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# 3.5-Inch RF-Series Disk Drive Installation Guide for BA42B-Based VAX 4000 Systems

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**Digital Equipment Corporation  
Maynard, MA**

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# Preface

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## Overview

### Introduction

This manual provides reference, configuration, and installation information for 3.5-inch RF-series disk drives in the BA42B-based VAX 4000 system.

### Intended Audience

The audience for this manual consists of Digital Services engineers or customers who have a self-maintenance agreement with Digital Equipment Corporation and will install 3.5-inch RF-series disk drives in the BA42B-based VAX 4000 system.

### Organization

This manual contains information specifically for installation of 3.5-inch RF-series disk drives in a BA42B-based VAX 4000 system. Information for the installation of all other disk drives or options or information pertaining to the BA42B itself can be found in other Digital documentation.

### Conventions

The following conventions are used in this manual:

Convention	Description
<i>x</i>	A lowercase italic <i>x</i> indicates the generic use of a letter. For example, <i>xxx</i> indicates any combination of three alphabetic characters.
<i>italic type</i>	Italic type emphasizes important information or indicates variables. It is also used for the titles of manuals.

## Overview

Convention	Description
<b>boldface type</b>	Boldface type in examples indicates user input. Boldface type in text indicates the first instance of terms defined either in the text, in the glossary, or both.
<i>nn nnn.nnn nn</i>	A space character separates groups of 3 digits in numerals with 5 or more digits. For example, <i>10 000</i> equals <i>ten thousand</i> .
<i>n.nn</i>	A period in numerals signals the decimal point indicator. For example, <i>1.75</i> equals <i>one and three-fourths</i> .
MONOSPACE	Text displayed on the screen is shown in monospaced type.
Radix indicators	The radix of a number is written as a word enclosed in parentheses, for example, 23(decimal) or 34(hexadecimal).
UPPERCASE	A word in uppercase indicates a command.
<b>Note</b>	A note contains information that is of special importance to the user.
<b>Caution</b>	A caution contains information to prevent damage to the equipment.

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## 3.5-Inch RF-Series Disk Drive Information

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### Introduction

#### Note

#### Note

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Contact your Digital Services representative to install 3.5-inch RF-series options in your system. If you attempt to install these options, you may invalidate the warranty.

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#### Manual Contents

This manual contains the following sections:

- Description  
Brief description of the option
- Option Contents  
List of the option components
- DSSI ID Information  
Description of setting the device's DSSI ID
- Installation  
Description of installation procedures
- Diagnostic Support  
Testing the operation of the disk drive

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## 3.5-Inch RF-Series Disk Drive Options

<b>Description</b>	The 3.5-inch RF-series disk drives are high-performance DSSI devices which store data in fixed length blocks on thin-film rigid media disks. The storage medium in the disk drive is fixed, not operator removable.
<b>Ordering Information</b>	To receive the appropriate installation hardware when installing a 3.5-inch RF-series disk drive in a BA42B-based VAX 4000 system, a Digital Services employee must order the disk drive option rather than the basic disk drive alone.
<b>Option Contents</b>	The 3.5-inch RF-series options contain the disk drives as well as a mounting bracket (P/N 74-44226-01), and the four grommets (P/N 12-31734-01).



### 3.5-Inch RF-Series DSSI IDs

#### Setting the DSSI ID

In a BA42B-based VAX 4000 system, each DSSI device must have a unique DSSI ID number. When installing 3.5-inch RF-series disk drive options, the DSSI ID must be set to an ID that is not used by any of the other DSSI devices in the system. For further information see the appropriate documentation for the particular system with which you are working.

To set the DSSI ID on 3.5-inch RF-series disk drive options, follow these steps:

