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Field Feature Bill of Material (FFBM)

PN 66X0016

INSTALLATION of a Storage Increment 4MB (FC 7100)

in IBM 3745 Models X10/X1A

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IBM   Installation Instructions

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Before Installation (steps 1-8)

All parts removed from the 3745 are IBM property and must be returned to IBM.

1.0 Machines Affected

3745 Models 210/21A/310/31A/410/41A/610/61A.

This feature should only be applied on the machine serial for which it is specified.

2.0 Related BMs and ECs

2.1 Prerequisites

(Must be installed prior to this installation)

- 72MB HDD must be installed.
  Checkpoint: Check in machine history for EC A97883, A97903 or A98113.

2.2 Concurrent.

(Must be installed together)

None.

2.3 Companion.

(May be Installed Separately)

None.

3.0 B/M(s) to be Installed

FFBM to be Installed

- 66X0015 - 4MB storage extension installation (2 FFBMs if you have to install 4MB in CCUA and CCUB).

- 66X0016 - Installation Instructions.

As required FFB/M(s):

- 80G5112 - Hard Disk Drive Exchange.

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4.0 Preparation

__ • Familiarize yourself with the purpose and details of these installation instructions before negotiating machine time with the customer.

__ • Check all the items and count parts listed on the B/M(s) to be installed to determine whether all the parts were received.

5.0 Programming

5.1 Diagnostic Programs

To reflect this change, the CDF will be upgraded in step 11.0. This is essential to allow diagnostics to be run properly.

5.2 System Programs

The customer must update the control program (Re-gen NCP) to implement this change.

6.0 Purpose and Description

6.1 Purpose

Install 4MB CCU memory size (FC 7100).

6.2 Description

4MB sorage card installation.

7.0 Installation Time

To be reported as MES.

FFB/M	Machine Hrs	System Hrs.	Nbr of CE
66X0015 (Models 21X/31X) (Models 41X/61X)	1.3 2.3	0.0	1

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8.0 Tools/Materials Required

ESD kit (PN 6428316).

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Installation (steps 9-11)

9.0 Safety

- This 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).

10.0 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, if not already done.

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 installing this feature in a Model X1A, go to Step 10.1.3, "Log the Service Processor on" on page 7.**

- **Otherwise, continue.**

10.1.2 Log the 3745-X10 Console on

__ 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**.

Note: If Model 410/610, the CCU must be selected with **CSR** function before **RST**.
Perform the **CSR/RST** sequence for each CCU.

__ 4. If the CCU is running, enter **CSR** and select CCU A or/and CCU B.
Then, enter **RST** to reset the CCU(s).
The MOSS goes in **MOSS ALONE** state.

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> • **Go to Step 10.1.4, "Display the CDF" on page 7.**

10.1.3 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**.

10.1.3.1 Open MOSS/MOSS-E Session

___ 1. On the **MOSS-E View** window, double click on the icon of the identified 3745.
___ 2. On the **3745 Menu** window, double click on **MOSS Console**.
___ 3. When **MOSS Console** screen is displayed, enter **CID**, press **Enter.**
___ 4. From the **CA INTERF DISPLAY** screen, record **Enabled channel adapters**. Then, **disable** all channel adapters.
___ 5. When all CAs are **DISABLED**, press **F1**.

Note: On Models 41A/61A, CCU must be selected with **CSR** function before performing **RST**.
Perform CSR/RST sequence for each CCU.

___ 6. If CCU running, enter **CSR** and select CCU A or CCU B. Then, enter **RST** to reset CCU(s).
The MOSS goes in **MOSS ALONE** state.

