. If your SCP System Media is on 1/2-inch cartridge tape, follow the steps in the "Powering Up from SCP System Media (1/2-inch Cartridge Tape)" section. If your SCP System Media is on a reel-to-reel tape, follow the steps in the "Powering Up from SCP System Media (Reel-to-Reel Tape)" section.

Before getting started, make sure the computer and all peripherals are turned off. Peripherals include terminals, printers, and external drives, or subsystems.

Follow the steps in the remaining sections in order; otherwise, the peripherals will not operate properly.

## Powering Up from SCP System Media (1/8-inch Cartridge Tape)

1.   With the computer turned off, turn on all terminals, printers, plotters and external drives. Make sure that the terminals and printers are *on line*.

   NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

Normally, when you turn on a nongraphics terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is on steady (when the computer power is turned on) or blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

2. Remove the SCP System Media cartridge tape from its plastic protective case.



INT-01784
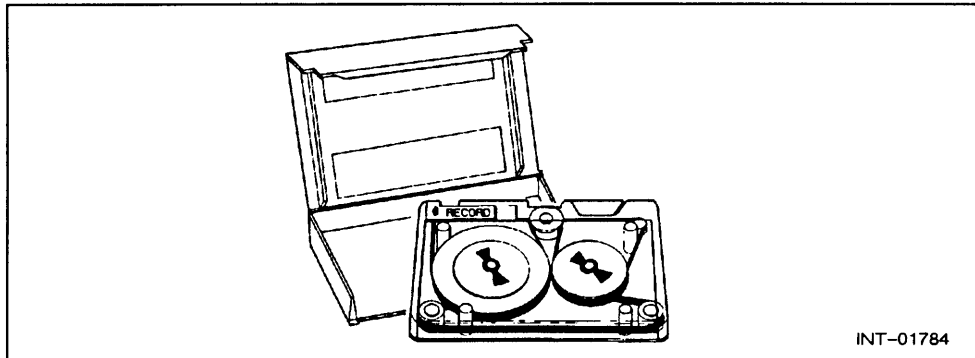
3. Slide the tape's record switch all the way to the right, so that you do not accidentally write on the SCP System Media tape.



INT-01785

4. Hold the cartridge tape upright with the metal plate on the left. Then gently push the cartridge tape against the drive door and into the drive. You will hear a click, see the eject button on the left pop out, and feel the cartridge tape lock tightly in place. (If you need to remove the cartridge tape for any reason, press the eject button, and extract the cartridge tape from the drive.)



Metal plate     Eject button

1/8-inch cartridge tape drive

1/8-inch cartridge tape

INT-01786

5. What you must do next depends on whether your system console is a a color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

**Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.
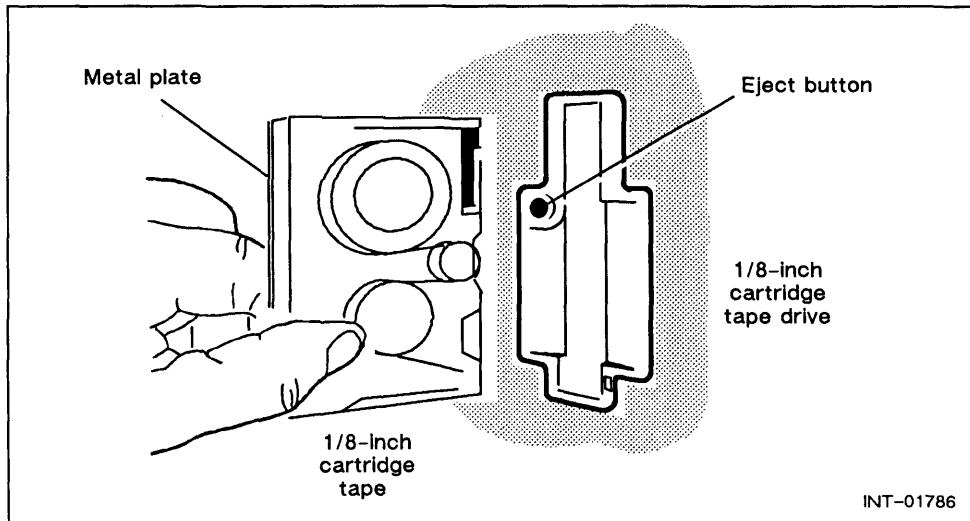
After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

**DASHER Display Terminal (except DASHER 6053)**— Turn on the computer by pressing the computer's power button. The system displays the power-up test message.

**DASHER 6053 Display Terminal**— Press and hold the system console's New Line key, and then the Rept key. While holding down both keys, turn on the computer by pressing its power button. When the system displays the power-up test message, release the keys.

6. After about 90 seconds or so, make sure the tape drive makes a noise, and its busy light begins to flash randomly. (If the system does not behave in this manner, it may need service. Remove the cartridge tape, and turn off the system's power. Contact Data General.)

069-000293

As the tape drive loads software (it may take up to 15 minutes), the system begins to display test messages like the following:

```
TESTING...

    Model # XXXX; System Processing Unit (SPU)                    .
     ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,    PASSED
    --Standard Hardware Tests Complete--
    --Optional Hardware Tests Beginning--
    Model # YYYY; Slot y; Local Area Network (LAN) Board
     ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,    PASSED

    --Optional Hardware Tests Complete--
    --Memory size is n Megabytes--
```

| Screen Display | Indicates |
| --- | --- |
| Model # XXXX | The model number of the system |
| Letters A–Z; digits 0–9 | A test has passed |
| Slot y | The slot location of the board |
| Model # YYYY | The model number of the board |
| n Megabytes | The amount of memory |

7. Make sure the test messages are complete and the memory size displayed on the screen is correct.

If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power–Up Problems."

If the memory size displayed is incorrect, stop here and contact Data General.

Once the system displays the correct memory size, the power–up tests are complete, and the system displays the following message and prompt:

*Do you want to install power–up diagnostics on your hard disk?*

*If these diagnostics are not installed on the hard disk, you will need to insert this media each time you power up. For the diagnostics to work, the disk on which they will be installed must have a diagnostic area reserved by the operating system's software formatter.*

*Install power–up diagnostics (Y or N)?*

8. Do not attempt to install power–up diagnostics at this time. Answer No to the question by pressing N and New Line.

9. When the system displays the Automatic Program Load (APL) menu shown below, you have 45 seconds before the system automatically continues to power up. Immediately press 2 and New Line.

```
                              DD-MMM-YY          HH:MM:SS

                        Automatic Program Load Menu



        1 Continue immediately with preset values
        2 Change preset values


        Loading with present values will continue automatically
        unless you respond within yy seconds

        The default device is xxxx

        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

NOTE: If the system interrupts the power-up sequence and goes into the System Control Program (SCP), the SCP-CLI prompt appears. Leave the SCP, and continue the power-up sequence by typing CONTINUE and pressing the New Line key. The CONTINUE command returns you to the Change Preset Values menu.

10. At this point you have powered up from your SCP System Media software, and the system displays the Change Preset Values menu. Do not turn off the system's power.

If you are installing an AOS/VS update, go to the section, "Installing an Update" in this chapter. If you are reinstalling AOS/VS on the system disk as described in Appendix A, return to Appendix A and step 3 in either of the following sections: "Reinstalling from System Disk Backup" or "Reinstalling from Release and Update Media."

As the tape drive loads software (it may take up to 15 minutes), the system begins to display test messages like the following:

```
TESTING...

  Model # XXXX; System Processing Unit (SPU)
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
  --Standard Hardware Tests Complete--
  --Optional Hardware Tests Beginning--
  Model # YYYY; Slot y; Local Area Network (LAN) Board
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

  --Optional Hardware Tests Complete--
  --Memory size is n Megabytes--
```

| Screen Display | Indicates |
| --- | --- |
| Model # XXXX | The model number of the system |
| Letters A-Z; digits 0-9 | A test has passed |
| Slot y | The slot location of the board |
| Model # YYYY | The model number of the board |
| n Megabytes | The amount of memory |

7. Make sure the test messages are complete and the memory size displayed on the screen is correct.

If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power–Up Problems."

If the memory size displayed is incorrect, stop here and contact Data General.

Once the system displays the correct memory size, the power–up tests are complete, and the system displays the following message and prompt:

*Do you want to install power–up diagnostics on your hard disk?*

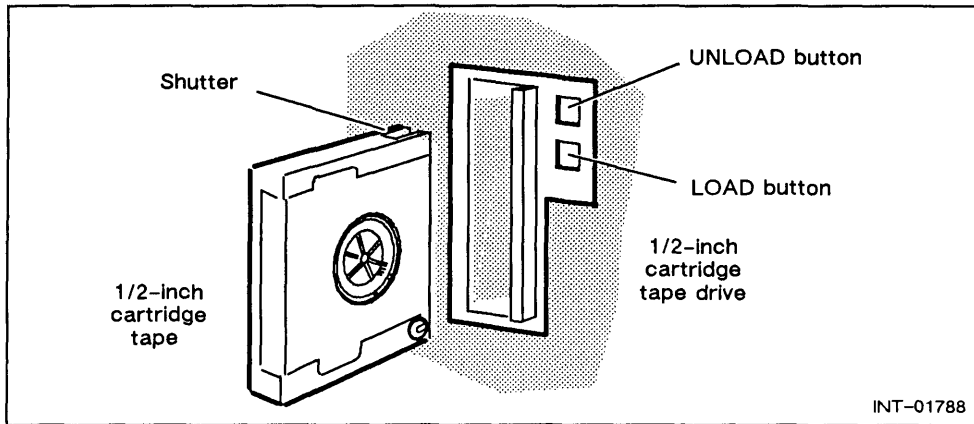*If these diagnostics are not installed on the hard disk, you will need to insert this media each time you power up. For the diagnostics to work, the disk on which they will be installed must have a diagnostic area reserved by the operating system's software formatter.*

*Install power–up diagnostics (Y or N)?*

8. Do not attempt to install power–up diagnostics at this time. Answer No to the question by pressing N and New Line.

Turn on the computer by pressing the computer's power button, then press and hold the drive's UNLOAD button until the door opens. Once the door opens, immediately turn off the computer by pressing the computer's power button, and then go to step 4.

4. Hold the tape cartridge upright with the shutter at the top, and gently slide the cartridge tape into the drive, and close the door. The door latches shut.



INT-01788

5. What you must do next depends on whether your system console is a color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

**Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.

After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

**DASHER Display Terminal (except DASHER 6053)**— Turn on the computer by pressing the computer's power button. The system displays the power-up test message.

**DASHER 6053 Display Terminal**— Press and hold the system console's New Line key, and then the Rept key. While holding down both keys, turn on the computer by pressing its power button. When the system displays the power-up test message, release the keys.

6. After about 90 seconds or so, the drive makes a noise, and its LOAD switch indicator begins to flash randomly. (If the system does not behave in this manner, it may need service. Remove the cartridge tape, and turn off the system's power. Contact Data General.)

069-000293

# Powering Up from SCP System Media
# (1/2-inch Cartridge Tape)

1.  With the computer turned off, turn on all terminals, printers, plotters and external drives. Make sure that the terminals and printers are *on line*.

    NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

    Normally, when you turn on a terminal or printer, it runs an automatic self-test and finishes by coming on line. This is indicated when the On Line light or Data light is on steady (when the computer power is turned on) or blinking (when the computer is turned off). If a printer's or terminal's On Line light does not come on, hold down the Cmd key and press the On Line key. For more information, see the documentation that came with your terminal or printer.

2.  Before inserting the 1/2-inch SCP System Media cartridge tape into the drive, write protect it so that you do not accidentally record on it. To write protect the 1/2-inch cartridge tape, push the write-protect pin up from the bottom of the cartridge tape with your finger. While holding the pin up with your finger, place a coin, a small flat-blade screwdriver or another similar tool into the groove of the write-protect pin, and turn it so that the arrow on the top of the pin points toward the word SAFE.
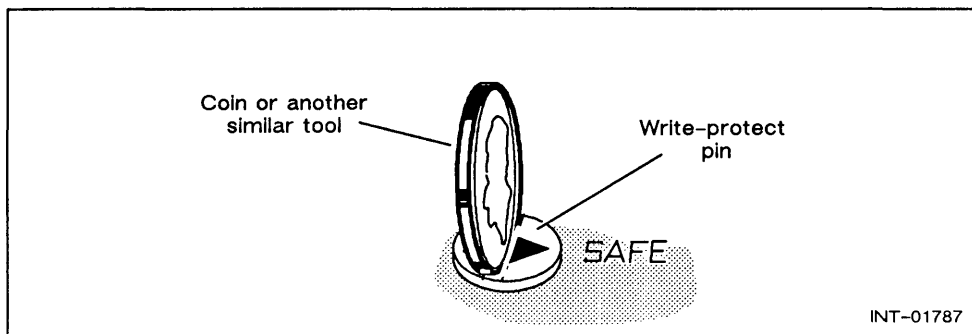


3.  If the door on the cartridge tape drive is open, go to step 4. If it is not open, do the following:

10. When the system displays the Automatic Program Load (APL) menu shown below, you have 45 seconds before the system automatically continues to power up. Immediately press 2 and New Line.

```
                              DD-MMM-YY          HH:MM:SS

                        Automatic Program Load Menu



       1 Continue immediately with preset values
       2 Change preset values


       Loading with present values will continue automatically
       unless you respond within yy seconds

       The default device is xxxx

       For assistance, press the Help key (Shift-F1) or H

       Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

NOTE: If the system interrupts the power-up sequence and goes into the System Control Program (SCP), the SCP-CLI prompt appears. Leave the SCP, and continue the power-up sequence by typing CONTINUE and pressing the New Line key. The CONTINUE command returns you to the Change Preset Values menu.

11. At this point you have powered up from your SCP System Media software, and the system displays the Change Preset Values menu. Do not turn off the system's power.

If you are installing an AOS/VS update, go to the section, "Installing an Update" in this chapter. If you are reinstalling AOS/VS on the system disk as described in Appendix A, "Reinstalling AOS/VS on the System Disk from Tapes," return to Appendix A and step 3 in either of the following sections: "Reinstalling from System Disk Backup" or "Reinstalling from Release and Update Media."

As the tape drive loads software (it may take up to 15 minutes), the system begins to display test messages like the following:

```
TESTING...

    Model # XXXX; System Processing Unit (SPU)
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
    --Standard Hardware Tests Complete--
    --Optional Hardware Tests Beginning--
    Model # YYYY; Slot y; Local Area Network (LAN) Board
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

    --Optional Hardware Tests Complete--
    --Memory size is n Megabytes--
```

| Screen Display | Indicates |
|---|---|
| Model # XXXX | The model number of the system |
| Letters A–Z; digits 0–9 | A test has passed |
| Slot y | The slot location of the board |
| Model # YYYY | The model number of the board |
| n Megabytes | The amount of memory |

8.  Make sure the test message is complete and the memory size displayed on the screen is correct.

    If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power–Up Problems."

    If the memory size displayed is incorrect, stop here and contact Data General.

    Once the system displays the correct memory size, the power–up tests are complete, and the system displays the following message and prompt:

    *Do you want to install power–up diagnostics on your hard disk?*

    *If these diagnostics are not installed on the hard disk, you will need to insert this media each time you power up. For the diagnostics to work, the disk on which they will be installed must have a diagnostic area reserved by the operating system's software formatter.*

    *Install power–up diagnostics (Y or N)?*

9.  Do not attempt to install power–up diagnostics at this time. Answer No to the question by pressing N and New Line.

INT-01807
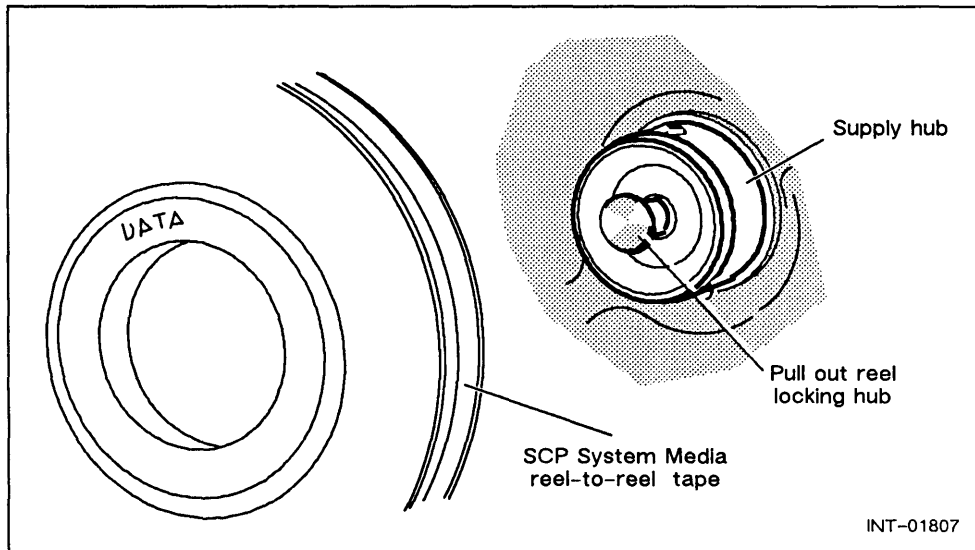
5.  Hold the SCP System Media reel-to-reel tape upright with the groove for the write-enable ring toward the tape drive. Align the center of the tape with the center of the supply hub and gently push the tape (from center area of the tape reel) onto the supply hub until it seats firmly. As it seats you can feel the spring-loaded balls on the supply hub snap into place.

INT-01808
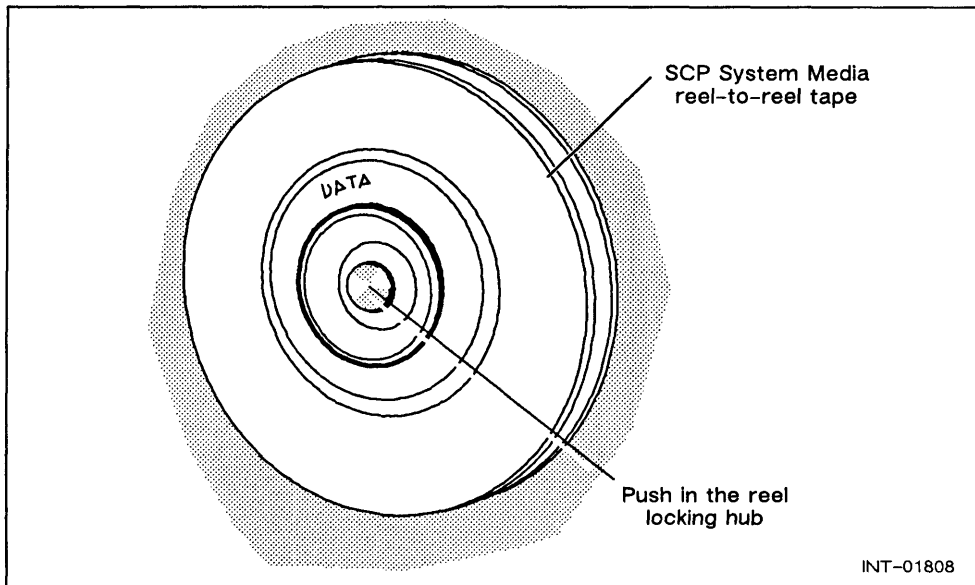
6.  Push in the reel locking hub in the center of the supply hub.

# Powering Up from SCP System Media (Reel-to-Reel Tape)

> NOTE: If you experience problems powering up from SCP System Media using the reel-to-reel tape drive, contact Data General. Your system may not be configured to do this.

1. With the computer turned off, turn on all terminals, printers, plotters and external drives. Make sure that the terminals and printers are *on line*.

> NOTE: If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

Normally, when you turn on a terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is on steady (when the computer is turned on) or is blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

2. Remove the plastic protective collar from the outside edge of the tape by lifting the latch.



INT-01806
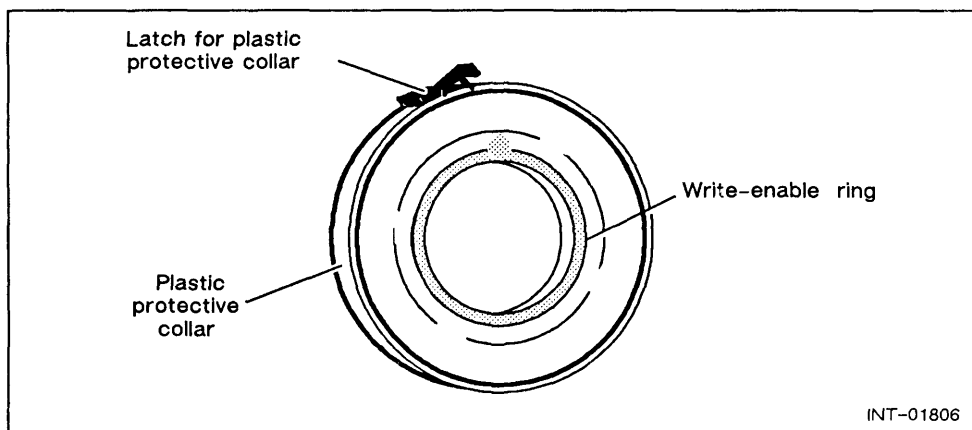
3. If the SCP System Media reel-to-reel tape has a write-enable ring installed, remove it so that the system does not accidently write (record) on the tape during the power-up procedure.

4. Open the tape drive's door by gently pulling on its right edge. Pull out the reel locking hub in the center of the supply hub.

POWER

0
OFF

1
ON

READY

WRITE
LOCK

BOT

EOT

UNLOAD BOT

OFF
LINE

ON
LINE

INT-01810
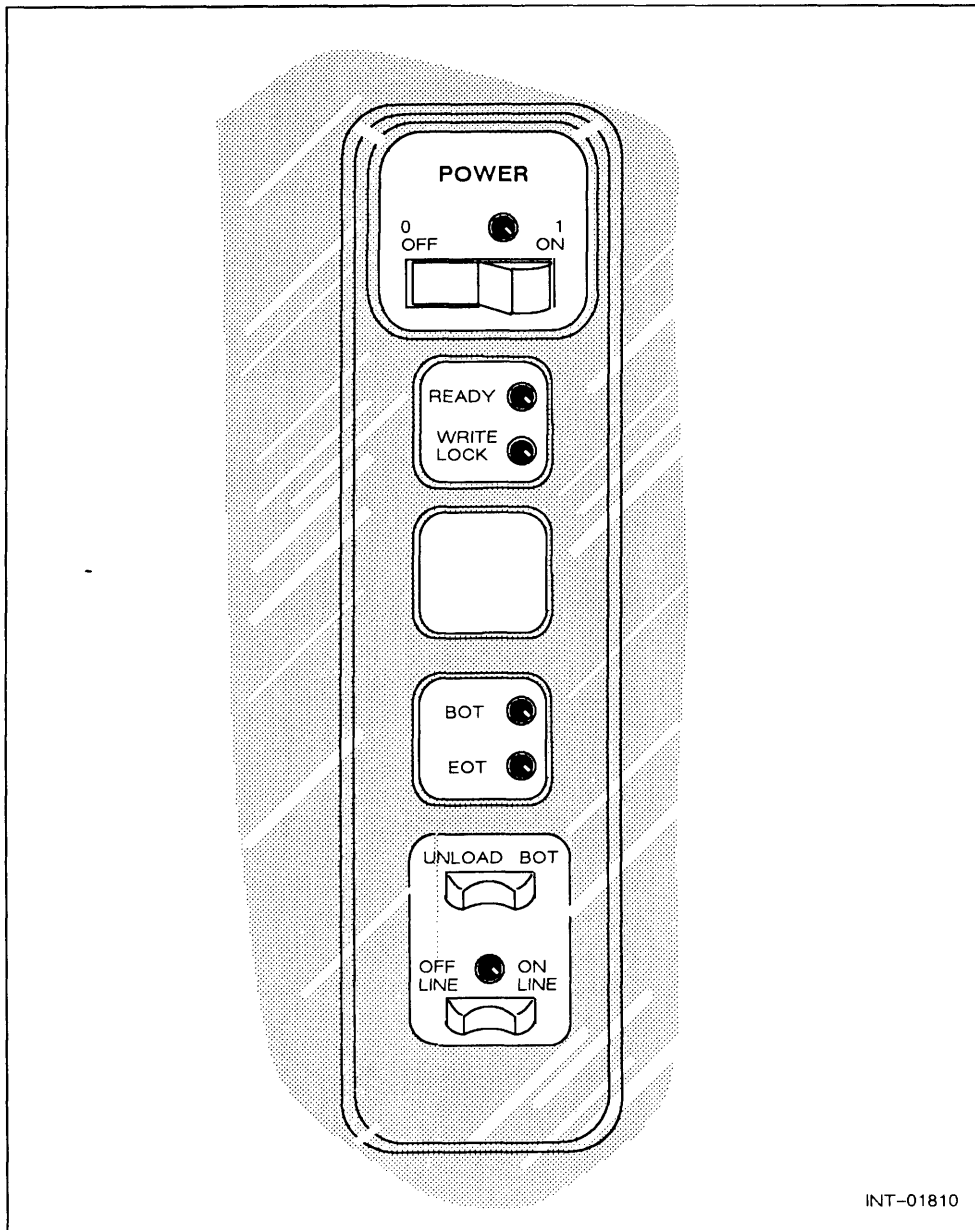
10. Press the BOT switch. The reels begin spinning as the drive locates the beginning of tape (BOT) marker. When the reels stop spinning, place the drive on line by pressing the ON LINE switch. The READY and WRITE LOCK indicators come on.

11. What you must do next depends on whether your system console is a color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

7.  With the SCP System Media tape reel locked in place on the supply hub, grasp the loose end of the magnetic tape and begin threading it through the drive as follows: Pull it over the roller above the tape reel. Then, while holding down the flux gate, pull the tape along the tape path opening and over to the roller above the permanent take-up reel. Make sure the tape is within the tape path, then release the flux gate. Pull the tape around the second roller and wrap it part way around the permanent take-up reel.



INT-01809

8.  Hold the tape in against the hub of the take-up reel with your finger and slowly rotate the take-up reel counterclockwise several turns. Remove your finger and wind the tape a few more turns to make sure the tape fits snugly around the permanent take-up reel. Eliminate any slack in the tape by gently rotating both reels at the same time. When you finish, close the drive's door.

9.  With the power turned on, place the drive off line by pressing the OFF LINE switch.

13. Make sure the test messages are complete and the memory size displayed on the screen is correct.

If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power-Up Problems."

If the memory size displayed is incorrect, stop here and contact Data General.

