IBM Installation Instructions

Field Feature Bill of Material (FFBM)

PN 94H7368

FC 5113 or 5123

Replace CBSP with CBSP3 (SC 9018) or CBSP2 with CBSP3 (SC 9103) in IBM 3746 Models 9X0

Written by: J. Michaut
Checked by: F. Falconetti
Approved by: A. Badino
Reviewed by: B. Kelly

3746	PN 94H7368	EC F12406				
FFBM	1 of 12	29AUG97				

3746 FFBM	PN 94H7368 2 of 12	EC F12406 29AUG97				

2

Before Installation (Steps 1-8)

> **Net Priced Feature**
>
> **All parts removed from this machine are IBM property and must be returned to IBM.**

1.0 Machines Affected

All 3746 Models 900 or 950.

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)

- EC microcode D46130D minimum level or higher.
  Checkpoint: Check that the CSS basic level packaging unit (BLPU) EC level is D46133-011 or higher.
  (Refer to SPIM, Chapter 3, 'Displaying the EC Level of Code Installed on the Hard Disk).
  If the EC level is not present you must upgrade the Licensed Internal Code.

2.2 Concurrent

(Must be installed together)

None.

2.3 Companion

(May be installed together)

None.

3746	PN 94H7368	EC F12406				
FFBM	3 of 12	29AUG97				

3.0 BMs to be Used

FFB/M   **Title**

94H7368   Replace CBSP or CBSP2 with CBSP3

4.0 Preparation

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

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

3. *This FFBM contains ESD sensitive parts. Prior to handling such part refer to "ESD Sensitive Parts Handling," outlined in Service Memorandum No. 305 of the IBM General Technical Service Memorandums group, IBM order number S230-9009.*

4. Ask the customer:

   - For the maintenance password (Default: IBM3745).
   - To stop traffic on the 3745 and on the 3746-900
   - To logoff the Service Processor (SP), if not already done.

5.0 Programming

5.1 Diagnostic Programs

None.

6.0 Purpose and Description

6.1 Purpose

Replace CBSP or CBSP2 with CBSP type 3

6.2 Description

Replace a CBSP type 1 or 2 with a CBSP type 3 Cassette.

7.0 Installation Time

FFBM	Machine Hours	System Hours	Nbr of CE's
94H7368	1	0.0	1

8.0 Tools/Materials Required.

Part No.   **Name.**

6428316   ESD kit

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 Multinetwork Controller Model 950 Safety Information*, GA33-0400.
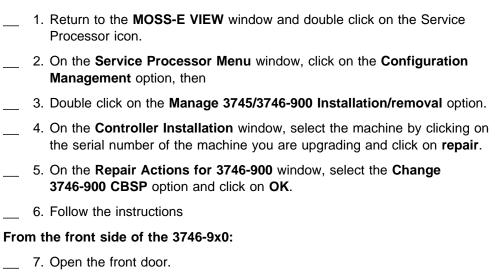
10.0 Details of the Installation

10.1 Logging ON the Service Processor.

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

__ 2. Click on **LOG ON MOSS-E**.

__ 3. Enter the maintenance password, press **Enter**.

10.2 Setting the 3746-9X0 in Offline Mode

__ 1. Return to the **3746-9x0 Menu** window.

__ 2. Click on the **Problem Management** option.

__ 3. Double click on the **Set 3746-9x0 Online/Offline** option.

__ 4. The **Set 3746-9x0 Online/Offline** window is displayed, follow the instruction to set the machine **Offline**

__ 5. Wait for the IML to end with **00000000** and ready LED ON, on the 3746-900 Control panel.

10.3 Setting the 3746-900 Power Mode

On the 3746-9x0 Control Panel:

__ Check that the **Power Control** indicator displays **3**.

If it does not, record the value __, press the **Power Control** key until (3) is displayed in the Power Control window. Then, press the **Validate** key.

Otherwise, continue with next step.

10.4 Replacing a CBSP with a CBSP3

On the Service Processor:

__ 1. Return to the **MOSS-E VIEW** window and double click on the Service Processor icon.

__ 2. On the **Service Processor Menu** window, click on the **Configuration Management** option, then

__ 3. Double click on the **Manage 3745/3746-900 Installation/removal** option.

__ 4. On the **Controller Installation** window, select the machine by clicking on the serial number of the machine you are upgrading and click on **repair**.