1. Locate the DSSI ID jumper wires on the disk drive. See Figure 2-1.

3.5-Inch RF-Series DSSI IDs

**Figure 2-1 3.5-Inch RF-Series DSSI ID Jumper Locations**

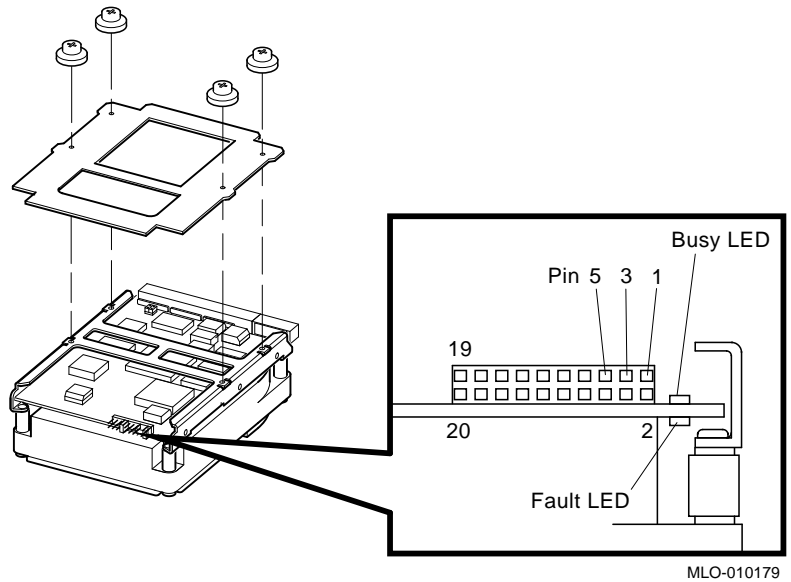


Table 2-1 shows the DSSI ID jumper combinations.

**Table 2-1 3.5-Inch RF-Series DSSI ID Jumper Combinations**

DSSI ID	Pin 5	Pin 3	Pin 1
0	Out	Out	Out
1	Out	Out	In
2	Out	In	Out
3	Out	In	In
4	In	Out	Out
5	In	Out	In
6	In	In	Out
7	In	In	In

- Determine the DSSI ID number to be assigned to the 3.5-inch RF-series disk drive option.

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**Note**

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When the system is in console mode, enter the SHOW DSSI command to view the DSSI ID numbers for the existing devices in the system.

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3. Position the jumpers for the DSSI ID number selected. Table 2–1 shows the DSSI ID number and the corresponding jumper wire combinations.

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## 3.5-Inch RF-Series Installation Procedures

### Before Installing 3.5-Inch RF-Series Disk Drive Options

Before installing the 3.5-inch RF-series disk drive option on the upper shelf, remove the enclosure cover. See the *BA42B Enclosure Maintenance Manual* (EK-472Ax-MG) for more information. The 3.5-inch RF-series disk drive options can only be installed on the upper drive-mounting shelf of a BA42B-based VAX 4000 system.

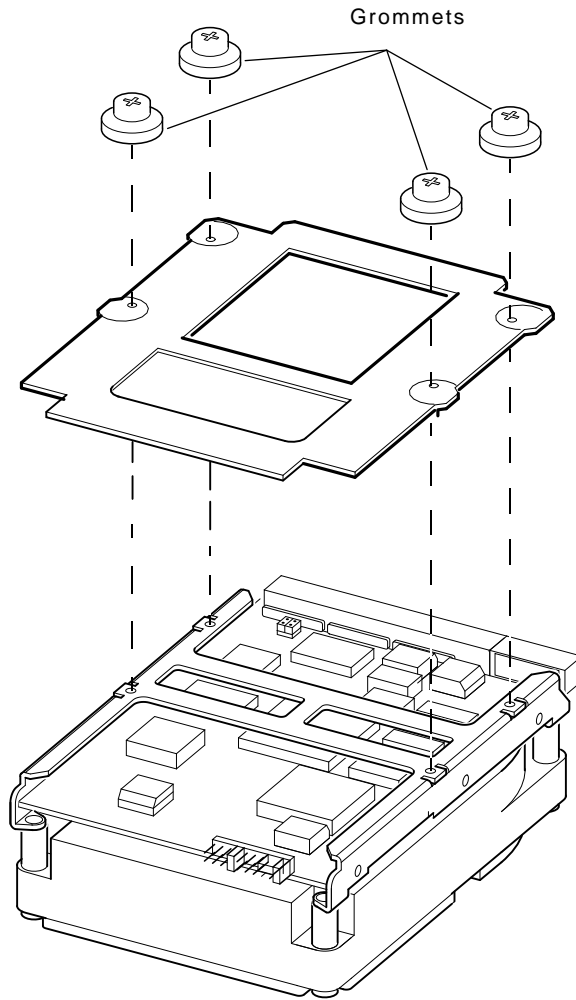
### Installing 3.5-Inch RF-Series Disk Drive Options

To install 3.5-inch RF-series disk drive options, follow these steps:

1. Attach the mounting bracket (P/N 74-44226-01) with the four grommets/screws (P/N 12-31734-01). The grommets fit into the recessed side of the imprinted pockets on the bracket. Figure 2–2 shows a sample 3.5-inch RF-series disk drive option with the mounting bracket. If you receive the drive with the mounting hardware already attached, disregard this step.

