

Field Feature Bill of Material (FFBM)

PN 72F0031

INSTALLATION of an Ethernet Lan Adapter (FC 4780) in IBM 3745 Models X10/X1A

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3745
FFBM

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EC A98311 04DEC91

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Before Installation (steps 1-8)

1.0 Machines Affected

3745 Models 210/21A/310/31A/410/41A/610/61A.

2.0 Related BMs and ECs

2.1 Prerequisites

(Must be installed prior to this installation)

- Microcode - Level C37967 or later.
Checkpoint: Check label on normal and backup sets of diskettes or check the EC level thru the MLT function on MOSS.
Note: NCP V6R1 or later must be installed to support an ELA feature.
- Documentation - Level A98310 or later.
Checkpoint: YZ pages.

2.2 Concurrent

(Must be Installed Together)
 None.

2.3 Companion

(May be Installed Separately)
 None.

3.0 BM(s) to be Installed

Note: Review each numbered item in this section to determine your needs.

P/N	Title
72F0031	ETHERNET Lan Adapter (ELA) FFBM

3.1 As Required BMs

P/N	Title
80G5125	Install Documentation Level A98310.
76F9057	Labels, wrap plug, clamp (with the first ELA)
66X0037	Line adapter power supply (if you install an adapter in ODD position)

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- 66X0095** DMSW and DTER card (if you install the first ELA in 3745 Models 210/310 without HSS installed)
- 66X1392** DMSW cards and DTER card (if you install the first ELA in 3745 Models 410/610 without HSS installed).
- 80G5119** Install Microcode Level C37967.

4.0 Preparation

1. Familiarize yourself with the purpose and details of these installation instructions before negotiating machine time with the customer.
2. Check all the items and count parts listed on the BM(s) to be installed to determine whether all parts were received.
3. If you install an ELA in a 3745 with ALC features installed (Air Line Control, RPQ 7L1092 (Check in MLC)) the first ALC feature on the IOC BUS must be moved to the last position on the IOC BUS.
The ELA feature will be plugged in place of the ALC feature.

Notes:

- a. The 01G-A1 board in base frame can be TSSB or TSST.
 - A TSST board (used only in the 3745) can have TRSS, TSS and/or HPTSS/ELA adapters installed.
 - A TSSB board can have TSS and HPTSS/ELA adapters installed.
 - b. TSSB and TSST boards are shared between 2 IOC buses.
 - IOC bus group 1 drives adapter positions 1 through 4.
 - IOC bus group 2 drives adapter positions 5 through 8 of each board.
4. Using the *Hone configuration sheet* and the following tables, determine the positions to install the ELA cards and the power supplies (if required). -
Table 1 : ELA installation in a TSST board (01G-A1 position only).

Adapt. Position	1	2	3	4	5	6	7	8
Specif.code ELA			9785	9787			9786	9788
Cards in CSP	N/A	N/A	G2	J2	N/A	N/A	S2	U2
01G-A1 EAC	N/A	N/A	H2	K2	N/A	N/A	T2	V2
Power Supply ID (PSTY4) Loc.	08 01H-A1		09 01H-B1		10 01H-C1		11 01H-D1	
01U-A0 Tailgate ELA	N/A	N/A	H	K	N/A	N/A	T	V

- Table 2: ELA installation in a TSSB board (01G-A1 position only)

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Adapt. Position	1	2	3	4	5	6	7	8
Specify code	9781	9783	9785	9787	9782	9784	9786	9788
Cards CSP	E2	G2	J2	L2	N2	Q2	S2	U2
in 01G-A1 EAC	F2	H2	K2	M2	P2	R2	T2	V2
Power supply id (PSTY4) Loc.	08 01H-A1	09 01H-B1	10 01H-C1	11 01H-D1				
01U-A0 Tailgate ELA	F	H	K	M	P	R	T	V

5. The installation of an ETHERNET LAN Adapter can be performed either ONLINE (concurrent mode with NCP running, MOSS ONLINE) or OFFLINE (complete machine POWER OFF).

Important note

- 1. The online installation of an ELA in 3745-X1A is disruptive for 3746-900 operations.**
- 2. Ask the customer to deactivate all resources of the 3746-900 before removing the adapter.**

Select the procedure according to the machine availability.

6. If there is no HPTSS installed and you are installing the first ELA in the 3745-X10, the installation must be performed OFFLINE (complete POWER OFF) to allow the installation of the DMSW and the DTER cards. DMSW and DTER cards are always present in 3745-X1A.
7. **For 3745-X1A and 3746-900:**
Configuration modification in a line adapter chain, in 3745-X1A with 3746-900 connected, requires the relocation of ACTIVE/PASSIVE bypass cards in IOC/DMA bus for proper signals propagation. This will be done in section 11.0. Parts to be used for relocation are part of the 3746-900 shipping group (holders, BPC1, ABP, cables...).

5.0 Programming

5.1 Diagnostic Programs

To reflect this change, CDF will be performed in Step 11.0, "Test Procedures" on page 19. This is essential to allow internal diagnostics to be run properly.

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5.2 System Programs

To implement this change, the customer must update the control program (NCP generation), if not already done.

NCP Tier	Usage Limits (Up to...)		
-----	-----	-----	-----
1	1 ELA/TSS/HPTSS	+ 1 TRA	+ 2 CA
2	2 ELA/TSS/HPTSS	+ 1 TRA	+ 2 CA
2.5	6 ELA/TSS/HPTSS	+ 0 TRA	+ 4 CA
	or 2 ELA/TSS/HPTSS	+ 2 TRA	+ 4 CA
3	8 ELA/TSS/HPTSS	+ 0 TRA	+ 8 CA
	or 4 ELA/TSS/HPTSS	+ 4 TRA	+ 8 CA

6.0 Purpose and Description

6.1 Purpose

Install an ETHERNET LAN Adapter (ELA) FC 4780.

6.2 Description

Install adapter cards (CSP and EAC), and associated tailgate, cable(s) and Power Supply (if required).

7.0 Installation Time

To be reported as MES.

FFB/M	Machine Hrs	System Hrs	Nbr of CE
76F9095	1.5	0.0	1

Add 0.3 for ABP card relocation (if 3746-900 attached).

