

## Field Feature Bill of Material (FFBM)

**PN 03F5077**

### **INSTALLATION of a LIB2 Board Positions 3/4 (FC 4903) in IBM 3745 Models 170 and 17A**

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Approved by: F. Charron  
Reviewed by: B. Kelly

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## Before Installation (steps 1-8)

### 1.0 Machines Affected

3745 Models 170 and 17A.

### 2.0 Related BMs and ECs

None.

### 3.0 BMs to be Installed

**Note:** Review each numbered item in this section to determine your needs.

- 03F5077 - Installation Instructions.
- 03F5075 - LIB2 asm position 3
- and/or 03F5078 - LIB2 asm position 4

### 4.0 Install one of the followings BMs

- 03F2599 - Homologation label France only
- 03F5096 - Homologation label Italy only
- 03F5097 - Homologation label Norway only

### 5.0 Preparation

1. Familiarize yourself with the purpose and details of these installation instructions before negotiating machine time with the customer.
2. Check all the items and count parts listed on the BM(s) to be installed to determine whether all parts were received.
3. After the LIC board hardware installation, you can install a Line Adapter (TSS) and/or a LIC feature before power on.

4. See the *HONE Configurator sheet* to determine in which position you have to install the LIB2.

Installation sequence:

- a. Position 4, top right (01L-A1)
- b. Position 3, bottom right (01L-A2).

### 6.0 Program Update

None.

### 7.0 Purpose and Description

#### 7.1 Purpose

Install a LIB2 feature.

#### 7.2 Description

Install a board LIB type 2 with associated SMUXA/B cards.

### 8.0 Installation Time

FFB/M Installed	Machine Hours	System Hours
03F5075	0.8	0.0
and/or 03F5078	0.8	0.0
Test Time	0.5	
Total Time	1.3	

### 9.0 Tools/Materials Required

ESD kit (PN 6428316).

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## Installation (steps 9-11)

### 10.0 Safety

- The installation must be performed offline.
- Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the *3745 Maintenance Information Procedures (MIP)* manual (SY33-2054).

### 11.0 Details of Installation

Before the installation, ask the customer:

- To set all the lines and channel addresses offline for this controller.
- To deactivate all resources of the 3746 Model 900, if attached.
- For the maintenance password.
- To logoff the console (3745-170) or the Service Processor (SP) (3745-17A), if not already done.

### 11.1 Checking

#### 11.1.1 From the 3745 Control Panel

1. Check that **Power Control** displays **3**.
2. If it does not, record the value \_\_\_\_.  
Set the **Power Control** value to **3**.  
Press the **Validate** key.

- If you are installing a LIB2 in a Model 17A, go to Step 11.1.3, "From the Service Processor."
- Otherwise, continue.

#### 11.1.2 From the 3745-170 Console

1. From the **CA INTERFACE DISPLAY** screen, record **Enabled channel adapters**. Then, **disable** all channel adapters.
2. Wait for **Interface Status Disabled** for all CAs. Press **F4**.
3. Enter the maintenance password, press **Send**.
4. If the CCU is running, enter **RST** to reset the CCU.  
The MOSS goes in **MOSS ALONE** state.

- Go to Step 11.2, "Hardware Installation" on page 5.

