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Field Feature Bill of Material (FFBM)

PN 05F2624

INSTALLATION of a 16MB Memory (FC 7200)

on IBM 3745 Models 31A or 61A

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Before Installation (1-8)

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

1.0   Machines Affected

3745 Models 31A/61A.

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. 2 FFBMs must be received for a Model 61A.

```
FFBM - 05F2623  - 16MB Memory size.
                  (Existing CCU houses 4MB)
FFBM - 43G3183  - 16MB Memory size.
                  (Existing CCU houses 8MB)
                  (RPQ 7L1228 in WT)
        05F2724 - Installation Instructions
```

4.0   Preparation

__   1. Familiarize yourself with the purpose and details of these installation instructions.

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

__   3. **Additional Information**.

- In 3745 Model 61A, the memory size must be equal in both CCUs. You must upgrade CCU-A and CCU-B at the same time.
- The SCTL3 card provided in this FFBM replaces the existing SCTL2 and the STO card(s) of a CCU.
- Based on your configuration (4 or 8MB per CCU), you will remove ONE SCTL2 plus ONE or TWO STO cards from each CCU.

- In World Trade, the memory upgrade from 8MB to 16MB is provided via RPQ 7L1228, for administrative reasons.

5.0   Program Update

5.1 Diagnostic Programs
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 16MB CCU memory size (FC 7200).

6.2 Description
Remove the current SCTL2 and STO cards and replace them by a SCTL3.

7.0   Installation Time

```
FFBM to be installed:          Machine  System
                                 Hrs.     Hrs.

43G3183 or 05F2623 (1 on 31A)    0.3      0.0
                   (2 on 61A)    0.4      0.0

 TEST time (for 31A)             1.0      0.0
 TEST time (for 61A)             2.0      0.0
                                -----    -----
 TOTAL time (for 31A)            1.3      0.0
 TOTAL time (for 61A)            2.4      0.0
```

8.0   Tools/Materials Required

ESD kit (PN 6428316).

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Installation (9-11)

9.0 Safety

- Review the **Safety Notices** located at the beginning of the *3745 Maintenance Information Procedure* (MIP) manual, SY33-2054.
- Review the **Safety Inspection Procedures** located at the beginning of the *3745 Maintenance Information Procedure* (MIP) manual, SY33-2054.

10.0 Details of Installation

Before the installation, ask the customer:

- To set all lines and channel addresses offline for this controller and associated machines.
- To provide the **maintenance password**.
- To logoff the Service Processor.

10.1 Checking, Diagnostics

From the Control Panel:

___ • Check that **Power Control** indicator displays **3**. If it does not, record the value ___. Then, set the **Power Control** to **3**. Press the **Validate** key.

From the Service Processor:

___ 1. On **MOSS-E View** window, click on **Program**.
___ 2. Click on **LOG ON MOSS-E**.
___ 3. Enter the **password**, press **Enter**.

10.1.1 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**.

Wait for **Function selection rules** screen.

10.1.2 Disable CA(s)

___ 1. Enter **CID**, press **Enter**.
___ 2. On **CA Interface Display** screen, record the **Enabled Channel Adapters**, then **Disable** all Channel Adapters.

   Note: If 3746 A11 is installed, Press **F8** to display channels 8 thru 16.
___ 3. Wait for **Interface Status Disabled** for all channels.
___ 4. Press **F1**.
___ 5. If CCU running, enter **RST** to reset it. The MOSS goes in **MOSS ALONE** state.

Note: If Model 61A, CCU must be selected with **CSR** function before performing **RST** function. Perform CSR/RST sequence for each CCU.
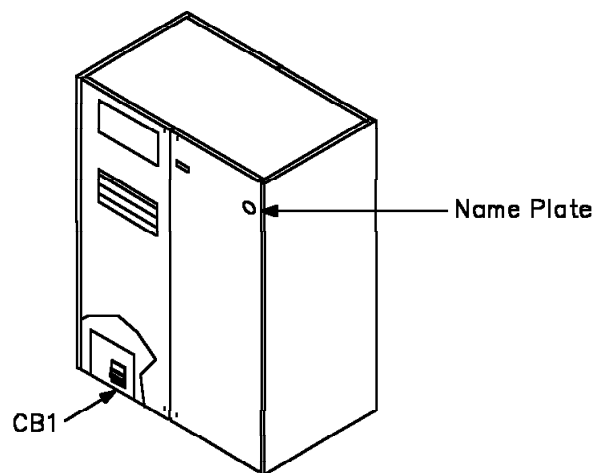
10.1.3 Display the CDF
From the Service Processor:

