

## **Field Bill of Material (FBM)**

### **Replacement of a Service Processor Optical Disk Drive**

Written by: M. Ardisson  
Modified by: J. Maher  
Checked by: M. Isnard Field PE Representative  
Reviewed by: A. Bowen  
Approved by: J. Combes

3745	PN 43P1293	EC H10048	EC H60007			
FBM	1 of 10	06 Jul 2001	09 Feb 2002			



## Before Installation (Sections 1 through 8)

### 1.0 Machines Affected

All 3745 Models requesting the upgrade as described in Section 6 below.

### 2.0 Related Bills of Material or ECs

#### 2.1 Prerequisites

(Must be installed prior to this installation.)

Based on SP 7585 or 3172 equipped with an external optical disk drive:

- P/N 89H4976
- P/N 89H4968
- P/N 89H4965

#### 2.2 Concurrent

(Must be installed at the same time.)

None.

#### 2.3 Companion

(Can be installed at another time)

None.

### 3.0 Bills of Material to Be Installed

FBM 43P1292 - Replacement of an Optical Disk Drive or

BM FRU 43P1343 - Replacement of a complete Optical Disk Drive unit

### 4.0 Preparation

- \_\_\_ 1. Familiarize yourself with the purpose and details of this installation instruction.
- \_\_\_ 2. Check all the items listed on the BM to determine that all parts have been received.

3745 FBM	PN 43P1293 3 of 10	EC H10048 06 Jul 2001	EC H60007 09 Feb 2002			
-------------	-----------------------	--------------------------	--------------------------	--	--	--

## 5.0 Program Updates

None.

## 6.0 Purpose and Description

### 6.1 Purpose

Replacement of an optical disk drive.

### 6.2 Description

Replace the optical disk drive on the service processor with a new one.

## 7.0 Installation Time

CE Hours	Machine (Subsystem) Hours	System Hours	No. of CEs
0.8	0.0	0.0	1

## 8.0 Special Tools or Materials Required

No special tools or materials are required.

## Installation (Sections 9 through 12)

### 9.0 Safety

Observe all normal safety precautions.

### 10.0 Details of Installation

#### 10.1 Machine Preparation for Optical Disk Drive Exchange

Exchange the optical disk drive using the following procedure:

- \_\_\_ 1. At the rear of the optical disk drive unit:
  - Power OFF the optical disk drive using the power ON/OFF switch.
  - Disconnect the optical disk drive power cable from the AC outlet distribution box and then from the rear of the unit.
  - Disconnect the signal cable and the terminator plug.
  - Record the ID switch as shown in Figure 2 on page 7.
- \_\_\_ 2. If you received:
  - A complete new optical disk drive unit, go to Step 5 on page 7.
  - Only a drive unit, continue with Step 3.
- \_\_\_ 3. On the base of the optical disk drive unit, there are four rubber feet. Locate the rubber foot positioned at the front of the unit on the left side. Pull off the rubber foot to expose the retaining screw for the drive holder assembly.
- \_\_\_ 4. Remove the screw and keep it in a safe place for re-assembly.