Once the system displays the correct memory size, the power-up tests are complete, and the system displays the following message and prompt:

*Do you want to install power-up diagnostics on your hard disk?*

*If these diagnostics are not installed on the hard disk, you will need to insert this media each time you power up. For the diagnostics to work, the disk on which they will be installed must have a diagnostic area reserved by the operating system's software formatter.*

*Install power-up diagnostics (Y or N)?*

14. Do not attempt to install power-up diagnostics at this time. Answer No to the question by pressing N and New Line.

15. When the system displays the Automatic Program Load (APL) menu shown below, you have 45 seconds before the system automatically continues to power up. Immediately press 2 and New Line.

```
                        DD-MMM-YY          HH:MM:SS

                   Automatic Program Load Menu



        1 Continue immediately with preset values
        2 Change preset values


        Loading with present values will continue automatically
        unless you respond within yy seconds

        The default device is xxxx

        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

NOTE: If the system interrupts the power-up sequence and goes into the System Control Program (SCP), the SCP-CLI prompt appears. Leave the SCP, and continue the power-up sequence by typing CONTINUE and pressing the New Line key. The CONTINUE command returns you to the Change Preset Values menu.

16. At this point you have powered up from your SCP System Media software and the system displays the Change Preset Values menu. Do not turn off the system's power.

   If you are installing an AOS/VS update, go to the section, "Installing an Update" in this chapter. If you are reinstalling AOS/VS on the system disk as described in Appendix A, return to Appendix A and step 3 in either of the following sections: "Reinstalling from System Disk Backup" or "Reinstalling from Release and Update Media."

# Installing an AOS/VS Release

An AOS/VS release includes all program and support files needed to tailor and run AOS/VS. Each release supersedes the previous one, although Data General will continue to support the old release for some specified amount of time. The new release is shipped to all new customers and customers on the Software Subscription Service. Data General creates releases as needed for new hardware and software features -- usually 6 to 12 months after the previous release.

Along with each release, Data General ships a new set of AOS/VS manuals and a printed Release Notice. Read the Changes and Enhancements section of the Release Notice for a description of new features supported by the release. The Release Notice is also supplied as a disk file in :UTIL, for example, :UTIL:085_000nnn_nn.

Release software does not include changes made in updates to that release. Typically, you receive an update with the release. You must load the release first, and then the update, as covered in this chapter.

If you also receive an SCP System Media update with an AOS/VS release or update, load the AOS/VS release and update before loading the SCP System Media update.

To install an AOS/VS release from cartridge tape or reel-to-reel tape, do the following:

1.   Read the Release Notice, and make sure you have enough disk space available on the system logical disk unit (LDU) to install the release.

     Also, check the Release Notice for files with the same names as files you have tailored for your system. For the release to succeed, each file in the release must be placed in the AOS/VS directory structure. This means that some files already in the structure will be deleted and replaced.

     In addition to the notice of possible filename conflicts, the Release Notice tells how to install the release. You can follow those instructions, instead of these, if you want. Instructions appear in this manual as well as in the Release Notice for your convenience.

2.   If you have changed any system supplied macros such as :UTIL:SMI_UP.CLI, you must rename them before loading the update. If you have not changed any macros, skip ahead to step 3.

     a. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System management Interface (SMI)* manual for the correct procedure.

     b. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

     *SMI-CLI)* **SUPERUSER ON⤸**

c. At the SMI_CLI prompt, type the following command line and press New
Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :** ⤵

d. Rename appropriate files.  For example

*SMI-CLI\*)* **RENAME SMI_UP.CLI SMI_UP.CLI1.** ⤵

3.   If you have changed any profile information (other than password) for user OP
     or SYSMGR, rename the profiles before loading the update. If you have not
     changed the profiles, skip ahead to step 4.

   a. Enter the CLI from the System Management Interface.  If you do not know
      how to enter the CLI from SMI, see the *Using the AOS/VS System
      Management Interface (SMI)* manual for the correct procedure.

   b. At the SMI_CLI prompt, type the following command line and press New
      Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON** ⤵

   c. At the SMI_CLI prompt, type the following command line and press New
      Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :** ⤵

   d. Rename appropriate profiles.  For example

*SMI-CLI\*)* **RENAME OP OP.OLD** ⤵

4.   Shut down your operating system and turn off the computer and peripherals.
     If you do not know how to shut down your operating system, see the *Using the
     AOS/VS System Management Interface (SMI)* manual for the correct shut–down
     procedure.

   NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any
           external drives (starting with the last drive on the peripheral bus),
           before turning on the computer unit.  When powering down the
           system, turn off any external drives (starting with the last drive on the
           peripheral bus), before turning off the computer unit.

5.   Power up your system following the procedures in Chapter 3, "Powering Up
     Routinely" until the system displays the Starter Main Menu.

6.   While in the Starter Main Menu, press 6 and New Line to select option 6,
     "Build or update the system disk."

7. While in the Build or Update System Disk menu, press 3 and New Line, or enter the SOFTWARE keyword, to select option 3, "Load new system software on the disk."

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                    Build or Update System Disk Menu

      1  Build the system disk
      2  Format a disk
      3  Load new system software on the disk
      4  Load the default operator profile on the disk
      *  Load new system firmware on the disk


      Enter choice [1]:


      To exit from any menu, press the Cancel/Exit key (F11).
      For assistance at any time, press the Help key (Shift-F1).
```
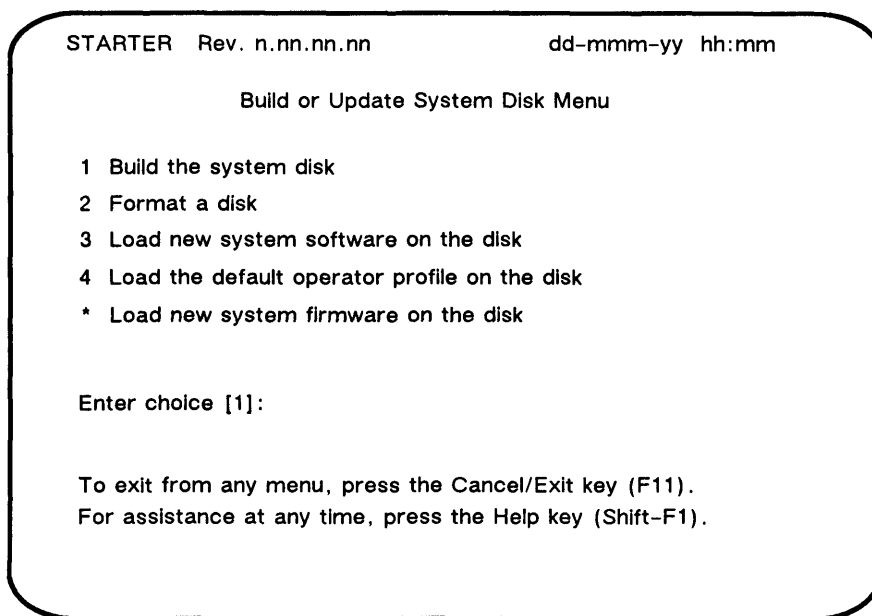
The Starter program will prompt you as follows:

*Enter T (Tape), D (Diskette), or a unit name:   T*

8. Type T to specify a load from tape. Alternatively, you can enter the unit name; for example, @MTJ0 or @MTJ10 for tape. Press New Line.

9. The system displays the following prompt:

*Mount the tape labeled OS System Media on unit @MTJ0*
*Press New Line when ready.*

10. Mount or insert your tape and press New Line. The system loads system software from your tape.

Starter will display some messages as it loads software from the media. When the system finishes loading the release files, Starter displays the Build or Update System Disk menu.

11. Remove the AOS/VS release tape.

12. Press the Cancel/Exit function key (F11) to enter the Starter Main Menu. If you need to install an update after installing a release, skip ahead to step 11 in the next section "Installing an AOS/VS Update." If you do not need to install an update, at the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system."

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                      STARTER Main Menu

          1  Start the default operating system
          2  Start a different operating system
          3  Change the system date or time
          4  Make a physical backup of a disk (using PCOPY)
          5  Restore a physical copy of a disk (using PCOPY)
          6  Build or update the system disk

          The default operating system will start up automatically
          unless you respond within 45 seconds


          Enter choice [1]:

          To exit from any menu, press the Cancel/Exit key (F11).
          For assistance at any time, press the Help key (Shift-F1).
```

The system displays the following message:

*Please wait. The system is being loaded.*
*SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

13. If you renamed any system supplied macros such as :UTIL:SMI_UP.CLI, as described in step 2, check the new versions of these macros in the AOS/VS update to determine if they contain anything new that you should include in your renamed versions. If necessary, use the SED text editor to edit your renamed macros. Refer to the *SED Text Editor User's Manual AOS and AOS/VS* for instructions.

If you have not changed any macros, skip ahead to step 14.

a. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON**)

b. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :** )

c. .At the SMI_CLI prompt, enter the delete command to delete the new system supplied macros. For example

*SMI-CLI\*)* **DELETE SMI_UP.CLI** )

c. .At the SMI_CLI prompt, rename the new system supplied macros. For example

*SMI-CLI\*)* **RENAME SMI_UP.CLI1   SMI_UP.CLI**)

14. If you renamed your edited OP or SYSMGR profiles as described in step 3, delete the profiles contained in the update, and rename your

a. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON**)

b. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :UPD** )

c. .At the SMI_CLI prompt, enter the delete command to delete the new profile. For example

*SMI-CLI\*)* **DELETE OP.OLD** )

c. .At the SMI_CLI prompt, rename the new profile. For example

*SMI-CLI\*)* **RENAME OP.OLD** )

# Installing an AOS/VS Update

Each AOS/VS update is shipped on the same medium, tape or diskettes, as the corresponding release. The update includes a tape or group of diskettes (each with a paper label marked with UD) and a printed Update Notice.

The update includes improved versions of some programs shipped in the original AOS/VS release. These program files are shipped in a revision directory named for the revision (for example, for update 7.63, the revision directory pathname is :UPDATE:7.63). Loading the update automatically creates the revision directory. Every update includes all changes from previous updates. For example, update 7.63 includes changes from updates 7.61 and 7.62 and 7.63.

The Update Notice explains reasons for the update and describes how to install it. Updates do not usually include new manuals, but they often do include new documentation changes files and Help files, which are automatically moved into directories :UTIL and :HELP when you load the update.

To install the update, follow these steps.

1. Read the Update Notice, and make sure you have enough disk space available on the system logical disk unit (LDU) to install the update.

   Also, check the Update Notice for files with the same names as files you have tailored for your system. For the update to succeed, each file in the update must be placed in the AOS/VS directory structure. This means that some files already in the structure will be deleted and replaced.

   In addition to the notice of possible filename conflicts, the Update Notice tells how to install the update. You can follow those instructions, instead of these, if you want. Instructions appear in this manual as well as in the update notice for your convenience.

2. If you have changed any system supplied macros such as :UTIL:SMI_UP.CLI, you must rename them before loading the update. If you have not changed any macros, skip ahead to step 3.

   a. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

   b. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

   *SMI-CLI)* **SUPERUSER ON⟩**

   c. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

   *SMI-CLI\*)* **DIRECTORY : ⟩**

   d. Rename appropriate files. For example

   *SMI-CLI\*)* **RENAME SMI_UP.CLI SMI_UP.CLI1.⟩**

3. If you have changed any profile information (other than password) for user OP or SYSMGR, rename the profiles before loading the update. If you have not changed the profiles, skip ahead to step 4.

   a. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

   b. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

   *SMI-CLI)* **SUPERUSER ON⟩**

   c. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

   *SMI-CLI\*)* **DIRECTORY : ⟩**

   d. Rename appropriate profiles. For example

   *SMI-CLI\*)* **RENAME OP OP.OLD⟩**

4.  Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

    NOTE:  If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit.  When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

5.  Power up your system following the instructions in the "Starting From Tape" section in this chapter.  The steps in that section tell you how to insert a cartridge tape or mount a reel-to-reel tape, power up the computer, and load the SCP System Media software.

6.  While in the Change Preset Values menu press 3 and New Line to select option 3, "Start from a different device."

```
                        Change Preset Values Menu

              1   Continue the powerup
              2   Change the system date or time
              3   Start from a different device
              4   Change the default device
              5   Change the time-out delay for Automatic Program Load  Menu
              6   Enter the SCP CLI
              7   Change the system console
              8   Select diagnostics sequence
              9   Configure parallel printer port
              10  Select positional tracking device types for tablets
              11  Select system clock type


         For assistance, press the Help key (Shift-F1) or H
         To exit from this menu, press the Cancel/Exit key (F11) or ESC

         Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

7.  While in the Start a Different Device menu, press 3 and New Line to select option 3, "Tape."

```
         Start from a Different Device


     1 Hard disk
     2 Diskette
     3 Tape



     To exit from this menu, press the Cancel/Exit key (F11) or ESC
     For assistance, press the Help key (Shift-F1) or H


     Start from which device? [n]
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

NOTE: If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

8.  When you select option 3, the system prompts you with

    *1   1/8-inch Cartridge Tape*
    *2   1/2-inch Cartridge or Reel Tape*

    Choose either option 1, the 1/8-inch cartridge tape drive, or option 2, the 1/2-inch cartridge tape drive or the reel-to-reel tape drive. Once you choose either option, the system prompts you with

    *Please insert or mount tape, then press New Line key (or the Enter key) to continue, or press the ESC key to cancel selection.*

9.  Remove the SCP System Media tape, then insert or mount the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA Rev 7.xx" in its drive.

    Insert or mount your tape on the proper drive and press New Line. The system loads software from your tape.

    NOTE:   If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

    **Missing or Bad Media**

    *To return to the menu, press the Cancel/Exit key.*

    If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

10. Press the space bar if you are loading from 1/8-inch cartridge tape. Press New Line if you are loading from either 1/2-inch cartridge tape or reel-to-reel tape. When prompted for a tape file number type 5, then press New Line.

    *Tape file number?* 5 ⤶

    The system loads the Starter program from the tape. When the program is finished loading, the screen displays the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn            dd-mmm-yy  hh:mm
                     STARTER Main Menu

         1  Start the default operating system
         2  Start a different operating system
         3  Change the system date or time
         4  Make a physical backup of a disk (using PCOPY)
         5  Restore a physical copy of a disk (using PCOPY)
         6  Build or update the system disk

         The default operating system will start up automatically
         unless you respond within 45 seconds


         Enter choice [ ]:

         To exit from any menu, press the Cancel/Exit key (F11).
         For assistance at any time, press the Help key (Shift-F1).
```

11. While in the Starter Main Menu, press 6 and New Line to select option 6 "Build or update the system disk." The system displays the Build or Update System Disk menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                      Build or Update System Disk Menu

        1  Build the system disk
        2  Format a disk
        3  Load new system software on the disk
        4  Load tne default operator profile on the disk
        *  Load new system firmware on the disk


        Enter choice [1]:


        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```
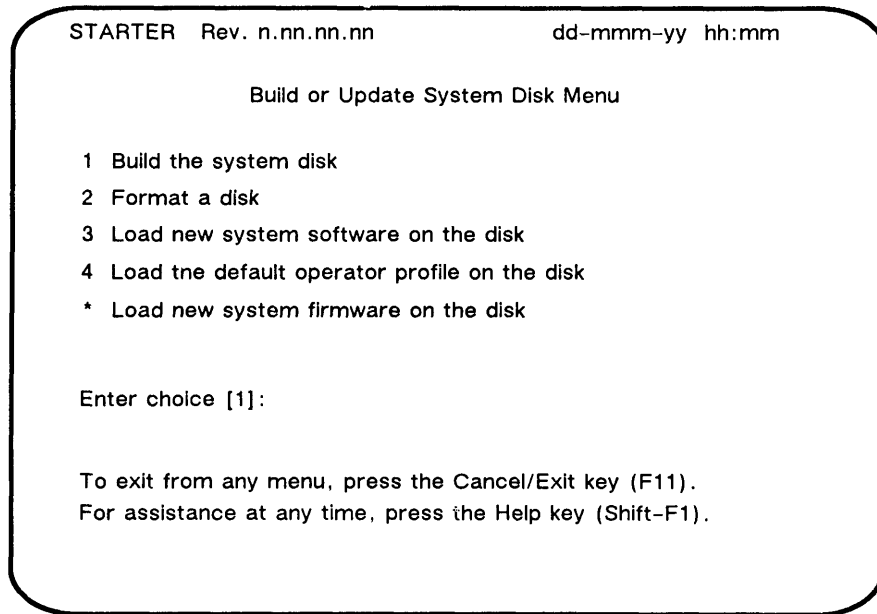
12. From the Build or Update System Disk menu, press 3 and New Line to select option 3, "Load new system software on the disk" on the Build or Update System Disk menu.

    If you are loading from the 1/8-inch cartridge tape the system displays the following prompt:

    *Mount the "OS UTILITIES MEDIA" tape in unit @MTJ0.*

    *Press New Line when ready.*

    If you are loading from either the 1/2-inch cartridge tape or reel-to-reel tape the system displays the following prompt:

    *Mount the "OS UTILITIES MEDIA" tape in unit @MTJ10.*

    *Press New Line when ready.*

13. Press New Line. When the system finishes loading the update tape files, Starter displays the Build or Update System Disk menu.

14. Remove the AOS/VS update tape.

15.  Press Cancel/Exit (F11) to return to the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm
                        STARTER Main Menu

      1  Start the default operating system

      2  Start a different operating system

      3  Change the system date or time

      4  Make a physical backup of a disk (using PCOPY)

      5  Restore a physical copy of a disk (using PCOPY)

      6  Build or update the system disk


      The default operating system will start up automatically
      unless you respond within 45 seconds


      Enter choice [ ]:

      To exit from any menu, press the Cancel/Exit key (F11).
      For assistance at any time, press the Help key (Shift-F1).
```

16.  While in the Starter Main Menu, press 1 and New Line to select option 1 "Start the default operating system." You will receive the following message.

*Please wait.  The system is being loaded.*
*SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

17.  If you renamed any system supplied macros such as :UTIL:SMI_UP.CLI, as described in step 2, check the new versions of these macros in the AOS/VS update to determine if they contain anything new that you should include in your renamed versions.  If necessary, use the SED text editor to edit your renamed macros. Refer to the *SED Text Editor User's Manual AOS and AOS/VS* for instructions.

If you have not changed any macros, skip ahead to step 18.

a.  At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON**↲

b.  At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :** ↲

    c.  .At the SMI_CLI prompt, enter the delete command to delete the new system supplied macros. For example

*SMI-CLI\*)* **DELETE SMI_UP.CLI )**

    d.  .At the SMI_CLI prompt, rename the new system supplied macros. For example

*SMI-CLI\*)* **RENAME SMI_UP.CLI1  SMI_UP.CLI)**

18.  If you renamed your edited OP or SYSMGR profiles as described in step 3, delete the profiles contained in the update, and rename your profiles as follows:

    a.  At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON)**

    b.  At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

*SMI-CLI\*)* **DIRECTORY :UPD  )**

    c.  .At the SMI_CLI prompt, enter the delete command to delete the new profile. For example

*SMI-CLI\*)* **DELETE OP.OLD )**

    d.  .At the SMI_CLI prompt, rename the new profile. For example

*SMI-CLI\*)* **RENAME OP.OLD )**

# Installing SCP System Media

The tape labeled SCP System Media software contains the system microcode, power-up diagnostics, and a program to install power-up diagnostics on the disk.

Follow the procedures in this section to install a new release of SCP System Media on the reserved diagnostics area of your disk or to reinstall SCP System Media if you are reinstalling AOS/VS on the system disk as described in Appendix B. Using these procedures you first install the ADESL file, and then the power-up diagnostics.

NOTE:     Computer systems with preinstalled AOS/VS contain SCP System Media on the system disk. You should install power-up diagnostics if you are installing a new revision of SCP System Media, or if you are building a new disk to use as your system disk as described in Appendix A.

## Installing ADESL

You install the file ADESL much as you would any other system software file. The following procedure assumes that AOS/VS is currently running on your system. Install the file ADESL in the AOS/VS root directory of your system disk as follows:

1.   Find the SCP System Media tape. It contains the ADESL file for AOS/VS. Read the Release Notice that came with the SCP System Media.

2.   Insert or mount the SCP System Media tape in the tape drive.

3.   Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

4.   From the CLI command line, enter the AOS/VS root directory, as shown below:

   *SMI_CLI)* **SUPERUSER ON**  )

   *SMI_CLI\*)* **DIR :**  )

5.   Enter the command below that corresponds to your SCP System medium.

   For 1/8-inch cartridge tape drives, enter

   *SMI_CLI\*)* **IOAD_II/V/DEL/NACL/BUFF=8192 @MTJ0:1**  )

   For 1/2-inch cartridge or reel-to-reel tape drives, enter

   *SMI_CLI\*)* **LOAD/V/DEL/NACL/BUFF=8192 @MTJ10:1**  )

6.   When it is finished loading the software, the system displays the following message:

   *dd-mmm-yy        hh:mm:ss*

   *ADESL*

7.   Remove the SCP System Media tape from the drive.

8.    Shut down your system completely as described in the *Using the AOS/VS System Management Interface (SMI)* manual. Turn off computer power.

NOTE:    If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

Follow the instructions in the next section, "Installing Power–Up Diagnostics," to install power–up diagnostics.

## Installing Power–Up Diagnostics

It will not harm your system if you don't install the contents of your SCP System Media on disk, however, if you don't install the contents on disk you must insert or mount the SCP System Media tape in its drive every time you power up your computer.

Install power–up diagnostics as follows:

1.    Follow the instructions in the section "Starting from a Tape," in this chapter. The steps in that section tell you how to insert a cartridge tape or mount a reel–to–reel tape, power up the computer, and load the SCP System Media software.

2.    Proceed through powerup until the power–up tests are complete. The system displays the following message on your screen:

```
Do you want to install power-up diagnostics on your hard disk?

If these diagnostics are not installed on the hard disk, you will need to insert
this diskette each time you power up. For the diagnostics to work, the disk on
which they will be installed must have a Diagnostic Area reserved by the
operating system software formatter.


Install power-up diagnostics (Y or N)?
```
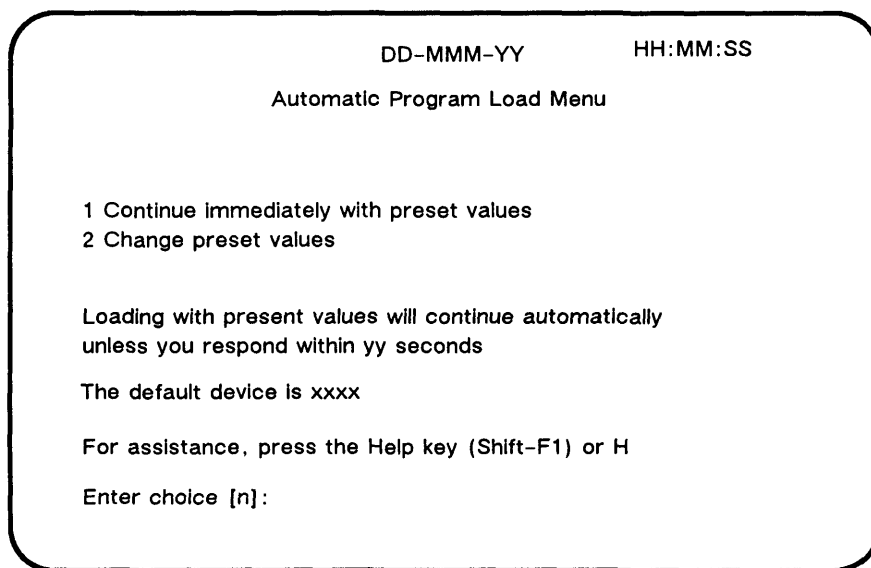
3.    Press Y and press New Line. The following message appears on your screen:

*Beginning Files Transfer*

When finished, the system displays the following message:

*Files Transfer Completed*

4. When the Automatic Program Load menu appears, you can either wait for the pre-set pause (originally set at 45 seconds) or press New Line to continue immediately with the default power-up sequence.

```
                         DD-MMM-YY          HH:MM:SS

                    Automatic Program Load Menu


        1 Continue immediately with preset values
        2 Change preset values


        Loading with present values will continue automatically
        unless you respond within yy seconds

