IBM INSTALLATION INSTRUCTION

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TITLE: HIGH SPEED SCANNER REMOVAL (FC 4741)

STATUS:

BEFORE INSTALLATION (STEPS 1-8)

1.0 MACHINES AFFECTED:

      3745 MODEL 170,130,150.

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:

```
B/M 03F5059 - HPTSS Removal   (FC4741)
    03F5160 - Installation instructions
```

    3.2 As required FFB/M

```
B/M 03F5056 - BPC1 card installation
```

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

    3. Using the *HONE configurator printout* determine the adapter card positions to be removed.

Notes

1. Up to 2 *HPTSS* can be installed in 3745 170 /130.
Only one *HPTSS* can be installed in 3745 model 150.

2. In models 170 and 130 the first *HPTSS* to be removed, if 2 *HPTSS's* are installed, is adapter number *4 (card positions A1R2 and A1S2)*

3. A *BPC1 card* will be installed in place of removed CSP card.

5.0   PROGRAMMING:

5.1   Diagnostic programs.

CDF to reflect this change will be performed in step 11.0. This is essential to allow internal diagnostics to be run properly.

5.2   System programs

The customer has to update the control program to implement this change.

6.0   PURPOSE AND DESCRIPTION:

6.1   Purpose

Remove a HPTSS feature. (FC4741)

6.2   Description

Remove Adapter cards, internal cable.

7.0   INSTALLATION TIME:

```
FFB/M           Machine Hrs.      System Hrs.
03F5059            0.7               00.0

test               0.8
----              -----
total              1.5
```

8.0   SPECIAL TOOLS AND/OR MATERIALS REQUIRED:

ESD kit P/N 6428316

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 Procedures (MIP)* manual, SY33-2070.

Review *Safety Notices* located at the beginning of the *Maintenance Information Procedures* manual.

10.0 DETAILS OF INSTALLATION

Before proceeding with installation the following steps must be performed:

- Ask customer to set all lines and channel addresses offline for this controller.

- Ask customer to logoff the console if not already done.

- Ask customer for *Maintenance Password.*

10.1 Checking, Diagnostics, Power off.

10.1.1 On control panel:

Check that *Power Control* indicator displays *3*.
If not, record the value __, then press *power control* key until *3* is displayed, press *Validate* key.

10.1.2 On local console:

- From CA interface display screen, record *enabled channel adapters* then *Disable* all channel adapters.

- Wait for *interface status disabled* for all CA's,
Press *F4*.

- Enter the *Maintenance Password*,
Press *SEND*.

- If CCU running, enter *RST* to reset the CCU. MOSS goes in *MOSS Alone* state.

10.1.3 Display the Configuration Data File (CDF) on local console.

- Enter *CDF*, Press *SEND*.

- Select *DISPLAY/UPDATE*, Enter *1*, Press *SEND*.

- Select *LA*, Enter *10*,   Press *SEND*.
  Check for the presence of *Y* under the identified LA number you have to remove according to the *HONE Configurator sheet*.
  Check the *LA type* (2 for HPTSS).
  Press *F1*.

10.1.4   Run Diagnostics.

- Enter *ODG*,   Press *SEND*.

- Select *IOCB*,   Enter *3*, Press *SEND*.

  - 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.

- Power off the 3745 from the control panel.

