Field Feature Bill of Material (FFBM)

PN 03F5172

**REMOVAL of a LIB1 Board Positions 1/2/3 (FC 4902)
from IBM 3745 Models 170 and 17A**

Written by: JP. Aubin
Checked by: B. Bigati
Approved by: F. Charron
Reviewed by: B. Kelly

2

| 3745 | PN 03F5172 | EC A47495 | EC A97870 | EC A47527 | EC A98198 | EC C38773 |
| FFBM | 2 of 14 | 03MAY89 | 21NOV89 | 22JUN90 | 12OCT90 | 03FEB94 |

Before Removal (steps 1-8)

1.0 Machines Affected

3745 Models 170 and 17A.

2.0 Related BMs and ECs

None.

3.0 BMs to be Used

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

- 03F5172 - Installation Instructions.

- 03F5081 - LIB1 asm removal from position 1 (no parts)

- and/or 03F5071 - LIB1 asm removal from position 2

- and/or 03F5181 - LIB1 asm removal from position 3 (no parts)

4.0 Preparation

1. Familiarize yourself with the purpose and details of these removal instructions before negotiating machine time with the customer.

2. Check all the items and count parts listed on the BM(s) to be used to determine whether all parts were received.

3. See the *HONE Configurator sheet* to determine from which position you have to remove the LIB1.
   Removal sequence:

   a. Position 3, bottom right (01L-A2).

   b. Position 2, top left (01M-A1)

   c. Position 1, bottom left (01M-A2)

4. All LIC cards and MUX cables of identified LIB1 board(s) have to be removed before beginning this removal.

5.0 Program Update

None.

6.0 Purpose and Description

6.1 Purpose

Remove a LIB1 feature.

6.2 Description

Remove a board LIB type 1 with associated DMUX cards.

7.0 Removal Time

FFBM Used	Machine Hours	System Hours
03F5081	0.5	0.0
and/or 03F5071	0.8	0.0
and/or 03F5181	1.0	0.0

8.0 Tools/Materials Required

ESD kit (PN 6428316).

| 3745 | PN 03F5172 | EC A47495 | EC A97870 | EC A47527 | EC A98198 | EC C38773 |
| FFBM | 3 of 14 | 03MAY89 | 21NOV89 | 22JUN90 | 12OCT90 | 03FEB94 |

3

Removal (steps 9-11)

9.0 Safety

- The removal 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 (SY33-2070).

10.0 Details of Removal

Before the removal, 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.

10.1 Checking

10.1.1 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 removing a LIB1 from a Model 17A, go to Step 10.1.3, "From the Service Processor."**