        The default device is xxxx

        For assistance, press the Help key (Shift-F1) or H

        Enter choice [n]:
```

| Screen Display | Indicates |
|----------------|-----------|
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

5. Remove the SCP System Media tape from the drive. You are now finished loading power-up diagnostics.

6. While in the Technical Maintenance menu, press 1 and New Line to select option 1, "Load the default operating system."

7. When the Change the System Date or Time screen appears, enter the correct date and time as described in Chapter 2. The system displays the Starter Main menu.

8. While in the Starter Main menu, press 1 and New Line to select the default option 1, "Start the default operating system." After a few moments, AOS/VS will come up and display its log-on banner.

# Creating a Backup of Operating System and Utility Files

After updating the system, you should backup the operating system and utility files. This can save many steps if you ever need to reinstall AOS/VS on your system disk. The SYSTAPE.CLI macro copies all files in and below directories (:), :UTIL, :HELP, :UPDATE, and :SYSGEN directories. This backup copy will also include a copy of the SCP System Media. You might want to change this macro to exclude files if you have large non-Data General files in or below the :UTIL directory (for example, large INFOS II database files).

To make a backup tape of operating system and utility files, go to the appropriate section – "Backing up to a 1/8-inch Cartridge Tape," "Backing up to a 1/2-inch Cartridge Tape," or "Backing up to a Reel-to-Reel Tape" and follow the instructions.
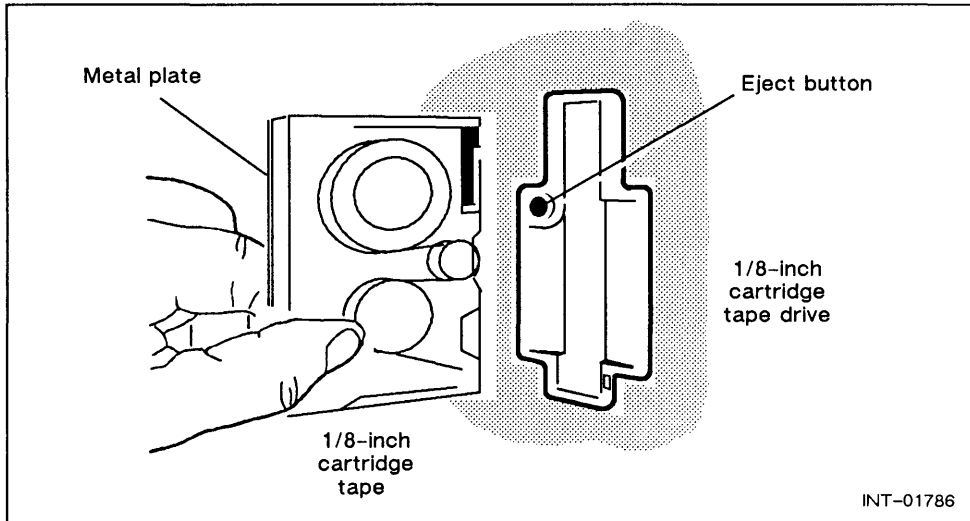
## Backing Up to a 1/8-inch Cartridge Tape

1. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

2. Remove the blank cartridge tape from its plastic protective case.



INT-01784
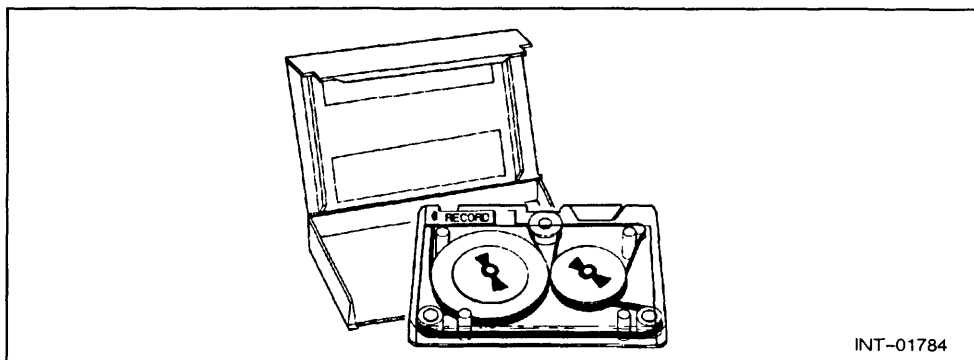
3. Slide the tape's record switch all the way to the left, so that you can write (record) on the tape.
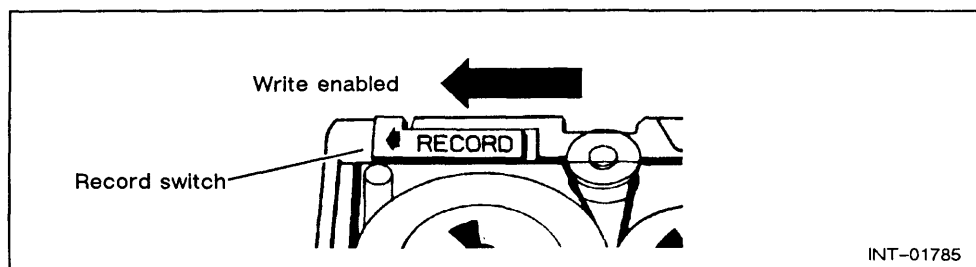


Write enabled

Record switch

INT-01785

4. Hold the cartridge tape upright with the metal plate on the left. Then gently push the cartridge tape against the drive door and into the drive. You will hear a click, see the eject button on the left pop out, and feel the cartridge tape lock tightly in place. (If you need to remove the cartridge tape for any reason, press the eject button, and extract the cartridge tape from the drive.)



5. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

   *SMI-CLI)* **SUPERUSER ON**⌡

6. At the SMI_CLI prompt, type the following command line and press New Line to enter the :SYSGEN directory as follows:

   *SMI-CLI\*)* **DIRECTORY :SYSGEN** ⌡

7. At the SMI_CLI prompt, type SYSTAPE and press New Line to execute the SYSTAPE macro as follows:

   *SMI-CLI\*)* **SYSTAPE**⌡

   The SYSTAPE macro will copy the files onto the cartridge tape.

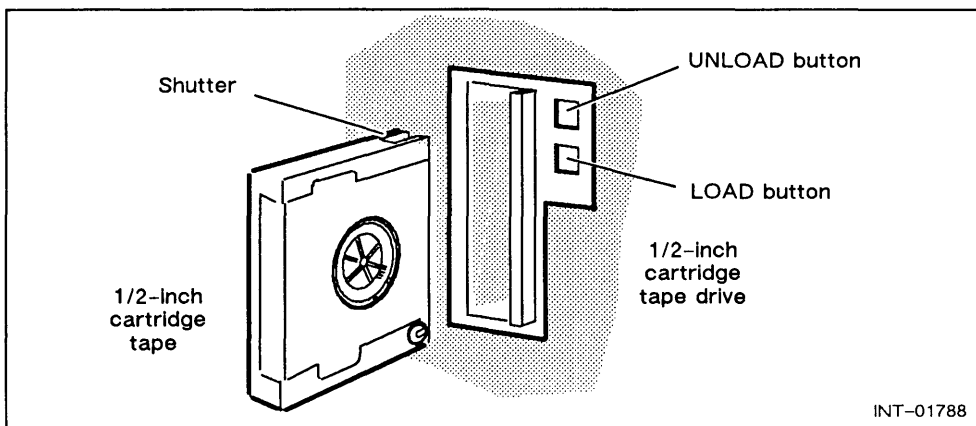8. Remove the system disk backup tape from the drive.

## Backing Up to a 1/2-inch Cartridge Tape

1. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

2.   Before inserting the blank 1/2-inch cartridge tape into the drive, write enable it
     so that you can record on it. To write enable the 1/2-inch cartridge tape, push
     the write-protect pin up from the bottom of the cartridge tape with your finger.
     While holding the pin up with your finger, place a coin, a small flat-blade
     screwdriver or another similar tool into the groove of the write-protect pin, and
     turn it so that the arrow on the top of the pin points away from the word SAFE.



INT-02049
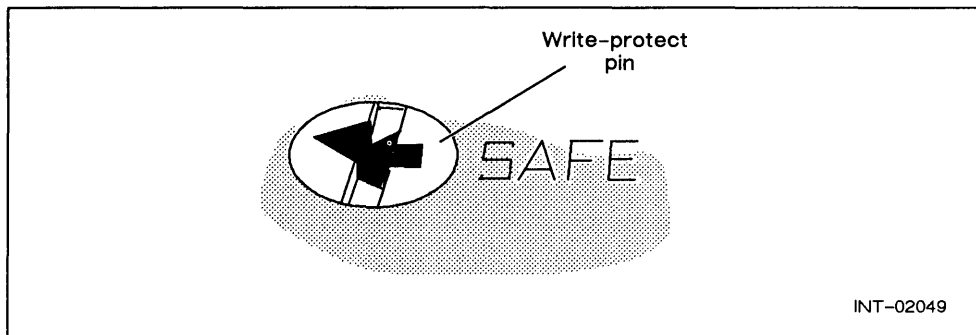
3.   If the door on the cartridge tape drive is open, go to step 4. If it is not open,
     press and hold the drive's UNLOAD button until the door opens.

4.   Hold the tape cartridge upright with the shutter at the top, and gently slide the
     cartridge tape into the drive, and close the door. The door latches shut.



INT-01788

5.   At the SMI_CLI prompt, type the following command line and press New Line
     to turn on Superuser privilege as follows:

     *SMI-CLI)* **SUPERUSER ON**⏎

6.   At the SMI_CLI prompt, type the following command line and press New Line
     to enter the :SYSGEN directory as follows:

     *SMI-CLI*)* **DIRECTORY :SYSGEN** ⏎

7.  At the SMI_CLI prompt, type SYSTAPE and press New Line to execute the
    SYSTAPE macro as follows:

    *SMI-CLI\*)* **SYSTAPE)**

    The SYSTAPE macro will copy the files onto the cartridge tape.

8.  Remove the system disk backup tape from the drive.

## Backing Up to a Reel–to–Reel Tape

1.  Enter the CLI from the System Management Interface. If you do not know how
    to enter the CLI from the SMI, see the *Using the AOS/VS System Management
    Interface (SMI)* manual for the correct procedure.

2.  Remove the plastic protective collar from the outside edge of the tape by lifting
    the latch.



INT–01806
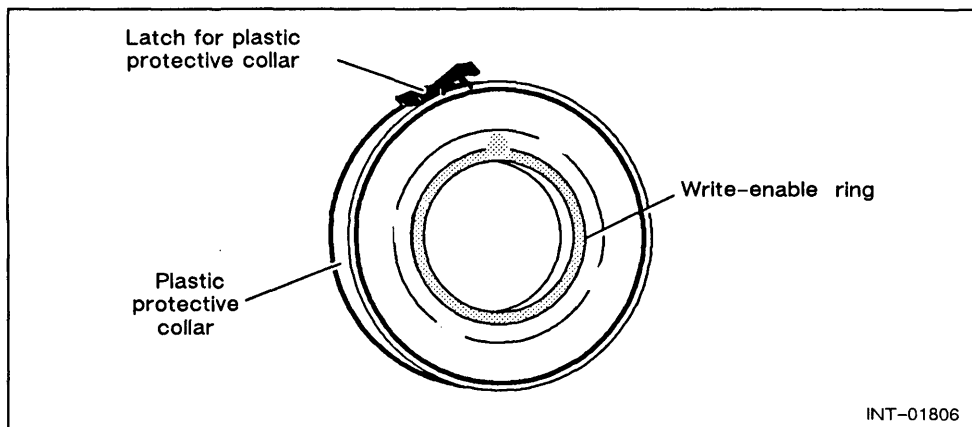
3.  Check that the blank reel–to–reel tape has a write–enable ring installed so that
    the system can write (record) on the tape during the backup procedure.

4.  Open the tape drive's door by gently pulling on its right edge. Pull out the reel locking hub in the center of the supply hub.
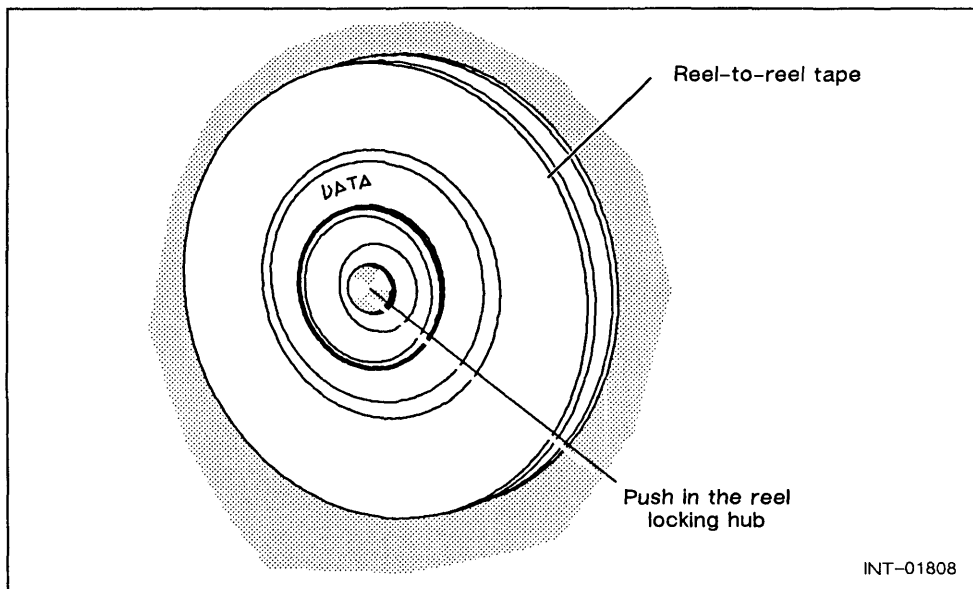


INT-01807
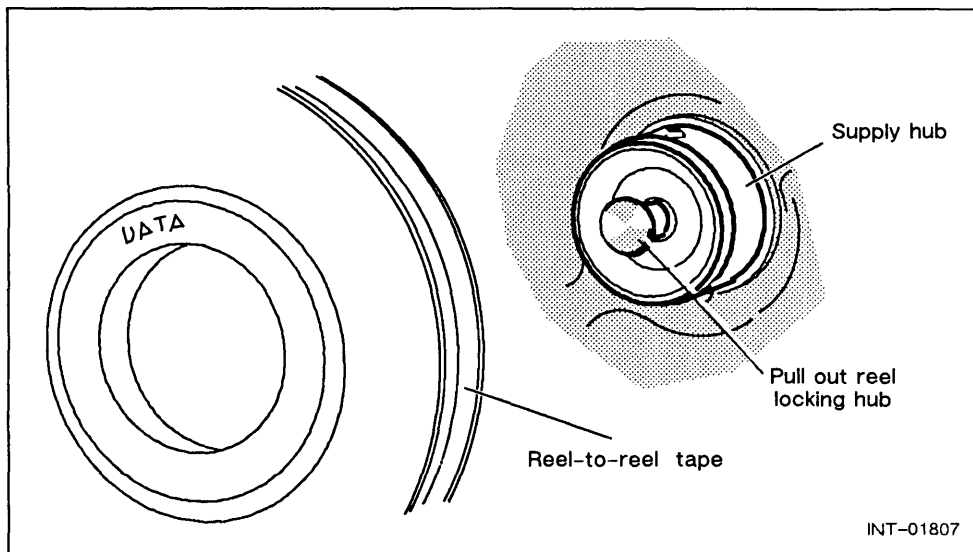
5.  Hold the reel-to-reel tape upright with the groove for the write-enable ring toward the tape drive. Align the center of the tape with the center of the supply hub and gently push the tape (from center area of the tape reel) onto the supply hub until it seats firmly. As it seats you can feel the spring-loaded balls on the supply hub snap into place.



INT-01808

6.  Push in the reel locking hub in the center of the supply hub.

7.  With the tape reel locked in place on the supply hub, grasp the loose end of the magnetic tape and begin threading it through the drive as follows: Pull it over the roller above the tape reel. Then, while holding down the flux gate, pull the tape along the tape path opening and over to the roller above the permanent take-up

reel. Make sure the tape is within the tape path, then release the flux gate. Pull the tape around the second roller and wrap it part way around the permanent take-up reel.



INT-01809

8.  Hold the tape in against the hub of the take-up reel with your finger and slowly rotate the take-up reel counterclockwise several turns. Remove your finger and wind the tape a few more turns to make sure the tape fits snugly around the permanent take-up reel. Eliminate any slack in the tape by gently rotating both reels at the same time. When you finish, close the drive's door.

9. With the power turned on, place the drive off line by pressing the OFF LINE switch.



INT–01810

10. Press the BOT switch. The reels begin spinning as the drive locates the beginning of tape (BOT) marker. When the reels stop spinning, place the drive on line by pressing the ON LINE switch. The READY and WRITE LOCK indicators come on.

11. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

*SMI-CLI)* **SUPERUSER ON⊥**

12. At the SMI_CLI prompt, type the following command line and press New Line to enter the :SYSGEN directory as follows:

    *SMI-CLI\*)* **DIRECTORY :SYSGEN** ⤸

13. At the SMI_CLI prompt, type SYSTAPE and press New Line to execute the SYSTAPE macro as follows:

    *SMI-CLI\*)* **SYSTAPE** ⤸

    The SYSTAPE macro will copy the files onto the reel-to-reel tape tape.

14. Remove the system disk backup tape from the drive.


End of Chapter

# Chapter 6
# Installing Releases and Updates
# from Diskettes

Read this chapter to find out how to install an AOS/VS or SCP System Media update or release on the system disk. Before reading this chapter, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's diskette drive and the computer system's power switch.

This chapter tells you how to

● Handle diskettes

● Insert a diskette into a drive

● Turn on your computer and start your system from the SCP System Media

● Install an AOS/VS release from diskettes

● Install an AOS/VS update from diskettes

● Install SCP System Media from diskettes

● Create a backup of operating system and utility files on diskettes

## Handling Media

Your update or release consistes of media labeled with the AOS/VS operating system name and/or media labeled SCP System Media. (The media will either be tape and/or diskettes, depending on whether your system has a tape drive or a diskette drive.). Appendix E contains a list of Data General computers and the SCP System Media that Data General ships with them. Use this information to verify that you have the correct SCP System Media.

Depending on the type of drives in your system, AOS/VS Media and the SCP System Media for your computer was shipped to you on either an 1/8-inch cartridge tape, a 1/2-inch cartridge tape, a reel-to reel tape, or diskettes. The next sections describe how to care for diskettes and how to protect the data that is stored on them.

# Handling Diskettes

Diskettes are manufactured in several sizes and formats. Your system uses a 5-1/4 inch diskette that is specially hardware formatted for use in Data General computers. This diskette comes with an adhesive label, a special plastic tab (whose purpose is explained later) and a protective storage envelope. When you are not using a diskette, keep it in this envelope and store it in a safe, dry, dust-free place, like a diskette-storage case.

Both heat and magnetic fields can damage a diskette or the information that is stored on a diskette. Store diskettes away from excessive temperatures. Temperatures between 50°F – 125°F (10°C – 52°C) are acceptable. Keep diskettes away from magnets and electrical or electronic equipment that produce magnetic fields. For example, many paper-clip holders found in offices use magnets, and equipment such as computer terminals, telephones, printers, and office equipment that use electric motors can produce magnetic fields. Pay special attention to where you place or store your diskettes when they are not in the computer.
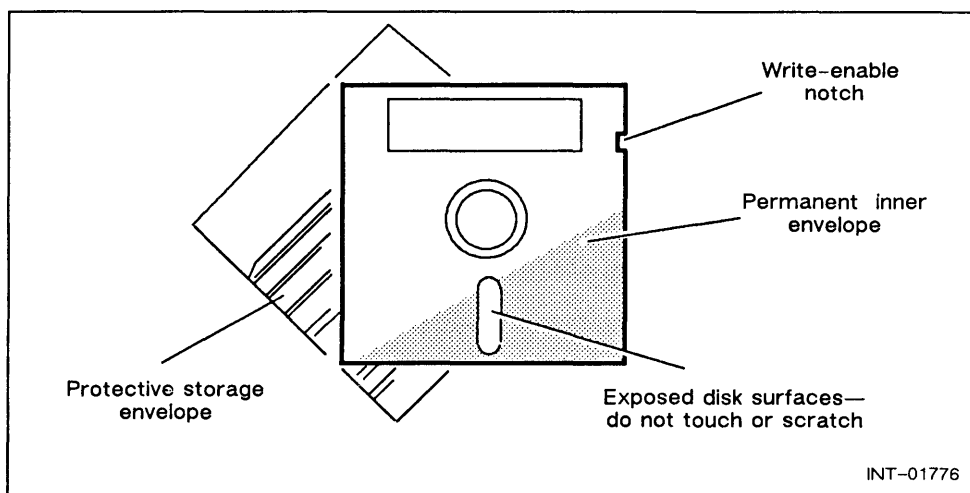


The diskette itself has a permanent inner envelope that you must never remove. In addition, you must never fold or bend a diskette or write directly on a diskette's permanent inner envelope.

The diskette has two openings (one on each side) that expose the magnetic disk that is inside the permanent envelope. Data is stored on or retrieved from the magnetic disk through these openings. Do not touch the exposed disk or allow it to become scratched—you may lose data that is stored on it. If you want to label a diskette, write on a label, then attach the label to the diskette. Make sure the label does not cover the write-enable notch on the edge of the diskette. (If you must write on the label after it is on the diskette, use a felt-tipped pen and do not bear down on the label.)

## Protecting Diskette Data

Your computer system uses a diskette in two ways. It retrieves information from the diskette in a process called *reading*, and it stores information on the diskette in a process called *writing*. When the system reads the information from an area of the diskette, that information remains intact on the diskette. On the other hand, when the

system writes new information to an area on a diskette, it writes over (erases) the old information already stored on that area. Once the old information is written over, the system cannot recover it from the diskette.

To prevent the accidental erasure of valuable information, cover the diskette's write-enable notch with the plastic tab that was supplied with the diskette (or you can use opaque tape). With the notch *covered*, the system cannot write any information on the diskette (the diskette is write protected). With the notch *uncovered*, your system can write new information and also write over any old information stored on the diskette (the diskette is write enabled).



INT-01777
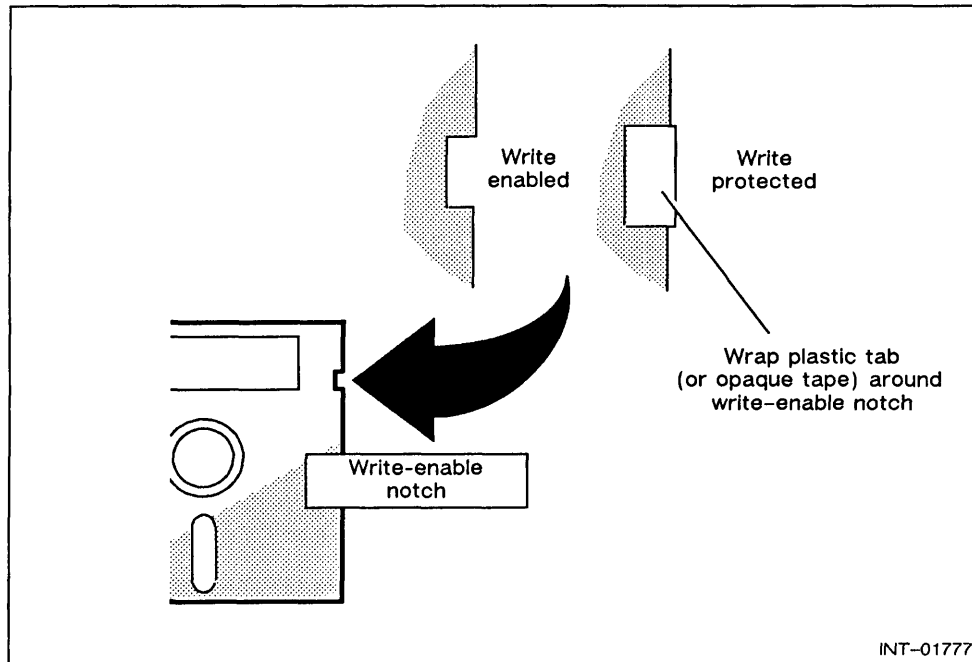
## Hardware Formatting Diskettes

The 5-1/4 inch diskettes sold by Data General are specially hardware formatted for use in your computer system. If you obtain 5-1/4 inch diskettes from a source other than Data General, you must hardware format them before using them in your system. To hardware format 5-1/4 inch diskettes, refer to the manual, *Using the Hardware Format Utility: ECLIPSE MV/1400™DC, ECLIPSE MV/2000™DC, ECLIPSE MV/2500™DC, and DS/7500 Systems.*

# Starting from a Diskette

You must power up from SCP System Media before you load an AOS/VS update as described in this chapter, or reinstall AOS/VS on the system disk as described in Appendix B.

The steps in this section tell you how to insert a diskette in a drive, and power up the computer from SCP System Media software. The diskette labeled SCP System Media contains the system microcode, power-up diagnostics, and a program to install power-up diagnostics on the disk.

Before getting started, make sure the computer and all peripherals are turned off. Peripherals include terminals, printers, and external drives, or subsystems.

Follow the steps in the remaining sections in order; otherwise, the peripherals will not operate properly.

## Powering Up from SCP System Media

1.  With the computer turned off, turn on all terminals, printers, plotters and external drives. Make sure that the terminals and printers are *on line*.

    NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

    Normally, when you turn on a nongraphics terminal or printer, it runs an automatic self-test and finishes by coming on line. In general, this is indicated when the On Line light or Data light is on steady (when the computer power is turned on) or blinking (when the computer is turned off). A graphics terminal, on the other hand, gives no indication that it is on line until you turn on the computer. For specific information, see the documentation that came with your terminal or printer.

2.  If the diskette drive's latch is not pointing down, turn it down.



INT-01789
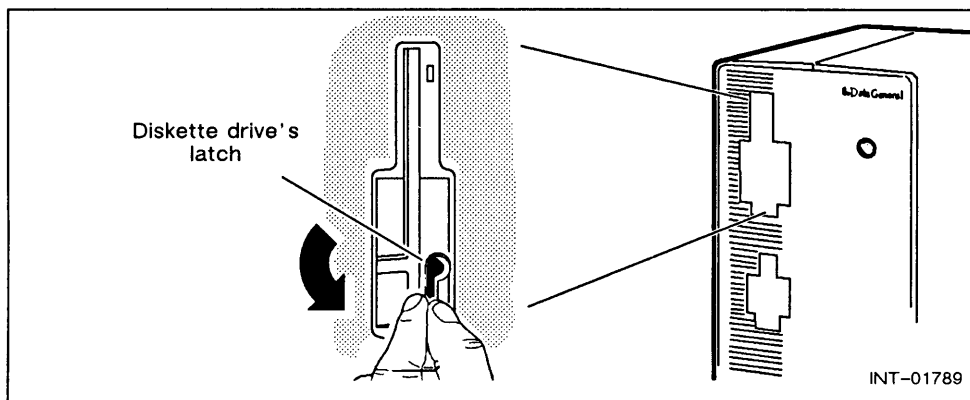
3. Remove the SCP System Media diskette from its storage envelope. Be careful not to touch the exposed areas of the magnetic disk. Make sure the diskette has a tab covering its write-enable notch so that the system does not accidently write on the diskette during the power-up procedure.
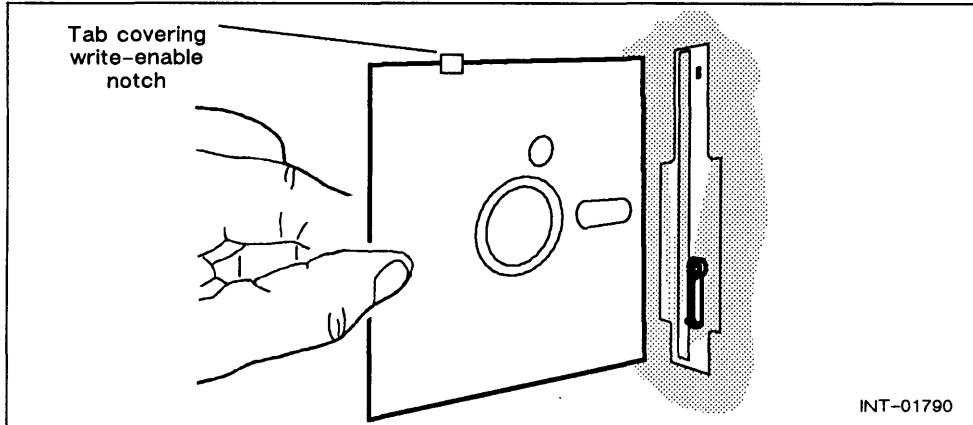


4. Hold the diskette as shown, and carefully slide it all the way into the diskette drive. Do not force or bend the diskette.

5. With the diskette in the drive, gently turn the drive's latch so that it is pointing to the left. Turning the latch to the left engages the diskette drive. (If the latch offers any resistance, do not force it. Turn the latch back so that it is pointing down again, remove the diskette, reinsert it, and try engaging the diskette drive again.)



6. What you must do next depends on whether your system console is a a color- or monochrome-graphics display terminal, a DASHER display terminal (except DASHER 6053), or a DASHER 6053 display terminal. Follow the instructions in the sections below for your type of system console terminal.

**Color- or Monochrome-Graphics Display Terminal** – Turn on the computer by pressing the computer's power button. Make sure the power button on the computer lights up. Also, check that the LEDs along the top of each keyboard flash randomly, and the screen on each terminal turns white for about 4 seconds and then goes blank.

After a while, the system begins displaying the power-up test message. If the terminal does not behave in this manner, refer to the "Graphics System Console Terminal" section in Appendix C.

**DASHER Display Terminal (except DASHER 6053)**— Turn on the computer by pressing the computer's power button. The system displays the power-up test message.

**DASHER 6053 Display Terminal**— Press and hold the system console's New Line key, and then the Rept key. While holding down both keys, turn on the computer by pressing its power button. When the system begins displaying the power-up test message, release the keys.

7. After about 90 seconds or so, the diskette drive makes a noise, and its busy light begins to flash randomly. (If the system does not behave in this manner, it may need service. Remove the diskette, and turn off the system's power. Contact Data General.)

As the diskette drive loads software, the system begins to display test messages like the following:

```
TESTING...

   Model # XXXX; System Processing Unit (SPU)
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED
   --Standard Hardware Tests Complete--
   --Optional Hardware Tests Beginning--
   Model # YYYY; Slot y; Local Area Network (LAN) Board
    ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789,   PASSED

   --Optional Hardware Tests Complete--
   --Memory size is n Megabytes--
```

| Screen Display | Indicates |
|---|---|
| Model # XXXX | The model number of the system |
| Letters A-Z; digits 0-9 | A test has passed |
| Slot y | The slot location of the board |
| Model # YYYY | The model number of the board |
| n Megabytes | The amount of memory |

8.  Make sure the test messages are complete and the memory size displayed on the screen is correct.

    If the test messages are either incomplete or end with an error message, refer to Appendix C, "Solving Power–Up Problems."

    If the memory size displayed is incorrect, stop here and contact Data General.

    Once the system displays the correct memory size, the power–up tests are complete.

9.  When the system displays the Automatic Program Load (APL) menu shown below, you have 45 seconds before the system automatically continues to power up. Immediately press 2 and New Line.

```
                        DD-MMM-YY        HH:MM:SS

                  Automatic Program Load Menu



       1 Continue immediately with preset values
       2 Change preset values


       Loading with present values will continue automatically
       unless you respond within yy seconds

       The default device is xxxx

       For assistance, press the Help key (Shift-F1) or H

       Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| DD-MMM-YY | Date-month-year |
| HH:MM:SS | Hours:minutes:seconds |
| yy | Automatic program load time delay (seconds) |
| xxxx | Default load device: Hard disk, diskette, or tape |
| n | Default choice |

NOTE:   If the system interrupts the power-up sequence and goes into the System Control Program (SCP), the SCP-CLI prompt appears. Leave the SCP, and continue the power-up sequence by typing CONTINUE and pressing the New Line key. The CONTINUE command returns you to the Change Preset Values menu.

10. At this point you have powered up from SCP System Media software, and the system displays the Change Preset Values menu. Do not turn off the system's power.

    If you are installing an AOS/VS update, go to the section, "Installing an Update" in this chapter. If you are reinstalling AOS/VS on the system disk as described in Appendix B, return to Appendix B and step 3 in either of the following sections: "Reinstalling from System Disk Backup" or "Reinstalling from Release and Update Media."

# Installing an AOS/VS Release

An AOS/VS release includes all program and support files needed to tailor and run AOS/VS. Each release supersedes the previous one, although Data General will continue to support the old release for some specified amount of time. The new release is shipped to all new customers and customers on the Software Subscription Service. Data General creates releases as needed for new hardware and software features -- usually 6 to 12 months after the previous release.

Along with each release, Data General ships a new set of AOS/VS manuals and a printed Release Notice. Read the Changes and Enhancements section of the Release Notice for a description of new features supported by the release. The Release Notice is also supplied as a disk file in :UTIL, for example, :UTIL:085_000nnn_nn.

Release software does not include changes made in updates to that release. Typically, you receive an update with the release. You must load the release first, and then the update, as covered in this chapter.

You may also receive an SCP System Media update with an AOS/VS release or update.

To install an AOS/VS Release from diskettes, do the following:

1.  Read the Release Notice, and make sure you have enough disk space available on the system logical disk unit (LDU) to install the release.

    Also, check the Release Notice for files with the same names as files you have tailored for your system. For the release to succeed, each file in the release must be placed in the AOS/VS directory structure. This means that some files already in the structure will be deleted and replaced.

    In addition to the notice of possible filename conflicts, the Release Notice tells how to install the release. You can follow those instructions, instead of these, if you want. Instructions appear in this manual as well as in the Release Notice for your convenience.

2.  If you have changed any system supplied macros such as :UTIL:SMI_UP.CLI, you must rename them before loading the update. If you have not changed any macros, skip ahead to step 3.

    a.  Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System management Interface (SMI)* manual for the correct procedure.

    b.  At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

        *SMI-CLI)* **SUPERUSER ON**⟩

    c.  At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

        *SMI-CLI\*)* **DIRECTORY :** ⟩

    d. Rename appropriate files. For example

      *SMI-CLI\*)* **RENAME SMI_UP.CLI SMI_UP.CLI1.**⤸

3. If you have changed any profile information (other than password) for user OP or SYSMGR, rename the profiles before loading the update. If you have not changed the profiles, skip ahead to step 4.

    a. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

    b. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

      *SMI-CLI)* **SUPERUSER ON**⤸

    c. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

      *SMI-CLI\*)* **DIRECTORY :** ⤸

    d. Rename appropriate profiles. For example

      *SMI-CLI\*)* **RENAME OP OP.OLD**⤸

4. Shut down your operating system and turn off the computer and peripherals.

If you do not know how to shut down your operating system, see *Using the AOS/VS System Management Interface (SMI)* for the correct shut-down procedure.