- Open the system cover and switch off *CB1*.
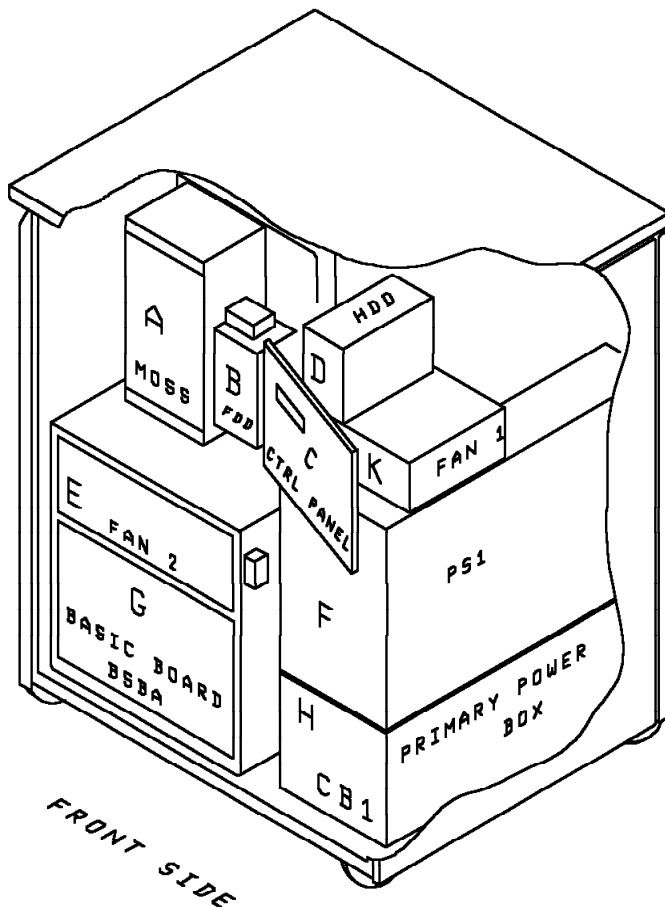
ENG CHANGE NO.	A47495	A73532	A97870		PART NO. 03F5160
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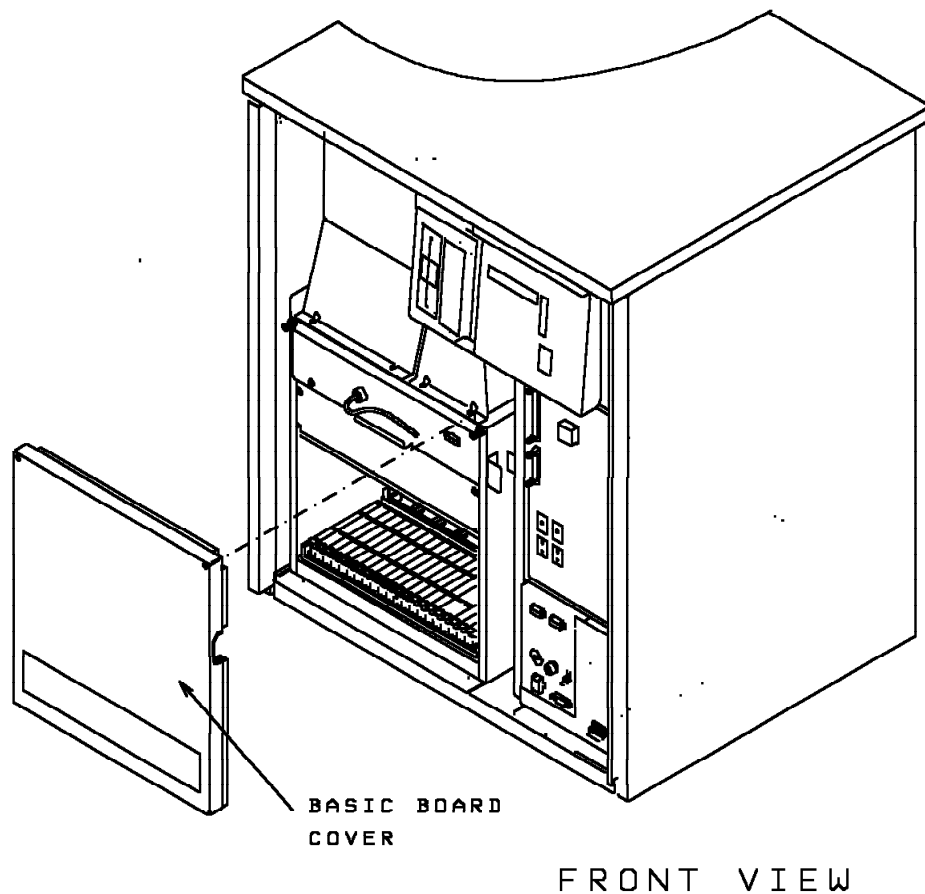**10.2   Hardware Installation**

10.2.1   Follow the existing ESD procedures when handling logic parts.

10.2.2   Cards removal.

- From the front of the machine, remove the basic board cover.

```
BASIC BOARD
COVER

FRONT  VIEW
```

- Identify the position of cards to be removed and remove the 3 top cards crossovers.