### 3.5-Inch RF-Series Installation Procedures

**Figure 2-2 Sample 3.5-Inch RF-Series Disk Drive Option with Mounting Bracket**



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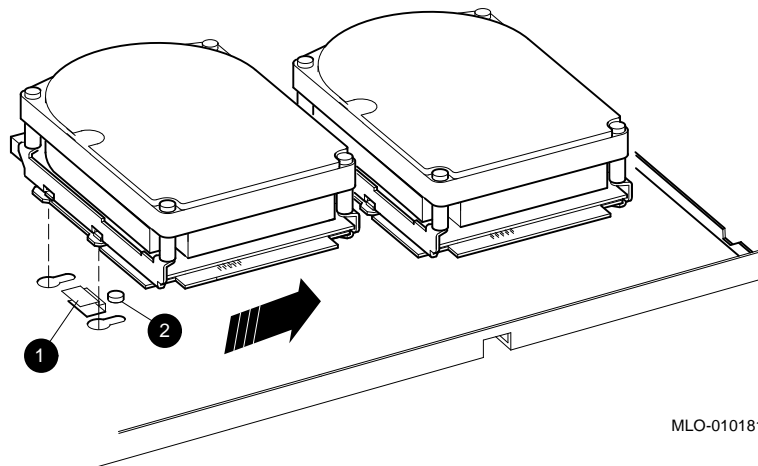
2. Identify the drive-mounting shelf position where the 3.5-inch RF-series option is to be installed. See the *BA42B Enclosure Maintenance Manual (EK-472Ax-MG)* for information about mass storage device orientation and combinations.

### 3.5-Inch RF-Series Installation Procedures

3. Identify the power cable that provides power to the drive-mounting shelf where the 3.5-inch RF-series option is to be installed. Connect the power cable to the power connector on the back of the 3.5-inch RF-series disk drive option.
4. Connect a DSSI cable connector to the back of the 3.5-inch RF-series disk drive option.
5. Identify the spring clip for the drive position where the 3.5-inch RF-series disk drive option will be installed (Figure 2-3). Then remove the lock-out screw if it has not already been removed.

Figure 2-3 shows how to install sample 3.5-inch RF-series disk drive options.

**Figure 2-3 Installing a Sample 3.5-Inch RF-Series Disk Drive Option**



- 1 Spring clip
- 2 Lock-out screw

6. Position the grommets attached to the 3.5-inch RF-series option in the cutouts of the 3.5-inch RF-series drive-mounting shelf.

## 3.5-Inch RF-Series Installation Procedures

7. Push the 3.5-inch RF-series disk drive option in until the grommets are secure in the cutouts, then slide the drive away from the spring clip on the drive-mounting shelf so that the clip locks the disk drive into position.

After the 3.5-inch RF-series disk drive option is installed, replace the enclosure cover.

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## Diagnostics

### Diagnostic Support

The BA42B-based VAX 4000 system provides diagnostic support that tests the operation of a 3.5-inch RF-series disk drive.

Enter the following command at the console prompt to verify that the 3.5-inch RF-series disk drive is visible on the bus:

```
>>> SHOW DSSI
```

If the test fails, the console terminal displays a hard error message containing test mnemonic (DSSI).

For details on diagnostics, refer to the appropriate documentation for the particular system with which you are working.

## Reader's Comments

3.5-Inch RF-Series Disk Drive Installation Guide  
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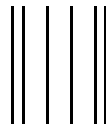
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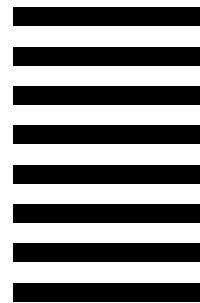
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