Installation of
Field Feature Bill of Material

PN 31L3625

256 Mb Memory Upgrade (FC 3522)

on the System Card of the Multiaccess Enclosure (FC 3001)

of the IBM 3746 Models 9X0

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Before Installation (Steps 1-8)

1.0 Machines Affected

3746 Model 9X0 with Multiaccess Enclosure (FC3001) and MAE Extended Functions (FC 5804).

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)

Check that the system card is one of the following part number:

- FRU PN 25L4784 or PN 25L4783
- FRU PN 31L4338 or PN 31L4336

EC   **Title**
F12380   Licensed Internal Code (Minimum level)

> **Checkpoint:** Check that the CSS 1 EC Level is F12380.000 or higher using the 2.1.1, "Displaying the Level of the Code Installed" procedure.

2.1.1 Displaying the Level of the Code Installed

__ 1. On **MOSS-E View** window, click on **help**.

__ 2. On **Help** window, click on **About**

__ 3. On the **MOSS-E View About** window, click on **Licenced Internal Code**. On the window obtained the code EC number is displayed.

__ 4. Click on **Close**, then **OK** to leave the function.

2.2 Concurrent ECs

(Must be installed together)
None.

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2.3 Companion ECs

(May be installed together)
None.

3.0 BMs to be Installed

FB/M   **Title**
31L3625   System Card Memory Upgrade 256 MB.

4.0 Preparation

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

• Check all items listed on the BM(s) to determine that all parts have been received.

5.0 Programming

None.

6.0 Purpose and Description

To increase the performance by adding a 256 MB Dual Inline Memory Module (DIMM) on the system card on the Multiaccess Enclosure.

7.0 Installation Time

FFBM	Machine Hrs.	System Hrs.	CE Hour	Nbr of CE
31L3625	01.0	00.0	1	1

8.0 Tools/Material Required

None.

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Installation (Steps 9-12)

9.0 Safety

Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the *IBM 3745 Communication Controller All Models*, *IBM 3746 Expansion Unit Model 900*, *IBM 3746 Nways Multiprotocol Controller Model 950 Safety Information*, GA33-0400.

10.0 Details of Installation

___ 1. If with this FFBM you have received the FFBM PN 10K8537 (system card replacement) start the upgrade procedure with it.

___ 2. Otherwise continue with 10.1, "Prerequisite Before Power OFF the MAE."

Attention

The System Card is **not** hot pluggable.

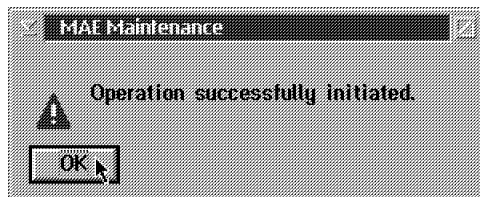## 10.1 Prerequisite Before Power OFF the MAE

___ 1. Ask the customer to stop the traffic on **all** the Multiaccess Enclosure.

___ 2. On the Service Processor select the **3746/9x0 Menu**.

___ 3. Click on the **Multiaccess Enclosure (MAE) Management**.

___ 4. Double click on the **Perform Maintenance on MAE**.

___ 5. The following window is displayed:

Click on **Yes**.

___ 6. The following window is displayed:

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MAE Maintenance

Operation successfully initiated.

⚠ OK

Click on **OK**.

__ 7. You should first received an alarm message saying: "MAE Concurrent Maintenance in Progress".

__ 8. Click on **OK**.

__ 9. Wait until you received: "Operation successfully sent to NNP", then click on **OK**.

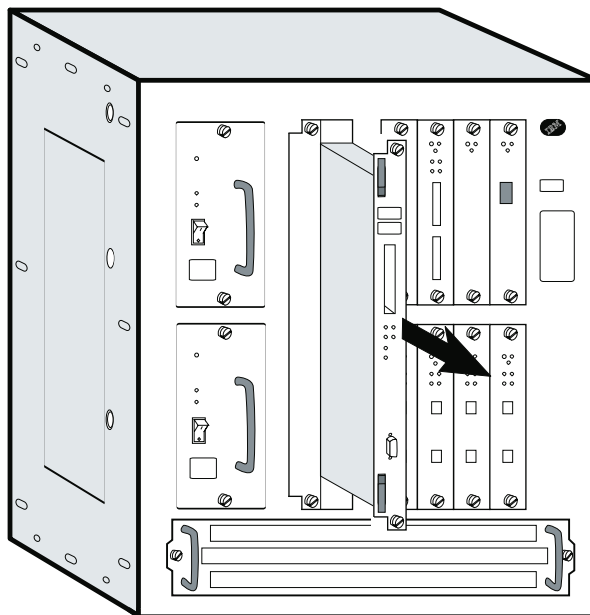**Note:** Be aware that the MAE will be restarted automatically after 40 minutes.