Note: Adapter 3 cards are plugged in A1T2 and A1U2.
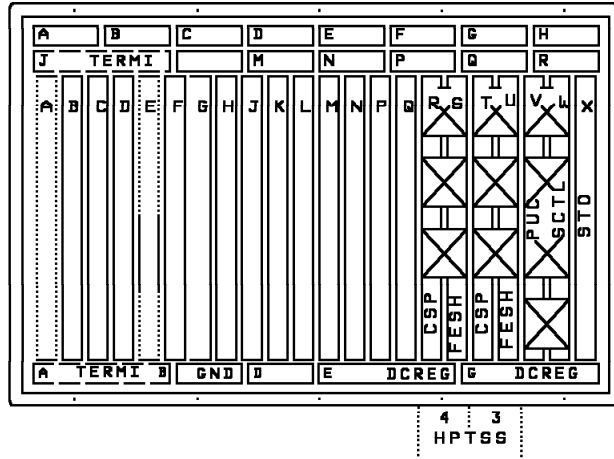Adapter 4 cards are plugged in A1R2 and A1S2.
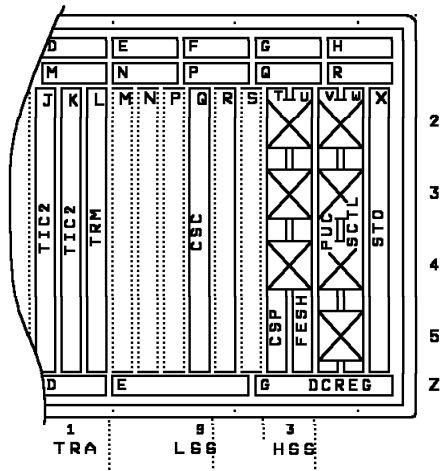
```
  3745 150 CARDS LOCATION          3745 170 OR 130 CARDS LOCATION
```

- Unplug the adapter cards and remove the internal HPTSS cable asm from the *FESH card*.

- Insert the cards in envelopes provided by the FFB/M.

10.2.3   DCREG card removal.

A DCREG card must be removed when a HPTSS feature is removed from the machine.
- If you remove the ADPT 3 (Cards in A1T2 and A1U2), you must remove a DCREG from A1ZG.
- If you remove the ADPT 4 (Cards in A1R2 and A1S2), you must remove a DCREG from A1ZE.

- If removing Adpt 4, unplug the cards from A1J2 thru A1S2 for access to DCREG.
 If removing Adpt 3, unplug the cards from A1R2 thru A1X2 for access to DCREG.

Note: Be sure that cards are labelled according to their positions.

- Unfasten the screw of the bottom 'spring retainer' securing cards in row Z of board. (See next figure)

- Remove the DCREG card from identified position and tighten the retainer screw.

- Re-install all cards in board.

10.2.4   Remove the clamp with its screw securing the HPTSS cable for

removal from the machine.
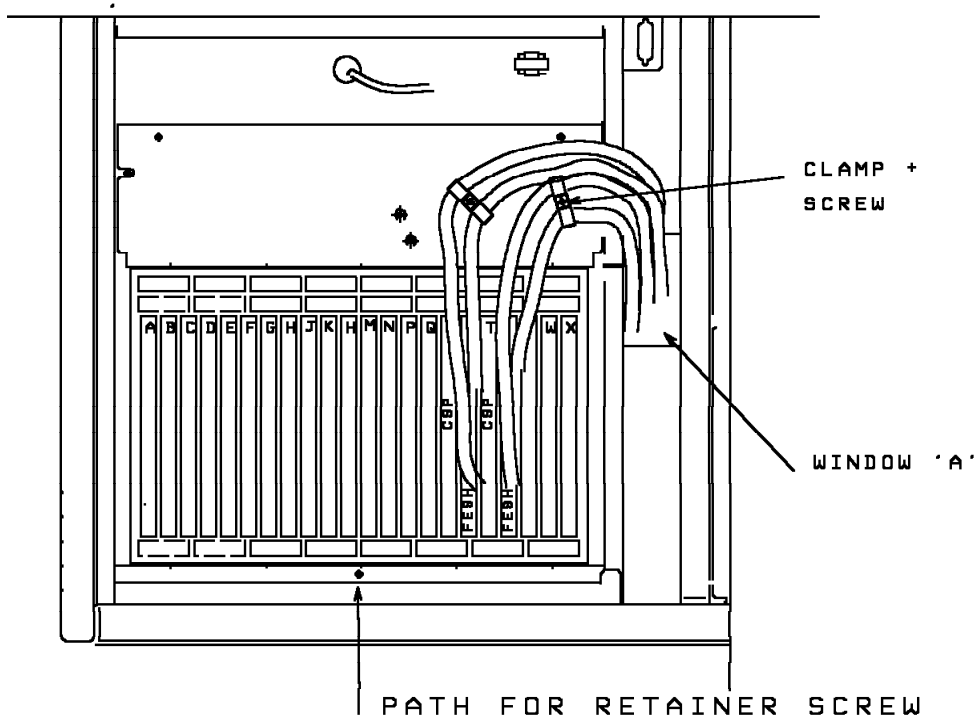
10.2.5   Install a filler P/N 2733278 in position A1S2 or A1U2.