___ 1. Enter **CDF**, press **Enter**.
___ 2. Select **DISPLAY/UPDATE**, enter **1**, Press **Enter**.
___ 3. Select **CCU**, enter **4**, press **Enter**. Check that CCU storage size is 4 or 8MB for CCUA and CCUB.
___ 4. Press **F1**.
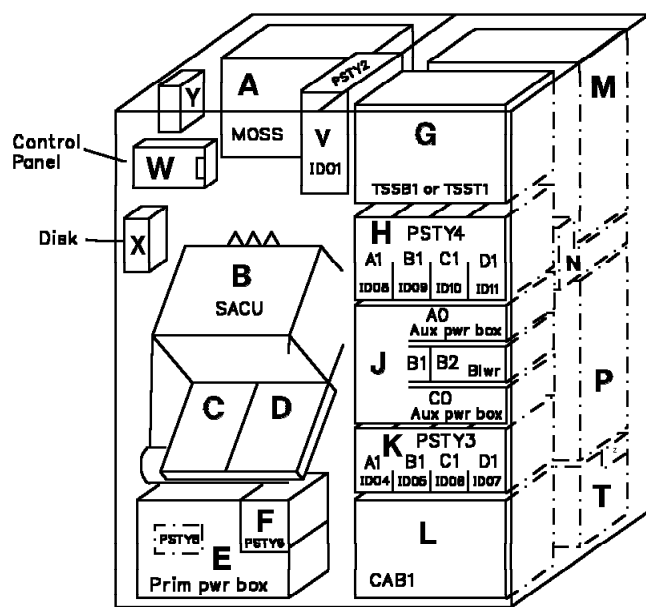___ 5. Enter **OFF**, press **Enter**.

10.1.4 Power OFF

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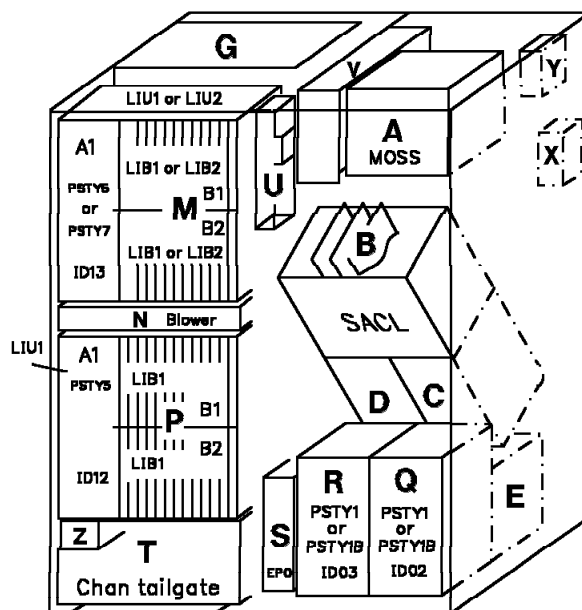___ 2. Open the front left system cover of 3745, then switch off **CB1**.