10.2 Removing the System Card

Attention

Electrostatic discharge (ESD) can damage the static-sensitive devices on circuit boards. To avoid this kind of damage, use the following precautions:

- Do not remove the DIMM until you are ready to insert it into the Multiaccess Enclosure.
- Use correct grounding techniques when inspecting and installing the DIMM. Use a foot strap or grounding mat, or wear a grounded static discharge wrist strap, or touch a grounded rack or other source of ground before you handle the DIMM.
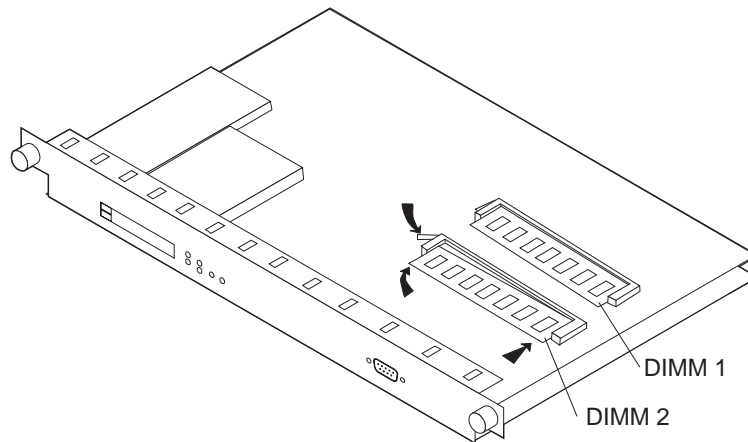---

__ 1. Switch OFF each power supply.

__ 2. Unplug the cables from the system card.

__ 3. Loosen thumbscrews on the system card.

__ 4. Remove the system card and lay it on a soft non-conductive surface.

__ 5. Check the part number of the system card with the part number given in the 2.1, "Prerequisites" on page 3. if there is a discrepancy check with your support.

10.3 Adding a DIMM on the System Card

__ 1. Remove the DIMM, in its antistatic bag, from its shipping container.

__ 2. Remove the DIMM from the antistatic bag. Inspect it for damage. Always handle the DIMM by the ends (preferably grasp it between the middle finger and thumb; do not touch the components). If the DIMM appears to be damaged, return it to the antistatic bag and contact the supplier.

__ 3. On the **System card**, Locate the DIMM sockets (Refer to figure below). You may have several cases:

   a. If on the system card you have a 64 MB or 128 MB DIMM memory installed, remove it and install the new 256 MB DIMM provided in this slot (see note below).
   b. If you already have a 256 MB DIMM installed, install the new 256 MB provided in the free slot (see note below).
   c. If you received a new system card without any DIMM installed, install the 256 MB DIMM in slot 1 (see note below).

   Note: Before inserting the DIMM ensure that the lever on the socket is on the outward position. Insert the DIMM into the slot. (Grasping the DIMM between the middle finger and thumb, place it connector edge down into the DIMM slot. Applying slight pressure to the top edge of the DIMM, move it forward until it is correctly aligned and snaps in place.) The lever will snap back into place as the DIMM is fully inserted.

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DIMM 1

DIMM 2

____ 4. If you have replaced the system card continue with the installation instruction PN 10K8537, otherwise continue with 10.4, "Re-installing the System Card."

10.4 Re-installing the System Card

____ 1. Re-install the new system card. Make sure the card is aligned with the plastic grooves and then slide it in until it is flush with the box. Hold the locking latches so that they are perpendicular to the face of the system card. With the card in full contact with the rear of the Multiaccess Enclosure, press the locking latches into the system card.