- **Otherwise, continue.**

10.1.2 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 10.2, "Hardware Removal" on page 5.**
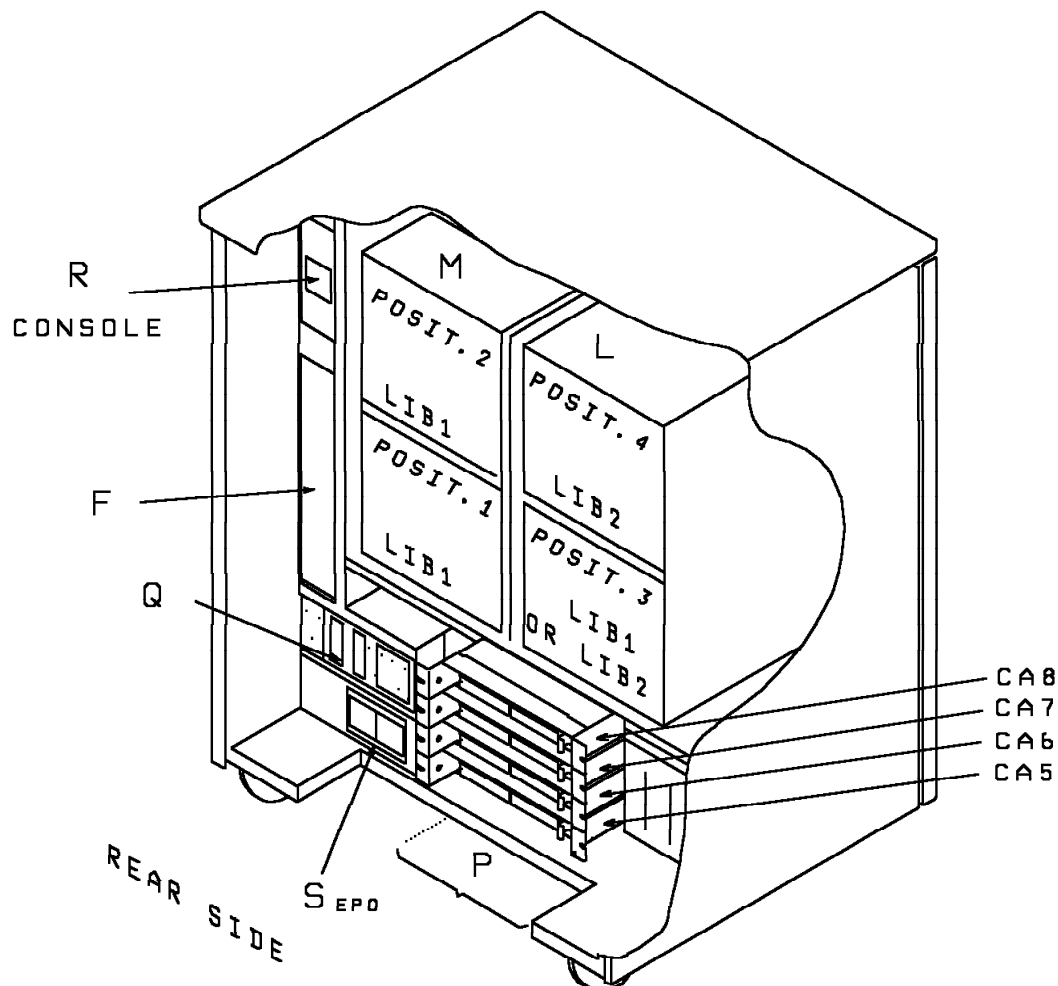

10.1.3 From the Service Processor

__ 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.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	4 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

4

10.2 Hardware Removal

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

__ 1. Open the rear system cover.

__ 2. Visually, check that there is a LIB1 installed where you have to remove this feature.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	5 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

10.2.1 Power OFF

__ 1. From the 3745 control panel, press the **Power OFF** key.

__ 2. Open the front system cover and switch off **CB1**.

Basic Board

Cover 'A'

CB1

Front View
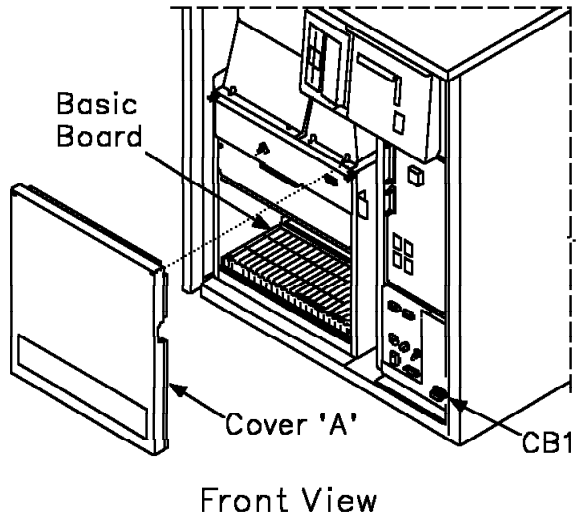
- If you are removing a LIB1 from position 1, go to section 10.2.4, "Removal of a LIB1 from position 1 (01M-A2)" on page 11.

