

Field Bill of Material (FBM)

PN 76F9039

EXCHANGE the CADR Card in IBM 3745 Models 130/170

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3745 FBM	PN 76F9039 1 of 10	EC A98181B 05JUN91	EC C38405 06APR93	EC H10030E 06FEB04		
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Before Installation (Steps 1-8)

1.0 Machines Affected

3745 Models 170 and 130 w/o EC A98181 and w/o IEC 6306171.

2.0 Related BMs and ECs

None.

3.0 BM(s) to be Installed

3.1 Install the Following BMs

FBM	Feature B/M	Description
76F9038	03F4658	Channel Adapter not UK
76F9038	03F4660	Channel Adapter TPS
76F9038	34F1319	Channel Adapter type 2 not UK
76F9039		Installation Instructions

4.0 Preparation

- ___ 1. Familiarize yourself with the purpose and details of these installation instructions prior to obtaining the customer machine time commitment.
- ___ 2. Check all the items and count the parts listed on the BM to be installed to determine whether all parts were received.
- ___ 3. Using the following tables, determine the CADR card positions to be exchange.

Warning

The installation of this EC could bring the channels down. Please, refer to TDR H063583 prior to installation.

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CA installation in 3745 models 170 or 130

- 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 CADR	G2 H2	E2 F2	C2 D2	A2 B2

- 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

Solve potential interface control check on Channel.

6.2 Description

Change the CADR card.

7.0 Installation Time

FBM	Machine Hrs.	System Hrs.
76F9039	0.5	00.0
Test Time	0.3	00.0
Total Time	0.8	

8.0 Tools/Material Required

ESD KIT P/N 6428316.

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Installation (Steps 9-11)

9.0 Safety

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

10.0 Details of Installation

Before proceeding with 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

- ___ 1. Check that **Power Control** indicator displays **3**.
 If not, record the value ___, then press **Power Control** key until **3** is displayed.
 Press the **Validate** key.

10.1.2 On local console:

- ___ 1. From channel interface display screen, record **Enabled Channel Adapters** then **Disable** all Channel Adapters.
- ___ 2. Wait for **Interface status Disabled** for all CAs.
- ___ 3. Press **F4**
- ___ 4. Enter the **Maintenance Password**, press **Send**.
- ___ 5. If CCU running, enter **RST** to reset the CCU.

The MOSS goes in **MOSS Alone**.

10.1.3 Display the CDF

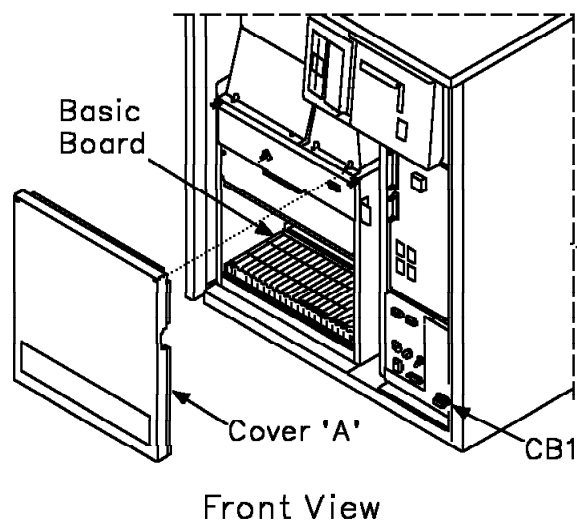
- ___ 1. Enter **CDF**, press **Send**.
- ___ 2. Select **Display/Update**, enter **1**, press **Send**.
- ___ 3. Select **CA**, enter **9**, press **Send**.
Check for a **Y** in the presence column for the CA position you have identified.
- ___ 4. Press **F1**.

10.1.4 Run 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**.
- ___ 3. If any error is reported, go to **Maintenance Information Procedure (MIP)** chapter 1 and follow appropriate procedure.
If no error reported, press **F1**

10.1.5 Power OFF

- ___ 1. Power off the 3745 from control panel.
- ___ 2. Open the system cover(s) and switch off **CB1**.

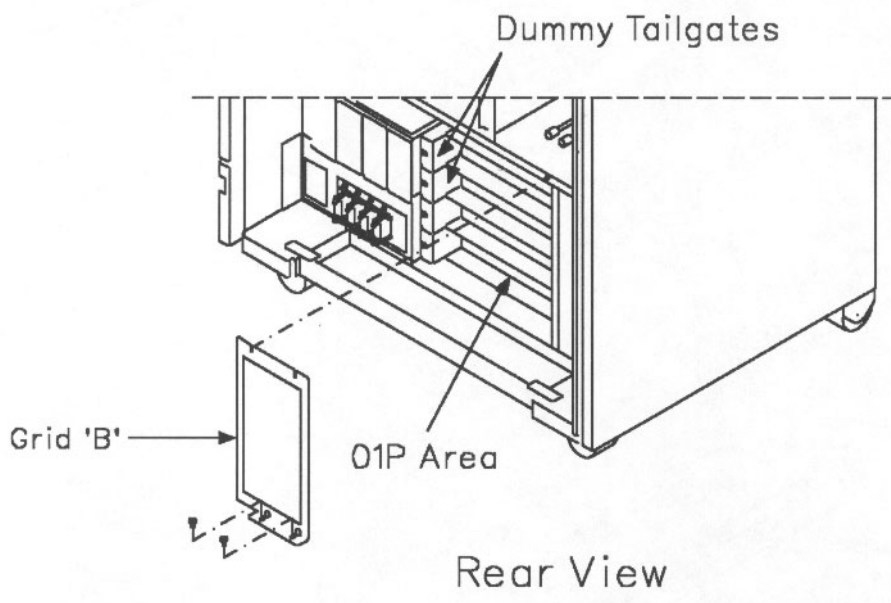


10.2 Cards Installation

Warning: Follow existing ESD procedures when handling logic parts.