8.0 Tools/Materials Required

ESD kit (PN 6428316).

Installation (steps 9-11)

9.0 Safety

- The adapter installation can be performed either online or offline.
- If there is no HPTSS installed and you are installing the first ELA in the 3745-X10, the installation must be performed OFFLINE (complete POWER OFF) to permit the installation of the DMSW card(s) and the DTER card.
- Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the *3745 Maintenance Information Procedures (MIP)* manual (SY33-2054).

10.0 Details of Installation

- If you are installing an adapter with the machine POWER ON, go to Step 10.2, "Adapter Installation Online (3745 Power ON)" on page 9.
- Otherwise, continue.

10.1 Adapter Installation Offline (3745 Power OFF)

Before the installation, ask the customer:

- ___ • To set all the lines and channel addresses offline for this controller.
- ___ • To deactivate all resources of the 3746 Model 900, if attached.
- ___ • For the maintenance password.
- ___ • To logoff the console, if not already done.

10.1.1 From the 3745 Control Panel

- ___ 1. Check that **Power Control** displays 3.
- ___ 2. If it does not, record the value ____.
Set the **Power Control** value to 3.
Press the **Validate** key.

- If you are installing an adapter in a Model X1A, go to Step 10.1.3, "Log the Service Processor on" on page 8.
- Otherwise, continue.

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10.1.2 Log the 3745-X10 Console on

- 1. From the **CA 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**.

Note: If Model 410/610, the CCU must be selected with **CSR** function before **RST**.

Perform the **CSR/RST** sequence for each CCU.

- 4. If the CCU is running, enter **CSR** and select CCU A or/and CCU B. Then, enter **RST** to reset the CCU(s). The MOSS goes in **MOSS ALONE** state.

- Go to Step 10.1.4, "Display the CDF."

10.1.3 Log the Service Processor on

- 1. On the **MOSS-E View** window, click on **Program**.
- 2. Click on **LOG ON MOSS-E**.
- 3. Enter the maintenance password, press **Enter**.

10.1.3.1 Open MOSS/MOSS-E Session

- 1. On the **MOSS-E View** window, double click on the icon of the identified 3745.
- 2. On the **3745 Menu** window, double click on **MOSS Console**.
- 3. When **MOSS Console** screen is displayed, enter **CID**, press **Enter**.
- 4. From the **CA INTERF DISPLAY** screen, record **Enabled channel adapters**. Then, **disable** all channel adapters.
- 5. When all CAs are **DISABLED**, press **F1**.

Note: On Models 41A/61A, CCU must be selected with **CSR** function before performing **RST**.

Perform CSR/RST sequence for each CCU.

- 6. If CCU running, enter **CSR** and select CCU A or CCU B. Then, enter **RST** to reset CCU(s). The MOSS goes in **MOSS ALONE** state.

10.1.4 Display the CDF

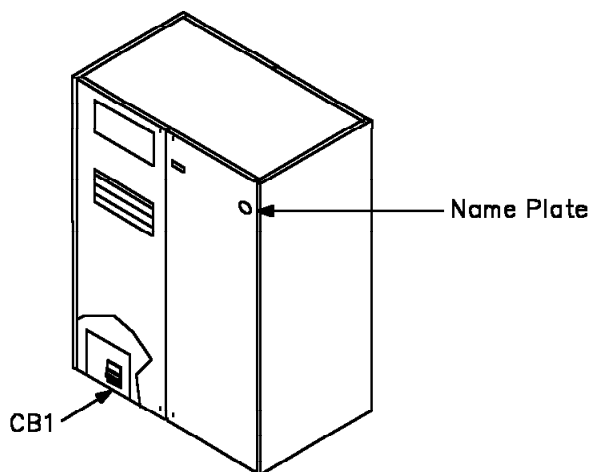
Note: From this point, the **Send** key is used only for a local console. For a Service Processor, press the **Enter** key.

- 1. Enter **CDF**, press **Send/Enter**.
- 2. Enter **1** (DISPLAY/UPDATE), press **Send/Enter**.
- 3. Enter **7** (LINE ADAPTERS (LA)), press **Send/Enter**.
Check for the presence of an **N** for the LA position to be installed according to the *HONE configurator sheet*. Press **F1**.

10.1.5 Run the Diagnostics

- ___ 1. Enter **ODG**, press **Send/Enter**.
- ___ 2. Enter **3** (IOCB), press **Send/Enter**.
- When **NO ERROR FOUND** is displayed, press **F1**.
- If an error is reported, see the *MIP*, Chapter 2, and follow appropriate procedure.

10.1.6 Power OFF



- ___ 1. From the 3745 control panel, press the **Power OFF** key.
- ___ 2. Open the left cover of the 3745, then switch **CB1** OFF.

• Go to Step 10.3, "ELA Installation" on page 12.

10.2 Adapter Installation Online (3745 Power ON)

Before the installation, ask the customer:

- ___ 1. For the maintenance password.
- ___ 2. To logoff the console, if not already done.
- ___ 3. To deactivate all resources on the 3746 Model 900, if attached.
- ___ 4. If the identified adapter to be installed is in an **EVEN** position, notify the customer to de-activate all the lines connected on the **ODD** adapter fed by the same power supply (refer to table in Step 4.0, "Preparation" on page 4).

10.2.1 From the 3745 Control Panel

- ___ 1. Check that **Power Control** displays **3**.
 - ___ 2. If it does not, record the value ___.
- Set the **Power Control** value to **3**.
Press the **Validate** key.

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- If you are installing an adapter in a Model X1A, go to Step 10.2.3, “Log the Service Processor on” on page 10.
- Otherwise, continue.

10.2.2 From the 3745-X10 Console

1. When the **CA INTERFACE DISPLAY** Screen is displayed, press **F4**.
2. Enter the maintenance password, press **Send**.

- Go to Step 10.2.4, “Display the CDF.”

10.2.3 Log the Service Processor on

1. On the **MOSS-E View** window, click on **Program**.
2. Click on **LOG ON MOSS-E**.
3. Enter the maintenance password, press **Enter**.
4. On the **MOSS-E View** window, double click on the icon of the identified 3745.
5. On the **3745 Menu** window, double click on **MOSS Console**.