10.1.4 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 **4** (CCU), press **Send/Enter**.
Check that CCU storage size is 4MB for CCUA and/or CCUB.
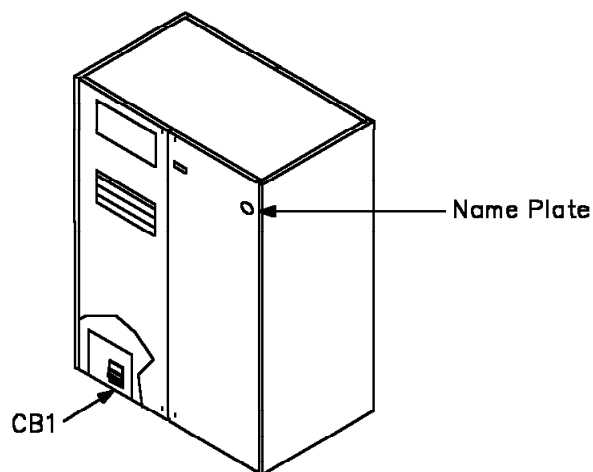Press **F1**.

10.1.5 Run the Diagnostics

___ 1. Enter **ODG**, press **Send/Enter**.
___ 2. Enter **2** (CCU).

> **Note:** If Model 410, 41A, 610, or 61A select CCU A or CCU B in 'ADP' field.

___ 3. Press **Send/Enter**.

• If **NO ERROR FOUND** is displayed, press **F1**.

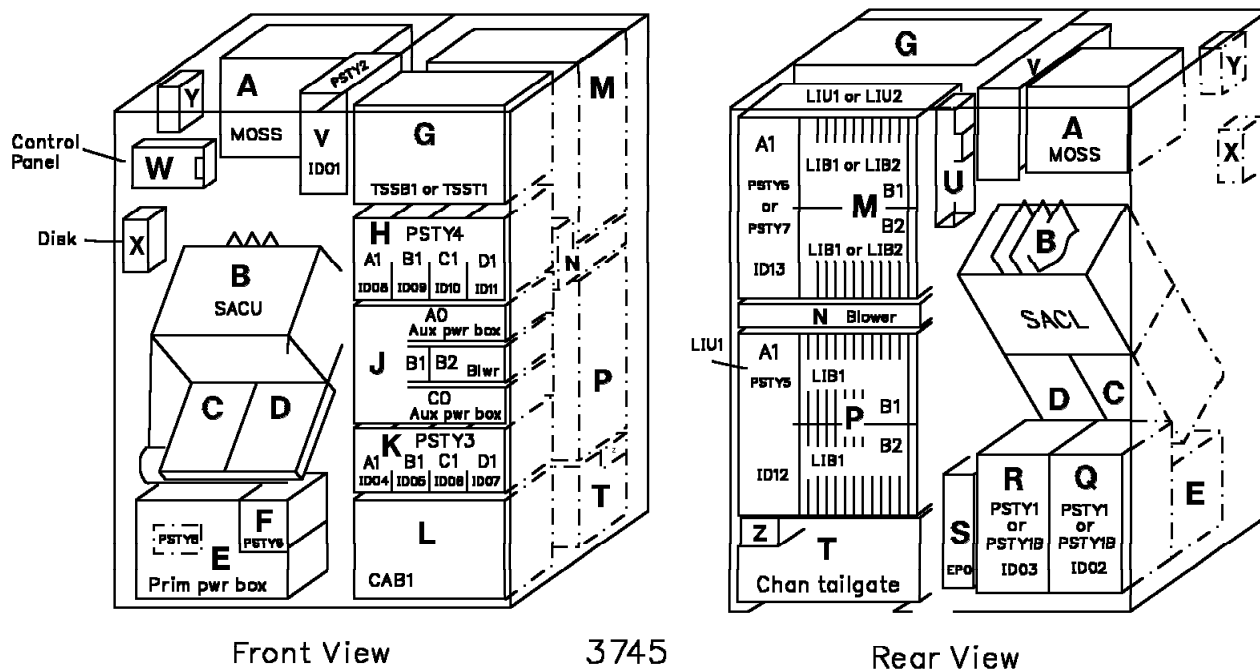• If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.