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10.2 Hardware Installation

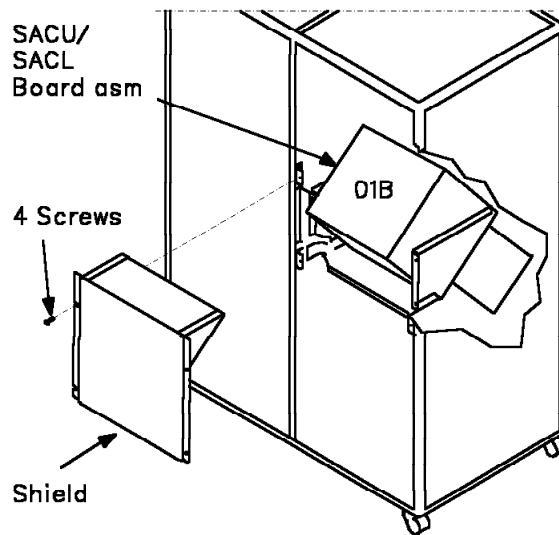**Warning:** Follow existing ESD procedures when handling logic parts.
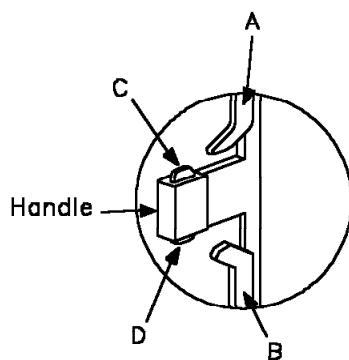

Front View

Rear View

10.2.1 Card Installation

___ 1. Open the right rear 3745 cover.

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

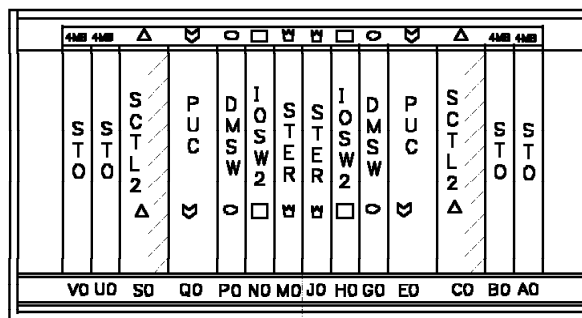___ 3. If present, remove the shield, by loosening 4 screws.

Rear

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Board 01B Model 61A with 8MB memory per CCU.

Card Clamp Mechanism

SACU 01B–A1

SACL 01B–A2

CCUB   CCUA

__ 4. In CCU enclosure, locate the SCTL2 card(s) and the STO card(s),

	Cards positions in :	
	31A	61A
SCTL2	C0	C0 and S0
STO-4MB	B0	B0 and U0
STO-8MB	A0	A0 and V0 *

* - If feature installed.

and remove them as follows:

- Using both hands, release levers A and B simultaneously by moving them upwards to their fullest extent.

- Press in catches C and D gently. Remove the card assembly from the board.

__ 5. Install the SCTL3 as follows:

	Cards positions in :	
	31A	61A
SCTL3	C0	C0 and S0

- On the card(s) provided by the FFBM, open the card handle by pressing the catches C and D in gently and pulling the handle.
If present, remove the yellow tab from the handle and the housings from card contacts.
- Ensure that levers A and B are still open to their fullest extent.
- Insert the card(s) into slot(s) C0 (and S0 if Model 61A) and allow it to seat under its own mass ensuring that it has reached the end of the slot.
- Press in catches C and D in and push the handle until it locks in closed position.
- Using both hands, move levers A and B inwards simultaneously.

Note: To improve contact, operate cards levers A and B three times.

__ 6. Insert dummy card(s) PN 80X3307 in free card slots (A0,B0,U0,V0).
Close the levers A and B.

__ 7. Reinstall shield (PN 58X9288), if previously removed.

__ 8. Close the rear system cover.

__ 9. Insert the removed cards in the ESD bags and containers provided by FFBM.

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10.3 Power ON

Switch CB1 ON, and close front system cover.

10.3.1 From the Control Panel

__ 1. Set **Service Mode** indicator to **2**.
Press the **Validate** key.

__ 2. Set the **Function** indicator to **1**.
Press the **Validate** key.

__ 3. Press **Power on Reset** key.

__ 4. The MOSS IML is completed when **F0E**
is displayed.

11.0 Test Procedures

11.1 Configuration Data File

11.1.1 Open MOSS/MOSS-E Session

From the Service Processor:

__ 1. On the **MOSS-E View** window, wait until
the **ICON** of the 3745 becomes purple.

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

Wait for hp2.Function Selection Rules screen.

11.1.2 Update the CDF

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

__ 2. Select **VERIFY**, enter **4**, press **Enter**.

- The values from the disk and the
  machine should be identical except
  for the memory you have just
  increased.