Wait for **MOSS Console** screen.

10.2.4 Display the CDF

Note: From this point, the **Send** key is used only for a local console. For a Service Processor, press the **Enter** key.

1. Enter **CDF**, press **Send/Enter**.
2. Enter **7** (LINE ADAPTERS (LA)), press **Send/Enter**.
Check for the presence of an **N** for the LA position to be installed according to the *HONE configurator sheet*.
Press **F1**.

- If you are installing an adapter in an ODD position (1 or 5), go to Step 10.3, “ELA Installation” on page 12.
- Otherwise, continue.

10.2.5 Adapter Disconnect from NCP

Note: If you install an adapter in an EVEN position, you must also disconnect from the NCP the adjacent ODD LA powered by the same PSTY4 (see table in Step 4.0, "Preparation" on page 4).

Follow this procedure for the first adapter (1 or 5), and repeat these Steps for the second (2 and 6).

- ___ 1. Enter **TRS** (TRSS services),
press **Send/Enter**.
- ___ 2. Enter **1** (SELECT), press **Send/Enter**.
- ___ 3. In the data entry, enter **1** (SELECT),
press **Send/Enter**.
- ___ 4. Enter the number of the adapter,
press **Send/Enter**.
- ___ 5. Move the cursor to the data entry area,
enter **2** (CONNECT/DISC),
press **Send/Enter**.
- ___ 6. Enter **DS**, press **Send/Enter**.
- ___ 7. Press **F1**.

10.2.6 Power OFF the PSTY4

Warning US ONLY

If there is a mix of PSTY4 vendors in the frame, and normal power removal procedures are used to power down more than one supply, a false NOREPLY indication may occur. To avoid this condition, remove power from one PSTY4, install the associated adapter(s) (Step 10.3, "ELA Installation" on page 12) and restore power to that PSTY4 (UXX from POS screen). This sequence can be repeated for the remaining PSTY4(s).

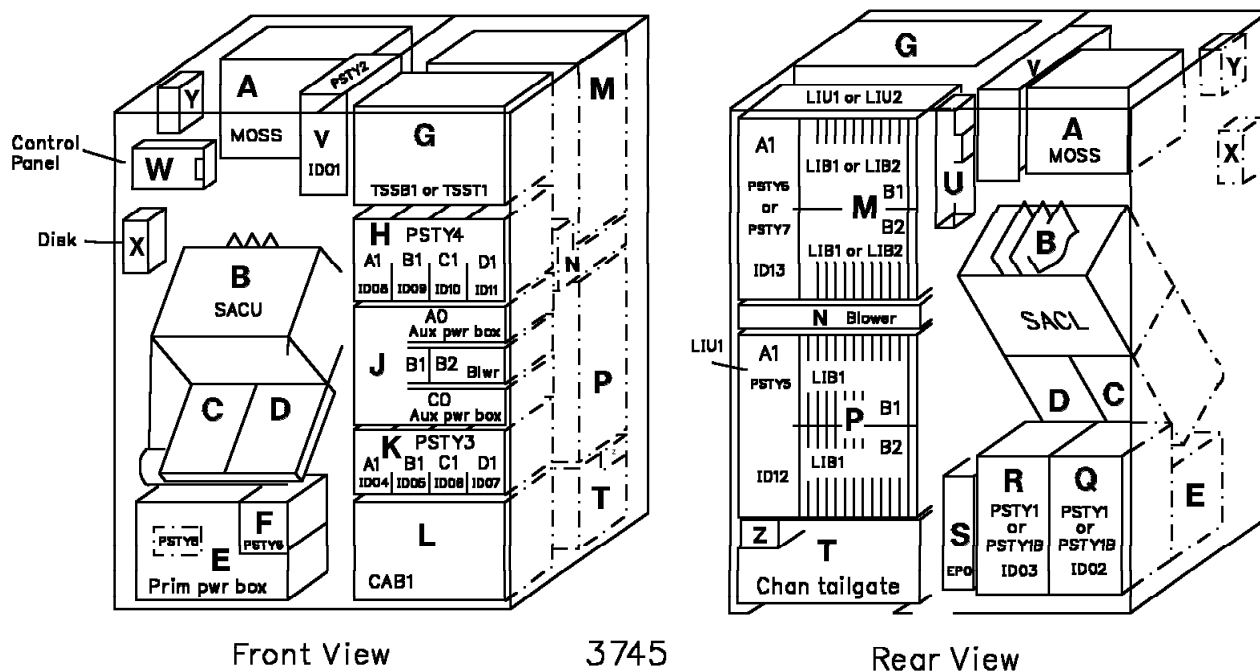
If you install an adapter in an EVEN position, you must power OFF the PSTY4 driving the adjacent ODD LA (see table in Step 4.0, "Preparation" on page 4).

- ___ 1. Enter **POS**, press **Send/Enter**.
- ___ 2. Enter **1** (frame power services), press **Send/Enter**.

On the displayed screen, check that the status of the identified PSTY4 is UP, then, enter DXX (XX being the PSTY4 ID). Verify that the power supply goes to the **DOWN** state.

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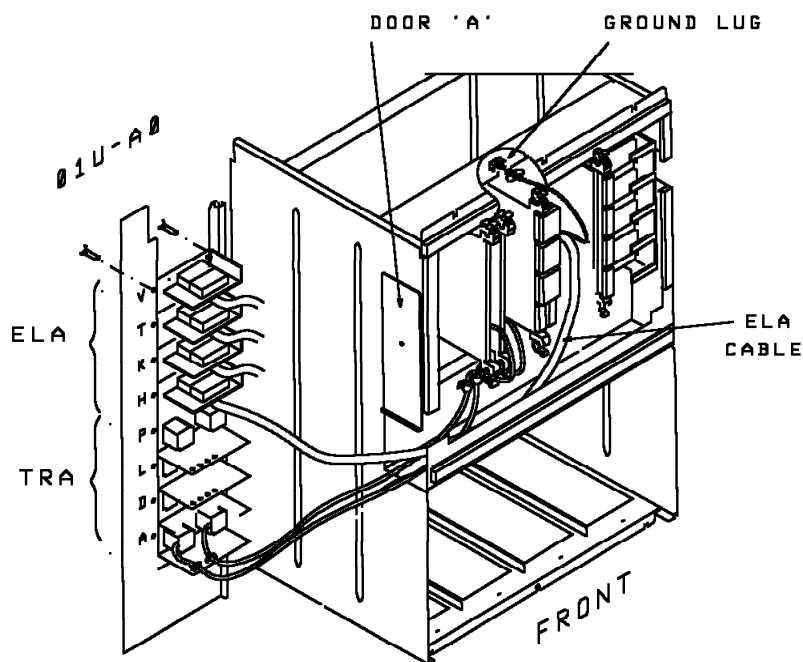
10.3 ELA Installation



