

Field Bill of Material (FBM)

PN 05F2597

CAL Card Code Upgrade in IBM 3745 Models 21x, 31x, 41x, 61x and in IBM 3746 Model A11

Written by: J. Michaut
Checked by: J. Combes
Approved by: D. Esteve
Reviewed by: B. Griffin

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BEFORE INSTALLATION (STEPS 1-8)

1.0 Machines Affected

3745 Models 21x, 31x, 41x, 61x and 3746 Model A11 without EC C30981.

Checkpoint: CAL cards PN 05F2672 installed.

2.0 Related BMs and ECs

None.

3.0 B/Ms to Be Installed

FB/M TO BE INSTALLED	FEATURE B/M	FEATURE DESCRIPTION
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05F2595 or 05F2596 05F2597	6495645	- Channel Adapter - Installation Instructions

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4.0 Preparation

1. Familiarize yourself with the purpose and details of this installation instruction.
2. Check all items and count parts listed on the B/Ms to be installed to determine that all parts were received.
 - B/M 05F2596 is used only to rework the CAL card
 - B/M 05F2595 is used only to replace the CAL card
3. With the following tables determine the CAL card positions of the feature to be modified in 01L-A1 (3745) and in 02E-A1 (3746 A11) board.

Board populated with CAs only

C.A. number	1/9	2/10	3/11	4/12	5/13	6/14	7/15	8/16
CARDS CAL position	B2	E2	G2	K2	N2	R2	T2	W2
	CADR A2	D2	F2	J2	M2	Q2	S2	V2
PSID in 3745 (PSTY3)	04 01K-A1		05 01K-B1		06 01K-C1		07 01K-D1	
PSID in 3746 (PSTY3)	14 02D-A1		15 02D-B1		16 02D-C1		17 02D-D1	
CA TAILGATE	1	2	3	4	5	6	7	8

Board populated with CAs + TPS only

C.A. number	1/9		3/11		5/13		7/15	
CAL cards cadr-a cadr-b	B2		G2		N2		T2	
	A2		F2		M2		S2	
	C2		H2		P2		U2	
PSID in 3745 (PSTY3)	04 01K-A1		05 01K-B1		06 01K-C1		07 01K-D1	
PSID in 3746 (PSTY3)	14 02D-A1		15 02D-B1		16 02D-C1		17 02D-D1	
CA TAILGATE	1	2	3	4	5	6	7	8

5.0 Programming

None.

6.0 Purpose and Description

6.1 Purpose

CAL card code improvement.

6.2 Description

- Change eight PROM modules on CAL cards if B/M 05F2596
- Change the CAL cards if B/M 05F2595

7.0 Installation Time

To be reported as MES.

FB/M	Machine Hrs	System Hrs	Nbr of CE
05F2596 or 05F2595	0.8	0.0	1

8.0 Special Tools and/or Materials Required

ESD kit (PN 93F2649).

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INSTALLATION (STEPS 9-11)

9.0 Safety

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

10.0 Details of the Installation

- ___ 1. Check that the **Power Control** indicator displays **3**.
If it does not, record the value: __ , then press the **Power Control** key until **3** is displayed.
Press the **Validate** key.
- ___ 2. Ask customer for maintenance password.
- ___ 3. Ask customer to LOGOFF the console if not already done.
- ___ 4. Ask customer to deactivate all resources connected to the controller.

10.1 Disable Channel Adapters

From the local console:

- ___ 1. From 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**.

10.2 Display CDF on Local Console

- ___ 1. Enter **CDF**, press **Send**.
- ___ 2. Select **DISPLAY/UPDATE**, enter **1**, press **Send**.
- ___ 3. Select **CA**, enter **6**, press **Send**.
- ___ 4. Check in 'PRESENCE' column the 'Y' for the identified CA number.
- ___ 5. Press **F1**.

10.3 Run the Diagnostics

- 1. Enter **ODG**, press **Send**.
- 2. Select **CA**, enter **4** in DIAG field.
Enter the identified CA number in 'ADP' field, press **Send**.
- 3. If CAL cards are to be exchanged on multiple CAs, run diagnostics on each CA.
 - When the message **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is reported, see the *MIP*, Chapter 1, and follow the appropriate procedure.