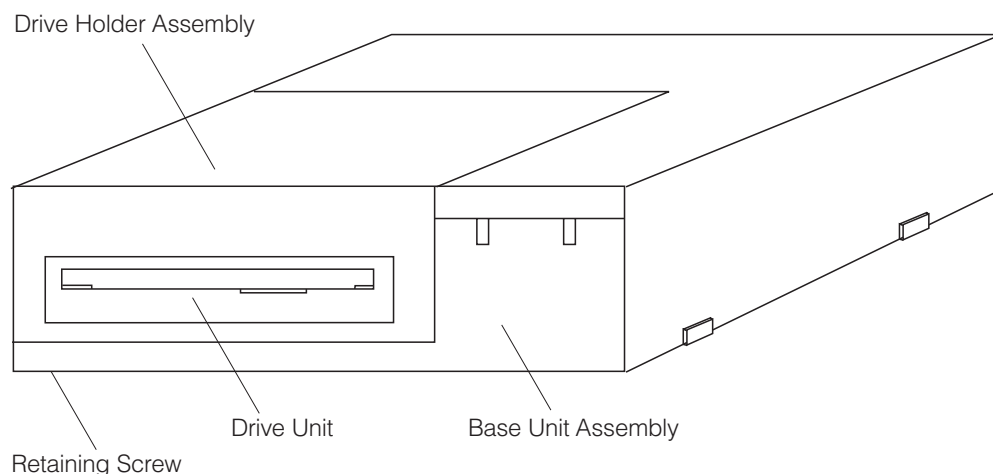


Figure 1. Optical Disk Drive Unit

- a. On the top and rear center of the optical disk drive unit, depress the latching tab that holds the drive holder assembly in place, and, at the same time, slide the drive holder assembly forwards about 30 mm.
- b. Note the position and orientation of the drive unit within the drive holder assembly.
- c. Being careful not to pull on the three cables connecting the drive unit to the base unit assembly, turn the drive holder assembly on its edge, and, using a Torx size T-10 tool or a posi-slotted screwdriver, remove the four screws holding the drive unit in the drive holder assembly.
- d. Slide the drive unit out of the drive holder assembly.

The drive holder assembly should now lift away from the base unit assembly, allowing access to the connecting cables.

- e. Note the positions of the three cables connecting the drive unit to the base unit assembly.
- f. Unplug the three (power, SCSI, and remote addressing) cables from the drive unit.

**Note:** One cable attaches to a small connector on the card itself. The connector is identified by CNH2 and has a small piece of adhesive tape on it. Remove the adhesive tape before unplugging the three cables from the drive unit.

- g. The old drive unit has two DIP switches; the new drive unit has only one. Set the DIP switch on the new drive unit to match the setting of the DIP switch identified as SW1 on the old drive unit. Ignore the DIP switch identified as SW2 on the old drive unit.
- h. Replug the three base unit assembly cables to the new drive unit in the positions noted during the removal of the old drive unit, and replace the small piece of adhesive tape on the CNH2 connector.
- i. Slide the new drive unit into the drive holder assembly until the front face of the drive unit is aligned with the casing of the drive holder assembly.
- j. Using the four Torx or posi screws, secure the drive unit in position. Do not over-tighten these screws, as it will damage the threads on the drive unit. To ensure that the drive unit is held securely, do not reinstall the flat washers with the screws.
- k. Position the drive holder assembly back onto the base unit assembly, making sure that it sits correctly in the slider grooves.
- l. Slide the drive holder assembly back into the base unit assembly until the latching tab clicks and it is held into position.
- m. Replace the retaining screw removed in Step 4 on page 5.
- n. Replace the rubber foot and press it firmly into position.
- o. Go to Step 7 on page 7.

- \_\_\_ 5. If you received:
  - A complete Xyratex optical disk drive unit, continue with Step 6.
  - A complete Fujitsu optical disk drive unit, go to Step 10.
- \_\_\_ 6. On the new optical disk drive unit that you are exchanging, set the identification number (ID) as it was on the removed optical disk drive unit.  
 To change the ID, press the little button on the right or left of the ID display.

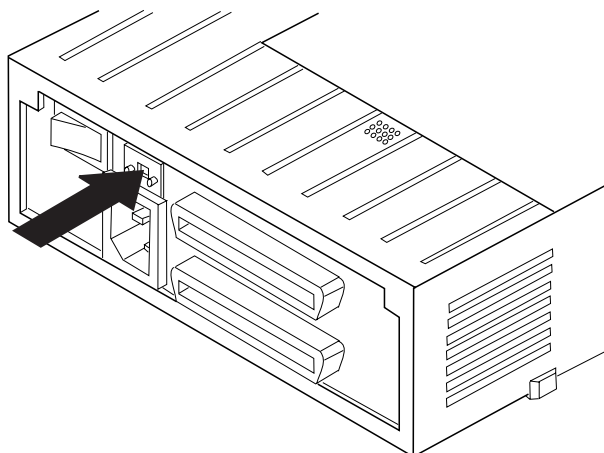


Figure 2. ID Setting on Optical Disk Drive

- \_\_\_ 7. At the rear of the optical disk drive unit:
  - Install the terminator plug previously removed.
  - Reconnect the signal cable.
  - Connect the power cable at the rear of the unit, then in the AC outlet distribution box.
- \_\_\_ 8. Refer to the *Service Processor Installation and Maintenance* manual of the service processor to which the optical disk drive unit is attached for instructions on how to run diagnostic tests on the optical disk drive and finish the exchange procedure.  
**Note:** Be careful to pay attention to all caution notices that apply to the new optical disk drive.
- \_\_\_ 9. Go to 11.0, "Test Procedure" on page 9.
- \_\_\_ 10. On the optical disk drive unit that you are installing:
  - Set the ID switch setting to the same number as the optical disk drive unit that you just removed.
  - Set the DIP1 switch to OFF and the DIP 2, 3, and 4 switches to ON as shown in Figure 3 on page 8.