__ 5. On the **Repair Actions for 3746-900** window, select the **Change 3746-900 CBSP** option and click on **OK**.

__ 6. Follow the instructions

From the front side of the 3746-9x0:

__ 7. Open the front door.

__ 8. Locate the CBSP cassette using the following figure and the labels on the doors.

Q	P	M	K	H	F	D	B
Dummy	TRP / ESCP / CLP	TRP / ESCP / CLP	TRP / ESCP / CLP	TRP / ESCP / CLP	**CBSP**	SPS	CSCE

Figure 1. Basic Enclosure

> **WARNING**
>
> Use the ESD kit and procedures.

__ 9. If there is a cable plugged in the front of the CBSP, remove the bracket, and unplug the cable.

__ 10. Remove the cassette:

- Press the two unlocking buttons and
- pull out the cassette.

3746	PN 94H7368	EC F12406				
FFBM	7 of 12	29AUG97				

__ 11. Insert the CBSP3 cassette into the enclosure and slide it firmly in until it clicks (locks in).

__ 12. If there was a cable in front of the CBSP, plug it again and secure it with the bracket previously removed.

On the 3746-9x0 Control Panel:

__ 13. Press **General IML** button.

CBSP3 hardware initialization phase is started which should terminate with **05282805** displayed at the 3746-900 control panel.
If a problem occurs during this phase, a code is displayed on the control panel.
This code can be flashing or steady (more than 60 seconds).

> **Is code 05282805 displayed?**
>
> • **YES**, Go to 14.
>
> • **NO**, Go to 22 on page 9.

__ 14. Return to Service Processor, then click on **OK**.

__ 15. Continue with the displayed instruction of the **Controller Repair Message**.

On the 3746-9x0 Control Panel:

> **Is the Standby LED ON?**
>
> • **YES**, Go to 16.
>
> • **NO**, Go to 10.5, "Upgrading 3746-900 EEPROM." on page 9.

__ 16. Press the **Start** key. An IML is started.

A normal IML is terminated by **00000000** displayed on the 3746-9x0 control panel.
If a problem occurs during IML, a code is displayed on the control panel.
This code can be flashing or steady (more than 60 seconds).

> **Is code 00000000 displayed?**
>
> • **YES**, Go to 17.
>
> • **NO**, Go to 19.

On the Service Processor:

__ 17. Return to the **Controller Repair Message** window and click on **OK**.

__ 18. Continue with the displayed instruction of the **Controller Repair Message**, then go to 10.5, "Upgrading 3746-900 EEPROM." on page 9.

__ 19. Record the displayed control panel code, then

3746	PN 94H7368	EC F12406				
FFBM	8 of 12	29AUG97				

8

__ 20. To fix the problem, go to **3746-9x0 Control panel code reported** on **Chapter 1. Start - How to Begin Troubleshooting: Selection Table** of the
3746-950 Service Guide, SY33-2108, or
3746-900 Service Guide, SY33-2116

__ 21. Go to 10.5, "Upgrading 3746-900 EEPROM.."

__ 22. Record the displayed control panel code.

__ 23. Return to Service Processor, then click on **OK**.

__ 24. Remove the CBSP3 that you have installed and order a replacement CBSP3 from C.E. Stores.

__ 25. Reinstall a new CBSP3, go to step 9 on page 7.

10.5 Upgrading 3746-900 EEPROM.

On the Service Processor:

__ 1. Return to the **3746-900 menu**

__ 2. Click on the **Change Management** Option

__ 3. Double click on the **Upgrade/downgrade EEPROM Code Level** option.

__ 4. An **EEPROM Upgrade** window is displayed telling that the Service Processor is searching the 3746-900 configuration.