10.4 Power OFF

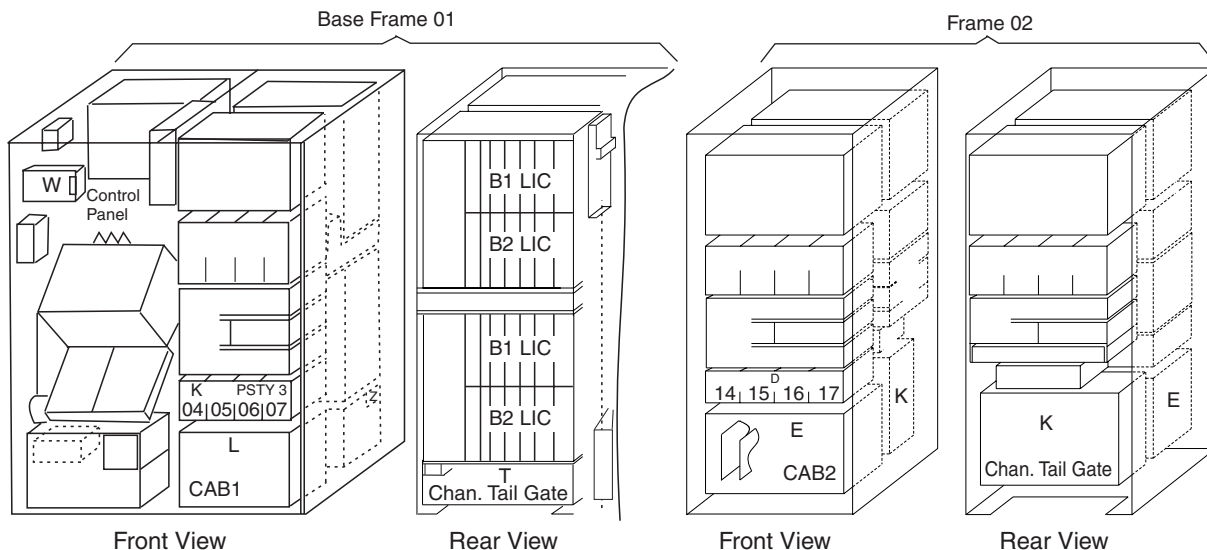
- 1. From the control panel, press the **Power OFF** key.
- 2. Open system cover 'C' then switch OFF CB1.

10.5 Hardware Installation

10.5.1 CAL Card Upgrade

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

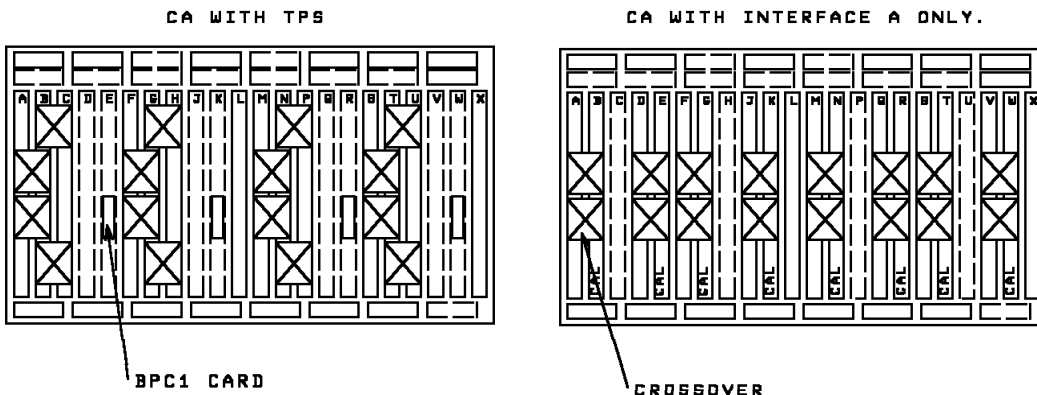
- 1. Open the front system covers of the 3745 and 3746.
- 2. Open the internal shield, if present.
- 3. Locate the channel adapter board in L area (3745) or in E area (3746).



