

Field Feature Bill of Material

PN 66X0044

**INSTALLATION of a LIC Card
LIC1 (FC 4911) or LIC3 (FC 4931)
or LIC4A (FC 4941) or LIC4B (FC 4942)
in IBM 3745 Models X10/X1A and 3746 Models L13/L14/L15**

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Before Installation (steps 1-8)

1.0 Machines Affected

3745 Models 210/21A/310/31A/410/41A/610/61A
and 3746 Models L13/L14/L15.

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.

3.1 Select the following FFBM.

- 66X0044 - Installation Instructions
- 66X0043 - LIC 1 card and/or
- 66X0049 - LIC 3 card and/or
- 66X0051 - LIC 4A card and/or
- 66X0053 - LIC 4B card.

3.2 As required FFBMs

- 66X1396 - LIC 1 spare (with the 1st LIC 1 on 3745 Models 210 and 410 only)
- 66X0059 - LIC 3 wrap plug/spare LIC (with the 1st LIC 3)
- 66X1397 - LIC 4A spare (with the 1st LIC 4A on 3745 Models 210 and 410 only).

3.3 For EMEA, select one of the following FFBMs

- 66X0048 - LIC 1 ext. cable group (except Belgium)
- 66X1351 - LIC 1 ext. cable group (Belgium only)
- 66X0050 - LIC 3 ext. cable group (except France)
- 66X1119 - LIC 3 ext. cable group (France only)
- 66X0052 - LIC 4A ext. cable group

- 66X0054 - LIC 4B ext. cable group (except France)
- 66X0058 - LIC 4B ext. cable group (France only).

Note: In Domestic and APG, external cables are supplied thru the Customer Order Chart.

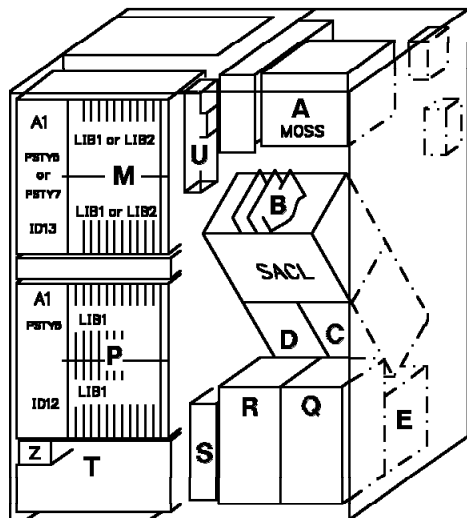
4.0 Preparation

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. With the *Hone Installation sheet* and the *Customer Configuration sheet* determine which line adapter will support the LIC. Identify the DMUX/LINE unit position, and the LIC position in LIC unit.
4. The LIC can be installed in boards:
 - 01P-B1, 01P-B2, 01M-B1, 01M-B2 located in 3745
 - 04B-B1, 04B-B2, 04D-B1, 04D-B2, 04E-B1, 04E-B2, 04G-B1, 04G-B2 located in 3746 Model L13
 - 05D-B1, 05D-B2, 05G-B1, 05G-B2, 05B-B1, 05B-B2, 05E-B1, 05E-B2 located in 3746 Model L14
 - 06D-B1, 06D-B2, 06G-B1, 06G-B2, 06B-B1, 06B-B2, 06E-B1, 06E-B2 located in 3746 Model L15.
5. You can also refer to page YZ839 to determine the LA/DMUX card relationship and DMUX/LINE unit position.

Note: The total LINE "weight" of all lines connected to a SCANNER must be less or equal to 100.

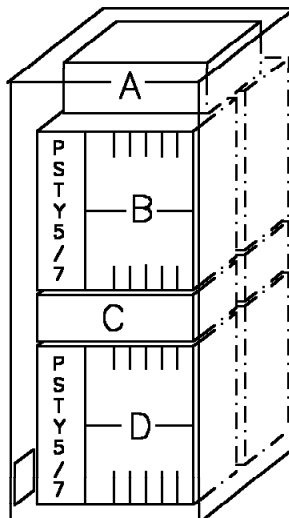
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3745 Frame 01

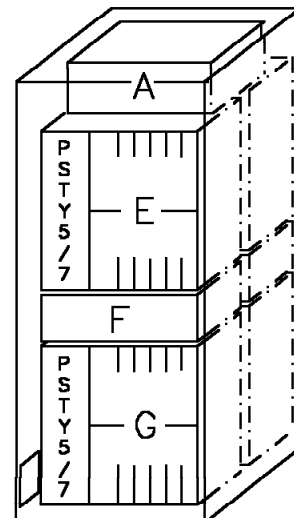


Rear View

3746 L13, L14, or L15



Front View



Rear View

6. Tables to determine the Area/Board position according to the *Hone Installation sheet*.

In 3745:

LIC POS.	D	E	F	G	H	J	K	L
01M-B1	AREA 7				AREA 8			
01M-B2	AREA 5				AREA 6			
01P-B1	AREA 3				AREA 4			
01P-B2	AREA 1				AREA 2			

In 3746 L13.