__ 5. On the EEPROM Upgrade window, the upgradable or downgradable processors are highlighted in reverse video according to the preselected status of the **Upgrade** or **Downgrade** options at the top of the window.
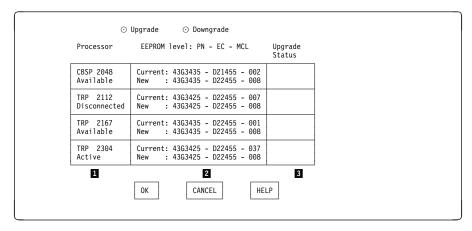
```
          ⊙ Upgrade      ⊙ Downgrade

   Processor      EEPROM level: PN – EC – MCL      Upgrade
                                                   Status

   CBSP 2048   Current: 43G3435 – D21455 – 002
   Available   New    : 43G3435 – D22455 – 008

   TRP  2112    Current: 43G3425 – D22455 – 007
   Disconnected New    : 43G3425 – D22455 – 008

   TRP  2167   Current: 43G3435 – D22455 – 001
   Available   New    : 43G3435 – D22455 – 008

   TRP  2304   Current: 43G3425 – D22455 – 037
   Active      New    : 43G3425 – D22455 – 008

   ■1                   ■2                ■3

        OK          CANCEL          HELP
```

Figure 2. EEPROM Upgrade Window.

■1 Gives the list of the 3746-9x0 processors in CDF-E with their status (available/disconnected/active).

■2 Gives the current and new EEPROM level: PN/EC/Level of each processor.

■3 Gives the status after the activation of the function.

3746	PN 94H7368	EC F12406				
FFBM	9 of 12	29AUG97				

__ 6. Select the **Upgrade** option at the top of the screen, then click on **OK**.

__ 7. An **EEPROM Upgrade** window informs you that the EEPROM upgrade is in progress and the time duration.

__ 8. At the end, an updated **EEPROM Upgrade** window is displayed with the status of the upgrade for each processor.

Check the result and take the appropriate action:

Status	*Action*
Complete	Upgrade done without error, click on **Cancel** button to exit the function.
Start failed	Call your support.
Failed	Call your support.
Completion failed	Call your support.

10.6 Running the Diagnostics on 3746-9x0.

__ 1. Return to the **3746-9x0 Menu** window, the icon should be **Red** (Machine offline).

__ 2. Click on the **Problem Management** option.

__ 3. Double click on the **Perform Offline Diagnostics** option.

__ 4. The **Diagnostics** window is displayed.

__ 5. Select the **Whole 3746-900** and the **No wrap** options and click on **Start**.

__ 6. The **Diagnostics** window is displayed again and the **Elapsed time** is incremented during test

__ 7. At the end of the test the number of errors is indicated by an arrow.

If an error is detected, refer to *3746-950 Service Guide*, SY33-2108 or *3746-900 Service Guide*, SY33-2116, go to:

- **Display the Field Replacement Unit (FRU) List After a Diagnostic Failure**, then
- to **3746-900 Maintenance Using the FRU list**.

If no error is detected, click on **Cancel**, then go to next step.

10.7 Setting the 3746-900 to Online Mode

__ 1. Return to the **3746-9x0 Menu** window.

__ 2. Click on the **Problem Management** option.

__ 3. Double click on the **Set 3746-9x0 Online/Offline** option.

__ 4. The **Set 3746-9x0 Online/Offline** window is displayed, follow the instruction to set the machine **Online**

10.8 Resetting the 3746-900 Power Mode

The **Power Control** is **3** (local). If its original value was **1** (remote), do the following:

___ 1. On the Control Panel, press the **Power Control** key until (1) is displayed in the Power Control window, then

___ 2. Press the **Validate** key.

10.9 Returning the Machine to the Customer

___ 1. Close the 3746-9x0 front door.

___ 2. Log the Service Processor **OFF**

___ 3. Inform the Customer to restart the traffic on the 3745 and on the 3746-9x0.

11.0 Test Procedures

No test required.

12.0 Field Updating

None.

3746	PN 94H7368	EC F12406				
FFBM	11 of 12	29AUG97				

After Installation (steps 13-15)

13.0 Publications Update

None.

14.0 Parts Disposition

All replaced/removed parts become the property of IBM. You MUST RETURN these parts following the instructions given on the Returned Material Equipment Report (RMER) provided with this FFBM.

15.0 Machine Records

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

- Report installation and quality problems using existing procedures.

End of instructions.

3746	PN 94H7368	EC F12406				
FFBM	12 of 12	29AUG97				

12