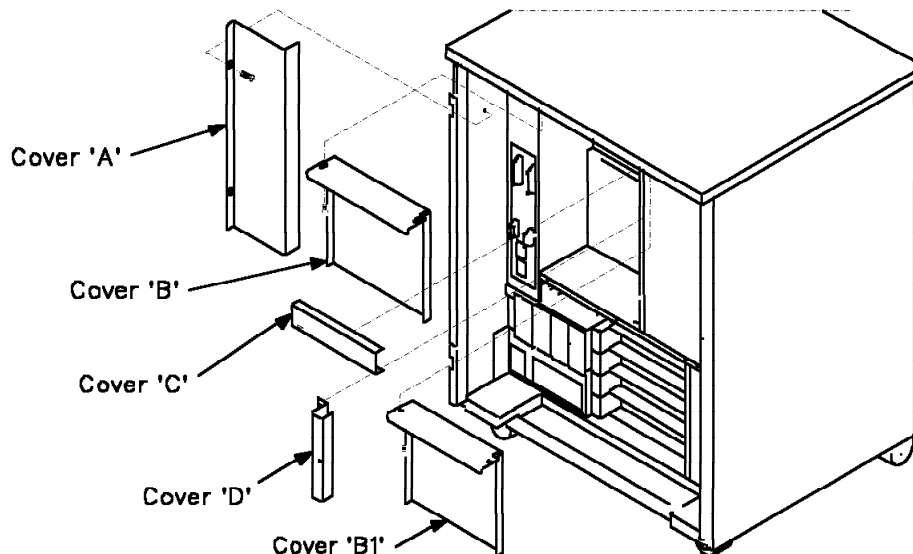- If you are removing a LIB1 from position 2, go to section 10.2.3, "Removal of a LIB1 from position 2 (01M-A1)" on page 9.

- If you are removing a LIB1 from position 3, continue.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	6 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

10.2.2 Removal of a LIB1 from position 3 (01L-A2)

Note: Keeping LIC external cables connected on LIC, unplug all LIC cards from LIB1 positions 1 and 2. Note the position of each LIC card.