Install the BPC1 card mounted on its extender P/N 1953093, received with FFB/M in position A1R4 or A1T4.
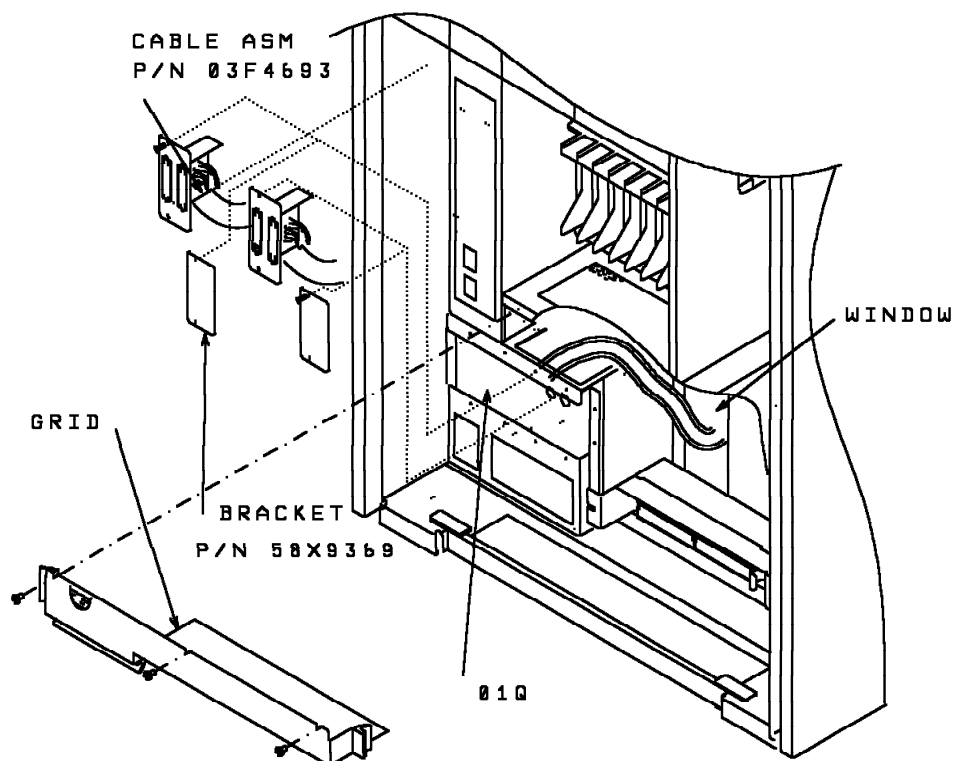Secure the card with intermix bracket P/N 1953110.

10.2.6   Re-install the base board cover.

10.2.7   HPTSS internal cable asm P/N 03F4693 removal.

  - Open the rear system cover.

  - Locate the *HPTSS* tailgate in position Q at the 3745 bottom left, and locate the connector to be removed.
   Disconnect the external cable if not already done.

  - Remove the GRID over the CA tailgate area.

  - Remove two screws securing the cable asm and remove the cable from the machine thru the bottom frame window.

