VAX 4000 Model 105A/106A

Installation Information

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This manual describes how to install and test the VAX 4000 Model 105A and Model 106A.

Digital Equipment Corporation Maynard, Massachusetts

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Preface

This manual describes how to install and test VAX 4000 Model 105A and Model 106A systems. It also refers to information on connecting the system to a network, connecting external options to the system, and booting the operating system.

Audience

This manual is intended for anyone who wants to install VAX 4000 Model 105A/106A systems. It is written for both experienced and inexperienced users.

Structure of This Manual

This manual contains one chapter. Each section heading is a step in the installation procedure and is indicated by the word *step* and a numeral. Substeps in the procedure are indicated by a numeral.

Additional Information

See the VAX 4000 Model 105A/106A Operator Information manual for the list of associated and related documents.

Conventions

The following conventions are used in this manual:

Convention	Description
MONOSPACE	Text displayed on the screen is shown in monospace type.
italic type	Italic type emphasizes important information and indicates the complete titles of manuals.
Note	A note contains information that is of special importance to the user.

Installation Procedure

This chapter shows you, step by step, how to install VAX 4000 Model 105A and Model 106A systems.

_ Note _____

Illustrations in this manual show a VAX 4000 Model 106A system rather than a Model 105A system, unless otherwise noted.

Step 1: Choosing a Suitable Location

Follow these guidelines when choosing where to place the system unit:

- Place the system unit where the room temperature is between 10° C and 40° C (50° F and 104° F) and the humidity is between 20% and 80%.
- Place the system unit at least 1 metre (3 feet) from heaters, photocopying machines, or other operating equipment.
- Place the system unit in a well-ventilated location.
- Place the system unit on a work surface that is raised above the floor.
- Do not place this unit on the top of any pedestal system.
- Keep the air vents on either side of the system unit clear.
- Do not expose the system unit to direct sunlight or abrasive particles.

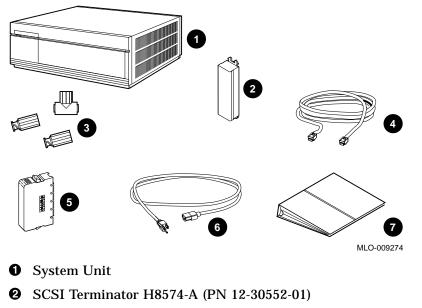
Note _

The console terminal is not supplied with the system.

Step 2: Unpacking the System and Identifying the Parts

- 1. Unpack the system.
- 2. Make sure that you have all the parts listed on the packing slip. The loose-piece accessory kit is shipped with all basic systems. If you do not have all the parts listed, contact your Digital Sales representative.

Figure 1–1 The VAX 4000 Model 105A/106A Systems

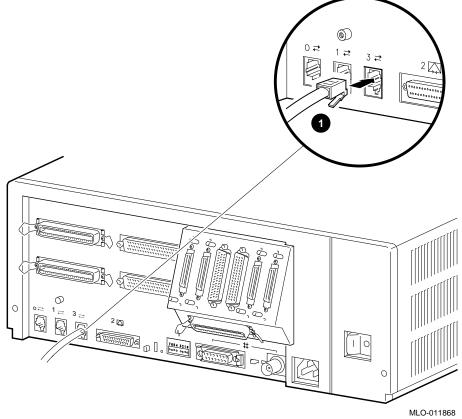


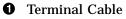
- One ThinWire[™] Ethernet T-Connector (H8223) and Two Terminators (H8225)
- **4** DEC423 Console Terminal Cable (BC16E-25)
- **5** DSSI Terminator (12-29258-01) (up to four included)
- **6** Power Cord
- **O** Documentation and Software Licenses

Step 3: Connecting the Console Terminal

- 1. Connect one end of the terminal cable to the modified modular jack (MMJ) port 3. This system will be shipped with a label covering ports 0 and 1. After port 3 is properly identified as the console port, the OPA0 arrow label may be removed.
- 2. Connect the other end of the terminal cable to a DEC423 (MMJ) communications port on the console terminal.



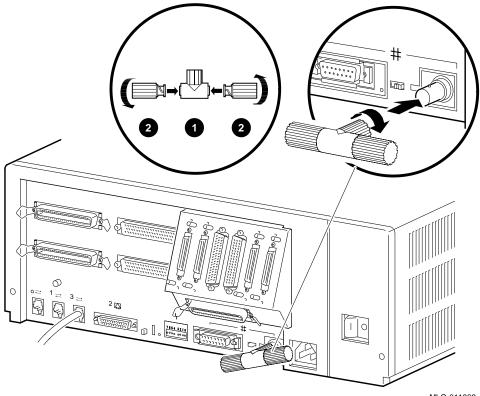




Step 4: Connecting the ThinWire Terminator

- 1. Assemble the T-connector and the two terminators to form a ThinWire terminator.
- 2. Connect the ThinWire terminator to the system unit.