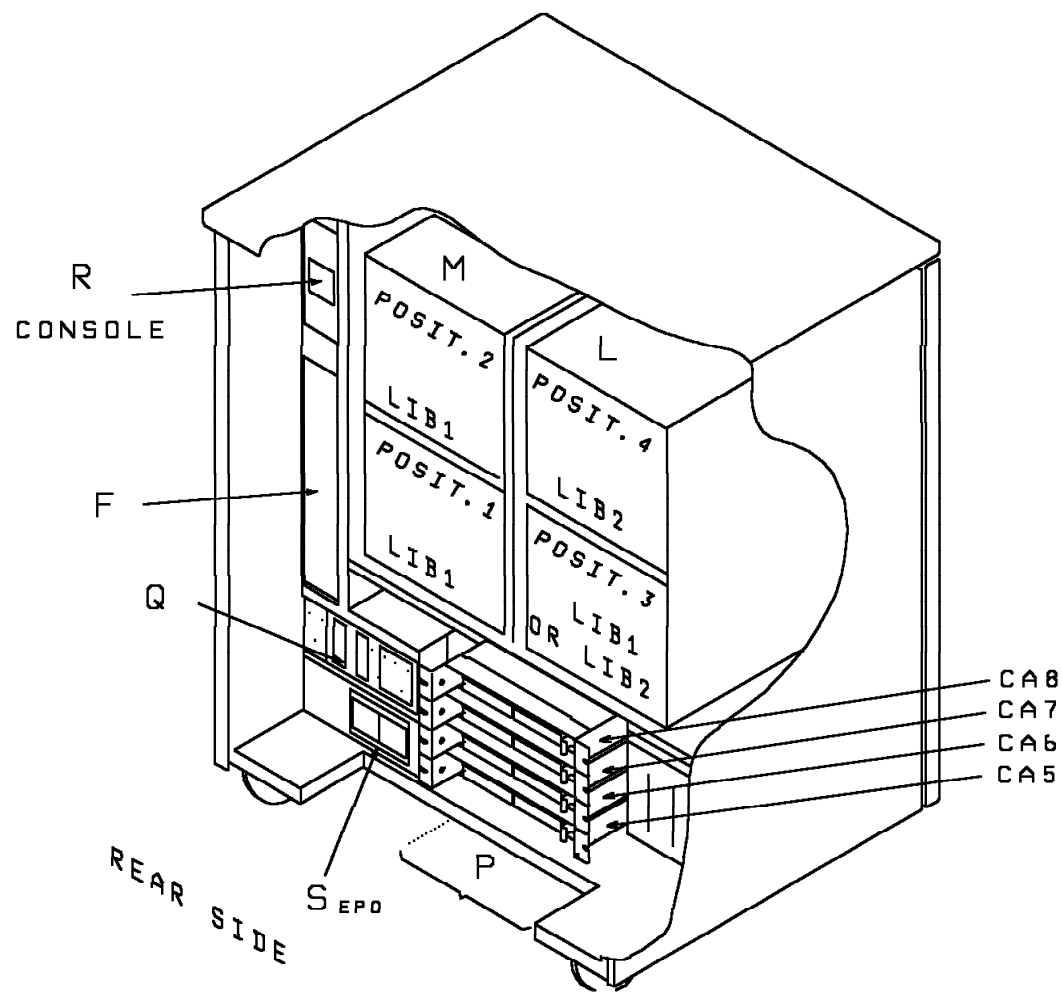
#### 11.1.3 From the Service Processor

1. On the **MOSS-E View** window, click on **Program**.
2. Click on **LOG ON MOSS-E**.
3. Enter the maintenance password, press **Enter**.
4. On the **MOSS-E View** window, double click on the icon of the identified 3745.
5. On the **3745 Menu** window, double click on **MOSS Console**.
6. When **MOSS Console** screen is displayed, enter **CID**, press **Enter**.
7. From the **CA INTERF DISPLAY** screen, record **Enabled channel adapters**. Then, **disable** all channel adapters.
8. When all CAs are **DISABLED**, press **F1**.
9. If CCU running, enter **RST** to reset the CCU.  
The MOSS goes in **MOSS ALONE** state.

## 11.2 Hardware Installation

**Warning:** Follow the existing ESD procedures when handling logic parts.

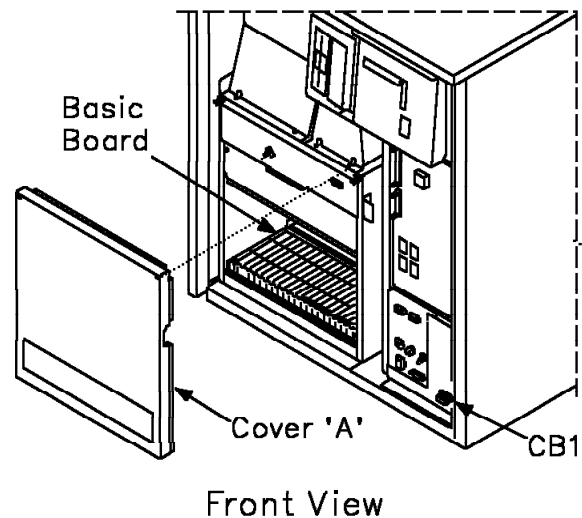
- \_\_\_ 1. Open the rear system cover.
- \_\_\_ 2. Visually, check that there is no LIB2 installed where you have to install this feature.



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## 11.2.1 Power OFF

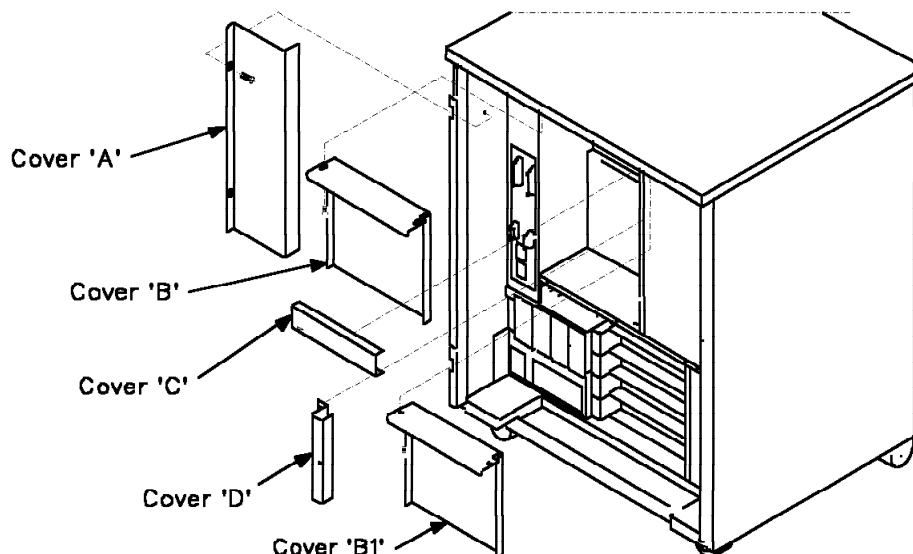
- 1. From the 3745 control panel, press the **Power OFF** key.
- 2. Open the front system cover and switch off **CB1**.



- If you are installing a LIB2 in position 3, go to section 11.2.3, "Installation of a LIB2 in Position 3 (01L-A2)" on page 9.
- If you are installing a LIB2 in position 4, continue.

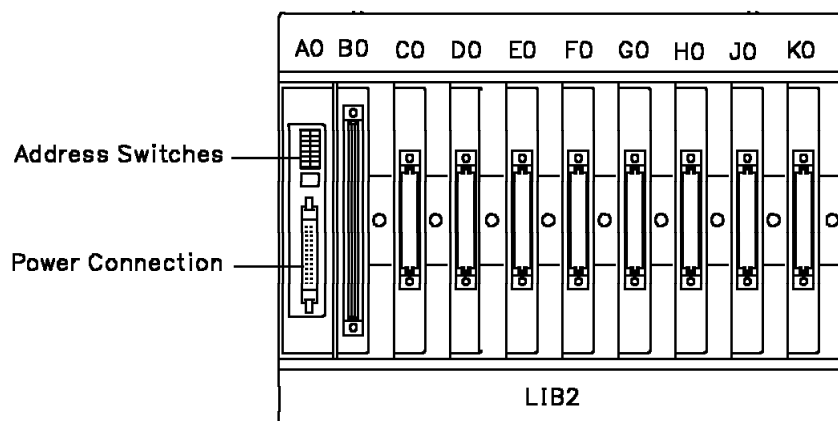
## 11.2.2 Installation of a LIB2 in position 4 (01L-A1)

- 1. From the REAR of the machine, remove cover 'A' with two screws and cover 'B1' with two screws.
- 2. If there is no LIB1 board in 01M-A1 position, you have to remove cover 'B' with two screws.
- 3. Remove cover 'C' (over raceway) with two screws.