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10.1.6 Power OFF

___ 1. From the 3745 control panel, press the **Power OFF** key.
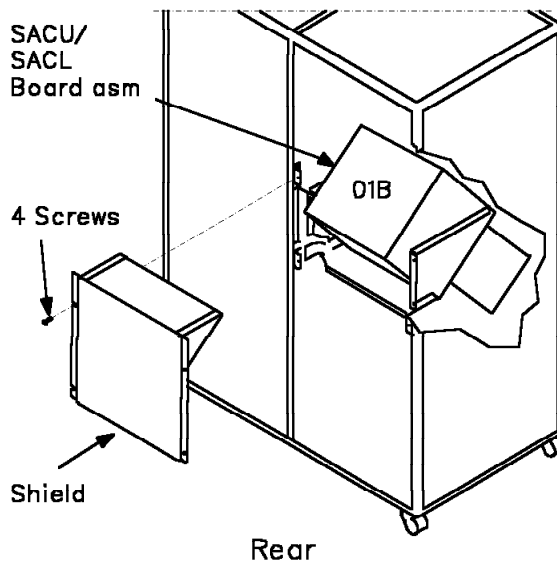___ 2. Open the left cover of the 3745, then switch **CB1** OFF.

10.2 Hardware Installation

Warning: Follow existing ESD procedures when handling logic parts.

Front View   3745   Rear View

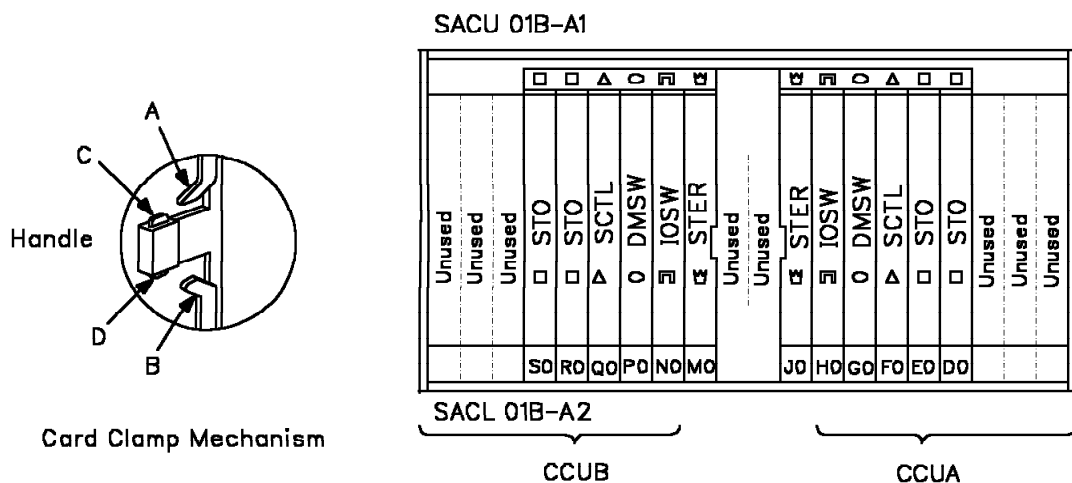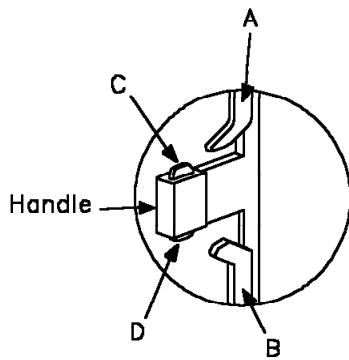| 3745 | PN 66X0016 | See EC | EC A98205 | EC A98318 | EC D55651 | EC E27926 |
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10.2.1 Card Installation