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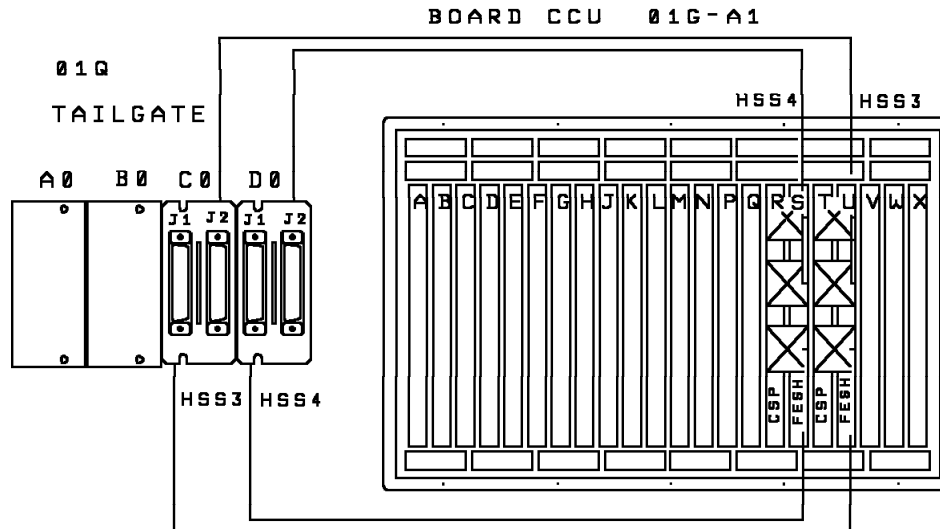
- Install a dummy bracket P/N 58X9369 in the same tailgate position with the removed screws.

- Re-install the grid over the CA tailgate.

11.0   TEST PROCEDURES:

11.1   Power on

Switch *CB1* in 3745 *ON* and close the system cover.

On control panel, press *Function* key until a flashing *1* is displayed. Press *Validate* key. Press *power on* key. A *MOSS IML* is performed.

11.2   On local console:

• When *CA interface display screen* is displayed,   press *F4*.

• Enter *Maintenance Password*, press *Send*.

11.2.1   Update the Configuration Data File (CDF).

• Enter *CDF*, Press *Send*.

• Select *Verify*,   Enter 4, press *Send*.
The values from the disk and the machine should be identical except for the adapter you have just removed.
To update the CDF with machine values, enter 2, Press *Send* .

  ▪ When function completed, msg "CDF verify completed" is displayed. .
Press *F6*.

  ▪ If adapters are not recognized go to MIP and follow appropriate procedure.

11.2.2   Display the Configuration Data File (CDF).

•   Select *DISPLAY/UPDATE*, Enter *1* Press *SEND*.

•   Select *LA*,   Enter *10*,   Press *SEND*.
    N should appear under the LA number you have just removed.

•   Press *F1*.

11.2.3   Run Diagnostics.

•   Enter *ODG*, Press *SEND*.

•   Select *IOCB*, Enter *3*.

•   Press *SEND*.

    ■   If any error is reported, go to *Maintenance Information Procedures (MIP)* chapter
        1 and follow appropriate procedure.

    ■   If no error reported,   press *F1*.

    Note: If all HPTSS features were not removed, run the HPTSS diagnostics to check the
    DMA bus integrity.

11.2.4   Save Configuration Data File (CDF) on BACK UP and NORMAL sets of

diskettes.

•   Enter *DIF*, Press *SEND*.

•   Select *2*,

•   Enter the date and save ID, Press *SEND*.

•   Follow prompts on console.
    When function complete,   press *F1*.

    Note: Repeat this step for each set of diskettes.

11.2.5   Logoff local console.

Re-enable all channel adapters disabled in step 10.1.2

11.3   General IPL.

11.3.1   Set the Power control indicator to the value recorded in step 10.1.1

11.3.2   On control Panel.

• Set the *Function* indicator value to *0* (General IPL).

• Press *Validate* key.

• 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* successful.

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

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AFTER INSTALLATION. (Steps 12 - 15)

12.0   FIELD UPDATING:

     NONE

13.0   FIELD SUPPORT PUBLICATIONS:

     NONE

14.0   PARTS DISPOSITION:

- **Purchased Machines**: Refer to the ownership of parts matrix to determine the correct owner of removed/unused parts.

    - For Domestic Area, return parts to customer.

    - For EMEA/APG/AG Area, refer to *H.W. and General Service Code Description.*

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

- **Rental Machines**: Provide all (or the following) parts to the IBM branch office for potential return in accordance with existing return, recovery, and reclamation programs.

15.0   MACHINE RECORDS:

- Install the new *MACHINE HISTORY* supplied.   .

- Report the installation and quality according to the existing procedure.

16.0   END OF INSTRUCTIONS