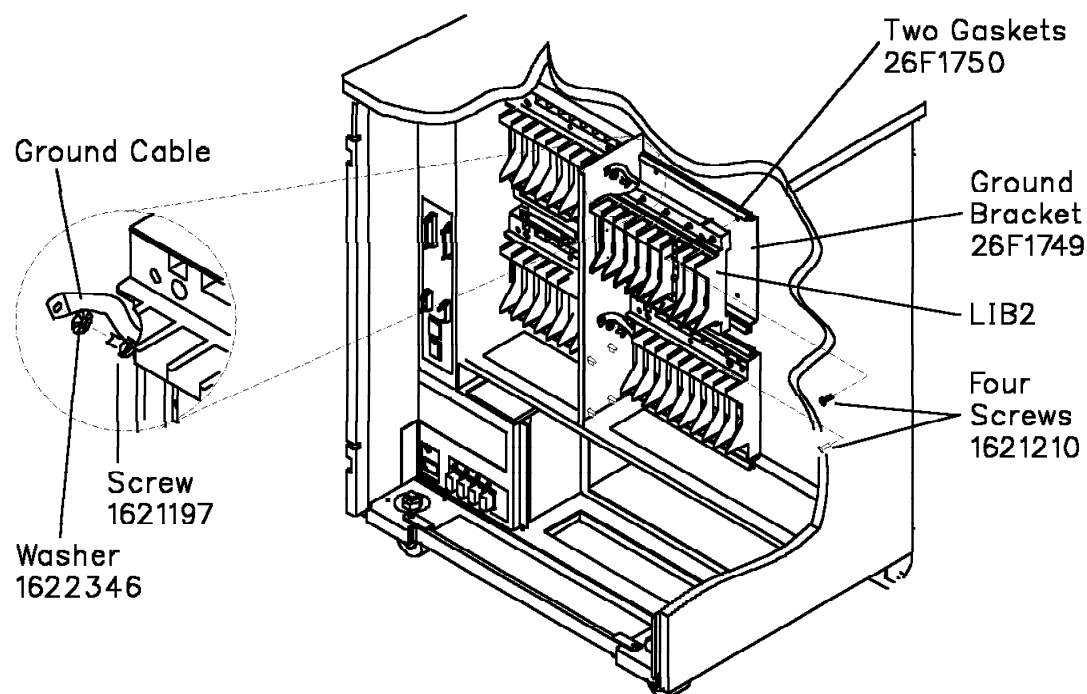


\_\_\_ 4. Set the board address as follows:

LIB2 Position	Switch Positions						
	7	6	5	4	3	2	1
01L-A1	0	0	0	0	0	1	1

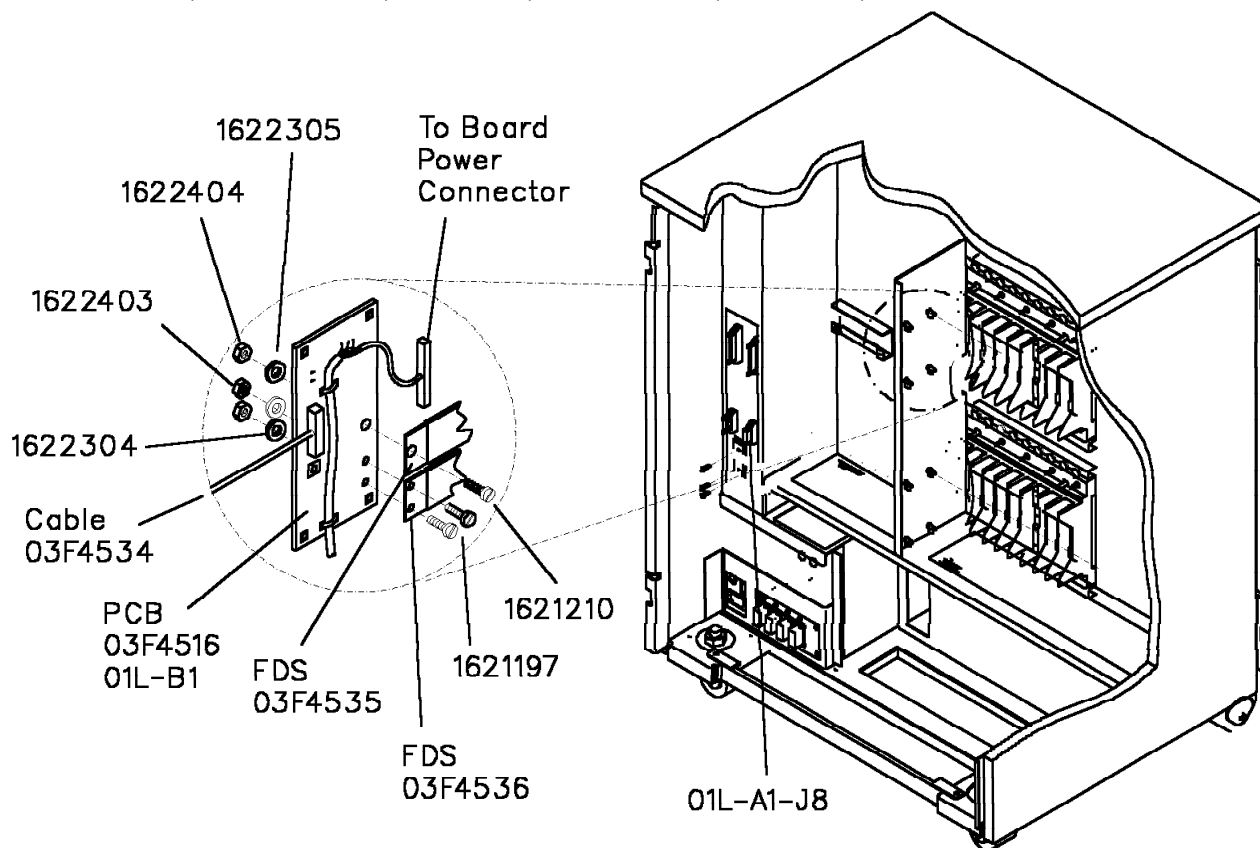


- \_\_\_ 5. Stick two gaskets (PN 26F1750) on top and bottom of ground bracket (PN 26F1749) (instead of these two PNs you may have PN asm 03f4623).
- \_\_\_ 6. Install the bracket and LIB2 asm (top right position) with four screws (PN 1621210).
- \_\_\_ 7. Connect the ground cable on the frame using screw (PN 1621197) and washer (PN 1622346).



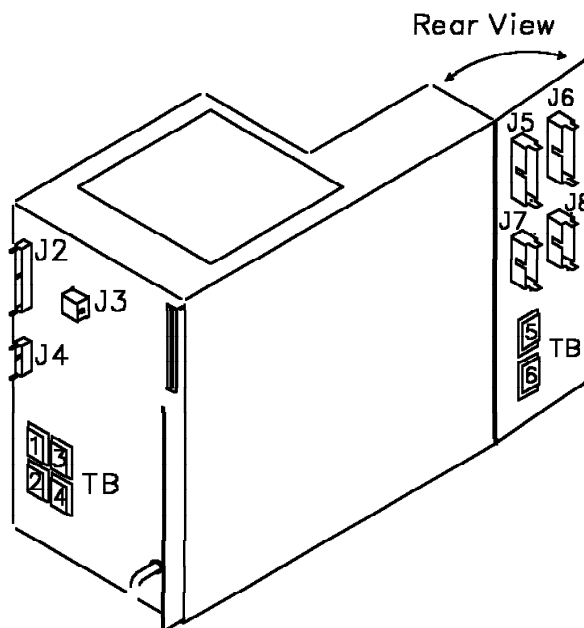
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- 8. On Printed Circuit Board (PCB) (03F4516) install the first FDS cable (PN 03F4535) in position 01L-B1 TB1 using screw (PN 1621210) with nut (PN 1622404) and washer (PN 1622305).
- 9. Install the second FDS cable (PN 03F4536) in position 01L-B2 TB2 using two screws (PN 1621197) with two nuts (PN 1621403) and washers (PN 1622304).



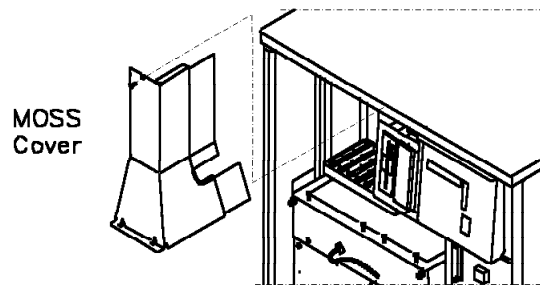
- 10. Install Printed Circuit Board (PCB) (PN 03F4516) securing it with the four standoffs already installed on the frame.
- 11. Route the two FDS cables towards the rear of PS1.
- 12. Connect one end of the cable (03F4534) in the board power connector (01L-B1J1) and route the other end towards the MOSS board position 01A.
- 13. Connect other end of first FDS cable in position 01F-A0 TB5 with screw (PN 1621210).
- 14. Connect other end of second FDS cable in position 01F-A0 TB6 with two screws (PN 1621197).

**Note:** Two FDS may be already installed in these positions.





\_\_\_ 15. Remove the MOSS cover.



\_\_\_ 16. Plug cable (PN 03F4534) in position 01A-Y0C3.

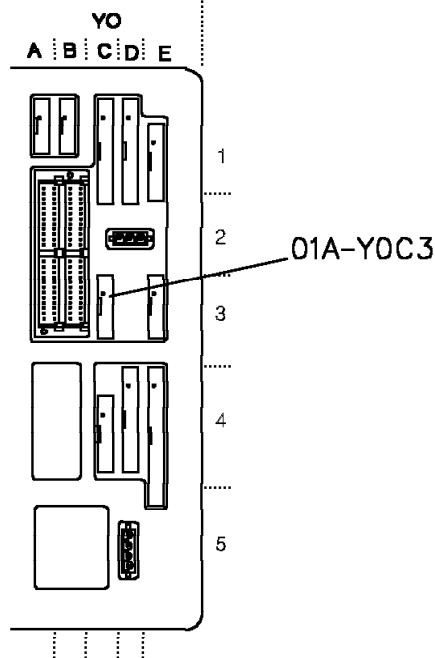
\_\_\_ 17. Install grid (PN 03F4747) with two screws (PN 1621210).

\_\_\_ 18. Plug SMUXB card in position B0 of the board and plug eight DUMMY LICs (PN 65X8446) from position C0 to K0. Tighten the front screws.