NOTE: If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

5. Power up your system following the procedures in Chapter 2 "Powering Up the First Time." If this is not your first-time powerup, refer to Chapter 3, "Powering Up Routinely."

6. While in the Starter Main menu, press 6 and New Line to select option 6, "Build or update the system disk."

7. While in the Build or Update System Disk menu, press 3 and New Line, or enter the SOFTWARE keyword, to select option 3, "Load new system software on the disk."

```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm


              Build or Update System Disk Menu

    1  Build the system disk
    2  Format a disk
    3  Load new system software on the disk
    4  Load the default operator profile on the disk
    *  Load new system firmware on the disk



    Enter choice [1]:



    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```
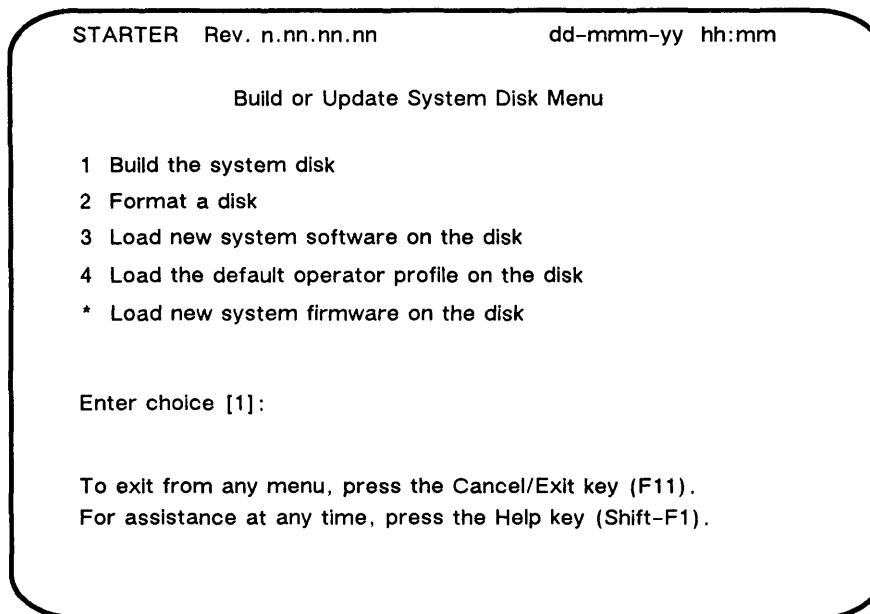
The Starter program will prompt you as follows:

*Enter T (Tape), D (Diskette), or a unit name:   D*

8. Type D to specify a load from diskette. Alternatively, you can enter the unit name; for example, @DPJ10 for diskette. Press New Line.

9. The system displays the following prompt:

*Please insert the first of the "OS UTILITIES MEDIA" diskettes in @DPJ10
Press New Line when ready.*

10. Insert the first volume of the AOS/VS release diskettes and press New Line. Follow the system prompts to load subsequent diskettes. The system loads system software from your diskettes.

When the system finishes loading the AOS/VS release files, Starter displays the Build or Update System Disk menu.

11. Remove the last AOS/VS release diskette.

12. Press the Cancel/Exit function key (F11) to enter the Starter Main Menu. If you need to install an update after installing a release, skip ahead to step 10 in the next section "Installing an AOS/VS Update." If you do not need to install an update, at the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system."

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

        1  Start the default operating system

        2  Start a different operating system

        3  Change the system date or time

        4  Make a physical backup of a disk (using PCOPY)

        5  Restore a physical copy of a disk (using PCOPY)

        6  Build or update the system disk


        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [1]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

The system displays the following message:

*Please wait. The system is being loaded.*
*SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

13. If you renamed any system supplied macros such as :UTIL:SMI_UP.CLI, as described in step 2, check the new versions of these macros in the AOS/VS update to determine if they contain anything new that you should include in your renamed versions. If necessary, use the SED text editor to edit your renamed macros. Refer to the *SED Text Editor User's Manual AOS and AOS/VS* for instructions.

If you have not changed any macros, skip ahead to step 14.

   a. At the SMI_CLI prompt, type the following command line and press New
      Line to turn on Superuser privilege as follows:

      *SMI-CLI)* **SUPERUSER ON)**

   b. At the SMI_CLI prompt, type the following command line and press New
      Line to enter the : directory as follows:

      *SMI-CLI\*)* **DIRECTORY : )**

   c. At the SMI_CLI prompt, enter the delete command to delete the new
      system supplied macros. For example

      *SMI-CLI\*)* **DELETE SMI_UP.CLI )**

   d. At the SMI_CLI prompt, rename the new system supplied macros. For
      example

      *SMI-CLI\*)* **RENAME SMI_UP.CLI1 SMI_UP.CLI)**

14. If you renamed your edited OP or SYSMGR profiles as described in step 3,
    delete the profiles contained in the update, and rename your profiles as follows:

   a. At the SMI_CLI prompt, type the following command line and press New
      Line to turn on Superuser privilege as follows:

      *SMI-CLI)* **SUPERUSER ON)**

   b. At the SMI_CLI prompt, type the following command line and press New
      Line to enter the : directory as follows:

      *SMI-CLI\*)* **DIRECTORY :UPD )**

   c. At the SMI_CLI prompt, enter the delete command to delete the new
      profile. For example

      *SMI-CLI\*)* **DELETE OP.OLD )**

   d. At the SMI_CLI prompt, rename the new profile. For example

      *SMI-CLI\*)* **RENAME OP.OLD )**

# Installing an AOS/VS Update

Each AOS/VS update is shipped on the same medium, tape or diskettes, as the
corresponding release. The update includes a tape or group of diskettes (each with a
paper label marked with UD) and a printed Update Notice.

The update includes improved versions of some programs shipped in the original
AOS/VS release. These program files are shipped in a revision directory named for
the revision (for example, for update 7.63, the revision directory pathname is
:UPDATE:7.63). Loading the update automatically creates the revision directory.
Every update includes all changes from previous updates. For example, update 7.63
includes changes from updates 7.61 and 7.62 and 7.63.

The Update Notice explains reasons for the update and describes how to install it. Updates do not usually include new manuals, but they often do include new documentation changes files and Help files, which are automatically moved into directories :UTIL and :HELP when you load the update.

To install the update, follow these steps.

1.  Read the Update Notice, and make sure you have enough disk space available on the system logical disk unit (LDU) to install the update.

    Also, check the Update Notice for files with the same names as files you have tailored for your system. For the update to succeed, each file in the update must be placed in the AOS/VS directory structure. This means that some files already in the structure will be deleted and replaced. There may be one or two existing file you want to protect (like :UTIL:SMI_UP.CLI and other CLI macros you have edited). The Update Notice will tell you if the update contains any files with the same names of files you may have edited. Then, rename each such existing file (perhaps just add the character 1 to the original name, as in RENAME SMI_UP.CLI SMI_UP1.CLI ) and run the Update tool.

    In addition to the notice of possible filename conflicts, the Update Notice tells how to install the update. You can follow those instructions, instead of these, if you want. Instructions are given here (as well as in the update notice) for your convenience.

2.  If you have changed any system supplied macros such as :UTIL:SMI_UP.CLI, you must rename them before loading the update. If you have not changed any macros, skip ahead to step 3.

    a.  Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from SMI, see the *Using the AOS/VS System management Interface (SMI)* manual for the correct procedure.

    b.  At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

    *SMI-CLI)* **SUPERUSER ON**⟩

    c.  At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

    *SMI-CLI\*)* **DIRECTORY :** ⟩

    d.  Rename appropriate files. For example

    *SMI-CLI\*)* **RENAME SMI_UP.CLI SMI_UP.CLI1.**⟩

3.  If you have changed any profile information (other than password) for user OP
    or SYSMGR, rename the profiles before loading the update. If you have not
    changed the profiles, skip ahead to step 4.

    a.  Enter the CLI from the System Management Interface.  If you do not know
        how to enter the CLI from SMI, see the *Using the AOS/VS System
        Management Interface (SMI)* manual for the correct procedure.

    b.  At the SMI_CLI prompt, type the following command line and press New
        Line to turn on Superuser privilege as follows:

        *SMI-CLI)* **SUPERUSER ON**⏎

    c.  At the SMI_CLI prompt, type the following command line and press New
        Line to enter the : directory as follows:

        *SMI-CLI\*)* **DIRECTORY :** ⏎

    d.  Rename appropriate profiles.  For example

        *SMI-CLI\*)* **RENAME OP OP.OLD**⏎

4.  Shut down your operating system and turn off the computer and peripherals.
    If you do not know how to shut down your operating system, see the *Using the
    AOS/VS System Management Interface (SMI)* manual for the correct shut-down
    procedure.

    NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any
            external drives (starting with the last drive on the peripheral bus),
            before turning on the computer unit.  When powering down the
            system, turn off any external drives (starting with the last drive on the
            peripheral bus), before turning off the computer unit.

5.  Power up your system following the instructions in the "Starting from a Diskette"
    section in this chapter.  The steps in that section tell you how to insert a
    diskette, and power up the computer from the SCP System Media software.

6. While in the Change Preset Values menu, press 3 and New Line to select option 3, "Start from a different device."

```
                    Change Preset Values Menu
          1   Continue the powerup
          2   Change the system date or time
          3   Start from a different device
          4   Change the default device
          5   Change the time-out delay for Automatic Program Load  Menu
          6   Enter the SCP CLI
          7   Change the system console
          8   Select diagnostics sequence
          9   Configure parallel printer port
          10  Select positional tracking device types for tablets
          11  Select system clock type


          For assistance, press the Help key (Shift-F1) or H
          To exit from this menu, press the Cancel/Exit key (F11) or ESC

          Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

7. While in the Start a Different Device menu, press 2 and New Line to select option 2, "Diskette."

```
                    Start from a Different Device


          1 Hard disk
          2 Diskette
          3 Tape



          To exit from this menu, press the Cancel/Exit key (F11) or ESC
          For assistance, press the Help key (Shift-F1) or H


          Start from which device? [n]
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

NOTE:    If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit key function (F11) or the Escape key or Break/Esc key on your keyboard.

8. When you select option 2, the system prompts you with

   *Please insert diskette, then press New Line key (or the Enter key)*
   *to continue, or press the ESC key to cancel selection*

   Insert your diskette and press New Line. The system loads software from your diskette.

   NOTE:   If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

   ***Missing or Bad Media***

   *To return to the menu, press the Cancel/Exit key.*

   If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

9. Remove the SCP System Media diskette, then insert the first Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx  diskette" in its drive. The system loads the first Starter diskette, then prompts you to insert the second Starter diskette and press New Line when ready. When the second Starter diskette is finished loading, the screen displays the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn              dd-mmm-yy  hh:mm

                    STARTER Main Menu

     1  Start the default operating system

     2  Start a different operating system

     3  Change the system date or time

     4  Make a physical backup of  disk (using PCOPY)

     5  Restore a physical copy of a disk (using PCOPY)

     6  Build or update the system disk


     The default operating system will start up automatically
     unless you respond within 45 seconds


     Enter choice [ ]:

     To exit from any menu, press the Cancel/Exit key (F11).
     For assistance at any time, press the Help key (Shift-F1).
```

10. While in the Starter Main Menu, press 6 and New Line to select option 6, "Build or update the system disk." The system displays the Build or Update System Disk menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                    Build or Update System Disk Menu

     1  Build the system disk
     2  Format a disk
     3  Load new system software on the disk
     4  Load the default operator profile on the disk
     *  Load new system firmware on the disk


     Enter choice [1]:



     To exit from any menu, press the Cancel/Exit key (F11).
     For assistance at any time, press the Help key (Shift-F1).
```
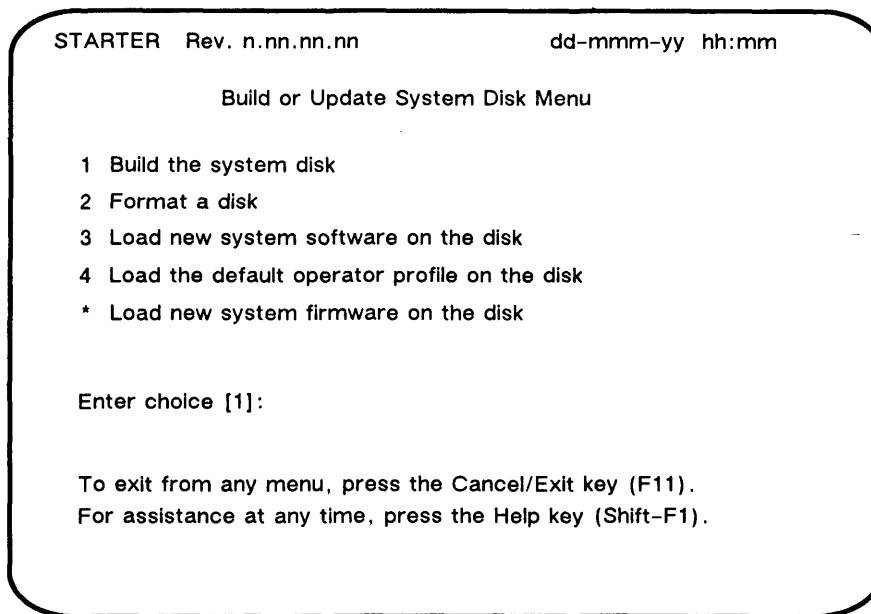
11. To load the AOS/VS update diskettes, select option 3, "Load new system software on the disk" on the Build or Update System Disk Menu.

The system displays the following prompt:

*Please insert the first of the "OS UTILITIES MEDIA" diskettes in unit @DPJ10.*

*Press New Line when ready.*

12. Remove the second Starter diskette. Insert the first volume of the update diskettes, labeled "UD nn AOS/VS UTILITIES MEDIA Rev. 7.xx," then press New Line. Follow the system prompts to load subsequent diskettes.

13. When the system finishes loading the update files, Starter displays the Build or Update the System Disk menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm


                  Build or Update System Disk Menu

        1  Build the system disk
        2  Format a disk
        3  Load new system software on the disk
        4  Load the default operator profile on the disk
        *  Load new system firmware on the disk


        Enter choice [1]:


        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

14. Remove the AOS/VS update diskette.

15. Press the Cancel/Exit function key (F11) to return to the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm
                        STARTER Main Menu

        1  Start the default operating system
        2  Start a different operating system
        3  Change the system date or time
        4  Make a physical backup of a disk (using PCOPY)
        5  Restore a physical copy of a disk (using PCOPY)
        6  Build or update the system disk

        The default operating system will start up automatically
        unless you respond within 45 seconds

        Enter choice [1]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

16. While in the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system." The system displays the following message.

    *Please wait. The system is being loaded.*
    *SYSGEN:MV2000_SMI.PR*

    The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

17. Press New Line and log on.

18. If you renamed any system supplied macros such as :UTIL:SMI_UP.CLI, as described in step 2, check the new versions of these macros in the AOS/VS update to determine if they contain anything new that you should include in your renamed versions. If necessary, use the SED text editor to edit your renamed macros. Refer to the *SED Text Editor User's Manual AOS and AOS/VS* for instructions.

    If you have not changed any macros, skip ahead to step 19.

    a. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

       *SMI-CLI)* **SUPERUSER ON**⟩

    b. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

       *SMI-CLI\*)* **DIRECTORY :** ⟩

    c. At the SMI_CLI prompt, enter the delete command to delete the new system supplied macros. For example

       *SMI-CLI\*)* **DELETE SMI_UP.CLI** ⟩

    d. At the SMI_CLI prompt, rename the new system supplied macros. For example

       *SMI-CLI\*)* **RENAME SMI_UP.CLI1   SMI_UP.CLI**⟩

19. If you renamed your edited OP or SYSMGR profiles as described in step 3, delete the profiles contained in the update, and rename your profiles as follows:

    a. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

       *SMI-CLI)* **SUPERUSER ON**⟩

    b. At the SMI_CLI prompt, type the following command line and press New Line to enter the : directory as follows:

       *SMI-CLI\*)* **DIRECTORY :UPD** ⟩

    c. At the SMI_CLI prompt, enter the delete command to delete the new profile. For example

       *SMI-CLI\*)* **DELETE OP.OLD** ⟩

d. At the SMI_CLI prompt, rename the new profile. For example

*SMI-CLI\*)* **RENAME OP.OLD** )

# Installing SCP System Media

The diskette labeled SCP System Media software contains the system microcode, powerup diagnostics, and a program to install power-up diagnostics on the disk. The diskette labeled ADESL contains the ADESL file.

Follow the procedures in this section to install a new release of SCP System Media on the reserved diagnostics area of your disk or to reinstall SCP System Media if you are reinstalling AOS/VS on the system disk as described in Appendix B. Using these procedures you first install the ADESL file and then the powerup diagnostics.

NOTE:      Computer systems with preinstalled AOS/VS contain SCP System Media on the system disk. You should install power-up diagnostics if you are installing a new revision of SCP System Media, or if you are building a new disk to use as your system disk as described in Appendix B.

## Installing ADESL

You install the file ADESL much as you would any other system software file. The following procedure assumes that AOS/VS is currently running on your system. Install the file ADESL in the AOS/VS root directory of your system disk as follows:

1.    Find the ADESL diskette containing the ADESL file for AOS/VS. Read the Release Notice that came with the SCP System Media.

2.    Insert the ADESL diskette in the diskette drive.

3.    Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

4.    From the CLI command line, enter the AOS/VS root directory, as shown below:

*SMI_CLI)* **SUPERUSER ON** )
*SMI_CLI\*)* **DIR :** )

5.    Enter the command line below.

*SMI_CLI\*)* **LOAD_II/V/DEL/NACL @DPJ10** )

6.    When it is finished loading the software, the system displays the following message:

*dd–mmm–yy        hh:mm:ss*

*ADESL*

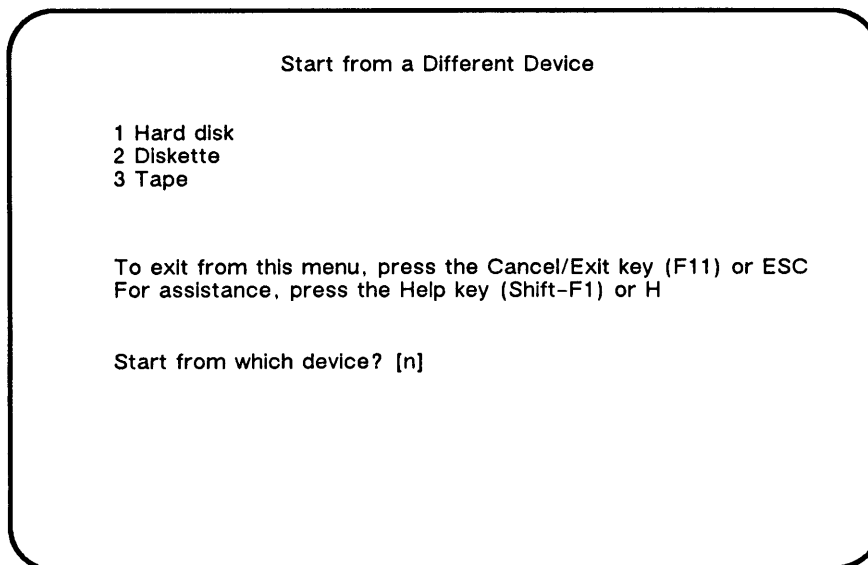7.    Remove the diskette from the drive.

8. Shut down your system completely as described in the *Using the AOS/VS System Management Interface (SMI)* manual. Turn off computer power.

Follow the instructions in the next section, "Installing Power-Up Diagnostics" to install power-up diagnostics.

## Installing Power-Up Diagnostics

It will not harm your system if you don't install the contents of your SCP System Media on disk, however, if you don't install the contents on disk you must insert the SCP System Media diskette in its drive every time you power up your computer.

1. Follow the instructions in the section "Powering Up from a Diskette" in this chapter. The steps in that section tell you how to insert a diskette, power up the computer, and load the SCP System Media software.

2. Proceed through powerup until the system displays the Change Preset Values menu.

3. While in the Change Preset Values menu, select option 3, "Start from a different device." The system displays the following menu:

```
                        Start from a Different Device


        1 Hard disk
        2 Diskette
        3 Tape



        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        Start from which device? [n]
```

| Screen Display | Indicates |
|----------------|-----------|
| n | Default choice |

4.   Select option 2, "Diskette," and press New Line.

The system prompts you with

*Please insert diskette, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection.*

Insert your diskette and press New Line. The system loads software from your diskette. If you make a mistake and want to cancel your selection, press the Escape key. The system returns you to the Change Preset Value menu.

NOTE:   If you accidently press New Line before you insert your diskette, your system attempts to load software from the empty diskette drive. Then after about two or three minutes the system displays the following message:

**Missing or Bad Media**

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

5.   Press the space bar once to continue.

The system displays the following message on your screen

```
Do you want to install power-up diagnostics on your hard disk?

If these diagnostics are not installed on the hard disk, you will need to insert
this diskette each time you power up.  For the diagnostics to work, the disk on
which they will be installed must have a Diagnostic Area reserved by the
operating system software formatter.


Install power-up diagnostics (Y or N)?
```

6.   Since you do want to install, choose the default, Y, and press New Line.  The following message appears on your screen:

*Beginning Files Transfer*

When finished, the following message appears:

*Files Transfer Completed*

7.  When the Automatic Program Load Menu appears, you can either wait for the pre-set pause (originally set at 45 seconds) or press New Line to continue immediately with the default power-up sequence.

8.  Remove the SCP System Media diskette from the drive.

9.  When the Change the System Date or Time screen appears, enter the correct date and time as described in Chapter 3. The system displays the Starter Main Menu.

10. While in the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system." After a few moments, AOS/VS will come up and display its log-on banner.

# Creating a Backup of Operating System and Utility Files

After updating the system, you should backup the operating system and utility files. This can save many steps if you ever need to reinstall AOS/VS on your system disk. The SYSDISKETTE.CLI macro copies all files in and below directories (:), :UTIL, :HELP, :UPDATE, and :SYSGEN directories. This backup copy will also include a copy of the SCP System Media. You might want to change this macro to exclude files if you have large non-Data General files in or below the :UTIL directory (for example, large INFOS II database files).

To make a backup diskette set of operating system and utility files, follow these steps:

1.  If computer power is not turned on, turn on the computer by pressing the computer's power button.

    NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2.  If the diskette drive's latch is not pointing down, turn it down.



Diskette drive's latch

INT-01789
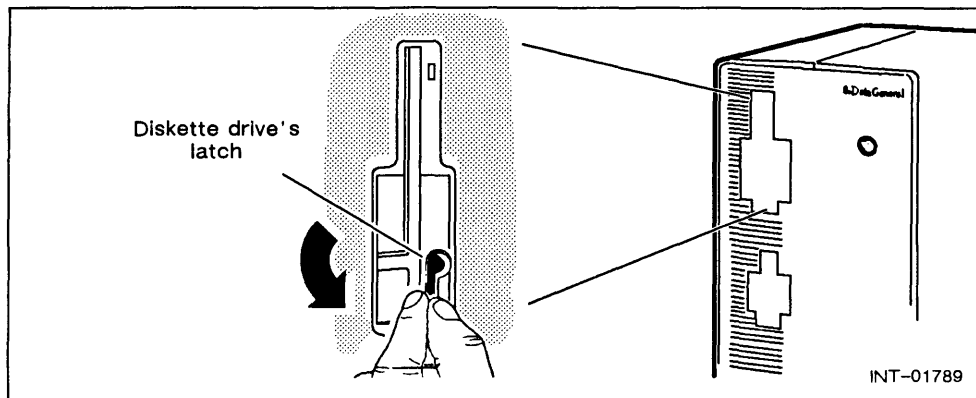
3. Remove the blank diskette from its storage envelope; be careful not to touch the exposed areas of the magnetic disk.

4. Hold the diskette as shown, and carefully slide it all the way into the diskette drive. Do not force or bend the diskette.



INT-01790
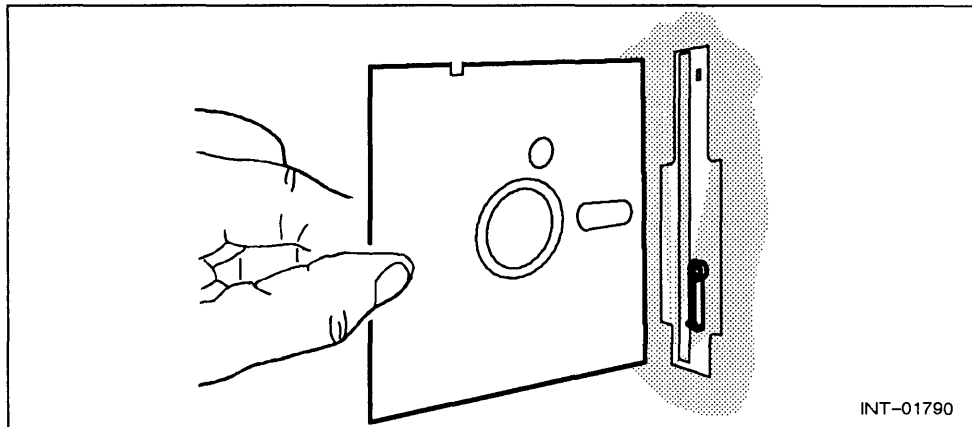
5. With the diskette in the drive, gently turn the drive's latch so that it is pointing to the left. Turning the latch to the left engages the diskette drive. (If the latch offers any resistance, do not force it. Turn the latch back so that it is pointing down again, remove the diskette, reinsert it, and try engaging the diskette drive again.)

6. Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the System Management Interface, see *Using the AOS/VS System Management Interface (SMI)* for the correct procedure.

7. At the SMI_CLI prompt, type the following command line and press New Line to turn on Superuser privilege as follows:

   *SMI-CLI)* **SUPERUSER ON**⟩

8. At the SMI_CLI prompt, type the following command line and press New Line to enter the :SYSGEN directory as follows:

   *SMI-CLI\*)* **DIRECTORY :SYSGEN** ⟩

9. At the SMI_CLI prompt, type SYSDISKETTE and press New Line to execute the SYSDISKETTE macro as follows:

   *SMI-CLI\*)* **SYSDISKETTE** ⟩

   The SYSDISKETTE macro will copy STARTER.SYS onto the first diskette.

10. Remove the first diskette from the diskette drive and reinsert it into its storage envelope.

11. Remove the second blank diskette from its storage envelope; being careful not to touch the exposed areas of the magnetic disk.

12. Carefully slide the second diskette all the way into the diskette drive.

13. At the SMI_CLI prompt, type SYSDISKETTE and press New Line to execute the SYSDISKETTE macro as follows:

    *SMI-CLI\*)* **SYSDISKETTE** ⟩

    The SYSDISKETTE macro will copy STARTER.SYS onto the second diskette.

14. Remove the second diskette from the diskette drive and reinsert it into its storage envelope.

15. Remove the third blank diskette from its storage envelope. Be careful not to touch the exposed areas of the magnetic disk.

16. Carefully slide the third diskette all the way into the diskette drive.

17. At the SMI_CLI prompt, type SYSDISKETTE and press New Line to execute the SYSDISKETTE macro.

    The SYSDISKETTE macro will first dump PROFILE, VOL1 onto the third diskette. When the system prompts you to remove the diskette and then insert it again, just press New Line to write to the diskette.

18. Remove the third diskette from the diskette drive and reinsert it into its storage envelope.

19. The system will prompt you when to insert the remaining diskettes.


End of Chapter

.

# Appendix A
# Reinstalling AOS/VS on the System Disk from Tapes

Data General shipped your system with preinstalled AOS/VS –– the AOS/VS operating system and the SCP System Media software already installed on the system disk. If you replace your original system disk with a new hard disk, if your system disk is damaged, or after you have reformatted your system disk, you won't be able to bring up AOS/VS on it. You will need to perform a special procedure to reinstall AOS/VS on the disk.

CAUTION: *Follow the procedures in this appendix to reinstall AOS/VS on the disk ONLY when you replace your original system disk with a new hard disk, when your system disk is damaged, or when your system disk has been reformatted.*

Refer to the instructions in the section appropriate for your type of backup.

● Reinstalling from physical backup copy (using PCOPY).

● Reinstalling from backup copy of operating system and utility files.

● Reinstalling from AOS/VS release and update media you received from Data General.

It usually takes less time to reinstall operating system and utility files on your system disk from a physical backup copy or backup copy of operating system and utility files. You should always use your most recent and reliable backup copy.

# Reinstalling from Physical Backup

If you used option 4 on the Starter Main Menu to create a physical copy of a hard disk, you can restore the disk from the backup copy described in this section. Restoring the disk from physical backup involves the following tasks:

- Powering up from SCP System Media

- Installing the Starter program from the AOS/VS update

- Installing the physical backup

- Installing ADESL and diagnostics

- Restoring system-wide files

Perform these tasks as follows:

## Powering Up from SCP System Media

1. Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

2. Power up your system following the instructions in "Starting from a Tape" in Chapter 5. Before reading that section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drive and the computer system's power switch.

3.  While in the Change Preset Values Menu, press 3 and New Line to select option 3, "Start from a different device."