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

- ___ 1. Locate the TSST or TSSB board in the position 01G-A1 (a shield in front may be present).
- ___ 2. Remove the dummy cards or the IOC bypass card (BPC1, can be plugged in the socket 4 of the CSP card slot) from positions where feature is to be installed. See the *Hone configuration sheet* and the tables in Step 4.0, "Preparation" on page 4.
- ___ 3. Slide the door A up.

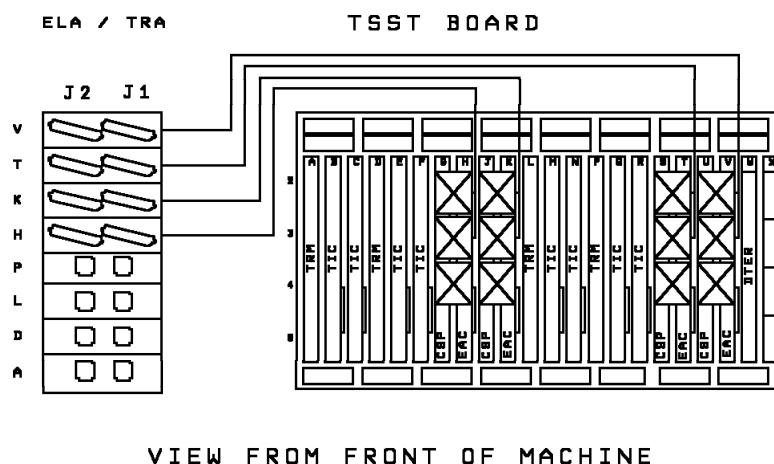
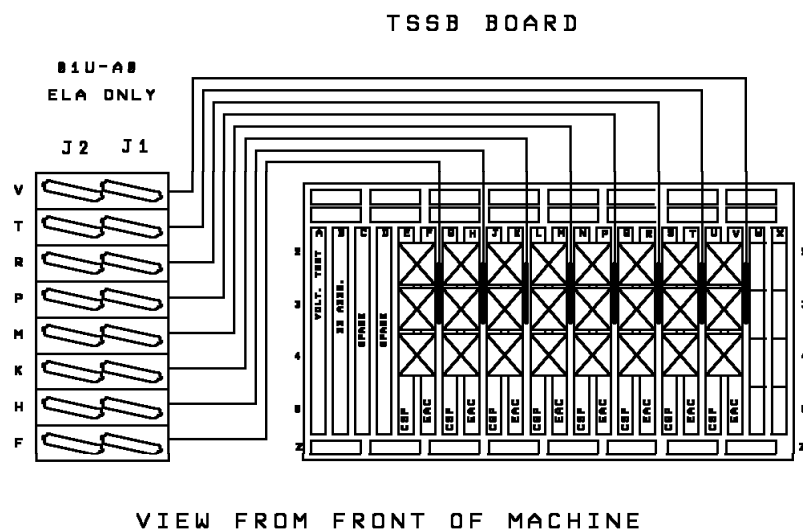
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10.3.1 Internal ELA Cable Installation

- ___ 1. From the rear side of the 3745, open the left cover and locate the 01U-A0 tailgate.
- ___ 2. Remove the dummy bracket from the tailgate position identified in Step 4.0, "Preparation" on page 4. Retain the screws.
- ___ 3. Pass the ELA cable asm (PN 72F0024) through the frame and route it to the front of the machine.
- ___ 4. Secure the connector tailgate with the 2 screws saved in previous Step.
- ___ 5. Route the cable to the 01G gate.

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10.3.2 Card Installation

- ___ 1. Install the holder (PN 1953244) on the EAC card (Holder is already installed on the CSP card).
- ___ 2. Plug the CSP in the board 01G-A1 in the position listed in Step 4.0, "Preparation" on page 4.

Note: Before plugging the EAC card in the board, connect the ELA cable connector in the socket J1 of the card.
- ___ 3. Plug the EAC in the board 01G-A1 in the position listed in the tables in Step 4.0, "Preparation" on page 4.
- ___ 4. Plug 3 crossovers (PN 8645777) in the top card connectors W, X, and Y of the CSP/EAC cards.
- ___ 5. Connect the ground wire of the cable ASM to the ground lug above the 01G gate.

- If you install the first ELA in 3745-X10 with no HPTSS installed, continue.
- Otherwise, go to Step 10.5, “Power Supply Installation (if required)” on page 16.

10.4 DMSW/DTER Cards Installation in 3745-X10

Warning: For this Section, the complete 3745 must be powered OFF.

With the first ELA in 3745, without HPTSS installed in the 3745, you must install:

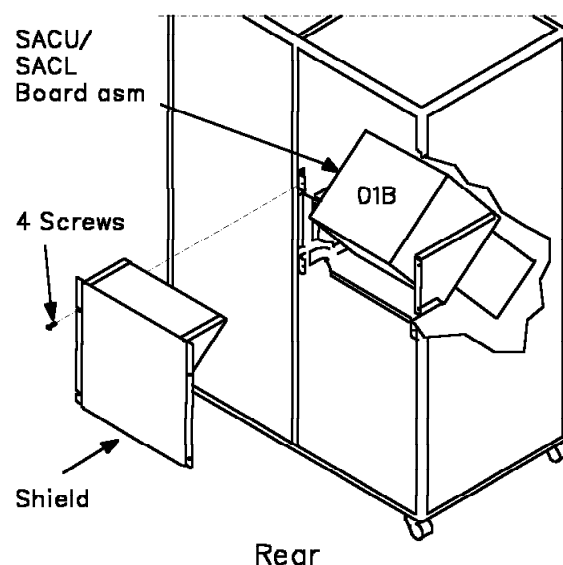
- In a 3745 Model 210/310: one DMSW card and one terminator card (DTER).
- In a 3745 Model 410/610: two DMSW cards and one terminator card (DTER).