- 4. Identify the CAL cards position according to the CA number you have selected (see tables in 4.0, "Preparation" on page 4).
- 5. Remove crossovers from the top of CA cards and unplug the CAL cards.

Note: If the CA has TPS, remove 4 crossovers.

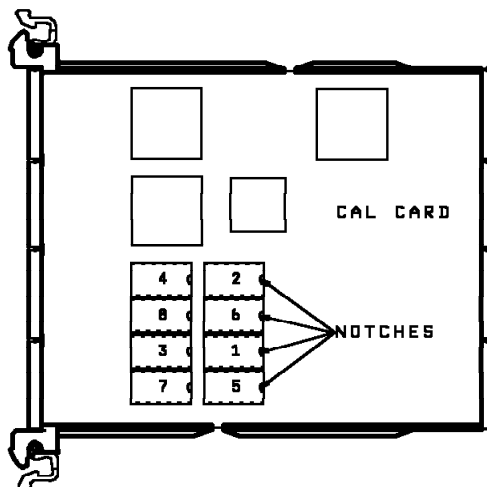
- 6. If you are installing FB/M 05F2596 (PROM exchange), continue with 10.5.2, "Locate the PROM Modules Positions on Card."
If you are installing FB/M 05F2595 (CAL exchange), go to 10.6, "CAL Card Replacement" on page 9.



10.5.2 Locate the PROM Modules Positions on Card

- 1. Note the position of modules for back up purpose, then carefully unplug the 8 PROM modules from the card and put them on a safe place.
- 2. Carefully plug the new modules in position as shown below and according to their PN:

- 1 09G2918
- 2 09G2919
- 3 09G2920
- 4 09G2921
- 5 09G2922
- 6 09G2923
- 7 09G2924
- 8 09G2925



10.5.3 Modules Return

- Put the old modules in the package provided with the new ones.
- Modules will be send back to B/O in this package.

10.5.4 Labelling

- ___ 1. On a label PN 811825 write the new PN 05F2672 and EC C30981.
- ___ 2. Stick the label on the card.
- ___ 3. Re-install the CAL cards in board.
- ___ 4. Go to Step 11.0, "Test Procedures."

10.6 CAL Card Replacement

- ___ 1. Verify the card holder is installed on the new CAL cards and install the new CAL cards in board.
- ___ 2. Re-plug the crossovers on top card connectors.

Go to Step 11.0, "Test Procedures."

11.0 Test Procedures

- ___ 1. Switch CB1 'ON'.
- ___ 2. Close shields and covers opened in previous steps.

On the Control Panel:

- ___ 3. Press the **Power ON Reset** key.
- ___ 4. Press the **Function** key until a blinking 1 (MOSS IML) is displayed in the **Function** indicator.

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- ___ 5. Press the **Service Mode** key until a blinking **0** is displayed. Then, press the **Validate** key.
- ___ 6. Press **Power on Reset** key.

11.1.1 Run the Diagnostics

On Local Console

- ___ 1. When the **CA INTERFACE DISPLAY** screen is displayed, press **F4**.
- ___ 2. Enter maintenance password.
- ___ 3. Enter **ODG**. Then, press **Send**.
- ___ 4. Select **CA**. Then, enter **4**.
- ___ 5. In the **DIAG** field, enter the CA number. Then, press **Send**.
 - When the message **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is reported, see the *MIP*, Chapter 1, and follow the appropriate procedure.

If CAL has been updated on several CAs, repeat this step.

11.1.2 Logoff Local Console

Re-enable all channel adapters disabled in Step 10.1, "Disable Channel Adapters" on page 6.

11.1.3 General IPL

From the control panel:

- ___ 1. Set the **Power Control** indicator to its original value.
- ___ 2. Set the **Function** indicator value 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 IPL successful.

AFTER INSTALLATION (STEPS 12-15)

12.0 Field Updating

None.

13.0 Field Support Publications

None.

14.0 Parts Disposition

Return all EEPROMs or Cards in accordance with existing return, recovery, and reclamation programs. Place the removed CAL cards in the ESD bags containing the new cards.

15.0 Machine Records

- Update Machine History to reflect
 - EC C30981 on B/M 6495645 CA
 as installed according to existing procedures.
- Report installation and quality according to existing procedures.

End of instructions

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