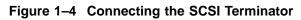


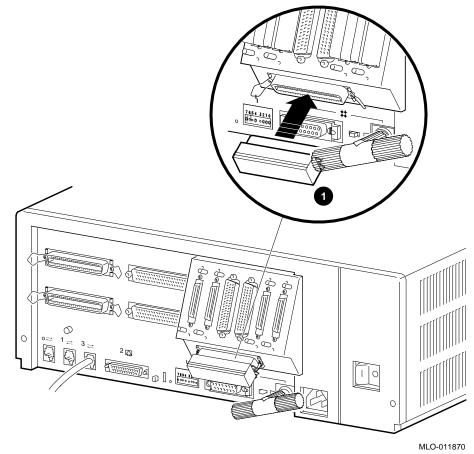
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- **1** T-Connector
- **2** Terminator

Step 5: Connecting the SCSI Terminator

- 1. Connect the SCSI terminator to the SCSI port.
- 2. Close the bail lock loops.







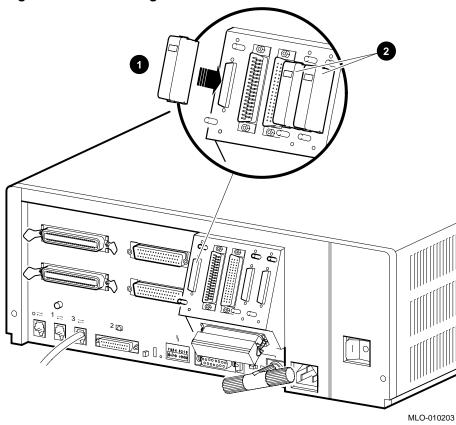
Step 6: Connecting the DSSI Terminators

Connect all DSSI terminators.

Note _

The VAX 4000 Model 105A has an expansion port with three DSSI slots (see Figure 1–5). The VAX 4000 Model 106A has four DSSI slots on the expansion port (see Figure 1–6).

Figure 1–5 Connecting a DSSI Terminator to a VAX 4000 Model 105A



- **1** DSSI Terminator for all models
- **2** Connected DSSI Terminators

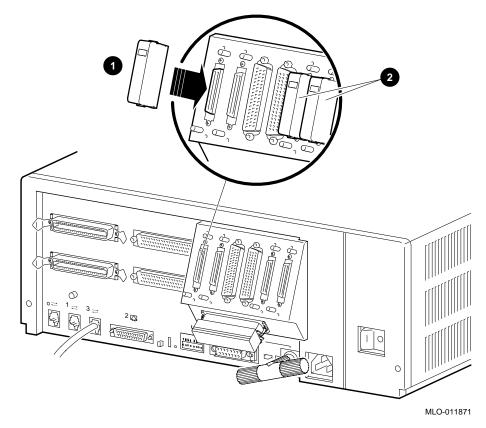
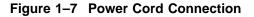


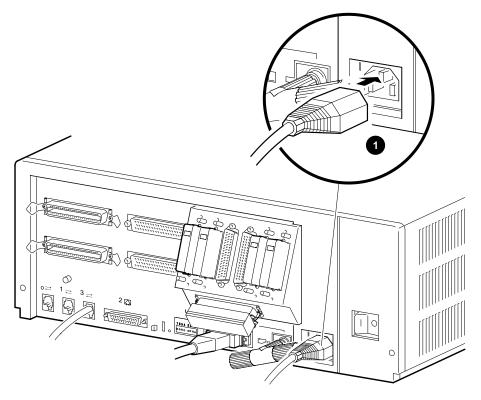
Figure 1–6 Connecting a DSSI Terminator to a VAX 4000 Model 106A

- **1** DSSI Terminator for all models
- **2** Connected DSSI Terminators

Step 7: Connecting the Power Cord

- 1. Ensure that the on/off switch is in the off (O) position (see Figure 1–8 for switch location).
- 2. Connect the power cord to the system unit.
- 3. Connect the other end of the power cord to an isolated, grounded circuit.