10.4.1 DTER Card Installation

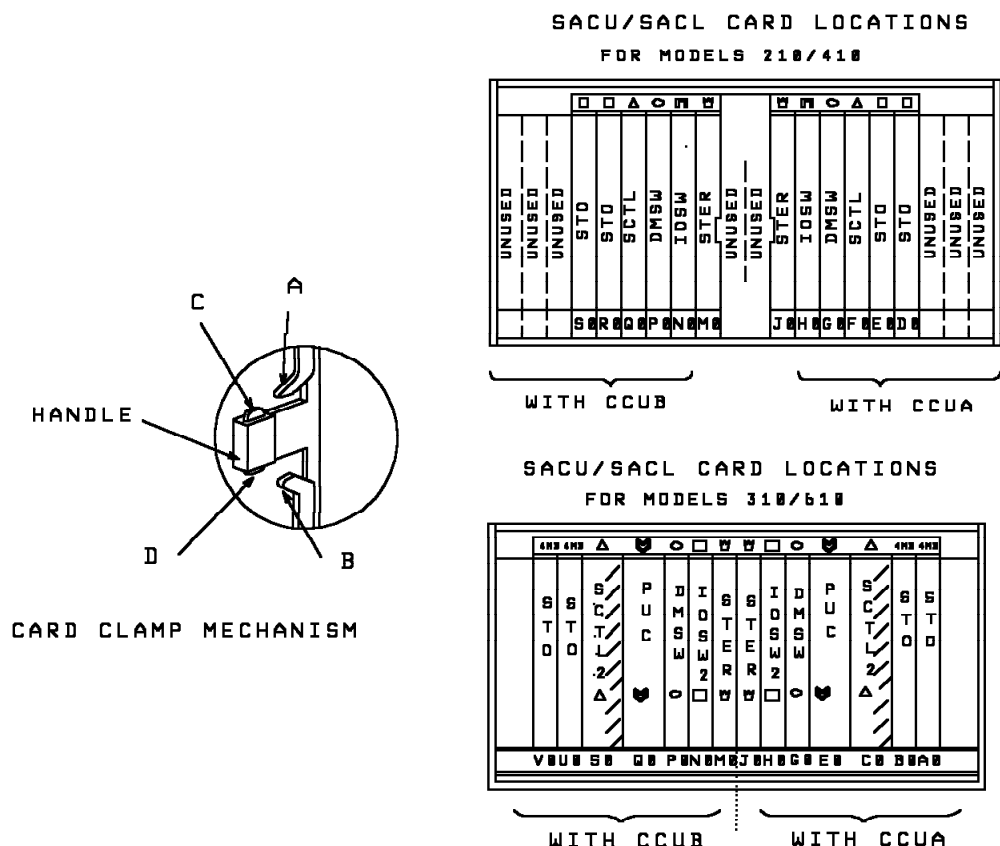
Install the holder (PN 1953244) on the DTER card and plug the card in 01G-A1W2.

10.4.2 DMSW Card(s) Installation

1. From the rear side of the 3745, open the right cover.
2. If present, loosen 4 screws and remove the shield over the 01B area.
3. Using both hands, move the levers A and B outwards simultaneously at positions:
 - 01B-G0 for a 3745 Model 210/310
 - or 01B-G0 and 01B-P0 for a 3745 Model 410/610,
 and remove the dummy cards.



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- ___ 4. Carefully, install the DMSW card(s) as follows: (see figure for card clamp mechanism).
 - a. Insert the card(s) in its slot (G0) or (G0 and P0) and press in the catches B and C, and gently, push the handle till the card(s) lock(s) in place.
 - b. Using both hands, move the levers A and B inwards simultaneously.
 - c. To improve contact, activate the levers 3 times.
- ___ 5. If present, reinstall the shield over the 01B area.

10.5 Power Supply Installation (if required)

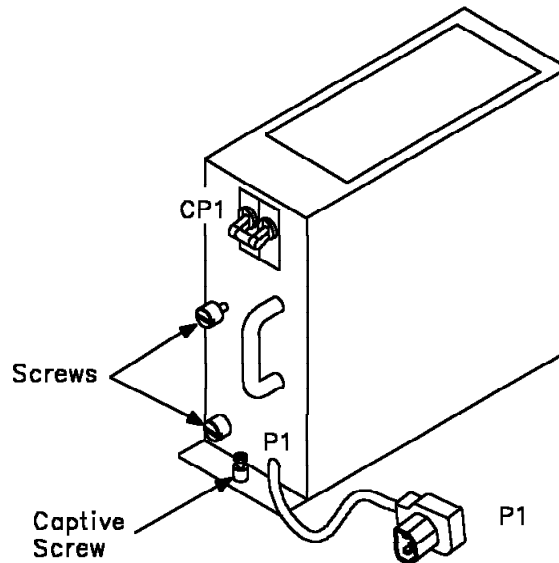
- If you have installed an adapter in an ODD position (1 or 5), you must install a line adapter power block (PSTY4).
- If you do not install a PSTY4, go to Step 10.6, "Label Installation" on page 17.

Note: A PSTY4 feeds 2 Line adapters.

Warning

1. Verify that all PSTY4 packing material is removed.
2. The two power screws are very easily cross threaded. If cross threading occurs, correct voltage levels may not be achieved. The following procedure is suggested to prevent cross threading. While applying a small amount of pressure, turn the screws counter clockwise, one full turn before beginning clockwise rotation and thread engagement.