**Notes:**

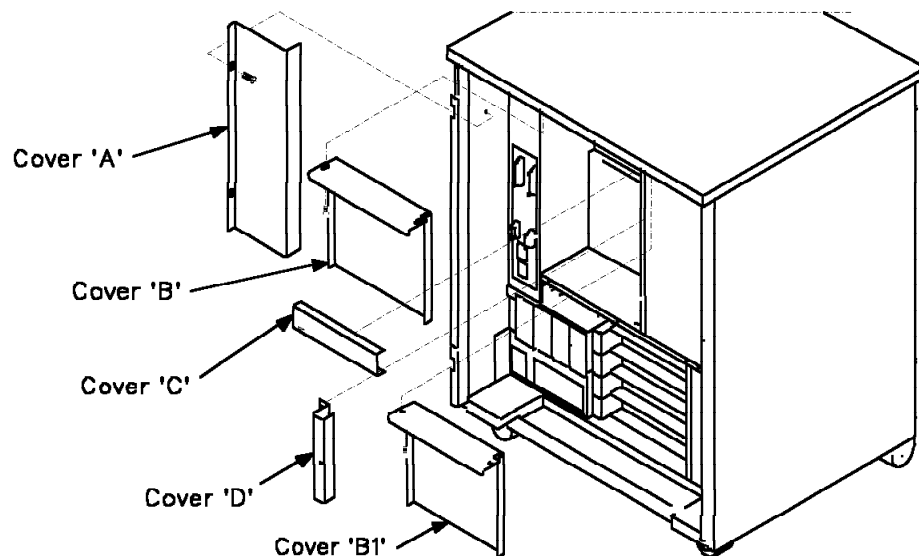
1. If you have to install TSS via others MESSs, you can perform their installation at this time.

2. You may have spare scanner(s) installed on the machine with MUX cable(s) saved in the right side of basic board in front of the machine. If present, connect them.



- If you have to install a LIB2 in position 3, go to 11.2.3, "Installation of a LIB2 in Position 3 (01L-A2)."
- Otherwise, go to section 11.2.4, "Homologation Label" on page 13

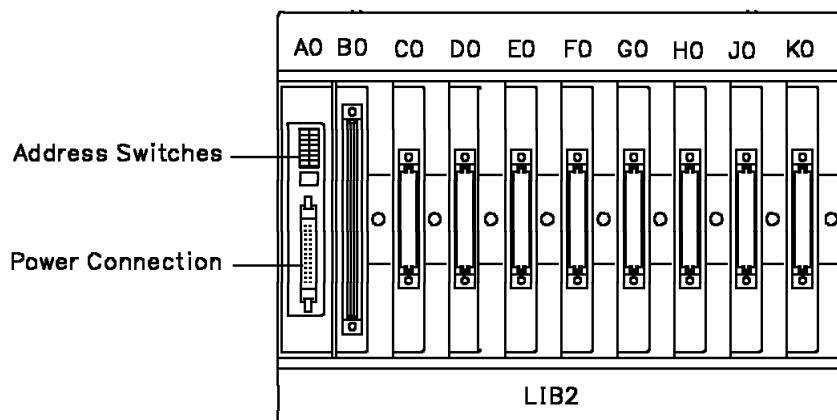
## 11.2.3 Installation of a LIB2 in Position 3 (01L-A2)



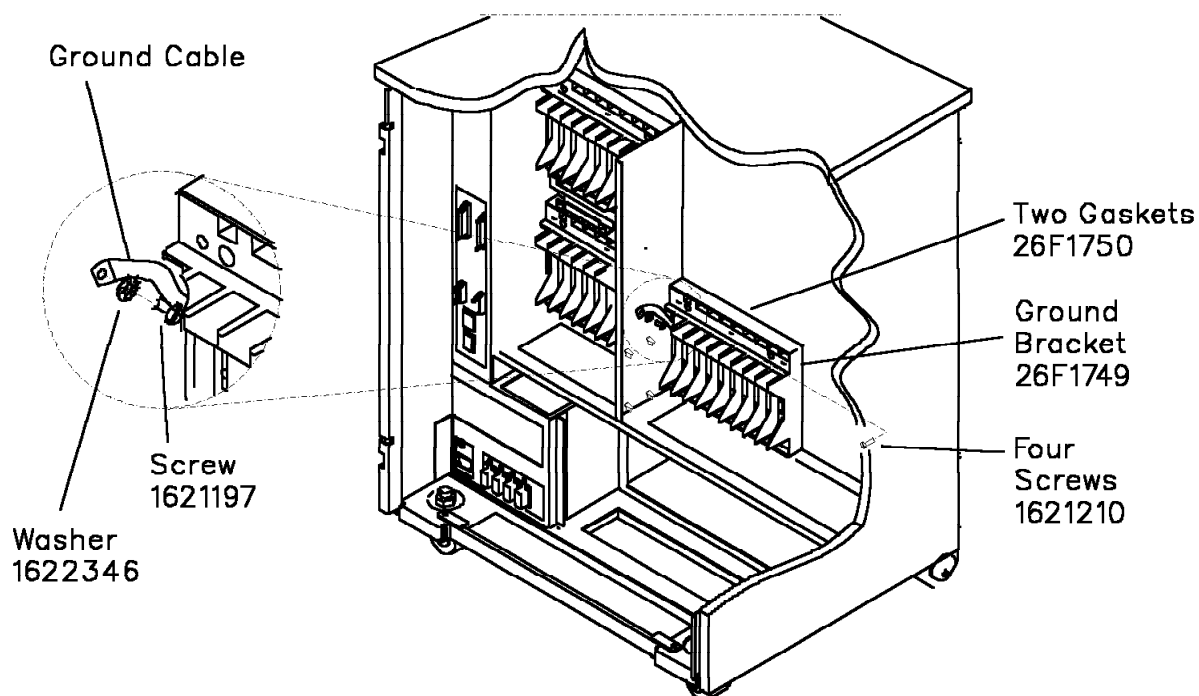
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- \_\_\_ 1. From the REAR of the machine, remove cover 'A' with two screws and cover 'B' with two screws.
- \_\_\_ 2. If there is no LIB1 board in 01M-A1 position, you have to remove cover 'B' with two screws.
- \_\_\_ 3. Remove cover 'C' (over raceway) with two screws.
- \_\_\_ 4. Set the board address as follows:

LIB2 Position	Switch Positions						
	7	6	5	4	3	2	1
01M-A2	0	0	0	0	0	1	0

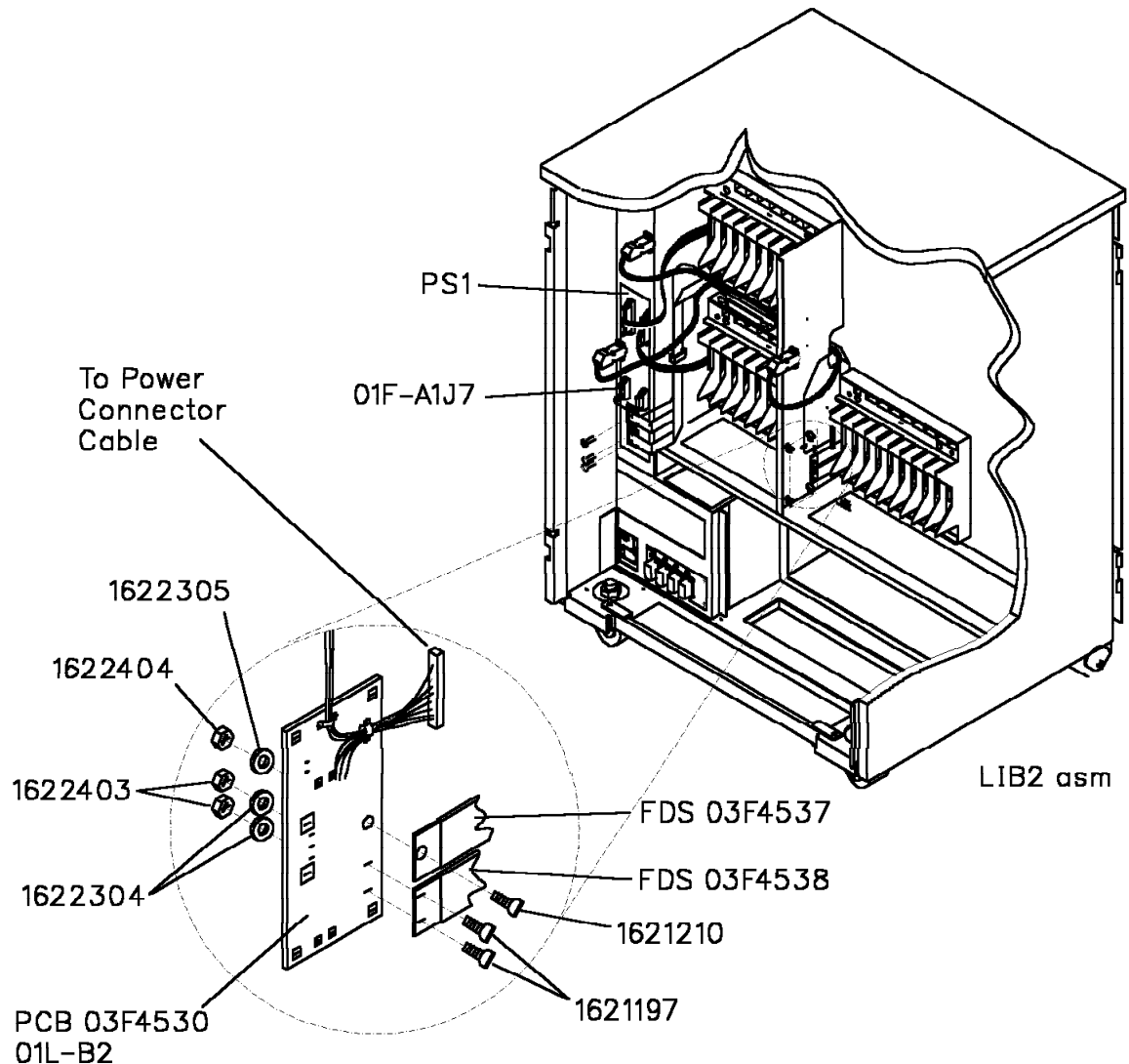


- \_\_\_ 5. Stick two gaskets (PN 26F1750) on top and bottom of ground bracket (PN 26F1749) (instead of these two PNs you may have PN asm 03F4623).
- \_\_\_ 6. Install the bracket and LIB2 asm (bottom right position) with four screws (PN 1621210).
- \_\_\_ 7. Connect the ground cable on the frame using screw (PN 1621197) and washer (PN 1622346).



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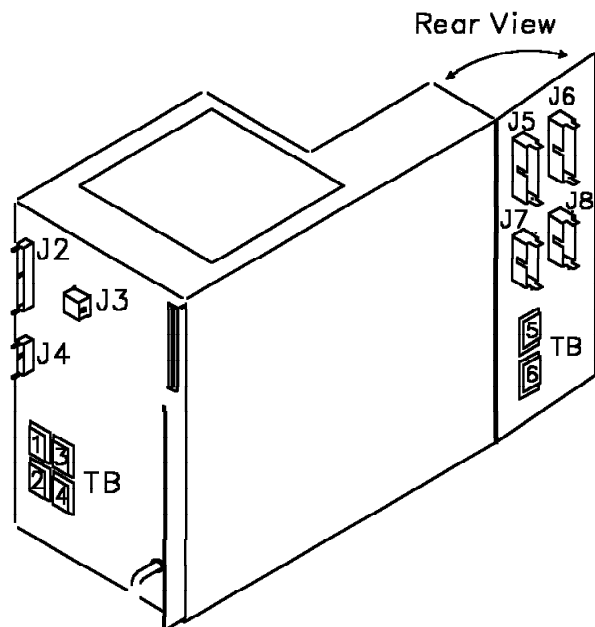
- 8. On Printed Circuit Board (PCB) (03F4530) install the first FDS cable (PN 03F4537) in position 01L-B2 TB1 using screw (PN 1621210) with nut (PN 1622404) and washer (PN 1622305).
- 9. Install the second FDS cable (PN 03F4538) in position 01L-B2 TB2 using two screws (PN 1621197) with two nuts (PN 1621403) and washers (PN 1622304).