___ 1. From the REAR of the machine, remove cover 'A' with two screws, cover 'C' with two screws and cover 'D' with two screws.
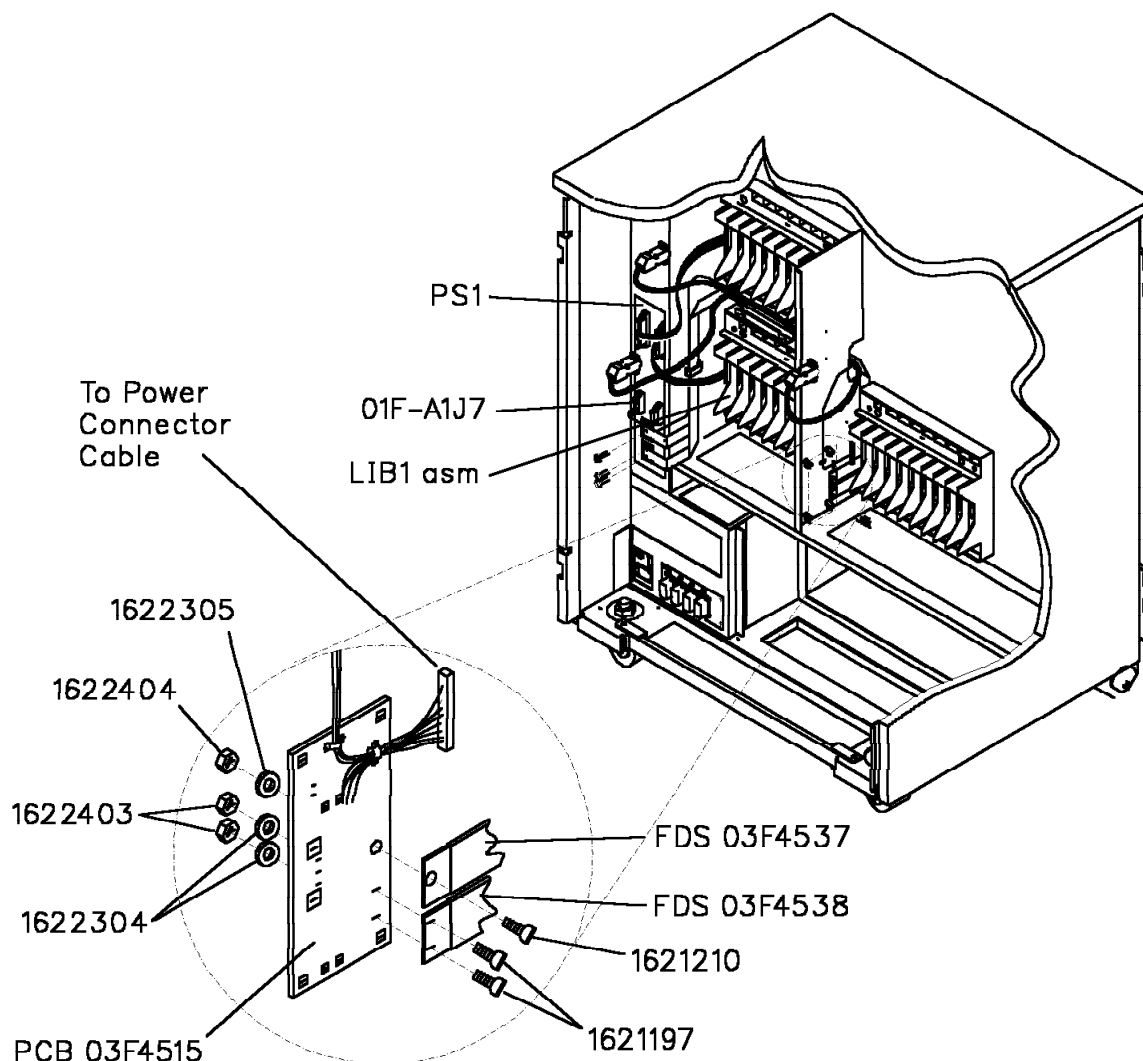
___ 2. Unplug DMUX card in position B0 of the board (LIC cards and MUX cables have been removed via previous MESs).

   Note: If you have spare MUX cables, they must be saved in right side of basic board or reconnected on other DMUX according to the *HONE Configuration sheet*.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	7 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

PS1

To Power
Connector
Cable

01F–A1J7

LIB1 asm

1622305

1622404

1622403

1622304

PCB 03F4515

FDS 03F4537

FDS 03F4538

1621210

1621197

___ 3. On Printed Circuit Board (PCB), remove the FDS cable (PN 03F4537) from position 01L-B2-TB1 (one screw (PN 1621210), a nut (PN 1622404), and a washer (PN 1622305)).

___ 4. On Printed Circuit Board (PCB), remove the FDS cable (PN 03F4538) in position 01L-B2-TB2 (two screws (PN 1621197), two nuts (PN 1622403), and two washers (PN 1622304)).

___ 5. Route these two FDS cables towards the rear of PS1.

___ 6. Disconnect the FDS cable (PN 03F4537) from position 01F-A0-TB5 (one screw (PN 1621210)).

___ 7. Disconnect the FDS cable (PN 03F4538) from position 01F-A0-TB6 with two screws (PN 1621197).

___ 8. Disconnect one end of the Printed Circuit Board (PCB) cable from board power connector and the other end from the rear of PS1 from position 01F-A1J7.