10.5.1 PSTY4 Installation



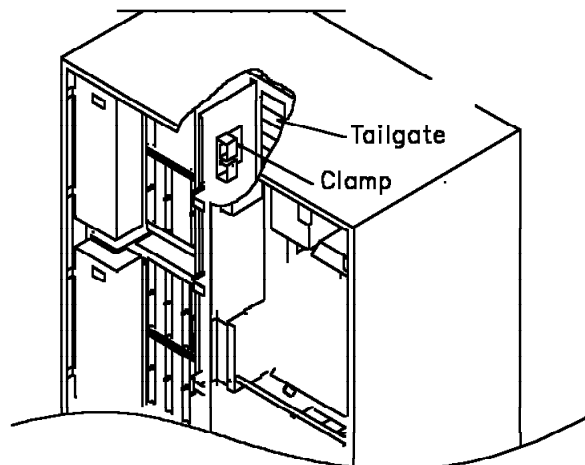
- ___ 1. Locate the position of the PSTY4 to be installed (see table in Step 4.0, "Preparation" on page 4).
- ___ 2. Remove the dummy PSTY bracket on that position (one screw).
- ___ 3. Slide the PSTY4 (PN 6495672) into the enclosure.
- ___ 4. Tighten the two front screws then the captive screw on the bottom front of PSTY4.
- ___ 5. Plug the power plug P1 into the appropriate plug position of the auxiliary power box (J1, J2, J3, or J4).
- ___ 6. Be sure that the CP1 on PSTY4 is in the **ON** position.

10.6 Label Installation

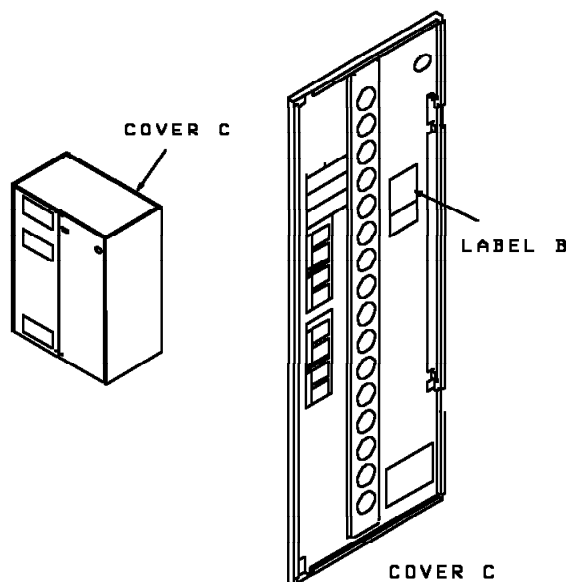
- Follow this Step only if you have installed the first ELA in 3745.
- Otherwise, go to Step 10.7, "Covers" on page 18.

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- ___ 1. Attach the magnetic clamp (PN 26F1775) to the frame, on the LIC Unit side.



- ___ 2. Affix the label **B** (PN 76F9053) over the existing label, inside the door as shown on figure.



10.7 Covers

- ___ 1. Slide down door 'A' on the left side of the adapter enclosure. See the second figure in Step 10.3, "ELA Installation" on page 12.
- ___ 2. Reinstall covers and shields opened in previous Steps.

- After an adapter installation with 3745 POWER ON, go to Step 11.2, "Test Procedure After an Adapter Installation Power ON" on page 24.
- Otherwise, continue.

10.8 Power ON

Switch CB1 ON, and close system covers.
From the 3745 control panel:

- ___ 1. set the **Function** indicator to 1.
Press the **Validate** key.
- ___ 2. Press the **Power ON Reset** key.

The MOSS IML is completed when **F0E** is displayed on the 3745 control panel.

11.0 Test Procedures

Note: During the following procedures some Alarm messages may be displayed on the screen, these can be removed by clicking on **OK**.

11.1 Test Procedures after Complete POWER OFF

- If you have installed an adapter in a Model X1A, go to Step 11.1.2, “Open MOSS/MOSS-E Session.”
- Otherwise, continue.

11.1.1 From the 3745-X10 Console

- ___ 1. When the **CA INTERFACE DISPLAY** screen is displayed, press **F4**.
- ___ 2. Enter the maintenance password, press **Send**.

- If you have not installed a PSTY4, go to Step 11.1.4, “Update the CDF” on page 20.
- Otherwise, go to Step 11.1.3, “Create the Power Configuration Table” on page 20.

11.1.2 Open MOSS/MOSS-E Session

From the Service Processor:

- ___ 1. Wait until the 3745 icon becomes PURPLE.
- ___ 2. When the **3745 Menu** window is displayed, double click on **MOSS console**.

Wait for the **Function Selection Rules** screen.

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- If you have not installed a PSTY4, go to Step 11.1.4, “Update the CDF” on page 20.
- Otherwise, continue.

11.1.3 Create the Power Configuration Table

- 1. Enter **POS**, press **Send/Enter**.
- 2. Enter **C** (RE-CREATE), press **Send/Enter**.
Verify that the ID of the PSTY4 you have installed is displayed.
- 3. Enter a **Y** to confirm, press **Send/Enter**.
- 4. Select option **1** and display the power information for the base frame, press **Send/Enter**.
The power status is **DOWN** for the new power.
- 5. Enter **UXX** to set the power **UP**.
Verify that the PSTY4 goes to the **UP** state.
Press **F1**.

11.1.4 Update the CDF

- 1. Visually check, on the ELA tailgate you installed that the green LED is **ON**.
If it does not, see the *MIP*, Chapter 2, and follow the appropriate procedure.
- 2. Enter **CDF**, press **Send/Enter**.
- 3. Enter **4** (VERIFY), press **Send/Enter**.
The values from the **CDF DATA** and the **MACHINE DATA** should be identical, except for the adapter you have just installed.
- 4. To update the CDF with machine values, enter **2**, press **Send/Enter**.
 - When **CDF VERIFY COMPLETED** is displayed, press **F6**.
 - If adapters are not recognized, see the *MIP*, Chapter 1, and follow appropriate procedure.

11.1.5 Display the CDF

- 1. Enter **CDF**, press **Send/Enter**.
- 2. Enter **1** (DISPLAY/UPDATE), press **Send/Enter**.
- 3. Enter **7** (LINE ADAPTERS (LA)), press **Send/Enter**.
A **Y** should appear under the LA number you have just installed.
Check the **LA TYPE** value.
 - If you have installed the first ELA in 3745 with no HPTSS installed, press **F6** and continue.
 - Otherwise, press **F1** and go to Step 11.1.6, “Run the Diagnostics” on page 21.