10.2.1 From REAR of Machine

- ___ 1. Locate Channel Tailgate in **01P** position.



- ___ 2. Remove grid B with its 4 screws.
- ___ 3. Identify the Channel Tailgate selected in section 4.0.
- ___ 4. Set the **Select Out Bypass** switch to **BYPASS** position.

10.2.2 From FRONT of Machine

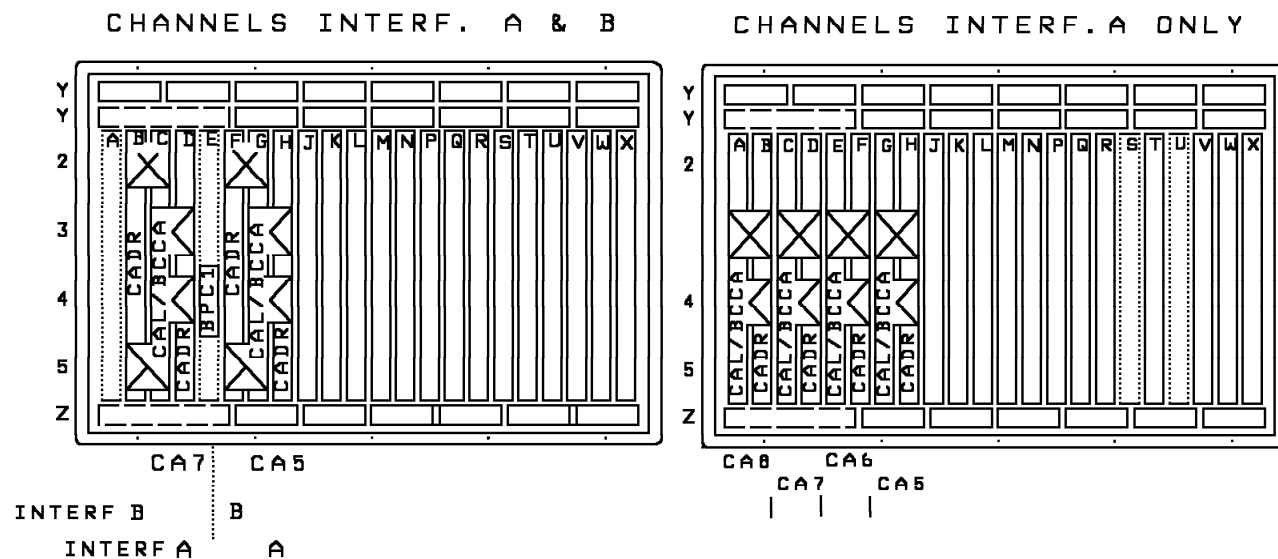
- ___ 1. Remove cover 'A' with two screws.
- ___ 2. Locate BASIC board in position 01G.
- ___ 3. Identify the CADR card position according to the identified CA number (see tables in section 4.).
- ___ 4. Remove crossovers from the top of CA cards and unplug the CADR card.

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

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10.2.3 CADR Card Replacement

- ___ 1. Verify the card holder is installed on the new CADR card (PN 76F8487) and install the new CADR card in board.
- ___ 2. Re-plug the crossovers on top card connectors.



- ___ 3. Set the **Select Out Bypass** switch to **NORMAL** position.
- ___ 4. Reinstall grid B with its 4 screws.

11.0 Test Procedures

11.1 Power ON

- ___ Switch **CB1** ON and close shields and covers opened in previous steps.

11.1.1 From the Control Panel

- ___ 1. Press **Function** key until **1** is displayed. Press the **Validate** key.
- ___ 2. Press the **Power On Reset** key.

A **MOSS IML** is performed.

11.1.2 From the Local Console

- ___ 1. When **CA interface display screen** is displayed, Press **F4**
- ___ 2. Enter **Maintenance Password**, press **Send**

11.1.3 Display the CDF

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

11.1.4 Run Diagnostics

- ___ 1. Enter **ODG**, press **Send**.
- ___ 2. Select **CA**, enter **4**, enter the Channel adapter number in **ADP** field.
- ___ 3. Press **Send**.
- ___ 4. If any error is reported, go to *Maintenance Information Procedure (MIP)* chapter 1 and follow appropriate procedure.

11.1.5 Logoff the Local Console

Re-enable all Channel Adapters disabled in step 10.1.2.

11.2 General IPL

11.2.1 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**. Press the **Validate** key.

The General IPL starts.

- If steady **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: Control program can fail if a mismatch exists between the control program and hardware configuration.

After Installation (12-15)

12.0 Field Updating

None.

13.0 Publication Update

None.

14.0 Parts Disposition

14.1 Purchased Machines

- For U.S., return parts according to your local return procedures.
- For AFE and EMEA areas, refer to: "H.W. AND GENERAL SERVICE CODE DESCRIPTION" to determine 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.

14.2 Rental Machines

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

15.0 Machine Records

- Update Machine History to reflect EC A98181B:

on	B/M 03F4658	CA not UK
or on	B/M 03F4660	CA/TPS
or on	B/M 34F1319	CA Type 2 not UK

- Report installation and quality according to existing procedures.

End of instructions.