___ 9. Remove the PCB (03F4515) (four standoffs).

___ 10. Remove the LIB1 ASM (four screws).

___ 11. Reinstall cover 'C' over raceway.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	8 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

8

__ 12. Reinstall all LIC and DMUX cards removed from LIB1 positions 1 and 2.

Rear View
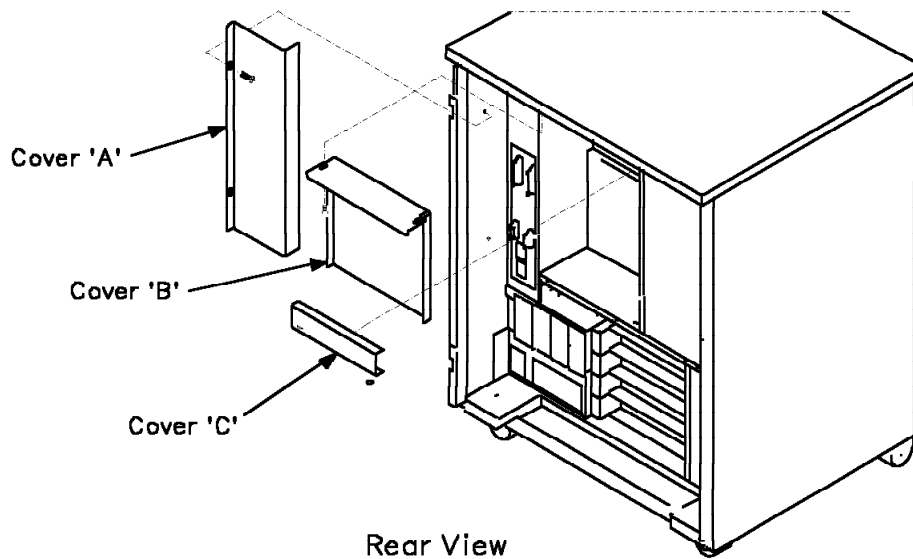
__ 13. Reinstall covers 'D' and 'A'.

10.2.3 Removal of a LIB1 from position 2 (01M-A1)

__ 1. From the REAR of the machine, remove cover 'A' with two screws and cover 'B' with two screws.

Rear View

3745 FFBM	PN 03F5172 9 of 14	EC A47495 03MAY89	EC A97870 21NOV89	EC A47527 22JUN90	EC A98198 12OCT90	EC C38773 03FEB94

9

___ 2. Unplug DMUX card in position B0 of the board (LIC cards and MUX cables have been removed via previous MESs).

Note: If you have spare MUX cables, they must be saved in right side of basic board or reconnected on other DMUX according to the *HONE Configuration sheet*.
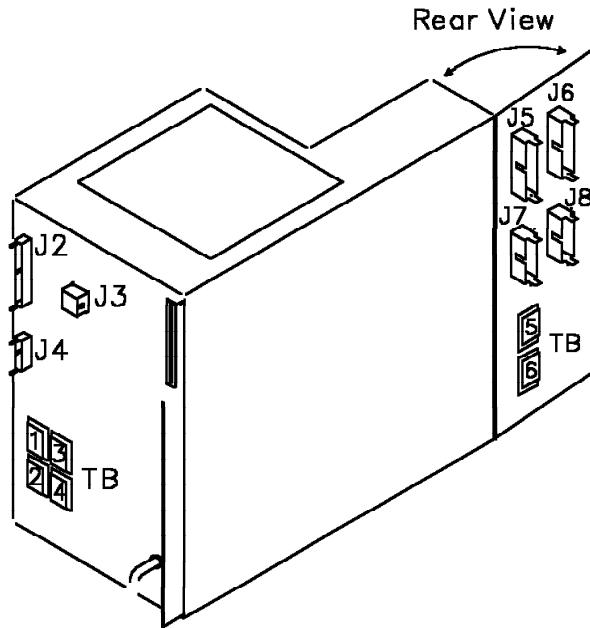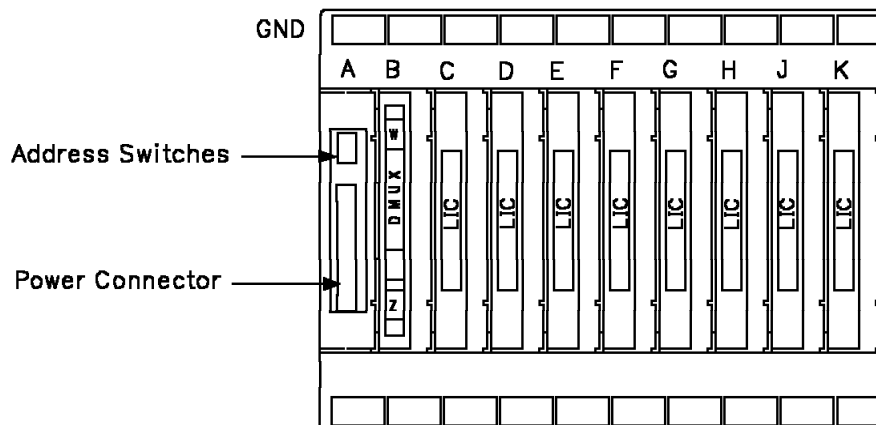