- To update the CDF with machine
  values, enter **2**, press **Enter**.

__ 3. When **CDF VERIFY COMPLETED** is dis-
played, press **F6**.

11.1.3 Display the CDF

__ 1. Select **DISPLAY/UPDATE**, enter **1**, press
Enter.

__ 2. Select **CCU**, enter **4**, press **Enter**.
The CCU memory size is 16MB for CCUA
(and CCUB Model 61A).

__ 3. Press **F1**.

11.2 Diagnostics

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

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

- When **NO ERROR FOUND** is dis-
  played, press **F1**.

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

11.3 Enable the CA(s)

__ 1. Enter **CID**, press **Enter**.

__ 2. Re-enable all Channel Adapters disabled
in Step 10.1.2, "Disable CA(s)" on
page 4.

__ 3. When CA(s) are enabled, press **F1**.

11.4 General IPL

From the 3745 control Panel:

__ 1. Set the Power Control Indicator to its ori-
ginal value, as per Step 10.1, "Checking,
Diagnostics" on page 4.

__ 2. Set the **Service Mode** indicator to **0**
Press the **Validate** key.

__ 3. Set the **Function** indicator to **0** (general
IPL).
Press the **Validate** key.

The general IPL starts.

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

- If the control program is loaded from hard
  disk, **000** will be displayed when the **IPL** is
  successful.

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

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11.5 Disk Save

When the customer network is restarted, save the contents of the hard disk on the **BACKUP** set of Diskettes.

11.5.1 Open MOSS/MOSS-E Session

From the Service Processor:

__ 1. On the **MOSS-E View** window, double click on the **ICON** of the identified 3745.

Wait for **Function Selection Rules** screen.

11.5.2 Save Disk Contents onto Diskettes

__ 1. If NCP is restarted and MOSS ONLINE, set the **MOSS OFF LINE**, enter **MOF**, press **Enter**.

    Note: If Model 61A, select the CCU first.

__ 2. Select **DIF**, press **Enter**.
__ 3. Select **2**.
__ 4. Enter the save-ID, and press **Enter**.
__ 5. Follow prompts on console.
__ 6. When function completed, press **F1**.

11.6 Close MOSS/MOSS-E Session

__ • Enter **OFF**, press **Enter**.

The **MOSS-E View** window is displayed.

11.7 Logging OFF from SP

__ 1. On **MOSS-E View** window, click on **Program**.
__ 2. Click on **LOG OFF MOSS-E**.

After Installation (12-15)

12.0 Field Updating

None.

13.0 Publications Update

None.

14.0 Parts Disposition

14.1 Purchased Machines

When this package is installed on a purchase machine, all removed parts become the Property of IBM.
These parts must be processed as stated in the rental machine directions below.

14.2 Rental Machines

Return all parts to the IBM branch office for potential return in accordance with existing return, recovery, and reclamation programs.

15.0 Machine Records

Install the new **MACHINE HISTORY** supplied, or update it as follows:

```
Remove :
1)   BM 05F2617 : 31A CCU group 4MB
  or BM 05F2620 : 61A CCU group 4MB
2) If feature increment 4MB was installed.
     BM 6496078 (QTY2 if 61A)
     BM 65X8700 (8 MB CCUA)
     B/N 65X8701 (8 MB CCUB)
Add if 31A:
     BM 05F2622 : 31A CCU group 16MB
     BM 05F2625 : 16MB CCU A
Add if 61A:
     BM 05F2739 : 61A CCU group 16MB
     BM 05F2625 : 16MB CCU A
     BM 05F2626 : 16MB CCU B
```

Report installation and quality to existing procedures.

End of instructions.

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<u>id</u>	<u>File</u>	<u>Page</u>	<u>References</u>
POW	P05F2624 SCRIPT	4	10.1, Checking, Diagnostics 7
CA	P05F2624 SCRIPT	4	10.1.2, Disable CA(s) 7

Processing Options

Runtime values:

Document fileid	P05F2624 SCRIPT
Document type	PNCDOC
Document style	FBII
Profile	EDFPRF30
Service Level	21Jun90
SCRIPT/VS Release	3.2.1
Date	93.04.06
Time	08:17:51
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