```
                    Change Preset Values Menu
           1   Continue the powerup
           2   Change the system date or time
           3   Start from a different device
           4   Change the default device
           5   Change the time-out delay for Automatic Program Load Menu
           6   Enter the SCP CLI
           7   Change the system console
           8   Select diagnostics sequence
           9   Configure parallel printer port
          10   Select positional tracking device types for tablets
          11   Select system clock type


          For assistance, press the Help key (Shift-F1) or H
          To exit from this menu, press the Cancel/Exit key (F11) or ESC

          Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| n | Default choice |

4.  Select the device that you want to start from by entering the option number for the device and pressing New Line. Press 3 and New Line to select option 3, "Tape."

```
                    Start from a Different Device


          1 Hard disk
          2 Diskette
          3 Tape



          To exit from this menu, press the Cancel/Exit key (F11) or ESC
          For assistance, press the Help key (Shift-F1) or H


          Start from which device? [n]
```

| Screen Display | Indicates |
|---|---|
| n | Default choice |

NOTE:   If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5.   When you select option 3, the system prompts you with

*1   1/8-inch Cartridge Tape*
*2   1/2-inch Cartridge or Reel Tape*

Choose either option 1, the 1/8-inch cartridge tape drive, or option 2, the 1/2-inch cartridge tape drive or the reel-to-reel tape drive. Once you choose either option, the system prompts you with

*Please insert or mount tape, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection.*

Insert or mount your tape on the proper drive and press New Line. The system loads software from your tape.

NOTE:   If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

**\*\*Missing or Bad Media\*\***

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

## Installing the Starter Program from the AOS/VS Update

6.   Remove the SCP System Media tape, then insert or mount the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx" in its drive.

7.   When prompted for which device, enter 3 for tape as follows:

*Start from which device? [1]:* **3** 𝑙

The system then asks you to insert or mount the specified medium, and to press the space bar when ready; for example:

*Please insert tape.  Press the space bar to continue.*

8.  Press the space bar if you are loading from 1/8-inch cartridge tape. Press New Line if you are loading from either 1/2-inch cartridge tape or reel-to-reel tape. When prompted for a tape file number type 5, then press New Line.

    *Tape file number?* **5** ⟩

    The system loads the Starter program from the tape. When the program is finished loading, the screen displays the Starter Main Menu.

    Depending on the condition of your disk, the system may replace menu options 1 and 2 with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn                 dd-mmm-yy  hh:mm

                      STARTER Main Menu

    *  Start the default operating system
    *  Start a different operating system
    3  Change the system date or time
    4  Make a physical backup of a disk (using PCOPY)
    5  Restore a physical copy of a disk (using PCOPY)
    6  Build or update the system disk

    The default operating system will start up automatically
    unless you respond within 45 seconds


    Enter choice [ ]:

    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```

## Installing the Physical Backup Copy

9.  While in the Starter Main menu, press 5 and New Line or enter the RESTORE keyword to select option 5, "Restore a physical copy of a disk (using PCOPY)."

    The system displays a screen and prompts

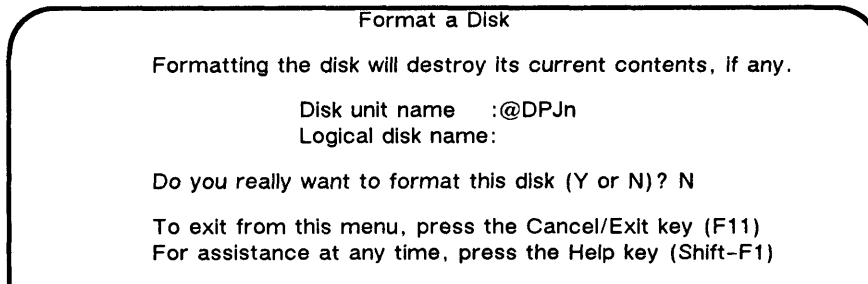    *Enter T (Tape), D (Diskette), or a unit name: T*

10. Type T to specify a restore from tape. Alternatively, you can enter the device name; for example, @MTJ10 for a 1/2-inch cartridge tape drive.

    The system displays the following prompt:

    *Enter the disk unit name: @DPJ0*

11. Press New Line to restore your disk unit. If you have two disks, type @DPJ1 and press New Line.

   If your disk has not yet been software formatted, the system displays the following menu:

```
                         Format a Disk

            Formatting the disk will destroy its current contents, if any.

                    Disk unit name    :@DPJn
                    Logical disk name:

            Do you really want to format this disk (Y or N)? N

            To exit from this menu, press the Cancel/Exit key (F11)
            For assistance at any time, press the Help key (Shift-F1)
```

| Screen Display | Indicates |
|---|---|
| n | 0 or 1 depending on specified disk unit |

   The system prompts you with

   *Do you really want to format this disk?*

12. Type Y and press New Line. The system displays the following message:

   *Please wait while the disk is being software formatted, @DPJn*

   Software formatting a hard disk takes from 1 to 2 hours. Once you have software formatted the disk, the Starter program returns you to the PCOPY utility. Refer to the *How to Generate and Run AOS/VS* manual for information on PCOPY. When PCOPY is finished, press New Line to return to the Starter Main Menu.

After restoring the system disk using the physical backup, you must reload the ADESL file, and the power–up diagnostics. You should also reload User–Friendly Diagnostics if they were installed on the system disk.

## Installing ADESL and Diagnostics

13. Follow the instructions in "Installing ADESL" and "Installing Power–Up Diagnostics" sections in Chapter 5. The steps in that chapter tell you how to insert a cartridge tape or mount a reel–to–reel tape, power up the computer, from the SCP System Media software, and install ADESL and install power–up diagnostics from tape.

14. Install User–Friendly Diagnostics (if applicable) following the instructions in the *ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

After installing the power–up diagnostics or User–Friendly Diagnostics (if applicable), you're ready to reload user files from backup.

## Restoring System-Wide Files

15. Log on to the system as SYSMGR and enter SMI.

16. While in the SMI Main menu, press 2 and New Line to select option 2, "Back up (dump) or restore (load) files." While in the Archive menu, press 4 and New Line or enter the SYSRESTORE keyword to select option 4, "Restore system-wide files."

17. When the Restore System-Wide Files screen appears, respond to the prompts as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

# Reinstalling from System Disk Backup

If you created a backup copy of operating system and utility files as described in Chapter 5, you can restore the disk from the backup copy described in this section. Restoring the disk from system disk backup involves the following tasks:

- Powering Up from SCP System Media

- Installing the system disk backup

- Installing the default operating system

- Installing ADESL and diagnostics

- Restoring system-wide files

Perform these tasks as follows:

## Powering Up from SCP System Media

1. Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

2. Power up your system following the instructions in "Starting from a Tape" in Chapter 5. Before reading that section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drive and the computer system's power switch.

3.  While in the Change Preset Values Menu, press 3 and New Line to select option 3, "Start from a different device."

```
                        Change Preset Values Menu

         1   Continue the powerup
         2   Change the system date or time
         3   Start from a different device
         4   Change the default device
         5   Change the time-out delay for Automatic Program Load Menu
         6   Enter the SCP CLI
         7   Change the system console
         8   Select diagnostics sequence
         9   Configure parallel printer port
        10   Select positional tracking device types for tablets
        11   Select system clock type


        For assistance, press the Help key (Shift-F1) or H
        To exit from this menu, press the Cancel/Exit key (F11) or ESC

        Enter choice [n]:
```

| Screen Display | Indicates |
|---|---|
| n | Default choice |

4.  Select the device that you want to start from by entering the option number for the device and pressing New Line. Press 3 and New Line to select option 3, "Tape."

```
                        Start from a Different Device


         1 Hard disk
         2 Diskette
         3 Tape


        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        Start from which device? [n]
```

| Screen Display | Indicates |
|---|---|
| n | Default choice |

NOTE: If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5.  When you select option 3, the system prompts you with

*1   1/8-inch Cartridge Tape*
*2   1/2-inch Cartridge or Reel Tape*

Choose either option 1, the 1/8-inch cartridge tape drive, or option 2, the 1/2-inch cartridge tape drive or the reel-to-reel tape drive. Once you choose either option, the system prompts you with

*Please insert or mount tape, then press New Line key (or the Enter key) to continue, or press the ESC key to cancel selection.*

## Installing the Starter Program from System Disk Backup

6.  Remove the SCP System Media tape, then insert or mount the system disk backup tape of AOS/VS system and utility files in its drive.

NOTE: If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

*\*\*Missing or Bad Media\*\**

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

7.  Press the space bar if you are loading from 1/8-inch cartridge tape.  Press New Line if you are loading from either 1/2-inch cartridge tape or reel-to-reel tape. When prompted for a tape file number type 5, then press New Line.

*Tape file number?* **5 )**

The system loads the Starter program from the tape.  When the program is finished loading, the screen displays the Starter Main Menu.

Depending on the condition of your disk, the system may replace menu options 1 and 2 with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy hh:mm

                    STARTER Main Menu

      *  Start the default operating system

      *  Start a different operating system

      3  Change the system date or time

      4  Make a physical backup of a disk (using PCOPY)

      5  Restore a physical copy of a disk (using PCOPY)

      6  Build or update the system disk


      The default operating system will start up automatically
      unless you respond within 45 seconds


      Enter choice [ ]:

      To exit from any menu, press the Cancel/Exit key (F11).
      For assistance at any time, press the Help key (Shift-F1).
```

8.  While in the Starter Main Menu, press 6 and New Line to select option 6, "Build or update the system disk." The system displays the following menu:

    NOTE:   Building a disk with this option includes software formatting the disk. If you are reinstalling AOS/VS onto a recently formatted disk, you might not need to use option 1, "Build the system disk." You can load the operating system onto a properly formatted disk using option 3, "Load new system software on the disk."

```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm

                  Build or Update System Disk Menu

          1  Build the system disk
          2  Format a disk
          3  Load new system software on the disk
          4  Load the default operator profile on the disk
          *  Load new system firmware on the disk


          Enter choice [1]:



          To exit from any menu, press the Cancel/Exit key (F11).
          For assistance at any time, press the Help key (Shift-F1).
```

9.   While in the Build or Update System Disk menu, press 1 and New Line to select option 1, "Build the system disk." The system displays the Build the System Disk menu.

```
                      Build the System Disk

        Building the disk will destroy its current contents, if any.

             Disk unit name    :@DPJ0
             Logical disk name:
        Do you really want to build this disk (Y or N)? N

        To exit from this menu, press the Cancel/Exit key (F11)
        For assistance at any time, press the Help key (Shift-F1)
```

The Build the System Disk menu may also show a logical disk name. If not, the system will provide a logical disk name when you execute the AOS/VS Disk Formatter program.

The system prompts you with

*Do you really want to build this disk?*

10.   Type Y and press New Line. The system displays the following message:

*Please wait while the disk is being software formatted, @DPJ0*

Software formatting a hard disk takes from 1 to 2 hours. Once you have software formatted the disk, the system prompts you to insert or mount the system disk backup tape of operating system and utility files.

11.   If you are loading from an 1/8-inch cartridge tape the system displays the following prompt:

*Mount the "OS UTILITIES MEDIA" tape in unit @MTJ0.*

*Press New Line when ready.*

If you are loading from a 1/2-inch cartridge tape or reel-to-reel tape, the system displays the following prompt:
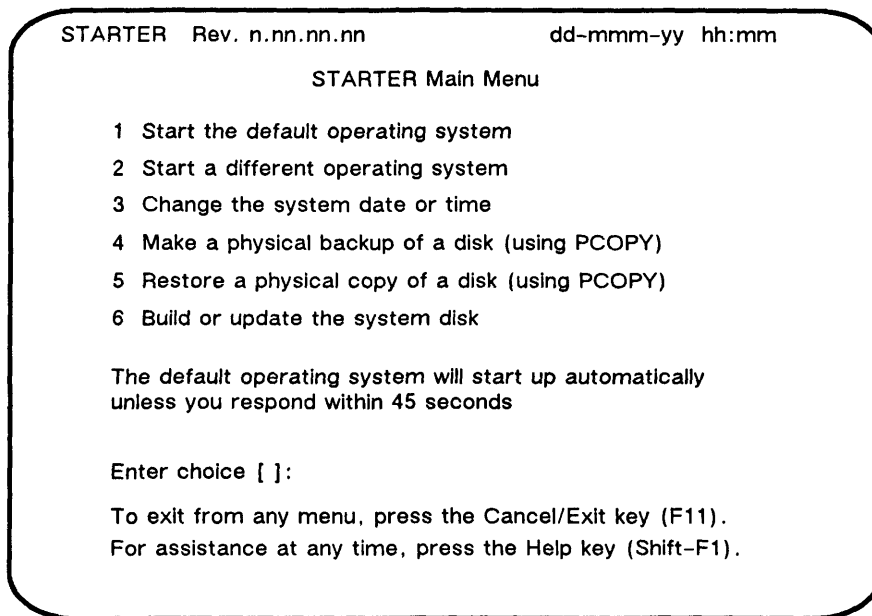
*Mount the "OS UTILITIES MEDIA" tape in unit @MTJ10.*

*Press New Line when ready.*

12.   Press New Line.  When the system finishes loading the system disk backup files, Starter displays the Build or Update System Disk Menu.

13.   Remove the AOS/VS system disk backup tape.

## Loading the Default Operating System

14.   Press Cancel/Exit (F11) to return to the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm
                         STARTER Main Menu

        1  Start the default operating system
        2  Start a different operating system
        3  Change the system date or time
        4  Make a physical backup of a disk (using PCOPY)
        5  Restore a physical copy of a disk (using PCOPY)
        6  Build or update the system disk

        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [ ]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

15.   From the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system."  The system displays the following message:

*Please wait.  The system is being loaded.*
*SYSGEN:MV2000_SMI.PR*

The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

Press New Line and log on.

069-000293

16. Shut down your system completely as described in the *Using the AOS/VS System Management Interface (SMI)* manual. Turn off computer power.

   NOTE: If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

## Loading ADESL and Diagnostics

17. Install the ADESL file and power-up diagnostics on the hard disk as described in "Installing ADESL" and "Installing Powerup Diagnostics" sections of Chapter 5. These sections describes how to install ADESL and power-up diagnostics from cartridge or reel-to-reel tape to your system disk.

18. If User-Friendly Diagnostics were installed on the system disk, reinstall them following the instructions in the *ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

After installing the power-up diagnostics, or User-Friendly Diagnostics (if applicable), you're ready to reload user files from backup you should reload user files from backup.

## Restoring System-Wide Files

19. Log on to the system as SYSMGR and enter the SMI.

20. While in the SMI Main menu, press 2 and New Line to select option 2, "Back up (dump) or restore (load) files"; then select option 4, "Restore system-wide files" on the Archive Menu. (Alternatively, you could enter the keyword SYSRESTORE from the SMI Main Menu.)

21. When the Restore System-Wide Files screen appears, respond to the prompts as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

# Reinstalling from Release and Update Media

If you did not create a backup tape of the system as described in Chapter 5, you must reinstall AOS/VS from release and update media. Restoring the disk from release and update media involves the following tasks:

- Powering up from SCP System Media
- Installing the AOS/VS files from tape
- Loading the default operating system
- Installing ADESL and diagnostics
- Restoring system-wide files

Perform these tasks as follows:

NOTE:  AOS/VS programs and files are on a tape labeled "AOS/VS OS UTILITIES MEDIA REV 7.xx." Any update to this tape is labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx."

## Powering Up from SCP System Media

1. Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

   NOTE:  If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2. Power up your system following the instructions in "Starting from a Tape" in Chapter 5. Before reading this section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drive and the computer system's power switch.

3. While in the Change Preset Values Menu, press 3 and New Line to select option 3, "Start from a different device."

```
                    Change Preset Values Menu

        1   Continue the powerup
        2   Change the system date or time
        3   Start from a different device
        4   Change the default device
        5   Change the time-out delay for Automatic Program Load Menu
        6   Enter the SCP CLI
        7   Change the system console
        8   Select diagnostics sequence
        9   Configure parallel printer port
        10  Select positional tracking device types for tablets
        11  Select system clock type


        For assistance, press the Help key (Shift-F1) or H
        To exit from this menu, press the Cancel/Exit key (F11) or ESC

        Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

4. While in the Start a Different Device Menu, press 3 and New Line to select option 3, "Tape."

```
                    Start from a Different Device


        1 Hard disk
        2 Diskette
        3 Tape


        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        Start from which device? [n]
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

NOTE: If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5. When you select option 3, the system prompts you with

   *1   1/8–inch Cartridge Tape*
   *2   1/2–inch Cartridge or Reel Tape*

   Choose either option 1, the 1/8–inch cartridge tape drive, or option 2, the 1/2–inch cartridge tape drive or the reel–to–reel tape drive. Once you choose either option, the system prompts you with

   *Please insert or mount tape, then press New Line key (or the Enter key)*
   *to continue, or press the ESC key to cancel selection.*

6. Remove the SCP System Media tape, then mount or insert the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA Rev 7.xx"
   *04* *60*
   Insert or mount your tape on the proper drive and press New Line. The system loads software from your tape.

   NOTE:   If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

   **Missing or Bad Media**

   *To return to the menu, press the Cancel/Exit key.*

   If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

## Installing the Starter Program from the AOS/VS Update

7. Press the space bar if you are loading from 1/8–inch cartridge tape. Press New Line if you are loading from either 1/2–inch cartridge tape or reel–to–reel tape. When prompted for a tape file number type 5, then press New Line.

   *Tape file number?*  5 ⏎

   The system loads the Starter program from the tape. When the program is finished loading, the screen displays the Starter Main Menu.

Depending on the condition of your disk, the system may replace menu options 1 and 2 with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

        *  Start the default operating system
        *  Start a different operating system
        3  Change the system date or time
        4  Make a physical backup of the disk (using PCOPY)
        5  Restore a disk from a physical backup (using PCOPY)
        6  Build or update the system disk

        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [ ] :

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

8.  While in the Starter Main Menu, press 6 and New Line to select option 6, "Build or update the system disk." The system will display the Build or Update System Disk menu.

    NOTE:  Building a disk with this option includes software formatting the disk. If you are reinstalling AOS/VS onto a recently formatted disk, you might not need to use option 1, "Build the system disk." You can load the operating system onto a properly formatted disk using option 3, "Load new system software on the disk."

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                    Build or Update System Disk Menu

          1  Build the system disk
          2  Format a disk
          3  Load new system software on the disk
          4  Load the default operator profile on the disk
          *  Load new system firmware on the disk


          Enter choice [1]:


          To exit from any menu, press the Cancel/Exit key (F11).
          For assistance at any time, press the Help key (Shift-F1).
```

**9.** While in the Build or Update System Disk Menu, press 1 and New Line to select option 1, "Build the system disk." The system displays the Build the System Disk menu.

```
                    Build the System Disk

      Building the disk will destroy its current contents, if any.

          Disk unit name    :@DPJ0
          Logical disk name:
      Do you really want to build this disk (Y or N)? N

      To exit from this menu, press the Cancel/Exit key (F11)
      For assistance at any time, press the Help key (Shift-F1)
```

The Build the System Disk menu may also show a logical disk name. If not, the system will provide a logical disk name when you execute the AOS/VS Disk Formatter program.

**10.** Type Y and press New Line. Your screen will display the message

*Please wait while the disk is being software formatted, @DPJ0*

Software formatting a disk takes from 1 to 2 hours.

## Installing AOS/VS Files

11. Remove the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx tape." Mount or insert the AOS/VS 7.xx release tape labeled "AOS/VS OS UTILITIES MEDIA REV 7.xx."

12. If you are loading from an 1/8-inch cartridge tape, the system displays the following prompt:

    *Mount the "OS SYSTEM MEDIA" tape in unit @MTJ0.*

    *Press New Line when ready.*

    If you are loading from either a 1/2-inch cartridge tape or a reel-to-reel tape, the system displays the following prompt:

    *Mount the "OS SYSTEM MEDIA" tape in unit @MTJ10.*

    *Press New Line when ready.*

13. Press New Line. When the program finishes loading the operating system release tape, it displays the Build or Update System Disk Menu.

14. Select option 3, "Load new system software on the disk" on the Build or Update System Disk Menu.

```
STARTER   Rev. n.nn.nn.nn              dd-mmm-yy  hh:mm

              Build or Update System Disk Menu

      1  Build the system disk
      2  Format a disk
      3  Load new system software on the disk
      4  Load the default operator profile on the disk
      *  Load new system firmware on the disk


      Enter choice [1]:


      To exit from any menu, press the Cancel/Exit key (F11).
      For assistance at any time, press the Help key (Shift-F1).
```

15. Remove the AOS/VS release tape labeled "AOS/VS OS UTILITIES MEDIA REV 7.xx," then mount or insert the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx"

    If you are loading from an 1/8–inch cartridge tape the system displays the following prompt:

    *Mount the "OS UTILITIES MEDIA" tape in unit @MTJ0.*

    *Press New Line when ready.*

    If you are loading from an 1/2–inch cartridge tape the system displays the following prompt:

    *Mount the "OS UTILITIES MEDIA" tape in unit @MTJ10.*

    *Press New Line when ready.*

16. Press New Line. The filenames of the files being loaded will then scroll on your screen for up to an hour. Then the following message will display at the bottom of the screen:

    *Please wait while bootstrap software is installed on disk, DPJ0_LDU*

    When the system finishes loading the system disk backup files, the Starter program redisplays the Build or Update System Disk Menu.

17. Remove the AOS/VS update tape.

18. Press Cancel/Exit (F11) to return to the Starter Main Menu.

```
 STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm
                       STARTER Main Menu

       1  Start the default operating system
       2  Start a different operating system
       3  Change the system date or time
       4  Make a physical backup of the disk (using PCOPY)
       5  Restore a disk from a physical backup (using PCOPY)
       6  Build or update the system disk

     The default operating system will start up automatically
     unless you respond within 45 seconds


     Enter choice [ ]:

     To exit from any menu, press the Cancel/Exit key (F11).
     For assistance at any time, press the Help key (Shift-F1).
```

19. While in the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system." The system displays the following message:

    *Please wait. The system is being loaded.*
    *SYSGEN:MV2000_SMI.PR*

    The default operating system will start up and, after a minute or two, you will see your system's log–on banner.

    Press New Line and log on as described in Chapter 2.

## Loading ADESL and Diagnostics

20. Install the ADESL file and power–up diagnostics on the hard disk as described in "Installing ADESL" and "Installing Power–up Diagnostics" sections in Chapter 5. These sections describes how to install ADESL and power–up diagnostics from cartridge or reel–to–reel tape to your system disk.

21. If User–Friendly Diagnostics were installed on the system disk, reinstall them following the instructions in the *ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

After you have reinstalled AOS/VS including ADESL, the power–up diagnostics, and User–Friendly Diagnostics (if applicable), you're ready to reload user files from backup.

## Restoring System–Wide Files

22. Log on to the system as SYSMGR and enter SMI.

23. Select option 2, "Back up (dump) or restore (load) files" on the SMI Main Menu. While in the Archive menu press 4 and New Line or enter the keyword SYSRESTORE to select option 4, "Restore system–wide files."

24. When the Restore System–Wide Files screen appears, proceed as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

End of Appendix

# Appendix B
# Reinstalling AOS/VS on the System
# Disk from Diskettes

Data General shipped your system with preinstalled AOS/VS -- the AOS/VS operating system and the SCP System Media software already installed on the system disk. When you replace your original system disk with a new hard disk, when your system disk is damaged, or after you have reformatted your system disk, you won't be able to bring up AOS/VS on it. You will need to perform a special procedure to reinstall AOS/VS on the disk.

CAUTION:  *Follow the procedures in this appendix to reinstall AOS/VS on the disk ONLY when you replace your original system disk with a new hard disk, when your system disk is damaged, or when your system disk has been reformatted.*

Refer to the instructions in the section appropriate for your type of backup.

● Reinstalling from physical backup copy (using PCOPY).

● Reinstalling from backup copy of operating system and utility files.

● Reinstalling from AOS/VS release and update media you received from Data General.

It usually takes less time to reinstall operating system and utility files on your system disk from a physical backup copy or backup copy of operating system and utility files. You should always use your most recent and reliable backup copy.

# Reinstalling from Physical Backup

If you used option 4 on the Starter Main Menu to create a physical copy of a hard disk, you can restore the restore the disk from the backup copy described in this section. Restoring the disk from physical backup involves the following tasks:

- Powering up from SCP System Media

- Installing the Starter program from the AOS/VS update

- Installing the physical backup

- Installing ADESL and diagnostics

- Restoring system-wide files

Perform these tasks as follows:

## Powering Up from SCP System Media

1. Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

2. Power up your system following the instructions in "Starting from Diskette" in Chapter 6. Before reading that section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drive and the computer system's power switch.

3. While in the Change Preset Values menu, press 3 and New Line to select option 3, "Start from a different device."

```
                        Change Preset Values Menu

            1   Continue the powerup
            2   Change the system date or time
            3   Start from a different device
            4   Change the default device
            5   Change the time-out delay for Automatic Program Load  Menu
            6   Enter the SCP CLI
            7   Change the system console
            8   Select diagnostics sequence
            9   Configure parallel printer port
           10   Select positional tracking device types for tablets
           11   Select system clock type


        For assistance, press the Help key (Shift-F1) or H
        To exit from this menu, press the Cancel/Exit key (F11) or ESC

        Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

4. Select the device that you want to start from by entering option number for the device and pressing New Line. Press 3 and New Line to select option 2, "Diskette."

```
╭──────────────────────────────────────────────────────────────╮
│                    Start from a Different Device               │
│                                                                │
│                                                                │
│         1 Hard disk                                            │
│         2 Diskette                                             │
│         3 Tape                                                 │
│                                                                │
│                                                                │
│         To exit from this menu, press the Cancel/Exit key (F11) or ESC │
│         For assistance, press the Help key (Shift–F1) or H     │
│                                                                │
│                                                                │
│         Start from which device? [n]                           │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
╰──────────────────────────────────────────────────────────────╯
```

**Screen Display**     **Indicates**

n                      Default choice

NOTE:   If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5. When you select option 2, the system prompts you with

*Please insert diskette, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection*

Insert your diskette and press New Line. The system loads software from your diskette.

NOTE:   If you accidently press New Line before you insert your diskette, your system attempts to load from the empty diskette drive. Then after about two or three minutes the system displays the following message:

*\*\*Missing or Bad Media\*\**

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

## Installing the Starter Program from the AOS/VS Update

6. Remove the SCP System Media diskette, then insert the first AOS/VS update Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx" in its drive. The system loads the first Starter diskette, then prompts you to insert the second Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx" and press New Line when ready. When the second Starter diskette is finished loading, the screen displays the Starter Main Menu.

   Depending on the condition of the disk, menu options 1 and 2 may have their numbers replaced with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

          *  Start the default operating system
          *  Start a different operating system
          3  Change the system date or time
          4  Make a physical backup of a disk (using PCOPY)
          5  Restore a physical copy of a disk (using PCOPY)
          6  Build or update the system disk

          The default operating system will start up automatically
          unless you respond within 45 seconds


          Enter choice [ ]:

          To exit from any menu, press the Cancel/Exit key (F11).
          For assistance at any time, press the Help key (Shift-F1).
```

## Installing the Physical Backup Copy

7. "While in the Starter Main Menu, press 5 and New Line or enter the RESTORE keyword to select option 5, "Restore a physical copy of the disk (using PCOPY)."

   The system displays a screen and prompts

   *Enter T (Tape), D (Diskette), or a unit name: D*

8. Type D to specify a restore from diskette. Alternatively, you can enter the device name; for example, @DPJ10 for diskette.