___ 3. Unplug one end of the power cable from board power connector and the other end from position 01F-A1J5 (rear of the Power Supply Type 1).

___ 4. Remove the LIB1 ASM (four screws).
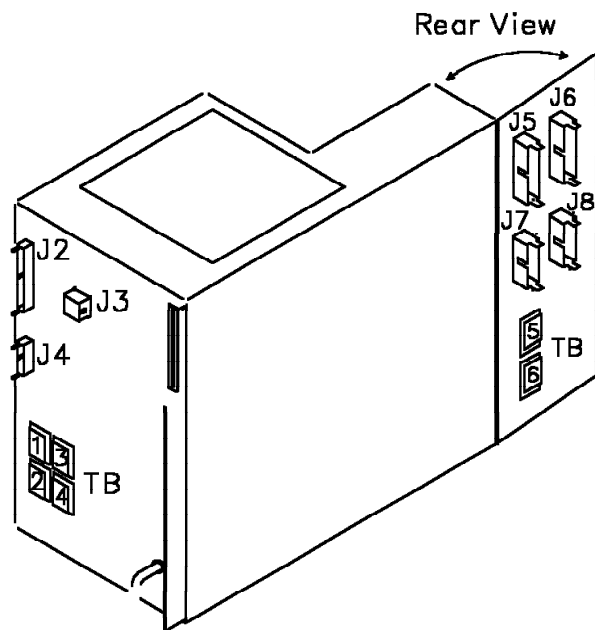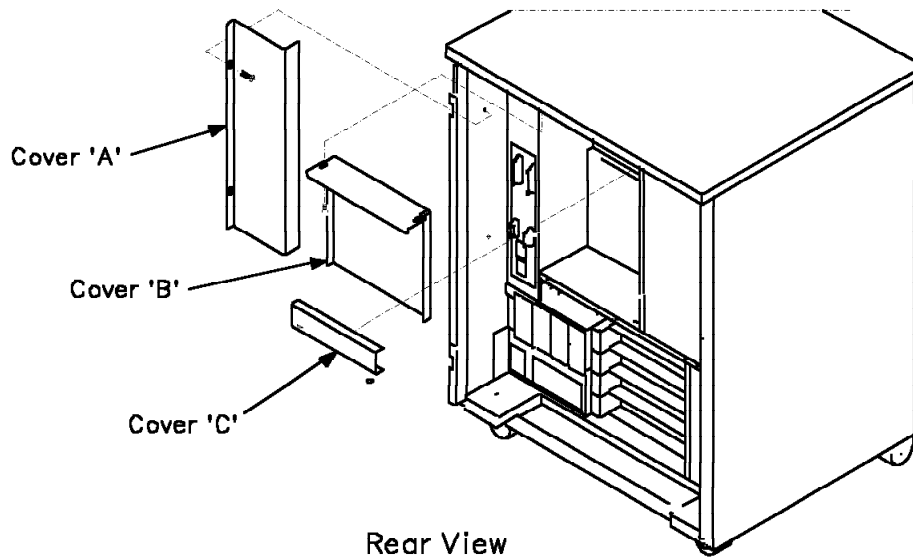
___ 5. Reinstall cover 'A'.