__ 1. Open the right rear 3745 cover.

__ 2. Locate SACU/SACL boards asm in position 01B.

__ 3. If present, remove the shield, by loosening 4 screws.

__ 4. Memory card positions are:

- If Models 210/21A/410/41A: D0 for CCU A and S0 for CCU B.
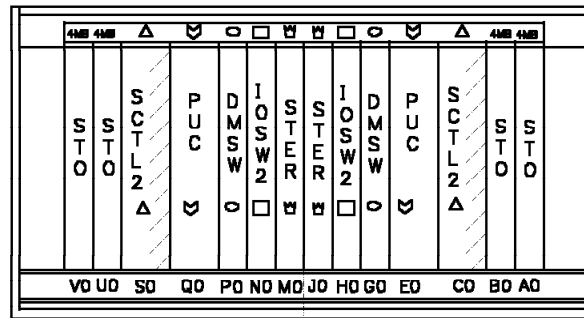

- If Models 310/31A/610/61A: A0 for CCU A and V0 for CCU B.

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Card Clamp Mechanism

SACU 01B–A1

SACL 01B–A2

CCUB   CCUA

___ 5. At choosen position(s) of SACU/SACL board asm, move levers A and B outwards and carefully remove the dummy card(s).

___ 6. Carefully, install MEMORY card(s) as follows:

    a. Insert the card in its slot and push it in place.

    b. Press in catches C and D and push the handle until it locks in the closed position.

    c. Using both hands, move inwards lever A and B simultaneously.

___ 7. Reinstall shield removed previously.

10.3 Power ON

Switch CB1 ON, and close system covers.
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.

11.0 Test Procedures

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

- **If you have installed this feature in a Model X1A, go to Step 11.1.2, "Open MOSS/MOSS-E Session" on page 11.**

- **Otherwise, continue.**

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11.1.1 From the 3745-X10 Console

__ 1. When the **CA INTERFACE DISPLAY** screen is displayed, press **F4**.

__ 2. Enter the maintenance password, press **Send**.

> • **Go to Step 11.1.3, "Update the CDF."**

11.1.2 Open MOSS/MOSS-E Session

From the Service Processor:

__ 1. Double click on the 3745 icon when it becomes PURPLE.

__ 2. On the **3745 Menu** window, double click on **MOSS console**.

Wait for **Function Selection Rules** screen.

11.1.3 Update the CDF

__ 1. Enter **CDF**, press **Send/Enter**.

__ 2. Enter **4** (VERIFY), press **Send/Enter**.
The values from the **CDF DATA** and the **MACHINE DATA** should be identical, except for the memory you have just increased.

__ 3. To update the CDF with machine values, enter **2**, press **Send/Enter**.

• When **CDF VERIFY COMPLETED** is displayed, press **F6**.

• If an error is displayed, see the *MIP*, Chapter 1, and follow appropriate procedure.

11.1.4 Display the CDF

__ 1. Enter **CDF**, press **Send/Enter**.

__ 2. Enter **1** (DISPLAY/UPDATE),
press **Send/Enter**.

__ 3. Enter **4** (CCU), press **Send/Enter**.
The CCU memory size should be 8MB for CCU A and/or CCU B.

__ 4. press **F1**.

11.1.5 Run the Diagnostics

__ 1. Enter **ODG**, press **Send/Enter**.

__ 2. Enter **2** (CCU), press **Send/Enter**.

• If **NO ERROR FOUND** is displayed, press **F1**.
• If an error is displayed, see the *MIP*, Chapter 2, and follow the appropriate procedure.

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11.1.6 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**.

- **If you have installed the feature in a Model X1A, go to step 11.1.8, "Logoff MOSS-E."**

- **Otherwise, continue.**

11.1.7 Logoff the 3745-X10 Console

Re-enable the channel adapters disabled in Step 10.1.2, "Log the 3745-X10 Console on" on page 6.

- **Go to Step 11.1.9, "General IPL."**

11.1.8 Logoff MOSS-E

__ 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, "Log the Service Processor on" on page 7.
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**.

11.1.9 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 6.

__ 2. Set the **Function** indicator value to **0** (general IPL).
Press the **Validate** key.

The general IPL starts.

- If **FF4** is displayed on the control panel, ask the customer to load the control program.

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- 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.

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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 (As MES activity) and quality to existing procedures.

End of instructions.

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