



Field Feature Bill of Material (FFBM)

PN 58G5516

Replace CBSP with CBSP2 (FC 5019) in IBM 3746 Models 900

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FFBM	1 of 12	22JAN96	19nov96	17JAN97		



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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.

2.0 Related BMs and ECs

2.1 Prerequisites

(Must be installed prior to this installation)

- EC microcode D22510 minimum level or higher.

Checkpoint: Check that the basic level packaging unit **CSS 1** EC level is D22510-056 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 separately)

None.

3.0 BMs to be Used

- 58G5516 - Installation Instructions.
- FFBM 58G5516 - Replace CBSP with CBSP2.

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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. 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

Install CBSP type 2

6.2 Description

Exchange of a CBSP type 1 with a CBSP type 2 Cassette.

7.0 Installation Time

FFBM	Machine Hours	System Hours	Nbr of CE's
58G5516	1	0.0	1

8.0 Tools/Materials Required.

ESD kit (PN 6428316).

Installation (Steps 9-11)

9.0 Safety

Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the:

- *3745 Communication Controller Models 210 to 61A Maintenance Information Procedures*, SY33-2054
- *3745 Communication Controller Models 130 to 17A Maintenance Information Procedures*, SY33-2070

10.0 Details of the Installation

10.1 Log the Service Processor ON

- ___ 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 3746-900 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

- ___ If the 3746-900 is in Power Mode **1** (remote), set the **Power Control** indicator of the 3746-900 control panel to **3** (local).
- ___ Press the **Validate** key.

10.4 Exchanging a CBSP with a CBSP2

- ___ 1. From the service processor, 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
- ___ 7. Locate the CBSP **3** cassette using Figure 1 and the labels on the doors.

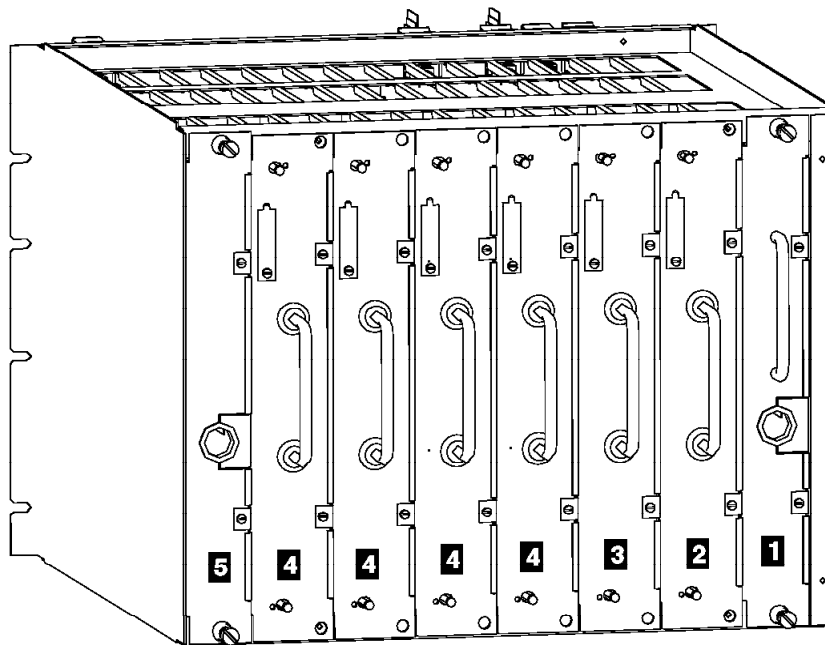


Figure 1. Basic Board 07G-A1 Locations (Processor Side, 3746-950 Front View)

- ___ 8. **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.
- ___ 11. Insert the CBSP2 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.

- ___ 13. On the **3476-900** control panel: Press **General IML** button.

CBSP2 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 8.

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

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

___ **On the 3746-900 Control Panel** _____

Is the **Standby LED ON**?

- **YES**, Go to 16.
- **NO**, Go to 10.5, "Upgrading 3746-900 EEPROM." on page 8.

- ___ 16. Press the 'start' key on the 3746-900 control panel to continue. An IML is started.

A normal IML is terminated by **00000000** displayed on the 3746-900 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.

- ___ 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 8.

- ___ 19. Record the displayed control panel code, then

- ___ 20. To fix the problem, go to **3746-900 Control panel code reported on Chapter 1. Start - How to Begin Troubleshooting: Selection Table** of the *3745 Communication Controller Models 210 to 61A Maintenance Information Procedures*, SY33-2054, or *3745 Communication Controller Models 130 to 17A Maintenance Information Procedures*, SY33-2070

- ___ 21. Go to 10.5, "Upgrading 3746-900 EEPROM." on page 8.



- ___ 22. Record the displayed control panel code.
- ___ 23. Return to Service Processor, then click on **OK**.
- ___ 24. Remove the CBSP2 that you have installed and order a replacement CBSP2 from C.E. Stores.
- ___ 25. Reinstall a new CBSP2, go to step 8 on page 6.

10.5 Upgrading 3746-900 EEPROM.

Important

Check the EC level of the Licensed Internal Code installed:

- If lower than D22560, go to 10.6, "Running the Diagnostics on 3746-900" on page 9.
- If D22560 or higher, go to next step.

- ___ 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.
- ___ 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:

EEPROM 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.

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10.6 Running the Diagnostics on 3746-900

- ___ 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 *3745 Communication Controller Models 210 to 61A Maintenance Information Procedures, SY33-2054* or *3745 Communication Controller Models 130 to 17A Maintenance Information Procedures, SY33-2070*, 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. Log the Service Processor **OFF**
- ___ 2. Inform the Customer to restart the traffic on the 3745 and on the 3746-900



11.0 Test Procedures

Not applicable.

After Installation (steps 12-15)

12.0 Field Updating

None.

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

- Record in the **MACHINE HISTORY** the new EC D22901A installed.
- Report installation and quality problems using existing procedures.

End of instructions.



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