___ 6. Install cover 'B' (PN 03F4669) with two screws (PN 1621210).

- **Go to section 10.3, "Power ON" on page 12.**

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	10 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

10
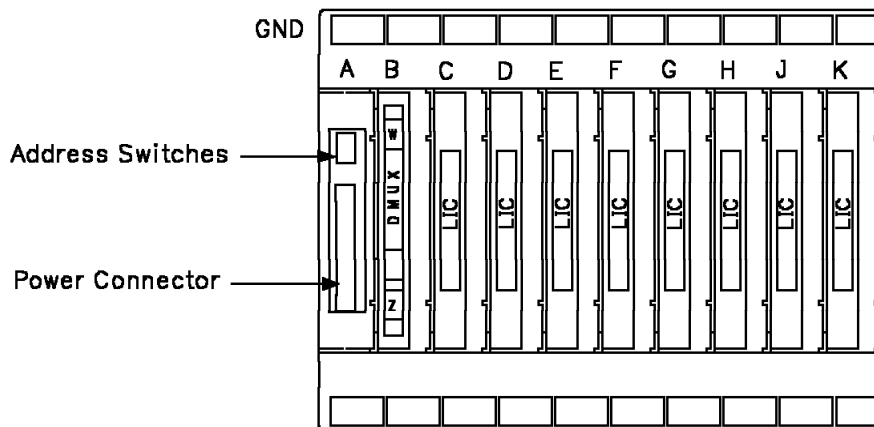
10.2.4 Removal of a LIB1 from position 1 (01M-A2)

___ 1. From the REAR of the machine, remove cover 'A' with two screws and cover 'B' with two screws.

Rear View

___ 2. Unplug DMUX card in position B0 of the board (LIC cards and MUX cables have been removed via previous MESs).

Note: If you have spare MUX cables, they must be saved in right side of basic board or reconnected on other DMUX according to the *HONE Configuration sheet*.

___ 3. Unplug one end of the power cable from board power connector and the other end from position 01F-A1J6 (rear of the Power Supply Type 1). Remove the cable from the machine.
___ 4. Remove the LIB1 ASM (four screws).

| 3745 | PN 03F5172 | EC A47495 | EC A97870 | EC A47527 | EC A98198 | EC C38773 |
| FFBM | 11 of 14 | 03MAY89 | 21NOV89 | 22JUN90 | 12OCT90 | 03FEB94 |

Power Cable (PN 03F4514)
01F-A1J6
PS1
LIB1 Asm
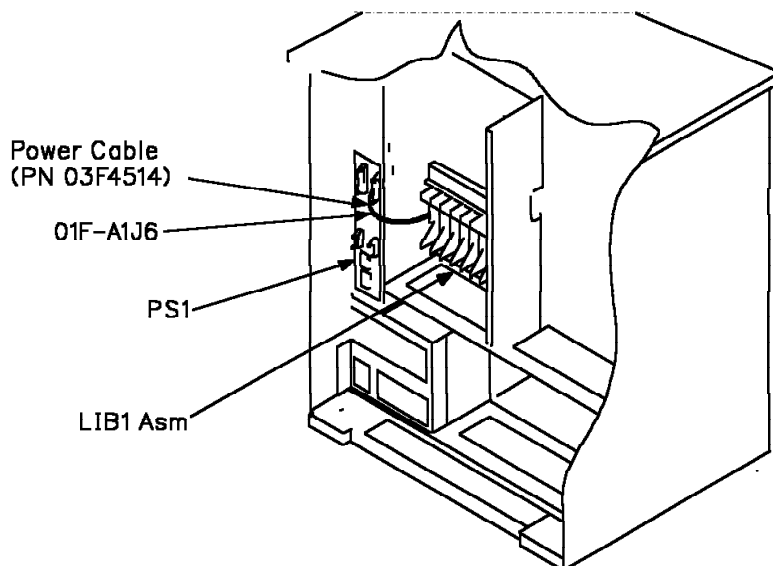
__ 5. Reinstall covers 'A' and 'B'.

