

CAL CARD CODE UPGRADE

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Status: Field use

PN 05F2598 1 of 12	EC C30981 25FEB92	EC C30981B 15MAY92			
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BEFORE INSTALLATION (Steps 1-8)

1.0 Machines Affected

3745 Models 130/170 with channel adapter(s), and without EC C30981 and candidates for 9034 attachment.

Checkpoint: CAL card(s) PN 05F2672 installed.

2.0 Prerequisites/Concurrent/Companion

2.1 Prerequisite

None.

2.2 Concurrent (Must be Installed Together)

None.

2.3 Companion (May be Installed Separately)

None.

3.0 B/M(S) to be Installed

3.1 Install the Following B/Ms

FB/M	Feature B/M	Description
05F2595 or 05F2596	03F4658	Channel Adapter not UK
05F2595 or 05F2596	03F4659	Channel Adapter UK
05F2598		Installation Instructions

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4.0 Preparation

1. Familiarize yourself with the purpose and details of the installation instruction prior to obtaining the customer machine time commitment.
2. Check all the items and count the parts listed on the B/M to be installed to determine that all the parts were received.

- B/M 05F2596 is used only to rework CAL card.
- B/M 05F2595 is used only to replace CAL card.

3. Using the following tables, determine the CAL card position.

- 1) Board populated with CA(s) only.

	IOC BUS			
INSTALLATION SEQUENCE	1ST CA5	2ND CA6	3RD CA7	4TH CA8
TAILGATE CONN. ON CCU BOARD	H	F	D	B
CARDS POSITION				
CAL	G2	E2	C2	A2
CAL	H2	F2	D2	B2

- 2) Board populated with CA(s) and TPS(s)

	IOC BUS	
THE TWO TPS INSTALLATION	CA5 + TPS	CA7 + TPS
TAILGATE CONN. ON CCU BOARD	H F	D B
CARDS POSITION		
CAL CADR-A CADR-B	G2 H2 F2	C2 D2 B2
BPC1	E4	A4

5.0 Programming

None.

6.0 Purpose and Description

6.1 Purpose

CAL card code improvement.

6.2 Description

- Change 8 PROM's modules on CAL card(s) if B/M 05F2596.
- Change the CAL card(s) if B/M 05F2595.

7.0 Installation Time

FB/M	Machine Hrs.	System Hrs.
05F2595 or 05F2596	0.5	00.0
Test Time	0.3	00.0
Total Time	0.8	

8.0 Special Tools and/or Materials Required

ESD kit (PN 6428316).

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INSTALLATION (Steps 9-11)

9.0 SAFETY

- Remove all electrical power from the machine and associated machines before the hardware installation.
- Review the **Safety Notices** located at the beginning of the **3745 Maintenance Information Procedures (MIP)** manual, SY33-2070.
- Review the **Service Inspection Procedures** located at the beginning of the **3745 Maintenance Information Procedure (MIP)** manual, SY33-2070.

10.0 Details of the Installation

Before the installation, ask the customer:

- To set all lines and channel addresses offline for this controller.
- For the **maintenance password**.
- To logoff the console, if not already done.

10.1 Checking, Diagnostics

10.1.1 From the Control Panel

___ 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 **Validate** key.

10.1.2 From the Local Console

1. When the **CA INTERFACE DISPLAY** screen is displayed, record **Enabled Channel Adapters**, then **Disable** all Channel Adapters.
2. Wait for **Interface status disabled** for all CA's,
Press **F4**.
3. Enter the **maintenance password**, Press **Send**.
4. If the CCU is running, Enter **RST** to reset the CCU.
The MOSS goes in **MOSS ALONE** state.

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10.1.3 Displaying the Configuration Data File (CDF)

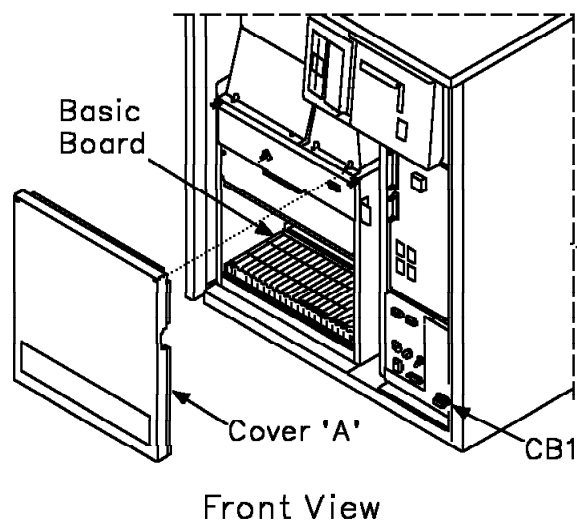
- ___ 1. Enter **CDF**, Press **Send**.
- ___ 2. Select **DISPLAY/UPDATE**, Enter **1**, Press **Send**.
- ___ 3. Select **CA**, Enter **9**, Press **Send**.
- ___ 4. Check for a **Y** in the presence column for the CA position you have identified.
- ___ 5. Press **F1**.