____ 2. Tighten the thumbscrews on the face of the adapter card clockwise.

____ 3. re-plug the cables into the system card.

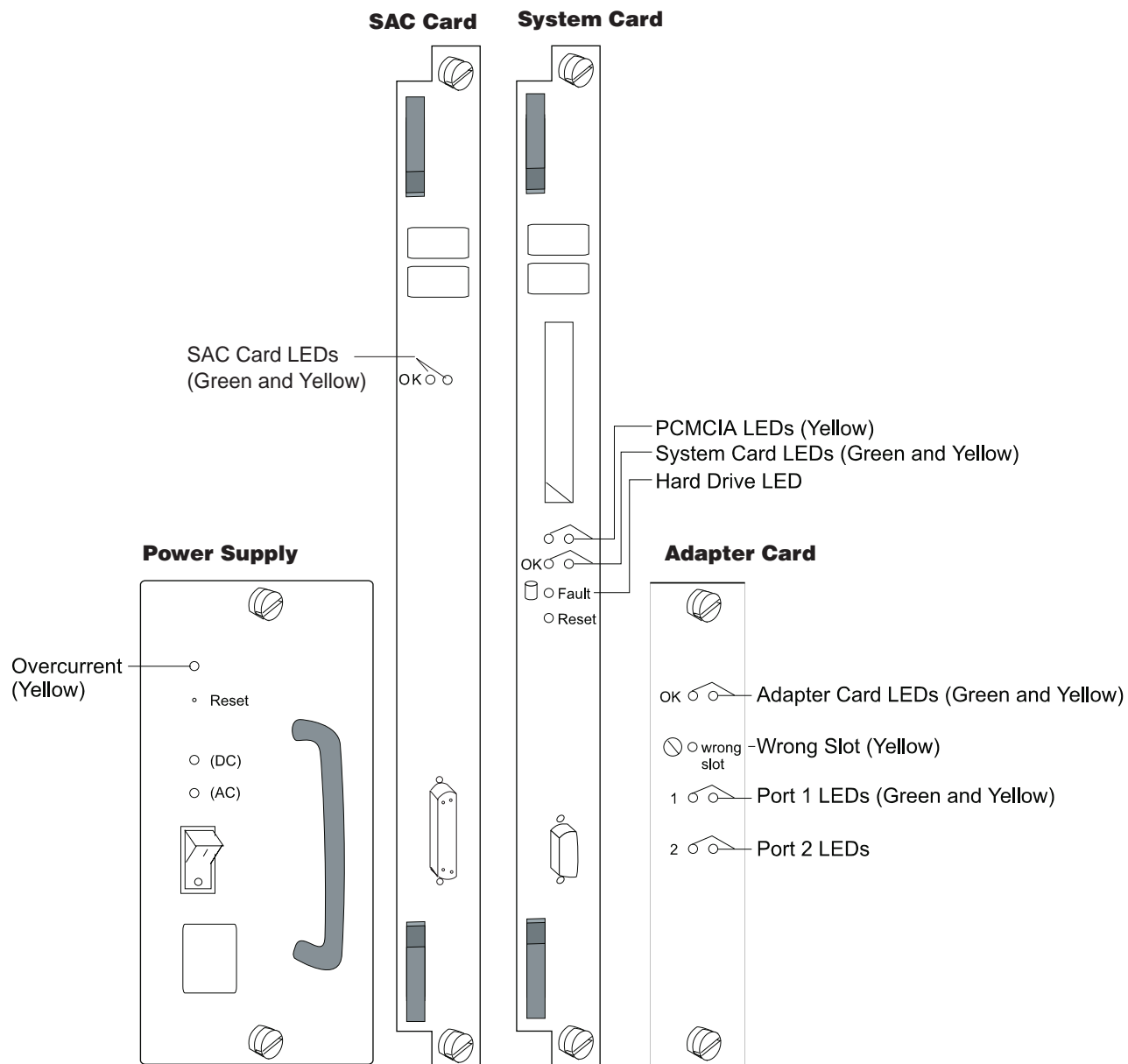____ 4. Power ON; Then verify the LEDs (Refer to Figure 1 on page 9 and to page 10 for LEDs status meaning).

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SAC Card   System Card

SAC Card LEDs
(Green and Yellow)

OK

PCMCIA LEDs (Yellow)
System Card LEDs (Green and Yellow)
Hard Drive LED

Power Supply

OK
Fault
Reset

Adapter Card

Overcurrent
(Yellow)

Reset

(DC)

(AC)

OK   Adapter Card LEDs (Green and Yellow)

wrong
slot   Wrong Slot (Yellow)

1   Port 1 LEDs (Green and Yellow)

2   Port 2 LEDs

Figure 1. Power Supply, System Card, SAC card (if present), and Adapter Card LEDs

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Power Supply Status

LEDs	Meaning
Yellow (Overcurrent)	On - There is an overcurrent condition with the −48 V to one or more of the adapters (slots 1–8) or the +12 V to the fan tray.
Green DC	On - +5 V, +12 V, and −48 V are OK.
Green AC	On - AC source voltage is present and within tolerance.

System Card Status

LEDs	Meaning
PCMCIA 1 or PCMCIA 2 (Yellow)	On - PCMCIA device has a fault, is not installed, or is not seated correctly. Off - Device passed self-tests
OK (Green)	On - Card hardware is operating normally. Blinking - Loading from hard file
OK (Yellow)	On - Card hardware has a fault.
Fault Hard Drive (Yellow)	On - Hard drive has failed.

Adapter Card Status

LEDs	Meaning
OK (Green)	On - Adapter is operating normally.
OK (Yellow)	On - Adapter has a fault.
Wrong slot (Yellow)	On - Adapter is in the wrong slot. The wrong slot LED is ON only when an adapter that is plugged into the multiaccess enclosure violates the plugging rules.
Green port (See note).	On - Port is operating normally (enabled and configured). Off - Port is not configured or is disabled. For the ESCON adapter: Blinking - The optical power measurement test is running.
Yellow port (See note).	On - One or more ports has a hardware fault. Blinking - One or more ports has a port I/O or network failure. Use the Maintenance Analysis Procedures (MAPs) to isolate. Off - No problem detected.

Note: The port LEDs of the multiport WAN adapters (FC 3282, FC 3291, and FC 3292) reflect the status of one or more of the ports.

SAC Card Status (I present)

LEDs	Meaning
OK (Green)	On - Card hardware is operating normally Blinking - Loading from hard file
OK (Yellow)	• MAE is not configured • Quick config is running on MAE • Card hardware has a fault

11.0 Test Procedures

No test required.

12.0 Field Updating

None.

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After Installation (steps 13-15)

13.0 Publications Update

None.

14.0 Parts Disposition

Return the removed DIMM 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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