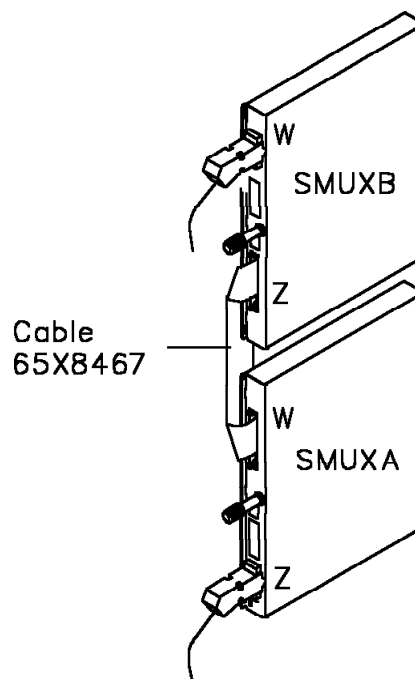
- 10. Install Printed Circuit Board (PCB) (PN 03F4530) securing it with the four standoffs already installed on the frame.
- 11. Route the two FDS cables towards the rear of PS1.
- 12. Connect one end of the cable (03F4534) in the board power connector (01L-B2J1) and route the other end towards the rear of PS1 and connect it in 01F-A1J8 position.

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- \_\_\_ 13. Connect other end of first FDS cable in position 01F-A0 TB5 with screw (PN 1621210).
- \_\_\_ 14. Connect other end of second FDS cable in position 01F-A0 TB6 with two screws (PN 1621197).



- \_\_\_ 15. Plug SMUXA card in position B0 of the board and plug eight DUMMY LICs (PN 65X8446) from position C0 to K0. Tighten the front screws.
- \_\_\_ 16. Remove the cover over the SMUXB card installed in LIB2 board position 4 and plug the cable (PN 65X8467) between SMUXA and SMUXB cards.



- \_\_\_ 17. Reinstall SMUXB cover.

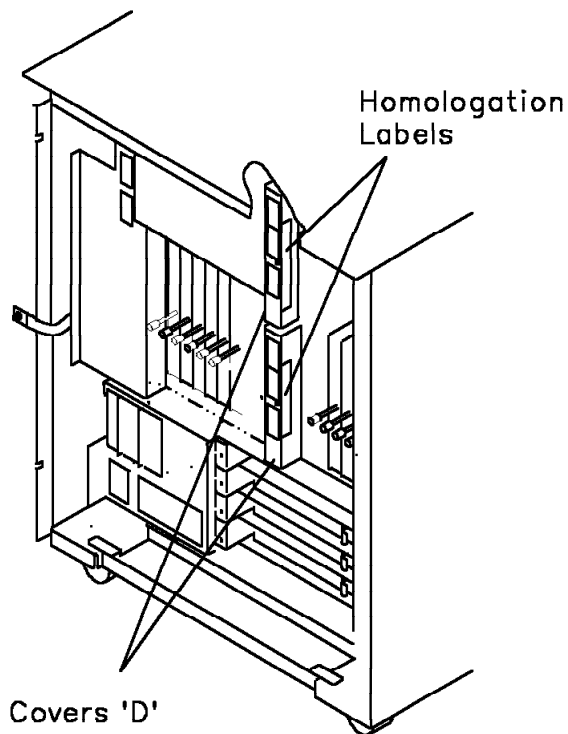
**Notes:**

- a. If you have to install TSS via others MESs, you can perform their installation at this time.
- b. You may have spare scanner(s) installed on the machine with MUX cable(s) saved in the right side of basic board in front of the machine. If present, connect them.

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## 11.2.4 Homologation Label

- \_\_\_ 1. Install cover 'D' (PN 03F4605) over Printed Circuit Board (PCB) and SMUXA card with two screws (PN 1621210).
- \_\_\_ 2. For FRANCE, affix homologation label (PN 26F0300 (from FFBM PN 03F5299) on cover 'D' as shown in figure below.



- \_\_\_ 3. Reinstall cover 'C'.
- \_\_\_ 4. Reinstall all LIC cards removed from board positions 01M-A1/A2.
- \_\_\_ 5. Reinstall cover 'A'.
- \_\_\_ 6. If no LIB1 in position 01M-A1, reinstall cover 'B'.

## 11.3 Power ON

Switch **CB1** ON, and close system covers.

## 11.3.1 From the 3745 Control Panel

- \_\_\_ 1. set the **Function** indicator to 1.  
Press the **Validate** key.
- \_\_\_ 2. Press the **Power ON Reset** key.

The MOSS IML is completed when **F0E** is displayed on the 3745 control panel.

- If you have installed a LIB1 in a Model 17A, go to Step 11.3.3, "From the Service Processor."
- Otherwise, continue.

## 11.3.2 From the 3745-170 Console

- \_\_\_ 1. When the **CA INTERFACE DISPLAY** screen is displayed, press **F4**.
- \_\_\_ 2. Enter the maintenance password, press **Send**.

- Go to Step 12.1, "Save Files."