10.1.4 Run the Diagnostics

- ___ 1. Enter **ODG**, Press **Send**.
- ___ 2. Select **CA**, Enter **4** in DIAG field,
Enter the CA number identified in Step 4.3, in ADP field, 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.

10.1.5 Power OFF

- ___ 1. From the control panel, Press the **Power OFF** key.
- ___ 2. Open the system cover(s) and switch OFF **CB1**.



10.2 Cards Installation

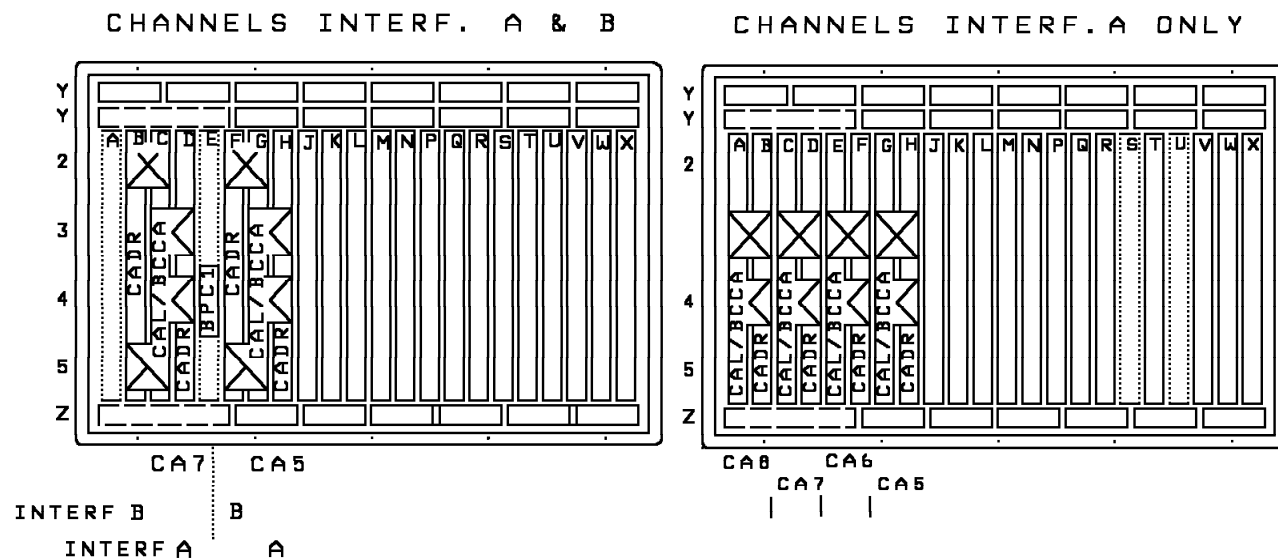
Warning: Follow the existing ESD procedures when handling logic parts.

- ___ 1. Remove the cover A (two screws).
- ___ 2. Locate the basic board in position 01G.
- ___ 3. Identify the CAL card position according to the identified CA number.
(see section 4.0, "Preparation" on page 3)
- ___ 4. Remove crossovers from the top of CA cards and unplug the CAL card.

Note: If you are working on a CA with TPS remove 4 crossovers.

If you install FB/M 05F2596 (PROM exchange), proceed.

If you install FB/M 05F2595 (CAL exchange), skip to step 10.4.

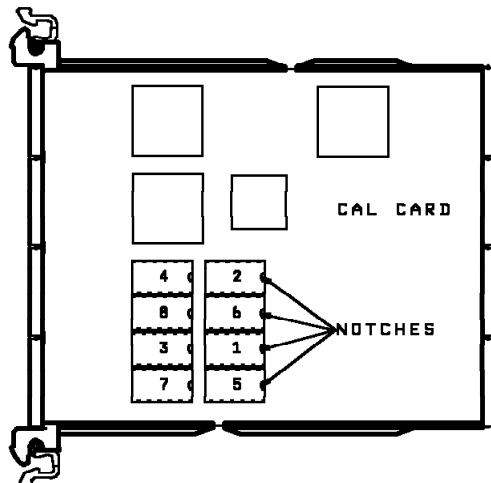


10.3 PROM Modules Exchange (FB/M 05F2596)

10.3.1 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, 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



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10.3.2 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.