Figure 3. DIP Switch Settings

- \_\_\_ 11. At the rear of the optical disk drive unit, attach the SCSI signal cable that you removed in Step 1 on page 5 to the adapter as shown in Figure 4. Attach the cable and the adapter to the upper SCSI connector on the drive assembly.

**Note:** Do not attach the terminator.

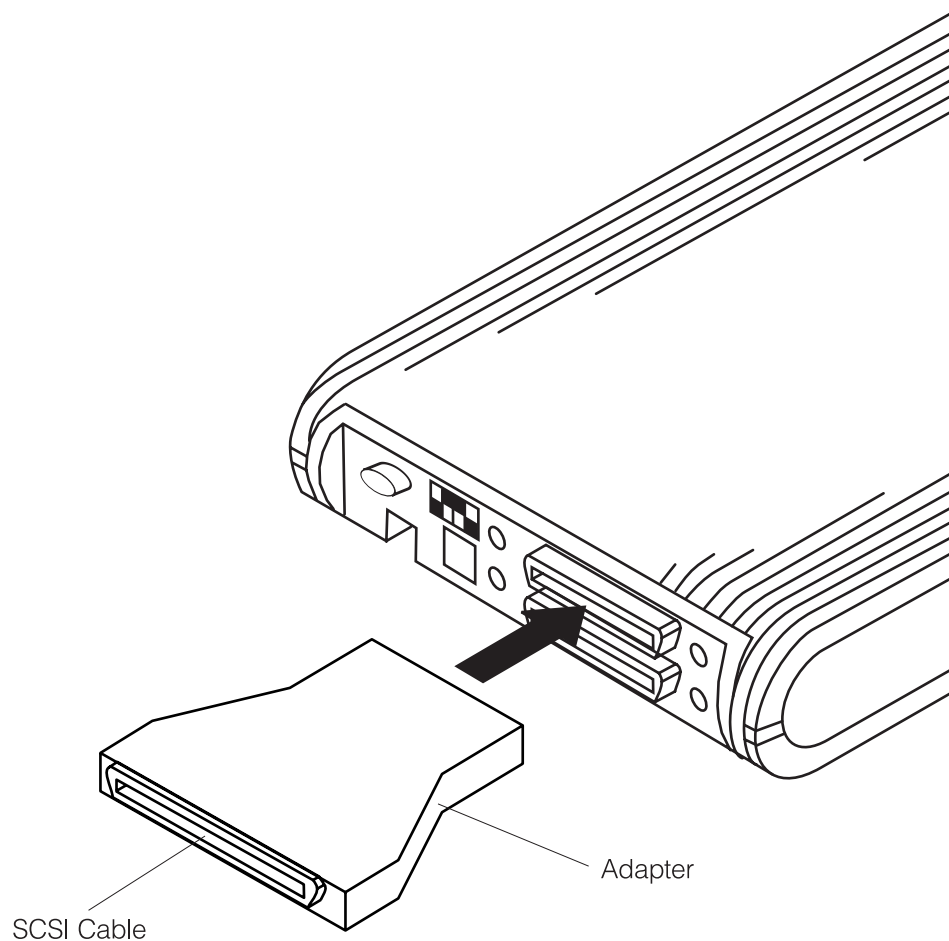


Figure 4. Reconnecting the Signal Cable

- \_\_\_ 12. Underneath the optical disk drive unit, connect the output cable from the external AC/DC power supply that you received with the new optical disk drive unit. Using the power cable from the removed optical disk drive assembly, connect the power cable to the AC/DC power supply and to the power source.



- \_\_\_ 13. Refer to the *Service Processor Installation and Maintenance* manual of the service processor to which the optical disk drive unit is attached for instructions on how to run diagnostic tests on the optical disk drive and finish the exchange procedure.

**Note:** Be careful to pay attention to all caution notices that apply to the new optical disk drive.

## 11.0 Test Procedure

No additional testing is required. All testing was performed during guided instruction.

## 12.0 Return the Machine to the Customer

The customer can now return to normal operations.

- \_\_\_ 1. Close all machine covers.
- \_\_\_ 2. Return the machine to the customer.

## 13.0 Field Updating

None.