   The system displays the following prompt:

   *Enter the disk unit name: @DPJ0*

**9.** Press New Line to restore your disk unit. If you have two disks, type @DPJ1 and press New Line.

If your disk has not yet been software formatted, the system displays the following menu:

```
                         Format a Disk

          Formatting the disk will destroy its current contents, if any.

                    Disk unit name    :@DPJn
                    Logical disk name:

          Do you really want to format this disk (Y or N)? N

          To exit from this menu, press the Cancel/Exit key (F11)
          For assistance at any time, press the Help key (Shift-F1)
```

| Screen Display | Indicates |
|---|---|
| n | 0 or 1 depending on specified disk unit |

The system prompts you with

*Do you really want to format this disk?*

**10.** Type Y and press New Line. The system displays the following message:

*Please wait while the disk is being software formatted, @DPJn*

Software formatting a hard disk takes from 1 to 2 hours. Once you have software formatted the disk, the Starter program returns you to the PCOPY utility. Refer to the *How to Generate and Run AOS/VS* manual for information on PCOPY. When PCOPY is finished, press New Line to return to the Starter Main Menu.

After restoring the system disk using the physical backup, you must reload the ADESL file, and power-up diagnostics. You should also reload User–Friendly Diagnostics if they were installed on the system disk.

## Loading ADESL and Diagnostics

**11.** Follow the instructions in "Installing ADESL" and "Installing Power–Up Diagnostics" sections in Chapter 6. The steps in these sections tell you how to insert a diskette, power up the computer from SCP System Media software, and install ADESL and power–up diagnostics from diskettes.

**12.** Install User–Friendly Diagnostics (if applicable) following the instructions in the *ECLIPSE MV/1400 DC, ECLIPSE MV/2000 DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

After installing the power–up diagnostics, or User–Friendly Diagnostics (if applicable), you're ready to reload user files from backup.

## Restoring System–Wide Files

13.  Log on to the system as SYSMGR and enter SMI.

14.  While in the SMI Main menu, press 2 and New Line to select option 2, "Back up (dump) or restore (load) files." While in the Archive menu, press 4 and New Line or enter the keyword SYSRESTORE to select option 4, "Restore system–wide files."

15.  When the Restore System–Wide Files screen appears, respond to the prompts as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

# Reinstalling from System Disk Backup

If you created a backup copy of operating system and utility files as described in Chapter 6, you can restore the disk from the backup copy described in this section. Restoring the disk from system disk backup involves the following tasks:

*   Powering Up from SCP System Media

*   Installing the system disk backup

*   Installing the default operating system

*   Installing ADESL and diagnostics

*   Restoring system–wide files

Perform these tasks as follows:

## Powering Up from SCP System Media

1.  Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

2.  Power up your system following the instructions in "Starting from Diskette" in Chapter 6. Before reading that section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the computer's cartridge tape drive and the computer system's power switch.

3. While in the Change Preset Values menu, press 3 and New Line to select option 3, "Start from a different device."

```
                      Change Preset Values Menu
            1    Continue the powerup
            2    Change the system date or time
            3    Start from a different device
            4    Change the default device
            5    Change the time-out delay for Automatic Program Load  Menu
            6    Enter the SCP CLI
            7    Change the system console
            8    Select diagnostics sequence
            9    Configure parallel printer port
            10   Select positional tracking device types for tablets
            11   Select system clock type


            For assistance, press the Help key (Shift-F1) or H
            To exit from this menu, press the Cancel/Exit key (F11) or ESC

            Enter choice [n]:
```

**Screen Display**     **Indicates**

n                      Default choice

4. Select the device that you want to start from by entering option number for the device and pressing New Line. Press 3 and New Line to select option 2, "Diskette."

```
                      Start from a Different Device


            1 Hard disk
            2 Diskette
            3 Tape



            To exit from this menu, press the Cancel/Exit key (F11) or ESC
            For assistance, press the Help key (Shift-F1) or H



            Start from which device? [n]
```

**Screen Display**     **Indicates**

n                      Default choice

NOTE:   If you choose the wrong option or change your mind, you can leave
        this menu by pressing the Cancel/Exit function key (F11) or the
        Escape key or Break/Esc key on your keyboard.

5.   When you select option 2, the system prompts you with

     *Please insert diskette, then press New Line key (or the Enter key)*
     *to continue, or press the ESC key to cancel selection*

     Insert your diskette and press New Line.  The system loads software from your
     diskette.

NOTE:   If you accidently press New Line before you insert your diskette, your
        system attempts to load from the empty diskette drive. Then after
        about two or three minutes the system displays the following message:


                          **Missing or Bad Media**

        *To return to the menu, press the Cancel/Exit key.*

        If this should happen, press the Cancel/Exit function key, and the
        system will return you to the Change Preset Values menu.

## Installing the Starter Program from System Disk Backup

6.   Remove the SCP System Media diskette, then insert the first AOS/VS update
     Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx" in its drive. The
     system loads the first Starter diskette, then prompts you to insert the second
     Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx" and press New
     Line when ready.  When the second Starter diskette is finished loading, the
     screen displays the Starter Main Menu.

     Depending on the condition of the disk, menu options 1 and 2 may have their
     numbers replaced with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

       *  Start the default operating system
       *  Start a different operating system
       3  Change the system date or time
       4  Make a physical backup of a disk (using PCOPY)
       5  Restore a physical copy of a disk (using PCOPY)
       6  Build or update the system disk

       The default operating system will start up automatically
       unless you respond within 45 seconds


       Enter choice [ ]:

       To exit from any menu, press the Cancel/Exit key (F11).
       For assistance at any time, press the Help key (Shift-F1).
```

7.   While in the Starter Main Menu, press 6 and New Line to select option 6,
     "Build or update the system disk." The system displays the following menu:

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                   Build or Update System Disk Menu

       1  Build the system disk
       2  Format a disk
       3  Load new system software on the disk
       4  Load the default operator profile on the disk
       *  Load new system firmware on the disk


       Enter choice [1]:


       To exit from any menu, press the Cancel/Exit key (F11).
       For assistance at any time, press the Help key (Shift-F1).
```

NOTE:   Building a disk with this option includes software formatting the disk.
        If you are reinstalling AOS/VS onto a recently formatted disk, you
        might not need to use option 1, "Build the system disk." You can
        load the operating system onto a properly formatted disk using
        option 3, "Load new system software on the disk."

8. While in the Build or Update System Disk menu, press 1 and New Line to select option 1, "Build the system disk." The system displays the Build the System Disk menu.

```
                    Build the System Disk

Building the disk will destroy Its current contents, If any.

    Disk unit name    :@DPJ0
    Logical disk name:
Do you really want to build this disk (Y or N)? N

To exit from this menu, press the Cancel/Exit key (F11)
For assistance at any time, press the Help key (Shift-F1)
```

The Build the System Disk menu may also show a logical disk name. If not, the system will provide a logical disk name when you execute the AOS/VS Disk Formatter program.

The system prompts you with

*Do you really want to build this disk?*

9. Type Y and press New Line. The system displays the following message:

*Please wait while the disk is being software formatted, @DPJ0*

Software formatting a hard disk takes from 1 to 2 hours. Once you have software formatted the disk, the system prompts you to insert your backup diskettes of operating system and utility files.

The system displays the following prompt:

*Please insert the first of the "OS UTILITIES MEDIA" diskettes in unit @DPJ10.*

*Press New Line when ready.*

10. Remove the second Starter diskette. Insert the first volume of the backup diskettes, then press New Line. Follow the system prompts to load subsequent diskettes.

11. When the system finishes loading the update files, the Starter program displays the Build or Update the System Disk menu.

12. Remove the last AOS/VS system disk backup diskette.

## Loading the Default Operating System

13. Press Cancel/Exit (F11) to return to the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                          STARTER Main Menu

        1  Start the default operating system

        2  Start a different operating system

        3  Change the system date or time

        4  Make a physical backup of a disk (using PCOPY)

        5  Restore a physical copy of a disk (using PCOPY)

        6  Build or update the system disk


        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [ ]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

14. From the Starter Main Menu, press 1 and New Line to select option 1, "Start the default operating system." The system displays the following message:

    *Please wait.  The system is being loaded.*
    *SYSGEN:MV2000_SMI.PR*

    The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

    Press New Line and log on.

15. Shut down your system completely as described in the *Using the AOS/VS System Management Interface (SMI)* manual.  Turn off computer power.

## Loading ADESL and Diagnostics

16. Install ADESL and power-up diagnostics on the hard disk as described in "Installing ADESL" and "Installing Power-up Diagnostics" sections of Chapter 6. These sections describe how to install ADESL and power-up diagnostics from diskettes to your system disk.

After installing the power–up diagnostics, or User–Friendly Diagnostics (if applicable), you're ready to reload user files from backup.

17. Install User–Friendly Diagnostics (if applicable) following the instructions in the *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

## Restoring System–Wide Files

18. Log on to the system as SYSMGR and enter the SMI.

19. While in the SMI Main menu, press 2 and New Line to select option 2, "Back up (dump) or restore (load) files." While in the Archive menu, press 4 and New Line or enter the keyword SYSRESTORE to select option 4, "Restore system–wide files."

20. When the Restore System–Wide Files screen appears, respond to the prompts as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

# Reinstalling from Release and Update Media

If you did not create backup diskettes of the system disk as described in Chapter 6, you must reinstall AOS/VS from release and update media. Restoring the disk from release and update media involves the following tasks:

● Powering up from SCP System Media

● Installing the AOS/VS files from tape

● Loading the default operating system

● Installing ADESL and diagnostics

● Restoring system-wide files

Perform these tasks as follows:

NOTE:    AOS/VS programs and files are on diskettes labeled "AOS/VS OS UTILITIES MEDIA REV 7.xx." Any update to these diskettes are labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx."

## Installing SCP System Media

1.   Shut down your operating system and turn off the computer and peripherals. If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

NOTE:    If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2.   Power up your system following the instructions in the "Starting from Diskette" section of Chapter 6. Before reading that section, however, make sure you have read the first chapter, "Identifying System Features and Controls." It shows you the location of the diskette drive and the computer system's power switch.

3.   While in the Change Preset Values menu, press 3 and New Line to select option 3, "Start from a different device."

```
                     Change Preset Values Menu

              1   Continue the powerup
              2   Change the system date or time
              3   Start from a different device
              4   Change the default device
              5   Change the time-out delay for Automatic Program Load Menu
              6   Enter the SCP CLI
              7   Change the system console
              8   Select diagnostics sequence
              9   Configure parallel printer port
              10  Select positional tracking device types for tablets
              11  Select system clock type


          For assistance, press the Help key (Shift-F1) or H
          To exit from this menu, press the Cancel/Exit key (F11) or ESC

          Enter choice [n]:
```

Screen Display    Indicates

n                 Default choice

4.   While in the Start a Different Device menu, press 2 and New Line to select option 2, "Diskette."

```
                     Start from a Different Device


          1 Hard disk
          2 Diskette
          3 Tape



          To exit from this menu, press the Cancel/Exit key (F11) or ESC
          For assistance, press the Help key (Shift-F1) or H


          Start from which device? [n]
```

Screen Display    Indicates

n                 Default choice

NOTE:    If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5.  When you select option 2, the system prompts you with

    *Please insert diskette, then press New Line key (or the Enter key)
    to continue, or press the ESC key to cancel selection*

    Insert your diskette and press New Line. The system loads software from your diskette.

    NOTE:   If you accidently press New Line before you insert your diskette, your system attempts to load from the empty diskette drive. Then after about two or three minutes the system displays the following message:

    **Missing or Bad Media**

    *To return to the menu, press the Cancel/Exit key.*

    If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

## Installing the Starter Program from the AOS/VS Update

6.  Remove the SCP System Media diskette, then insert the first AOS/VS update Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx" in its drive. The system loads the first Starter diskette, then prompts you to insert the second Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx " and press New Line when ready. When the second Starter diskette is finished loading, the screen displays the Starter Main Menu.

    Depending on the condition of the disk, menu options 1 and 2 may have their numbers replaced with asterisks, as shown in the following example.

```
STARTER   Rev. n.nn.nn.nn              dd-mmm-yy  hh:mm

                    STARTER Main Menu

    *  Start the default operating system
    *  Start a different operating system
    3  Change the system date or time
    4  Make a physical backup of a disk (using PCOPY)
    5  Restore a physical copy of a disk (using PCOPY)
    6  Build or update the system disk


    The default operating system will start up automatically
    unless you respond within 45 seconds


    Enter choice [ ]:

    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```

7. While in the Starter Main Menu, press 6 and New Line to select option 6, "Build or update the system disk." The system will display the Build or Update System Disk menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                      Build or Update System Disk Menu

        1  Build the system disk
        2  Format a disk
        3  Load new system software on the disk
        4  Load the default operator profile on the disk
        *  Load new system firmware on the disk


        Enter choice [1]:


        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

NOTE: Building a disk with this option includes software formatting the disk. If you are reinstalling AOS/VS onto a recently formatted disk, you might not need to use option 1, "Build the system disk." You can load the operating system onto a properly formatted disk using option 3, "Load new system software on the disk."

8. While in the Build or Update System Disk menu, press 1 and New Line to select option 1, "Build the disk." The system displays the Build the System Disk menu.

```
                       Build the System Disk

        Building the disk will destroy its current contents, if any.

           Disk unit name    :@DPJ0
           Logical disk name:
        Do you really want to build this disk (Y or N)? N

        To exit from this menu, press the Cancel/Exit key (F11)
        For assistance at any time, press the Help key (Shift-F1)
```

The Build the System Disk menu may also show a logical disk name. If not, the system will provide a logical disk name when you execute the AOS/VS Disk Formatter program.

9.   Type Y and press New Line.  Your screen will display the message

*Please wait while the disk is being software formatted, @DPJ0*

Software formatting a disk takes from 1 to 2 hours.

## Installing AOS/VS Files

10.  Remove the second Starter update diskette labeled "UD nn AOS/VS STARTER REV 7.xx."  Insert the first of the AOS/VS 7.xx release diskettes labeled "AOS/VS OS UTILITIES MEDIA REV 7.xx" into the diskette drive.

The system displays the following prompt:

*Please insert the first of the "OS UTILITIES MEDIA" diskettes in unit @DPJ10.*

*Please insert a diskette (VOL1).  Press New Line when ready.*

11.  Press New Line.  As you are prompted, remove the first AOS/VS OS UTILITIES MEDIA diskette and insert the second.  Then press New Line.

*-- Please insert the next diskette (VOL2).  Press New Line when ready.*

12.  The program will prompt you for subsequent diskettes in the same manner. When it has finished loading, it will prompt you as follows:

*-- Please remove the diskette.*

13.  Remove the last AOS/VS 7.xx release diskette.  Insert the first volume of the update diskettes labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx," then press New Line.  Follow the system prompts to load subsequent diskettes.

14.  When the system finishes loading the update files, it displays the Build or Update the System Disk menu.

```
STARTER   Rev. n.nn.nn.nn              dd-mmm-yy  hh:mm


                  Build or Update System Disk Menu


   1  Build the system disk
   2  Format a disk
   3  Load new system software on the disk
   4  Load the default operator profile on the disk
   *  Load new system firmware on the disk



   Enter choice [1]:



   To exit from any menu, press the Cancel/Exit key (F11).
   For assistance at any time, press the Help key (Shift-F1).
```
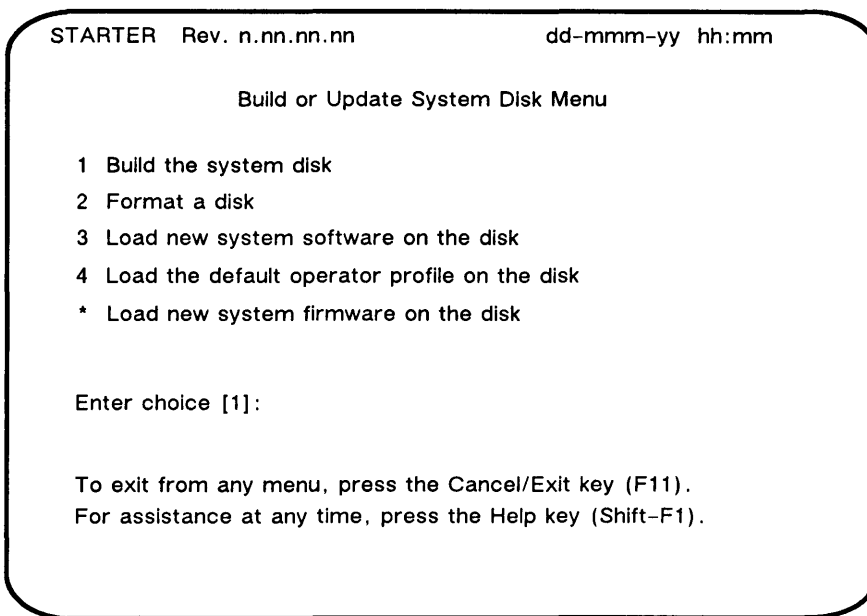
15. Remove the last AOS/VS update diskette.

16. Press Cancel/Exit (F11) to return to the Starter Main Menu.
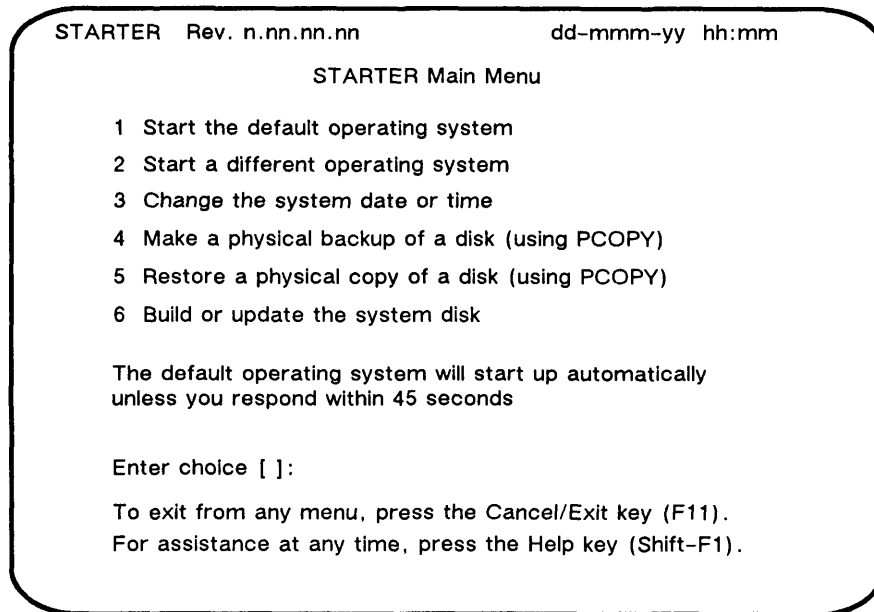
```
STARTER   Rev. n.nn.nn.nn                dd-mmm-yy  hh:mm

                    STARTER Main Menu

    1  Start the default operating system

    2  Start a different operating system

    3  Change the system date or time

    4  Make a physical backup of a disk (using PCOPY)

    5  Restore a physical copy of a disk (using PCOPY)

    6  Build or update the system disk


    The default operating system will start up automatically
    unless you respond within 45 seconds


    Enter choice [ ]:

    To exit from any menu, press the Cancel/Exit key (F11).
    For assistance at any time, press the Help key (Shift-F1).
```

17. While in the Starter Main menu, press 1 and New Line to select option 1, "Start the default operating system." The system displays the following message:

    *Please wait. The system is being loaded.*
    *SYSGEN:MV2000_SMI.PR*

    The default operating system will start up and, after a minute or two, you will see your system's log-on banner.

    Press New Line and log on as described in Chapter 2.

## Loading ADESL and Diagnostics

18. Install the ADESL file and power-up diagnostics on the hard disk as described in "Installing ADESL" and "Installing Power-up Diagnostics" sections in Chapter 6. These sections describe how to install ADESL and power-up diagnostics from diskettes.

19. If User-Friendly Diagnostics were installed on the system disk, reinstall them following the instructions in the *ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC_II (Models 91347 — 91349) and DS/7500_II Series Systems User Friendly Diagnostics* manual or the *ECLIPSE MV/2500™ DC User Friendly Diagnostics* manual.

Once you have reinstalled AOS/VS including ADESL, the power-up diagnostics, and User-Friendly Diagnostics (if applicable), you should restore user files.

## Restoring System-Wide Files

20. Log on to the system as SYSMGR as described in Chapter 2, and enter SMI as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

21. While in the SMI Main Menu, press 2 and New Line or enter the SYSRESTORE keyword to select option 2, "Back up (dump) or restore (load) files." While in the Archive menu, press 4 and New Line to select option 4, "Restore system-wide files."

22. When the system displays the Restore System-Wide Files screen, respond to the prompts and proceed as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

End of Appendix

# Appendix C
# Solving Power-Up Problems

When you turn on your computer system, power-up diagnostic programs automatically test your system to make sure that it can perform certain basic operations. This appendix tells you what you should do in case your system fails a power-up diagnostic test.

What your system does depends on whether your system uses a nongraphics terminal or a graphics terminal for a system console. The next sections describe how a system powers up when its system console is a nongraphics terminal and when its system console is a graphics terminal. Each section also tells you what to do when you experience a power-up problem.

## Nongraphics System Console Terminal

When a system with a nongraphics system console terminal passes the power-up diagnostic tests, it displays the Automatic Program Load menu on the system console. On the other hand, if this system fails a power-up test, either the system console screen remains blank or messages on the screen indicate a failure.

If the system console screen remains blank for more than two minutes, try to resolve the problem yourself by following the steps in the section, "Blank Screen on the System Console." If the system console displays an error message, try to resolve the problem by following the steps in the section, "Error Messages on the Screen".

### Blank Screen on the System Console

Follow the steps in this section if your system console screen remains blank for more than two minutes after powerup.

1.  Make sure the terminal you are watching is the system console. (If you are not sure which terminal is the system console refer to one of the following manuals: *Installing and Maintaining Your ECLIPSE MV/1400™DC, ECLIPSE MV/2000™DC, or ECLIPSE MV/2500™DC Computer System,* or *Installing and Maintaining Your DS/7500 Computer System.*)

2.  Make sure the system console terminal is turned on.

3.  Make sure the screen intensity on your system console is adjusted brightly enough so you can see messages on the screen. (Try temporarily adjusting the screen intensity to the maximum setting.)

4.  Make sure the keyboard's On Line light is on. If it is not on, hold down the Cmd key and press the On Line key. If it comes on, go to step 7.

5. If the keyboard's On Line light is still off, do the following:

   Make sure the system console's power cord is plugged tightly into the ac power outlet, and the ac outlet is supplying power.

   Make sure the cable that connects the keyboard to the display is plugged securely into the keyboard connector on the back of the display. If it is secure, and the On Line light is still off, go to step 8.

6. If the On Line light is on and your screen is still blank, do the following:

   Take the terminal off line by holding down the Cmd key and pressing the On Line key. With the terminal off line, use the keyboard to type something. If the characters appear on your console screen, put the terminal back on line by holding down the Cmd key and pressing the On Line key.

7. If you still do not receive the power-up messages on your system console screen, make sure the cables that connect your system components together are undamaged and their connectors are secured tightly so that they make a good connection.

8. If the display is still blank, your system console terminal may have a problem. Replace the system console terminal with another terminal. To set up a system console, follow the appropriate instructions in one of the following manuals: *Installing and Maintaining Your ECLIPSE MV/1400™DC, ECLIPSE MV/2000™DC, or ECLIPSE MV/2500™DC Computer System* or *Installing and Maintaining Your DS/7500 Computer System*.

   If your terminal has switches for setting the baud rate, parity, data length, and so forth, make sure they are set correctly. Refer to one of the following manuals: *Installing and Maintaining Your ECLIPSE MV/1400™DC, ECLIPSE MV/2000™DC, or ECLIPSE MV/2500™DC Computer System,* or *Installing and Maintaining Your DS/7500 Computer System* for proper switch settings.

9. If the cables are connected properly and the switch settings for the terminals are correct, try powering up your system again.

10. Listen for the whirring noise of the fans inside the unit. If you do not hear the fans, make sure the computer is getting power by checking the power cord and power source.

11. If your screen is still blank, contact Data General.

# Graphics System Console Terminal

When a system with a graphics system console powers up, the system flashes the four LEDs along the top of the graphics keyboard in various patterns as it monitors the progress of the power–up tests. These LEDs are labeled On Line, Alpha Lock, F19, and F20. Once power–up messages begin to appear on a graphics terminal screen, the LEDs revert to the function that is indicated by their label. When your system passes the power–up diagnostic tests, the system displays the Automatic Program Load menu on the system console screen. On the other hand, if your system fails a power-up test, your system will react in one of two ways:

1.   The system console screen will remain blank and the keyboard's LEDs will either be off or remain on in a fixed pattern.

2.   The system may display part of the test messages or the word "Failed" and an error code number.

If the system console remains blank with the LEDs either on or off, try to resolve the problem yourself by following the steps in the "Interpreting Graphics Keyboard LEDs During Power-Up Failure" section.  If the test message on a screen does not display completely or in sequence or the system displays the word "Failed," try to resolve the problem by following the steps in the "Error Messages on the Screen" section.

# Interpreting Graphics Keyboard LEDs During Power-Up Failure

Follow the steps in this section when the display on the graphics system console is blank and the LEDs along the top of the keyboard are off or remain on in a fixed pattern.

The next few pages show the LED patterns that the system may display when it fails a power-up test. In some cases you can correct the problem yourself. Steps under these patterns suggest ways that you might resolve the problem. Write down the pattern's code number, and then try each of these steps before you contact Data General for help.

## Code 0

ON LINE · ALPHA LOCK · F19 · F20
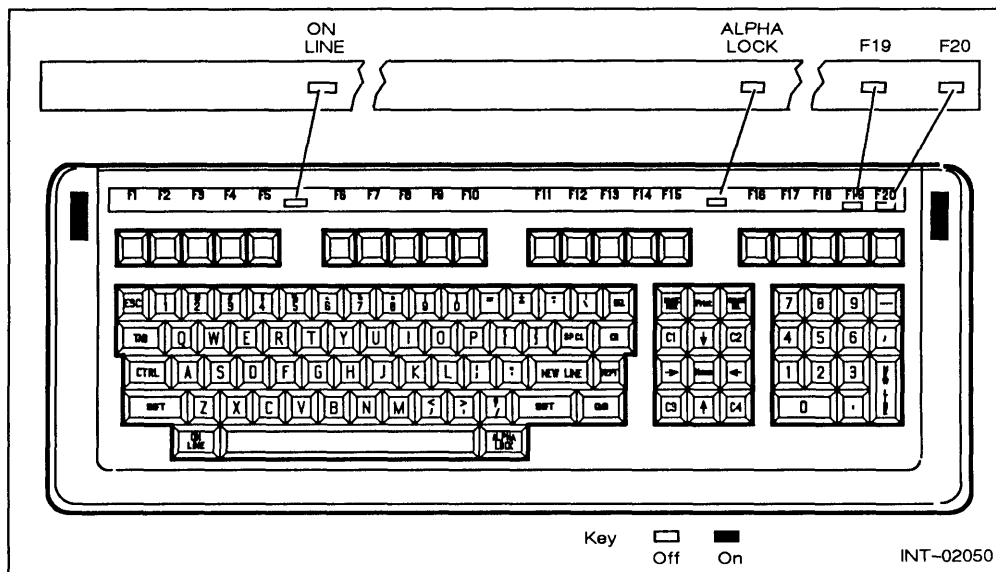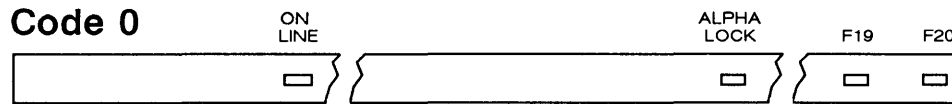
If you turn on the system and after a moment none of the LEDs come on, do the following:

1. Make sure the computer is plugged into a working electrical outlet.
2. Check that all devices are connected to the computer correctly. Refer to the manual, *Installing and Maintaining Your DS/7500 Computer System.*
3. Turn the computer off and then on again.

If the previous steps do not solve the problem, contact Data General.

## Code 1

ON LINE · ALPHA LOCK · F19 · F20

If your system continues to display this LED pattern, do the following:

1. Check that the devices are connected correctly to the computer. Refer to the manual, *Installing and Maintaining Your DS/7500 Computer System.*
2. Turn the computer off and then on again.

If the previous steps do not solve the problem, contact Data General.

## Code 2

ON LINE · ALPHA LOCK · F19 · F20
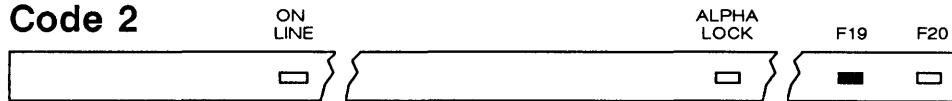
If your system continues to display this LED pattern, contact Data General. The diskette drive is probably at fault.

## Code 3

ON LINE · ALPHA LOCK · F19 · F20

If your system continues to display this LED pattern, contact Data General. The tape drive is probably at fault.

## Code 4

ON LINE · ALPHA LOCK · F19 · F20
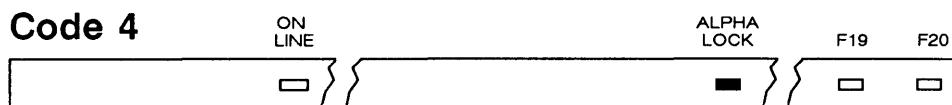
If your system continues to display this LED pattern, contact Data General. The disk drive is probably at fault.
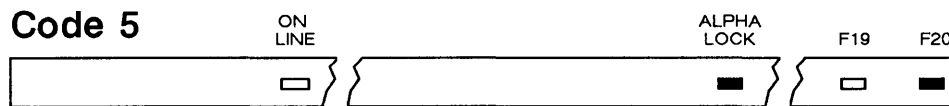
## Code 5

If your system continues to display this LED pattern, do the following:

1. If you are starting from diskette, make sure that the System Media diskette is inserted correctly in the drive by doing the following: remove the diskette, turn off the system power, carefully reinsert the diskette, engage the diskette drive, and turn the power on again.

If the previous steps do not solve the problem, contact Data General. The diskette media is probably at fault.

## Code 6

If your system continues to display this LED pattern, do the following:

1. If you are starting from tape, make sure you have inserted the SCP System Media tape in the drive.
2. Make sure you inserted the tape in the drive correctly by doing the following: remove the tape, turn off the system power, carefully reinsert the tape, and turn the power on again.

If the previous steps do not solve the problem, contact Data General. The tape media is probably at fault.

## Code 7

If your system continues to display this LED pattern, do the following:

1. If loading from the SCP System Media diskette or tape, make sure that you inserted the media in the drive correctly by doing the following: turn off the system power, remove the media, carefully reinsert the media, engage the drive, and turn the power on again.

If the previous step does not solve the problem or if your power-up diagnostics are installed on the system disk, contact Data General.

## Code 8
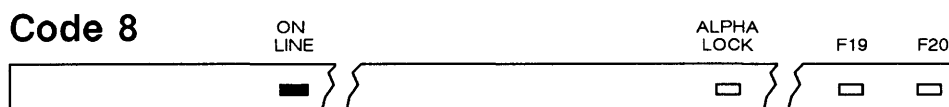
If your system continues to display this LED pattern, contact Data General. The graphics board is probably at fault.

## Code 9

| ON LINE | | ALPHA LOCK | F19 | F20 |
|---|---|---|---|---|
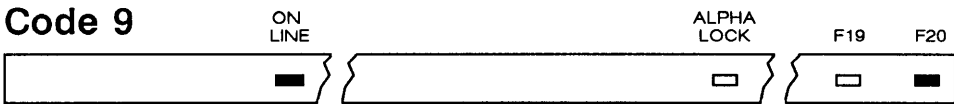
If your system continues to display this LED pattern, contact Data General. Disk unit 1 is probably at fault.

## Code 10

| ON LINE | | ALPHA LOCK | F19 | F20 |
|---|---|---|---|---|
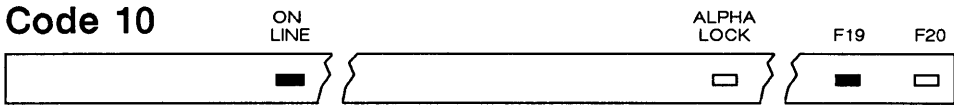
(Currently not used — reserved for future use)

## Code 11

| ON LINE | | ALPHA LOCK | F19 | F20 |
|---|---|---|---|---|
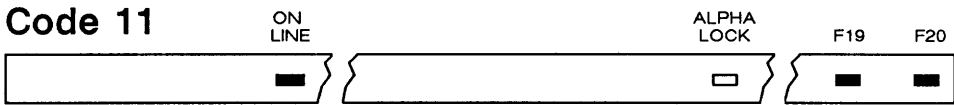
If your system continues to display this LED pattern, do the following:

1. Make sure the system console is turned on and its On Line indicator is illuminated.
2. Turn off the system console, and then turn it on again.
3. Try plugging the system console into another ac outlet.
4. Make sure the system console is installed correctly. Refer to the manual, *Installing and Maintaining Your DS/7500 Computer System.*

If the previous steps do not solve the problem, contact Data General.

## Code 12

| ON LINE | | ALPHA LOCK | F19 | F20 |
|---|---|---|---|---|

If your system continues to display this LED pattern, do the following:

1. Temporarily adjust the brightness of the display to maximum.
2. Try plugging the console into another ac outlet.

If the previous steps do not solve the problem, contact Data General.

## Code 13

| ON LINE | | ALPHA LOCK | F19 | F20 |
|---|---|---|---|---|

If your system continues to display this LED pattern, contact Data General.

## Code 14

| ON<br>LINE | | ALPHA<br>LOCK | F19 | F20 |
| --- | --- | --- | --- | --- |
| ■ | | ■ | ■ | ▢ |

If your system continues to display this LED pattern, do the following:

1. Temporarilty adjust the brightness of the display to maximum.
2. Try plugging the console into another outlet.

If the previous steps do not solve the problem, contact Data General.

## Code 15

| ON<br>LINE | | ALPHA<br>LOCK | F19 | F20 |
| --- | --- | --- | --- | --- |
| ■ | | ■ | ■ | ■ |
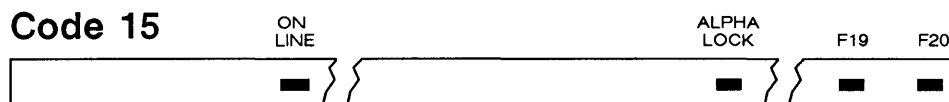
If your system continues to display this LED pattern, contact Data General.

# Error Messages on the Screen

Follow the steps in this section if the power-up diagnostic tests do not display messages sequentially, the tests display an error message, or the terminal "hangs" and does not display a complete message.

1. Write down the error code or, if no error code appears, write down the last letter or number displayed.

2. If the characters displayed on your system console make no sense, check the cables that connect your system components. If your system console has baud rate and parity switch settings, make sure they are correct. Refer to one of the following manuals: the *Installing and Maintaining Your MV/1400™DC, ECLIPSE MV/2000™DC, or ECLIPSE MV/2500™DC Computer System* manual, or the *Installing and Maintaining Your DS/7500 Computer System* manual if you do not know the settings of the switches.

3. If the cables are connected properly and the switch settings for the terminals are correct, try powering up your system again.

4. If your system powers up without an error, it may be warning you that it will require service soon. If you have the User Friendly Diagnostics, test your system completely as soon as possible. On the other hand, if the same error code or a different error code appears, contact Data General.

End of Appendix

# Appendix D
# Handling Starter and Other Problems

This appendix tells you what you should do in case your system displays unexpected menus, or if you receive an error message while in a Starter menu. It discusses the following topics:

- Format a disk menu.

- The break sequence.

- Error messages at the Operating System Load menus.

- Starter options available on error conditions.

- Starter panics.

- Physical unit failure messages.

- Reinstalling the Starter program.

- Starter and related error messages.

## Format a Disk Menu

If the Starter program detects disk format inconsistencies, the AOS/VS Disk Fixer program (FIXUP) runs automatically to correct the problem so that normal power up can continue. On rare occasions, FIXUP cannot remedy an inconsistency, or the Starter program determines that the system disk needs reformatting because it is damaged. When this happens, Starter automatically displays the following menu:

```
                              Format a Disk

              Formatting the disk will destroy its current contents, if any.

                          Disk unit name    :@DPJn
                          Logical disk name:

              Do you really want to format this disk (Y or N)? N

              To exit from this menu, press the Cancel/Exit key (F11)
              For assistance at any time, press the Help key (Shift-F1)
```

| Screen Display | Indicates |
| --- | --- |
| n | 0 or 1 depending on specified disk unit |

The system prompts you with

*Do you really want to format this disk?*

In most cases, you should press New Line to accept the default answer (N). The system returns you to the power-up menu that preceeded the Format a Disk menu, and continues the power-up sequence.

If the systems returns to the Format a Disk menu or if the Format a Disk menu remains on your screen, turn the system power off, and then on again. As your system repeats the power-up sequence, it attempts to correct the problem that interrupted the last power up and runs FIXUP if necessary. If the power-up sequence is successful, you can continue the power-up procedure.

NOTE:     If the Format a Disk menu displays during powerup, you should run a *full* backup of your disk as soon as possible. To run a full backup, follow the instructions in the *Using the AOS/VS System Management Interface (SMI)* manual.

## Formatting a Disk

Software formatting a hard disk takes from 1 to 2 hours and *destroys the entire contents of the disk.* Before you format your disk, check your system and backup media for at least one of the following:

• A physical backup copy of the disk made using PCOPY.

• A system disk backup copy of operating system and utility files, *and* a recent backup copy of all user files on the disk (SMI system-wide backup) as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

• Release and update media for preinstalled AOS/VS and any other system software on the disk (such as CEO or TEO) *and* a recent backup of all user files on the disk (SMI system-wide backup) as described in the *Using the AOS/VS System Management Interface (SMI)* manual.

If you need to reformat your system disk and do *not* have one of these groups of media, contact Data General.

If you *do* have a reliable copy of your disk contents, at the following prompt, type Y and press New Line.

*Do you really want to format this disk (Y or N)?* Y ↓

Starter automatically runs the AOS/VS Disk Formatter program, and the system displays the message

*Please wait while the disk is being software formatted, @DPJ0*

Once you reformat your disk, you must reinstall AOS/VS on the system disk. Refer to Appendix A, "Reinstalling AOS/VS on the System Disk From Tapes," or Appendix B, "Reinstalling AOS/VS on the System Disk From Diskettes."

# The Break Sequence

If you accidentally enter the break sequence during power-up diagnostics

1.  Turn off computer power. If you don't turn off the power, powerup will continue, but could cause problems.

2.  Turn computer power on and restart the power-up procedure.

If you accidentally enter the break sequence after diagnostic programs are finished, you will interrupt powerup. From most terminals on your system, the break sequence has no effect. If you type Brk or Cmd-Break, the terminal will ignore it. However, if you issue the break sequence from the system console, the console will turn control over to the System Control Program (SCP) Command Line Interpreter (CLI). The SCP is the so-called "bottom layer" of everything that is running on your system. If you enter the SCP, the system displays the following prompt:

*SCP-CLI>*

To exit the System Control Program, type the CONTINUE command at the SCP-CLI prompt and press New Line, as follows:

*SCP-CLI>* **CONTINUE** ⤸

The system returns to the program you were running before you typed the break sequence.

NOTE:    The break sequence requires that you hold down the Cmd key and press the Break key three times (Cmd-Brk 3 times) before the system enters the SCP.

# Error Messages at the Operating System Load Menus

There are several error messages that you could receive while in one of the Operating System Loadmenu. Table D-1 alphabetically lists the Technical Maintenance menu error messages and describes when you might receive each one.

**Table D-1    Error Messages at the Operating System Load Menus**

| Error Message | Meaning |
| --- | --- |
| ** *ABORT* ** *Hard error reading disk: status in AC0* | The system has encountered a bad spot on your disk. You will have to reformat and build the disk. Refer to Appendix A to reinstall AOS/VS on the system disk from tapes, or Appendix B to reinstall AOS/VS from diskettes. |
| *AOS/VS cannot run with this instruction set* | You have the incorrect SCP System Media loaded. You will have to use User-Friendly Diagnostics to load the correct file. If you don't have these diagnostics, contact Data General. |
| *Disk and file system revision number don't match* | Your system disk and SYSBOOT program have incompatible revision numbers. You have two options: reload your older revision of SYSBOOT, or reformat the disk. See the *How to Generate and Run AOS/VS* manual. |
| *** *Fatal overlay error − error code is in AC0 and AC1* *** | Use Starter's "Load new system software" option to reinstall AOS/VS on your disk. (See Chapter 3 for details.) If the error still results, you will have to reformat and rebuild the disk. Refer to Appendix A to reinstall AOS/VS on the system disk from tapes, or Appendix B to reinstall AOS/VS from diskettes. |
| *Hard disk error while reading from the LDU* | The system has encountered a bad spot on your disk. You will have to reformat and rebuild your system disk. Refer to Appendix A to reinstall AOS/VS on the system disk from tapes, or Appendix B to reinstall AOS/VS from diskettes. |

(continues)

**Table D-1  Error Messages at the Technical Maintenance Menu**

| Error Message | Meaning |
|---|---|
| *Hard disk error while writing to the LDU* | The system has encountered a bad spot on your disk. You will have to reformat and rebuild your system disk. Refer to Appendix A to reinstall AOS/VS on the system disk from tapes, or Appendix B to reinstall AOS/VS from diskettes. |
| *Hard error while writing to the system overlay area: Status in AC0* | The system has encountered a bad spot on your disk. You will have to reformat and rebuild your system disk. Refer to Appendix A to reinstall AOS/VS on the system disk from tapes, or Appendix B to reinstall AOS/VS from diskettes. |
| *Illegal boot device from DSKBT* | Run a partial format on your disk. This procedure is described in the *How to Generate and Run AOS/VS* manual. You can run the DFMTR disk-formatting program from Starter by choosing the "Start a different program or operating system" option on the Starter Main Menu. |
| *Illegal response – try again* | The number you typed at a menu is not one of the options listed. |
| *Illegal value – try again* | The value you specified for the time-out delay was not within the range 10 – 45. |
| *Inconsistent LDU – Run a partial format over this LDU* | The system is having trouble with a file it is trying to access. Run a partial format on the disk. Refer to the *How to Generate and Run AOS/VS* manual for information. You can run the DFMTR disk-formatting program from Starter by choosing option 2, "Start a different program or operating system" option on the Starter Main Menu. |
| *LCS instruction failed – Code in AC0 and AC1* | The system had a problem while trying to load the microcode. Reload the microcode using the Starter program (described in Chapter 3). |

(continued)

**Table D-1    Error Messages at the Technical Maintenance Menu**

| Error Message | Meaning |
| --- | --- |
| *LDU inconsistency – EOF returned when trying to read FIB block* | The system had a problem while trying to read a file. Run a partial format on the disk. Refer to the *How to Generate and Run AOS/VS* manual for information. You can run the stand-alone Disk Formatter (DFMTR) from Starter by choosing option 2, "Start a different program or operating system," on the Starter Main Menu. |
| *Microcode file does not exist* | You selected option 5, "Load New System Firmware on the Disk" from the Build or Update System Disk menu. This option does not apply to systems running preinstalled AOS/VS. |
| *Microcode file is invalid – Block with length=0 detected* | Something went wrong when the system tried to load the microcode file. Reload the microcode using the Technical Maintenance Menu (see Chapter 3). |
| *Overlay area is too small – Must do a partial format to make it larger* | Run a partial format on the disk (see the *How to Generate and Run AOS/VS* manual). Specify a larger overlay area. You can run the stand-alone Disk Formatter (DFMTR) utility program from Starter by choosing the "Start a different program or operating system" option on the Starter Main Menu. |
| *Premature end of file while reading system file* | Something went wrong while reading the system from the master LDU. Reload the system on the disk. (See Chapter 3 for information on Starter's "Load new system software" option.) |
| *Premature EOF on read of ADEX* | The User-Friendly Diagnostics bootstrap is in place on your disk, but the User-Friendly Diagnostic programs are not. Reload User-Friendly Diagnostics on your disk. (See Chapter 3 for information.) |

*(continued)*

Table D-1  Error Messages at the Technical Maintenance Menu

| Error Message | Meaning |
| --- | --- |
| *** *SYSBOOT MUST BE INSTALLED ON THE MASTER LDU!* *** | SYSBOOT, the program that starts up AOS/VS, is not on your disk.  Install it using Starter's "Load new system software" option (see Chapter 3). |
| *System file is too large to load* | Try reloading the system (Starter's "Load new system software" option, Chapter 3).  If the same error results, do a partial format on the disk and then reload the system.  (You can run the Disk Formatter (DFMTR) program from Starter by choosing option 2, "Start a different program or operating system" on the Starter Main Menu.  See the *How to Generate and Run AOS/VS* manual for information on DFMTR.)  If the same error results, refer to Appendix A to reinstall AOS/VS from tape, or Appendix B from diskettes. |
| *The ADEX bootstrap was not installed* | The User–Friendly Diagnostics bootstrap, which you need to start up User–Friendly Diagnostic programs, is not on your disk.  Reload User–Friendly Diagnostics on your disk.  (See Chapter 3 for information.) |
| *There is no default system; you must specify a default pathname* | Neither the Starter program nor AOS/VS is on your disk. Refer to "Reloading the Missing Starter Program" in this appendix. |

(continued)

**Table D-1   Error Messages at the Technical Maintenance Menu**

| Error Message | Meaning |
| --- | --- |
| *Unknown disk name specified in DIB - Do a partial format* | There is a problem with the LDU you were trying to start up from. Run a partial format on this disk (see the *How to Generate and Run AOS/VS* manual for information). To run the DFMTR disk-formatting program from Starter, choose option 2, "Start a different program or operating system," on the Starter Main Menu. |
| *** Warning ** Disk is in use - FIXUP must be run on this LDU* | Proceed with your powerup. Select option 1, "Load and start the default operating system," on the Technical Maintenance menu. The Starter program will run FIXUP automatically. If Starter is not on your disk, the Technical Maintenance menu will have more options on it than usual, including FIXUP. Run FIXUP from this menu by selecting option 7, which will be the default. |
| *** Warning ** FIXUP recommended on this LDU to reclaim space* | Proceed with your powerup. Select option 1, "Load and start the default operating system," on the Technical Maintenance menu. The Starter program will run FIXUP automatically only when it is required. If Starter does not indicate that it is running FIXUP, you might want to run it yourself. Select option 2, "Run a different program or operating system," on the Starter Main Menu, and specify :FIXUP as the pathname. Press New Line to accept all of FIXUP's defaults except for the question "May I fix it?", to which you should type Y and press New Line. See the *How to Generate and Run AOS/VS* manual for complete information on FIXUP. |

(concluded)

# Starter Options Available on Error Conditions

When the Starter program cannot start up AOS/VS from the disk, the Starter program will allow you to select only certain Starter Main menu options. Starter menu options that are not available will be replaced by asterisks.

The Starter menus below show the Starter menu options that are available with each error condition. Solutions to these error conditions suggest ways in which you might resolve the problem.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                    STARTER Main Menu

      *  Start the default operating system

      2  Start a different operating system

      3  Change the system date or time

      4  Make a physical backup copy of a disk (using PCOPY)

      5  Restore a physical copy of a disk (using PCOPY)

      6  Build or update the system disk


      The default operating system will start up automatically
      unless you respond within 45 seconds


      Enter choice [1]:

      To exit from any menu, press the Cancel/Exit key (F11).
      For assistance at any time, press the Help key (Shift-F1).
```

**Error Condition**

The default system is not on the disk, or the link to the default system is missing.

**Solution**

Select option 2, "Start a different operating system." At the prompt enter
**:SYSGEN:MV2000_SMI.PR**
If this does not resolve the error condition, at the prompt, enter
**SYSGEN:MV2000.PR**
If this does not resolve the error condition, select option 6, "Build or update the system disk," and then select option 3, "Load new system software on the disk." Refer to Chapter 3 for a description of Starter Main Menu options.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

         *  Start the default operating system

         *  Start a different operating system

         3  Change the system date or time

         4  Make a physical backup copy of a disk (using PCOPY)

         5  Restore a physical copy of a disk (using PCOPY)

         6  Build or update the system disk


         The default operating system will start up automatically
         unless you respond within 45 seconds


         Enter choice [1]:

         To exit from any menu, press the Cancel/Exit key (F11).
         For assistance at any time, press the Help key (Shift-F1).
```

| Error Condition | Solution |
|---|---|
| Certain other required software (such as CLI.PR) is not on the disk. | Select option 6, "Build or update the system disk," and then select option 3, "Load new system software on the disk." Refer to Chapter 3 for a description of this menu option. |
| The disk is not software formatted. | Unless you plan to restore your system-wide files from a physical backup (created using PCOPY), select option 6, "Build or update the system disk," and then select option 1, "Build the system disk." Refer to Appendix A for a description of reinstalling AOS/VS from tapes, or Appendix B for a description of how to reinstall AOS/VS from diskettes. |
|  | If you have a physical backup of the disk, from which you plan to restore the system-wide user files, select option 5, "Restore the disk from a physical backup (using PCOPY)." This type of restoration will place the AOS/VS system files back on the disk so you won't have to load AOS/VS from release media. Refer to Chapter 3 for description of option 5. |

| Error Condition | Solution |
|---|---|
| The system disk is off-line. | Turn system power off and on again. Go through powerup to the Starter Main Menu and see if any other options show other than 3 or 6. Alternatively, you can select option 6 to display the Build or Update System Disk Menu and then choose option 2 to format a disk other than your system disk.<br><br>If no other options are available, and you have received Hard Errors, this error condition could indicate disk head misalignment. This error condition could also indicate a disk head crash. |

# Starter Panics

If Starter ever encounters a serious error situation from which it cannot recover, it will display a panic message on the system console screen. The message will be accompanied by several codes, which represent the values in the computer registers at the time of the panic. It will look something like this:

*Fatal system error      000000    00000000   at PC = 00000000000*

*AC0            AC1              AC2            AC3             C WSP           WFP*
*00000000000 00000000000 00000000000 00000000000 0 00000000000  00000000000*

Some of the areas shown as zeros above will have other values displayed.

If you receive a panic message do the following:

1. Log each panic in a system log book kept near the system console. Note the time, the revision of the AOS/VS system, any unusual conditions (such as new software or hardware) that may have caused the panic, and the panic values. Panic records can be very important to Data General personnel whom you might call on for assistance.

2. Turn the computer's power off.

3. Turn the power on again. If the same situation results, check to see if the displayed codes are the same as those you've written down. If the codes differ, write the new codes down too. Then contact Data General with the information.

# Physical Unit Failure Message

The system may display a *PHYSICAL UNIT FAILURE* message while you are reinstalling system software on the system disk as described in Appendix A and B. The message is always accompanied by a device code to indicate which device has failed. (See the table of device names and codes in Chapter 3.)

If the diskette drive or tape drive has failed,

1.   Restart the reinstallation procedure.

2.   While in the Build or Update System Disk Menu, press 3 and New Line to select option 3, "Load new system software on the disk."

3.   Mount or insert media as prompted.

If the system displays this message repeatedly, contact Data General.

If the system displays this message for any other situation, refer to the *How to Generate and Run AOS/VS* manual.

# Reloading the Starter Program

If the system can find neither the Starter nor the Sysboot program, (the program that displays the Operating System Load menu), your power up will hang at the point where the Operating System Load menu should display.   You must reload the Starter program from tape or diskette.

## Reloading from Tape after Powerup Hang

1.   Shut down your operating system and turn off the computer and peripherals.

     If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

     NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit.   When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2.     Power up the system as described in Chapter 4.

3.     When the system displays the Change Preset Values Menu, press 3 and New Line to select option 3, "Start from a different device."

```
                    Change Preset Values Menu
          1   Continue the powerup
          2   Change the system date or time
          3   Start from a different device
          4   Change the default device
          5   Change the time-out delay for Automatic Program Load Menu
          6   Enter the SCP CLI
          7   Change the system console
          8   Select diagnostics sequence
          9   Configure parallel printer port
         10   Select positional tracking device types for tablets
         11   Select system clock type


    For assistance, press the Help key (Shift-F1) or H
    To exit from this menu, press the Cancel/Exit key (F11) or ESC

    Enter choice [n]:
```

**Screen Display**   **Indicates**

n               Default choice

4.     Select the device that you want to start from by entering the option number for the device and pressing New Line. Press 3 and New Line to select option 3, "Tape."

```
                    Start from a Different Device


    1 Hard disk
    2 Diskette
    3 Tape



    To exit from this menu, press the Cancel/Exit key (F11) or ESC
    For assistance, press the Help key (Shift-F1) or H


    Start from which device? [n]
```

**Screen Display**   **Indicates**

n               Default choice

NOTE:    If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5.    When you select option 3, the system prompts you with

*1  1/8-inch Cartridge Tape*
*2  1/2-inch Cartridge or Reel Tape*

Choose either option 1, the 1/8-inch cartridge tape drive, or option 2, the 1/2-inch cartridge tape drive or the reel-to-reel tape drive. Once you choose either option, the system prompts you with

*Please insert or mount tape, then press New Line key (or the Enter key) to continue, or press the ESC key to cancel selection.*

6.    Insert or mount the AOS/VS update tape labeled "UD nn AOS/VS OS UTILITIES MEDIA REV 7.xx" in its drive.

Press New Line. The system loads software from your tape.

NOTE:    If you accidently press New Line before you insert or mount your tape, your system attempts to load from the empty tape drive. Then after about two or three minutes the system displays the following message:

**Missing or Bad Media**

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

7.    Press the space bar if you are loading from 1/8-inch cartridge tape.  Press New Line if you are loading from either 1/2-inch cartridge tape or reel-to-reel tape. When prompted for a tape file number type 5, then press New Line.

*Tape file number?*  **5  )**

The system loads the Starter program from the tape. When the program is finished loading, the screen displays the Starter Main Menu.

```
STARTER   Rev. n.nn.nn.nn                    dd-mmm-yy  hh:mm

                        STARTER Main Menu

        1  Start the default operating system
        2  Start a different operating system
        3  Change the system date or time
        4  Make a physical backup of a disk (using PCOPY)
        5  Restore a physical copy of a disk (using PCOPY)
        6  Build or update the system disk

        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [ ]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

## Reloading from Diskettes

1. Shut down your operating system and turn off the computer and peripherals.

   If you do not know how to shut down your operating system, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct shut-down procedure.

   NOTE:   If your system is an ECLIPSE MV/2500 DC, always turn on any external drives (starting with the last drive on the peripheral bus), before turning on the computer unit. When powering down the system, turn off any external drives (starting with the last drive on the peripheral bus), before turning off the computer unit.

2. Power up the system as described in Chapter 4.

3.  When the system displays the Change Preset Values Menu, press 3 and New Line to select option 3, "Start from a different device."

```
                    Change Preset Values Menu
        1   Continue the powerup
        2   Change the system date or time
        3   Start from a different device
        4   Change the default device
        5   Change the time-out delay for Automatic Program Load Menu
        6   Enter the SCP CLI
        7   Change the system console
        8   Select diagnostics sequence
        9   Configure parallel printer port
        10  Select positional tracking device types for tablets
        11  Select system clock type


        For assistance, press the Help key (Shift-F1) or H
        To exit from this menu, press the Cancel/Exit key (F11) or ESC

        Enter choice [n]:
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

4.  Select the device that you want to start from by entering the option number for the device and pressing New Line.  Press 2 and New Line to select option 2, "Diskette."

```
                    Start from a Different Device


        1 Hard disk
        2 Diskette
        3 Tape



        To exit from this menu, press the Cancel/Exit key (F11) or ESC
        For assistance, press the Help key (Shift-F1) or H


        Start from which device? [n]
```

| Screen Display | Indicates |
| --- | --- |
| n | Default choice |

069-000293

NOTE:   If you choose the wrong option or change your mind, you can leave this menu by pressing the Cancel/Exit function key (F11) or the Escape key or Break/Esc key on your keyboard.

5.   When you select option 2, the system prompts you with

*Please insert diskette, then press New Line key (or the Enter key)*
*to continue, or press the ESC key to cancel selection*

6.   Insert the first AOS/VS update Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx " in its drive. The system loads the first Starter diskette, then prompts you to insert the second Starter diskette labeled "UD nn AOS/VS STARTER REV 7.xx " and press New Line when ready.  When the second Starter diskette is finished loading, the screen displays the Starter Main Menu.

NOTE:   If you accidently press New Line before you insert your diskette, your system attempts to load from the empty diskette drive. Then after about two or three minutes the system displays the following message:

**Missing or Bad Media**

*To return to the menu, press the Cancel/Exit key.*

If this should happen, press the Cancel/Exit function key, and the system will return you to the Change Preset Values menu.