10.3 Power ON

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

10.3.1 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 removed a LIB1 from a Model 17A, go to Step 10.3.3, "From the Service Processor."**

- **Otherwise, continue.**

10.3.2 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 11.0, "Test Procedures."**

10.3.3 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.

11.0 Test Procedures

None.

- **If you have removed an adapter from a Model 17A, go to Step 11.2, "From the Service Processor" on page 13.**

- **Otherwise, continue.**

11.1 From the 3745-170 Console

Re-enable the channel adapters disabled in Step 10.1.2, "From the 3745-170 Console" on page 4.

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	12 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

12

> • **Go to Step 11.3, "General IPL" on page 13.**

11.2 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 10.1.3, "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**.

11.3 General IPL

From the 3745 Control Panel:

__ 1. Set the **Power Control** indicator to its original value recorded in Step 10.1.1, "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 Removal (steps 12-15)

12.0 Field Updating

None.

13.0 Publications Update

None.

14.0 Parts Disposition

14.1 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.

15.0 Machine Records

• Install the new **MACHINE HISTORY** supplied.

• Report installation and quality to existing procedures.

End of instructions.

3745 FFBM	PN 03F5172 13 of 14	EC A47495 03MAY89	EC A97870 21NOV89	EC A47527 22JUN90	EC A98198 12OCT90	EC C38773 03FEB94

13

3745	PN 03F5172	EC A47495	EC A97870	EC A47527	EC A98198	EC C38773
FFBM	14 of 14	03MAY89	21NOV89	22JUN90	12OCT90	03FEB94

14

```
┌────────────────────────────────────────────────────────────────────────────┐
│                                  Headings                                    │
└────────────────────────────────────────────────────────────────────────────┘
```

<u>id</u>	<u>File</u>	<u>Page</u>	<u>References</u>
DD	P03F5172 SCRIPT	3	4.0, Preparation
OO	P03F5172 SCRIPT	4	10.1.1, From the 3745 Control Panel 13
NN	P03F5172 SCRIPT	4	10.1.2, From the 3745-170 Console 12
SP1	P03F5172 SCRIPT	4	10.1.3, From the Service Processor 4, 13
OFF	P03F5172 SCRIPT	5	10.2, Hardware Removal 4
POS2	P03F5172 SCRIPT	9	10.2.3, Removal of a LIB1 from position 2 (01M-A1) 6
POS1	P03F5172 SCRIPT	11	10.2.4, Removal of a LIB1 from position 1 (01M-A2) 6
PO	P03F5172 SCRIPT	12	10.3, Power ON 9, 10
SP3	P03F5172 SCRIPT	12	10.3.3, From the Service Processor 12
SF	P03F5172 SCRIPT	12	11.0, Test Procedures 12
SP4	P03F5172 SCRIPT	13	11.2, From the Service Processor 12
IPL	P03F5172 SCRIPT	13	11.3, General IPL 13
PP	AFTRINSR	13	After Removal (steps 12-15)

```
┌────────────────────────────────────────────────────────────────────────────┐
│                              Processing Options                              │
└────────────────────────────────────────────────────────────────────────────┘
```

Runtime values:
```
        Document fileid  ......................................................................  P03F5172 SCRIPT
        Document type  ........................................................................  PNCDOC
        Document style  .......................................................................  FBII
        Profile ...............................................................................  EDFPRF30
        Service Level  ........................................................................  21Jun90
        SCRIPT/VS Release  ....................................................................  3.2.1
        Date ..................................................................................  94.02.03
        Time ..................................................................................  09:42:15
        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

```
Page 4          LOGONLC1
Page 4          LOGONSP1
Page 13         LOGOFFSP
Page 13         AFTRINSR
```