- ___ 4. Select **DISPLAY/UPDATE**, enter **1**, press **Send**.
- ___ 5. Select **SWITCH**, enter **5**, press **Send**.
Verify the DMSW presence in CCUA and CCUB (if installed).
Press **F1**.

11.1.6 Run the Diagnostics

- ___ 1. Make sure SQE switch is in the **ON** position on the transceiver that is attached to the port.
- ___ 2. Enter **ODG**, press **Send/Enter**.
- ___ 3. Enter **9** (ELA).
Enter the **Adapter Number**, then press **Send/Enter**.
 - If **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is displayed, see the *MIP*, Chapter 2, and follow the appropriate procedure.

11.1.7 Run the Wrap Test on Port 1.

- ___ 1. Enter **UF02** in the Diag field.
Enter the LA number in the ADP field, press **Send/Enter**.

When prompt **Enter ETGX-J2 config....** is displayed (X is the LA number):
- ___ 2. Install the ELA wrap plug (PN 70X8670) on the connector J2 of ELA tailgate,
- ___ 3. Enter **RF1**, then press **Send/Enter**.
- ___ 4. If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
- ___ 5. If **NO ERROR FOUND** is displayed, and if a properly terminated transceiver/cable assembly is available from the customer, remove the wrap plug and rerun the routine **UF02**, as follows: Otherwise, go to 11.1.8, "Run the Wrap Test on Port 2.."

When prompt **Enter ETGX-J2 config....** is displayed,
- ___ 6. Connect the external cable with a properly terminated/transceiver to the connector J2, enter **RF2**, press **Send/Enter**.
- ___ 7. If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
- ___ 8. If **NO ERROR FOUND** is displayed, continue.

11.1.8 Run the Wrap Test on Port 2.

- ___ 1. Enter **UF03** in the Diag field.
Enter the LA number in ADP field, press **Send/Enter**.

When prompt **Enter ETGX-J1 config....** is displayed (X is the LA number),

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- ___ 2. Install the ELA wrap plug (PN 70X8670) on the connector J1 of ELA tailgate,
- ___ 3. Enter **RF1**, then press **Send/Enter**.
- ___ 4. If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
- ___ 5. If **NO ERROR FOUND** is displayed, and if a properly terminated transceiver/cable assembly is available from the customer, remove the wrap plug and rerun the routine **UF03**, as follows: Otherwise, press **F1**.

When prompt **Enter ETGX-J1 config....** is displayed,

- ___ 6. Connect the external cable with a properly terminated transceiver to the connector J1, enter **RF2**, then press **Send/Enter**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
 - If **NO ERROR FOUND** is displayed, press **F1**.

11.1.9 External Cable

Warning

Install only cables which conform to ISO 8802-3. See the *Safety Handbook* GA33-0126. The line interface connector is not designed to prevent operator contact with the shield, and precautions must be taken at installation time to ensure that the shield is not brought into contact with any hazardous voltage while being handled by operating personnel.

The external cables are provided by the customer.

Route the cables through the magnetic clamp installed in Step 10.6, "Label Installation" on page 17.

- If you have installed an adapter in a Model X1A, go to Step 11.1.11, "Relocate the Bypass Cards" on page 23.
- Otherwise, continue.

11.1.10 Logoff the 3745-X10 Console

Re-enable the channel adapters disabled in Step 10.1.2, "Log the 3745-X10 Console on" on page 8.

- Go to Step 11.1.13, "General IPL" on page 23.

11.1.11 Relocate the Bypass Cards

Note: Follow this Step if a 3746-900 is attached.
From the Service Processor:

- ___ 1. On the **3745 Function Selection** screen, enter **OFF**, press **Enter**.
- ___ 2. On the **3745 menu** window, click on **OPERATION MANAGEMENT**.
- ___ 3. Double click on **Locate Bypass Card Position**.
- ___ 4. Follow the instructions.

Note: Refer to the *3746 Model 900 Installation Guide* (SY33-2088), Chapter 4, section: 'Plugging the Active and Bypass Cards and Connecting +5V Cables'. Then, Chapter 5, perform steps 1, 2, and 5, to verify the CDF and test the IOC/DMA bus.

11.1.12 Logoff MOSS-E

- ___ 1. On the **3745 Menu** window, double click on **MOSS Console**,
- ___ 2. Enter **CID**, press **Enter**.
- ___ 3. Enable the channel adapter recorded in Step 10.1.3, "Log the Service Processor on" on page 8.
Wait until all channels are **E** in the E/D REQUEST column.
Press **F1**.
- ___ 4. Enter **OFF**, press **Enter**.
- ___ 5. On the **3745 Menu** window, click on **Function**. Then, click on **Exit**.
- ___ 6. On the **MOSS-E View** window, click on **Program**.
- ___ 7. Click on **LOG OFF MOSS-E**.

11.1.13 General IPL

From the 3745 Control Panel:

- ___ 1. Set the **Power Control** indicator to its original value recorded in Step 10.1.1, "From the 3745 Control Panel" on page 7.
- ___ 2. Set the **Function** indicator value to **0** (general IPL).
- ___ 3. Press the **Validate** key.

The general IPL starts.

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

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

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11.1.14 Save Hard Disk Contents Onto the Backup Set of Diskettes

When Network is restarted, save the CDF.

- ___ 1. Enter the maintenance password, press **Send/Enter**.
Note: If 3745 Model 410/41A/610/61A, the CCU must be selected with **CSR** function before performing the **MOF** function.
Perform *CSR/MOF* sequence for each CCU.
- ___ 2. Enter **MOF**, press **Send/Enter**.
- ___ 3. Press **F1**.
- ___ 4. Select **DIF**, press **Send/Enter**.
- ___ 5. Select **2**.
Enter the date and save-ID, press **Send/Enter**.
Follow prompts on console.
- ___ 6. When the function is completed, press **F1**.
- ___ 7. Set the MOSS online, enter **MON**, press **Send/Enter**.
- ___ 8. Logoff the local console, enter **OFF**, press **Send/Enter**.
- ___ 9. Close the rear system covers.

• Go to Step "After Installation (steps 12-15)" on page 28.