## 11.3.3 From the Service Processor

- \_\_\_ 1. Double click on the 3745 icon when it becomes PURPLE.
- \_\_\_ 2. When the **3745 Menu** window is displayed, double click on **MOSS console**.

Wait for **Function Selection Rules** screen.

# 12.0 Test Procedures

## 12.1 Save Files

If you have installed additional features (LSS/LIC), refer to their Installation Instructions for files update.

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- If you have installed an adapter in a Model 17A, go to Step 12.3, "From the Service Processor" on page 14.
- Otherwise, continue.

## 12.2 From the 3745-170 Console

Re-enable the channel adapters disabled in Step 11.1.2, "From the 3745-170 Console" on page 4.

- Go to Step 12.4, "General IPL."

## 12.3 From the Service Processor

1. On the **3745 Menu** window, double click on **MOSS Console**,
2. Enter **CID**, press **Enter**.
3. Enable the channel adapter recorded in Step 11.1.3, "From the Service Processor" on page 4.  
Wait until all channels are **E** in the E/D REQUEST column.  
Press **F1**.
4. Enter **OFF**, press **Enter**.
5. On the **3745 Menu** window, click on **Function**. Then, click on **Exit**.
6. On the **MOSS-E View** window, click on **Program**.
7. Click on **LOG OFF MOSS-E**.

## 12.4 General IPL

From the 3745 Control Panel:

1. Set the **Power Control** indicator to its original value recorded in Step 11.1.1, "From the 3745 Control Panel" on page 4.
2. Set the **Function** indicator value to **0** (general IPL).
3. Press the **Validate** key.

The general IPL starts.

- If **FF4** is displayed on the control panel, ask the customer to load the control program.
- If the control program is loaded from the hard disk, **000** will be displayed when **IPL** is successful.

**Note:** The control program load can fail if a mismatch exists between the control program and the hardware configuration.

## After Installation (steps 12-15)

## 13.0 Field Updating

None.

## 14.0 Publications Update

None.

## 15.0 Parts Disposition

### 15.1 Purchased Machines

Refer to the parts ownership matrix to determine the correct owner of removed/unused parts.

- For EMEA/APG/AG Areas, refer to *Hardware and General Service Code Description*.
- For Domestic Areas, return parts to the customer.

## 16.0 Machine Records

- Install the new **MACHINE HISTORY** supplied.
- Report installation and quality to existing procedures.

**End of instructions.**

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### Table Definitions

<u>id</u>	<u>File</u>	<u>Page</u>	<u>References</u>
TOTO1	P03F5077 SCRIPT	7	7
TATA1	P03F5077 SCRIPT	7	7
TOTO	P03F5077 SCRIPT	10	10
TATA	P03F5077 SCRIPT	10	10

### Headings

<u>id</u>	<u>File</u>	<u>Page</u>	<u>References</u>
DD	P03F5077 SCRIPT	3	5.0, Preparation
OO	P03F5077 SCRIPT	4	11.1.1, From the 3745 Control Panel 14
NN	P03F5077 SCRIPT	4	11.1.2, From the 3745-170 Console 14
SP1	P03F5077 SCRIPT	4	11.1.3, From the Service Processor 4, 14
OFF	P03F5077 SCRIPT	5	11.2, Hardware Installation 4
POS3	P03F5077 SCRIPT	9	11.2.3, Installation of a LIB2 in Position 3 (01L-A2) 6, 9
HOMO	P03F5077 SCRIPT	13	11.2.4, Homologation Label 9
SP3	P03F5077 SCRIPT	13	11.3.3, From the Service Processor 13
SF	P03F5077 SCRIPT	13	12.1, Save Files 13
SP4	P03F5077 SCRIPT	14	12.3, From the Service Processor 14
IPL	P03F5077 SCRIPT	14	12.4, General IPL 14
PP	AFTRINS2	14	After Installation (steps 12-15)

### Processing Options

#### Runtime values:

Document fileid .....	P03F5077 SCRIPT
Document type .....	PNCDOC
Document style .....	FBII
Profile .....	EDFPRF30
Service Level .....	21Jun90
SCRIPT/VS Release .....	3.2.1
Date .....	94.02.03
Time .....	09:47:45
Device .....	3820A
Number of Passes .....	2
Index .....	YES
SYSVAR G .....	INLINE
SYSVAR P .....	3820
SYSVAR R .....	XREF
SYSVAR U .....	FNT382SS
SYSVAR W .....	XREF

#### Formatting values used:

Annotation .....	NO
Cross reference listing .....	YES
Cross reference head prefix only .....	NO
Dialog .....	LABEL
Duplex .....	SB

DVCF conditions file .....	(none)
DVCF value 1 .....	(none)
DVCF value 2 .....	(none)
DVCF value 3 .....	(none)
DVCF value 4 .....	(none)
DVCF value 5 .....	(none)
DVCF value 6 .....	(none)
DVCF value 7 .....	(none)
DVCF value 8 .....	(none)
DVCF value 9 .....	(none)
Explode .....	NO
Figure list on new page .....	YES
Figure/table number separation .....	YES
Folio-by-chapter .....	NO
Head 0 body text .....	(none)
Head 1 body text .....	(none)
Hyphenation .....	YES
Justification .....	NO
Language .....	ENGL
Layout .....	2
Leader dots .....	YES
Master index .....	(none)
Partial TOC (maximum level) .....	4
Partial TOC (new page after) .....	INLINE
Print example id's .....	NO
Print cross reference page numbers .....	YES
Process value .....	3820
Punctuation move characters .....	"
Read cross-reference file .....	XREF
Running heading/footing rule .....	NONE
Show index entries .....	NO
Table of Contents (maximum level) .....	3
Table list on new page .....	YES
Title page (draft) alignment .....	CENTER
Write cross-reference file .....	XREF

Imbed Trace

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Page 14	AFTRINS2