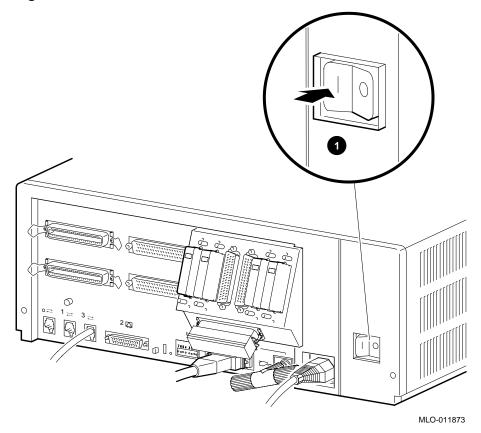
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1 Power Cord

Step 8: Turning on the Console Terminal and System Unit

- 1. Turn on the console terminal. Wait until it completes its power-up test. (See the terminal documentation for more information.)
- 2. Check the terminal settings. See the VAX 4000 Model 105A/106A Operator Information manual for the list of correct settings.
- 3. Turn on the system unit by setting the on/off switch to the on (|) position.

Figure 1–8 Power Turn On



1 On/Off Switch (the on position (|) is shown)

Step 9: Checking the Power-Up Test Results

The power-up test can take several minutes to complete, depending on the number of installed options and on which default settings you use.

- 1. If the power-up test results displayed on the screen are similar to the results in Example 1–1, the system has passed the power-up test. Go to step 9.
- 2. If the power-up test results displayed on the screen are not similar to the results in Example 1–1, the system has not passed the power-up test. See Example 1–2 for a typical failure.

Example 1–1 Successful Power-Up Test Screen

```
KA53-A VX.X, VMB 2.14  
Performing normal system tests.
72..71..70..69..68..67..66..65..64..63..62..61..60..59..58..57..
56..55..54..53..52..51..50..49..48..47..46..45..44..43..42..41..
40..39..38..37..36..35..34..33..32..31..30..29..28..27..26..25..
24..23..22..21..20..19..18..17..16..15..14..13..12..11..10..09..
08..07..06..05..04..03..
Tests completed.  
>>>
```

- Central Processing Unit (CPU) Name, Firmware Version Number, and Virtual Memory Boot (VMB) Version Number
- **2** Read-Only Memory (ROM) based diagnostics countdown

```
③ Status Message
```

O Console Prompt

If SIMM_OD is not present or not plugged in correctly, the system responds with a display similar to the following example:

Example 1–2 Unsuccessful Power-Up Test Screen

KA53-A VX.X, VMB 2.14 Performing normal system tests. 72..71..70..69..68..67..66..65..64..63..62.. O ? Test_Subtest_DC_88 Loop_Subtest=05 Err_Type=FF DE_NO_Memory_present.lis Vec=0000 Prev_Errs=0000 P1=E04EE04E P2=00000000 P3=00000000 P4=00001006 P5=00000000 P6=7F337F7F P7=00000000 P8=00000000 P9=FFFF0000 P10=2006270C r0=00000008 r1=21018000 r2=E04EE04E r3=80000000 r4=01000000 r5=04000000 r6=00000002 r7=00000000 r8=0000000 r9=20140758 r10=FFFFFFF r11=FFFFFFF dser=0000 cesr=00000000 icsr=01 pcsts=F800 pcctl=FC00 cctl=00000006 bcetsts=03E0 bcedsts=0400 cefsts=00007E80 nests=00 mmcdsr=01FFFE40 mesr=00000000 0 Error: SIMM Set 0 (0A,0B,0C,0D), SSR = E04E $SIMM_0A = 16MB$ $SIMM_{0B} = 16MB$ $SIMM_OC = 16MB$ SIMM OD = 00MB ?? Total of OMB, 0 good pages, 0 bad pages, 0 reserved pages Normal operation not possible. 3 >>> • Error Message **2** Error Summary showing SIMM "0D" is missing Status Message

Note __

If a failure occurs, refer to VAX 4000 Model 105A/106A Troubleshooting and Diagnostics Information manual.

Step 10: Connecting the System to a Network

If you want to connect the system to a network, see the VAX 4000 Model 105A/106A Operator Information manual.

Step 11: Connecting External Options to the System

If you want to connect external options to the system, see the VAX 4000 Model 105A/106A Operator Information manual.

Step 12: Booting the Operating System

The system is supplied with factory installed software (FIS) on the system disk. Boot the operating system following the procedures in the VMS^{TM} Factory Installed Software User Guide.

Reader's Comments

VAX 4000 Model 105A/106A Installation Information EK-512AA-IN. B01

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I rate this manual's:	Excellent	Good	Fair	Poor
Accuracy (product works as manual says)				
Completeness (enough information)				
Clarity (easy to understand)				
Organization (structure of subject matter)				
Figures (useful)				
Examples (useful)				
Index (ability to find topic)				
Page layout (easy to find information)				
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