11.2 Test Procedure After an Adapter Installation Power ON

- If you have not installed a PSTY4, go to Step 11.2.3, "Update the CDF" on page 25.
- Otherwise, continue.

11.2.1 Create the Power Configuration Table

- ___ 1. Enter **POS**, press **Send/Enter**.
- ___ 2. Enter **C** (RE-CREATE), press **Send/Enter**.
Verify that the ID of the PS you have installed is displayed.
- ___ 3. Enter a **Y** to confirm, press **Send/Enter**.
- ___ 4. Select option **1** and display the power information for the base frame.
Press **Send/Enter**.

11.2.2 Power ON the PSTY4

- ___ 1. The power status is **DOWN** for the PSTY4.
- ___ 2. Enter **UXX** to set the power supply **UP**.
Verify that the PSTY4 goes to the **UP** state.
- ___ 3. Press **F1**.

11.2.3 Update the CDF

- ___ 1. Enter **CDF**, press **Send/Enter**.
- ___ 2. Enter **7** (LINE ADAPTERS (LA)), press **Send/Enter**.
An **N** is displayed under the LA you have just installed.
- ___ 3. Enter the LA number, press **Send/Enter**.
Press **F5** (Update).
- ___ 4. Enter the LA type, press **Send/Enter**.
- ___ 5. When **CDF LA CHANGE COMPLETED** is displayed, press **F6**.
- ___ 6. A **Y** is now displayed under the LA number. Verify the LA type.
Press **F1**.

11.2.4 Concurrent Diagnostics

- ___ 1. Enter **CDG**, press **Send/Enter**.
- ___ 2. Enter **9** (ELA), the **Adapter Number**,
press **Send/Enter**.
 - When **NO ERROR FOUND** is displayed, press **F1**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.

11.2.5 Wrap Tests

- ___ 1. Run the routine **UF02** (on the port 1 of the ELA you have just installed.)
 - a. Enter **UF02** in the Diag field.
Enter the LA number in the ADP field, press **Send/Enter**.
 - b. When prompt **Enter ETGX-J2 config....** is displayed (X is the LA number):
 - Install the ELA wrap plug (PN 70X8670) on the connector J2 of ELA tailgate,
 - Enter **RF1**, press **Send/Enter**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
 - c. If **NO ERROR FOUND** is displayed, and if a properly terminated transceiver/cable assembly is available from the customer, remove the wrap plug and rerun the routine **UF02**, as follows: Otherwise, run the routine **UF03** (next Step).
 - d. When prompt **Enter ETGX-J2 config....** is displayed,

- Connect the external cable with a properly terminated/transceiver to the connector J2, enter **RF2**, press **Send/Enter**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
- e. If **NO ERROR FOUND** is displayed, continue.
- ___ 2. Run the routine **UF03** (on port 2 of the ELA you have just installed).
- a. Enter **UF03** in the Diag field.
Enter the LA number in ADP field, press **Send/Enter**.
 - b. When prompt **Enter ETGX-J1 config....** is displayed (X is the LA number),
 - Install the ELA wrap plug (PN 70X8670) on the connector J1 of ELA tailgate,
 - Enter **RF1**, press **Send/Enter**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
 - c. If **NO ERROR FOUND** is displayed, and if a properly terminated transceiver/cable assembly is available from the customer, remove the wrap plug and rerun the routine **UF03**, as follows: Otherwise, press **F1**.
 - d. When prompt **Enter ETGX-J1 config....** is displayed,
 - Connect the external cable with a properly terminated transceiver to the connector J1, enter **RF2**, press **Send/Enter**.
 - If an error is reported, see the *MIP*, Chapter 2, and follow the appropriate procedure.
 - e. If **NO ERROR FOUND** is displayed, press **F1**.

11.2.6 External Cable

Warning

Install only cables which conform to ISO 8802-3. See the *Safety Handbook* GA33-0126. The line interface connector is not designed to prevent operator contact with the shield, and precautions must be taken at installation time to ensure that the shield is not brought into contact with any hazardous voltage while being handled by operating personnel.

The external cables are provided by the customer.

Route the cables through the magnetic clamp installed in Step 10.6, "Label Installation" on page 17.

11.2.7 RE-IML the Scanner

- ___ 1. Enter **IMS**, press **Send/Enter**.
- ___ 2. Enter **SXX** (XX being the LA number), press **Send/Enter**.
When the function is completed, the scanner is connected to NCP.

Note: Repeat this Step for the adjacent scanner if required.

11.2.8 Set the MOSS Offline

Note: If the 3745 is a Model 410/41A/610/61A, the CCU must be selected with the **CSR** function before performing the **MOF** function.

Perform **CSR/MOF** sequence for each CCU.

- ___ 1. Enter **MOF**, press **Send/Enter**.
- ___ 2. Press **F1**.

11.2.9 Save Hard Disk Contents onto the Backup set of Diskettes

- ___ 1. Enter **DIF**, press **Send/Enter**.
- ___ 2. Enter **2**.
Enter the date and save-ID and press **Send/Enter**.
Follow the prompts on the console.
- ___ 3. When the function is completed, press **F1**.

- If you have installed an adapter in a Model X1A, go to Step 11.2.11, “Log the Service Processor off.”
- Otherwise, continue.

11.2.10 Log the 3745-X10 Console off

Ask the customer to activate the resources on the new adapter if the NCP is configured.

- Go to Step “After Installation (steps 12-15)” on page 28.

11.2.11 Log the Service Processor off

- ___ 1. Enter **MON**, press **Enter**.
- ___ 2. Enter **OFF**, press **Enter**.
- ___ 3. On the **MOSS-E View** window, click on **Program**.
- ___ 4. Click on **LOG OFF MOSS-E**.

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After Installation (steps 12-15)

12.0 Field Updating

None.

13.0 Publications Update

None.

14.0 Parts Disposition

14.1 Purchased Machines

Refer to the parts ownership matrix to determine the correct owner of removed/unused parts.

- For EMEA/APG/AG Areas, refer to *Hardware and General Service Code Description*.
- For Domestic Areas, return parts to the customer.

15.0 Machine Records

- Install the new **MACHINE HISTORY** supplied.
- Report installation (As MES activity) and quality to existing procedures.

End of instructions.