10.3.3 Labelling

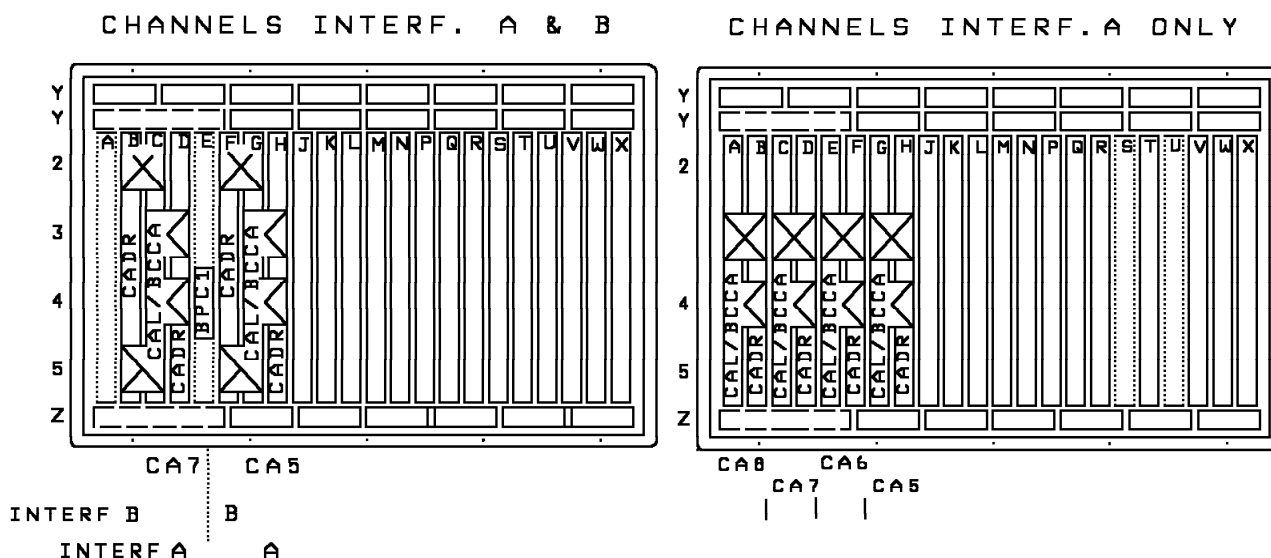
1. On a label PN 811825 write the new PN 05F2672 and EC C30981
2. Stick the label on the card.
3. Re-install the CAL card(s) in board.
4. Skip to step 10.5.

10.4 CAL Card Replacement (FB/M 05F2595)

Verify the card holder is installed on the new CAL card PN 05F2672 and install the new CAL card in board.

10.5 End of Rework

Re-plug the crossovers on top card connectors.



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***** ATTENTION *****

It is extremely important to read section 14.0 after your tests.

11.0 Test Procedures

11.1 Power ON

From the primary power box:

___ Switch **CB1** ON, and close the system covers.

From the control panel:

___ 1. Press the **Function** key until a blinking **1** is displayed.

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

___ 3. Press the **Power On Reset** key.

A **MOSS IML** is performed.

11.2 From the Local Console

___ 1. When the **CA INTERFACE DISPLAY** screen is displayed, Press **F4**.

___ 2. Enter the **maintenance password**, Press **Send**.

11.2.1 Run the Diagnostics

___ 1. Enter **ODG**, Press **Send**.

___ 2. Select **CA**, Enter **4**, Enter the Channel adapter number in the **ADP** field, 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.

11.2.2 Logoff the Local Console

Re-enable all Channel Adapters disabled in step 10.1.2.

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11.3 General IPL

11.3.1 From the Control Panel

- ___ 1. Set the **Power Control** indicator to its original value as recorded in section 10.1.1.
- ___ 2. Set the **Function** indicator value to **0**.
- ___ 3. Press the **Validate** key.

The general IPL starts.

- If **FF4** code is displayed on control panel, ask customer to load control program.
- If control program is loaded from hard disk, **000** will be displayed when **IPL** is successful.

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

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AFTER INSTALLATION (Steps 12-15)

12.0 Field Updating

None.

mine the correct owner of removed/unused parts.

All parts determined to be the property of IBM should be processed as stated in the rental machine directions below.

13.0 Field Support Publications

None.

14.3 Rental Machines

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

14.0 Parts Dispositions

14.1 All machines that replaced cards

- Place the removed CAL cards into the ESD bags from the new cards.
- Place the removed CAL cards into the boxes from the new cards.
- Place the boxes into the shipping box that the FB/M came in.
- For DOMESTIC,
 - Affix the label PN 76F8662 on the shipping box and mail it.

14.4 Modules Return

Modules will be sent back to B/O in the package received with the new ones for potential return to plant.

15.0 Machine Records

- Update Machine History to reflect
 - EC C30981 on B/M 03F4658 CA NOT U.K.
 - or on B/M 03F4659 CA U.K.
- as installed according to existing procedures.
- Report installation and quality according to existing procedures

14.2 Purchased Machines

Refer to ownership of parts matrix:

- For DOMESTIC areas, return parts to IBM.
- For AFE/EMEA areas, refer to *Hardware and General Service Code Description* to deter-

End of instructions.

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