LIC POS.	D	E	F	G	H	J	K	L
04B-B1	AREA 11				AREA 12			
04B-B2	AREA 9				AREA 10			
04D-B1	AREA 3				AREA 4			
04D-B2	AREA 1				AREA 2			
04E-B1	AREA 15				AREA 16			
04E-B2	AREA 13				AREA 14			
04G-B1	AREA 7				AREA 8			
04G-B2	AREA 5				AREA 6			

In 3746 L14.

LIC POS.	D E F G	H J K L
05B-B1	AREA 11	AREA 12
05B-B2	AREA 9	AREA 10
05D-B1	AREA 3	AREA 4
05D-B2	AREA 1	AREA 2
05E-B1	AREA 15	AREA 16
05E-B2	AREA 13	AREA 14
05G-B1	AREA 7	AREA 8
05G-B2	AREA 5	AREA 6

In 3746 L15.

LIC POS.	D	E	F	G	H	J	K	L
06B-B1	AREA 11				AREA 12			
06B-B2	AREA 9				AREA 10			
06D-B1	AREA 3				AREA 4			
06D-B2	AREA 1				AREA 2			
06E-B1	AREA 15				AREA 16			
06E-B2	AREA 13				AREA 14			
06G-B1	AREA 7				AREA 8			
06G-B2	AREA 5				AREA 6			

5.0 Programming

5.1 Diagnostic Programs

CDF to reflect this change will be performed in step 11.0. This is essential to allow internal diagnostics to be run properly.

5.2 System Programs

The customer must update the control program to implement this change.

6.0 Purpose and Description

6.1 Purpose

Install additional LIC 1 (FC 4911) or LIC 3 (FC 4931) or LIC 4A (FC 4941) or LIC 4B (FC 4942).

6.2 Description

LIC card installation.

7.0 Installation Time

FFBMs	Machine Hours	System Hours	Nbr. of CE
66X0043 or 66X0049 or 66X0051 or 66X0053	0.3	0.0	1
Test Time	0.7	0.0	1
Total Time	1.0	0.0	1

8.0 Tools/material Required

None.

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Installation (Steps 9-11)

9.0 Safety

- Since the LIC is HOT PLUGGABLE, the LIC installation will be done with the machine POWER ON.
- Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the *3745 Maintenance Information Procedures (MIP)* manual (SY33-2054).

10.0 Details of Installation

Before the installation, ask the customer:

1. To deactivate all lines connected on the Line Adapter identified in step 4.0, "Preparation" on page 3.

Attention

Be sure all affected lines are deactivated, this will prevent troubles at line adapter restart.

2. For the maintenance password.
3. To logoff the console, if not already done.

- If you are installing a LIC card in a 3745-X1A or in a 3746 line frame connected to a 3745-X1A, go to Step 10.1.2, "Log the Service Processor on."
- Otherwise, continue.

10.1.1 Log the 3745-X10 Console on

1. Press **F4**
2. Enter the maintenance password, then press **Send**

- Go to Step 10.1.3, "Display the CDF."

10.1.2 Log the Service Processor on

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**.

Wait for **MOSS Console** screen.

10.1.3 Display the CDF

Note: From this point, the **Send** key is used only for a local console. For a Service Processor, press the **Enter** key.

1. Enter **CDF**, press **Send/Enter**.
2. Enter **1** (DISPLAY/UPDATE), press **Send/Enter**.
3. Enter **7** (LA), press **Send/Enter**. Check for the presence of an **N** for the LIC position to be installed.

Note: If the LA supports more than 4 LICs (extend = yes on display), press **F8** to display the presence status of LIC positions 5 through 8 (they will be numbered 1 through 4 on display).

4. Press **F1**.

10.1.4 Disconnect TSS from NCP

1. Enter **TSS** (TSS services), press **Send/Enter**.
2. Enter **1** (SELECT), press **Send/Enter**.
3. Enter the number of the adapter, press **Send/Enter**. Move the cursor to data entry area then,
4. Enter **3**, press **Send/Enter**.
5. Enter **DS**, press **Send/Enter**.
6. Press **F1**.

10.1.5 Run the Diagnostics

- ___ 1. Enter **CDG**, press **Send/Enter**.
 - ___ 2. Enter **5** (TSS), press **Send/Enter**.
 - ___ 3. Enter the LA, press **Send/Enter**.
- When **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.