```
STARTER   Rev. n.nn.nn.nn                 dd-mmm-yy  hh:mm

                      STARTER Main Menu

        1  Start the default operating system

        2  Start a different operating system

        3  Change the system date or time

        4  Make a physical backup of a disk (using PCOPY)

        5  Restore a physical copy of a disk (using PCOPY)

        6  Build or update the system disk


        The default operating system will start up automatically
        unless you respond within 45 seconds


        Enter choice [ ]:

        To exit from any menu, press the Cancel/Exit key (F11).
        For assistance at any time, press the Help key (Shift-F1).
```

# Reloading Missing Starter File

If the system displays the Technical Maintenance menu rather than the Starter Main Menu or if the Operating System Load menu displays the following message

*The default operating system is INSTALLED SYSTEM*

STARTER.SYS was probably accidentally deleted. You will have to reload the Starter program from tape or diskette.

1.  While in the Technical Maintenance menu, press 6 and New Line to select option 6, "Start a different operating system."

2.  The system will prompt you for the AOS/VS pathname to the operating system. At the prompt enter
    **:DEFAULT.SYS**

3.  Enter the CLI from the System Management Interface. If you do not know how to enter the CLI from the SMI, see the *Using the AOS/VS System Management Interface (SMI)* manual for the correct procedure.

4.  From the CLI command line, turn Superuser on.

    *SMI_CLI)* **SUPERUSER ON⤵**

5.  From the CLI command line, type the following command line and press New Line to enter the : (root) directory as follows:

    *SMI_CLI)* **: ⤵**

6.  Enter the command line below.

    *SMI_CLI\*)* **LOAD_II @MTJn:7 STARTER.SYS⤵**

    where n indicates 0, 1, or 10 depending on the specified tape unit.

7.  From the CLI command line, type BYE to renter the SMI.
    *SMI_CLI\*)* **BYE**

# Starter and Related Error Messages

This section lists and describes the error messages displayed by the Starter program, programs that load Starter and AOS/VS, and some related AOS/VS and EXEC messages that you might receive. You might receive some additional AOS/VS, CLI, or EXEC error messages, depending on what you are doing. We have included only the most common ones in this manual. See the manuals *How to Generate and Run AOS/VS* and *Command Line Interpreter (CLI) User's Manual (AOS and AOS/VS)* for descriptions of all AOS/VS, CLI, and EXEC error messages.

Each Starter message that we list here will show up on the screen of whichever user caused the error or status condition. Other messages, however, might appear on the system console instead. For example, messages from the EXEC process and device errors will display on the system console. When this happens, the person using the system console will have to take note of the error and act accordingly, and then press the Erase Page key to refresh the screen before continuing.

Table D-2 lists all Starter (and related) error and status messages alphabetically and describes when you might receive each one.

**Table D-2  Starter and Related Error and Status Messages**

| Message | Description |
|---|---|
| *ABORT* 32-bit process trap | A process started by Starter or SMI has terminated abnormally. |
| *ABORT* Console interrupt | A console interrupt interrupted a process subordinate to Starter or SMI. |
| *ABORT* Customer chained | An error occurred with the network. |
| *ABORT* Customer-server connection broken | You were working over the network and the connection was broken, so your process was terminated. |
| *ABORT* Terminated by superior process | A process higher in the process hierarchy than yours has terminated your process. |
| CAUTION: Preset powerup values have been reinitialized to their default values | This message occurs during powerup. This message may result if you received an error message during testing of a circuit board, or if a test hung and you turned power off and on again as instructed. |
| Directory access denied, File <pathname> | You attempted to back up files in a directory to which you do not have access. You must have W (Write), R (Read), and E (Execute) access to the directory. |
| Drive not ready. (Is diskette properly inserted, and is latch closed?) | The diskette drive is not currently usable by the system. Remove the diskette and reinsert it. Close the latch. See Chapter 6 for instructions on inserting a diskette. |
| Enter one of the menu entry numbers listed, or enter a command | You specified a number that is not one of the current menu options, or a word that is not a valid keyword. |
| Fatal diskette error – Halting | The system has encountered an error with the diskette that it cannot fix. There might be a problem with the diskette drive. Contact Data General. |

(continues)

**Table D-2    Starter and Related Error and Status Messages**

| Message | Description |
|---------|-------------|
| *File access denied, File <pathname>* | You attempted to back up files to which you do not have R (Read) access. |
| *File name already exists* | When creating a queue, you attempted to give it a name that is already a filename in the :PER directory. Give it a different name. Do not attempt to give a queue a name that you have already assigned or plan to assign to a printer. |
| *FROM PMGR:*<br>*IAC DEVICE CODE  nn DOES NOT*<br>*RESPOND*<br>*BYPASSING THIS IAC* | Power-up testing found something wrong with an asynchronous communications board. Contact Data General. |
| *Hard error, device=ddd, unit=mm,*<br>*retries=rr* | A hard error message indicates an error with a device, such as a disk, diskette, or tape.<br><br>If the device code listed (ddd) is 024 (or just 24), the hard error is on the disk. Retry the operation you were trying to perform at the time of the error. If the same error results, you probably have one or more bad disk blocks. Refer to the *How to Generate and Run AOS/VS* manual before using the software Disk Formatter (DFMTR) to run a *partial* format on your disk. |

(continued)

**Table D-2    Starter and Related Error and Status Messages**

| Message | Description |
| --- | --- |
| *Hard error, device=ddd, unit=mm, retries=rr* | If the device code listed is 064 or 64, the error is on the diskette. It could mean that the diskette has not been hardware formatted (diskettes you acquire from Data General are already hardware formatted); otherwise, it means that some of the surface of the diskette is unreadable or unwritable. To hardware format a diskette, use the Format Utility shipped with your SCP System Media to specify bad blocks. Refer to the *Using the Hardware Format Utility ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems* manual. |
| | If this message occurs during a backup to diskettes, you will have to interrupt the backup and start over using a different diskette. If it occurs during a restoration from backup, you won't be able to complete the restoration. |
| | Find the next most recent set of backup diskettes and restore from that, specifying to load the most recent copy of files rather than to delete existing files with identical names on the disk (SMI's Restore screens allow you to specify this). |
| | If the device code listed is 23 or 63, the hard error is on the tape. Use the Format Utility shipped with your SCP System Media to specify bad blocks. Refer to the *Using the Hardware Format Utility ECLIPSE MV/1400™ DC, ECLIPSE MV/2000™ DC, ECLIPSE MV/2500™ DC, and DS/7500 Systems* manual. |

(continued)

**Table D-2  Starter and Related Error and Status Messages**

| Message | Description |
| --- | --- |
| *Illegal password character* | You attempted to specify a password character that is not allowed. Valid password characters are all printable characters except for the caret (^) character. |
| *Illegal username character* | The username you entered when creating a profile contains a character that is not allowed in usernames. The valid username characters are A - Z, 0 - 9, underscore ( _ ), period (.), question mark (?), and dollar sign ($). |
| *Input number is too large* | The number you specified at the current input field is larger than allowed for that field. |
| *Invalid console name* | You specified the name of a console that does not exist, or you typed a console's name incorrectly. |
| *Invalid date* | The date you specified at the Change System Date or Time screen either is not a valid date, or is not in an acceptable format. You must specify the date in the format dd-mmm-yy or mm/dd/yy. |
| *Invalid device name* | The name you specified at a prompt for a device name is not a valid device name. Refer to Table 3-2 for a list of device names. |
| *Invalid fileset name* | While attempting to install software from diskette, you specified an invalid name when prompted for a fileset. Check the software product's Release Notice for the correct fileset name. |
| *Invalid system file size* | The system or program you instructed Starter to start up does not have a valid file size, and is therefore probably not a system or program. |

(continued)

**Table D-2    Starter and Related Error and Status Messages**

| Message | Description |
| --- | --- |
| *Invalid time* | The time you specified at the time field of the Change System Date or Time screen is either not a valid time, or is not in an acceptable format. You must specify the time in the format hh:mm:ss, with AM or PM optional. If you don't specify AM or PM, a 24-hour format is assumed. |
| *Keyword does not accept arguments* | You attempted to enter arguments to a command keyword that does not accept them. |
| *Keyword expected but not found* | Starter expected you to enter a keyword at, or as part of, the current input field. |
| *Keyword is unknown* | The value you entered is not one of the Starter keywords. Check the listing of Starter keywords in Chapter 3 to find the keyword you need. |
| *Library does not contain the screen format, <screen-name>* | A screen is missing from your Starter package. |
| *No help available for input - <field-name>* | There is no on-line help text for the input field at which you pressed the Help key. Refer to the appropriate section of this manual for instructions. |
| *Non-unique abbreviation* | The abbreviation you used at an input field is not unique. You must enter a longer abbreviation or the entire word. |
| *Number expected but not found* | Starter expected you to enter a numeric value at, or as part of, the current input field. |
| *Numeric argument out of range* | The number you specified as an argument is not within the acceptable range for that argument. |

(continued)

Table D-2  Starter and Related Error and Status Messages

| Message | Description |
| --- | --- |
| *Password must have 6 to 15 characters* | You attempted to set or change a profile's password to something with an invalid number of characters Passwords must be at least 6 and no more than 15 characters long. |
| *Pathname must start at the root* | You specified a filename or pathname that did not begin at the root directory (:). Be sure to specify the complete pathname. |
| *Please complete this field or press a function key* | You did not fill in a required input field. Enter a value or press the Cancel/Exit function key to abandon the screen. Or press the Help function key to get more information. |
| *Please give a "Yes" or "No" reply* | The current input field will accept only a Yes or No answer (optionally specified Y or N). |
| *Please wait while bootstrap software is installed on disk, <unit-name>* | When Starter rebuilds the disk, it must install the bootstrap software on the disk so AOS/VS can be booted. |
| *Please wait while the disk is being evaluated, <unit-name>* | Starter must evaluate the disk before it will continue. |
| *Please wait while the disk is being fixed, <unit-name>* | If your disk needs FIXUP to be run after an abnormal shutdown, the FIXUP program will run automatically, and you will see this message. |
| *Please wait while the disk is being software formatted, <unit-name>* | Before the Starter program can load files onto the disk, the disk must be software formatted. If you are rebuilding the disk, or formatting a disk/diskette, or restoring the disk with PCOPY, you will see this message after the Format a Disk menu. |
| *Process termination – error flag but no error code* | A subordinate process started by Starter or SMI has terminated. |

(continued)

**Table D-2   Starter and Related Error and Status Messages**

| Message | Description |
|---------|-------------|
| *Range numbers must be in ascending sequence* | The numbers you specified to indicate a range of numbers are not in ascending order.  Reorder them with the lower number first. |
| *Script file failure (End Of File)* | A process Starter was running has encountered an error. |
| *SYSBOOT is not installed on the disk* | Your bootstrap software is missing. |
| *Terminated by system* | The system has terminated the subordinate process that was running. |
| *The first line is already on display.* | While viewing Help, you pressed the Previous Screen function key (F3) while the first line of Help text was already being displayed. |
| *The last line is already on display* | While viewing Help, you pressed the Next Screen function key (F4) while the last line of Help text was already being displayed. |
| *Too many arguments to command* | The command or command keyword that you specified does not accept as many arguments as you entered. |
| *Unknown keyword* | The value you entered is not one of the Starter keywords.  Check the listing of Starter keywords in Chapter 3, to find the keyword you need. |
| *Username already exists* | You attempted to create a user profile with a username for which a profile already exists.  Enter a different username. |

(continued)

**Table D-2   Starter and Related Error and Status Messages**

| Message | Description |
| --- | --- |
| *Username directory already exists* | You tried to create a user profile with a username for which there is already a directory in :UDD. This probably happened because you deleted that user's profile, but opted not to delete the user's :UDD directory. Choose a different username, or back up the existing username directory to tape or diskette and then use the CLI to delete the directory. |
| *Username does not exist* | When attempting to modify or delete a profile, you specified a username for which no profile exists. |
| *<Username> does not have write access to <pathname>. You cannot back up this directory.* | You attempted to back up files in a directory to which you don't have W (Write) access. You must have W, R (Read), and E (Execute) access to the directory. |
| *Wrong diskette inserted* | You have inserted the wrong diskette in the drive. The system will prompt you for the correct diskette. Remove the diskette from the drive and find the diskette specified. Insert it and press New Line. |
| *You are not privileged to perform this function* | Your profile doesn't contain the privileges required to perform the function you were attempting. |

(concluded)

If you receive an error message not listed in this table, refer to the *How to Generate and Run AOS/VS* manual.

If you receive an unlisted error message while using the System Management Interface (SMI), refer to the *Using the AOS/VS System Management Interface (SMI)* manual.

End of Appendix

# Appendix E
# Identifying Media

This appendix contains the identification labels that Data General attaches to AOS/VS and SCP System Media diskettes, cartridge tapes, and reel-to-reel tape. Beside each label is the Data General computer that uses that particular media. If you get a system media error when powering up your system, check to see that you are using the correct SCP System Media. The lables are organized as follows:

- Table E-1   Labels for AOS/VS Release Diskettes and Tape.

- Table E-2   Labels for AOS/VS Update Diskettes and Tape.

- Table E-3   Labels for SCP System Media Diskettes.

- Table E-4   Labels for SCP System Media Tapes.

- Table E-5   Labels for ADESL Media Diskettes.

### Table E-1 Labels for AOS/VS Release Diskettes and Tape

Diskette Labels                                    Computer

```
081-nnnnnn-nn  31133G
AOS/VS STARTER  REV. 7.xx
DISKETTE 1 OF 2
(c) Data General Corporation 1980 - 1988
ALL RIGHTS RESERVED
```
                                                   For all systems

```
081-nnnnnn-nn  31133G
AOS/VS OS UTILITIES MEDIA REV. 7.xx
VOL n
(c) Data General Corporation 1980 - 1988
ALL RIGHTS RESERVED
```
                                                   For all systems

#### 1/8-inch Cartridge Tape Label

```
061-nnnnnn-nn   31133B
AOS/VS OS UTILITIES MEDIA
REV. 7.xx
(c) Data General Corporation 1980 - 1988
ALL RIGHTS RESERVED
```
                                                   For all systems

#### 1/2-inch Cartridge Tape Label

```
070-nnnnnn-nn   31133J
AOS/VS OS UTILITIES MEDIA
REV. 7.xx
(c) Data General Corporation 1980 - 1988
ALL RIGHTS RESERVED
```
                                                   For all systems

#### Reel-to-Reel Tape Label

```
071-nnnnnn-nn   31133H
AOS/VS OS UTILITIES MEDIA
REV. 7.xx
(c) Data General Corporation 1980 - 1988
ALL RIGHTS RESERVED
```
                                                   For all systems

### Table E-2 Labels for AOS/VS Update Diskettes and Tape

| Diskette Labels | Computer |
|---|---|
| 081-nnnnnn-nn  31133G<br>UD nn – AOS/VS STARTER  REV. 7.xx<br>DISKETTE 1 OF 2<br>(c) Data General Corporation 1980 – 1988<br>ALL RIGHTS RESERVED | For all systems |
| 081-nnnnnn-nn   31133G<br>UD nn – AOS/VS OS UTILITIES MEDIA REV. 7.xx<br>VOL n<br>(c) Data General Corporation 1980 – 1988<br>ALL RIGHTS RESERVED | For all systems |

**1/8-inch Cartridge Tape Label**

| | |
|---|---|
| 061-nnnnnn-nn    31133B<br>UD nn AOS/VS OS UTILITIES MEDIA<br>REV. 7.xx<br>(c) Data General Corporation 1980 – 1988<br>ALL RIGHTS RESERVED | For all systems |

**1/2-inch Cartridge Tape Label**

| | |
|---|---|
| 070-nnnnnn-nn    31133J<br>UD nn AOS/VS OS UTILITIES MEDIA<br>REV. 7.xx<br>(c) Data General Corporation 1980 – 1988<br>ALL RIGHTS RESERVED | For all systems |

**Reel-to-Reel Tape Label**

| | |
|---|---|
| 071-nnnnnn-nn    31133H<br>UD nn AOS/VS OS UTILITIES MEDIA<br>REV. 7.xx<br>(c) Data General Corporation 1980 – 1988<br>ALL RIGHTS RESERVED | For all systems |

## Table E-3 Labels for SCP System Media Diskettes

| Diskette Labels | Computer |
|---|---|
| 091000244- xx<br>MV1400DC SCP SYSTEM MEDIA<br>31478G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADEX FORMAT | ECLIPSE MV/1400 DC |
| 091000246-xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADEX FORMAT | ECLIPSE MV/2000 DC<br>(Yellow lettering)* |
| 09100017                                    GF1<br>MV2000DC SCP REV. x.xx LEVEL A<br>31138G<br>(c) Data General Corporation | ECLIPSE MV/2000 DC<br>(Tan lettering)* |
| 091000281-xx<br>MV2500DC SCP REV. x.xx<br>31589G<br>(c) Data General Corporation | ECLIPSE MV/2500 DC |
| 091000246-xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADEX FORMAT | ECLIPSE DS/7500 Series<br>(Yellow lettering)* |
| 091000173-xx<br>DS/7500 SCP REV. x.xx LEVEL A<br>31190G<br>(c) Data General Corporation | ECLIPSE DS/7500 Series<br>(Tan lettering)* |

*Tan lettering and yellow lettering refer to the color of the letters in the computer name on the front of your computer unit.

## Table E-4 Labels for SCP System Media Tapes

| 1/8-inch Cartridge Tape Labels | Computer |
|---|---|
| 060000152-xx   REV. x.xx<br>MV1400DC SCP SYSTEM MEDIA<br>31478B MICROCODE REV. x.x<br>(c) Data General Corporation | ECLIPSE MV/1400 DC |
| 060000154-xx   REV. x.xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462B MICROCODE REV. x.x<br>(c) Data General Corporation | ECLIPSE MV/2000 DC<br>(Yellow lettering)* |
| 060000136-xx<br>MV2000DC SCP REV. x.xx LEVEL A<br>31138B<br>(c) Data General Corporation | ECLIPSE MV/2000 DC<br>(Tan lettering)* |
| 060000162-xx<br>MV2500DC SCP REV. x.xx<br>31589B<br>(c) Data General Corporation | ECLIPSE MV/2500 DC |
| 060000154-xx   REV. x.xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462B MICROCODE REV. x.x<br>(c) Data General Corporation | ECLIPSE DS/7500 Series<br>(Yellow lettering)* |

| 1/2-inch Cartridge Tape Label | |
|---|---|
| 070000387-xx<br>MV2500DC SCP REV. x.xx<br>31589J<br>(c) Data General Corporation | ECLIPSE MV/2500 DC |

| Reel-to-Reel Tape Label | |
|---|---|
| 074000643-xx<br>MV2500DC SCP REV. x.xx<br>31589H<br>(c) Data General Corporation | ECLIPSE MV/2500 DC |

*Tan lettering and yellow lettering refer to the color of the letters in the computer name on the front of your computer unit.

## Table E-5 Labels for ADESL Media Diskettes

| Diskette Labels | Computer |
|---|---|
| 091000244- xx<br>MV1400DC SCP SYSTEM MEDIA<br>31478G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADESL (AOS FORMAT) | ECLIPSE MV/1400 DC |
| 091000248-xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADESL (AOS FORMAT) | ECLIPSE MV/2000 DC<br>(Yellow lettering)* |
| 09100226                                GF2<br>MV2000DC SCP REV. x.xx LEVEL A<br>31138G<br>(c) Data General Corporation | ECLIPSE MV/2000 DC<br>(Tan lettering)* |
| 091000281-xx<br>MV2500DC SCP REV. x.xx<br>31589G<br>(c) Data General Corporation | ECLIPSE MV/2500 DC |
| 091000248-xx<br>MV2DC_II & DS7500_II SCP SYSTEM MEDIA<br>31462G MICROCODE REV. x.x<br>(c) Data General Corporation<br>ADEX FORMAT | ECLIPSE DS/7500 Series<br>(Yellow lettering)* |
| 091000229-xx                                GF2<br>DS/7500 SCP REV. x.xx LEVEL A<br>31190G<br>(c) Data General Corporation | ECLIPSE DS/7500 Series<br>(Tan lettering)* |

*Tan lettering and yellow lettering refer to the color of the letters In the computer name on the front of your computer unit.

End of Appendix

# Index

Within this index, commands, keywords, programs, and acronyms are in uppercase letters (e.g., BOOTSTRAP). First-level headings begin with a capital letter (e.g., Automatic program load (APL) menu); all other entries are in lowercase letters.

## Symbols

# K

# L

# M

# O

# P

# TIPS ORDERING PROCEDURES

## TO ORDER

1. An order can be placed with the TIPS group in two ways:

   a) MAIL ORDER – Use the order form on the opposite page and fill in all requested information. Be sure to include shipping charges and local sales tax. If applicable, write in your tax exempt number in the space provided on the order form.

   Send your order form with payment to:    Data General Corporation
       ATTN: Educational Services/TIPS G155
       4400 Computer Drive
       Westboro, MA 01581-9973

   b) TELEPHONE – Call TIPS at (508) 870-1600 for all orders that will be charged by credit card or paid for by purchase orders over $50.00. Operators are available from 8:30 AM to 5:00 PM EST.

## METHOD OF PAYMENT

2. As a customer, you have several payment options:

   a) Purchase Order – Minimum of $50. If ordering by mail, a hard copy of the purchase order must accompany order.

   b) Check or Money Order – Make payable to Data General Corporation.

   c) Credit Card – A minimum order of $20 is required for Mastercard or Visa orders.

## SHIPPING

3. To determine the charge for UPS shipping and handling, check the total quantity of units in your order and refer to the following chart:

| Total Quantity | Shipping & Handling Charge |
|---|---|
| 1-4 Units | $5.00 |
| 5-10 Units | $8.00 |
| 11-40 Units | $10.00 |
| 41-200 Units | $30.00 |
| Over 200 Units | $100.00 |

If overnight or second day shipment is desired, this information should be indicated on the order form. A separate charge will be determined at time of shipment and added to your bill.

## VOLUME DISCOUNTS

4. The TIPS discount schedule is based upon the total value of the order.

| Order Amount | Discount |
|---|---|
| $1-$149.99 | 0% |
| $150-$499.99 | 10% |
| Over $500 | 20% |

## TERMS AND CONDITIONS

5. Read the TIPS terms and conditions on the reverse side of the order form carefully. These must be adhered to at all times.

## DELIVERY

6. Allow at least two weeks for delivery.

## RETURNS

7. Items ordered through the TIPS catalog may not be returned for credit.

8. Order discrepancies must be reported within 15 days of shipment date. Contact your TIPS Administrator at (508) 870-1600 to notify the TIPS department of any problems.

## INTERNATIONAL ORDERS

9. Customers outside of the United States must obtain documentation from their local Data General Subsidiary or Representative. Any TIPS orders received by Data General U.S. Headquarters will be forwarded to the appropriate DG Subsidiary or Representative for processing.

# TIPS ORDER FORM

Mail To:     Data General Corporation
             Attn: Educational Services/TIPS G155
             4400 Computer Drive
             Westboro, MA 01581 - 9973

| BILL TO: | SHIP TO: (No P.O. Boxes - Complete Only If Different Address) |
|---|---|
| COMPANY NAME_____ | COMPANY NAME_____ |
| ATTN:_____ | ATTN:_____ |
| ADDRESS_____ | ADDRESS (NO PO BOXES)_____ |
| CITY_____ | CITY_____ |
| STATE_____ ZIP_____ | STATE_____ ZIP_____ |

Priority Code _____ (See label on back of catalog)

_____ _____ _____ _____ _____
Authorized Signature of Buyer          Title           Date      Phone (Area Code)    Ext.
(Agrees to terms & conditions on reverse side)

| ORDER # | QTY | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**A  SHIPPING & HANDLING**

| □ UPS | ADD |
|---|---|
| 1-4 Items | $ 5.00 |
| 5-10 Items | $ 8.00 |
| 11-40 Items | $ 10.00 |
| 41-200 Items | $ 30.00 |
| 200+ Items | $100.00 |

**Check for faster delivery**

Additional charge to be determined at time of shipment and added to your bill.
□ UPS Blue Label (2 day shipping)
□ Red Label (overnight shipping)

**B  VOLUME DISCOUNTS**

| Order Amount | Save |
|---|---|
| $0 – $149.99 | 0% |
| $150 – $499.99 | 10% |
| Over $500.00 | 20% |

Tax Exempt #
or Sales Tax
(if applicable)

_____

| | |
|---|---|
| ORDER TOTAL | |
| Less Discount See B | – |
| SUB TOTAL | |
| Your local* sales tax | + |
| Shipping and handling – See A | + |
| TOTAL – See C | |

**C  PAYMENT METHOD**

□ Purchase Order Attached ($50 minimum)
   P.O. number is_____. (Include hardcopy P.O.)
□ Check or Money Order Enclosed
□ Visa      □ MasterCard        ($20 minimum on credit cards)

Account Number                          Expiration Date

| | | | | | | | | | | | | | | | |   | | | | |

_____
Authorized Signature
(Credit card orders without signature and expiration date cannot be processed.)

THANK YOU FOR YOUR ORDER

PRICES SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
PLEASE ALLOW 2 WEEKS FOR DELIVERY.
NO REFUNDS NO RETURNS.

* Data General is required by law to collect applicable sales or use tax on all purchases shipped to states where DG maintains a place of business, which covers all 50 states. Please include your local taxes when determining the total value of your order. If you are uncertain about the correct tax amount, please call 508-870-1600.

# DATA GENERAL CORPORATION
# TECHNICAL INFORMATION AND PUBLICATIONS SERVICE
# TERMS AND CONDITIONS

Data General Corporation ("DGC") provides its Technical Information and Publications Service (TIPS) solely in accordance with the following terms and conditions and more specifically to the Customer signing the Educational Services TIPS Order Form. These terms and conditions apply to all orders, telephone, telex, or mail. By accepting these products the Customer accepts and agrees to be bound by these terms and conditions.

## 1. CUSTOMER CERTIFICATION
Customer hereby certifies that it is the owner or lessee of the DGC equipment and/or licensee/sub-licensee of the software which is the subject matter of the publication(s) ordered hereunder.

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Customer shall be responsible for all taxes, including taxes paid or payable by DGC for products or services supplied under this Agreement, exclusive of taxes based on DGC's net income, unless Customer provides written proof of exemption.

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DGC warrants the CLI Macros media, provided by DGC to the Customer under this Agreement, against physical defects for a period of ninety (90) days from the date of shipment by DGC. DGC will replace defective media at no charge to you, provided it is returned postage prepaid to DGC within the ninety (90) day warranty period. This shall be your exclusive remedy and DGC's sole obligation and liability for defective media. This limited media warranty does not apply if the media has been damaged by accident, abuse or misuse.

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EXCEPT FOR THE LIMITED MEDIA WARRANTY NOTED ABOVE, DGC MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ON ANY OF THE PUBLICATIONS, CLI MACROS OR MATERIALS SUPPLIED HEREUNDER.

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A. CUSTOMER AGREES THAT DGC'S LIABILITY, IF ANY, FOR DAMAGES, INCLUDING BUT NOT LIMITED TO LIABILITY ARISING OUT OF CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR WARRANTY SHALL NOT EXCEED THE CHARGES PAID BY CUSTOMER FOR THE PARTICULAR PUBLICATION OR CLI MACRO INVOLVED. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO CLAIMS FOR PERSONAL INJURY CAUSED SOLELY BY DGC'S NEGLIGENCE. OTHER THAN THE CHARGES REFERENCED HEREIN, IN NO EVENT SHALL DGC BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS AND DAMAGES RESULTING FROM LOSS OF USE, OR LOST DATA, OR DELIVERY DELAYS, EVEN IF DGC HAS BEEN ADVISED, KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY THEREOF; OR FOR ANY CLAIM BY ANY THIRD PARTY.

B. ANY ACTION AGAINST DGC MUST BE COMMENCED WITHIN ONE (1) YEAR AFTER THE CAUSE OF ACTION ACCRUES.

## 7. GENERAL
A valid contract binding upon DGC will come into being only at the time of DGC's acceptance of the referenced Educational Services Order Form. Such contract is governed by the laws of the Commonwealth of Massachusetts, excluding its conflict of law rules. Such contract is not assignable. These terms and conditions constitute the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior oral or written communications, agreements and understandings. These terms and conditions shall prevail notwithstanding any different, conflicting or additional terms and conditions which may appear on any order submitted by Customer. DGC hereby rejects all such different, conflicting, or additional terms.

## 8. IMPORTANT NOTICE REGARDING AOS/VS INTERNALS SERIES (ORDER #1865 & #1875)
Customer understands that information and material presented in the AOS/VS Internals Series documents may be specific to a particular revision of the product. Consequently user programs or systems based on this information and material may be revision-locked and may not function properly with prior or future revisions of the product. Therefore, Data General makes no representations as to the utility of this information and material beyond the current revision level which is the subject of the manual. Any use thereof by you or your company is at your own risk. Data General disclaims any liability arising from any such use and I and my company (Customer) hold Data General completely harmless therefrom.

Cut here and insert in binder spine pocket