10.2 Hardware Installation

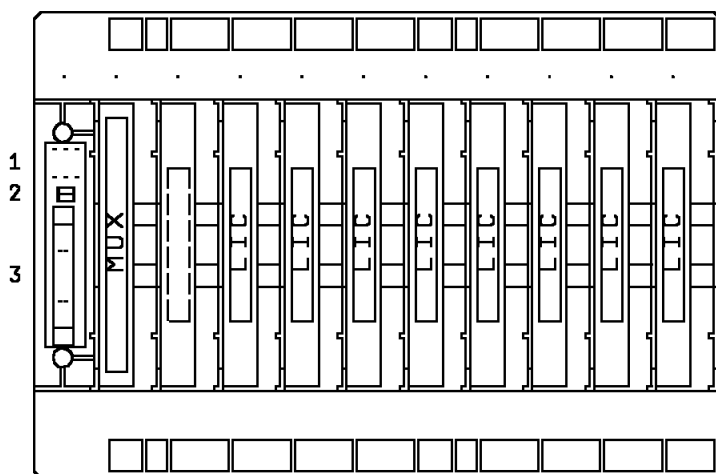
Warning: Follow existing ESD procedures when handling logic parts.

Open system cover where LIC(s) is to be installed.

10.2.1 Card Installation

- ___ 1. Based on the new machine configuration, locate the LIC Unit.
- ___ 2. Identify the board and card position with tables in step 4.0, "Preparation" on page 3.
- ___ 3. Insert the LIC cassette in proper location and tighten the front thumbscrew.

The thumbscrew is BROWN on a LIC1, BLUE on a LIC3, GREEN on a LIC4.



Warning

Hazardous voltages can exist on the ground shields of cables due to various faults. When installing LIC cables, verify that the ground potential difference between the cable shields and the 3745/3746 frame ground is no more than 1.0 VAC. If the voltage is exceeded, notify the customer immediately and do not proceed until the problem is corrected. Avoid installation or reconfiguration work during lightning activity.

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10.2.2 LIC Cables

- ___ 1. Connect external LIC cable(s) in LIC top card connector(s) and route them out of the machine.
- ___ 2. Close system covers.

11.0 Test Procedures

Note: During the following procedures some Alarm messages may be displayed on the screen, these can be removed by clicking on **OK**.

11.1 Update the CDF

- ___ 1. Enter **CDF**, press **Send/Enter**.
Note: If NCP is not loaded, use CDF verify to update the CDF.
- ___ 2. Enter **7** (LA), press **Send/Enter**.
An **N** is still present in front of the LIC you have just installed.
- ___ 3. Press **F5** for update (not available if NCP is not loaded).
- ___ 4. Enter **7** (ADD LIC), press **Send/Enter**.
- ___ 5. Enter the LIC position in the scanner, press **Send/Enter**.

When **CDF LA COMPLETED** is displayed, press **F6**.

11.2 Display the CDF

- ___ 1. Press **F7**.
A **Y** is now displayed in front of the LIC you have just installed.
- ___ 2. Verify the cable and clock info.
C = 0 not present I = 0 not present
 1 internal 1 wrap block LIC1, or 4
 2 external 2 wrap cable LIC3
 3 local 4 modem
 5 direct attached
 6 autocal

Note: If the LA supports more than 4 LICs (extend = yes on display), press **F8** to display the status of LIC positions 5 through 8.

- ___ 3. Press **F1**.

11.3 Run the Diagnostics

- ___ 1. Enter **CDG**, press **Send/Enter**.
- ___ 2. Enter **5** (TSS), press **Send/Enter**.
Enter the **LA** number, press **Send/Enter**.
 - When **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is displayed, see the *MIP*, Chapter 2, and follow the appropriate procedure.

11.4 Re-IML the Scanner

- ___ 1. Enter **IMS**, press **Send/Enter**.
- ___ 2. Enter **SXX** (XX being the LA number), press **Send/Enter**.
When the function is completed, the scanner is connected to NCP.
- ___ 3. Press **F1**.

11.5 Save Hard Disk Contents Onto the Backup set of Diskettes

- ___ 1. Select **DIF**, press **Send/Enter**.
- ___ 2. Select **2**. Enter the date and save-ID, press **Send/Enter**.
Follow the prompts on the console.
- ___ 3. When function is completed, press **F1**.

11.6 Logoff the Console

Ask the customer to reactivate all lines on the scanner.

Attention

If one of the affected line was not deactivated at step 1, on 10.0, "Details of Installation" on page 6, you may be forced to re-load the NCP.

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After Installation (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.

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